

Terms of Reference

Understanding the Political Economy of Artificial Intelligence and Digitalisation in Africa

The African Forum and Network on Debt and Development (AFRODAD) is a Pan-African civil society organisation established in 1996 to advocate for debt cancellation and addressing debt related issues in Africa. Over the past 25 years, AFRODAD has built expertise on public debt management issues and its intersectionality with domestic resource mobilisation, and international public and private finance in Sub-Saharan Africa and continues to be concerned that African economies do not become highly indebted and in debt distress as in the 1980s. We work with Government Officials across Africa, Members of Parliament, Media and Journalists, Civil Society Organisations, and representatives from the global financial architecture at continental and global levels. We advocate for accountable and transparent public debt and financial management; strengthening of legal and policy frameworks to curtail leakages through illicit financial flows and profit shifting; prioritising revenue generating opportunities through all forms of finance in Africa. Our work focuses on influencing African governments and institutions to adopt accountable and transparent public debt management policies and practices for sustainable development and eradication of poverty. Since our establishment, we have been contributing to finding sustainable solutions to Africa's challenges in debt and resources mobilisation, including financial development. Our main focus areas are Sovereign Debt Management, Democratisation of the Debt Discourse, Collective Action on Debt and Development and Institutional Development & Sustainability.

I. Introduction

Looking back into the chronology of industrial revolution, the first revolution was propelled by steam, the second powered by electricity while preliminary automation and machinery engineered the third. Presently, the world is shaping for the fourth industrial revolution, and this will be attributed to cyber-physical systems or intelligent computers. From this, it is clear that the fourth industrial revolution builds up on the inventions of the third industrial revolution but brings them beyond the previous realm of possibility with



four foundational types of disruptive technologies that can be applied all along the value chain¹. These include:

- Connectivity, data and computational power- this entails cloud technology, the internet, blockchain and sensors.
- Analytics and intelligence- entails advanced analytics, machine learning and artificial intelligence.
- Human-machine interaction which entails virtual and augmented reality, robotics and automation, and autonomous guided vehicles.
- Advanced engineering- entails additive manufacturing, renewable energy and nanoparticles.

From these, we can conclude that the fourth industrial revolution will be driven largely by the convergence of digital, biological and physical innovations which will have a series pf social, political, cultural and economic upheavals unfold in the 21st century. The revolution involves systemic changes across many sectors and aspects of human life: the crosscutting impacts of emerging technologies are more important than the existing capabilities they represent: artificial intelligence is augmenting processes and skill in every industry: neurotechnology is making unprecedented strides in how we can use and influence the brain as the last frontier of human biology: automation is disrupting century-old transport and manufacturing paradigms and technologies such as blockchain, used in executing cryptocurrency transactions and smart materials are redefining and blurring the boundary between the digital and physical worlds².

This ultimately leads to societal transformation at a global scale as it affects incentives, rules, and norms of economic life, it transforms how we communicate, learn, entertain ourselves and relate to one another and how we understand ourselves as human beings. Given that the new technologies being developed and implemented at an increasingly rapid pace has an impact on human identities, communities and political structures, our responsibilities to one another, our opportunities for self-realisation and our ability to positively impact the world are intricately tied to and shaped by how we engage with the technologies of the fourth industrial revolution. We therefore have the opportunity and responsibility to give it structure and purpose.

¹ What are Industry 4.0, the fourth industrial revolution and 4IR https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-are-industry-4-0-the-fourth-industrial-revolution-and-4ir

² The Fourth Industrial revolution https://www.britannica.com/topic/The-Fourth-Industrial-Revolution-2119734



Africa is rapidly emerging as a critical arena for power contestation in cyberspace. The continent's immense demographic potential presents significant opportunities for various actors to engage and influence both the continental and global online spaces. Its large and growing pool of potential users of digital technologies also presents significant opportunities for investment in digital infrastructure and tech startups. In addition to its human capital, Africa also hosts majority of the world's reserves of critical minerals that will be necessary to drive global technological development. These minerals include cobalt, lithium, and rare earth elements that are necessary for the production of batteries, electric vehicles, and other high-tech devices are in immense demand from both governments and companies in the Global North as well as rising powers in the East.

Africa's central location between the East and West has also meant it is an attractive location for digital infrastructure development and surveillance. The continent is a major transit point for submarine cables, which carry the vast majority of the world's internet traffic. This makes Africa a strategic location for countries that want to monitor and control the flow of information.

II. Problem Analysis

Africa's mobile-first approach has also allowed the continent to leapfrog traditional technological development and contribute to technological innovation. For example, Kenya has become a global leader in mobile money, and Nigeria is home to a thriving tech startup scene. We have also recently seen the case of Guinea-Bissau adopting Blockchain to manage public sector salaries with an aim of combating poor governance in state finances, embezzlement and corruption. The system seeks to eliminate ghost workers, payroll fraud and other schemes that persisted due to poor traceability of public funds³. Digital currencies such as cryptocurrency use is gaining momentum across the continent but warrants close monitoring and evaluation to the elevated risks. On the other hand, governments through their Central Banks are developing Central Bank Digital Currencies to counter cryptocurrencies, mitigating their risks and ensure that monetary sovereignty is attained, and the illicit use of money is curbed. These developments are driving new investment pathways on the continent while also influencing the creation of innovative mobile telephony solutions.

³ Guinea-Bissau is Using Blockchain to Boost Fiscal Transparency: https://www.imf.org/en/News/Articles/2024/10/02/cf-guinea-bissau-is-using-blockchain-to-boost-fiscal-transparency#:~:text=What%20is%20Guinea%2DBissau's%20new,and%20salary%20and%20pensions%20disbursements.



However, Africa's contribution to technological development has been accompanied by several challenges. Weak regulatory, policy and oversight frameworks that have not kept pace with technological development have contributed to exploitation and abuse. For example, there have been reports of citizens and workers being exploited in the development of technology tools and their personal data being harvested without consent.

The African Union plays a key and critical role in coordinating Al governance in Africa through a Continental Al Strategy that aims to establish ethical and equitable Al frameworks. The main aim of AI governance in Africa is on robust data protection laws and regulations, as the access to and control over data is crucial for responsible Al development. Many African countries are already developing their own national AI strategies that outline how they plan to leverage AI for socioeconomic development while mitigating potential harms. Countries such as Benin, Egypt, Nigeria, Mauritius, Rwanda, Senegal and Algeria have made notable efforts in releasing their national AI strategies. It is worth noting that Rwanda is the only country with a <u>national policy</u> while other countries such as Ethiopia, Ghana, Morocco, Kenya, south Africa, Tanzania, and Mauritania are making significant steps towards defining their Al strategies. It is intriguing to note that a number of African countries with existing AI strategies appear to have considered some of the foundational principles in the AU strategy despite some of the efforts predating its adoption. This demonstrates some convergence in Al governance across the continent which is pegged on emphasis on: Adopting global best practices, as seen in Rwanda's national Al policy; Acquiring high-quality and diverse data sets for AI development, as seen in Rwanda, Benin, and Nigeria; Stimulating adoption of Al in similar industries, as in Mauritius; Adopting Al in public and private sectors; and Adopting and implementing ethical principles for AI that respect human rights. On the other hand, some notable differences relate to the flagship sectors under consideration in the various national AI strategies. While the AU's regional AI Strategy marks the agricultural, healthcare, public service delivery, climate change, peace, and security sectors as those that stand to benefit from AI solutions, Rwanda includes these and others such as construction, banking, digital payments, and e-commerce. On Al governance, while the AU proposes a multi-tiered approach as explained above, countries such as Benin view their path to Al governance as mostly consisting of updating existing institutional and regulatory frameworks for AI⁴.

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⁴ The African Union's Continental AI Strategy: Data Protection and Governance Laws set to Play a Key Role in AI Regulation https://fpf.org/blog/global/the-african-unions-continental-ai-strategy-data-protection-and-governance-laws-set-to-play-a-key-role-in-ai-regulation/



The recent artificial intelligence (AI) inflection point presents an opportunity for Africa to address some of its most pressing challenges, such as poverty, disease, and climate change. AI has the potential to be used to improve healthcare, education, public service provision, agriculture, and other sectors. For example, AI can be used to support smart agriculture, support climate adaptation measures, personalize learning, and to optimize service delivery. However, there are also concerns that Africa will merely be a casual observer in the next transformative wave of human development as the vast majority of AI research and development is happening in the Global North.

Besides this, AI is evolving at an exponential pace and cuts across a broad spectrum of economic, trade, financial, political, and ethical dimensions. AI research at AFRODAD will emphasise the connection with the "real economy" and how this affects Africa's Transformation Agenda via trade, employment, taxation, and investment. In addition, we want to look at AI from the broader digitalisation agenda of global commerce and finance, and specifically look at the area of crypto currency, blockchain, and datamining. These areas have a direct link debt, tax, and IFFs. We are aiming at fomenting a deeper understanding of Africa's position in the global AI landscape and its potential to shape and benefit technological dependencies as well as ensuring inclusive and sustainable development in Africa. We are also keen to start engaging during upcoming high level events on AI such the Inaugural Global AI Summit on Africa in Kigali Rwanda in April 2025, and the G20 Summit in Johannesburg South Africa in November 2025 among other events.

III. Objectives of the Study

- 1. To help inform AFRODAD's position on issues relating to AI and digitalisation based on the ongoing development discussions.
- 2. To map out key processes, opportunities and actors in the AI and Digitalisation space critical in policymaking and AI advancements.
- 3. Address ethical concerns and potential abuses related to AI use in Africa in the context of context of technological dependence and data exploitation.

IV. The Scope of the Study

- 1. To provide an in-depth analysis of the political economy of AI and Digitalisation from an economic governance and a capital accumulation point of view.
- 2. To unpack what this new moment means for Africa.
- 3. To examine the current and potential role of Africa plays in AI development and its implications for Africa's and global technological advancement.



- 4. To assess the need for a strategic framing conversation on the new AI wave and what it means for the fourth industrial revolution.
- 5. To assess the role of emerging technology in economic disruption/ economic security.
- 6. To analyse how this new frontier impact global power relations.

V. Key Outputs

Assessment Paper (25 pages including references, cover page and annexes). Formatting requirements include Calibri Body Font, Font 11, Spacing 1.15 and Justified Alignment.

VI. Analysis Approach

The assessment paper should have and/or follow the structure proposed below which enables flow of arguments and the tying down of cutting-edge policy propositions

1. Introductory or background section

- o Presents an overview of the subject.
- o Expresses a clear research problem with related research questions.
- Includes aim and objectives of the study with a justification of why study is needed.
- Summarises and justifies the methods used in the study.

2. Literature Review

- Presents clear conceptual clarifications.
- o Looks at related literature and identifies gaps.
- Looks at issues related to the problem and questions raised.

3. Findings and Discussions

- o Tackles the questions raised.
- o Determines whether the main problem is being solved.

4. Conclusions and Policy Recommendations

- o Determines whether the research aims and objectives were met.
- o Engages in policy discussions and advances recommendations.

The paper should:

- Be well written with references and acknowledgement of sources of materials that are referred to in the text, end notes and bibliography at the end of the report.
- Have a table of contents and list of tables, glossary and list of acronyms if any.



- Contain an executive summary, and a section on key findings, conclusions and recommendations.
- Contain recommendations for Parliament, Governments, private sector, civil society and the international community.
- Outputs should be tailored to specific events and audiences during the dissemination of findings.

VII. Timing

The Research Study should be completed within 30 working days from the time the contract is signed between the selected consultant and AFRODAD.

	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6
Inception meeting with consultant	xxxx					
First draft and review	xxxx	xxxx				
Second Draft and Validation			xxxx	xxxx		
Final Draft and design				xxxx	xxxx	
Approval and Webinar launch						xxxx

VIII. Reporting

The consultant will report to both the, Executive Director, Policy Manager and Policy Assistant, Executive Director's Office, jason@afrodad.org, theo@afrodad.org and john@afrodad.org



IX. Competencies

The Consultant should have skills and experience in the following areas:

- 1. Policy experience on artificial intelligence, digitalisation and issues relating to governance on artificial intelligence and the digital space.
- 2. Postgraduate degree in Information Technology, Tech Policy, and an Undergraduate degree in Information Technology, Economics or Law with experience on digital governance issues, tech policy and global economic governance.
- 3. A minimum of 5-7 years of professional experience in undertaking similar or related tasks; familiarity with technology and innovation, digital law, digital rights and Al policy.

Expressions of interest should be sent to recruiment@afrodad.org, copying Jason@afrodad.org, theo@afrodad.org and john@afrodad.org with the subject line "EOI: Understanding the political Economy of Artificial Intelligence and Digitalisation in Africa". Expressions of interest should be submitted by 5th March 2025 at 11.59 p.m. EAT