AI Sovereignty in the Global South: Power, Dependency, and Strategic Futures

Simon Davies[1], **Vikranth Harthikote Nagaraja**[*2], **Innocent Nyalala**[3], **Nirav Bhatt**[3], **Soumya Banerjee**[*†4]

[1]University of Staffordshire, UK
[2]University of Salford, UK
[3]Indian Institute of Technology Madras Zanzibar Campus, Tanzania
[4]University of Cambridge, UK

Abstract

Artificial intelligence (AI) is reshaping economies and governance, yet its benefits remain unevenly distributed. This paper asks whether countries in the Global South are advancing toward *digital sovereignty* control over data, compute, and governance or drifting into *digital serfdom* dependence on foreign platforms. Using a seven-dimensional framework and four case studies (Singapore, Vietnam, Kenya, and Syria), we reveal key asymmetries in compute, talent, and regulation, and outline multipolar policy options involving the African Union (AU), Association of Southeast Asian Nations (ASEAN), and potential collaborations with India and China to promote equitable participation.

Introduction

AI is now treated as a general-purpose technology and strategic asset. High-income states expand compute, regulation, and talent pipelines that consolidate their advantage, while many Global South nations face limited infrastructure, capital, and skills (World Bank 2021; Horwitch 2024). If these disparities persist, they risk deepening a form of *data colonialism*, where Southern nations supply data and labour for AI systems designed elsewhere, with little influence over standards or benefits (OECD 2021; UNESCO 2023; Couldry and Mejias 2019). This paper examines whether selected Global South countries are moving toward *digital sovereignty* or drifting into *digital serfdom*. Four case studies illustrate alternative trajectories and policy levers that could shift outcomes toward sovereignty rather than dependency.

Conceptual Foundations: Digital Sovereignty or Digital Serfdom

Digital infrastructures are often owned or shaped by foreign actors, producing conditions that Morozov (Morozov 2018) characterises as forms of digital dependency, or *D*igital Serfdom. This aligns with Global South analyses of digital colonialism, where data extraction and infrastructural control reproduce unequal power relations (Couldry and Mejias 2019), and with dependency theory's emphasis on structural limits to technological self determination (Amin 1976). Rather than viewing *D*igital Sovereignty as linear progress toward a Global North model, this framing highlights the capacity of states to define alternative pathways such as slower adoption, welfare oriented design, or regionally shared infrastructures rooted in their own priorities. The **7 Dimensional** framework therefore evaluates the extent of strategic choice available to states, not their distance from Western technological trajectories.

Related Work

Since 2017, national AI strategies have proliferated, but the Organisation for Economic Co-operation and Development (OECD) and developing-country plans diverge in capacity and focus (Demaidi 2025; OECD 2021). Regional frameworks such as the EU AI Act and AU Continental AI Strategy propose contrasting governance models (European Commission 2021; African Union Commission 2024). Comparative indices, including the Government AI Readiness Index (Oxford Insights 2023) and Stanford vibrancy rankings, establish readiness baselines. The European Parliament's *Making Europe an AI Continent* (2025) outlines the EU's ambition for human-centric AI and strategic autonomy within the single market (European Parliamentary Research Service 2025).

Methodology

A seven-dimensional framework (7D) assesses the implementation of the AI strategy using scores from 0-5 (see Appendix A). The appendix table outlines the rationale behind each of the seven dimensions and collectively shapes the degree of strategic choice available to a state. Data were triangulated from national strategies, comparative indices, and policy literature to produce comparable country profiles.

Four countries were purposively selected to capture diverse contexts: **Singapore**, a high-income digital leader with mature governance; **Vietnam**, a fast-growing ASEAN economy expanding its digital capabilities; **Kenya**, an African innovation hub aligned with the AU's development agenda; and **Syria**, a conflict-affected and sanctioned state with severely constrained infrastructure. These cases illustrate

[*]These authors contributed equally.
[†]Corresponding author
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different structural conditions and sovereignty challenges across the Global South, enabling meaningful comparative analysis.

A key limitation of the methodology is that the 7D framework relies on publicly available national strategies and comparative indices, which vary in quality, completeness, and transparency across countries. Meaning the results should be viewed as indicative rather than definitive.

Case Studies & 7D Scoring

Singapore [4.5/5]. Advanced infrastructure, coherent governance, and sustained investment make Singapore a model for small-state AI sovereignty (Government of Singapore 2023).

Vietnam [3/5]. A state-led plan to 2030 emphasises human-capital growth but lacks high-performance compute and private investment (Government of Vietnam 2021).

Kenya [2.5/5]. A development-oriented strategy (2025–2030) leverages mobile innovation and agriculture, constrained by limited high-performance computing (HPC) but strengthened through AU alignment and entrepreneurship (Government of Kenya 2025; African Union Commission 2024).

Syria [1/5]. Conflict and sanctions leave minimal domestic AI capacity; most activity is diaspora-driven or humanitarian (Al-Khalil 2024). Long-term recovery depends on post-conflict reconstruction and exemptions.

Comparative Findings

Three divides shape outcomes:

- **Compute divide:** Access to HPC and cloud infrastructure remains the key structural bottleneck, reinforcing vendor lock-in.
- **Governance gap:** Regulatory maturity and finance correlate with sovereignty; Singapore exemplifies institutional coherence.
- **Human-capital asymmetry:** Talent mobility and weak investment pipelines constrain operational capacity and sustainability.

Discussion & Policy Directions

In the short term, pooled regional procurement, shared HPC (AU/ASEAN), and humanitarian exemptions could reduce reliance on external providers while building local capacity. Medium-term actions include deepening South–South cooperation (India, UAE, Japan) for technology transfer and regulatory mentorship, and creating transparent procurement to avoid platform capture. These findings align with literature on *AI sovereignty* and *data colonialism*, warning that unequal compute and governance reproduce extractive dependencies (Couldry and Mejias 2019; OECD 2021; UNESCO 2023). As reflected in the EU's human-centric AI approach (European Parliamentary Research Service 2025), sustainable sovereignty in the Global South depends on regional collaboration, open standards, and collective bargaining power.

Conclusion

Digital sovereignty is attainable but requires coordinated investment in compute, people, and governance. Without it, many Global South states risk renewed dependency. Multipolar cooperation, targeted finance, and capacity-building offer pathways toward equitable AI futures. Future work will extend the framework to additional UN-recognised countries.

Appendix A: 7D Framework Table

Dimension	Description
Infrastructure & Connectivity	Compute, broadband, cloud access.
Data Governance	Access, sovereignty, protection.
Human Capital	Education, AI-skilled labour.
Regulatory Maturity	Laws, institutions, oversight.
Funding & Investment	Public/private/foreign finance.
Public Trust	Acceptance and safeguards.
Sanctions Overlay	Export controls, restrictions.

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