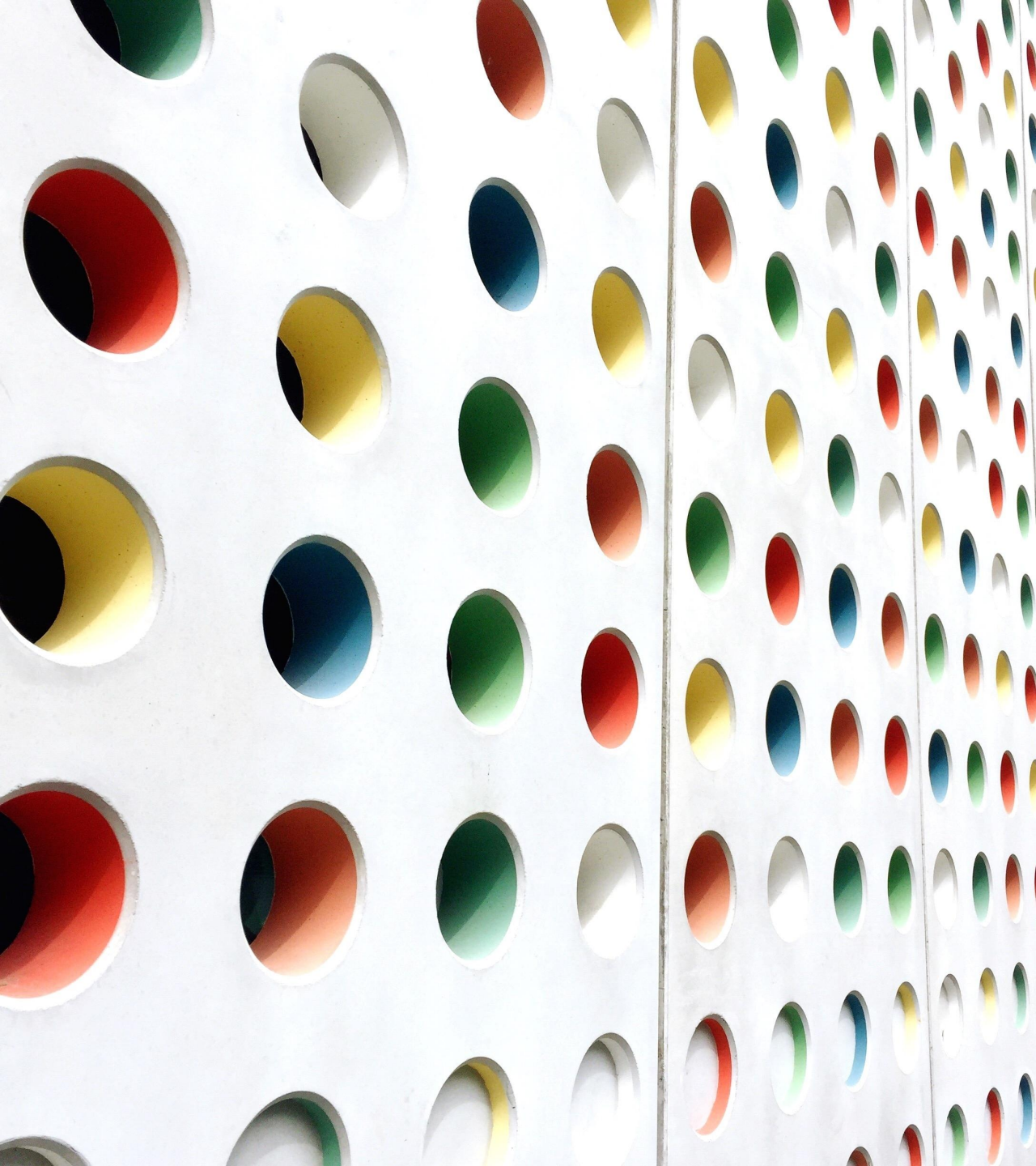




Social Intelligence as National Infrastructure

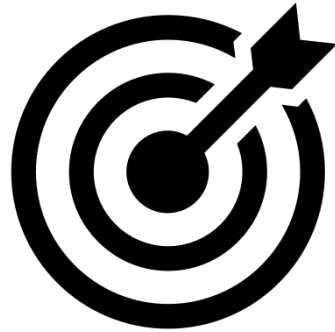
LEVERAGING EMPIRICAL
EVIDENCE FOR SOCIETAL
ADVANCEMENT

Mariam Fagbemi
NiMRA Conference 2026

Agenda



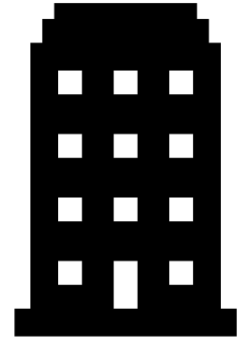
Conceptualizing
social intelligence
nationally



Social intelligence
as national
infrastructure



Policy framework
for national social
intelligence
integration



Case studies and
sectoral application

Conceptualizing social intelligence

Preamble

In the pursuit of national development, infrastructure is traditionally viewed through the lens of physical assets—roads, bridges, and power grids – especially in the global south.

However, in an era defined by digital transformation and complex societal challenges, there is an urgent need to recognize **Social Intelligence, powered by research**, as a fundamental form of national infrastructure. Social intelligence; provides the "collective cognition" necessary for informed decision-making and societal transformation.

In Nigeria, the potential for knowledge driven societal change is immense even if the political will may be lacking. Nigerians are at the forefront of scientific advancements both on the continent and beyond. Notwithstanding, the gap that exists and persists between the production of knowledge and its application in policy and practice is massive.

For research to truly function as infrastructure, social intelligence through research must be revitalized through robust funding, improved coordination, and a shift away from perfunctory gestures toward evidence-based solutions that address local challenges

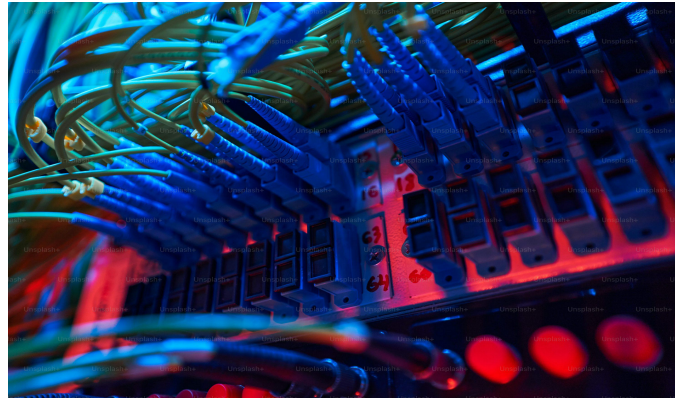
This paper explores how prioritizing "social intelligence" as a foundational asset can yield for a better, more resilient society. It draws from the sociological theories of structural functionalism and political theory of social innovation.

Key definitions – Infrastructure

The framework of essential physical systems and facilities that a society, country, or organization needs to function. It provides the foundational structure that allows economies to operate, businesses to trade, and communities to live safely.



Physical
[Bridges, schools, roads...]



Digital
[Internet connectivity...]



Institutions
[Courts, banks, parastatals...]

Key definitions – (SI)

Two broad perspectives:

1. The ability to understand and navigate social situations effectively while building healthy, rewarding relationships with others.

A socially intelligent person is able to observe, process and interpret verbal and nonverbal cues—such as body language, tone of voice, and emotional states—and use that information to adapt their behavior to different social environments.

2. The capacity of a country—comprising its government, institutions, and citizens—to collectively perceive, analyze, and appropriately respond to complex social dynamics, public needs, and systemic vulnerabilities to foster national resilience

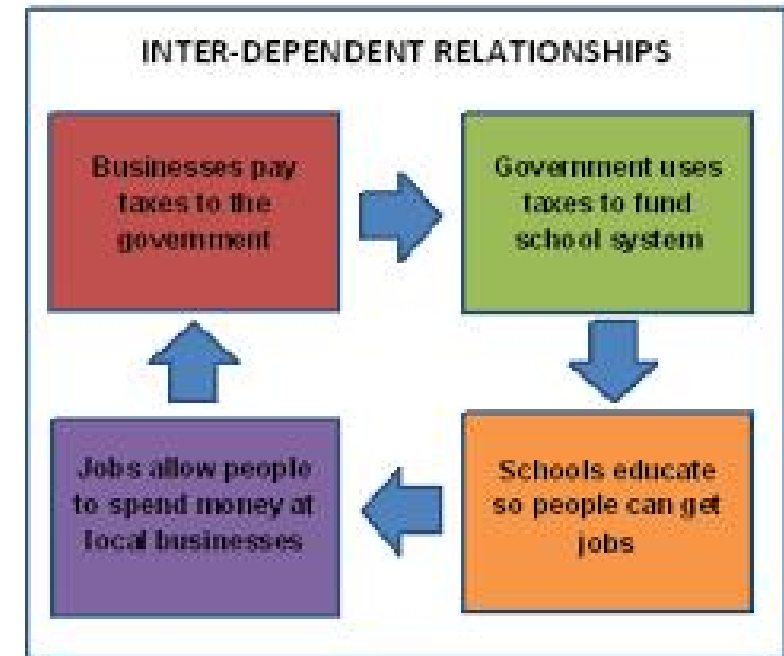


Theoretical basis – Structural Functionalism

A macro-sociological perspective that views society as a complex, interconnected system whose parts work together to promote solidarity, stability, and equilibrium. It posits that social structures (like family, education, and economy) exist because they serve essential functions for the survival of society.

Society is viewed a living organism (system) with different parts (sub-systems) performing assigned roles (latent or manifest functions).

A state of normlessness (anomie) ensues when there is a breakdown in functioning or when different parts do not perform their assigned function

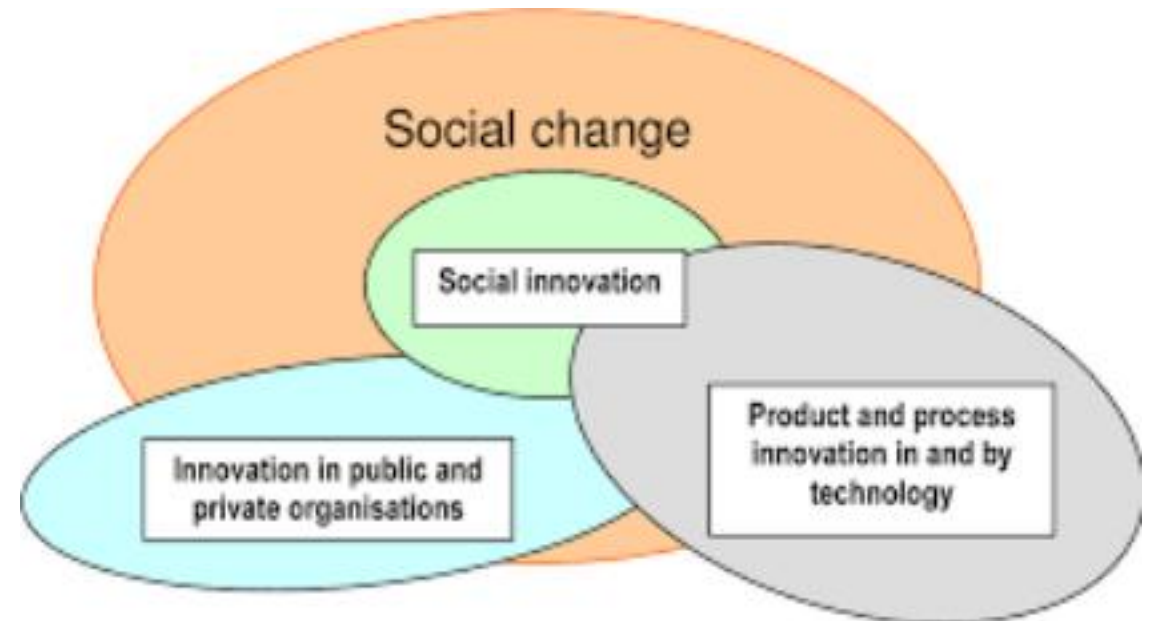


Theoretical basis – Social Innovation

The political theory of social innovation conceptualizes the development and implementation of new ideas—such as products, services, and models—not merely as economic optimization, but as processes aimed at **altering power dynamics, addressing structural inequalities**, and **fostering participatory democracy**.

Innovation is embedded in and enabled by larger societal structures. The cultural foundations (e.g. African, Asian) and economic frameworks dictate the pace, growth and scope of innovation per country (American economic vs Chinese economic frameworks):

"I do not think that Lagos will be a European city... but Lagos will ultimately be a city where life is sustainable... [and] where everybody irrespective of your status will find a place." BRF



Social intelligence as national infrastructure

National view of SI

On the national level, social intelligence driven initiatives are large scale undertakings designed around human-centric empathy, community collaboration, cultural dynamics, and behavioral insights.

Unlike strictly technical infrastructure, these programs focus on how citizens interact, build trust, and respond to social rule. It affects the way the citizens interact with, use and help enhance public service delivery.

By nature, SI is cross-cutting, abstract and cannot be restricted to just one section of national life.

It acts as the glue that powers interdependency and aids the smooth functioning of the different elements of society:

The research connection

Intelligence and research are interdependent – research powers intelligence and intelligence unearths the need for more research.

For research to serve its role in advancing the course of social life in any society, it must be viewed as more than mere academic activity. It must be seen as a form of collective cognition or social intelligence driver that serves as the basis for powering sound decision making

Just as roads are physical infrastructure that power commerce, education, health, etc, research is the social and cognitive infrastructure that powers the very decisions that inform the allocation of resources for the physical infrastructure that are more visible.

Research or social cognition or social research powers the way society knows, discovers, evolves, reimagines, grows

Increasingly, technology and digital revolution is influencing the deployment of social intelligence in societies across the world.

How is Nigeria faring in this evolution?

Policy framework for national social intelligence integration

A balancing act

A country should rarely treat these as mutually exclusive choices, as true development requires a balanced systems-thinking approach.

However, the prioritization often depends heavily on the nation's current developmental stage.

Nigeria and other developing economies, Often need to prioritize physical infrastructure (roads, electrical grids, water, transit) first, as basic physical networks are the fundamental building blocks required to stimulate job creation, improve trade, and provide access to healthcare and education.

Physical without social	Building roads or transit without investing in the people will lead to neglect, vandalism, and failure to maximize economic utility.
Social without physical	A highly educated and organized populace will struggle to translate that potential into tangible economic growth or improved living standards without reliable transport, energy, and digital networks

The Nigerian Situation



Capacity:

Africa's largest producers of scientific publications, ranking second only to South Africa in science publications .



Consensus:

Nigerians believe that a nation's development is determined by the functionality of its research structures .



Chasm (disconnect):

Despite high output, there is a significant "research-to-policy" gap. Weak linkages and poor

The Nigeria Situation

Nigeria cannot afford to choose one over the other, but its sequencing is vital.

Physical infrastructure is currently acting as the skeleton, providing the roads and power grids needed to keep businesses alive.

However, **social intelligence is the lifeblood**.

Without scaling up investments in education, healthcare, and social safety nets, Nigeria risks building expensive roads that citizens are too impoverished or untrained to productively exploit.

- **The Brain Drain Effect:** A failure to build a strong local social infrastructure has historically led to the "Japa" phenomenon, where highly skilled professionals migrate abroad, draining the tech, and corporate sectors of vital intellectual capital.
- **Wasted Technological Potential:** Nigeria has a booming, organic digital economy and ICT sector. However, without structural investments in public education and digital literacy, the majority of the youthful population cannot participate in this high-growth sector.



Institutional provisions



The National Information Technology Development Agency (NITDA) is the public service institution responsible for implementing Nigeria's IT policy, regulating the tech sector, and driving the country's transition into a globally competitive digital economy

local knowledge ...

The National Orientation Agency (NOA) is the Nigerian Federal Government body tasked with communicating government policies, mobilizing public support, and promoting patriotism, national unity, and positive behavioral change.



Harnessing social intelligence

Civic engagement



- Civic education:** national values education, teaching empathy and social awareness, promoting local conflict resolution
- **Participatory governance:** facilitate dialogue mechanisms – civic engagements, town halls etc
 - **Digital literacy:** promote productive use of digital assets

Social listening



- Data-driven social intelligence gathering
- Real-time sentiment analysis
- Early warning systems
- Feedback loop
- Transparent resolution of crisis

Political environment (Institutions strengthening)



- Adaptability
- Inclusivity
- Institutionalization over tokenism
- Transparency
- Trust

Relevant applications

Domains	Approach/Technique	Benefits
Smart cities / governance	Civic intelligence + AI for proposals	Increases participation and governance efficiency via tokenized engagement and smart contracts
Civic tech platforms	Monitoring collective intelligence online	Identifies socio-technological conditions for communities to become “more intelligent”
Transport systems	Societal intelligence framework	Coordinates vehicles and infrastructure for safer, more efficient transport
Land management	Social intelligence mining with LLMs	Extracts public concerns from social media to inform land-use policy

Case studies and sectoral application

Case studies

China: Societal intelligence for safer and smarter transportation: examined the advances made in autonomous driving technology and sought to analyze bottlenecks for wider society adoption especially for mass transportation.

Austria: Social intelligence mining to enhance land management and urban planning. Data derived from social media is used to inform environmental planning and urban land use.

Smart Nation Initiative (Singapore): A nationwide transformation that prioritizes user-friendly digital inclusion. Singapore uses continuous citizen feedback loop mechanisms to shape national apps like *LifeSG*, packaging public services

directly around key human life milestones (e.g., childbirth, aging) instead of rigid bureaucratic silos.

Nigeria: Social Safety Net and Welfare Mapping (Nigeria):

Implemented to strengthen social protection delivery chains by identifying vulnerable urban populations. Rather than imposing a standard data collection blueprint, the system integrates data analytics with localized cultural safety structures like community networks to verify and distribute aid

Haqdarshak Platform Integration (India): An initiative utilizing mobile applications alongside a nationwide network of community-trained women entrepreneurs ("Haqdarshiks"). The project leverages their existing localized trust and social networks to help marginalized citizens identify, understand, and apply for government welfare programs they are entitled to.

Sector specific application-Agriculture

Nigeria's over reliance on antiquated means of agricultural management has long been proven to be inadequate

The global threat that climate change poses to livelihood and food insecurity calls for renewed urgency in the widespread and institutionalized adoption of technology for agricultural management.

The challenge of insecurity and inability of farmers to access their farms or being taxed out of profit add a more complex dimension to the already difficult situation.

Examples from Kenya, Rwanda, India

Country	Core transition Strategy	Funding mechanisms	Key takeaway for Nigeria
Kenya	Digital Extension & Micro-Insurance	blended finance via international climate funds and private venture capital.	Scale multi-lingual, SMS-based agricultural advice tied to index-based crop insurance to de-risk smallholder farmers against both weather and security shocks.
Rwanda	Land Consolidation & Terracing	Direct green bonds and specialized state-backed agricultural adaptation grants	Incentivize smallholder groupings into large, contiguous farming cooperatives. This aggregation makes it highly cost-effective to deploy joint solar irrigation and dedicated security details.
India	Solarization of the Farm Sector	Subsidized federal matching funds paired with commercial bank credit guarantees.	Transition farming clusters away from expensive diesel fuel by replacing machinery with solar-powered pumps, permanently protecting food production costs from global energy market shocks.

Driving a knowledge-based economy

- a) Nigerian ownership of the emerging research and development ecosystem:
 - Local leadership, priority agenda setting and coordination
 - Funding and provision of appropriate logistics
- b) Detach the development of the research and development ecosystem from political encumbrance:
 - Independent monitoring of the National Research and Innovation Council (NRIC) alongside the National Research and Innovation Development Fund (NRIDF).
- c) Actively engage local and diaspora private sector including the academia:
 1. Discourage the private-public university discrimination
 2. Support private universities with targeted funding
- d) Prioritize and promote local knowledge and indigenous R&D:
 1. Whose knowledge counts – at the federal, state, local (including communal) level
 2. For example: The Nigerian Institute for Pharmaceutical Research and Development (NIPRD) deconstructed traditional herbal formulas for sickle cell management, advancing them through clinical trials to create standardized, plant-based therapeutics.
- e) Policy retention across administration

Conclusion

Across AI, civic tech, transport, and environmental governance, research treats social and civic intelligence as capacities that can be systematically measured, designed for, and institutionalized.

Building data infrastructures, monitoring civic platforms, embedding social intelligence in education, and using participatory governance mechanisms are all proposed pathways toward treating social intelligence more like national infrastructure rather than as an abstract.

Ensuring that infrastructure choices do not entrench narrow, technical visions requires an explicit prioritization of social, ethical, and equity dimensions.

In Nigeria can pace itself by powering the emergence of a socially intelligent society through currently needed spend on the still yawning gap for technical infrastructure.

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with a deliberate strategy to infrastructures to public-good production