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From Responsible AI Governance to Competitive Advantage: Examining the Role of AI Governance Capability in Driving Innovation and Organizational Performance in Nigerian Organizations

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Abstract

Artificial intelligence creates opportunities for organizational innovation while introducing accountability, fairness, privacy, and oversight challenges. Existing research explains AI resources and business value more extensively than the organizational capability required to govern AI responsibly and translate governance into strategic outcomes. This conceptual paper develops a framework connecting AI governance capability, innovation capability, organizational performance, and competitive advantage in Nigerian organizations. A purposive, integrative synthesis of 20 journal articles informs construct differentiation and the development of seven hypotheses. Drawing on resource-based and dynamic capability perspectives, the paper conceptualizes AI governance capability through strategic accountability, data and model lifecycle governance, ethical assurance, human oversight, and adaptive monitoring. Innovation capability is proposed as a mechanism linking governance capability to two distinct organizational outcomes. The synthesis indicates that governance may facilitate value creation through clearer decision rights, reusable assurance practices, and organizational learning, although implementation costs and excessive procedural burdens may limit these benefits. A proposed organizational survey design specifies measurement development, multiple informants, temporal separation, and tests of incremental explanatory value beyond general AI capability. The paper contributes a capability-based explanation of responsible AI governance and a

context-sensitive research agenda for Nigeria. Its hypotheses remain untested; the framework establishes a basis for empirical investigation .

Keywords: responsible artificial intelligence; AI governance capability; innovation capability; organizational performance; competitive advantage; Nigeria.

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1 Introduction

1.1 Background of the Study

Artificial intelligence has become an organizational resource whose value depends on its relationship with people, business processes, and managerial decisions. Access to models, computational infrastructure, and data does not by itself establish an organization's ability to use AI effectively. Mikalef and Gupta (2021) conceptualize AI capability as a combination of tangible human, and intangible resources and examine its relationship with creativity and performance. Enholm et al. (2022) similarly organize the literature around the conditions and mechanisms through which AI generates business value. These contributions make organizational arrangements central to understanding AI outcomes. Responsible AI adds a further organizational challenge. An AI application may be technically effective while creating unacceptable consequences for employees, customers, or other stakeholders. Conversely, an organization may endorse ethical principles without developing routines capable of implementing them. Jobin et al. (2019) document recurring ethical concerns across AI guidelines, while Eitel-Porter (2021) addresses implementation beyond principle statements. The strategic question developed here is whether an organization's capacity to govern AI responsibly also supports innovation and organizational outcomes. This question requires separating governance capability from both ethical declarations and general technical proficiency.

Nigeria provides a consequential setting for examining the interaction between AI governance and organizational value. Alakitan and Makinde (2025) analyze Nigerian digital technology and AI policy documents and identify concerns regarding ethical guidance and data protection within the approaches examined. Their policy analysis motivates organizational investigation, but it does not establish how Nigerian firms actually govern AI or whether particular governance arrangements improve performance. Moving between these levels of

analysis without evidence would obscure the contribution of a firm-level study. The proposed empirical population is therefore bounded to private organizations operating in Nigeria and using at least one identifiable AI application in a business process. Including private firms provides a clearer basis for interpreting competitive advantage than combining commercial firms and public agencies under one undifferentiated outcome measure. Organizations that purchase AI services remain eligible because accountability, monitoring, and vendor oversight are relevant even when models are externally developed. Sector, organizational size, ownership, and AI use intensity are contextual characteristics to be recorded rather than assumed to be uniform. These boundaries preserve the title's Nigerian organizational focus while identifying a coherent unit of analysis.

1.2 Problem Statement

The research problem concerns an incomplete explanation of how responsible AI governance becomes an organizational capability and how that capability might create business value. Birkstedt et al. (2023) identify limitations concerning implementation, context, effectiveness, and process operationalization in the governance literature they review. Batool et al. (2025) further organize governance through questions of accountability, governed elements, lifecycle timing, and mechanisms. These reviews support moving beyond governance labels toward observable organizational practices.

1.3 Research Aim and Objectives

The **Research aim** is to develop a theoretically grounded framework for examining how AI governance capability is associated with innovation capability, organizational performance, and competitive advantage in Nigerian organizations.

The **Research objectives** are as follows.

RO1: To specify the dimensions of AI governance capability and establish a basis for their subsequent validation.

RO2: To examine conceptually the relationship between AI governance capability and innovation capability.

RO3: To explain the proposed direct and innovation-mediated relationships between AI governance capability and organizational performance.

RO4: To explain the proposed direct and innovation-mediated relationships between AI governance capability and competitive advantage within the Nigerian setting.

1.4 Research Questions

RQ1: Which dimensions constitute AI governance capability, and how can they be measured distinctly from general AI capability?

RQ2: How is AI governance capability associated with innovation capability?

RQ3: How is AI governance capability associated with organizational performance, directly and through innovation capability?

RQ4: How is AI governance capability associated with competitive advantage, directly and through innovation capability, in Nigerian organizations?

1.5 Significance of the Study

The paper offers three intended contributions. It defines governance capability as an implemented organizational capacity. It explains innovation capability as a possible intervening mechanism and separates organizational performance from competitive advantage. It also specifies how a Nigerian study could investigate these relationships without attributing policy-level observations directly to firms. The resource-based argument concerns heterogeneity in organizational arrangements; the dynamic capability argument concerns the adaptation of those arrangements over time. For managers, the framework identifies organizational practices through which responsible AI commitments can become actionable governance arrangements. For Nigerian organizational research, it establishes an approach to assessing whether governance capability contributes explanatory value beyond general AI capability. These

contributions provide a basis for empirical investigation of innovation and business outcomes without presuming that ethical commitments necessarily produce competitive advantage.

2 Literature Review

2.1 Responsible AI Principles

Responsible AI principles establish expectations concerning the ethical development, deployment, and use of artificial intelligence. These expectations address fairness, accountability, transparency, privacy, safety, and human oversight. Jobin et al. (2019) identify recurring ethical concerns across AI guidelines, providing a foundation for understanding the responsibilities associated with organizational AI adoption. However, agreement on broad principles does not ensure consistent implementation because organizations must interpret these expectations within particular business processes and decision environments. The implementation challenge concerns how ethical commitments become operational responsibilities. Eitel-Porter (2021) emphasizes the organizational work required to implement ethical AI beyond formal declarations. Camilleri (2024) further connects AI governance with social responsibility, highlighting the need to consider the consequences of AI for stakeholders. Responsible AI principles therefore provide the normative foundation of the present study, while organizational governance explains how these principles can guide actual decisions and practices.

2.2 Organizational AI Governance

Organizational AI governance concerns the arrangements through which organizations direct, oversee, and evaluate their use of AI. Mäntymäki et al. (2022) position AI governance within the wider organizational governance structure and emphasize rules, practices, processes, and tools. Schneider et al. (2023) extend this discussion to business organizations, directing attention to responsibilities and governance arrangements that support organizational implementation. The distinction

between governance commitments and their implementation is particularly relevant when organizations acquire AI from external suppliers. Adopting organizations may have limited control over training data, model development, and subsequent updates, while retaining responsibility for how systems inform their own decisions. Effective governance consequently requires supplier assessment, documentation of limitations, assigned decision rights, and escalation procedures. Papagiannidis et al. (2023) provide empirical insights into organizational governance practices through comparative cases in the energy sector. Their findings inform the identification of relevant practices, although their transferability to Nigerian organizations requires examination.

2.3 AI Governance Capability

AI governance capability is defined in this paper as an organization's repeatable and adaptable ability to establish responsibilities, coordinate decisions, implement controls, and learn from evidence throughout the development, acquisition, deployment, and use of AI. This definition emphasizes the capacity to enact governance consistently. Papagiannidis et al. (2025) provide a responsible AI governance framework that informs this organizational interpretation, while the dimensional structure proposed here remains subject to empirical validation. Five candidate dimensions constitute the proposed capability. Strategic accountability concerns oversight responsibilities and decision rights. Data and model lifecycle governance addresses provenance, access, evaluation, documentation, and retirement. Ethical assurance concerns the assessment and review of foreseeable harms. Human oversight involves meaningful intervention and opportunities to challenge AI-supported decisions. Adaptive monitoring concerns incident detection, corrective action, and the revision of governance routines. Mökander et al. (2021) support the consideration of auditing as a governance mechanism while emphasizing the importance of understanding its scope and limitations.

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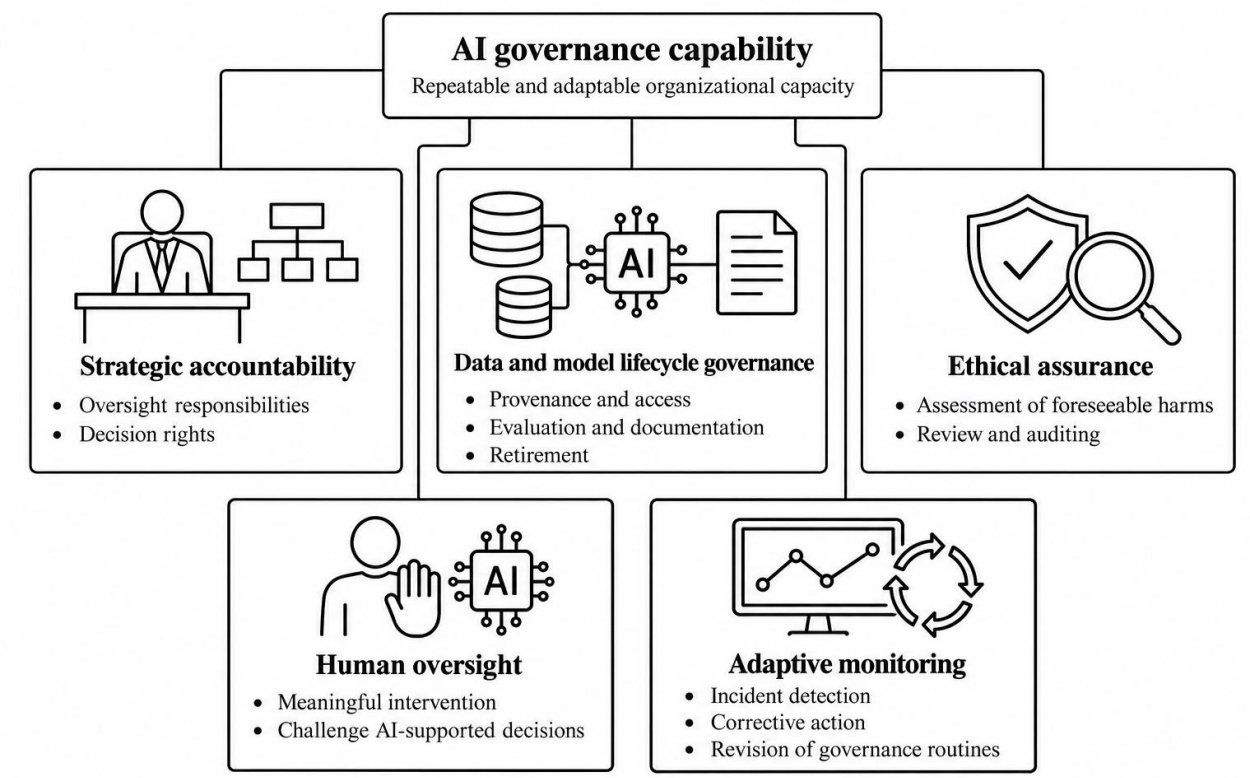


Figure 1. Proposed dimensions of AI governance capability
Conceptual synthesis; dimensions require empirical validation.

Figure 1 presents the proposed composition of AI governance capability. The higher-order construct is provisionally conceptualized as a composite formed by distinct dimensions. These dimensions perform different organizational functions and should not automatically be treated as interchangeable. The measurement specification of each lower-order dimension will depend on whether its indicators represent manifestations of an underlying capacity or distinct practices contributing to that capacity.

2.4 Innovation Capability through AI Governance

Innovation capability concerns an organization's ability to generate, evaluate, and implement useful changes in products, services, and processes. Haefner et al. (2021) examine AI and innovation management, providing a foundation for considering how AI-related organizational arrangements influence innovation activities. Their contribution supports examining innovation as an organizational process rather

than assuming that access to AI automatically produces innovative outcomes. AI governance capability may support innovation by clarifying responsibilities, establishing acceptable conditions for experimentation, and providing procedures for evaluating emerging applications. Reusable assessments and documented lessons may reduce uncertainty during implementation. Nevertheless, governance can also introduce delays when approval requirements are disproportionate to application risks. The proposed relationship therefore concerns an organization's ability to govern effectively and adaptively, rather than the number of policies or approval stages it maintains. Enholm et al. (2022) explain AI business value through organizational conditions and mechanisms, while Mikalef and Gupta (2021) examine the relationship between general AI capability, organizational creativity, and performance. These studies provide transferable foundations for the proposed innovation pathway. They do not directly establish that AI governance capability improves innovation, making this relationship an appropriate subject for empirical investigation.

2.5 Organizational Outcomes of AI Governance

Organizational performance refers to the achievement of operational and business objectives, including productivity, service quality, efficiency, and financial outcomes. Wamba-Taguimdje et al. (2020) examine the business value of AI-based transformation projects and their implications for firm performance. Their work supports attention to organizational processes through which AI investments may produce measurable benefits. Competitive advantage concerns a favorable position relative to relevant competitors. Krakowski et al. (2023) examine how AI changes the sources of competitive advantage, highlighting the significance of complementary human and technological capabilities. Organizational performance and competitive advantage should therefore remain distinct outcomes. A firm may improve its efficiency

while competitors achieve similar improvements, resulting in better internal performance without greater relative advantage.

For the proposed Nigerian study, organizational performance indicators should address achieved objectives and improvements within a specified period. Competitive advantage indicators should explicitly refer to relevant competitors. This distinction reduces measurement overlap and allows the study to assess whether governance capability supports operational improvement, competitive differentiation, or both.

2.6 Research Gaps

RG1: AI Governance Capability Specification: Further research is needed to specify and validate AI governance capability as a construct distinct from general AI capability (Birkstedt et al., 2023; Batool et al., 2025).

RG2: Innovation Mechanism: The relationship between AI governance capability and innovation capability requires further empirical examination.

RG3: Organizational Performance Pathways: The direct relationship between AI governance capability and organizational performance requires examination alongside the mediating role of innovation capability.

RG4: Competitive Value in Nigeria: Further organizational research is needed to examine how AI governance capability relates to competitive advantage in the Nigerian context (Alakitan & Makinde, 2025).

3 Theoretical Foundation

3.1 Resource-Based View

The resource-based view provides a foundation for explaining why organizations using similar AI technologies may achieve different outcomes. Organizational value depends on how technological resources are combined with human expertise, routines, and complementary capabilities. Mikalef and Gupta (2021) apply a resource-based perspective to general AI capability, demonstrating the relevance of

tangible, human, and intangible resources to organizational creativity and performance. Within the present framework, AI governance capability represents a proposed organizational capacity through which AI-related resources and decisions are coordinated. Governance arrangements may become strategically valuable when embedded in accumulated knowledge, working relationships, and established decision processes. Their competitive significance, however, depends on whether they produce valuable differences that competitors cannot readily reproduce. Krakowski et al. (2023) support examining how combinations of human and AI capabilities influence competitive advantage, providing a theoretical foundation for this argument. The resource-based view consequently informs the proposed relationships between governance capability and organizational outcomes. It does not establish that every governance practice is rare, difficult to imitate, or sufficient to generate competitive advantage. Those conditions require theoretical justification and empirical assessment.

3.2 Dynamic Capability Perspective

The dynamic capability perspective explains how organizations adapt their capabilities in response to changing technologies, risks, and business requirements. Its relevance to AI governance arises from the need to revise organizational arrangements as applications evolve and new evidence emerges. Papagiannidis et al. (2025) provide a responsible governance framework that supports attention to organizational implementation, while Enholm et al. (2022) situate organizational capabilities within the broader explanation of AI business value. An important distinction exists between performing a governance activity and adapting the arrangements through which governance operates. Monitoring a deployed application is an operational activity. Using monitoring evidence to revise assessment procedures, redistribute responsibilities, or redesign oversight arrangements represents an adaptive activity. AI governance capability therefore contains a proposed dynamic component when organizations use experience to reconfigure their

governance routines. This perspective supports including adaptive monitoring and organizational learning within the proposed capability. It also explains why the existence of policies alone provides limited evidence of effective governance. The capacity to recognize emerging problems and change organizational responses must be examined directly.

3.3 Theoretical Integration for AI Governance Capability

The resource-based and dynamic capability perspectives offer complementary explanations of the proposed model. The resource-based view explains how differences in governance arrangements may contribute to differences in organizational outcomes. The dynamic capability perspective explains how those arrangements are maintained and revised as technological and organizational conditions change. Their integration positions AI governance capability as an organizational capacity that combines reliable implementation with adaptation. Innovation capability provides a proposed mechanism through which this capacity may translate into organizational performance and competitive advantage. Governance may establish conditions for responsible experimentation, while innovation capability supports the implementation of useful changes. Raisch and Krakowski (2021) further inform this reasoning through their analysis of automation and augmentation in management. Their work highlights the importance of managerial choices concerning human involvement in AI-supported activities. In the present framework, human oversight forms part of governance capability, while the effective combination of human judgment and AI may support organizational innovation. Together, these theoretical perspectives provide a basis for developing the proposed direct and mediated relationships. The hypotheses remain open to empirical testing, including the possibility that governance capability explains organizational outcomes differently from general AI capability.

4 Conceptual Framework

4.1 Innovation through AI Governance Capability

AI governance capability may support innovation by clarifying approval responsibilities, permissible data use, and deployment requirements. Reusable assessments and assigned decision rights can reduce fragmented learning and repeated negotiations. However, excessive controls may delay experimentation; the proposed benefit concerns proportionate, adaptable governance rather than rule quantity. Organizational readiness and implementation research provide foundations for this argument (Jöhnk et al., 2021; Eitel-Porter, 2021).

H1: AI governance capability is positively associated with innovation capability.

4.2 Organizational Performance through AI Governance Capability

Governance may improve existing operations through clear accountability, documented system limitations, and timely incident response. Data governance research supports examining these coordination arrangements (Abraham et al., 2019), although extending this reasoning to AI governance requires empirical testing. Governance also consumes resources, and benefits may depend on application risks and the assessment period.

H2: AI governance capability is positively associated with organizational performance.

4.3 Competitive Advantage through AI Governance Capability

Governance capability may support competitive advantage through credible AI deployment and accumulated implementation knowledge. Research on automation, augmentation, and changing competitive capabilities provides a theoretical foundation (Raisch & Krakowski, 2021; Krakowski et al., 2023). Nevertheless, governance may represent an industry requirement rather than differentiation. Credibility and learning are proposed explanations, not separately measured mediators.

H3: AI governance capability is positively associated with competitive advantage.

4.4 Organizational Outcomes through Innovation Capability

Innovation capability enables the implementation of useful process changes and market offerings, potentially improving performance and relative positioning (Haefner et al., 2021; Enholm et al., 2022). Outcomes remain uncertain because unsuccessful projects consume resources and returns may be delayed. Internal improvement and competitor-relative advantage require distinct measures; innovation does not guarantee durable advantage.

H4: Innovation capability is positively associated with organizational performance.

H5: Innovation capability is positively associated with competitive advantage.

4.5 Innovation Capability as a Mediator

Governance capability may establish conditions for responsible experimentation, while innovation capability translates these conditions into organizational outcomes. Direct and indirect pathways may coexist; complete mediation is not assumed. A nonsignificant direct effect does not rule out an indirect effect, which requires separate estimation.

H6: Innovation capability mediates the relationship between AI governance capability and organizational performance.

H7: Innovation capability mediates the relationship between AI governance capability and competitive advantage.

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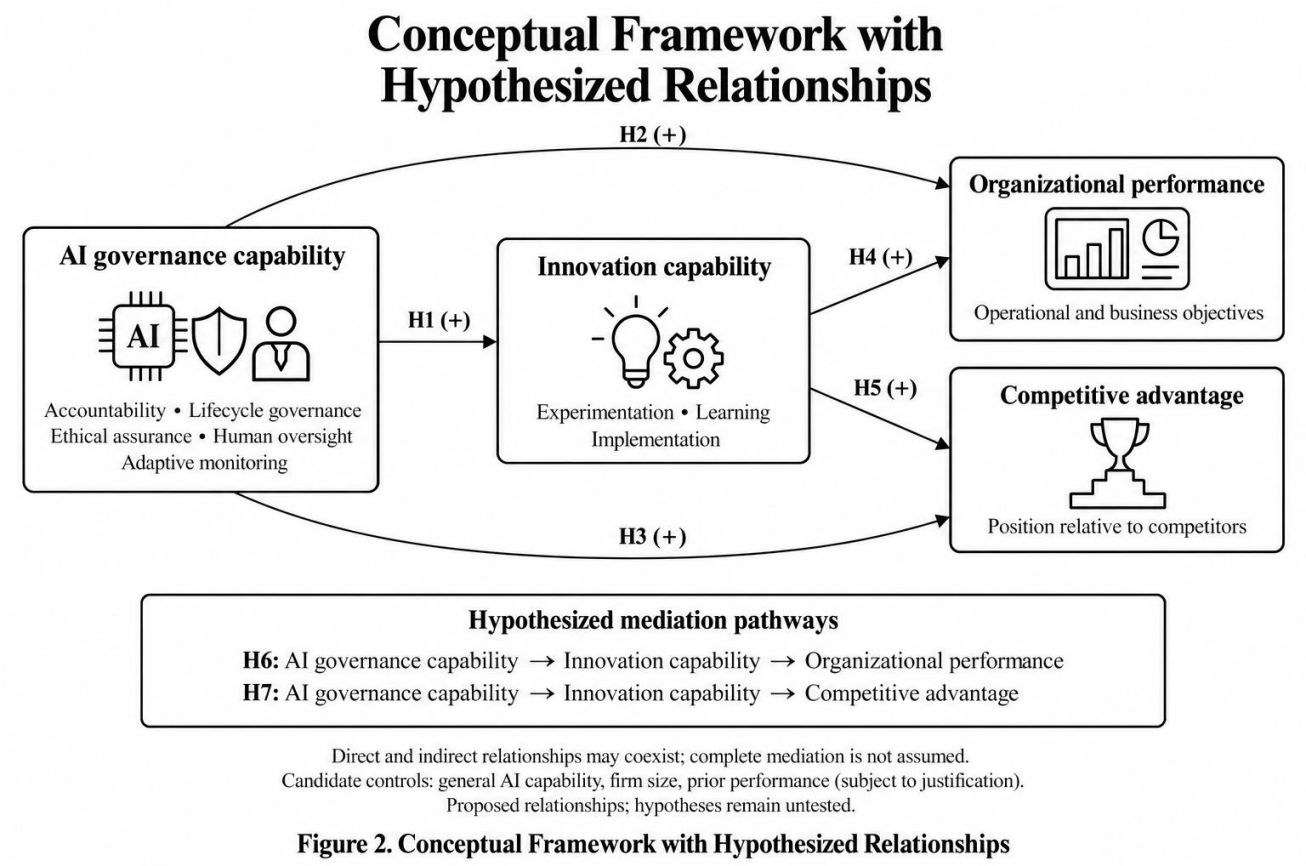


Figure 2. Conceptual Framework with Hypothesized Relationships

Figure 2 depicts H1–H5 as direct paths and H6–H7 as indirect paths through innovation capability. These relationships remain untested, so no estimated coefficients are presented. General AI capability, firm size, and prior performance are candidate controls requiring explicit justification. Empirical assessment must distinguish governance capability from technical proficiency and evaluate alternative explanations.

5 Research Methodology

5.1 Conceptual Research Design

This paper uses a purposive integrative synthesis of 20 journal articles covering AI governance, capability, innovation, business value, and context. Construct comparison and mechanism identification inform five proposed governance dimensions and seven untested hypotheses. Sections 5.2–5.5 outline future empirical research; abstracts alone cannot establish methodological details.

5.2 Sampling of Nigerian Organizations

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Eligible Nigerian private firms would demonstrate an identifiable AI application. Stratified probability sampling would be preferred where suitable lists exist; purposive recruitment would require documented limitations. Power or simulation analysis would determine organizational sample size. Separate knowledgeable informants would report governance and outcomes. Confidential linkage and agreement assessment would precede aggregation; multiple respondents would not constitute additional independent firms.

5.3 Measurement of AI Governance Capability

Definition-based items would undergo expert review, cognitive interviews, and pilot testing. Governance items would capture implemented practices; performance and competitive advantage would remain distinct. The five governance dimensions would provisionally form a higher-order composite, with lower-order specifications determined by indicator meaning. Table 1 retains the proposed measurement foundations; scales require adaptation and validation.

Table 1: ***Proposed construct operationalization and measurement foundations***

Construct	Proposed measurement domain	Specification and source foundation
AI governance capability	Strategic accountability; data and model lifecycle; ethical assurance; human oversight; adaptive monitoring.	Higher-order composite proposed; lower-order form depends on indicator meaning. Foundations: Mäntymäki et al. (2022), Schneider et al. (2023), Papagiannidis et al. (2025).
Innovation capability	Routines for generating, assessing and implementing useful product, service and process changes.	Reflective candidate subject to content assessment. Foundation: Haefner et al. (2021); scale adaptation must be documented.
Organizational performance	Productivity, service quality and achievement of business objectives during a stated period.	Separate operational and business facets as needed; corroborate with records where possible. Foundations: Mikalef and Gupta (2021), Wamba-Taguimdje et al. (2020).
Competitive advantage	Relative differentiation and positioning against clearly defined competitors.	Ensure competitor referents and separation from performance. Foundation: Krakowski et al. (2023); not a claimed validated scale from that study.
General AI capability	Technical and business skills, tangible resources and complementary organizational resources.	Comparison construct or justified covariate. Adaptation foundation: Mikalef and Gupta (2021).

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5.4 Ethical Data Collection

Three waves would measure governance and baseline outcomes, innovation, then final outcomes. Intervals would require justification. Ethics approval, voluntary participation, confidentiality, access controls, and a retention schedule would protect participants. Separate sources and neutral wording would address bias, alongside missingness, attrition, and nonresponse assessment. Cross-sectional alternatives would support associational interpretation. Figure 3 illustrates the proposed workflow.

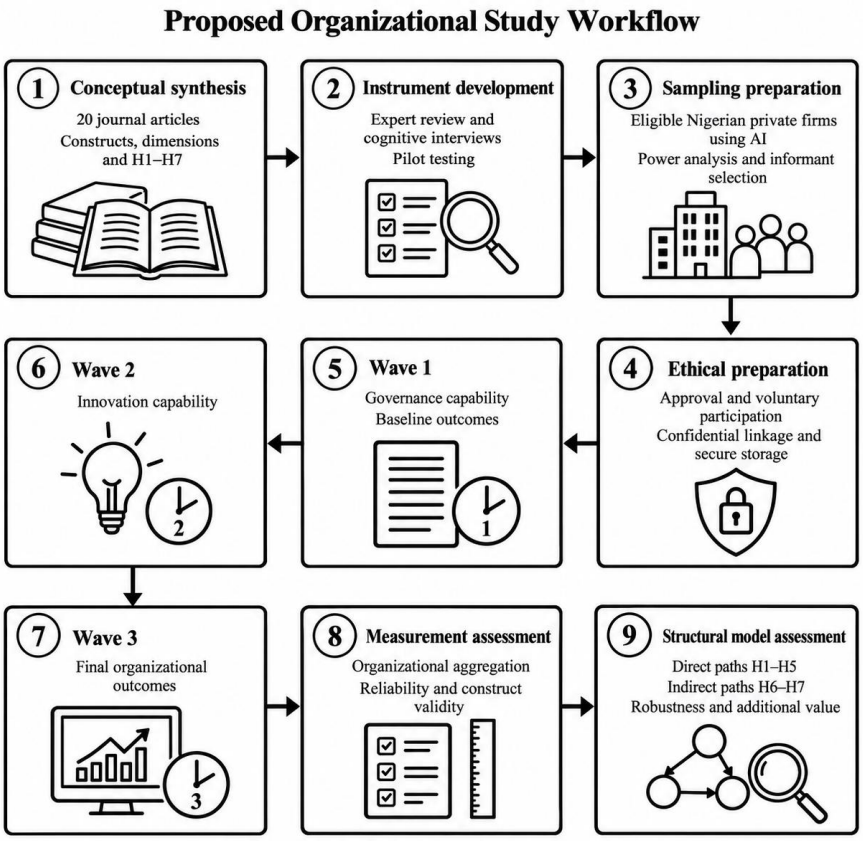


Figure 3. Proposed organizational study workflow

5.5 Structural Model Assessment

Structural equation modelling would follow construct specifications. Reflective measures would undergo reliability and validity assessment; composites would require indicator, collinearity, and external-validity checks. Analysis would estimate H1–H5 and bootstrapped indirect effects for H6–H7,

reporting uncertainty, effect magnitude, and explained variance. Comparisons would assess governance's additional contribution beyond general AI capability. Justified covariates, alternative specifications, and influential observations would inform robustness; prediction requires out-of-sample evaluation. Temporal separation cannot establish causality or eliminate reverse causality.

6 Conceptual Synthesis

6.1 AI Governance Capability Configuration

AI governance capability comprises connected arrangements through which responsibilities, controls, oversight, and learning operate together. Policies or technical evaluations alone do not demonstrate capability unless organizations can translate them into decisions. This interpretation remains conceptual rather than an observed pattern in Nigerian firms. Empirical assessment should report dimension profiles alongside aggregate scores because similar totals may conceal missing functions. Any minimum requirements should be justified before examining results.

6.2 Distinctiveness of AI Governance Capability

General AI capability concerns resources and skills enabling AI use, whereas governance capability concerns its direction, assessment, and correction. These capabilities may be related without being identical. Addressing RQ1 therefore requires conceptually distinct items and statistical assessment of construct separation. Technical staffing should not automatically represent governance capacity. Failure to establish distinctiveness would weaken claims about governance's additional explanatory contribution, regardless of significant path estimates.

6.3 Innovation as a Value Creation Pathway

Clear responsibilities, reusable assessments, and feedback may support experimentation and implementation, allowing governance to contribute beyond harm prevention. These proposed mechanisms are conceptual

explanations, not separately measured mediators. Raisch and Krakowski (2021) highlight tensions between automation and augmentation, supporting attention to appropriate human involvement. Innovation may consequently involve redesigned work practices alongside technological additions. Testing H6–H7 would assess indirect associations without identifying which specific governance routines produce them.

6.4 Differentiation of Organizational Outcomes

Organizational performance concerns internal improvement; competitive advantage concerns relative positioning. Faster service may improve performance without differentiation when competitors achieve similar gains. Direct and innovation-mediated pathways therefore require separate assessment. Table 2 preserves the proposed relationships and evidence requirements. Positive, null, or contrary findings remain possible; absent governance effects after accounting for general AI capability would challenge its additional explanatory value.

Table 2: ***Hypotheses and evidence required for empirical assessment***

ID	Proposed relationship	Required evidence	Status
H1	Governance → innovation capability	Positive direct estimate with interval and effect magnitude.	Untested
H2	Governance → organizational performance	Direct estimate controlling for the specified model.	Untested
H3	Governance → competitive advantage	Direct estimate using a distinct relative outcome measure.	Untested
H4	Innovation → organizational performance	Direct estimate with uncertainty and effect magnitude.	Untested
H5	Innovation → competitive advantage	Direct estimate with uncertainty and effect magnitude.	Untested
H6	Governance → innovation → performance	Bootstrapped indirect estimate for the H1–H4 pathway.	Untested
H7	Governance → innovation → advantage	Bootstrapped indirect estimate for the H1–H5 pathway.	Untested

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6.5 Conditions Affecting Governance Value

Governance costs may precede benefits. Excessive approvals can delay innovation, while insufficient oversight can permit costly errors. The model proposes average positive relationships without specifying optimal governance intensity. Nonlinear or interaction tests would require theoretical justification and transparent specification. Resources, prior performance, and management quality provide competing explanations: successful organizations may invest more in both governance and innovation. Controls and temporal separation can address some concerns but cannot eliminate reverse causality or establish causal effects. Figure 4 distinguishes proposed mechanisms, contextual conditions, and alternative explanations. Contextual conditions are not specified as tested moderators. The synthesis establishes testable propositions rather than empirical confirmation.

Proposed mechanisms of governance value

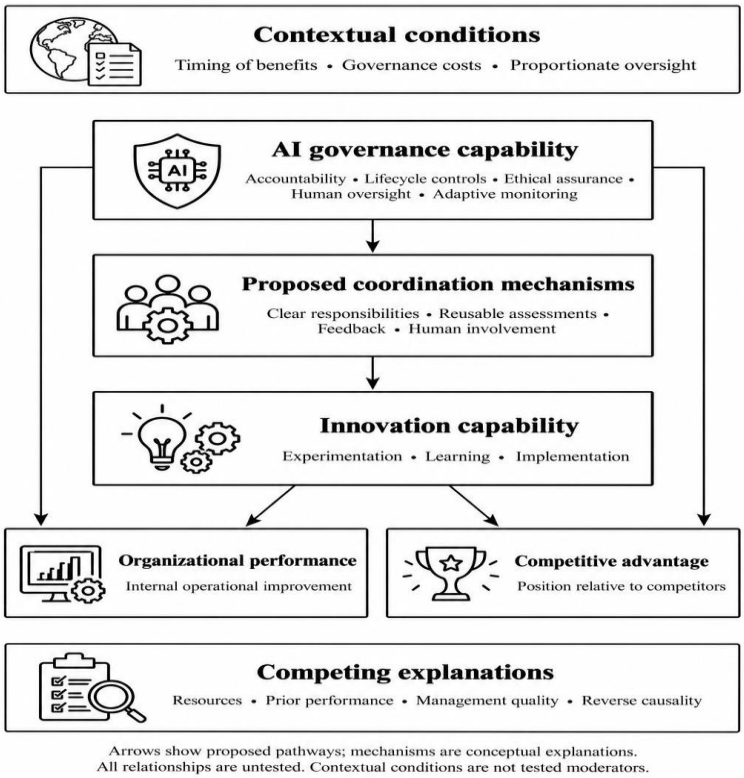


Figure 4. Proposed mechanisms of governance value

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7. Theoretical Contributions and Implications

7.1 Theoretical Contributions

This paper positions AI governance capability between responsible AI principles and enacted organizational routines, clarifying the capacity that empirical research should measure. It proposes innovation capability as a mechanism connecting governance with organizational performance and competitive advantage, while distinguishing governance capacity from general AI capability. The framework also qualifies its strategic claims. Governance routines may improve coordination without being rare, difficult to imitate, or sufficient for sustained competitive advantage. Competitive advantage therefore remains a separate empirical question. Similarly, the adaptive dimension requires evidence that organizations revise governance arrangements through experience. These distinctions strengthen resource-based and dynamic capability reasoning. Future findings may support the proposed relationships or identify where theoretical revision is necessary.

7.2 Managerial Implications

Managers can assess governance through observable responsibilities: who authorizes AI applications, communicates limitations, handles challenges to decisions, and initiates corrective action. These questions assess implementation beyond policy ownership and remain relevant when external suppliers provide AI systems. Integrating governance with innovation management requires clear evidence requirements, proportionate review procedures, and appropriate routes for applications with different risk levels. Reusable assessments may reduce duplicated effort, while documented incidents can inform subsequent designs. Managers should assess governance costs, operational reliability, stakeholder consequences, and innovation outcomes together. Greater governance activity should not automatically indicate stronger capability. These recommendations follow from the conceptual framework and require empirical evaluation in Nigerian organizations.

7.3 Implications for Nigerian Organizations

The Nigerian contribution concerns contextual investigation rather than national generalization. Alakitan and Makinde (2025) motivate attention to ethical guidance through their policy analysis; organizational research must separately examine how firms translate expectations into routines. Sectoral requirements, external business relationships, and available resources may influence implementation. Mohamed et al. (2020) support questioning the uncritical transfer of AI assumptions across contexts. Accordingly, research should examine stakeholder representation, the suitability of data and evaluations for affected populations, and organizational capacity to enact governance procedures. Contextual adaptation should preserve ethical standards while making responsibilities operationally meaningful. Findings from accessible firms should not be generalized to all Nigerian organizations without appropriate evidence. Recommendations concerning contemporary legislation would require a separate review of current primary legal sources.

8. Research Limitations

The paper is limited by its purposive reference set and conceptual method. It does not claim exhaustive literature coverage, validated dimensions, or evidence that the hypotheses hold. Some selected works address adjacent constructs or non-Nigerian settings, making theoretical transfer necessary. The proposed private-firm boundary also limits applicability to public agencies and nonprofit organizations. Future empirical work should complete full-text appraisal, extend source coverage where needed, and predefine the measurement and analytical decisions before collecting outcome data. Longitudinal organizational studies would help investigate ordering and delayed returns. Comparative case studies could explain how governance routines operate, while independently observed performance indicators could complement manager reports. Later work might examine sectoral differences,

organizational ownership, or risk exposure as boundary conditions when supported by theory and sample size. The proposed innovation mechanism should also be compared with alternatives such as improved operational reliability. Finally, research should assess stakeholder outcomes directly so that a commercially successful governance arrangement is not assumed to satisfy responsible AI objectives automatically.

9 Conclusion

Responsible AI governance becomes an organizational capability when commitments are supported by repeatable responsibilities, lifecycle controls, assurance, human oversight, and adaptive learning. This paper develops a framework explaining how that capability may relate to innovation, organizational performance, and competitive advantage in Nigerian private organizations. It proposes seven hypotheses and a design for distinguishing governance capability from general AI capability, while recognizing that organizational improvement and relative competitive value are different outcomes. The framework's principal contribution is a testable explanation of governance as a potential condition for responsible value creation. Its propositions remain open to empirical assessment, including evidence of implementation costs, null relationships, or alternative pathways. A carefully designed Nigerian study can build on this foundation to determine which governance arrangements support innovation and business outcomes while retaining accountability to the people affected by AI.

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