

# **Title: Neo-Institutional Theory in Researching Research Data Management (RDM) Practices in Developing Contexts**

## **Theme: Sustaining Communities of Learning and Practice in Innovative Open Education**

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### **Abstract**

Research Data Management (RDM) has become essential for open science and research integrity; however, it is often fragmented and under-resourced in many developing regions. This conceptual paper applies Neo-Institutional Theory (NIT) to investigate the coercive, mimetic, and normative forces shaping higher education institutions (HEIs) that engage with RDM practices. Using Botswana as a case study, the paper develops a model that places RDM within a broader ecosystem of regulatory expectations, professional norms, and legitimacy-seeking behaviours. The framework illustrates how global data governance mandates are interpreted locally, symbolically adopted, or selectively adapted. This paper contributes to the theoretical discourse in RDM studies and provides a foundation for future empirical research and policy reform in low- and middle-income higher education systems.

**Keywords:** Research Data Management, Neo-Institutional Theory, Higher Education Institutions, Institutional Pressures, Conceptual Framework, Open Science, Developing Countries, RDM Policy

### **1. Introduction**

Research Data Management (RDM) has become a cornerstone of research integrity, transparency, and data reuse in higher education institutions (HEIs). Yet in many low- and middle-income countries, RDM remains fragmented, under-institutionalised, and unevenly practised due to weak policy frameworks, infrastructural limitations, and constrained organisational capacity (Mthembu, 2024). Addressing these challenges requires more than technical interventions; it necessitates robust conceptual tools that examine how institutions respond to global scientific mandates within localised contexts.

This paper employs Neo-Institutional Theory (NIT) to examine how HEIs engage with RDM practices in the face of varying institutional pressures. NIT offers a valuable perspective for understanding how coercive forces (e.g., funder requirements and national policies), mimetic behaviours (e.g., imitation of global best practices), and normative expectations (e.g., professional standards and training) shape institutional behaviour (Scott, 2014; DiMaggio & Powell, 1983). These external forces are often internalised through processes of symbolic compliance, strategic adaptation, or outright resistance.

The framework proposed in this paper is conceptual and not based on empirical findings. It is intended to theorise institutional responses to RDM implementation and to highlight the roles of key actors—including librarians, ICT professionals, and academic managers—who navigate tensions between external expectations and internal limitations. Central to the model are the dynamics of decoupling, where policy adoption does not translate into operational change, and hybridisation, where global norms are selectively adapted to align with local capacities and values.

While the framework will eventually be tested in a study of government-funded academic institutions in Botswana, this paper is not limited to that national context. Botswana serves solely as an illustrative case to demonstrate how institutional responses to RDM in resource-constrained environments can involve negotiation, resistance, and symbolic adoption. The broader aim is to show that these dynamics, common across many developing countries' HEIs, can be meaningfully interpreted using NIT.

By articulating a theoretical framework grounded in neo-institutional theory, this paper contributes to ongoing discussions in RDM scholarship and provides a foundation for future empirical studies and policy interventions in resource-constrained higher education systems worldwide.

### **2. Research Problem and Objectives**

Research Data Management (RDM) is increasingly recognised as essential for ensuring the quality, transparency, and reproducibility of academic research. However, in many resource-constrained and transitional contexts, the implementation of RDM is often limited and inconsistent. Technical interventions alone have not effectively addressed the organisational, normative, and structural factors that influence behaviours in higher education institutions (HEIs).

There is a significant lack of theoretically informed frameworks that explain how the pursuit of legitimacy, conformity, and professional norms affects RDM adoption within HEIs. This paper employs Neo-Institutional Theory (NIT) to conceptualise how institutions respond to external mandates, peer practices, and normative pressures, especially under constrained conditions.

**Overarching Objective:** To explore the applicability of Neo-Institutional Theory (NIT) as a framework for understanding how RDM practices are shaped within HEIs.

**Specific Objectives:**

1. To describe the key assumptions and constructs of NIT.
2. To explain the relevance of NIT to RDM in higher education.
3. To propose a conceptual model grounded in NIT for interpreting institutional responses to RDM.
4. To assess the strengths and limitations of using NIT in this context.
5. To suggest how the framework can be used in future research on RDM in universities.

**3. Foundational Assumptions and Core Constructs of the Neo-Institutional Theory (NIT)**

Neo-Institutional Theory (NIT) provides a valuable framework for understanding how higher education institutions (HEIs) adopt practices not only for technical efficiency but also to gain legitimacy within socially constructed environments. DiMaggio and Powell (1983) argue that organisations conform to institutional pressures to appear credible and align with prevailing norms, regulations, and professional expectations. This behaviour is typically explained through the mechanism of institutional isomorphism, which refers to the tendency of organisations within a field to become more similar over time.

**Three types of isomorphic pressures are central to NIT:**

- **Coercive isomorphism** occurs when institutions face formal and informal pressures from governments, regulatory agencies, and funding organisations. For example, institutions might implement Research Data Management (RDM) policies to align with national science strategies or to meet eligibility requirements for funding.
- **Mimetic isomorphism** takes place when institutions try to imitate their peers that are perceived as successful, especially in uncertain or resource-limited situations. The adoption of global platforms like DSpace or the alignment with FAIR data principles often stems from this emulation rather than being based on local needs.
- **Normative isomorphism** develops from shared professional values and educational pathways. Librarians, IT staff, and researchers often work within communities of practice that are influenced by regional networks, such as the African Library and Information Associations and Institutions (AFLIA). These networks promote standardised competencies and ethical frameworks.

The pressures faced by organisations shape their behaviour, often as part of strategies aimed at gaining legitimacy rather than through rational optimisation. A notable phenomenon in this context is "decoupling," where organisations adopt formal policies and structures to signal compliance without making substantive changes (Meyer & Rowan, 1977). For example, higher education institutions (HEIs) may develop open data policies or join research consortia while lacking the necessary infrastructure or staff to implement Research Data Management (RDM) effectively.

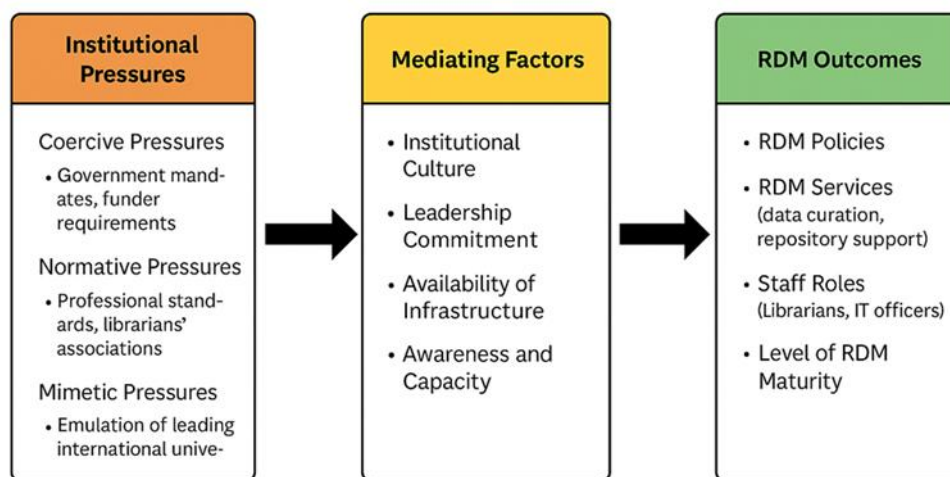
Another central concept in New Institutional Theory (NIT) is legitimacy, which Suchman (1995) defines as the general perception that an organisation's actions are desirable and appropriate within a socially constructed system of norms and beliefs. In resource-constrained settings, the pursuit of legitimacy often takes precedence over considerations of technical capability or organisational readiness, leading to symbolic compliance.

The relevance of NIT to RDM becomes evident when examining how HEIs in developing contexts respond differently to global data governance expectations. Coercive pressures may lead to the introduction of RDM policies; however, in the absence of enforcement or funding, the implementation may remain superficial. Mimetic pressures encourage the replication of international practices without fully aligning them to local contexts. Normative influences may promote standardisation, but the lack of formal accreditation or consistent training frameworks typically weakens their institutional impact.

Despite focusing on structure, NIT also recognises the role of agency. Institutional actors—including university librarians, ICT professionals, and administrators mediate external pressures through negotiation, reinterpretation, or selective resistance (Romic & Medak, 2019; Perry, 2011). These interactions create zones of hybridisation, where global mandates are blended with local contexts, and spaces of symbolic compliance, where alignment is performative rather than practical.

Figure 1 visualises this dynamic by mapping institutional pressures against internal responses. It highlights feedback loops and contextual variables including leadership, infrastructure, and organisational culture, that influence how RDM practices evolve within HEIs.

In summary, NIT provides a nuanced understanding of why HEIs might adopt RDM policies yet fail to institutionalise them meaningfully. It offers a framework for analysing legitimacy-seeking, institutional mimicry, and policy symbolism in higher education. These insights are particularly valuable in resource-limited environments where global norms intersect with constrained capacity, fragmented governance, and competing organisational priorities.



**Figure 1. Neo-Institutional Framework for Understanding Research Data Management (RDM) Outcomes in Higher Education Institutions**

*Source: Motubudi (2025), developed for PCF11*

#### 4. Alternative Theoretical Lenses: A Critical Reflection

While Neo-Institutional Theory (NIT) offers a valuable perspective for understanding the legitimacy-driven adoption of Research Data Management (RDM) practices in higher education institutions (HEIs), alternative theories provide additional insights. This section critically examines three such frameworks: Contingency Theory, Actor-Network Theory (ANT), and the Diffusion of Innovation (DoI) theory, highlighting their strengths and limitations in interpreting institutional responses to RDM imperatives.

##### 4.1 Contingency Theory

Contingency Theory suggests that organisational effectiveness is achieved through alignment between internal structures and external environmental conditions (Galbraith, 1973; Otley, 1980). In the context of RDM, this

theory emphasises the need for context-specific adaptation in response to funder mandates, infrastructure constraints, and staffing realities (Wolski & Richardson, 2011). While this approach captures the importance of situational variation, it is primarily descriptive and reactive. It offers limited theoretical insight into why institutions adopt RDM policies symbolically or fail to translate these policies into practice. Furthermore, its lack of a normative orientation and generalisability restricts its utility for broader institutional analysis.

#### 4.2 Actor-Network Theory (ANT)

ANT views institutions as sociotechnical networks composed of both human and non-human actors, such as researchers, librarians, platforms, and data standards, whose interactions co-construct RDM environments (Latour, 2005; Vitale, 2023). This framework is particularly useful for analysing the relational dynamics and localised negotiations that influence RDM implementation. However, ANT's dismissal of structural hierarchies and focus on ontological flatness diminishes its explanatory power at the macro-institutional level. It tends to overlook the impact of policy frameworks, professional norms, and legitimacy pressures, which are crucial for institutionalising RDM.

#### 4.3 Diffusion of Innovation (DoI) Theory

DoI theory explains how innovations spread within a social system over time, highlighting the roles of perceived advantages, communication channels, and opinion leaders (Rogers, 2003). In RDM research, it has been applied to identify early adopters and track adoption patterns (Morobolo et al., 2018). Although valuable for describing adoption trajectories, DoI often assumes a linear and rational process, underestimating institutional stagnation, structural constraints, and cultural barriers. Furthermore, it lacks a critical perspective to analyse legitimacy-seeking behaviour or symbolic compliance.

#### Synthesis

Each of these theories provides specific insights but falls short of explaining the institutional logics, isomorphic convergence, and decoupling behaviours central to RDM in resource-constrained HEIs. NIT remains uniquely positioned to address the macro-level dynamics of policy adoption, symbolic implementation, and legitimacy construction, particularly in settings characterised by uncertainty and institutional fragmentation.

Theory	Focus	Strengths	Limitations
<b>Contingency Theory</b>	Fit between internal structures and external conditions	Emphasises context-specific adaptation and organisational flexibility	Lacks normative guidance; descriptive and reactive; limited in addressing legitimacy dynamics
<b>Actor-Network Theory</b>	Sociotechnical networks of human and non-human actors	Highlights relational dynamics; captures localised practices and decentralised interactions	Ignores institutional hierarchy; weak on macro-level legitimacy and policy influence
<b>Diffusion of Innovation</b>	Spread of innovations through social systems	Explains early adoption patterns; identifies roles of opinion leaders and perceived advantage	Assumes linear, rational adoption; overlooks institutional constraints and symbolic compliance
<b>Neo-Institutional Theory (NIT)</b>	Organisational legitimacy, isomorphism, and symbolic adoption	Captures conformity pressures, legitimacy-seeking, decoupling, and hybridisation	May underemphasise agency and micro-level variation unless extended with complementary theories

**Table 1: Comparative Analysis of Theoretical Frameworks for RDM in HEIs**

### 6. Integrating Theoretical Insights: Reaffirming the Value of NIT

The previous discussion highlights the various theoretical perspectives that contribute to understanding Research Data Management (RDM) in higher education institutions (HEIs). However, none captures the interactions of legitimacy, isomorphic pressures, and institutional complexity as effectively as Neo-Institutional Theory (NIT).

NIT provides a cohesive framework for analysing how coercive, mimetic, and normative pressures influence institutional behaviour, particularly in contexts where limited resources and regulatory uncertainty complicate the implementation of policies. Unlike Contingency Theory, which focuses on environmental fit without addressing the dynamics of legitimacy, NIT explains why HEIs might adopt RDM policies that are only superficially implemented. While Actor-Network Theory emphasises micro-level relationships, NIT allows for a macro-level analysis of institutional conformity and variation. In contrast to the rational assumptions of Diffusion of Innovation theory, NIT contextualises adoption as a response shaped by social expectations regarding credibility and professional legitimacy.

Additionally, NIT introduces the concept of decoupling, where institutions adopt formal structures for the sake of legitimacy while substantive practices remain unchanged (Meyer & Rowan, 1977). It also accommodates hybridisation, as institutions navigate multiple institutional logics and selectively integrate global norms.

This paper positions NIT not only as a diagnostic framework for analysing patterns of RDM adoption but also as a conceptual tool for guiding future empirical research and institutional reform. By focusing on institutional legitimacy and the agency of actors within structured environments, NIT provides a crucial foundation for examining the symbolic, contested, and contextual nature of RDM practices in resource-constrained HEIs.

## **6. Conceptual Methodology and Model Construction**

This paper adopts a conceptual theory-building approach grounded in Neo-Institutional Theory (NIT) to develop a model that explains how Research Data Management (RDM) practices evolve within higher education institutions (HEIs) under institutional pressure. The goal is not to generate empirically testable propositions but to construct a theoretically coherent framework that supports analytical generalisations and guides future inquiry.

### **6.1 Philosophical Orientation and Purpose**

Guided by conceptual scholarship (Ravitch & Riggan, 2021; Swedberg, 2016; Jabareen, 2009), this paper emphasises theorisation rather than empirical generalisation. The focus is on clarifying and connecting key constructs such as coercive, mimetic, and normative pressures; symbolic compliance; decoupling; and actor agency to theorise how HEIs respond to global science mandates amid institutional and infrastructural constraints. This approach is particularly relevant in resource-limited contexts, where empirical data may be fragmented, but theoretical development is urgently needed.

### **6.2 Theoretical Justification**

Neo-Institutional Theory is a well-established framework for analysing organisational behaviour in higher education, including responses to the adoption of digital infrastructure (Kushnir & Yazgan, 2025; Greenwood et al., 2017). However, its application to RDM remains under-theorised. This paper extends NIT by incorporating complementary constructs such as institutional work, translation theory, and hybridisation (Sahlin & Wedlin, 2008; Oliver, 1991), providing a nuanced account of how HEIs internalise or resist external data governance expectations.

### **6.3 Literature Strategy and Synthesis**

The model is informed by a thematic literature review spanning three domains: (1) NIT and its application to HEIs; (2) institutional approaches to RDM in global and African contexts; and (3) organisational responses to open science policy. Peer-reviewed publications (2015–2024) were sourced via Primo, ProQuest, and Google Scholar using combinations of keywords including “research data management,” “institutional theory,” “higher education,” “policy adoption,” and “open science.” Authoritative policy sources (e.g., UNESCO, CODATA) were also included.

Instead of aggregating findings, the review utilised analytical synthesis (Jabareen, 2009) to identify conceptual patterns, particularly the gap between formal policy adoption and substantive RDM implementation. This gap underpins the model’s emphasis on symbolic compliance and institutional legitimacy-seeking.

### **6.4 Model Construction Strategy**

Using a combination of deductive and abductive reasoning (Swedberg, 2016), the model maps institutional pressures (coercive, mimetic, normative) onto HEI contexts and integrates actor-based responses. It highlights how institutional agents such as librarians, ICT staff, and academic staff mediate external demands through adaptation, negotiation, or resistance.

**The model visualises:**

- Feedback loops between external pressures and internal responses.
- Hybridisation zones, where global standards (e.g., FAIR principles) are selectively adapted to fit local values and infrastructural realities.
- Decoupling spaces, where institutions symbolically align with global norms without structurally integrating RDM practices.

It serves as a heuristic device (Whetten, 1989) rather than a universal template. The model aims to guide empirical research and inform policy design in contexts characterised by uncertainty, resource scarcity, and complex institutional mandates.

## 6.5 Conceptual Rigour and Validity

Conceptual validity is supported by:

- Systematic triangulation of relevant literature across RDM, institutional theory, and higher education policy.
- Clear definitions of constructs, with terms such as “symbolic compliance” and “institutional isomorphism” grounded in foundational NIT literature (Scott, 2014; Meyer & Rowan, 1977).
- Theoretical reflexivity, which acknowledges NIT’s limitations, including its occasional underemphasis on micro-level agency and institutional diversity (Suddaby, 2010; Zilber, 2016).

By clarifying the relationships among key constructs, this conceptual model contributes to advancing theory in both information science and the governance of research in low- and middle-income HEIs.

## 7. Proposed Conceptual Model

This paper presents a conceptual model that theorises how higher education institutions (HEIs) engage with Research Data Management (RDM) practices within institutional environments influenced by various, often conflicting, external pressures. Drawing from Neo-Institutional Theory (DiMaggio & Powell, 1983), the model integrates three key isomorphic forces, coercive, mimetic, and normative, to explain patterns of policy adoption, symbolic compliance, and adaptive institutional behaviour.

- **Coercive pressures** arise from national regulatory frameworks, funding mandates, and international data governance protocols (e.g., the FAIR principles), which may compel HEIs to adopt formal RDM policies and technical infrastructures.
- **Mimetic pressures** stem from uncertainty and reputational concerns, leading institutions to imitate practices observed in globally renowned universities and repositories.
- **Normative pressures** originate from professional associations, regional training programs, and disciplinary norms that encourage the standardisation of RDM skills, values, and ethical frameworks.

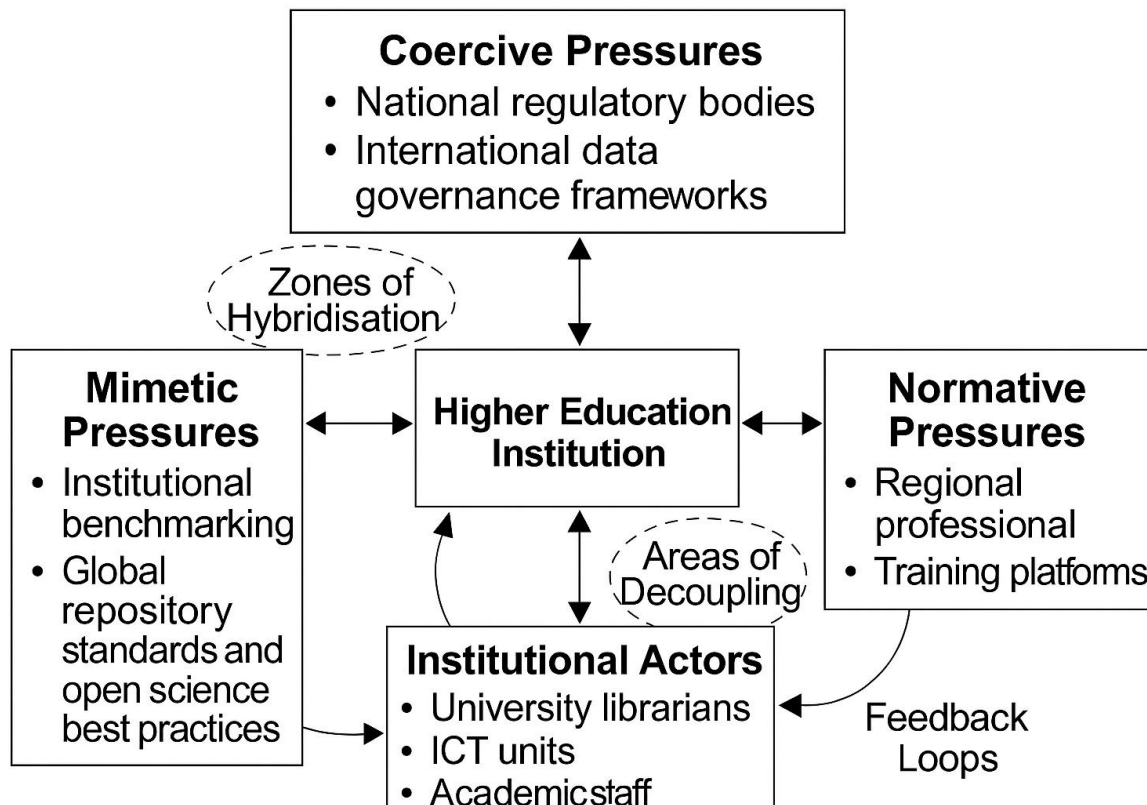
The model extends beyond conventional applications of Neo-Institutional Theory by incorporating insights from institutional translation theory (Sahlin & Wedlin, 2008) and strategic response theory (Oliver, 1991), which describe how internal actors mediate external demands. Librarians, ICT personnel, and academic staff actively reinterpret and adapt external expectations within local institutional contexts.

Key features of the model include:

- **Zones of hybridisation**, where global standards are selectively redefined to accommodate local capacities and values, such as data sovereignty or infrastructural limitations.
- **Spaces of decoupling**, where symbolic policy adoption obscures limited operational implementation.
- **Feedback loops**, illustrating the dynamic and iterative interaction between external mandates and internal responses over time.

This model does not assume uniform applicability; rather, it serves as a conceptual model for exploring how RDM practices become institutionalised across diverse HEI settings. It is particularly relevant in resource-constrained contexts, where legitimacy, rather than technical readiness, often drives adoption.

By highlighting the complex interplay between institutional pressures and actor agency, the model provides a valuable conceptual tool for both scholars and policymakers aiming to strengthen RDM systems in under-resourced higher education environments.



**Figure 2. The Conceptual Model**  
*Source: Motubudi (2025), developed for PCF11*

## 8. Critical Reflections and Conceptual Challenges on Neo-Institutional Theory in Higher Education

While Neo-Institutional Theory (NIT) provides a useful framework for understanding the legitimacy-seeking behaviours of higher education institutions (HEIs), especially in their adoption of Research Data Management (RDM) practices, it does have conceptual limitations, particularly in complex and resource-constrained environments.

One major critique of NIT is its tendency to overemphasise structural conformity while downplaying institutional agency and strategic decision-making. DiMaggio and Powell (1983) highlight coercive, mimetic, and normative pressures, yet NIT sometimes portrays organisations as passive recipients of external expectations. As Greenwood et al. (2008) argue, organisations act as strategic players capable of negotiating, reinterpreting, or resisting institutional demands. In loosely regulated contexts, HEIs might selectively implement aspects of RDM policy, adjust practices to align with disciplinary cultures, or postpone adoption based on their institutional priorities.

Additionally, NIT places a strong emphasis on isomorphic convergence, which can obscure the diversity of responses from institutions. In reality, HEIs often navigate various overlapping institutional logics, balancing international norms with local issues such as data sovereignty, ethics, or national research relevance. This complexity leads to hybrid logics, where institutions adopt partial RDM strategies that satisfy both global expectations and internal constraints (Greenwood et al., 2011). For instance, an HEI might implement open data policies to meet funder requirements while restricting access to sensitive health or indigenous data, resulting in context-specific adaptations.

Another related limitation is the concept of decoupling, which NIT defines as symbolic compliance—maintaining formal alignment with external expectations without making substantial operational changes (Meyer & Rowan, 1977). While this concept is useful for explaining surface-level conformity, it fails to provide a comprehensive understanding of the motivations and contextual factors that lead to such misalignments. Without more attention to the micro-dynamics within institutions, NIT risks presenting change as static or overly deterministic.

To address these shortcomings, scholars have suggested complementary frameworks such as institutional work (Lawrence & Suddaby, 2006) and strategic action fields (Fligstein & McAdam, 2012). These frameworks reintroduce the concept of agency and acknowledge the contested nature of institutional environments. They are particularly valuable for understanding how librarians, IT staff, and academic administrators actively construct or contest RDM practices in constrained contexts.

In summary, while NIT remains a valuable tool for analysing macro-level institutional dynamics, it is enhanced by integrating theories that emphasise agency, diversity, and context-specific institutional change. By incorporating these perspectives, researchers and policymakers can gain a clearer understanding of the complex pathways through which RDM is negotiated, adapted, or resisted within HEIs facing various pressures.

## **9. Illustrative Context: Research Data Management in Botswana's Higher Education Sector**

Although this paper does not focus on any one national context, Botswana is used here as an illustrative case to explore how Research Data Management (RDM) is shaped by institutional pressures in low- and middle-income environments. Applying Neo-Institutional Theory (NIT) to Botswana enables an examination of how coercive, mimetic, and normative forces intersect with local constraints, agency, and policy responses.

Botswana's higher education sector comprises major public institutions such as the University of Botswana (UB), Botswana International University of Science and Technology (BIUST), Botswana Open University (BOU), and the Botswana University of Agriculture and Natural Resources (BUAN). These institutions are expected to align with national development agendas, including Vision 2036 and the Revised National Policy on Research, Science, Technology, and Innovation (2023), which create pressures to improve research governance and develop institutional knowledge management systems.

Despite these top-down directives, Botswana's RDM infrastructure remains fragmented and underdeveloped. There is no comprehensive national RDM policy, and the digital infrastructure is inadequate for supporting a complete research data lifecycle. While platforms such as UBRISA (at UB) and BIUSTRE (at BIUST) exist, they mainly serve as static institutional repositories rather than dynamic data management environments. This situation exemplifies the phenomenon of decoupling, where formal compliance masks the absence of substantive integration (Meyer & Rowan, 1977; Chiware & Becker, 2018).

Mimetic isomorphism is also present. Institutional actors have adopted international standards, such as the FAIR principles or the use of open data repositories, not necessarily due to their local suitability but to enhance their perceived legitimacy and competitiveness. Participation in regional and global research networks, such as the CODATA-ODOS collaboration, EIFL's Open Science training series, and webinars hosted by the African Open Science Platform, reinforces these behaviours by framing RDM as an indicator of institutional maturity.

Normative pressures in Botswana are emerging through professional and regional bodies, such as the Botswana Library Consortium, the Open Data Open Science (ODOS) Committee, and partnerships with EIFL and CODATA. These organisations promote standardised competencies and ethical data practices. However, the absence of unified RDM curricula, limited metadata expertise, and fragmented governance mechanisms continues to undermine normative consolidation across institutions.

Additionally, Botswana's experience highlights the importance of not only aligning with regulations but also exhibiting institutional creativity. Higher Education Institutions (HEIs) in Botswana face the challenge of balancing global imperatives with local values, particularly in terms of protecting indigenous knowledge systems, respecting disciplinary autonomy, and managing infrastructural limitations. These negotiations represent strategic agency and adaptation, demonstrating that institutions are not merely passive recipients of international mandates.

Importantly, the challenges and responses observed in Botswana are not unique. They mirror broader trends in postcolonial contexts, where symbolic compliance often conceals uneven or fragmented implementation. Therefore, Botswana's RDM landscape provides comparative insights for higher education institutions across sub-Saharan Africa, South Asia, and Latin America, where similar dynamics of legitimacy-seeking, institutional complexity, and selective adaptation are at play.

## **10. Conclusion**

This conceptual paper proposes a theoretical framework based on Neo-Institutional Theory to understand how higher education institutions respond to Research Data Management (RDM) mandates in contexts characterised by limited resources, regulatory ambiguity, and institutional complexity. By distinguishing between coercive,

mimetic, and normative pressures, and analysing how these influences are mediated through organisational actors, the framework highlights the interplay between global expectations and local realities.

The model introduces key concepts—symbolic compliance, decoupling, and hybridisation—as mechanisms through which institutions manage external legitimacy demands while navigating internal constraints. It also emphasises the role of actors such as librarians and ICT professionals, whose strategic interpretation of external norms shapes the practical implementation of RDM practices.

Although Botswana serves as a case study, the framework is relevant beyond this national context, providing a conceptual toolkit for examining RDM policy translation in other resource-constrained higher education systems. This is particularly relevant in situations where legitimacy-driven adoption coexists with infrastructural fragility. The dynamics captured in the model reflect patterns observed in many postcolonial systems, where institutions symbolically align with global norms while selectively implementing them based on political priorities, cultural values, and resource capacities.

This model lays the groundwork for future empirical research, offering both diagnostic and analytical value for scholars and policymakers. By moving beyond technical considerations and engaging more deeply with institutional theory, it supports the development of context-sensitive and sustainable RDM systems across the Global South.

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