



ENHANCING SPATIAL DATA SHARING BEHAVIOUR IN NAMIBIAN PUBLIC SECTOR LAND ADMINISTRATION ORGANISATIONS THROUGH STRUCTURAL REFORM

CELINA KAFUTE AWALA, JULY 2024

KEY MESSSAGE

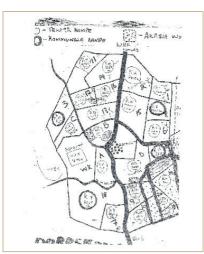
Existing studies are missing empirical insights on the implications of organisational structure on spatial data-sharing behaviour. This brief focuses on the implications of organisational structure as a variable of ongoing academic research. The study empirically determined the nature and pattern of selected organisational characteristics and assessed their implications on the lack of spatial data sharing in Namibia's public sector land administration organisations. Organisational structure is a crucial determinant of organisational efficiency (Channon & Caldart, 2014). It is how activities within organisations are divided, organised and coordinated (Ahmady et al., 2016; Pollitt & Bouckaert, 2011).

Research participants perceive their organisations to have a mechanistic structure with centralised decision-making, extensive hierarchy, and formalised coordination procedures. This structural rigidity negatively affects their spatial data handling practices, hindering efficiency and innovation in work processes. The results underscore the importance of considering the broader business and management environment, including organisational structure, when addressing spatial data sharing challenges in public sector land administration organisations.

is a Lecturer for Land Administration in the Department of Land and Spatial Sciences at Namibia University of Science and Technology (NUST). Ms. Awala has experience in Land and Spatial Science both in private and public organisations in Namibia. She is a novice researcher interested in Public Sector Spatial Data Management, Land Tenure Management, Governance, and Integration of Geotechnologies in Research and Work Processes.

Ms. Celina Kafute Awala













BACKGROUND AND CONTEXT

Namibia endeavours to become an industrialised nation by the year 2030 (GRN, 2017, 2015). Public sector land administration organisations are one of the cornerstones for attaining this national strategic objective through the provision of land-related data. Public sector land administration organisations are mandated by Acts of Parliament to administer and manage land and its resources, resulting in the production of essential locational information in their possession.

These data include land parcel boundaries, aerial imageries, and attribute information on land ownership, value, development, and land use zoning plans, which are a bedrock for all spatial developmental projects.

As Namibia navigates the complexities of land use planning and allocation processes in the context of industrialisation and population growth, it is imperative to note the importance of readily available and accessible spatial data for informed decision-making. Public sector land administration organisations play an essential role in providing spatial data. However, issues of the need for sharing spatial data have been reported. Efficient intraorganisational spatial data-sharing behaviour in public sector land administration organisations is a catalyst to achieve industrialisation. Further, it contributes to the overall efficiency of public service delivery, fostering citizen satisfaction by ensuring accuracy and transparency in property records, facilitating efficient land transactions, and enabling more responsive and informed decision-making (GRN, 2015; UN-GGIM Expert Group on Land Administration, 2020; UNECA, 2021). Despite their crucial responsibilities, public sector land administration organisations are not without limiting factors, one of which is their structure.

Methodology

The brief presents empirical data from a mixed-methods academic study. The study aimed to determine the state and pattern of selected organisational characteristics and assess their implications on spatial data-sharing behaviour in Namibia's public sector land administration organisations. Quantitative and qualitative data was collected concurrently from an identical sample representing 33 out of 75 public sector land administration organisations at Namibia's national, regional and local authority levels.

Participants were selected through multistage purposive random and purposive convenience sampling strategies (Sanders et al., 2019; Venkatesh et al., 2016). Research participants ranked at lower and middle management positions. Data was collected through multiple modes: face-to-face, email, video call, online, and phone inter-

views with an embedded interview instrument. Interviews were the primary data collection strategy, complemented by non-participatory observation and organisational documents. Quantitative data is analysed through descriptive content analysis complemented with qualitative explanatory subjective narrations in verbatim quotes from research participants (Sanders et al., 2019; Vaismoradi et al., 2013; Venkatesh et al., 2016). Content analyses are based on the descriptive frequency mention of structural dimensions.

A combination of Excel and PSPP, data analysis programmes, was used to determine the frequencies of mention of the different structural dimensions complemented and expanded with the perceptual narrative experiences of research participants. Findings are presented in the following section.

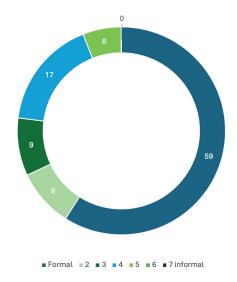




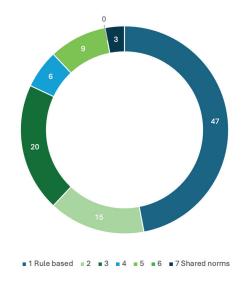




DEPARTMENTALISATION



ORGANISATIONAL CONTROL SYSTEMS



Findings

An empirical examination of the current organisational and management framework in Namibia's public sector land administration organisations indicates a mechanistic structure orientation. A mechanistic organisation structure is characterised by elements such as formal grouping of departments, centralised decisionmaking, extensive hierarchical levels, formalised coordination, and control systems governed by rules and standardised procedures (Burns & Stalker, 1961). These elements are perceived as collectively negatively influencing research participants' spatial data-sharing behaviours in public sector land administration organisations in Namibia. Participants indicated that operational unit formation follows formal functional grouping, constraining internal collaboration and knowledge exchange as each team focuses on their specific tasks. Many levels in the hierarchy result in many signatories before the decision is made by a centralised executive, the Executive Director for ministries, Chief Regional Officers, and Chief Executive Officers for local authorities. Using checklists and other standardised instruments prevents flexibility and creativity in work processes. Coordination is based on written rules and procedures as per job descriptions and Research participants believe that these coordination mechanisms are based on the provisions of Part II Public Service Code of Conduct, Integrity and Ethics, 1995; Public Service Act 13 of 1995 and other discipline-specific laws such as Deeds Registries Act 47 of 1937, Land Survey Act 33 of 1993, Property Valuers Profession Act No. 7 of 2012, Urban and Regional Planning Act, Act 5 of 2018., making it difficult to make spatial data available to other units within and across organisational boundaries.

Theoretically, formalised and standardised rules and procedures are good for consistency in work processes. However, contemporary studies indicate that inflexibility in work processes affects coordination and inhibits technological innovation due to a lack of data and knowledge exchange across units (Pollitt & Bouckaert, 2017, 2011; Torfing, 2023; Watson, 2017). Hence, there is a need for structural reform towards a more organic structure to enhance spatial data-sharing practices and, subsequently, improve the overall efficacy of land administration systems and decision-making for an industrialised Namibia.









Recommendations

The implications of addressing the influence of organisational structure on spatial data sharing within Namibia's Public Sector Land Administration organisations require legislative and operational reforms. Specifically, this calls for the Office of the Prime Minister (OPM), as mandated by the Public Service Act 13 of 1995, to formulate policy instruments that endorse organisational redesigning toward an organic organisational structure that promotes a flexible and collaborative environment.

An organic management system is less defined, and coordination is based on mutual adjustments among employees (Burns & Stalker, 1961). An organic structure emphasises the freedom of the individual to carry out his tasks with great commitment and competence (Burns & Stalker, 1961b; Mintzberg, 1979; Nandakumar et al., 2010; Zhu&Bao, 2017). Due to its orientation, employees in an organic structure are flexible and can contribute to task activities across units and organisational boundaries based on their expertise. These are the characteristics of an innovative and collaborative work environment of the 21st century.

ACTION PLAN



As a long-term action plan for optimising the land administration system, the prime minister's office should review the public management/administration framework, especially against the principles and objectives of previously implemented reforms.



Public sector land administration organisations should create internal operational spatial data sharing guidelines and channels that are not embedded in task activities.



Checklists and other standardised instruments are to be reviewed regularly to align with emerging innovative approaches.



Open and clear channels for interunit collaboration to share data and expertise should be created.



Heads of organisations review operational procedures to determine the extent to which they are standardised and can be relaxed without compromising on the quality of products and services.



Heads of organisations will review operational procedures to incorporate informally and innovatively adapted flexible mechanisms.

CONCLUSIONS AND WAY FORWARD

In conclusion, the challenges identified in the current organisational structures present clear opportunities for optimisation through structural reform in public sector land administration organisations toward a more efficient and effective land administration system in Namibia. This aligns with broader national and international strategic objectives, namely, Vision 2030, Digital transformation, the Fourth Industrial Revolution, African Agenda 2063 and SDGs.









REFERENCES AND APPENDICES

Ahmady, G. A., Mehrpour, M., & Nikooravesh, A. (2016). Organizational Structure. Procedia - Social and Behavioral Sciences, 230(May), 455–462.

Burns, T., & Stalker, G. M. (1961a). Burns and Stalker, The Management of Innovation*. In The Management of Innovation (pp. 103–108). Tavisstock.

Burns, T., & Stalker, G. . (1961b). The management of innovations (First). Tavistock publications.

Channon, D. F., & Caldart, A. A. (2014). McKinsey 7S model. Wiley Encyclopedia of Management, 1(1), 1–2.

GRN. (2017). Namibia's 5th National Development Plan (NDP5).

GRN. (2015). National Spatial Data Infrastructure (NSDI) Policy (Patent No. 103). Government Gazette Republic of Namibia.

GRN. (2022). Ministry of Land Reform. Mandate. https://mlr.gov.na/home

Mintzberg, H. (1979). The Structuring of Organizations: A Synthesis of the Research, theory of management policy series. http://link.springer.com/10.1007/978-1-349-20317-8_23%0A https://www.nrc.gov/docs/ML0907/ML090710600.pdf

Nandakumar, M. K., Ghobadian, A., & O'Regan, N. (2010). Business-level strategy and performance: The moderating effects of environment and structure. Management Decision, 48(6), 907–939.

Pollitt, C., & Bouckaert, G. (2011). Public Management Reform: A Comparative Analysis—New Public Management, Governance, and the Neo-Weberian State (3rd ed.). Oxford University Press. http://eprints.uanl.mx/5481/1/1020149995.PDF

Pollitt, C., & Bouckaert, G. (2017). Public Management Reform: A Comparative Analysis-Into the Age of Austerity (4th ed.). Oxford University Press.

Sanders, M. N. K., Lewis, P., & Thornhill, A. (2019). Research Methods for Business Students. In Oxford English Dictionary (Eighth). Pearson.

Torfing, J. (2023). Co-innovation in Welfare States Across Europe. In K. J. Baehler (Ed.), The Oxford Handbook of Governance and Public Management for Social Policy (p. 1065). Oxford University Press.

UN-GGIM Expert Group on Land Administration. (2020). Framework for Effective Land Administration (Issue May).









REFERENCES AND APPENDICES

UNECA. (2021). United Nations Global Geospatial Information Management. In Report on regional activities in Africa (Issue June).

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. Nursing and Health Sciences, 15(3), 398–405.

Venkatesh, V., Brown, S. A., & Sullivan, Y. W. (2016). Guidelines for conducting mixed-methods research: An extension and illustration. Journal of the Association for Information Systems, 17(7), 435–495.

Watson, T. (2017). Sociology, Work and Organisation. In Sociology, Work and Organisation (6th ed.). Routledge, Taylor & Francis Group.

Zhu, X., & Bao, M. (2017). Substitutes or complements? Individual-focused and group-focused transformational leadership in different organizational structures in new firms. Leadership and Organization Development Journal, 38(5), 699–718.





