

Big Data & AI Vs Small Data & Native Intel: A Case for Africa

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Introduction

- Big Data = bounteous data pool → natural blueprint for AI
→ for generating and advancing knowledge exponentially.
- In contrast, “Small Data” == scant/unstructured → characterize most emerging economies of the developing world, of which Africa is a center piece.
- “Native Intel” = refers to the knowledge systems that characterize Indigenous people, e.g., in Africa.



Home Truth



- Big Data & AI = tremendous insights that have impacted Western sectors such as education, human capital, healthcare, and finance.
 - Albeit with foreboding ethical challenges.
- Having been a late comer to previous industrial revolution, this digital revolution may not hold much hope for Africa (if not handled with care).
 - ➔ The current digital chasm between the North and the South might widen even more.
- True: Google, IBM and Microsoft are investing to develop Africa's talent pool
 - But questions remain.

Home Truth cont'd



- ROI: Foreign companies that invest in that sector are likely to continue to gather and use data on Africa exploitatively.
- “Data colonialism” is a big issue: under whose custody?
- IP: Industries such as pharmaceuticals, leverage IP protection for competitive advantage.
- Lack of regulatory framework
 - Even the **2019 Revised Common Rule** – is ill-equipped to the concerns posed by Big Data and AI.
- Africa lacks quality data -- refined, reliable, or shovel-ready data, as well as AI talent
- AI has led to racial bias and unfair predictions.
- Indigenous knowledge systems**
 - Unlike Western *Individualism*, *Community* is at the heart of the African nature of being, bodies, actions, achievements, environments, and technologies, i.e., “Native Intel.”
 - African relationalism or *Ubuntu* – “*I am because we are.*”
 - Understanding of humans as multiplex composites helps us move away from considering new and emerging technologies as zero-sum games.

Way forward



Equity

Best Practices for Equitable Partnership in International Collaboration.

- Capacity building that promote collaborative work that is inclusive, elevates underrepresented voices and groups, and demonstrates fairness of opportunity and process.

“Gird your loins”

African people and govts should:

- a. Invest in R&D for AI, data, tech initiatives, etc.
- b. Provide grants and tax credits
- c. Make the internet more accessible/affordable.

- d. Provide citizens with digital skills.
- e. Educate the public about safe digital practices.
- f. Ensure that private companies, agencies, etc., are transparent.
- g. Ensure strong regulatory framework.



Summary

Africa should take up the gauntlet:

- ❖ Develop a robust system that applies “Native Intel” to optimize the values of AI and big Data.
 - ❖ E.g., The African Union should prioritize creating a set of African data protection laws akin to the [European Union’s General Data Protection Regulation](#) -- but tailored to African communitarian mantra.





Thank you



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