

# AI in Africa Policy Project – AI4D

**Key message:** For artificial intelligence (AI) to be beneficially deployed in Africa, appropriate local policy and regulatory frameworks that leverage benefits, whilst preventing harms and mitigating risks must be introduced through multistakeholder participation. This requires building evidence in an African context.

## The policy and regulatory landscape for beneficial AI

The dual potential of AI to promote human development, while introducing new risks and harms into society highlights the importance of designing policies that maximise the benefits of AI while mitigating risks. Policies on data protection, privacy, security that build trust, and improve accountability and fairness, are essential.

What is the state of Africa's readiness to adopt beneficial AI? What does AI readiness entail in the African context?

Currently, Africa lags behind other regions in terms of policy and regulatory readiness for AI. Kenya and Tunisia are the only two countries on the continent that have AI strategies (Oxford Insights, 2020). More than half of all African countries lack privacy and data protection laws. Meanwhile there are only 14 signatories and five ratifications to the African Union Convention on Cybersecurity and Personal Data Protection (the Malabo Convention).

The ongoing discourse on AI Ethics (fairness, accountability and transparency) is mainly driven by multinational corporations or their foundations and commercial analysts pushing a (self-interested) self-regulatory agenda. But there are also more publicly-oriented multilateral organisations, researchers and activists in the Global North grappling with these complex issues.

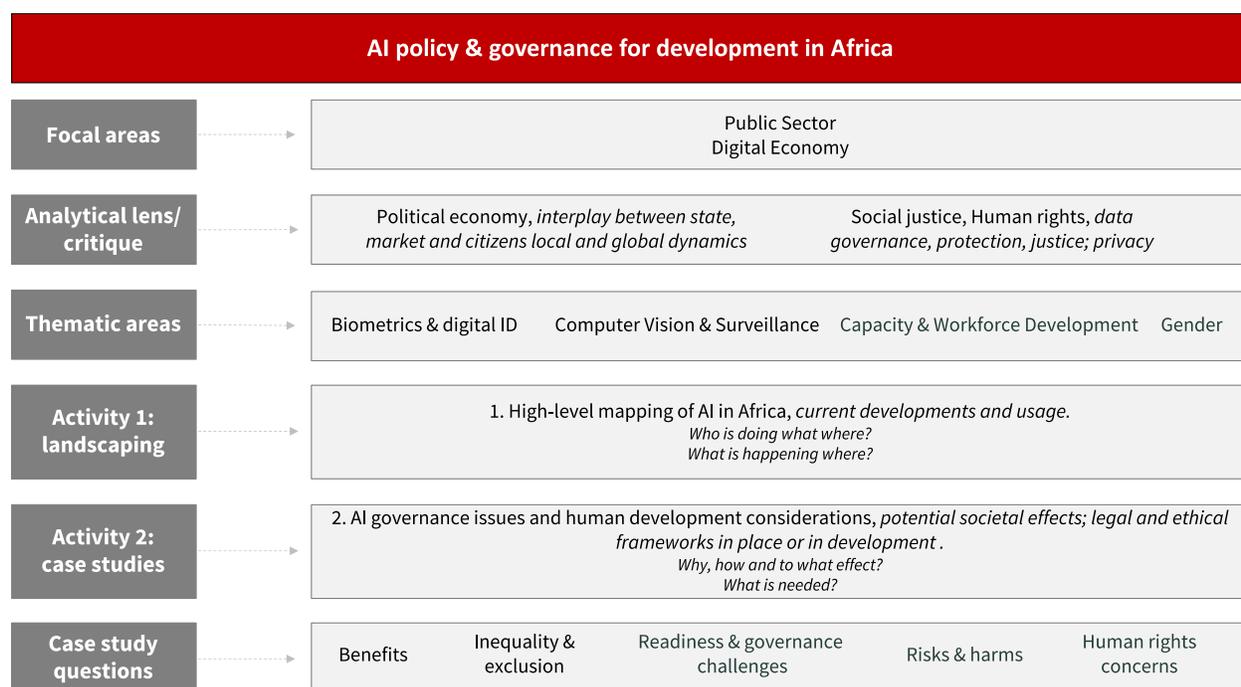
But the norms and principles for ethical and responsible AI can't be driven entirely by advanced economies, nor by the private sector, particularly in relation to voluntary compliance and self-regulation. AI readiness dimensions can and should have different configurations and structures of power. This, therefore, requires investigation in the African context.

## The AI in Africa Policy Project

The AI in Africa Policy Project (AI4D) aims to address the gap in African perspectives on AI as well as policy and regulatory readiness, by undertaking a mapping of AI usage, governance and societal impacts in Africa. In the context of RIA's ongoing work on digital inequality and digital inclusion, the project will ascertain what measures have been or need to be taken within and by the public sector to ensure that as large numbers of people are exposed to AI, they are safeguarded from associated harms, through the adoption of mechanisms to mitigate identified risks.

Approaching this issue from a rights-based and political economy perspective, AI4D will consider the legal and ethical frameworks needed to ensure compliance in terms of data protection and privacy as well as human rights and data justice. Data justice is defined as "fairness in the way people are made

visible, represented and treated as a result of their production of digital data" (Taylor, 2017). Using a political economy frame, we will analyse the interplay of state, markets and citizens in the delivery of public goods, particularly those that are partially or fully provided by private sector actors. The private delivery of public goods does not mean an abdication of the powers and responsibilities of state to citizens, which has commonly occurred over the past two decades. The two perspectives will develop recommendations for the design of policies that enable beneficial, inclusive and rights-based AI.



**Diagram 1: AI4D research plan**

## Mapping Dimensions of AI in Africa

The AI4D project has three core themes with gender as a cross cutting subject:

- biometrics and digital identity
- computer vision and surveillance, and
- skills capacity and workforce development

1. **Biometrics and digital identity:** Spurred by the Sustainable Development Goals (SDGs), there is a plethora of digital identity projects being pursued across the continent, often outside of overt legal and regulatory frameworks. A biometric or digital identity system may employ AI within the system's functions or be related to AI systems that leverage its data. In turn, both biometric identity systems and AI systems are predicated on the collection and processing of personal and other forms of data. This thematic area aims to examine the role of AI in bio-identity systems in Africa, identify measures to combat related risks and harms and leverage existing systems to ensure that bio-ID systems are beneficial to all and abide by human rights standards. It will examine issues such as social benefits delivery and financial inclusion, enabled or constrained by AI-related digital identity systems. Given

the regional context of the African Free Trade Area, the study may also consider implications for specific populations such as refugees and immigrants.

2. **Computer vision and surveillance:** One of the emergent applications of AI, with some of the greatest potential negative impacts on human rights, is in surveillance. Traditional CCTV and online monitoring have shifted from simply observing the movements and activities of people to using AI to analyse big data from other more passive forms of surveillance, with no human intervention. While this is presented as a positive aspect of smart cities, enabling mobility and safety, it has serious implications for individual and group privacy and safety. This thematic area will identify where video surveillance and facial recognition systems are being rolled out in Africa and how they use AI, the implications of public sector use of large amounts of data gathered by commercial entities, how bias in computer vision systems can be addressed and the human rights consequences of these systems.
3. **Skills capacity and workforce development:** AI is already creating and enabling new jobs, but is also replacing human labour in certain sectors. It is essential for societies to have the right types and amounts of human capacity to survive the impending labour disruptions and to design, implement, govern and sustain AI systems. Governments should also be equipped to regulate AI systems to safeguard social justice, human rights and national agency. Currently, there is a tendency to conceptualize AI skills needs primarily in terms of technical expertise. However, capacity-building strategies should account for a host of other complementary skills (such as in social science, governance and management) that are necessary for the beneficial functioning of any technological system. This thematic area will explore how AI is being used to facilitate employment. It will also identify notions of essential AI-related skills and examine the state of national capacity in these areas.
4. **Gender:** Without policy interventions, the deployment of AI is likely to intersect with gender to compound social and economic exclusion. AI systems include the biases of both machines and the people that program them. They can thus reproduce or act as amplifiers of existing structures of power and marginalization. Gender responsiveness thus becomes important in ensuring beneficial AI. This thematic area will look into gender-related implications and actual outcomes of the deployment of AI systems in the core thematic areas, shedding light on whether and how gender biases and/or blindness leads to systems that exclude or discriminate against women and other groups. It will investigate the intersectional configurations of gender and power to provide proposals on how public services and the digital economy can incorporate AI in ways that are socially just.

These themes will be explored through six lenses:

1. **Benefits:** How is AI being adopted in different public sector domains? What are the expected benefits, who benefits, and are any of these benefits already emerging? What does beneficial AI look like within the existing constraints in African countries?
2. **Inequalities and exclusions:** To what extent does the deployment of AI systems contribute to deepening existing inequalities and creating new exclusions? How do systemic power imbalances, marginalization and discrimination act as obstacles to the ability of particular groups to gain meaningful access to both public and private goods mediated by AI?

3. **Governance challenges:** Are measures in place to govern AI systems in order to circumscribe their power and autonomy over human beings? What mechanisms are needed to prevent the use of AI by self-seeking actors to exercise control over others, especially the most vulnerable populations? Who owns and controls the data and algorithms underlying AI systems?
4. **Readiness challenges:** To what extent do African countries have the infrastructural and human capacity to create and sustain their own AI systems? How can the formal openness of software and data be actualized so that the development of AI systems does not remain primarily in the hands corporations and governments?
5. **Human rights concerns:** Considering the political contexts, what are the human rights implications and realities associated with the use of AI in critical service? To what extent can the regulation of personal data protect human rights in AI? How can the negative consequences of AI deployment by states for administrative purposes be challenged?
6. **Risks and harms:** What risks and potential harms accompany the deployment of AI in Africa and how can they be mitigated? What are the implications of relying on AI systems for states, especially if those systems are provided by global corporations?

The AI in Africa Policy Project began in January 2020 and will last 18 months. Future briefs will provide further details on the Bio-ID, Computer Vision and Surveillance, Skills Capacity and Workforce Development, and Gender themes. Watch this space for updates.

#### References

Oxford Insights. Government AI Readiness Index 2020, <https://www.oxfordinsights.com/government-ai-readiness-index-2020>.

Taylor, L. (2017). What is data justice? The case for connecting digital rights and freedoms globally. <https://journals.sagepub.com/doi/10.1177/2053951717736335>