



ARTIFICIAL INTELLIGENCE IN THE WORKPLACE AND DEMOCRATIC GOVERNANCE IN AFRICA

Risks, Benefits, Challenges, and Opportunities

Presented By: Adedeji Adeniran

Website: www.cseaafrica.org

1

Exposure is concentrated, not evenly spread

AI-driven labour disruption is concentrated in service and public-sector occupations — not in the agriculture, informal sector and construction work that employs most Africans.

2

Limited risk, but also limited reward

Low exposure limits near-term job losses, but also caps the productivity gains AI can deliver without complementary investment.

3

Governance cuts both ways

AI can improve service delivery and accountability or entrench surveillance and erode civil liberties, depending entirely on the safeguards in place.

4

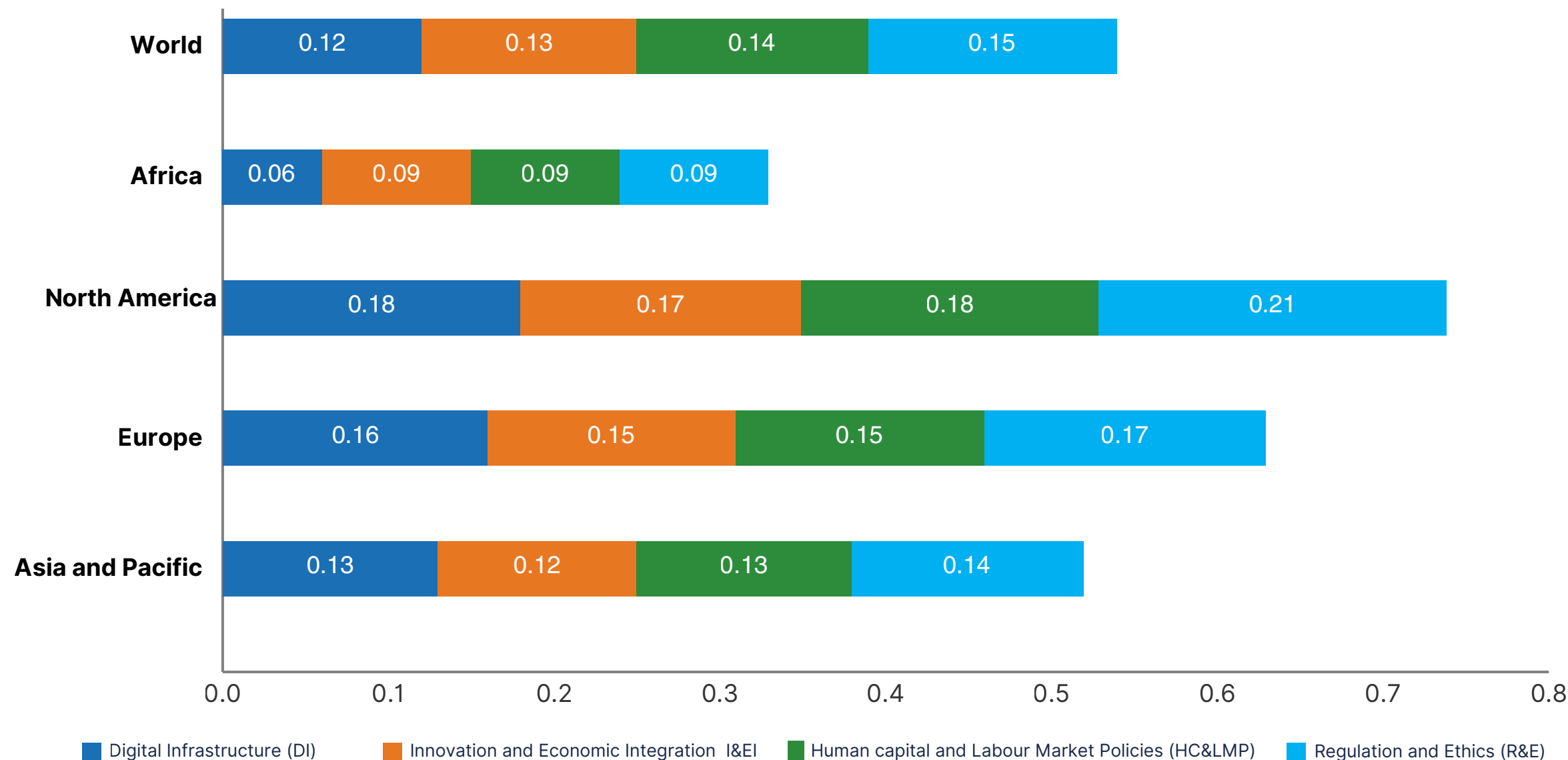
Outcomes are a policy choice, not a certainty

Infrastructure, skills, inclusive governance frameworks, and human oversight will determine whether Africa captures AI's benefits.

Key Takeaways

THE AI PREPAREDNESS GAP

Africa trails every region and below the global average on the IMF's AI Preparedness Index in all the four dimensions



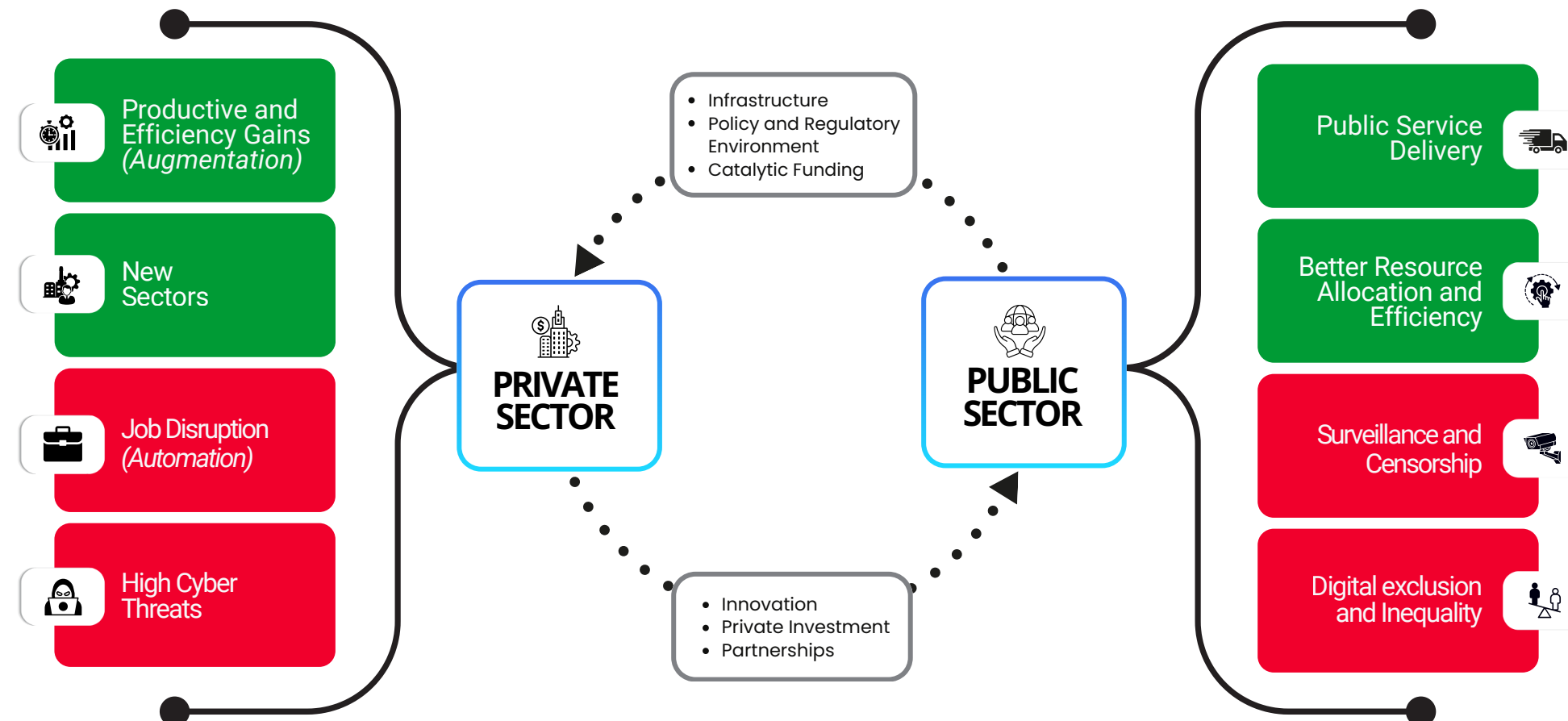
- Only 3 countries — Seychelles, Mauritius, South Africa — score above the 0.50 index.
- Just 25 of 55 countries exceed the continental average of 0.34.
- AI preparedness tracks digital development: countries with stronger connectivity consistently score higher across all four AIPI dimensions — infrastructure, innovation, human capital, and regulation.

TWO CHANNELS THROUGH WHICH AI SHAPES DEVELOPMENT OUTCOMES

Economy & AI

Workforce Channel

- How AI affects labour allocation — through augmentation (boosting productivity) or automation (substituting for workers).
- Effects vary by sector, formality status, and skill level.



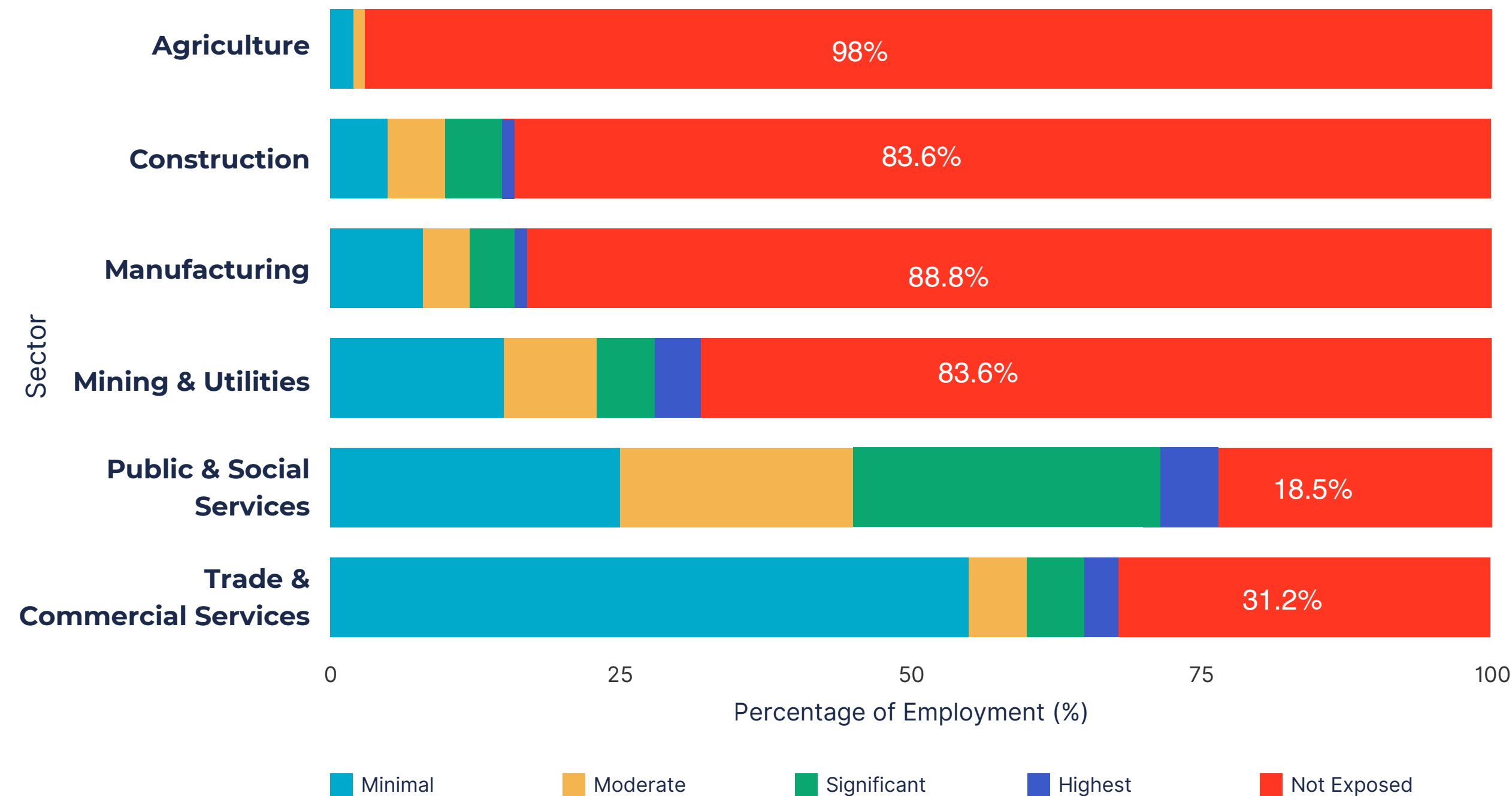
Governance Channel

- The state's role in enabling responsible AI deployment — while guarding against its misuse as an instrument of democratic erosion.
- Effects vary by institutional capacity and the strength of oversight.

Source: Authors' illustration

WHERE GEN AI EXPOSURE CONCENTRATES: SECTORS

Not in the biggest employers — in the most cognitive, admin-heavy ones



SHARE OF EMPLOYMENT

Agriculture



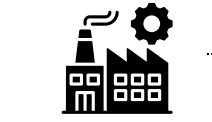
36.3%

Construction



4.26%

Manufacturing



8.44%

Mining & Utilities



1.23%

Public & Social Services



10.71%

Trade & Commercial Services



27.54%

SUBSTITUTION AND COMPLEMENTARITY EFFECTS ACROSS SECTORS

The same exposure can cut two ways;

Substitution/Automation Risk

- Highly codifiable, routine tasks — clerical and administrative roles — face the most direct substitution risk.
- Without coordinated reskilling, this risk falls hardest on entry-level and lower-skill workers.

Complementary/Augmentation Gain

- Professions like law and adjudication show high AI exposure but strong potential for productivity gains if practitioners integrate AI meaningfully.
- The net effect depends on the balance of substitution vs. complementarity in each occupation's specific task mix.

WHAT DOES THIS MEAN FOR INFORMAL ECONOMY?

Today's insulation is a stage of diffusion, not a permanent condition



95.7%

of Africa's agricultural workforce
is informally employed



84.3%

of wholesale & retail trade
workers are informally employed

- Informal work in agriculture and trade is manual and physically embedded — and further insulated by weak digital infrastructure, so exposure is lower than formal counterparts.
- AI projects targeted at informal farmers have shown potential to improve food security and rural livelihoods, while generative AI is helping microenterprises differentiate products and reach wider audiences.
- As digital infrastructure and affordable AI tools expand, the informal economy — which absorbs most African workers — will increasingly intersect with AI. Preparing this workforce is among the region's most pressing policy challenges.

GOVERNANCE: PROMISE AND RISK

AI's effect on democracy is a policy choice, not a technological certainty

The Potential

- Improved service delivery, poverty targeting, and disaster response
- Reduced administrative leakage and stronger fiscal management
- Greater efficiency and data driven policymaking
- Expanded access to essential public services for underserved citizens

The Risk

- AI-enabled disinformation and cybercrime
- Algorithmic bias and opaque eligibility decisions
- Mass surveillance and suppression of civil liberties
- Digital exclusion that reinforces existing inequalities

CASE STUDIES AT A GLANCE

Comparative synthesis of public-sector AI deployment

Case	Democratic Contribution	Principal Governance Risk
Togo (Novissi)	Rapid, scalable crisis relief without a social registry	Exclusion of the digitally invisible; opaque eligibility
Kenya (PROMPTS, payment rails)	Auditable transfers; measurable health-inclusion gains	Dependence on platform integrity and data protection
Rwanda (Irembo, AI Policy)	Broad service digitization; structured AI adoption	Concentration of expertise, vendor, and oversight risk
South Africa (public-sector AI)	Wide state experimentation; fraud analytics	Documentation failures; surveillance creep

FIVE FORCES DEFINING AI'S STAKES FOR AFRICA

01

Demographic Scale

Africa has the youngest, fastest-growing workforce on earth — making AI readiness a question of immediate and generational economic consequence.

02

Digital Infrastructure Gap

Just 36% internet penetration and an AI Preparedness score of 0.34 (vs. 0.56 globally) show the foundations are still being built.

03

Informal Economy Dominance

95.7% of agricultural workers and 84.3% of trade workers are informally employed — the segment AI diffusion will eventually have to reach.

04

Governance Readiness Gap

African countries rank lowest globally on responsible-AI safeguards, raising the stakes for how governments choose to deploy these tools.

Inadequate regulatory frameworks and weak institutional capacity (Arakpogun et al. 2021)

05

A Dual-Edged Paradigm

The interplay between labour substitution and task enhancement.

POLICY DIRECTIONS

What regional and national actors should prioritize

Regional Priorities

- Accelerate ratification of regional data-protection frameworks (e.g. the Malabo Convention).
- Resource and operationalize the AU's African AI Readiness Index and monitoring observatory.
- Prioritize regional sharing of AI infrastructure, compute, and open datasets to prevent capability concentration in a few first-mover states.

National Priorities

- Prioritize digital and energy infrastructure as the foundational prerequisite for AI readiness.
- Realign education and training to build AI-relevant skills across all skill tiers — not only advanced technical roles.
- 3. Adopt human-in-the-loop as a non-negotiable design standard, with grievance mechanisms and independent audit capacity.
- 4. Target labour policy at compounded displacement risk through active reskilling programmes.



Thank you for listening.