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Review Article

Bridging Traditional and Agile Governance in Digital Transformation: Frameworks for Emerging Economies

*[1]Solomon Osei Kordieh Mensah, [2]Olatunji Emmanuel Arayombo, [3]Amienye Babatunde Omo Enabulele

About Article

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About Author

[1] Department of Supply Chain and Information Systems, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

[2] Department of Civil Engineering and Construction, Atlantic Technology University, Sligo, Ireland

[3] College of Business, Missouri State University, Springfield, Missouri, USA

Contact @ Innocent Junior Opara
solomonoseikordiehmensah@gmail.com

ABSTRACT

This paper examines governance challenges in digital transformation projects, with a particular focus on the absence of integrated or hybrid governance structures suited to emerging economies. While traditional governance models emphasize control and compliance, and agile approaches promote adaptation and flexibility, limited research has examined how these paradigms can be effectively integrated in resource-constrained, institutionally heterogeneous environments. A systematic literature review was conducted across five major databases using a transparent screening and coding procedure aligned with PRISMA principles. 36 peer-reviewed articles published since 2010 were synthesized. The review identifies three dominant governance orientations traditional, agile, and hybrid and demonstrates that hybrid approaches offer a superior balance between control and flexibility. However, their applicability in developing economies remains limited due to weak institutional capacity, inadequate policy systems, and underdeveloped digital ecosystems. This study proposes a Hybrid Governance Model that integrates formal control, adaptive flexibility, and situational enablers such as policy alignment, vendor ecosystems, and skills development. The findings guide PMOs and policymakers seeking to adopt hybrid governance to improve risk management, scheduling, and procurement outcomes in digital transformation projects. The review is constrained by publication and language bias, as only a limited amount of non-English and grey literature was included. Future empirical research is recommended to validate and generalize the proposed model across diverse institutional contexts.

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1. INTRODUCTION

1.1. Background: Governance Challenges in Digital Transformation

Digital transformation is unavoidable for organisations that need to achieve better agility, efficiency, and competitive advantage in the current business environment. Such a shift of operational regimes towards data-oriented, cloud-based systems comes with significant governance issues. The inherent fluidity, transdisciplinary nature, and often unexpected characteristics of digital ventures put pressure on traditional governance paradigms in which control, hierarchical management, and inflexible, linear planning are prioritised. These challenges are compounded by the scarcity of resources and instability of institutions in emerging economies, where some of their governance structures are often underdeveloped or incoherent. Digital transformation programs are particularly vulnerable to risks, delays, and inefficiencies unless governance structures are adjusted to incorporate both traditional forms of control systems and the flexibility required of digital environments (Adeleke *et al*., 2025; Shehadeh *et al*., 2023)

Some of the key issues of governance are:

i. Establishing accountability in making critical technological and architectural choices within a digital ecosystem is one of the key governance issues.

ii. Cybersecurity, data privacy, and compliance are risks associated with digital environments.

iii. Integration and the alignment of legacy: It would be necessary to make old systems compatible with new digital modules.

iv. Strategic alignment: Digital and organizational alignment.

v. Institutional capacity: In most emerging economies, there is weak regulatory and institutional capacity that adds to these problems.

Emerging economies have more governance challenges because of resource unavailability, inadequate IT infrastructure, underdeveloped policy frameworks, and institutional rigidity. The governance of digital transformation is a socio-institutional problem, rather than a technological or organisational one.

1.2. Research Gap: Need for Integrated/Hybrid Governance in Emerging Contexts

There is a growing body of literature on digital transformation governance, but it remains largely centred on developed economies and large enterprises. Much of this work focuses on two extremes: traditional governance, which relies on centralised authority, clearly defined policy implementation, and structured protocols; and agile governance, which emphasises flexibility, decentralisation, and continuous learning. However, hybrid governance models those that blend elements of both approaches are notably lacking, particularly in emerging economies. In such contexts, purely traditional or purely agile systems are often inadequate. Instead, governance frameworks are needed that balance formal control and centralisation with autonomy and strict adherence to rules and regulations (Enabulele *et al*., 2025). This paper, therefore, proposes a hybrid governance paradigm tailored to digital transformation in new economies with limited institutional capacity and resources.

1.3. Objectives & Research Questions

This paper explores and experiments with a hybrid governance model of digital transformation projects in the emerging economies. The paper will examine the impact of this paradigm on the success of projects in major project management aspects. This research attempts to:

- To determine and establish the characteristics of formal, informal, and hybrid governance that will be most suitable for open resource-constrained and institutionally diverse initiatives of digital transformation phenomena.
- To investigate the impacts of hybrid governance on project risk management, project schedule, project cost/procurement control, and project change management.
- To inform policymakers, project sponsors, and practitioners in the implementation and use of hybrid forms of governance to ensure better outcomes of the digital transformation process, particularly in emerging economies.

1.4. Contributions

This paper advances the project governance theory and practice.

1. Risk management: Hybrid governance structures can be used to predict, control, and address the digital transformation risks, such as cybersecurity, integration, and technology discontinuities.

The paper analyses the application of hybrid governance in terms of enhancing the schedule following of the project timeline to ensure the team manages to adjust to the fast rates and transitioning demands of digital ventures.

2. Cost and procurement management Governance streamlines digital technology and service procurement. The paper uncovers the idea that hybrid governance can enhance stakeholder congruence, adaptive change, and circular transformations that digital firms require.

3. IT governance tools: Data analytics, real-time dashboards, and automation enhance transparency in the project, decision-making, and governance.

2. LITERATURE REVIEW

2.1. Theoretical Foundations of Governance Hybridity

Hybrid governance has emerged from a growing recognition that neither purely traditional nor purely agile governance structures are sufficient in environments characterized by technological disruption, institutional uncertainty, and complex stakeholder ecosystems. Hybrid governance draws upon several theoretical foundations, most prominently institutional theory, contingency theory, and governance-in-projects literature, to explain why organizations combine formal control with adaptive flexibility (Olaitan *et al*., 2025; Setyadi *et al*., 2025).

2.1.1. Institutional Theory

Institutional theory posits that governance structures are shaped by the broader institutional environment, including regulatory frameworks, cultural norms, and organizational routines. In emerging economies, institutional arrangements tend to be fragmented, inconsistent, or weakly enforced, compelling organizations to layer flexible mechanisms onto formal governance structures. As a result, hybrid governance becomes an adaptive response to institutional voids, enabling

organizations to maintain legitimacy (through formal controls) while pursuing efficiency and responsiveness (through agile mechanisms) (Park *et al.*, 2025).

2.1.2. Contingency Theory

Contingency theory argues that organizational design and governance mechanisms must fit the environmental context; no single governance model is universally optimal. Digital transformation projects characterized by high uncertainty, rapid technological change, and multi-actor coordination require governance structures that can adjust to changing contingencies. Hybrid governance reflects this situational adaptability by integrating hierarchical oversight with iterative decision-making, cross-functional collaboration, and decentralized autonomy(Abul-Husn & Kenny, 2019; Pacheco-Cubillos *et al.*, 2024). The literature increasingly identifies hybrid governance as the most context-appropriate structure when uncertainty and interdependence are both high.

2.1.3. Governance-in-Projects and Digital Governance Theory

Traditional project governance literature emphasizes control, accountability, and role clarity, while agile project governance emphasizes learning, experimentation, and team autonomy. Hybrid governance is positioned as a synthesis that mitigates the weaknesses of both paradigms (Enabulele *et al.*, 2025). In digital transformation contexts, where project boundaries, requirements, and risks evolve continuously, governance needs to shift from static planning to dynamic assurance. Hybrid governance frameworks, therefore, incorporate:

- Formal controls (e.g., compliance mechanisms, documentation, standardized oversight)
- Adaptive controls (e.g., feedback loops, iterative planning, agile ceremonies)
- Enabling mechanisms (e.g., digital dashboards, cross-functional governance boards, vendor partnerships)

These blended mechanisms facilitate alignment between strategic priorities and emergent digital requirements.

2.2. Hybrid Governance in Digital Transformation

Digital transformation introduces governance challenges that stem from technological complexity, inter-organizational dependencies, and rapid change cycles. The literature increasingly recognizes that hybrid governance is necessary to support:

- Real-time decision-making
- Iterative delivery models
- Risk integration with dynamic project scopes
- Cross-functional coordination
- Technology–policy alignment(Animashaun *et al.*, 2025; Ojo, 2025)

In this context, hybrid governance becomes less about balancing "traditional" and "agile" and more about orchestrating multiple layers of control and adaptation. Scholars describe hybrid governance as a layered system, where strategic oversight remains centralized while operational teams exercise autonomy through agile practices. Digital tools such as real-time dashboards, automated reporting, and predictive analytics serve as the connective tissue that enables this duality.

Empirical studies show that hybrid governance enhances performance in areas such as risk mitigation, schedule adherence, vendor management, and change integration, particularly in complex digital projects. However, its success depends on institutional enabling factors such as regulatory coherence, digital infrastructure, leadership maturity, and skilled PMOs.

2.3. Hybrid PMOs and Organizational Governance Structures

Project Management Offices (PMOs) play a central role in operationalizing hybrid governance. The literature identifies several evolutions of PMOs traditional, agile, and hybrid each aligned with different organizational needs. Hybrid PMOs leverage:

- Standardized methodologies for consistency
- Agile delivery practices for responsiveness
- Data-driven tools for real-time visibility
- Tiered decision structures to balance autonomy and oversight

Hybrid PMOs serve as governance integrators, unifying risk, schedule, procurement, and change-management processes across diverse digital initiatives. They also act as boundary-spanning units that connect project teams with strategic leadership, regulatory bodies, and external vendors (Enabulele *et al.*, 2025; Shehu *et al.*, 2025).

In emerging economies, PMOs often face institutional challenges such as resource scarcity, limited digital maturity, and inconsistent regulatory environments. These conditions further necessitate hybrid governance approaches that can operate effectively despite institutional constraints.

2.4. Hybrid Governance in Weak Institutional Contexts (Emerging Economies)

The literature emphasizes that governance models designed for stable, institutionalized environments may not transfer directly to emerging economies. Institutional fragility manifested through poorly coordinated regulations, limited digital infrastructure, and fragmented governance authorities complicates the implementation of both strict traditional and fully agile governance models. Hybrid governance becomes a contextual adaptation mechanism, enabling organizations to:

- Compensate for institutional voids through flexible practices
- Maintain compliance where formal structures are ambiguous
- Coordinate across fractured regulatory environments
- Manage multi-vendor ecosystems typical of developing markets
- Address skills gaps through layered oversight and capability building

Hybrid governance is thus not merely a strategic choice but a necessary institutional response, enabling digital transformation projects to function despite systemic constraints (Leslie & Perini, 2024).

2.5. Synthesis and Implications for the Proposed Model

The existing theoretical and empirical literature supports the need for a hybrid governance model tailored to emerging

economies. Three themes recur:

1. Balancing formal control and adaptive flexibility is essential in digital transformation.

2. Institutional context shapes governance needs, making hybridity particularly important in emerging economies.

3. PMOs serve as critical governance integrators, operationalizing hybridity across project management domains. These insights form the theoretical foundation for the Hybrid Governance Model proposed in this study, which integrates institutional, structural, and project-level dimensions of governance to address the challenges specific to emerging economies.

3. METHODOLOGY

3.1. Review Type and Protocol

In this research study, systematic and scoping reviews were employed as a methodological rigour and comprehensive analysis. The study looks at digital transformation governance models with the help of these two approaches. To achieve transparency, repeatability, and uniformity, the review was performed under PRISMA 2020 guidelines of study discovery, screening, eligibility assessment, and final inclusion. This protocol will guarantee the full review of the evidence-based results of this study.

3.2. Search Strategy

The search to identify the relevant publications in 2010-2025 was conducted in a multi-database given that the concept of digital transformation in project management started during this period. To be as comprehensive as possible, we used Boolean operators and combinations of keywords to search on the subject of digital transformation, project governance, hybrid governance, and developing economies. The quality was ensured in Scopus, Web of Science, ScienceDirect, Emerald Insight, and Google Scholar. This guarantees a multidimensional body of digital transformation governance.

Table 1 contains the databases, the period of coverage, and representative search keywords. These databases included Scopus, Web of Science, Science Direct, Emerald Insight, and Google Scholar.

Directional citation tracking: Backwards and forward citation tracking. Incurred new sources that were not found in the initial query. This iterative procedure augmented data set understanding as well as minimized publication bias.

Table 1. Search Strings and Database Coverage (2010–2025).

Database	Coverage Period	Search String Example	Hits Retrieved	Notes
Scopus	2010–2025	(“digital transformation” OR “digitalization”) AND (“governance” OR “hybrid governance”) AND (“project management” OR “risk” OR “change management” OR “schedule” OR “procurement”) AND (“emerging economies” OR “developing countries”)	410	Peer-reviewed journals only
Web of Science	2010–2025	(“digital transformation” AND “project governance” AND “emerging economies”)	285	Excluded conference abstracts
ScienceDirect	2010–2025	(“hybrid governance” AND “digital projects” AND “developing countries”)	232	Included conceptual & empirical papers
Emerald Insight	2010–2025	(“digital governance” AND “project management” AND “public sector” OR “private sector”)	157	Focused on management and IT journals
Google Scholar	2010–2025	(“digital transformation governance” + “project performance” + “emerging economies”)	96	Used for grey literature and citation chaining

3.3. Eligibility Criteria

The eligibility criteria were designed to ensure the inclusion of studies that were relevant, methodologically robust, and of high scholarly quality. Only English-language, peer-reviewed journal articles, conference proceedings, and book chapters published between 2010 and 2025 were considered. Eligible studies were required to focus on digital transformation, governance models, or project management within the context of emerging or developing economies. In addition, studies had to present empirical, conceptual, or mixed-method research with clearly articulated findings related to key project management dimensions, including risk management, schedule performance, cost and procurement control, and change management.

3.4. Screening Procedure

The initial database search produced a total of 1,180 records. After removing 398 duplicates, 782 unique publications remained for title and abstract screening. At this stage, studies that did not address digital transformation, governance models, or emerging economy contexts were excluded. Following this preliminary screening, 214 articles were selected for full-text assessment based on relevance and methodological rigor.

During the full-text review, 178 studies were excluded due to insufficient methodological quality, lack of direct relevance to governance-in-projects, or limited applicability to emerging/developing economy contexts. Ultimately, 36 studies satisfied all eligibility criteria and were included

in the final synthesis. This multi-step screening process ensured that only robust and contextually appropriate evidence contributed to the review and the development of the proposed hybrid governance model.

Screening Summary:

- Total initial records identified: 1,180
- Records after duplicate removal: 782
- Final studies included in synthesis: 36

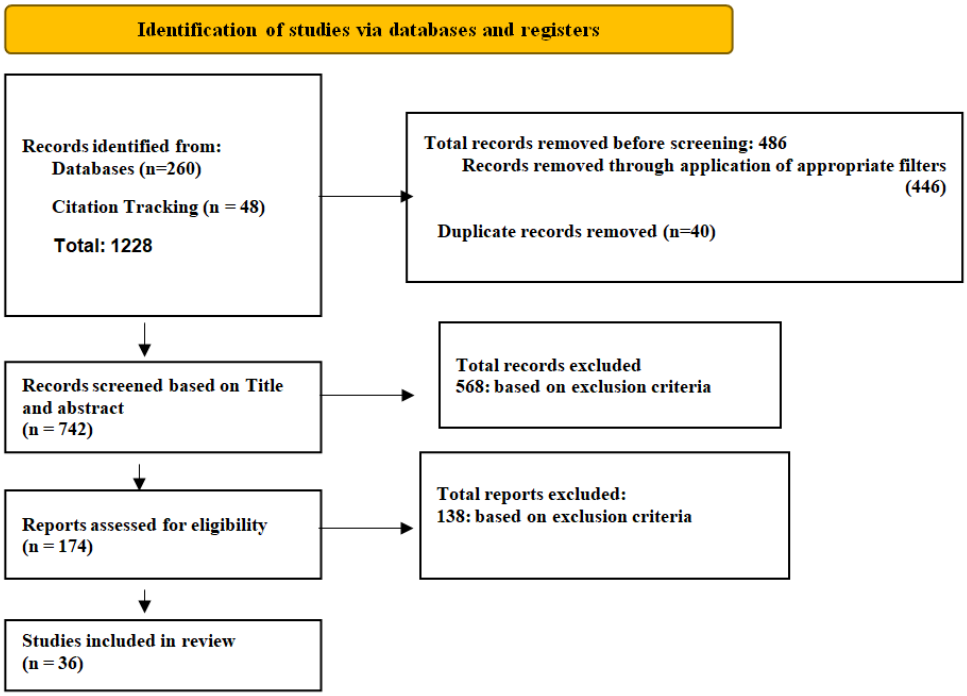

Figure 1. The flow of information through the identification, screening, eligibility, and inclusion stages following PRISMA 2020 guidelines.

3.5. Data Extraction and Coding Scheme

A standardized data-extraction template was developed to systematically collect key information from all selected studies. The extracted variables included bibliographic details such as country of origin, year of publication, and authorship. Contextual factors were also recorded, including each study's economic classification whether it originated from a developing or developed economy and the sector involved, distinguishing between public and private settings.

Governance-related variables captured the roles of stakeholders, decision-making authority, types of control mechanisms employed, and the defining features of hybrid governance arrangements. In terms of project-management elements, the template gathered information on change-management practices, cost and procurement control, schedule performance, and risk-management approaches.

Finally, outcomes and moderating variables were documented, including contextual factors influencing project execution, the effectiveness of governance structures, and overall performance indicators. This comprehensive and structured approach to capturing the most relevant dimensions of project governance and management strengthened the robustness of the resulting synthesis.

3.6. Synthesis Approach

The data synthesis was performed using a comparative topic matrix method, and it involved the findings of the qualitative and quantitative studies. Themes were identified based on recurring governance processes, performance outcomes, and situational factors. Vote counting was another method to assess the frequency and consistency of the observed effects during the research that illuminated the most common and dependable findings. It was a comprehensive approach toward understanding the relative impact of different governance models in different situations and ensured that the synthesis reflected the complexity of governance in digital transformation appropriately.

4. RESULTS AND DISCUSSION

4.1. Landscape of Governance Frameworks

Project evaluations of digital transformation projects identify traditional, agile, and hybrid governance frameworks. There are advantages and disadvantages in each based on the organization:

1. Traditional control: document rules, strict adherence, and centrality. They are effective with the public sector and highly controlled industries' efforts, which demand accountability and auditability. Nevertheless, it lacks flexibility and thus they are not easily able to adjust to rapid organizational and tech changes, which makes them inefficient in dynamic digital environments (Balcıoğlu *et al.*, 2024).

2. Agile governance encourages learning, adaptation, and engagement of the stakeholders. It allows decentralized

decision-making, self-organizing teams, as well as rapid adaptation to change. This approach suits startups and IT companies with time constraints and flexibility criteria. Control and risk management may be difficult in massive projects or multi-vendor projects due to the absence of supervision and bipolar project assurance (Antoniadi *et al.*, 2021; Enabulele, Omo-Enabulele *et al.*, 2025).

3. Hybrid governance is a blend of formal control systems and loose processes to strike a balance between accountability and flexibility. The approach promotes innovation, flexibility, mitigation of risks, and conformance. Complex and fragmented, and weak institutions are becoming more common in emergent economies, having complicated processes of digital transition of the public and the private sector. Hybrid governance is a means of managing transitions to digital in unpredictable circumstances, which are scalable and reactive (Abbott & Faude, 2022; Enabulele *et al.*, 2025).

4.2. Comparative Analysis of Governance Frameworks

It is the case that matrix comparisons reviewed the maturity, scalability, the assurance/control techniques, and fit to the context of traditional, agile, and hybrid governance systems. The conventional governance is developed and regulated, but cannot be scaled. It is effective when it has predictable circumstances and has a clear set of procedures, but it is not effective in fast digital disruption. Agile governance is flexible and can be extended to large scale because of iterative feedback control and decentralizing authority, yet it tends to have no assurance mechanisms to resolve risk and guarantee compliance with regulations. The elements of balanced hybrid governance are systematic reporting, control-layered, and responsive feedback. Horizontal collaboration between digital projects and vertical alignment with the strategy is made possible. Hybrid frameworks are useful in the rising economies, where the institutional instability demands rigour and flexibility (Almeida & Bálint, 2024; Hammed *et al.*, 2025).

Table 2. Comparative Matrix of Governance Frameworks

Dimension	Traditional Governance	Agile Governance	Hybrid Governance
Structure & Decision Rights (da Silva & de Souza, 2021)	Centralized hierarchy; formal committees	Decentralized teams; self-organizing authority	Dual-layer structure: central oversight + agile teams
Maturity (Gajdzik, 2022)	High procedural maturity; rigid standards	Moderate maturity; evolving norms	Adaptive maturity: integrates standards with agility
Scalability (Fotis *et al.*, 2022)	Limited beyond departmental scope	High for modular projects	Moderate-to-high; scalable through layered control
Assurance & Control (Hut-Mossel *et al.*, 2021)	Strong compliance; heavy documentation	Minimal documentation; relies on trust and iteration	Balanced assurance via dashboards and real-time reporting
Flexibility	Low	High	Moderate-to-high
Contextual Fit (Emerging Economies) (Crnogaj & Rus, 2023)	Suitable for stable, regulated sectors	Effective for innovation-driven startups	Optimal for transitional contexts, balancing regulation and flexibility
Typical Tools & Frameworks (Sott & Bender, 2025)	PRINCE2, ITIL, ISO 38500	Scrum, SAFe, DevOps	COBIT-Agile integration, hybrid PMO models
Key Strengths (Garrido-Moreno *et al.*, 2024)	Accountability, auditability, predictability	Responsiveness, collaboration, innovation	Balance between control and adaptability
Key Weaknesses(Cairney & Toomey, 2025)	Bureaucratic inertia, low adaptability	Limited control, inconsistent assurance	Complexity in coordination requires skilled leadership

4.2.1. Interpretation

Table 2 highlights that hybrid governance is offering a balance between flexibility and persistence. It would be especially effective in newly industrialized states where institutional uncertainty and capacity constraints during rapid digital transformation characterize those economies, which is a combination of formal control systems with iterative project processes.

4.3. Derivation of Governance Orientations and Link to the Proposed Model

The three governance orientations identified in this review traditional, agile, and hybrid emerged inductively from the thematic synthesis of the included studies. During the coding process, governance mechanisms, decision-making structures, control practices, and project management approaches described in each article consistently clustered around these three configurations (Chen *et al.*, 2025). Studies emphasizing hierarchical authority, procedural compliance, and structured oversight aligned with the traditional orientation, while those focusing on decentralization, iterative adaptation, and stakeholder-centred responsiveness aligned with the agile orientation. A third, increasingly prevalent set of studies described governance systems that deliberately combined formal control processes with flexible, adaptive routines; these constituted the hybrid orientation (Ogirri & Idugie, 2024). The convergence of these patterns across the reviewed literature provides the empirical basis for the classification presented in

this study.

This synthesis also directly informed the development of the Hybrid Governance Model (Figure 2). Evidence related to accountability structures, audit requirements, and procedural assurance underpins the model's formal control dimension, while findings emphasising iterative learning cycles, cross-functional collaboration, and adaptive planning inform its flexibility dimension. The hybrid governance layer is grounded in studies that demonstrate the benefits of integrating structured oversight mechanisms with agile delivery practices, particularly in contexts characterised by institutional volatility or technological uncertainty. Furthermore, the contextual enablers incorporated into the model policy alignment, institutional capacity, vendor ecosystem maturity, and workforce skills were derived from recurrent barriers and success factors identified across the included studies. Collectively, these findings establish a clear conceptual and empirical link between the review evidence and the structural components of the proposed model, ensuring that the framework is not only theoretically grounded but also reflective of demonstrated governance practices in digital transformation initiatives within emerging economy settings.

4.4. Gaps and Adaptations Needed for Emerging Economies

Even though hybrid forms of governance are increasingly gaining acceptability, their practicality in the new economies is limited by several circumstances:

- *Failure to integrate policies:* The adoption of most governance models is incomplete since they do not align with industry-related regulations or national digital policies. When links between governance structures and more general policy objectives are unclear, organizations find it hard to achieve sustained and sustained governance results in digital transformation programs (Hanisch *et al.*, 2023).
- *Limitations on institutional capacity:* The limitations are often restricted to administrative and institutional capacity to implement governance structures in different industries. The scarcity of resources and institutional inflexibility within most of the emerging economies render the implementation of concepts of governance and project management methods very hard without consistency (Meuleman, 2021; Olaitan *et al.*, 2025)
- *Unavailability of digital tools:* Many, both public and private organizations, do not have the digital platforms or information systems to drive the performance assessment and real-time observance of project management and governance-pose activities. The inability to access essential information impedes timely decision-making and reduces the effectiveness of models of governance in managing the process of digital transformation (Hughes *et al.*, 2025).
- *Sociocultural incompatibility:* The structures of industrialized economies may not easily be accommodated into the sociocultural norms of emerging economies and decision-making processes. It must be customized to make it relevant and effective in a wide range of cultural settings because the best governance systems that work successfully in industrialized economies may not be an appropriate fit regarding local riskful natures, expectations in accountability, or organizational hierarchy (Assan, 2023).

Such findings point to the relevance of contextual customization, which includes, specifically, the creation of hybrid governance paradigms that combine the reality of digital infrastructure, the level of institutional maturity, and the local policy context.

4.5. Enablers and Barriers

Based on the literature, there are multiple facilitators and barriers to the effectiveness of governance in digital transformation initiatives:

Enablers

Support in regulations: Data protection and e-governance strategies, also, foster homogeneous practices through specific digital policies.

i. Ability to create PMO: Advanced Project Management Offices help to unify the level of governance and project execution.

ii. Vendor Ecosystem maturity: Local and foreign suppliers of IT products offer technical expertise and process acumen.

iii. Workforce skills: Agility skills, skills in data analytics, and expertise in IT governance frameworks (e.g., COBIT, PRINCE2 Agile) contribute to increasing implementation ability.

iv. Barriers

v. The fragmentation of regulation and unstable policy application in industries.

vi. Low levels of institutional persistence, which cause disturbances in governance during the tenures of projects.

vii. Lack of change-management competence, especially among institutions of the state.

viii. Resource constraints and use of outside consultants in the establishment and oversight of governance (Alibekova *et al.*, 2020).

The findings highlight the fact that, to be effective, government cannot just rely on the kind of structure that is adopted, but the larger institutional and organizational ecology in which the digital transformation is brought about.

4.6. Discussion

4.6.1. Theoretical Implications for Governance-in-Projects

The findings of this study are arguably good proof of the increasing sentiment that control and flexibility should not be isolated, but, as a matter of fact, project governance in the digital era of transformation requires integration. Rigidity, bureaucracy, and compliance measures have historically been the subjects of conventional governance concepts, which often do not allow much room to deviate. Nevertheless, studies on agile governance and digital transformation point to the necessity of flexibility, responsiveness to the shifting project demands, and learning by trial and error/decentralized decision-making.

In this work, it is demonstrated that hybrid governance models can help provide the effective bridging between the two seemingly incompatible paradigms through the integration of dynamic feedback mechanisms and the structural assurance(Aristovnik *et al.*, 2022). It also highlights the fact that flexibility and control are not contradictory aspects of a comprehensive governance structure; on the contrary. Having the components in balance, the projects can trigger creativity,

responsiveness, and contextual adaptation (through flexibility) and at the same time keep responsibility, regulatory compliance, and risk mitigation (through control) (Yasmin *et al.*, 2022).

The theoretical implications of this finding for project governance include the significance of institutional performance in developing countries, where institutional structures are often weak or inefficient. The hybrid governance models could provide a more scalable and flexible approach to project management, as they fill the divide between agile inventive processes with an innovation-based approach and the traditional control-based structures (Saddiqa *et al.*, 2023).

4.6.2. Practical Implications for PMOs

These findings suggest an important fit to Project Management offices (PMOs), a single governance framework that integrates the various project management domains (risk, schedule, cost, and change) rather than the disjointed control over the various domains previously in place. These areas have been managed independently by PMOs, but hybrid governance requires their integration in real time with the support of data analytics and sophisticated computer tools.

The underlying implications of PMOs on the real world can be seen to be as follows:

- *Risk unification:* PMOs are expected to integrate quantitative risk indicators with real-time feedback with the use of data analytics and predictive interfaces. It would also be possible to prevent risks owing to the nature of integration issues, cybersecurity, and project delays (Aljohani, 2023; Animashaun *et al.*, 2025).
- *Change of timing synchronisation:* PMOs must establish formal decision-making mechanisms that are highly aligned to the cycles of iterative plans. This will ensure that alterations in the resources, time, or objective of the project pass smoothly into the schedule to continue capturing the goals of the project as it becomes consistent with the reality of operation (Moghaddasi *et al.*, 2025).
- *Procurement and cost transparency:* Digital procurement controls associated with governance dashboards can make a great change in improving traceability and cost transparency. It will help avoid cost allotments, improve the decision-making process surrounding procurement processes (Motaung *et al.*, 2023).
- *Decision escalation procedures:* PMOs are advised to act rationally to address project problems by adopting a design of decision escalation at various levels. This ensures that there is the proper management of risks and that the project managers address them in a tactical and operational manner, whereas the senior leadership addresses them at the strategic level (Johnivan, 2022).

These modifications will enable PMOs to turn into strategic governance centres that integrate the objectives of the project with those of digital transformation.

As a result, hybrid governance redefines what the PMO is and what the PMO does by defining it as a strategic harmonizer and not a compliance-monitoring authority.

4.6.3. Policy Implications for Emerging Economies

There are institutional strengths and regulatory complexity two critical elements of the Institutional strength and regulatory system complexity that play a major role in enhancing the effectiveness of governance systems in digital transformation projects in emergent economies. Lurking at the findings placed upon it, the following policy recommendations are made towards the improvement of the governance structures in these economies (34):

1. *Adoption and Localization of Standards:* To ensure that the international models such as COBIT, ISO 38500, and PRINCE2 Agile are suitable in the local environments of the emerging countries, facilitate their localization. To enable the models of governance to be effective and sustainable, they need adjustment to align themselves with the institutional organizations, sociopolitical realities, and domestic laws (Otundo Richard, 2024).
2. *Building of Institutional Capacity:* Governments and organisations in the emerging economies should invest in institutional capacity building of their Project Management offices (PMOs) through specialised training programs based on hybrid governance, risk management, and IT assurance. The activities would enhance the institutional ability to successfully deal with the digital transitions, and PMOs would be in a better position to deal with issues of governance issues (Moghaddasi *et al.*, 2025).
3. *Orchestration of the Ecosystem:* Form digital transformation interagency councils consisting of academicians, corporations, and government. Such councils may help in ensuring that governance processes are synchronized and that intersections are beneficial to digital transformation systems. Moreover, this combined strategy will facilitate the development of multifunctional governance systems that are applicable to most sectors and enhance the integration of policies (Pu *et al.*, 2025).

These policy guidelines view governance as an effective facilitator of digital transformation as opposed to a compliance burden.

4.6.4. Integration of Findings: Proposed Hybrid Governance Model

Using the above theoretical, practical, and policy perspectives, Figure 2 illustrates the Proposed Hybrid Governance Model of Emerging Economies.

The model outlines the interaction between formal control interventions and adaptability, centrally consolidating on a hybrid layer of governance that is supported by contextual facilitating factors, such as policy structures, institutional capacity, vendor cosmos, and workforce abilities. The combination of both factual results in high-quality project results- reduced risk exposure, enhanced schedule and cost performance, greater flexibility, and long-term digital transformation (Motadi & Sikhwari, 2024)

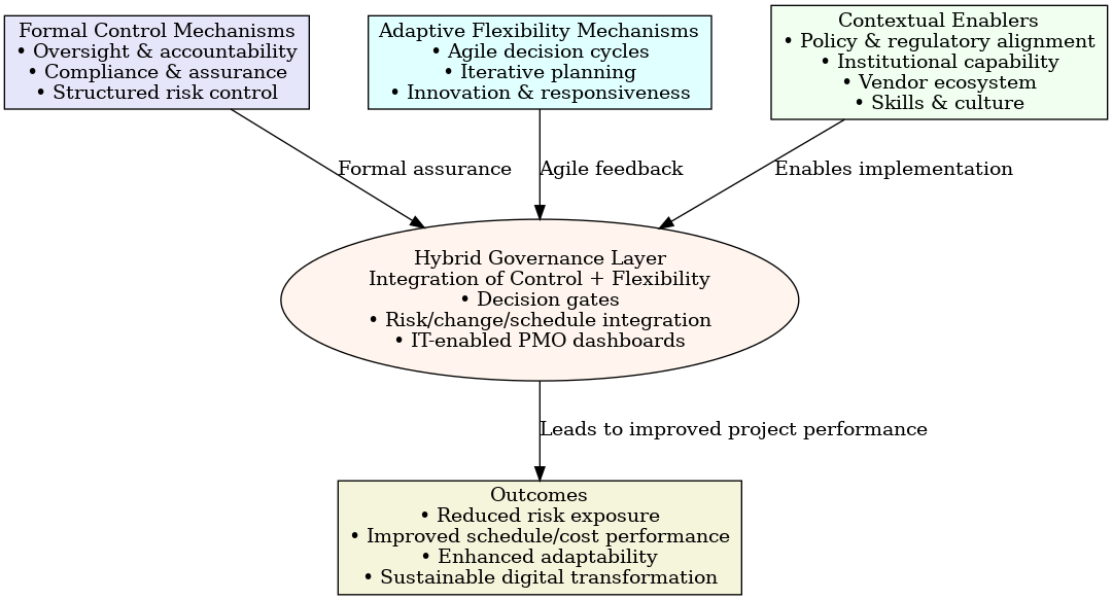

Figure 2. Proposed Hybrid Governance Model for Emerging Economies
Source: Authors' development (2025).

This theoretical framework shows how formal control and adaptive flexibility processes are coming together within a hybrid layer of governance, enabled by contextual facilitators such as legislation, institutional capability, vendor coalitions, and expertise. The unified framework makes digital transformation efforts in developing economies efficient and sustainable.

4.6.5. Limitations and Threats to Validity

Although the given study provides a comprehensive review of the literature, it has several limitations that must be mentioned: Coverage bias: Individual databases have been used; however, research that was specific to a particular area or those ones that were not in English would have been ignored, and it might have left out relevant data about non-Western settings.

i. Publication bias: Due to the selection of peer-reviewed sources to publish more positive outcomes, the use of these sources to conduct the review may have overstated the effectiveness of hybrid governance methods.

ii. Conceptual heterogeneity: The language that applies across the studies (including digital governance, hybrid PMO, and IT governance) might restrict the extent to which some findings can be generalised, and construct comparability might be challenging.

Methodological diversity: The conceptual and empirical research are complementary to the review; however, direct quantitative synthesis is challenging, and one can find more conclusive results based on all the reviewed studies, which makes it more challenging.

To address these limitations, future studies ought to utilize cross-national comparison, longitudinal studies, and quantitative testing of hybrid systems of governance.

5. CONCLUSION

5.1. Summary of Key Insights

In this research, the authors have performed a critical evaluation of governance strategies in the context of the digital transformation, with special focus on how the emerging economies can balance the formal control and adaptive flexibility in the governance of projects. The synthesis made it clear that conventional frameworks are more concerned with compliance and assurance and often do not cope with technological and contextual instability. On the other hand, lean governance structures enhance flexibility but deter uniformity and responsibility.

The review recommended the hybrid governance model (Figure 2) to address these contradictions with the integration of control-oriented and flexibility-oriented processes within a flexible and context-specific framework. The conceptualization of governance through this model views it as a dynamic strategic competence instead of a pre-determined compliance structure that is flexible in line with the complexity of the project, the level of institutional maturity, and the readiness of the digital ecosystems.

The discussion underlined policy consistency, institutional capacity, vendor ecosystem, and digital competencies as the necessary facilitators of hybrid governance to be introduced in emerging economies.

5.2. Managerial Takeaways

To practitioners and Project Management Offices (PMOs), the research can offer practical advice in the shape of a governance implementation rubric:

Table 3. Managerial Takeaways

Dimension	Actionable Guideline for PMOs	Intended Outcome
Risk Integration	Embed predictive analytics and continuous monitoring tools for early risk detection.	Reduced exposure and proactive mitigation.
Change–Schedule Alignment	Establish rolling-wave schedules linked to agile change-control gates.	Greater adaptability with minimal disruption.
Procurement and Vendor Oversight	Digitize procurement processes and link to governance dashboards for traceability.	Transparency and cost efficiency.
Decision Governance	Apply tiered decision gates (strategic–tactical–operational) with escalation protocols.	Faster and context-appropriate decision-making.
Capability Development	Train PMO staff in hybrid governance principles, digital tools, and data-driven management.	Sustained institutional learning and agility.

All these managerial practices operationalize the hybrid governance framework to enable the PMOs to move out of the administration compliance units and into strategic governance centers that add value to digital transformation projects.

FUTURE RESEARCH

Despite the theoretical background created in the review, there are many possibilities of empirical advancement:

i. Cross-Country Comparative Studies: Future research must focus on inquiring into the diversity of hybrid governance schemes in the developing economies typified by different regulatory and cultural environments. This type of study could test how well the proposed model (Figure 2) can be applied to different industries and nations.

ii. Longitudinal and Mixed-Method Designs: The longitudinal case studies on the advancement of hybrid governance mechanisms across multiple project cycles with the use of longitudinal or mixed-method research would allow obtaining a deeper insight into the development of causality and adaptation dynamics.

iii. Quantitative Model Testing: Development and testing of a measurement instrument of governance hybridity, i.e., a combination of both control and flexibility dimensions, would ease the hypothesis testing and performance-correlation tests.

iv. Digital PMO Transformation: Future research directions. Future research might explore the effects of artificial intelligence, data analytics, and automation on the real-world transformation of hybrid governance arrangements in project management as digitization increases.

Based on such recommendations, scholars will be able to improve, apply, and empirically verify the proposed framework, hence developing a stronger theory of governance-in-projects that applies to emerging economies.

The article contributes to the overall understanding of governance in projects by defining a hybrid paradigm of governance that should be used during the era of digital transformation. The proposed paradigm involves control, flexibility, and contextual facilitators in order to enhance the performance of the project and institutional resilience. It is a systematic tool that enables Dr. Scientists and Practitioners to establish future-ready, sustainable systems of governance that are efficient, compliant, and adaptive.

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