7TH AFRICA EMERGING MARKETS FORUM

ARTIFICIAL INTELLIGENCE IN THE WORKPLACE AND DEMOCRATIC GOVERNANCE IN AFRICA: RISKS, BENEFITS, CHALLENGES, AND OPPORTUNITIES

Adedeji Adeniran, Obiageli (Oby) Ekwunwa, Chidozie Uzoma Nwosu, PhD, and Adeyemi Abel Ajibesin, PhD.

JULY 29 - 30, 2026

ABUJA, NIGERIA

Emerging Markets Forum

Central Bank of Nigeria

Abstract

This report examines the implications of AI adoption for two domains that are central to Africa's development trajectory: the workplace and democratic governance. The analysis reveals that Africa's exposure to AI-driven labour market disruption is concentrated in service-oriented and public sector occupations rather than in the agriculture, trade and construction activities that employ most of the workforce. While this limits near-term displacement risk, it also constrains the productivity gains AI can deliver without complementary investments in digital infrastructure, skills, and innovation ecosystems. On the governance side, the report documents both the potential of AI to improve service delivery, social protection targeting, and public accountability, and the significant risks it poses to civil liberties, electoral integrity, and democratic institutions where safeguards are absent. The report emphasizes key priority interventions in the aspect of digital and energy infrastructure, developing AI-relevant skills, enacting inclusive governance frameworks, and embedding human oversight into public sector AI deployments as crucial elements in maximizing gains from AI adoption and mitigating the potential risks.

1. Introduction

Artificial intelligence (AI), broadly defined as computer systems capable of performing tasks that typically require human cognitive abilities (Arakpogun et al. 2021), has emerged as a major driver of technological change with far-reaching economic, social, and political implications. By improving operational efficiency, enabling rapid access to information, and supporting data-driven decision-making, AI is transforming production processes and business models across increasingly complex economic environments. Applications such as autonomous transport, virtual assistants, predictive analytics, and robotic process automation are already reshaping sectors including manufacturing, healthcare, finance, and logistics (Azaroual, 2024).Beyond the private sector, AI also presents opportunities to modernize public administration, strengthen service delivery, and improve the efficiency of government operations (Awan et al. 2021). Estimates suggest that AI could contribute as much as US$15.7 trillion to global gross domestic product (GDP) by 2030 (Mithi, 2024).

The rapid diffusion of AI has also raised important policy concerns. These include the potential to widen existing inequalities, the adequacy of regulatory and governance frameworks, and the disruption of traditional business models and labour markets (Arakpogun et al. 2021). While AI has the potential to increase productivity and create new economic opportunities, it is also expected to automate some tasks, complement others, and fundamentally reshape the demand for skills (Cazzaniga et al. 2024). Consequently, the labour market, governance, and distributional effects of AI are likely to vary considerably across countries, depending on their levels of digital readiness, institutional capacity, human capital, and policy responses.

Despite these challenges, AI adoption is accelerating across both the private and public sectors, prompting growing attention from policymakers and practitioners seeking to maximize its benefits while mitigating associated risks. For Africa, where digital infrastructure gaps, limited digital inclusion, and institutional constraints remain significant (Diallo et al. 2025), harnessing AI represents both an opportunity and a policy challenge. AI has the potential to strengthen public administration, expand access to essential services, improve productivity, and support innovation across sectors such as healthcare, education, agriculture, transportation, financial services, environmental management, and social protection (Eke et al. 2023). At the same time, inadequate regulatory frameworks and weak institutional capacity could heighten risks related to data privacy, cybersecurity, algorithmic bias, and national security, potentially reinforcing existing socioeconomic disparities (Arakpogun et al. 2021).

Against this backdrop, this study examines the implications of AI adoption for Africa's workplaces and systems of democratic governance. It assesses the opportunities that AI presents for economic transformation and improved public sector performance, while identifying the constraints that may limit its effective and equitable adoption. The analysis adopts an integrated perspective by examining both the private and public sectors and highlighting the interactions between economic transformation, labour markets, institutional capacity, and democratic governance. The central argument is that the development outcomes associated with AI adoption are not predetermined. Rather, they will depend on complementary investments in digital infrastructure and human capital, the strength of governance and regulatory institutions, and the policy choices made by governments, businesses, and other stakeholders.

1.1 The African Digital Landscape

The digital architecture across the continent has experienced substantial advancement in recent years. At the supranational level, strategic investments in subsea connectivity have yielded expansive fibre optic networks, such as the 10,000 km Eastern Africa Submarine Cable System (EASSY) and the 17,000 km SEACOM network linking Southern Africa and East Africa with Europe and Asia. Similarly, the 14,530 km West Africa Cable System (WACS) provides critical infrastructure for 15 nations (Nanfuka, 2022). Complementing these physical assets, the African Union’s Digital Transformation Strategy for Africa (2020-2030) prioritizes digitally-enabled socio-economic growth as a continental imperative. National-level initiatives further reflect this trend: Kenya’s Digital Economy Blueprint emphasizes infrastructure and data protection; South Africa’s Fourth Industrial Revolution (4IR) Strategy targets the integration of advanced analytics into manufacturing and finance; and Nigeria’s National Digital Economy Policy and Strategy (NDEPS) focuses on fostering innovation hubs and digital literacy (PECB, 2025). These coordinated efforts underscore a robust regional commitment to modernizing the digital landscape.

Nevertheless, within this emerging digital ecosystem, profound inequities persist regarding the accessibility and outcomes of technological innovation (Motadi, 2026). While 3G network coverage reached approximately 89 percent of the population in 2025, 5G availability remained limited to just 12 percent (Table 1). Connectivity data reveals that although internet penetration rose to 36 percent in 2025, it still lags significantly behind the global benchmark of 74 percent. Furthermore, despite 94 percent mobile network coverage, active internet participation remains constrained, with nearly two-thirds of the population remaining digitally isolated (Diagana and Wadagni, 2025). These disparities constrain the continent's capacity to fully leverage emerging technologies, resulting in uneven access to digital opportunities and limiting the inclusiveness of Africa's digital economy.

Digital disparities are also evident across regions, countries, and population groups within countries, resulting in uneven access to digital opportunities and limiting the inclusiveness of Africa's digital economy. These disparities constrain the continent's capacity to fully leverage emerging technologies, including artificial intelligence. Existing evidence points to multiple underlying constraints. Osakwe and Adeniran (2021) identify weak data governance as a key bottleneck to digital transformation, while the World Bank (2024) highlights inadequate digital infrastructure, affordability constraints, persistent gender disparities in digital access and use, and weak regulatory and institutional frameworks as major barriers to building an inclusive and resilient digital economy.

Table 1

African Digital Landscape

Year	Mobile Telephone subscriptions	Active mobile-broad band subscriptions	Mobile Network Coverage	3G mobile network Coverage	5G mobile network Coverage	Internet Penetration
2020	81.2	38.3	90.1	75.6	0.1	26.9
2021	83.7	39.9	91.4	78.9	0.9	29
2022	88.8	45.0	92.3	81.7	2.1	31.1
2023	91.4	46.5	93.1	84.2	5.8	32.3
2024	90.4	50.4	93.7	86.8	9.3	33.6
2025	91.7	55.5	94.1	88.8	11.8	35.7

Source: ITU World Telecommunication/ICT Indicators database. Version November 2025, for Facts and Figures 2025

1.2 AI Readiness and Preparedness in Africa

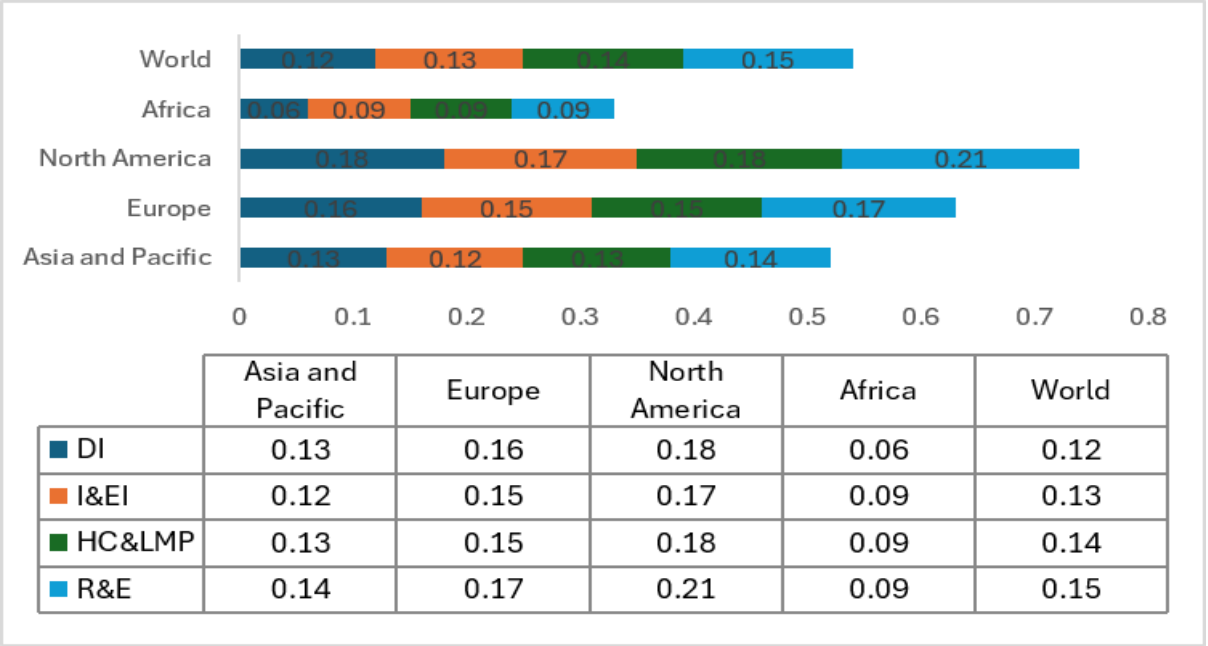
A country's level of AI preparedness is a critical determinant of its ability to harness the benefits of artificial intelligence while mitigating its associated risks. AI preparedness refers to the availability of the hard and soft infrastructure required to support the adoption, diffusion, and effective integration of AI technologies across the economy. The International Monetary Fund's AI Preparedness Index (AIPI) measures this readiness across four dimensions: digital infrastructure (DI), innovation and economic integration (I&EI), human capital and labour market policies (HC&LMP), and regulation and ethics (R&E).

Figures 1 and 2 present the AIPI for African countries in comparison with other regions. Africa performs below all other regions and falls well short of the global average score of 0.56 across all four dimensions of preparedness. Moreover, only three African countries (Seychelles, Mauritius, and South Africa) score above the benchmark value of 0.50, while only 25 countries exceed the continental average of 0.34 (Figure 2). The analysis also reveals a strong positive relationship between digital development and AI preparedness. Countries with higher levels of digital penetration consistently record stronger AI preparedness scores, underscoring that AI adoption builds on existing digital capabilities rather than emerging independently of them.

This finding highlights the complementary relationship between broader digital transformation and AI readiness. Africa's relatively low level of AI preparedness reflects broader structural constraints, including limited capacity for systemic technological transformation, an underdeveloped innovation ecosystem, shortages of AI-relevant skills, inadequate digital and energy infrastructure, and weak data ecosystems (Mithi, 2024). Consequently, strengthening AI readiness in Africa will require parallel investments in the broader digital economy, particularly in expanding digital infrastructure, improving data systems, fostering innovation ecosystems, and developing a digitally skilled workforce.

Figure 1

Global AI Preparedness Index Source

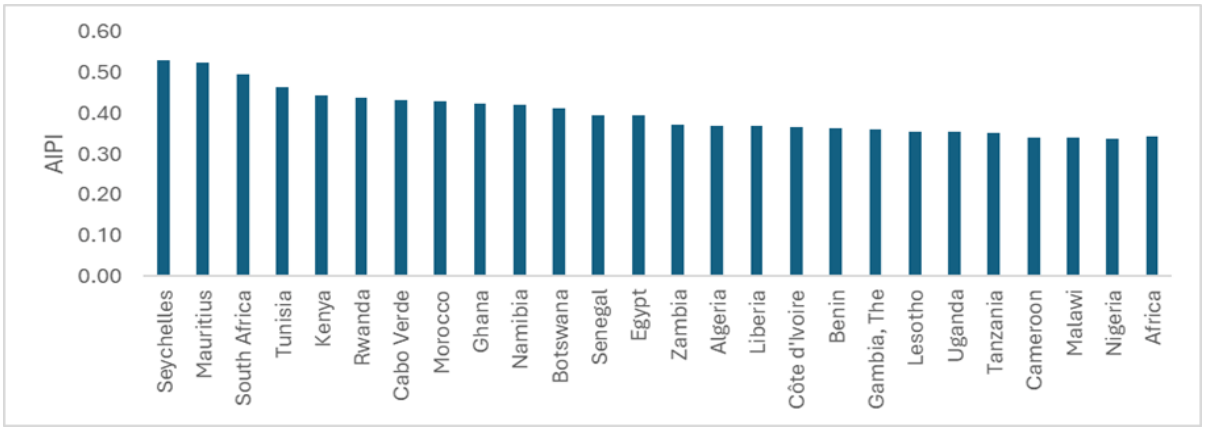


	Asia and Pacific	Europe	North America	Africa	World
DI	0.13	0.16	0.18	0.06	0.12
I&EI	0.12	0.15	0.17	0.09	0.13
HC&LMP	0.13	0.15	0.18	0.09	0.14
R&E	0.14	0.17	0.21	0.09	0.15

Source: IMF Database, 2026

Figure 2

Africa AI Preparedness Index.



Source: IMF Database, 2026

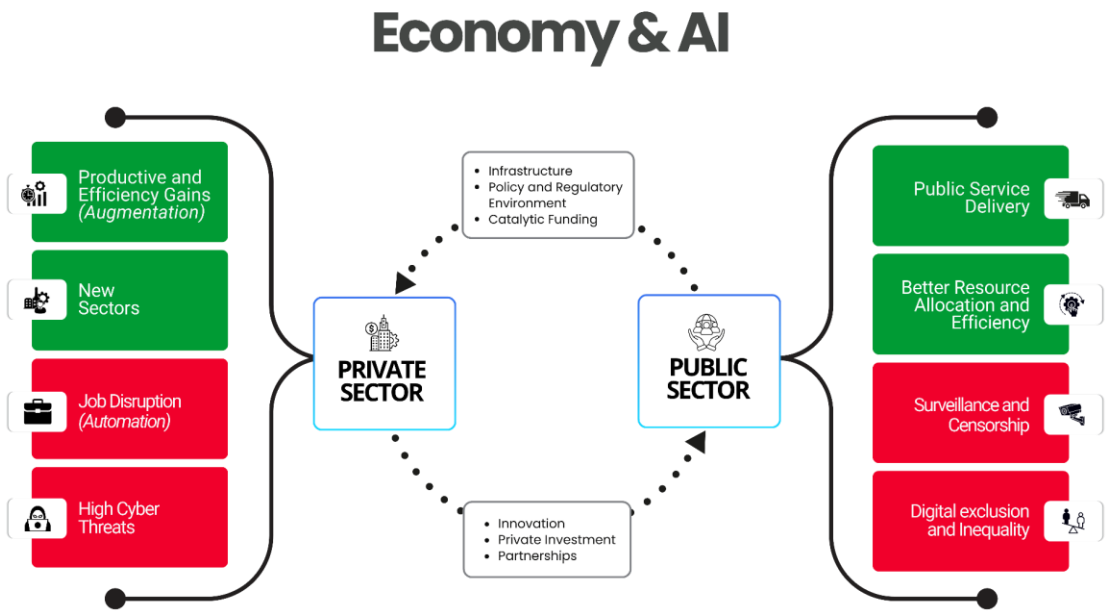
2. Distilling the Linkage between AI, the Labour Market, and Democratic Governance in Africa

While the transformative potential of AI for the global economy is widely acknowledged, its net impact on economic growth, human capital, and welfare remains unknown. This is because AI adoption is still at an early stage, and its ultimate effects will be shaped by a complex interplay of technological, institutional, and market factors. However, historical patterns from prior episodes of general-purpose technology diffusion points to the aggregate economic impact of AI will likely be determined by its uptake and deployment across two principal sectors: the private sector, as the primary engine of productive activity, and the public sector, as the architect of the regulatory and institutional environment within which markets and innovation systems operate.

This paper develops a conceptual framework that maps these two channels. As depicted in Figure 1, the framework identifies the workforce (private sector) and governance (public sector) channels as the primary pathways through which AI shapes economic outcomes. The workforce channel relates to how AI affects labour allocation either by augmenting human productivity or by substituting for it through automation. The governance channel focuses on the role of the public sector in creating an enabling environment for responsible AI deployment while guarding against its misuse as an instrument of democratic erosion and civil liberties suppression.

Figure 3

Linkage between AI, the Labour Market, and Democratic Governance in Africa



Source: Authors's illustration

2.1 The Workforce Channel

Existing theory yields competing predictions regarding AI's labour market effects. Acemoglu (2025) formalises the tension between task augmentation and task automation, noting that the aggregate employment effect depends on the relative magnitude of productivity gains versus displacement. Early empirical evidence is consistent with both mechanisms. Anthropic (2025) reports that, across observed AI tool usage, tasks were split roughly evenly between augmentation and automation — 57 percent augmented compared with 43 percent automated. OpenAI (2026) similarly finds that only approximately 18 percent of jobs face high short-run automation risk. Nevertheless, emerging labour market evidence points to a measurable slowdown in entry-level hiring, consistent with early-stage automation-driven displacement at the lower end of the skill distribution.

The pace and extent of AI-driven automation will also vary considerably by sectors. Felten, Raj, and Seaman (2021) developed an index of AI occupational exposure that documents substantial structural and functional differences in automation risk across sectors. The financial sector and the ICT industry are among the most exposed to AI, while construction and agriculture are among the least exposed. This has important implications for Africa, where agriculture and informal, low-technology services dominate economic activity. Lower exposure implies a reduced risk of job displacement, but also more limited productivity gains from AI adoption. In the long term, AI could lead to new industries and entirely new classes of jobs similar to how the ICT industry emerged from the third industrial revolution, Africa risks being excluded if domestic technological capacity and institutions are not AI-ready.

2.2 The Governance Channel

The public sector's role is not limited to market facilitation. Governments are simultaneously the architects of AI governance frameworks and potential vectors of its misuse. On the enabling side, AI offers significant scope to improve public service delivery through process automation, fraud detection in procurement and public expenditure, and enhanced targeting of social programmes. African governments have become increasingly active in developing national AI strategies. The Global AI Observatory finds that nearly all African countries now have at least one AI-related policy framework in place (African AI Governance Index, 2025).

However, the governance risks are equally significant. The Global AI Index (2024) ranks African countries lowest on its responsible AI index, citing limited institutional safeguards around inclusion, workers' rights, and civil liberties. AI can substantially lower the cost of mass surveillance and make tools for targeted harassment, disinformation, and political suppression more accessible to state and non-state actors alike (Feldstein, 2019). In contexts where accountability mechanisms are already weak these technologies risk amplifying existing tendencies toward authoritarian control rather than democratic deepening.

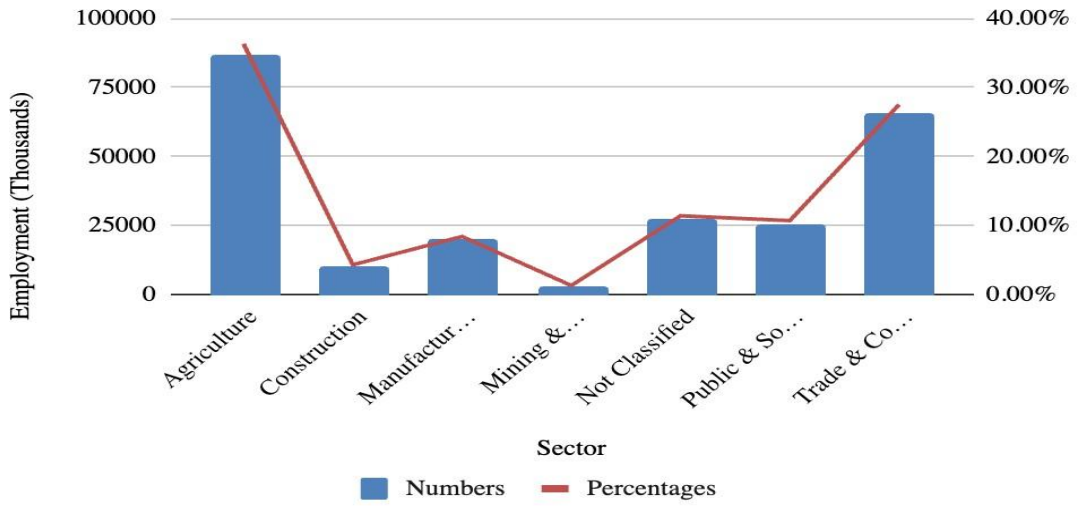
The framework also highlights the importance of public-private complementarities in determining AI's development trajectory. The public sector has a crucial role in providing macroeconomic and digital infrastructure, establishing inclusive governance frameworks, and offering catalytic financing to support early-stage domestic innovation ecosystems. The private sector, in turn, can bring resources, technical expertise, and operational capacity to bear on challenges that exceed the public sector's implementation capacity including AI-specific cybersecurity threats and infrastructure investment gaps. The remainder of this paper expands on each element of this framework, examining the workforce implications, and democratic governance outcomes across the African continent.

3. African Labour Market and AI Trends

Africa has the youngest and fastest growing workforce globally, a result of the youth bulge trend. This makes understanding AI's implications for the workforce important for both immediate and long-term economic potentials. A comprehensive labor market analysis was conducted using the 2024 ILOSTAT sectoral and regional employment dataset across 14 African countries, capturing trends in workforce composition with respect to skill level and generative AI exposure by sector, region, and ISCO occupation category (see Box 1). Figure 4 shows that Agriculture remains the largest employer, providing livelihoods for 36.3% of the workforce. The second pillar of employment is Trade and Commercial Services, which accounts for 27.5%. Together, these two sectors account for nearly 64% of workers. The contributions of key formal sectors including Manufacturing and Construction (12.7%) and Public & Social Services (10.7%) is much lower. While the broad sectoral landscape is defined by the weight of agriculture and trade, understanding the workforce's occupational composition by skill level gives deeper insight into employment trends.

Figure 4

Employment by Sector in Africa, 2024



Source: ILOSTAT, 2024

Box 1: ISCO-08 Skill Level Classification and Occupational Categories

The ISCO-08 framework categorizes occupations into distinct skill tiers based on the complexity and range of tasks performed across the labor market.

- Low-Skill (Skill Level 1): This foundational tier consists of elementary occupations that typically involve simple, routine physical or manual tasks. Common examples within this group include cleaners and helpers, agricultural, forestry, and fishery labourers, as well as food preparation assistants.

- Medium-Skill (Skill Level 2): Representing the broadest and most diverse segment of the workforce, this tier drives day-to-day economic operations through clerical, service, sales, agricultural, craft, and machine-operating roles. Typical occupations encompass customer service clerks, sales workers, market-oriented skilled agricultural workers, building and related trades workers, and drivers and mobile plant operators.

- High-Skill (Skill Levels 3 and 4): This upper tier comprises knowledge-intensive roles requiring complex problem-solving, advanced technical expertise, and strategic decision-making. It includes managers, professionals, and technicians, with specific examples such as chief executives, science and engineering professionals, health professionals, and teaching professionals.

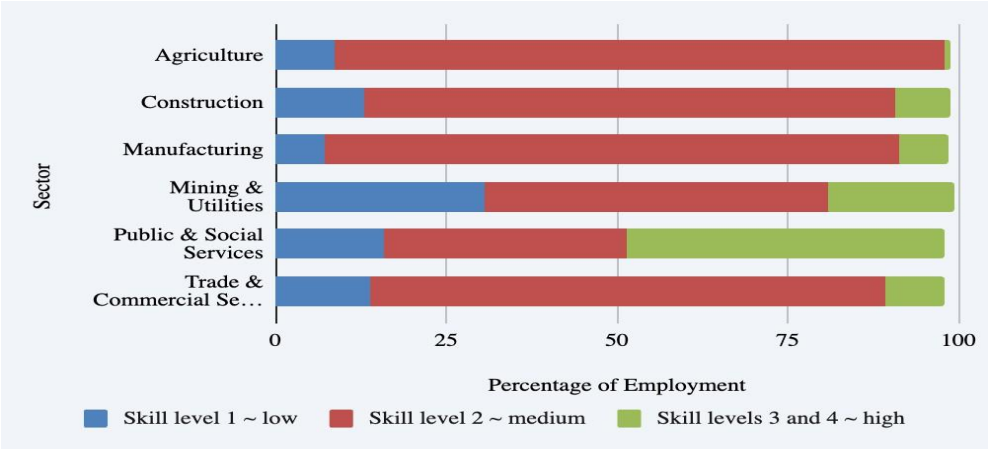
The distribution of the workforce can be understood through the ISCO-08 skill-level classification, a tiered structure that reflects varying degrees of task complexity and educational requirements across the labor market. This structure begins with Skill Level 1, low-skill occupations that represent routine manual tasks, progresses through Skill Level 2, medium-level occupations that cover a wide range of technical, service,

and administrative roles, and culminates in Skill Levels 3 and 4, high-skill occupations that require advanced theoretical knowledge, complex problem-solving abilities, and significant leadership or technical expertise (Box 1). Figure 5 reveals that the functional engine of this workforce is the Skill Level 2 (Medium) category. The medium skill tier is the primary workforce component in the most populous industries, such as Agriculture, Construction, Manufacturing, and Trade, where it consistently accounts for the vast majority of the labour force. In the dominant Agriculture sector, approximately 89.2% of workers operate at this medium-skill level. A similar trend is evident in Trade and Commercial Services, where 75.4% of the sector drives the marketplace's daily exchanges. However, a sharp contrast emerges when examining the skill distribution in the Public & Social Services sector. Despite employing fewer workers overall, it has a high concentration of highly skilled and knowledgeable professionals, with 46.4% of its workforce categorised in high-skill occupations. This highlights that medium-skill occupations dominate Africa's labour market, while the concentration of high-skill work in sectors like Public & Social Services signals that sustained growth will require both upskilling medium-skill workers and structurally transforming sectors like agriculture to generate high-skill jobs.

Expanding this analysis to a regional level reveals that these skill imbalances are not uniform across the continent, with distinct regional profiles shaping economic potential. As shown in Figure 6, North Africa and Southern Africa possess the highest concentrations of high-skill labour at 22.3% and 20.7%, respectively; however, their overall profiles differ significantly, with North Africa having 72.0% medium-skill and 5.7% low-skill labour, while Southern Africa consists of 52.5% medium-skill and 26.8% low-skill labour. West Africa stands out, with an overwhelming 85.6% of its workforce in the medium-skill tier, while high- and low-skill labour account for just 8.1% and 6.3%, respectively. This points to an economy driven predominantly by medium-skill trade and service occupations, but also indicates a much steeper climb in integrating high-level specialized talent into the broader economy. Conversely, East Africa exhibits a profile dominated by 68.6% medium-skill and 24.7% low-skill labour, with only 6.6% in the high-skill tier. The high proportions of low-skill labour in Southern Africa (26.8%) and East Africa (24.7%) correspond primarily to elementary occupations under ISCO-08. For these regions, the transition to a high-innovation economy requires not just bridging the gap to high-level skills but also significant investment to elevate the foundational skill levels of roughly a quarter of their workforce.

Figure 5

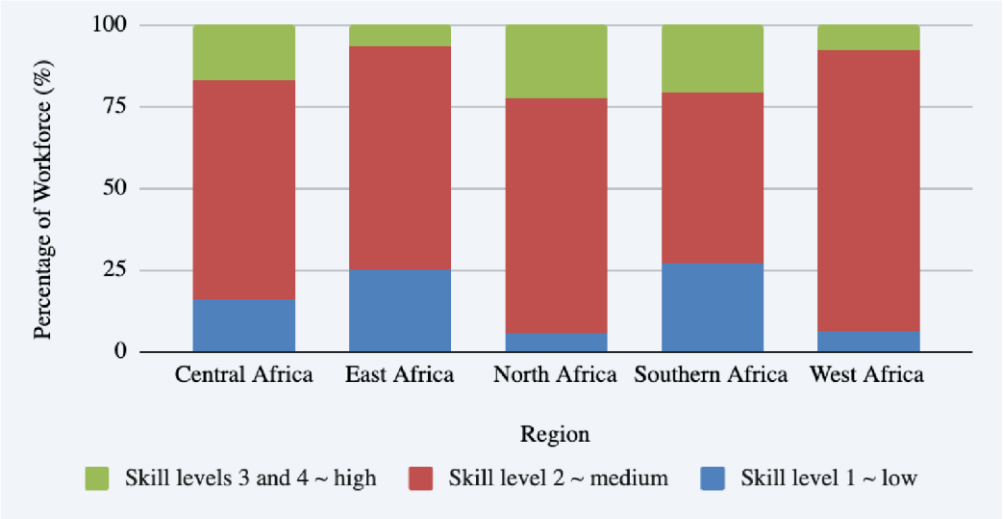
Skill Level Distribution by Sector in Africa



Source: ILOSTAT, 2024

Figure 6

Skilled Level Distribution by Region



Source: ILOSTAT, 2024

3.1 The exposure of African labour markets to artificial intelligence

To further discuss the labour-market implications of AI exposure, it is important to examine trends in African labour markets' exposure to AI. Using ILO employment data disaggregated by ISCO-08 occupation code, each occupation was assigned a Gen AI exposure gradient based on the classification developed by Gmyrek et al. (2025), which maps ISCO-08 occupation codes to corresponding levels of GenAI exposure). Based on this framework, occupations exhibit a spectrum of GenAI exposure

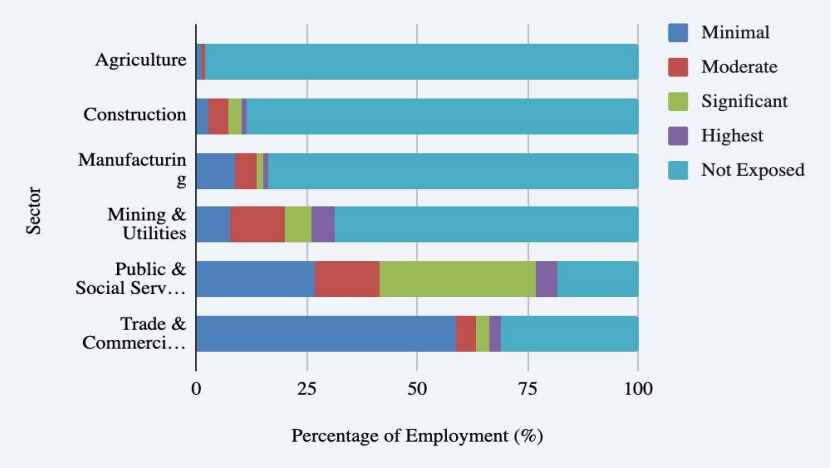
classified into four increasing levels of exposed: Exposure Level 1 (Minimal), Exposure Level 2 (Moderate), Exposure Level 3 (Significant), Exposure Level 4 (Highest), and Not Exposed. At a minimal level of exposure, occupations are heavily insulated from disruption because their core tasks often rely on non-routine manual execution, physical dexterity, or intense emotional intelligence, areas where GenAI currently has no operational interface. In high-exposure occupations, a large share of core tasks involves structured data processing, text generation, administrative routines, or communication-focused activities; areas where GenAI has a strong operational interface and growing capabilities. These roles have high automation potential and a strong capacity to evolve and take on new tasks through the innovative application of GenAI and other digital tools. These exposure gradients provide a clear basis for analysing how Gen AI will reshape labour demand, task composition, and policy priorities in African economies.

Figure 7 illustrates the relationship between employment levels and Gen AI exposure across key economic sectors. The agricultural sector, which employs the largest share of the workforce in our sample (36.34%), remains largely insulated from generative AI, with 97.99% of workers reporting no exposure. The remaining exposed workforce is distributed across minimal (0.98%), moderate (0.79%), significant (0.17%), and highest (0.07%) levels. This resilience reflects the labour-intensive, physical nature of farming; tasks that current AI technologies cannot easily replicate due to high cost. In contrast, the second-largest sector, Trade & Commercial Services, shows a clear shift toward AI integration. While 31.23% of its workforce remains unexposed, the majority face minimal (58.85%) exposure, followed by moderate (4.53%), significant (2.81%), and highest (2.59%) exposure. Interestingly, sectors with smaller workforces often experience higher intensities of AI impact. For instance, Public & Social Services, which accounts for 10.71% of the workforce, records the lowest share of unexposed workers (18.50%). It also exhibits the highest level of significant (35.09%) exposure across all sectors, alongside minimal (26.74%), moderate (14.86%), and highest (4.82%) exposure rates. Similarly, the Mining & Utilities sector shows a broad integration spectrum: while 68.59% are unexposed, the rest experience moderate (12.53%), minimal (7.51%), significant (6.00%), and highest (5.37%) exposure. Finally, Manufacturing and Construction mirror agriculture in having high percentages of unexposed workers (83.62% and 88.80%, respectively). However, their exposure breakdown reveals notably higher rates of integration than the primary sector: Manufacturing shows minimal (8.55%), moderate (4.86%), significant (1.62%), and highest (1.35%) exposure, while Construction records moderate (4.27%), significant (3.16%), minimal (2.78%), and highest (0.99%) exposure. Overall, these patterns show that Gen AI exposure is concentrated not in Africa's largest sectors by employment, but in those where cognitive, administrative, and service-oriented tasks dominate: Public & Social Services and Trade & Commercial Services face substantially higher exposure at the moderate-to-highest tiers, while the labour-intensive nature of Agriculture, Manufacturing, and Construction continues to insulate the majority of their workforces from disruption.

The sectoral patterns across the 14 African countries are consistent with AI exposure indexes constructed in other studies. For instance, Felten et al. (2021) developed an index of AI occupational exposure (AIOE) that similarly found higher exposure in services (finance and ICT(, and lower exposure in agriculture and construction. It is worth noting that the Felten et al. (2021) AIOE index was constructed using U.S. occupational task data and incorporates a broad set of AI applications, including those now classified as Generative AI, as well as other types. Although the two indices are not directly comparable in magnitude or coverage, the consistent sectoral patterns provide support for the robustness of these exposure findings across different contexts and methods.

Figure 7

AI Exposure Distribution by Sector (2024)



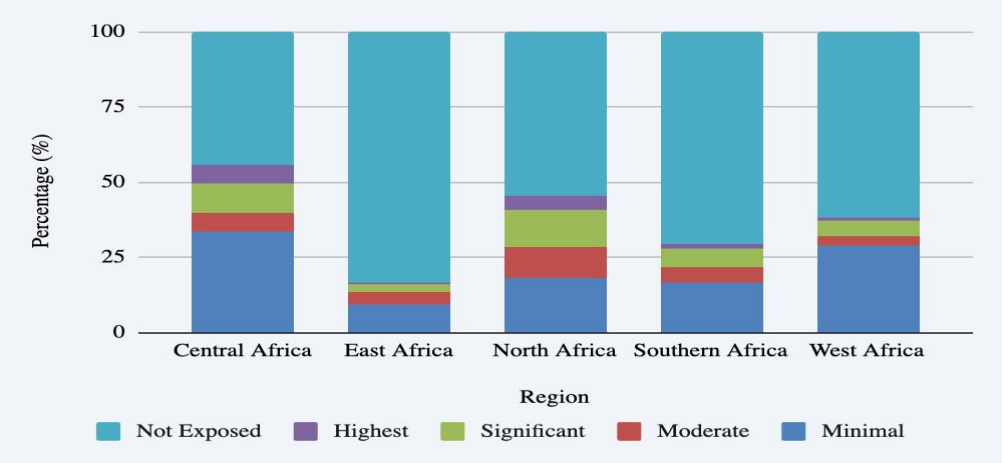
Source: ILOSTA, 2024

The distribution of Gen AI exposure across various regions in Africa is illustrated in Figure 8, revealing distinct structural differences across the continent. Looking first at the 'Not Exposed' category, East Africa leads the continent with 83.37% of its workforce in occupations unaffected by Gen AI, followed by Southern Africa at 70.83% and West Africa at 61.75%. In contrast, North Africa (54.72%) and Central Africa (44.41%) report significantly lower shares of unexposed workers, indicating a higher baseline of technology integration across their workforces. For 'Minimal' exposure, Central Africa exhibits the highest share at 33.64%, followed closely by West Africa at 28.86%, North Africa at 18.26%, Southern Africa at 16.32%, and East Africa at 9.36%. In the 'Moderate' exposure tier, North Africa leads at 10.34%, while the remaining regions show lower, relatively compressed levels: Central Africa (6.16%), Southern Africa (5.34%), East Africa (3.95%), and West Africa (3.09%). When examining higher levels of exposure, North Africa and Central Africa emerge as the clear leaders. In the 'Significant' exposure category, North Africa records 12.00%, followed by Central Africa (9.65%), Southern Africa (6.21%), West Africa (5.01%), and East Africa (2.64%). For 'Highest' exposure, Central Africa leads with 6.15%, followed

by North Africa (4.69%), Southern Africa (1.30%), West Africa (1.29%), and East Africa (0.68%). Cumulatively, North Africa shows a combined 'Significant' and 'Highest' exposure of 16.69%, the highest on the continent, followed closely by Central Africa at 15.79%, while Southern Africa (7.51%), West Africa (6.31%), and East Africa (3.32%) show much lower combined high-level exposure. This aligns with previous analyses identifying North and Central Africa as leaders in high-skill occupations, where Gen AI is already intersecting with daily tasks. Conversely, the high 'Not Exposed' rate in East Africa is closely tied to the region's concentration of low-skill, manual-intensive occupations. Intuitively, regions that have historically led in high-skill, cognitive occupations show high AI exposure, whereas regions dominated by manual labor exhibit low AI exposure due to the physical nature of their work.

Figure 8

AI Exposure Distribution by Region (2024)



Source: ILOSTAT, 2024

3.2 Employment Implications of AI Exposure

3.2.1. Substitution and Complementarity Effects Across Sectors

The implications of AI exposure for employment can be comprehended through the automation-augmentation framework introduced in previous sections. AI may generate substitution effects, reducing employment where it automates tasks previously performed by workers, or complementary effects, augmenting workers' productivity and thereby increasing employment. For occupations where core job duties demand physical dexterity, non-routine manual execution, or high emotional intelligence, AI faces strict functional boundaries, leaving these roles with minimal to no exposure. Conversely, jobs anchored in structured data processing, administrative routines, text generation, or highly codifiable communication have a deep operational interface with AI, positioning them in the significant-to-highest exposure gradients. For workers in low-exposure occupations, employment is likely to remain stable or shift toward tasks that exploit human-only capabilities, preserving job counts even as task composition evolves. However, roles facing high AI exposure may experience net

employment declines when substitution dominates, or net gains when complementary reskilling and task redesign unlock productivity that firms translate into additional hiring (Pizzinelli et al., 2023). Therefore, at these various levels of task automation and AI exposure, the net impact on employment will depend on the balance between task substitution and task complementarity, which are determined by occupation-specific task composition of the labour force. However, the characteristics of this substitution-complementarity effect are not uniform across the economy, as they depend on whether work is organised in the formal or informal sector.

AI's employment effects also vary by formality status within each sector. In their formal segments, agriculture, manufacturing, and construction, characterised by high physical-labour intensity, remain comparatively insulated from AI exposure. This is consistent with the more general argument that core tasks in these sectors, being physically embedded and resistant to codification, sit outside the operational reach of current AI systems (Gmyrek et al., 2025). Consequently, immediate employment effects from AI-based automation are likely to be limited among formally employed workers in these industries, since their central tasks are not readily reducible to the structured, rule-based processes AI systems are best suited to perform. In contrast, the formal segments of service-oriented sectors, including public and social services and trade and commercial services, appear considerably more exposed to AI (Gmyrek et al., 2025). This pattern is consistent with the nature of the tasks these sectors typically involve: data processing, administrative coordination, and professional or client-facing services, domains in which AI is already interacting closely with daily work routines. The employment effect within these sectors is therefore mixed, depending on whether particular occupations are capable of harnessing AI for innovation and task transformation instead of being displaced by it outright. It is worth noting, however, that formal employment accounts for only a fraction of total employment in several of these sectors: informal employment in Africa reaches approximately 95.7% in agriculture and 84.3% in wholesale and retail trade (ILO, 2019), meaning the large majority of workers in both sectors operate outside formal employment structures altogether.

Given that a large share of Africa's workforce in agriculture and trade operates informally, AI's employment influences in these sectors are shaped as much by informality as by the sectors themselves. Informal work in agriculture and trade tends to be manual and physically embedded, similar in character to the formal segments of these same industries, but further insulated by weaker digital infrastructure and scarce access to AI-enabled tools. In the near term, therefore, informal workers in these sectors are likely to experience even lower AI exposure than their formal counterparts, supporting the larger pattern of low displacement risk in agriculture and trade overall. This insulation, however, should be understood as a feature of AI's current stage of diffusion in Africa rather than a permanent condition. As digital infrastructure expands and AI tools become steadily accessible and affordable, the informal economy could increasingly intersect with AI over the long term. Emerging evidence already points in this direction: AI projects targeted at informal agricultural workers have enhanced food security, augmented productivity, and improved rural livelihoods (GPAI, 2025), while

Kolade et al. (2025) find that AI has considerable potential to promote innovation throughout informal trade and microenterprise activity, enabling new products and services that allow microenterprises to differentiate themselves in competitive markets. Generative AI tools also allow informal workers to reach wider audiences, with algorithms personalising recommendations and boosting user experiences to increase sales and job opportunities (Ogada et al., 2024). Taken together, these show that while the informal segments of agriculture and trade currently face limited exposure to AI, the long-term trajectory of AI adoption could gradually extend into the informal economy, with effects on productivity, income, and employment that merit persistent monitoring as digital access deepens.

3.2.2. Risks and Concerns Arising from AI Exposure

Within the formal sector, clerical and administrative support roles appear more susceptible to substitution, given the highly codifiable nature of their core tasks, whereas professions such as law and adjudication, despite considerable AI exposure, may instead experience productivity gains if practitioners are equipped with the skills to integrate AI meaningfully into their work (Pizzinelli et al., 2023). However, without coordinated reskilling and upskilling programmes a compounded displacement risk could emerge: workers displaced from physical labour by automation may find that the administrative and service-sector roles that would traditionally have absorbed them are simultaneously being reshaped or reduced by AI adoption elsewhere in the formal economy (Giwa & Ngepah, 2024).

This compounded displacement risk is further deepened as the informal economy, which has historically absorbed labour shed from the formal sector, is itself undergoing an uneven AI-driven transformation. Yet the innovation and market-access gains associated with generative AI adoption are not evenly distributed across informal activities. The integration of Artificial Intelligence (AI) into Africa's informal sector, while offering potential benefits, therefore also carries significant risks of job displacement and loss across various traditional roles. Those able to use generative AI for product design or online sales, are better positioned to capture these benefits, however, AI-driven automation and robotics can replace manual labor in small-scale manufacturing, cottage industries, and informal workshops (Ogada et al., 2024). In addition, insufficient infrastructure is a significant restricting factor as a result of limiting access to consistent internet and digital devices, tools needed to utilize AI in their work. The digital divide restricts opportunities to acquire new skills, trapping informal actors in cycles of low-value entrepreneurial activities and face higher risk of job displacement (Kolade et al., 2025). Furthermore, governments in the region have primarily focused on promoting economic diversification through AI rather than protecting employees whose work autonomy and jobs are affected by these technologies (Bischoff et al., 2024). Evidence shows that concerns regarding bias, privacy, inclusivity, and human oversight could hinder equitable service delivery and prevent safeguards for citizens' rights (Pulijala, 2024).Therefore, the Government has a significant role to play in minimizing the employment-related risks associated with AI adoption, such as displacement, skills mismatches, and inequitable service delivery,

and in evaluating AI policy through multiple lenses, including efficiency and democratic governance; these broader governance dimensions are discussed in the next section.

4. AI and Democratic Governance in Africa

AI is increasingly reshaping democratic governance across Africa by transforming how governments design, deliver, and manage public services. Across the continent, AI-powered technologies are being deployed for citizen registration, poverty identification, social protection targeting, fraud detection, tax administration, healthcare management, disaster response, and other data-driven public services, offering significant opportunities to improve administrative efficiency, transparency, accountability, and evidence-based policymaking (African Union [AU], 2024; Cazzaniga et al., 2024; Diallo et al., 2025). These innovations have the potential to promote more inclusive governance by expanding access to essential public services, reducing administrative leakage, strengthening fiscal management, and improving governments' responsiveness to citizens' needs. However, the same technologies also introduce significant risks, including AI-enabled disinformation, cybercrime, algorithmic bias, mass surveillance, digital exclusion, and unequal access to digital infrastructure, which may reinforce existing socio-economic inequalities and weaken democratic institutions where appropriate governance safeguards are absent (Arakpogun et al., 2021; Eke et al., 2023; CIPESA, 2025). Consequently, AI represents both an opportunity for inclusive development and a source of exclusion, depending on how governments design, deploy, and oversee it.

The impact of AI on democratic governance in Africa is neither predetermined nor technologically deterministic; rather, it largely depends on the institutional, legal, and policy choices made by African governments. Effective data governance, transparent and contestable algorithmic decision-making, equitable digital infrastructure investment, robust cybersecurity, ethical AI regulation, and accountable electoral institutions determine whether AI strengthens public trust, democratic participation, and inclusive socio-economic development or instead exacerbates inequality, concentrates political and economic power, and erodes electoral integrity and civic freedoms (African Union, 2024; Oxford Insights, 2025; INTERPOL, 2025). This section therefore examines AI's evolving role in democratic governance, drawing on evidence from selected African countries, including Rwanda, Kenya, Nigeria, and South Africa, to critically assess how AI serves as a fundamental tool for fostering inclusive governance, improving public service delivery, and advancing sustainable democratic progress, while also addressing rising risks such as cybersecurity threats and digital authoritarianism.

4.1 Public-Sector AI Use: Case Studies and Their Implications

4.1.1 Welfare Targeting and Social Protection

Togo provides an early example of AI-assisted poverty targeting under crisis conditions. The Novissi programme operated as a fully contactless emergency cash transfer system that reached over half a million beneficiaries within weeks despite the absence of any comprehensive social registry. The targeting involves the use of machine learning models applied to high resolution satellite imagery and mobile phone metadata, reducing exclusion errors by 4 to 21 percent relative to the geographic alternatives (Aiken et al., 2022). The positive lesson is that where administrative records are absent, AI could allow governments to act faster and at a greater scale than case-by-case verification allows. Novissi is nonetheless the strongest warning against equating technical performance with inclusion, because people without phones, with unstable access, or with weak digital traces risk systematic exclusion, and those characteristics map directly onto the vulnerabilities social protection exists to reduce. However, this can be addressed by complementing AI assisted targeting with grievance mechanisms, offline registration pathways, and human review (Aiken et al., 2022; UNDP, 2025).

AI can partially compensate for missing welfare data, but it can also normalise opaque eligibility unless rules for explanation, appeal, and correction are explicit. Kenya shows the more institutionalised pathway, since targeting rides on strong digital identity and mobile money rails that reduce duplication and leakage and make transfers auditable (World Bank, 2024). The general finding is that AI works best as a layer on top of functioning identity, payment, and records systems rather than as a standalone tool.

4.1.2 Service Delivery and Public Value

Rwanda demonstrates how the digital government creates a platform for AI-enabled public value. The Irembo platform has digitized more than 100 routine services, from birth registration to driving license applications, and the National AI Policy structures adoption around public sector use, data infrastructure, ethics, and skills (Republic of Rwanda, 2023). Democratic governance is not only about elections. It is also about whether citizens can obtain documents and complete administrative processes without delay, rent seeking, or geographic disadvantages. Rapid modernization nonetheless concentrates risk because centralized systems deepen dependence on small expert pools, external vendors, and closed infrastructures, raising the premium on procurement transparency, data governance rules, local language support, and independent oversight. Citizen-facing deployments reinforce the inclusion story. In Kenya, the PROMPTS , AI embedded maternal health platform, had reached three million mothers by 2026, raised prenatal checkup attendance by 20 percent, doubled postpartum family planning uptake, and helped ensure that 90 percent of high-risk cases received hospital care. Similarly, the World Food Programme tool MEza digitised records across more than 100 clinics in Kenya and the Republic of the Congo (Global Center on AI Governance, 2026). Both cases pair impact with responsible design, keeping humans in the loop, using open tools, and protecting privacy, which matters

because public value depends on citizens trusting the process behind the outputs, not only the outputs themselves.

4.1.3 Accountability, Integrity, and Public Oversight

South Africa is another example of experimentation within the state, with a recent inventory identifying 23 distinct AI applications in active use across the public sector, spanning chatbots, fraud analytics, biometric security, and conservation (Global Center on AI Governance, 2026). Well-governed, such systems reduce waste and strengthen administrative integrity. Poorly governed, they enable opaque decision-making and the creep of surveillance. South Africa also supplies a sharp cautionary tale about governance discipline itself. In April 2026, the government withdrew its gazette draft National AI Policy after journalists established that at least six of its 67 academic citations were fabricated and apparently AI-generated, and the drafting process was restarted under strengthened independent review (Reuters, 2026). The lesson is not that AI policy should halt but that human oversight, documentation quality, and public scrutiny are non-negotiable, even in relatively capable states. Accountability also extends beyond the state. The Uwazi platform developed by HURIDOCS uses machine learning to tag, categorize, and extract metadata from large human rights evidence sets while retaining manual review and an error feedback loop, an instructive example of AI widening accountability rather than centralizing power (Global Center on AI Governance, 2026).

4.1.4 Comparative Findings and Policy Implications

The cases yield a clear conclusion, summarized in Table 4. AI strengthens democratic governance when it is tied to inclusive infrastructure, lawful data sharing, human review and low-cost channels for appeal, Kenya health architectures, Rwanda's service platform, and the rights-oriented design of Uwazi. AI weakens democratic governance when inputs are unequally distributed, eligibility is opaque, cyber defenses lag behind digital expansion, or governments fail to meet basic evidentiary standards, as Togo's exclusion risks and South Africa's policy withdrawal each demonstrate in different ways.

Table 4

Comparative synthesis of the case study evidence

Case	Democratic contribution	Principal governance risk
Togo (Novissi)	Rapid, scalable crisis relief without a social registry	Exclusion of the digitally invisible, opaque eligibility
Nigeria (NIN, satellite targeting)	Identity scale, data gaps partially bridged by AI	Normalized opacity, high cyberattack exposure

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 on expertise, vendor, and oversight risk
South Africa (public sector AI, policy withdrawal)	Wide State experimentation, fraud analytics	Documentation failures, surveillance creep
Civil society (Uwazi)	Scaled human rights documentation with human review	Sustainability and donor dependence

Two policy implications emerge. First, the most successful African AI initiatives are rooted in institutional aspects rather than just technology. Their success relies on identity systems, payment infrastructure, and redress mechanisms, areas where investment should be prioritized. Second, the governance gap continues to be significant and is more political than technical. While most African states now have data protection laws, only 16 out of 55 have ratified the Malabo Convention. As a result, legal coverage is expanding more quickly than trust and interoperability are being harmonized. (Chatham House, 2025). On a continent where support for democracy stays robust but faces challenges, bridging the gap with enforceable oversight, regional cooperation, and inclusive strategies will decide if AI becomes a means for democratic renewal or subtly sustains exclusion.

4.2 The Institutional Architecture of African AI Governance

4.2.1 Continental Aspirations and National Realities

The Continental Artificial Intelligence Strategy (formally adopted by the African Union in July 2024) articulates an Africa-centric, development-focused vision organized around five focus areas, namely harnessing AI's benefits, building capabilities, minimizing risks, stimulating investment, and fostering cooperation, which are operationalized through fifteen action areas (African Union, 2024). Implementation is phased. Phase I, covering 2025 to 2026, prioritizes governance structures, national AI strategies, resource mobilization, and capacity building. Phase II, beginning in 2028, focuses on implementing core projects informed by a 2027 review (African Union, 2024; Future of Privacy Forum, 2024). The Strategy was adopted alongside the African Digital Compact and builds on prior instruments, including the Digital Transformation Strategy 2020 to 2030, the AU Data Policy Framework, and the Malabo Convention. The African Digital Compact seeks to create a digitally empowered Africa

in which technology drives economic growth, enhances societal well-being, and secures a prosperous future for all.

National realities are considerably more heterogeneous than the continental blueprint implies. A first-mover cohort comprising Egypt, Rwanda, Mauritius, Senegal, Benin, Nigeria, and Algeria has adopted national AI strategies or policies, while South Africa, Kenya, Ghana, Ethiopia, Morocco, Tunisia, and Tanzania are at an advanced stage of formulation (Future of Privacy Forum, 2024). Egypt ranked first in Africa in the Oxford Insights Government AI Readiness Index 2025, reflecting sustained institutional investment (Oxford Insights, 2025). In 2020, Nigeria established the National Center for Artificial Intelligence and Robotics and subsequently launched N-ATLAS in 2025. N-ATLAS is a government-backed multilingual large language model trained in Yoruba, Hausa, Igbo, and Nigerian-accented English, signaling an ambition to shape AI in African languages (Ekwealor, 2025). South Africa's draft National AI Policy Framework seeks to attract an estimated USD 3.7 billion in AI investment by 2030 and to position the country as a continental AI hub. Table 2 summarises selected national instruments, and Figure 9 situates them within the wider multi-level architecture.

Table 5

Selected national AI governance instruments in Africa, 2019–2026

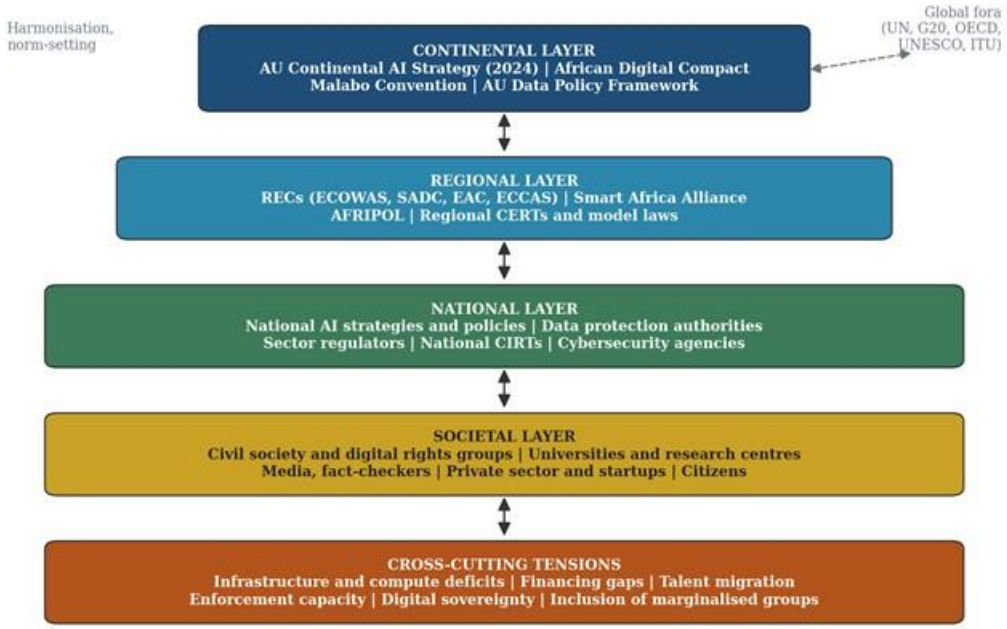
Country	Instrument and year	Distinctive emphasis
Egypt	National AI Strategy (2021, updated 2025)	State-led capability building, AI diplomacy, first in Africa on the 2025 Government AI Readiness Index
Rwanda	National AI Policy (2023)	Only national policy instrument, responsible AI adoption, Kigali as a regional testbed
Mauritius	AI Strategy (2018)	Early mover, digital hub positioning built on 88 percent internet penetration
Nigeria	National AI Strategy (2024)	NCAIR, N-ATLAS multilingual LLM, AI Fund with private partners
Senegal	National AI Strategy (2023)	Francophone leadership, data governance alignment with the Malabo Convention
Benin	National AI and Big Data Strategy (2023)	Adaptation of existing institutions rather than new regulatory bodies

South Africa	Draft National AI Policy Framework (2025)	Targets USD 3.7 billion AI investment by 2030, continental AI hub ambition
Kenya	National AI Strategy (2025)	Innovation ecosystem focus, alignment of data protection and AI oversight

Source. Compilation based on African Union, 2024; Future of Privacy Forum, 2024; and Oxford Insights, 2025.

Figure 9

The multi-level architecture of AI governance in Africa



Source. Conceptualization based on African Union, 2024 and Gwagwa et al., 2020.

African AI governance is best characterized as a nested, multi-level system in which authority is distributed rather than hierarchical, as depicted in Figure 9. The continental layer supplies norms and coordination goods, including the AU Strategy, the Digital Compact, and continental dialogues such as the High-Level Policy Dialogue on AI, whose 2025 communique declared AI a strategic priority and committed member states to shared investment in infrastructure, datasets, compute capabilities, and skills (African Union, 2025). The regional layer, comprising the Regional Economic Communities, the Smart Africa Alliance, and AFRIPOL, translates continental norms into model laws, interoperability frameworks, and operational cooperation. The national layer holds the decisive instruments of statutes, regulators, budgets, and

procurement, while the societal layer of universities, civil society, media, and enterprise supplies both innovation and accountability.

4.2.2 Multi-Level Governance and Regional Coordination

The comparative politics of this arrangement matter. Multi-level designs economise on scarce national capacity by allowing smaller states to import regional standards rather than author their own, a logic visible in ECOWAS and SADC model frameworks for data protection and cybercrime. Yet the same design produces coordination costs and accountability gaps when layers move at different speeds, as the Malabo experience has shown. Effective regional coordination also requires an empirical backbone. The AU's planned African AI readiness index and monitoring portal, together with proposals for an African AI observatory to track the social implications of deployment, represent necessary investments in the informational infrastructure of governance (African Union, 2024; Effoduh, 2024).

5. Conclusion and Policy Directions

The Workplace and Governance Nexus

The workforce and governance dimensions of AI are more deeply interconnected than they might initially appear. The sectors most exposed to AI-driven disruption in Africa including public and social services, trade, and financial sector are precisely the sectors through which governments deliver services, collect revenue, and administer public programmes. This means that the same AI systems that reshape labour demand within the public sector also determine whether citizens receive equitable services, whether procurement is transparent, and whether administrative data is used to include or exclude vulnerable populations. Governance quality therefore directly mediates the labour market effects of AI, and vice versa. Similarly, a workforce that lacks AI-relevant skills constrains the state's capacity to deploy these technologies responsibly and effectively.

The informal economy, which absorbs the majority of African workers, sits at the intersection of these two challenges. Informal workers currently face limited AI exposure, but this insulation reflects the current frontier of technology diffusion rather than a permanent structural condition. As digital infrastructure expands and AI tools become more affordable, informal agriculture, trade, and microenterprise will increasingly intersect with these technologies. Preparing this workforce for that transition is among the most pressing policy challenges the region faces.

Regional Policy Directions

At the continental and regional level, two priorities stand out. First, accelerating the operationalisation of the regional agreements is essential. The limited national support for the Malabo convention is an example of this, with only 16 of 55 African Union member states having ratified the Convention to date. This means the continent

lacks a common legal foundation for data protection, cybercrime prevention, and cross-border AI accountability. Regional Economic Communities should develop model frameworks that allow integration from regional to national standards. Second, the African Union's proposed African AI Readiness Index and monitoring observatory should be resourced and operationalised as a matter of priority. Evidence-based regional coordination requires a shared informational infrastructure, and the absence of comparable, real-time data on AI adoption and its social effects across the continent creates a significant gap in collective governance capacity. Third, regional mechanisms for sharing AI infrastructure, compute resources, and open training datasets should be prioritised under the Continental AI Strategy's implementation phases to prevent a concentration of AI capability in a small number of first-mover states.

National Policy Directions

At the national level, five policy directions emerge from the evidence. First, governments should prioritise digital and energy infrastructure investment as the foundational prerequisite for AI readiness. Second, national education and training systems should be realigned to build AI-relevant skills across the full range of skill levels, not only at the advanced technical tier. This includes embedding digital and data literacy into primary and secondary curricula, expanding vocational and technical training programmes that prepare medium-skill workers for AI-complemented roles, and developing postgraduate and specialist capacity in AI engineering, ethics, and governance. Third, governments deploying AI in public services should adopt a human-in-the-loop principle as a non-negotiable design standard, complemented by accessible grievance mechanisms, transparent eligibility criteria, and independent oversight bodies with the technical capacity to audit algorithmic systems. The Togo and South Africa case studies each illustrate, in different ways, the institutional and reputational costs of deploying AI without adequate safeguards. Fourth, labour market policy should explicitly address the compounded displacement risks facing workers in clerical and administrative roles, who are simultaneously exposed to AI automation and less likely to be absorbed into the informal economy as a fallback. Active labour market programmes, including reskilling incentives should be adapted to AI-specific transition risks.

Taken together, these directions reflect a common underlying principle that AI's contribution to inclusive and democratic development in Africa will not emerge automatically from the technology itself. It will require deliberate institutional investment, coherent policy design, and sustained regional cooperation. The continent has the demographic advantage, the entrepreneurial dynamism, and, increasingly, the governance ambition to make this transition work in Africa's interest.

References

Acemoglu, D. (2024). The simple macroeconomics of AI. Economic Policy, 40(121). https://doi.org/10.1093/epolic/eiae042

Adeniran, A., Okon, A., Salihu, A., & Achi, P. (2025). Artificial intelligence usage in Nigeria: Evidence from digitally-enabled firms. Centre for the Study of Economies of Africa. http://www.cseaafrica.org

Africa Defense Forum. (2025). The continent experiences sharp rise in cybercrime.

African AI Governance Index. (2025). African AI governance index data. African AI Governance Index. https://africanaigovernanceindex.com/tracker

African Union. (2014). African Union Convention on Cyber Security and Personal Data Protection (Malabo Convention).

African Union. (2024a). Continental artificial intelligence strategy.

African Union. (2024b). African ministers adopt landmark continental artificial intelligence strategy and African digital compact.

African Union. (2025). High Level Policy Dialogue on Artificial Intelligence and data policy implementation updates.

AfricLaw. (2026). International Privacy Day 2026: Why privacy is Africa's democratic imperative in the age of data, AI, and surveillance. AfricLaw.

Aiken, E., Bellue, S., Karlan, D., Udry, C., & Blumenstock, J. E. (2022–2025). Research on machine learning and mobile-phone data for humanitarian targeting.

Aiken, E., Blumenstock, J., et al. (2022). Machine learning for social protection targeting in Togo's Novissi programme.

Anthropic. (2025). Anthropic economic index report: Uneven geographic and enterprise AI adoption. Anthropic.com. https://www.anthropic.com/research/anthropic-economic-index-september-2025-report

Arakpogun, E. O., Elsahn, Z., Olan, F., & Elsahn, F. (2021). Artificial intelligence in Africa: Challenges and opportunities. In The fourth industrial revolution: Implementation of artificial intelligence for growing business success (pp. 375–388). Springer International Publishing.

Awan, U., Kanwal, N., Alawi, S., Huiskonen, J., & Dahanayake, A. (2021). Artificial intelligence for supply chain success in the era of data analytics. In The fourth industrial revolution: Implementation of artificial intelligence for growing business success (pp. 3–21). Springer International Publishing.

Azaroual, F. (2024). Artificial intelligence in Africa: Challenges and opportunities (Policy Brief No. 23).

Bischoff, C., Kamoche, K., & Wood, G. (2024). The formal and informal regulation of Labor in AI: The experience of Eastern and southern Africa. ILR Review, 77(5), 825–835. https://doi.org/10.1177/00197939241278956c

Cambridge Core, Data & Policy. (2025). Case studies of AI policy development in Africa. Data & Policy, 7, e15.

Cazzaniga, M., Jaumotte, M. F., Li, L., Melina, M. G., Panton, A. J., Pizzinelli, C., ... & Tavares, M. M. M. (2024). Gen-AI: Artificial intelligence and the future of work. International Monetary Fund.

Center for Effective Global Action. (2021–2025). Using AI and digital data to target cash transfers in Togo; Using big data and machine learning to locate the poor in Nigeria.

Chatham House. (2025). The Malabo Convention and digital governance in Africa.

CIPESA. (2025). Safeguarding African democracies against AI-driven disinformation.

Deckker, D. (2025). Artificial intelligence and the Future of Job Security: A narrative review of risks, resilience, and policy responses. International Journal of Research and Innovation in Social Science.

Democracy in Africa. (2025). AI-generated propaganda threatens African democracy.

Diagana, O., & Wadagni, R. (2025, November 17). Accelerating Africa's digital revolution to boost jobs and growth. World Bank Blogs. https://blogs.worldbank.org/en/voices/accelerating-africa-s-digital-revolution-to-boost-jobs-and-growth

Diallo, K., Smith, J., Okolo, C. T., Nyamwaya, D., Kgomo, J., & Ngamita, R. (2025). Case studies of AI policy development in Africa. Data & Policy, 7, e15. https://doi.org/10.1017/dap.2025.15

Diplō Foundation. (2025). What is the Malabo Convention?

Effoduh, J. O. (2024). Artificial intelligence governance in Africa.

Eke, D. O., Wakunuma, K., & Akintoye, S. (2023). Introducing responsible AI in Africa. In Responsible AI in Africa: Challenges and opportunities (pp. 1–11). Springer International Publishing. https://doi.org/10.1007/978-3-031-2345-6

Ekwealor, C. (2025). Nigeria launches N-ATLAS multilingual large language model.

Fatuma's Voice. (2025). The African Union AI continental strategy and the development-governance paradox.

Feldstein, S. (2019). The global expansion of AI surveillance. Carnegie Endowment for International Peace. https://carnegieendowment.org/research/2019/09/the-global-expansion-of-ai-surveillance

Felten, E., Raj, M., & Seamans, R. (2021). Occupational, industry, and geographic exposure to artificial intelligence: A novel dataset and its potential uses. Strategic Management Journal, 42(12), 2195–2217. https://doi.org/10.1002/smj.3286

Festus, U., & Basuo, K. B. (2025). Impact of Artificial Intelligence and Technology on Labour Relations. IIARD International Journal of Economics and Business Management, 11(12). www.iiardjournals.org

Frontiers in Big Data. (2026). Using artificial intelligence to improve governance and public services in Africa. Frontiers in Big Data, 7, 123456.

Future of Privacy Forum. (2024). The African Union Continental AI Strategy and national AI governance developments.

FW de Klerk Foundation. (2026). Can technology save democracy? A look into AI and the local government elections.

Giwa, F., & Ngepah, N. (2024). Artificial intelligence and skilled employment in South Africa: Exploring key variables. Research in Globalization, 8, 100231. https://doi.org/10.1016/j.resglo.2024.100231

Global Center on AI Governance. (2026). AI governance use cases.

Gmyrek, P., Berg, J., Kamiński, K., Konopczyński, F., Ładna, A., Nafradi, B., Rosłaniec, K., & Troszyński, M. (2025). Generative AI and Jobs: A Refined Global Index of Occupational Exposure (ILO Working Paper 140). International Labour Office. https://doi.org/10.54394/HETP0387

GPAI. (2025, April). AI for Informal Sector Workers Course. Global Partnership on AI.

GSMA. (2025). The mobile gender gap report 2025. Global mobile suppliers association.

Gwagwa, A., et al. (2020). Road map for research on responsible artificial intelligence for development in Africa.

Ifeanyi, U. S., Nwokoro, A. N., & Ojiako, E. U. (2025). Artificial intelligence and economic growth in Africa: Challenges and opportunities. AJAP-AMAMIHE Journal of Applied Philosophy, 23(3).

International IDEA. (2024). Artificial intelligence and the integrity of African elections. International Institute for Democracy and Electoral Assistance.

International Labour Office / Organization. (2025a). Employment by economic activity, sex, and age (net number) [Data set]. ILOSTAT Data Explorer. https://rshiny.ilo.org/dataexplorer42/?lang=en&segment=indicator&id=EMP_TEMP_SEX_GAI_NB_A&channel=ilostat

International Labour Organization. (2025b). Africa: Informality regional statistical profile. ILOSTAT. https://www.ilo.org/sites/default/files/2025-02/Africa_Informality%20Regional%20statistical%20profile.pdf

International Telecommunication Union. (2024). Global cybersecurity index 2024. https://www.itu.int/en/ITU-D/Cybersecurity/Global-Cybersecurity-Index.aspx

INTERPOL. (2025). Africa cyberthreat assessment report (4th ed.).

Jean, N., Burke, M., Xie, M., Davis, W. M., Lobell, D. B., & Ermon, S. (2016). Combining satellite imagery and machine learning to predict poverty. Science, 353(6301), 790–794. https://doi.org/10.1126/science.aaf7894

Kolade, O., Egbetokun, A., Owoseni, A., & Woldesenbet Beta, K. (2026). Artificial intelligence in the informal economy: game changer for microentrepreneurs?. International Journal of Entrepreneurial Behavior & Research, Vol. ahead-of-print. https://doi.org/10.1108/IJEBR-12-2024-1457

Mithi, J., Moyo, V., Malemela, A., Mangena, B., Dlamini, T., & Masoga, M. (2026). Artificial intelligence (AI) Preparedness—Is Africa ready: The case of Southern Africa development community (SADC) countries. Springer Transactions on Digital Learning, 395–420. https://doi.org/10.1007/978-981-95-8240-2_25

Motadi, M. S. (2026). Harnessing digital infrastructure for inclusive economic transformation in Africa. International Journal of Studies in Inclusive Education, 1(si1), 36–41.

Nanfuka, J. (2022). Digital access and economic transformation in Africa (Africa Paper Series No. 4). Institute for New Economic Thinking.

OECD. (2026). AI governance in Africa. Organisation for Economic Co-operation and Development.

Osakwe, S., & Adeniran, P. A. (2021). Strengthening data governance in Africa (Policy Brief). Centre for the Study of Economies of Africa.

Oxford Insights. (2025). Government AI readiness index 2025.

PECB. (2025, January 12). Digital transformation in Africa: Challenges and opportunities for professionals. PECB Article. https://pecb.com/en/article/digital-transformation-in-africa-challenges-and-opportunities-for-professionals

Pizzinelli, C., Panton, A., Tavares, M. M., Cazzaniga, M., & Li, L. (2023). Labor market exposure to AI: Cross-country differences and distributional implications (IMF Working Paper WP/23/216). International Monetary Fund. https://doi.org/10.5089/979247701

Pulijala, S. (2024). Artificial intelligence in governance: Opportunities, challenges, and ethical implications for Public administration. International Journal for Multidisciplinary Research, 6(6). https://doi.org/10.36948/ijfmr.2024.v06i06.29990

Republic of Rwanda, Ministry of ICT and Innovation. (2023). National Artificial Intelligence Policy.

Reuters. (2026). South Africa withdraws draft AI policy after fabricated citations discovered.

Smythe, T., & Blumenstock, J. (2022). AI, satellite imagery and poverty estimation in developing countries.

Sule, D. F. (2026). Towards responsible artificial intelligence adoption: Emerging and existing ethical issues in Africa. Sci, 8(3), 60. https://doi.org/10.3390/sci8030060

UNDP. (2025). Digital public infrastructure and human development publications.

UNESCO. (2025). AI and the future of education: Disruptions, dilemmas and directions. United Nations Educational, Scientific and Cultural Organization.

World Bank. (2023). Digital Africa: Technological transformation for jobs. World Bank. https://doi.org/10.15964/digitalafrica2023

World Bank. (2024, January 18). Digital transformation drives development in Africa. World Bank Results. https://www.worldbank.org/en/results/2024/01/18/digital-transformation-drives-development-in-africa

World Bank Independent Evaluation Group. (2024). How the World Bank supports adaptive social protection and crisis response.

World Telecommunication/ICT Indicators database. (2025). Facts and figures 2025 (Version November 2025). International Telecommunication Union. https://datahub.itu.int/

Yeh, C., et al. (2020). Using publicly available satellite imagery and deep learning to understand economic well-being in Africa.