Just AI, labour and inequality in Africa: Towards an equitable political economy of AI in African labour markets

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Executive summary

Rapid advances in artificial intelligence (AI) are reshaping labour markets globally, raising concerns about job displacement, inequality, and the redistribution of economic power. While much of the global debates have focused on advanced economies, insufficient attention has been paid to how these dynamics unfold within African labour markets characterised by informality, structural inequality, unemployment, and a dominance of micro and small enterprises. This paper examines the implications of AI adoption for employment, labour relations, and inequality in Africa through a political economy lens. Drawing on the task-based approach to technological change, the paper analyses how AI restructures labour by automating cognitive, predictive, and organisational tasks while simultaneously creating opportunities for productivity enhancement and economic participation. The paper further situates these developments within broader questions of governance, public value creation, digital inequality, and global asymmetries in AI production and ownership.

The paper argues that employment outcomes associated with AI in Africa are not technologically predetermined but are shaped by institutional arrangements, policy choices, and the distribution of power between labour and capital. While AI may lower barriers to participation for some workers and enterprises, it also risks reinforcing extractive global value chains and deepening inequality where policy frameworks remain weak. The paper concludes that African countries require integrated and context-specific AI governance frameworks that align labour policy, education systems, digital inclusion, industrial strategy, and social protection to ensure distributive and restorative labour justice. Ultimately, the paper contends that AI governance in Africa must move beyond narrow efficiency-oriented frameworks toward a broader developmental and public value approach capable of promoting equitable economic transformation.

1. Introduction

Artificial intelligence (AI) has emerged as one of the most transformative technologies of the 21st Century. As a general-purpose technology, AI possesses the ability to permeate multiple sectors of the economy, reshape productive systems, alter labour relations, and transform governance structures (Bresnahan & Trajtenberg, 1995). Much like earlier industrial revolutions driven by steam power, electricity, and digital computing, AI is expected to fundamentally reorganise economic production and social life. However, unlike previous waves of automation that primarily replaced routine physical labour, AI increasingly targets cognitive, predictive, and organisational tasks traditionally associated with skilled and middle-income employment (Brynjolfsson & McAfee, 2014).

The rapid advancement of AI has generated significant global debate around employment disruption, inequality, productivity, and the concentration of economic power. Research from Acemoglu and Restrepo (2019) argues that automation technologies can reduce labour demand, weaken worker bargaining power, and contribute to labour market polarisation. At the same time, proponents of AI-driven productivity growth argue that AI has the potential to improve efficiency, lower costs, expand

access to services, and generate entirely new industries and occupations (Brynjolfsson et al., 2023). The tension between these competing perspectives has become central to contemporary debates on technological change and economic development.

In Africa, these debates acquire additional urgency due to the structural characteristics of African economies. African labour markets are marked by high levels of informality, persistent unemployment, low industrialisation, weak social protection systems, and deep inequalities across class, geography, education, and gender (ILO, 2023). Moreover, many African countries remain marginal participants in global AI production systems, relying heavily on imported technologies, external digital infrastructure, and foreign-owned platforms (UNCTAD, 2021). These asymmetries raise important questions regarding the distributive effects of AI adoption in African contexts.

In addition, AI technologies are shaped by the political economy within which they are designed, deployed, and governed. The ownership of AI infrastructure, data, computational resources, and digital platforms remains highly concentrated within a small number of multinational corporations primarily located in the Global North (Zuboff, 2019). These dynamics shape labour outcomes because the benefits of AI-driven productivity gains tend to accrue disproportionately to technology owners and platform intermediaries rather than workers (Mazzucato, 2018). As a result, the diffusion of AI into African economies risks reproducing existing patterns of extraction, labour precarity, dependency, and unequal value distribution.

At the same time, AI presents important opportunities for African economies. AI applications have the potential to improve productivity in agriculture, healthcare, education, finance, logistics, and public administration (World Bank, 2021). AI tools may reduce language barriers, improve access to information, support microenterprise development, and enhance state capacity. Whether AI ultimately contributes to inclusive development or deepens inequality depends on the institutional arrangements, governance frameworks, and policy choices adopted by African governments and regional institutions.

This paper focuses specifically on the relationship between AI and labour in Africa through a political economy framework. It examines how AI adoption may reshape employment patterns, labour relations, workplace organisation, skills requirements, labour market stratification, and distributive outcomes across African economies. Particular attention is paid to the implications of AI for workers operating within informal economies, for platform-mediated work, and low-productivity sectors. The paper further investigates how labour policy, education systems, industrial policy, and AI governance frameworks can mitigate labour displacement, reduce labour precarity, and promote equitable and restorative labour outcomes.

The paper proceeds as follows: Section 2 outlines the conceptual framework and political economy approach underpinning the analysis; Section 3 examines AI as a general-purpose technology and explores the dynamics of AI production; Section 4 analyses African labour markets and the potential employment effects of AI adoption; Section 5 explores the relationship between AI and inequality, focusing on digital exclusion, gender disparities, and global power asymmetries; Section 6 discusses AI

governance and policy responses in the areas of labour, education, industrial policy, competition, taxation, and data governance. The final section concludes with recommendations for equitable and just AI governance in Africa.

2. Conceptual framework: Political economy and AI

Understanding the implications of AI for labour and inequality in Africa requires moving beyond technologically deterministic approaches that treat technological outcomes as inevitable. Instead, this paper adopts a political economy perspective that situates AI within broader relations of power, production, governance, and distribution in Africa.

The political economy of AI concerns how AI technologies are developed, owned, governed, and deployed within a global industrial system that is characterised by unequal access to resources and power (Couldry & Mejias, 2019). AI systems are not merely technical artefacts; they are embedded within institutional arrangements that shape how value is created and distributed. The political economy approach therefore examines the interactions between states, markets, labour, capital, and digital infrastructures.

A key contribution of the political economy framework is its emphasis on distributional outcomes. AI has the potential to increase productivity and economic efficiency, but these gains are not automatically distributed equitably. Instead, productivity gains may be concentrated among those who own AI technologies, computational infrastructure, datasets, and digital platforms (Srnicek, 2017). This concentration of ownership raises concerns about inequality, monopoly power, and labour precarity. What the Research ICT Africa (RIA) Just AI Framework of Inquiry pushes us to do is rethink this trajectory. It asks us to centre justice – not just fairness or inclusion, but real redistribution, real participation, and real accountability across the AI value chain (Chetty & Sey, 2025).

This paper further draws on the task-based approach to technological change. Unlike occupation-based frameworks that treat jobs as homogeneous categories, the task-based approach distinguishes between specific tasks within occupations that may either be automated or complemented by AI technologies (Autor et al., 2003). This distinction is critical because AI rarely automates entire occupations; rather, it automates particular tasks while altering the composition of work. This framework is particularly relevant in African contexts where labour markets differ substantially from those in advanced economies.

African economies are characterised by high levels of informal employment, limited digital infrastructure, uneven access to education and digital skills, weak institutional capacity, low levels of industrialisation, and the dominance of micro and small enterprises (African Development Bank, 2022). These structural conditions are accompanied by persistently high levels of unemployment and underemployment, all of which shape the ways AI technologies are adopted and integrated into labour markets, and how labour markets adjust to technological change.

The paper also incorporates the concept of public value creation. AI systems generate both commercial and social value. However, under prevailing global digital capitalism, AI development is largely organised around private value extraction rather than public value creation (Mazzucato, 2018). Data extraction, platform monopolisation, and surveillance-based business models often result in asymmetric benefits where global corporations accumulate rents while local economies capture limited value.

The governance challenge for African countries is therefore not simply whether to adopt AI, but how to govern AI in ways that promote inclusive economic participation, protect labour rights, build local productive capabilities, strengthen state capacity, reduce structural inequality, and facilitate the equitable distribution of AI-generated productivity gains.

The political economy lens adopted in this paper recognises that AI outcomes are contingent upon policy choices, institutional capacity, and the balance of power between labour and capital.

3. AI, technological change, and labour transformation

AI is increasingly described as a general-purpose technology because of its pervasive applicability across sectors and its capacity to transform multiple economic processes simultaneously (Bresnahan & Trajtenberg, 1995). Similar to the application of the internet, AI has economy-wide implications that extend beyond individual industries.

AI systems use large datasets and computational techniques to identify patterns, make predictions, automate decisions, and optimise processes. Advances in machine learning, natural language processing, computer vision, and generative AI have accelerated the deployment of AI technologies across sectors including finance, healthcare, manufacturing, logistics, education, agriculture, and governance (Russell & Norvig, 2021).

The significance of AI lies not only in automation but also in its predictive capabilities. AI systems reduce the cost of prediction by processing vast amounts of data to generate probabilistic outcomes (Agrawal et al., 2018). This predictive function enables firms and governments to optimise decisions, reduce uncertainty, and automate complex organisational tasks.

3.1 AI infrastructure investment and capital concentration

AI development requires substantial investments in research and development, data centres, high-performance computing infrastructure, cloud computing systems, data acquisition and storage, and highly skilled labour. These requirements contribute to the concentration of AI development within economies that possess advanced technological ecosystems and significant financial resources. AI investment remains heavily concentrated in North America and Asia, particularly in the United States and China (Stanford HAI, 2024). African countries lag significantly in AI investment because of infrastructure deficits, limited venture capital ecosystems, inadequate digital infrastructure, and shortages of advanced technical skills.

This concentration of investment contributes to global asymmetries in AI production and ownership. African countries largely remain consumers rather than producers of AI technologies, limiting their ability to shape AI development trajectories.

3.2 Data and uneven representation

Data is fundamental to AI systems. AI models require vast datasets for training and operation. However, data availability and quality remain uneven globally. African countries particularly face multiple challenges related to data availability and digital infrastructure, including limited digitalisation of economic and social activities, weak public statistical systems, low internet penetration in many regions, limited local language datasets, and weak data governance frameworks (UNESCO, 2022). These constraints reduce the visibility of African contexts within global AI systems and limit local participation in AI development.

The absence of representative African datasets creates several problems. First, African populations remain underrepresented in global AI systems, increasing the risk of biased outcomes (Benjamin, 2019). Second, foreign corporations extract data from African users without corresponding local value creation. Third, weak data governance frameworks limit the ability of African states to regulate data extraction and ensure equitable benefits.

The digital inequality paradox further complicates these dynamics. These constraints reduce the representation of African contexts in AI training data. As a result, existing social and economic inequalities become embedded within AI systems.

3.3 Labour augmentation, productivity, and skills

Labour remains central to AI production and deployment. AI production and deployment depend on a wide range of skilled workers, including data scientists, machine learning engineers, software developers, digital platform workers, data annotators, and AI governance specialists. The uneven distribution of these skills globally contributes to asymmetries in AI development and adoption.

At the same time, AI also functions as a labour-replacing and labour-augmenting technology. AI systems automate certain tasks while complementing others. The distributive consequences depend on which tasks are automated, which workers are affected, and how productivity gains are distributed (Acemoglu & Johnson, 2023).

In Africa, digital skills gaps remain significant. Many workers lack the foundational digital competencies required to effectively utilise AI tools. Moreover, AI awareness remains relatively low outside specialised technology sectors. Without significant investment in education, training, and digital infrastructure, many African workers risk exclusion from AI-driven productivity gains.

4. African labour markets and AI

The effects of AI on employment in Africa must be understood within the context of existing labour market structures. African labour markets differ significantly from those in advanced economies in several important respects (ILO, 2023).

4.1 Informality and labour market structure

Informality dominates labour markets across much of Africa. Informal enterprises across Africa are frequently characterised by low productivity, limited access to finance, weak labour protections, income instability, and low levels of technological adoption (ILO, 2018). These conditions shape both the opportunities and vulnerabilities associated with AI adoption within informal economies.

Micro and small enterprises constitute the backbone of employment in many African economies (African Development Bank, 2022). Many workers engage in survivalist economic activities rather than formal wage employment.

This structure has important implications for AI adoption. On one hand, low levels of industrial automation may reduce immediate risks of mass technological unemployment compared to highly industrialised economies. On the other hand, weak labour protections and limited social protection systems increase vulnerability to economic disruption (World Bank, 2019).

AI adoption within informal economies could be potentially transformative. Opportunities associated with AI in informal economies include AI-enabled mobile financial services, improved market information systems, digital identity platforms, language translation tools, and productivity-enhancing applications that support small-scale enterprises and informal workers (GSMA, 2023).

However, several constraints remain, including low digital literacy, high data costs, weak connectivity infrastructure, limited access to devices, and lack of regulatory protections (RIA, 2026).

4.2 Task-based impacts of AI

As in other parts of the world, AI is likely to affect African labour markets through task substitution and task augmentation.

4.2.1 Task substitution

AI systems are increasingly capable of automating administrative tasks, customer service functions, routine analytical work, data processing, predictive tasks, and organisational co-ordination (Acemoglu & Restrepo, 2019). Unlike earlier waves of automation that targeted manual labour, AI increasingly affects middle-skilled occupations associated with cognitive and organisational work (Brynjolfsson & McAfee, 2014).

This shift is significant because middle-skilled employment often provides pathways for social mobility and economic stability. The erosion of such occupations risks deepening labour market polarisation (Autor, 2015).

4.2.2 Task augmentation

At the same time, AI technologies can complement labour by enhancing worker productivity, reducing information asymmetries, supporting decision-making, lowering transaction costs, and expanding market access (Agrawal et al., 2018). For African microenterprises and informal workers facing significant information and capability constraints, AI tools may improve financial management, language translation, customer communication, and market and educational access. These suggest the potential of AI to reduce barriers to economic participation when accompanied by enabling policy frameworks (World Bank, 2021).

4.3 Employment disruption and labour polarisation

While aggregate job automation risks in Africa may be lower than in advanced economies, AI is still likely to reshape labour market dynamics.

4.3.1 Labour market polarisation

These dynamics manifest in labour market outcomes through increasing demand for high-skill digital workers, declining demand for routine middle-skill roles, and the expansion of low-paid service work (Acemoglu & Johnson, 2023). The dynamics risk widening income inequality, increasing labour market segmentation, weakening social mobility for workers whose occupations become increasingly automated, and deepening social stratification (Autor, 2015).

4.3.2 Platformisation of work

Digital labour platforms increasingly mediate work arrangements across sectors including transport, logistics, freelancing, and digital services (Srnicek, 2017). Platform work frequently involves income instability, weak labour protections, a lack of social protection, and limited collective bargaining rights (ILO, 2021). AI systems intensify these dynamics by enabling automated worker surveillance, performance management, and labour allocation (Zuboff, 2019).

4.3.3 Gendered impacts

The impacts of AI are likely to be gendered. Women are disproportionately represented in administrative occupations, clerical work, and routine service tasks that are particularly susceptible to automation (UN Women, 2023).

Women also frequently face lower levels of digital access, reduced participation in science, technology, engineering, and mathematics (STEM) education, restrictive social norms limiting digital participation, and unequal, unpaid care burdens (UNESCO, 2022). These structural inequalities constrain women's ability to benefit from AI-driven economic opportunities. Without targeted interventions, AI may therefore deepen existing gender inequalities in labour markets.

5. AI, labour inequality, and worker precarity in Africa

AI intersects with multiple dimensions of inequality in Africa. Rather than emerging within neutral economic environments, AI systems are characterised by structural inequalities embedded in colonial histories, uneven development, gender disparities, and global power asymmetries (Couldry & Mejias, 2019).

5.1 Digital inequality and exclusion

The digital divide remains one of the most significant constraints to equitable AI adoption in Africa. Large segments of African populations remain offline, barely connected, unable to afford devices or data, or excluded from digital services altogether (RIA, 2026). These exclusions have profound implications for AI systems because those excluded from digital systems are also excluded from the datasets shaping AI outcomes. Individuals excluded from digital systems become invisible within the datasets used to train AI models (UNCTAD, 2021).

This creates a feedback loop where existing inequalities become embedded within AI systems. AI systems trained primarily on Global North datasets often fail to reflect African local languages, cultural contexts, informal economic practices, and social institutions. As a result, AI applications may reproduce biases and exclusions that undermine equitable development.

5.2 Concentration of economic power

The global AI industry is characterised by extreme concentration of economic power. As mentioned, a small number of multinational corporations control cloud infrastructure, computational resources, large datasets, foundational AI models, and dominant digital platforms (Srnicek, 2017). This concentration reinforces existing asymmetries in control over AI development and value capture. It creates several challenges for African economies including dependence on external AI systems and limited local economic participation (Mazzucato, 2018). These dynamics mirror broader patterns of dependency within global capitalism where African economies remain positioned primarily as sites of resource extraction rather than centres of technological production (Rodney, 1972).

5.3 Data extraction and digital colonialism

Global technology corporations extract data from African users and deploy AI systems trained on these datasets. However, the economic benefits generated from these systems are rarely redistributed equitably (Couldry & Mejias, 2019).

Asymmetrical flows of value in which data flows outward from African economies, profits accumulate within foreign corporations, and local innovation ecosystems remain underdeveloped (UNCTAD, 2021) reinforce dependency and unequal participation in global digital economies. Likewise, extracting data without corresponding local value creation similarly reinforces structural inequalities between Africa and the Global North (Nothias, 2020).

5.4 AI, class, and labour precarity

AI may deepen class inequalities by redistributing power away from labour toward capital (Acemoglu & Johnson, 2023).

AI technologies increase returns for owners of platforms, intellectual property, computational infrastructure, and data monopolies (Zuboff, 2019). On the other hand, workers increasingly face wage pressures, employment insecurity, heightened surveillance, algorithmic management, and reduced bargaining power as AI technologies expand within labour markets (ILO, 2021).

These dynamics are especially concerning in African contexts where labour protections, unionisation levels, and social safety nets often remain weak (ILO, 2023). AI therefore raises important questions not only about productivity but also about worker dignity, labour rights, and democratic participation within economic systems.

5.5 Environmental and resource inequalities

AI production also raises environmental and extractive concerns. Africa possesses significant mineral resources essential for AI hardware production, including cobalt, lithium, tantalum, tin, and tungsten (UNEP, 2022). Despite this, much of the value associated with global AI production continues to accumulate outside the continent.

However, resource extraction is often linked to environmental degradation, labour exploitation, and unequal value distribution (Amnesty International, 2016). Thus, while Africa supplies critical resources for global AI systems, much of the associated value creation occurs elsewhere.

Overall, these dynamics – labour restructuring, digital exclusion, and global concentration of value – are mutually reinforcing, shaping how AI risks and opportunities are distributed across African economies.

6. Labour governance and policy responses to AI

The distributive outcomes associated with AI are not inevitable. They depend on governance frameworks, institutional capacity, and political choices (Acemoglu & Johnson, 2023). African governments therefore face the challenge of developing integrated AI governance frameworks capable of promoting equitable and inclusive outcomes.

6.1 Labour policy and social protection

Labour policy must adapt to the changing nature of work under AI. Below are some of the key priorities for policymakers in Africa.

6.1.1 Expanding social protection

Governments should strengthen unemployment protection systems, health insurance schemes, pension systems, and income support mechanisms to mitigate the risks of labour market disruption and technological displacement (ILO, 2021).

Social protection systems are particularly important in contexts where informal employment dominates (World Bank, 2019).

6.1.2 Protecting platform workers

Regulatory frameworks for digital labour platforms should address algorithmic management, worker classification, collective bargaining rights, fair compensation, and transparency in automated decision-making systems (ILO, 2021).

6.1.3 Supporting labour transitions

Governments should support labour transitions through reskilling programmes, lifelong learning systems, active labour market policies, and public employment initiatives designed to support workers displaced by technological change (OECD, 2023).

6.2 Skills development and workforce adaptation

Education systems play a central role in shaping AI outcomes. African countries require major investments in digital literacy, STEM education, AI awareness, technical and vocational education, and higher education research capacity to prepare workers and institutions for AI-driven economic transformation (UNESCO, 2022).

However, education policy should not focus solely on technical skills. Education and training strategies should also cultivate critical thinking, ethics, governance expertise, and interdisciplinary approaches that can address the broader societal implications of AI adoption (UNESCO, 2021).

Skills development strategies must therefore balance technical capabilities with broader social and institutional competencies.

6.3 Labour-centred industrial policy

AI governance requires proactive industrial policy. Industrial policy should support local AI startups, public-interest AI research, African language models, public digital infrastructure, and local data ecosystems that strengthen domestic productive capabilities and innovation (African Union, 2024a).

Achieving these objectives requires sustained investment in broadband infrastructure, data centres, research institutions, and broader innovation ecosystems that support local AI development and deployment (World Bank, 2021).

Industrial policy should also aim to build local productive capacity and reduce dependence on imported AI systems (Mazzucato, 2018).

6.4 Platform labour and digital work regulation

AI markets are highly concentrated. Therefore, competition policy becomes essential for preventing monopoly power, regulating platform dominance, supporting local innovation, and ensuring fair market access within increasingly concentrated digital economies (Srnicek, 2017).

Regional cooperation is particularly important given the transnational nature of digital markets. The African Continental Free Trade Area (AfCFTA) may provide an important platform for harmonised AI governance frameworks (African Union, 2024b).

6.5 Data governance and worker rights

Effective AI governance requires robust data protection legislation, privacy safeguards, data sovereignty frameworks, public interest data governance mechanisms, and equitable data access policies that balance innovation with rights protection (UNCTAD, 2021).

African governments should prioritise developing representative public datasets while ensuring protections against exploitative data extraction (Couldry & Mejias, 2019).

6.6 Social protection and redistribution

AI raises important questions regarding taxation and redistribution. Global technology corporations frequently generate revenue in African markets without corresponding tax contributions (OECD, 2021).

Governments should pursue digital taxation frameworks, international tax cooperation mechanisms, transparency requirements, and broader resource mobilisation strategies to address the concentration of profits within global technology corporations (United Nations, 2023).

Redistributive taxation will be increasingly important in contexts where AI intensifies capital concentration (Piketty, 2014).

6.7 Human-centred and worker-centred AI

AI governance should move beyond narrow efficiency frameworks toward broader developmental objectives. AI systems should ultimately be evaluated according to their contributions to public value creation, inclusive development, social justice, human capabilities, and democratic accountability rather than narrow efficiency metrics alone (Eaves et al., 2024).

This requires strong public institutions capable of steering AI adoption toward socially beneficial outcomes (Mazzucato, 2018).

7. Policy recommendations: Towards a labour-centred AI governance framework

The concept of labour justice is central to equitable AI governance. AI technologies are increasingly shaping employment opportunities, workplace organisation, wage structures, social mobility, and economic participation (Acemoglu & Johnson, 2023). Without intervention, AI risks intensifying labour precarity and deepening structural inequalities (ILO, 2021). Therefore, a restorative and distributive approach to labour justice requires several interrelated shifts:

- **Rebalancing power between labour and capital:** AI governance must address asymmetries in bargaining power between workers and technology owners (Mazzucato, 2018). African governments, particularly labour ministries and regulators, should strengthen labour

institutions, support worker representation, regulate algorithmic management systems, and ensure a fairer distribution of AI-generated productivity gains (Acemoglu & Restrepo, 2019).

- **Embedding equity into AI design:** Regulation and standards should require AI developers and firms to embed equity into AI design processes through representative datasets, bias-auditing mechanisms, inclusive design practices, and meaningful human oversight (Benjamin, 2019). Further, AI systems should be designed to complement rather than undermine human capabilities (UNESCO, 2021). Embedding equity at the design stage prevents bias from reproducing and reduces the risk of uneven labour impacts. Designing for complementarity rather than substitution helps preserve jobs, support productivity, and protect vulnerable groups from displacement.
- **Promoting human-centred AI:** African governments, in partnership with civil society, should establish transparent governance systems, democratic accountability, public participation in AI policymaking, and strong protections for human rights and worker dignity (European Commission, 2019). Human-centred governance shifts the focus from efficiency alone to broader social outcomes. By embedding accountability and participation, these frameworks ensure that AI deployment aligns with public interest objectives and protects workers from exploitative practices.
- **Building regional cooperation:** AI governance challenges transcend national boundaries. Regional institutions such as the African Union should leverage agreements such as AfCFTA and lead efforts to harmonise regulations, coordinate data governance and competition policy, develop digital trade frameworks, and strengthen Africa's collective bargaining power in global AI governance processes (African Union, 2024a). Regional co-ordination strengthens Africa's collective negotiating position, reduces regulatory fragmentation, and enables contextually relevant frameworks. This helps ensure that AI-driven value creation is retained within African economies and supports inclusive development.

8. Conclusion

AI represents both an opportunity and a profound risk for African economies. As a general-purpose technology, AI can reshape production systems, labour markets, governance structures, and social relations across the continent. However, the outcomes associated with AI adoption are not technologically predetermined. They are shaped by political-economic dynamics, institutional arrangements, and policy choices.

Taken together, the evidence shows that AI interacts with existing labour market vulnerabilities, digital constraints, and global asymmetries in ways that risk reinforcing inequality. While AI may generate productivity gains and lower barriers to participation for some workers and enterprises, it also risks reinforcing extractive economic relations and deepening inequality where governance frameworks remain weak.

African labour markets are particularly vulnerable to these dynamics due to constraints such as unemployment, limited social protection, weak digital infrastructure, and uneven access to education

and digital skills. At the same time, the dominance of foreign-owned AI systems and digital platforms limits local value capture and reinforces dependency within global digital capitalism.

Yet AI also presents important opportunities. Under the right policy conditions, AI could boost productivity, improve access to services, strengthen state capacity, reduce information asymmetries, and foster local innovation ecosystems. Realising these opportunities requires deliberate and coordinated policy intervention.

This paper therefore calls for integrated AI governance frameworks grounded in principles of equity, inclusion, public value creation, and labour justice. Such frameworks must align labour policy, industrial policy, education systems, competition regulation, data governance, taxation, and social protection.

Importantly, AI governance in Africa must move beyond narrow techno-solutionist approaches and instead engage more deeply with political economy questions concerning ownership, power, distribution, and democratic accountability. The future of AI in Africa should not be determined solely by market forces or external technological agendas. Rather, African governments, institutions, workers, and communities must actively shape AI governance in ways that advance equitable economic transformation and restorative labour outcomes.

Ultimately, the challenge is not simply whether Africa adopts AI, but whether AI adoption contributes to decent work, labour protection, inclusive development, and a more equitable distribution of the benefits of technological progress. The future of AI in Africa will depend heavily on whether labour institutions, governments, and regional organisations are capable of steering AI adoption toward worker-centred and socially just outcomes rather than narrowly extractive and labour-displacing trajectories.

References

Acemoglu, D., & Johnson, S. (2023). *Power and Progress: Our Thousand-Year Struggle Over Technology and Prosperity*. PublicAffairs.

Acemoglu, D., & Restrepo, P. (2019). Automation and new tasks: How technology displaces and reinstates labor. *Journal of Economic Perspectives, 33*(2), 3–30.

Agrawal, A., Gans, J., & Goldfarb, A. (2018). *Prediction Machines: The Simple Economics of Artificial Intelligence*. Harvard Business Review Press.

Amnesty International. (2016). *This is What We Die For: Human Rights Abuses in the Democratic Republic of the Congo Power the Global Trade in Cobalt*. Amnesty International.

African Development Bank. (2022). *African economic outlook 2022*. African Development Bank

African Union. (2024a). *Continental artificial intelligence strategy for Africa*. African Union Commission.

African Union. (2024b). *Protocol to the agreement establishing the African Continental Free Trade Area on digital trade*. African Union Commission.

Autor, D. H. (2015). Why are there still so many jobs? The history and future of workplace automation. *Journal of Economic Perspectives, 29*(3), 3–30.

Autor, D. H., Levy, F., & Murnane, R. J. (2003). The skill content of recent technological change: An empirical exploration. *Quarterly Journal of Economics, 118*(4), 1279–1333.

Benjamin, R. (2019). *Race After Technology: Abolitionist Tools for the New Jim Code*. Polity Press.

Bresnahan, T. F., & Trajtenberg, M. (1995). General purpose technologies 'Engines of growth'? *Journal of Econometrics, 65*(1), 83–108.

Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W. W. Norton & Company.

Brynjolfsson, E., Li, D., & Raymond, L. R. (2023). Generative AI at work (NBER Working Paper No. 31161). National Bureau of Economic Research.

Chetty, P., & Sey, A. (2025). RIA Just AI Framework of Inquiry. Research ICT Africa.

Couldry, N., & Mejias, U. A. (2019). *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism*. Stanford University Press.

Eaves, D., Mazzucato, M., & Vasconcellos, B. (2024). *Digital public infrastructure and public value: What is "public" about DPI?* UCL Institute for Innovation and Public Purpose.

European Commission. (2019). *Ethics Guidelines for Trustworthy AI*.

GSMA. (2023). *The State of Mobile Internet Connectivity Report 2023*.

International Labour Organization. (2018). *Women and Men in the Informal Economy: A Statistical Picture*.

International Labour Organization. (2021). *World Employment and Social Outlook 2021: The Role of Digital Labour Platforms in Transforming the World of Work*.

International Labour Organization. (2023). *World Employment and Social Outlook Trends 2023*.

Mazzucato, M. (2018). *The Value of Everything: Making and Taking in the Global Economy*. Allen Lane.

Nothias, T. (2020). Access granted: Digital colonialism, datafication, and the governance of digital platforms in Africa. *Global Media and Communication, 16*(3), 329–348.

Organisation for Economic Co-operation and Development. (2021). *Tax Challenges Arising from Digitalisation of the Economy*.

Organisation for Economic Co-operation and Development. (2023). *OECD Employment Outlook 2023*.

Piketty, T. (2014). *Capital in the Twenty-First Century*. Harvard University Press.

Research ICT Africa. (2026). *The state of gender digital inequality in Sub-Saharan Africa*. Research ICT Africa.

Rodney, W. (1972). *How Europe Underdeveloped Africa*. Bogle-L'Ouverture Publications.

Russell, S., & Norvig, P. (2021). *Artificial Intelligence: A Modern Approach* (4th ed.). Pearson.

Srnicek, N. (2017). *Platform Capitalism*. Polity Press.

Stanford Institute for Human-Centered Artificial Intelligence. (2024). *AI index report 2024*.

United Nations Conference on Trade and Development. (2021). *Digital Economy Report 2021*.

United Nations Environment Programme. (2022). *Mineral Resource Governance and Green Transitions Report*.

UNESCO. (2021). *Recommendation on the Ethics of Artificial Intelligence*.

UNESCO. (2022). *Global Education Monitoring Report: Technology and Education*.

United Nations. (2023). *International Tax Cooperation and Sustainable Development*.

UN Women. (2023). *Gender Equality and Artificial Intelligence*.

World Bank. (2019). *World Development Report 2019: The Changing Nature of Work*.

World Bank. (2021). *Digital Africa: Technological Transformation for Jobs and Economic Growth*.

Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. PublicAffairs.