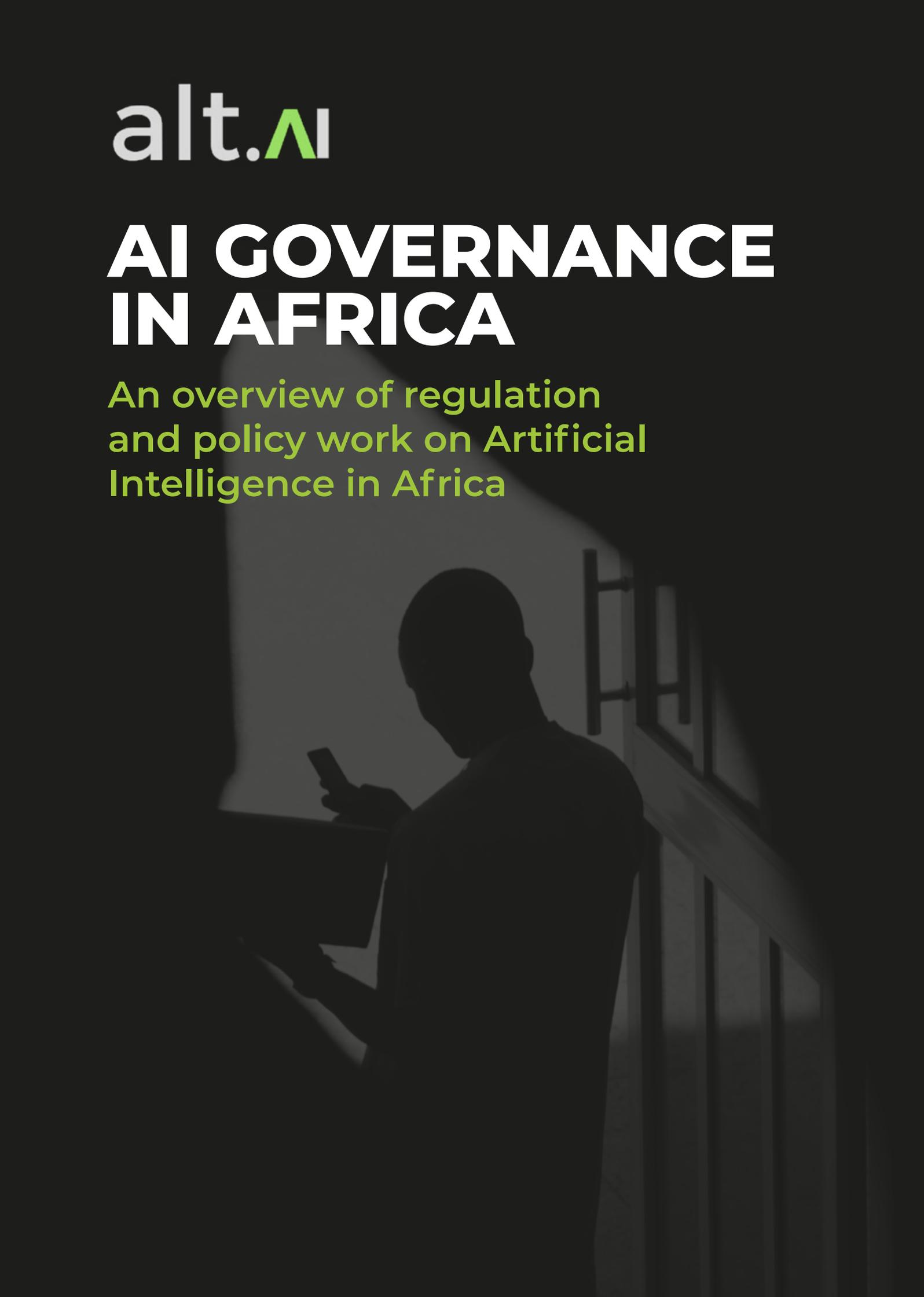


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AI GOVERNANCE IN AFRICA

An overview of regulation
and policy work on Artificial
Intelligence in Africa



AI governance in Africa

An overview of regulation and policy work on Artificial Intelligence in Africa
ALT Advisory, 2022



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ACRONYMS

ACHPR	The African Commission on Human and Peoples' Rights
ADRF	The Africa Digital Rights Funds
ACHPR	The African Commission on Human and Peoples' Rights
AI	Artificial Intelligence
AU	African Union
CCW	Convention on Certain Conventional Weapons
CIPESA	The Collaboration on International ICT Policy for East and Southern Africa
DPA	Data Protection Authority
EU	European Union
LAWS	Legal Autonomous Weapons Systems
OECD	The Organisation for Economic Co-operation and Development
STC-CICT	Specialised Technical Committee on Communication and Information Technologies
UN	United Nations
UNESCO	The United Nations Educational, Scientific and Cultural Organisation

GLOSSARY

Artificial Intelligence	A broad term for a computer or software system's ability to be programmed to 'think' like a person, for example, to analyse information, look for patterns, or make decisions.
Algorithm	A set of rules or instructions that a computer or software system is programmed to follow in order to process information or perform a task.
Automated processing	Any tech-enabled processing of personal information without ongoing human involvement.
Biometrics	The recording of a person's physical or biological information, such as fingerprints, retinal scans, voice features, or facial features, as a way of identifying them.
Data Subject	The person to whom personal information relates.
Machine learning	An AI technique that uses existing datasets to teach a computer or software system how to solve a specific problem, by detecting patterns and similarities in existing and new data.
Personal information / personal data	Information relating to a data subject that identifies the data subject. This includes but is not limited to contact information, information relating to race, gender, sex, pregnancy, national, ethnic, or social origin, information relating to medical, financial criminal, or employment history, and biometric information.
Processing	Any operation or activity concerning personal information which includes but is not limited to the collection, recording, collation, storage, alteration, and use of personal information.

INTRODUCTION

Artificial intelligence (“AI”) is often posited as a solution to the myriad difficulties faced on the African continent. AI discourse is littered with articles that proclaim an optimistic vision for AI-driven social change, with titles that suggest “the future is intelligent”, and that we must “harness AI in Africa.”

We have harnessed it. In [Togo](#), AI has been used to target the poorest cantons for social funds and in Zambia it is being [used](#) to identify and mitigate mis- and disinformation during elections. However, like all ‘silver bullet’ technologies, even a successful solution to one problem can create additional, different ones. AI has reportedly been [used](#) in lethal autonomous weapons systems in Libya, and in an alleged rollout of [national facial recognition systems](#) in Zimbabwe, and a significant amount of [research](#) has documented how AI can entrench biases, deepen injustices, and infringe on a range of human rights.

This is the dichotomous nature of AI technologies. They have enormous potential for good, but also pose significant risks. In addition, the use of AI technologies is by no means confined to democratically elected states, where the citizenry might exercise at least some control over harmful policies and decisions: the vast possible uses of AI technologies by businesses and private actors, often based in the global north, must also be accounted for.

In response, states have grown increasingly interested in the governance of AI. According to the Organisation for Economic Co-operation and Development (“**OECD**”) there are over 700 AI [policy initiatives](#) that have been implemented by 60 countries, [since 2017](#). Further, forty-two countries [adopted](#) the first set of intergovernmental policy guidelines on AI developed by the OECD in 2019. However, only 5 African countries contribute to the OECD’s 60-country membership, and none of the signatory countries were African.

Africa also performed poorly according to the Oxford Insights 2021 [AI Readiness Index](#), which ranks 160 countries by how prepared their governments are to use AI in public services. The report reviewed 41 countries from the Sub-Saharan Africa region and found that the region’s average score is 31.61 out of 100, far below the global average score of 47 out of 100.

So what measures are African countries taking in response to AI?

This report answers that question by mapping the current state of AI governance in Africa. We look at what instruments exist at the continental level and domestically. An analysis of the substance of the instruments is beyond the scope of this report but will be included in future reports.

CONTINENTAL GOVERNANCE

Progress on AI governance has been slow at a continental level, but AI is increasingly on the policy agenda.

AU working group on AI

In 2019, African Union (“**AU**”) Ministers responsible for Communications and ICTs, forming the Specialised Technical Committee on Communication and Information Technologies (“**STC-CICT**”), adopted the [Sharm El Sheikh Declaration](#). The declaration, amongst other things, included an agreement to establish a Working Group on AI. The mandate of the Working Group is to study the creation of a common African stance on AI, the development of an Africa-wide capacity-building framework, and to establish an AI think tank to assess and recommend projects to collaborate on in line with the AU’s Agenda 2063 and the United Nations (“**UN**”) Sustainable Development Goals (SDGs). The Working Group has since [elected](#) Egypt as Chair, Uganda as Vice Chair, and Djibouti as Rapporteur of the group.

Artificial Intelligence Blueprint

During South Africa’s chairmanship of the African Union, in 2020, the President of South Africa, Cyril Ramaphosa called for a unified regional approach to AI to serve as a blueprint for African member-states in developing policies and regulatory instruments on AI. As a result, South Africa – in collaboration with the Smart Africa Alliance, other member-states and multi-disciplinary stakeholders – is working on an [Artificial Intelligence Blueprint](#). The objective of the Blueprint is to outline the most relevant opportunities and challenges of the development and use of AI for Africa, and to make concrete policy recommendations aimed at harnessing the potential of AI while mitigating risk. The Blueprint will reportedly be tabled at the AU soon.

African Commission resolution 473

The African Commission on Human and Peoples’ Rights (“**ACHPR**”) adopted a [resolution](#) (No, 473) in February 2021 on the need to address the implications for human rights of AI, robotics and other new and emerging technologies in Africa. Acknowledging the significant potential impact on human rights, the ACHPR called on state parties to work towards a comprehensive legal and ethical governance framework for AI and related technologies. It calls on the AU and regional bodies to develop a regional regulatory framework that ensures that these technologies respond to the needs of the people of the continent. It also committed to undertake a study to further develop guidelines and norms that address these concerns.

Support for UN-level actions on autonomous weapons

One area in which African countries have demonstrated an intent to develop regional and global regulation is Legal Autonomous Weapons Systems (“**LAWS**”), which [use](#) AI to select and engage targets without human intervention once activated. During an April 2018 meeting of the UN Convention on Certain Conventional Weapons (“**CCW**”) on LAWS, a group of states, including Ghana, Sierra Leone, South Africa, Uganda, Zambia, and Zimbabwe, [recommended](#) concluding a legally binding instrument to address concerns over these weapons systems.

The Malabo Convention

The deployment of AI systems entails enormous amounts of data, which often includes personal information. Data protection legislation accordingly plays an important role in the governance of AI. With regard to data protection in Africa, the AU adopted the [Malabo Convention](#) in 2014, which mandates every state to establish a data protection framework,

“aimed at strengthening fundamental rights and public freedoms, particularly the protection of physical data, and punish any violation of privacy without prejudice to the principle of the free flow of information.” This framework is to be enforced by a national data protection authority (“**DPA**”), and provide for the processing of personal information in line with core data protection principles, such as consent, lawfulness, confidentiality, and transparency.

Importantly for this discussion, the Malabo Convention also includes provisions, albeit limited, for the regulation of AI: in terms of Article 9, its regulation of data processing includes the *automated processing* of personal information (for example, through the use of AI), and Article 14.5 confers the right on all people not to be subject to “a decision which produces legal effects concerning him/her or significantly affects him/her to a substantial degree and which is *based solely on automated processing of data intended to evaluate certain personal aspects* of him/her.”

Equally importantly for this discussion, however, is the fact that the Malabo Convention is not yet in force, as AU member states have been slow to ratify the Convention since its adoption. As of March 2022, [thirteen](#) states have ratified it, bringing it close to the fifteen required to bring it into operation.

Although some progress has been made, there is clearly a need to understand existing governance measures and identify key policy gaps.

DOMESTIC GOVERNANCE

Much like governance efforts at a continental level, domestic initiatives to regulate AI have been slow, and very few measures have been adopted. In this section we look at the state of domestic AI governance in African countries.

Methodology

To map the domestic governance context, we reviewed existing AI regulatory instruments in African countries¹ and combined it with research on existing international tools. We also considered data protection legislation which plays an important role in regulating the personal data used in the AI life cycle. Using this research, we developed six indicators which together provide a picture of the state of AI governance in a given country.

Six indicators of AI governance

1. Does the country have dedicated AI legislation?
2. Does the country's data protection legislation provide rights regarding automated decision-making?
3. Does the country have a national AI strategy?
4. Does the country have a draft policy or white/green paper on AI that indicates progress towards developing an AI strategy, or which builds on a higher-level strategy if one exists?
5. Has the country established an expert commission, taskforce or similar entity to guide its adoption of AI?
6. Is AI a priority in the country's current National Development Plan?

These indicators were used to map the current state of AI governance in each country and the findings are discussed below.

¹ For the purposes of this report, we looked at all territories recognised as countries by the African Union.

FINDINGS

Table 1 | Regulation of artificial intelligence by country

Country	Dedicated AI legislation	Data protection legislation addresses automated decision-making	Has a national AI strategy	Has draft policy on AI	Expert body on AI	AI is a priority in National Development Plan
Algeria	No	Yes	No	No	Yes	Yes
Angola	No	Yes	No	No	No	No
Benin	No	Yes	No	No	Yes	No
Botswana	No	Yes	No	No	No	No
Burkina Faso	No	Yes	No	No	No	No
Burundi	No	No	No	No	No	No
Cabo Verde	No	Yes	No	No	No	No
Cameroon	No	No	No	No	No	No
Central African Republic	No	No	No	No	No	No
Chad	No	No	No	No	No	No
Comoros	No	No	No	No	No	No
Congo (Rep. of)	No	Yes	No	No	No	No
Cote d'Ivoire	No	Yes	No	No	No	No
Democratic Republic of Congo	No	No	No	No	No	No
Djibouti	No	No	No	No	No	No
Egypt	No	Unknown	Yes	No	Yes	No
Equatorial Guinea	No	Unknown	No	No	No	No
Eritrea	No	No	No	No	No	No
Eswatini	No	Yes	No	No	No	No
Ethiopia	No	No	No	No	Yes	No
Gabon	No	Yes	No	No	No	Partial
The Gambia	No	Partial	No	No	No	No
Ghana	No	Yes	No	No	No	No
Guinea	No	Yes	No	No	No	No
Guinea-Bissau	No	No	No	No	No	No
Kenya	No	Yes	No	No	Yes	No
Lesotho	No	Yes	No	No	No	No
Liberia	No	No	No	No	No	No
Libya	No	No	No	No	No	No
Madagascar	No	Yes	No	No	No	No
Malawi	No	No	No	No	No	No
Mali	No	Yes	No	No	No	No
Mauritania	No	Yes	No	No	No	No

Mauritius	Partial	Yes	Yes	No	Yes	Yes
Morocco	No	Yes	Yes	No	Yes	Yes
Mozambique	No	No	No	No	No	No
Namibia	No	No	No	No	Yes	No
Niger	No	Yes	No	No	No	No
Nigeria	No	Yes	No	No	Yes	Partial
Rwanda	No	Yes	No	No	Yes	No
Sao Tome & Principe	No	Yes	No	No	No	No
Senegal	No	Yes	No	No	No	No
Seychelles	No	No	No	No	No	Yes
Sierra Leone	No	No	Yes	No	Yes	Yes
Somalia	No	No	No	No	No	No
South Africa	No	Yes	No	No	Yes	No
South Sudan	No	No	No	No	No	No
Sudan	No	No	No	No	No	No
Tanzania	No	No	No	No	No	No
Togolese Republic	No	Yes	No	No	No	Partial
Tunisia	No	Yes	No	Yes	Yes	No
Uganda	No	Yes	Partial	No	Yes	Partial
Sahrawi Arab Democratic Republic	No	No	No	No	No	No
Zambia	No	Yes	No	No	No	No
Zimbabwe	No	Yes	No	No	No	Yes

Findings

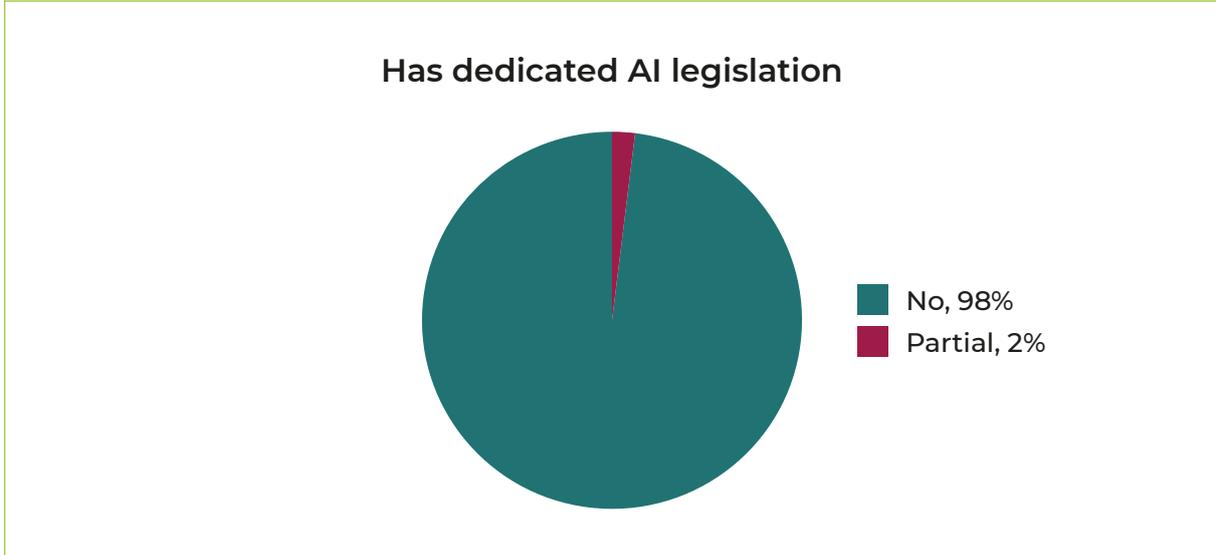
- No country has dedicated AI legislation – though Mauritius has partial legislation on AI.
- 30 countries have data protection legislation that addresses automated decision making.
- 4 countries have a national AI strategy.
- 1 country has a draft policy or a white/green paper on AI.
- 13 countries have established an expert commission or taskforce on AI.
- 6 countries include AI as a priority in their National Development Plan, while 4 other countries' plans make partial mention of AI.

Notes on Methodology

The findings are based exclusively on publicly available information. Only where we have found clear evidence of the existence of a policy, strategy, or piece of legislation (in other words, the document itself or verifiable news reports that point to the existence of a document) have we marked a country as “Yes.” This research was last updated in June 2022.

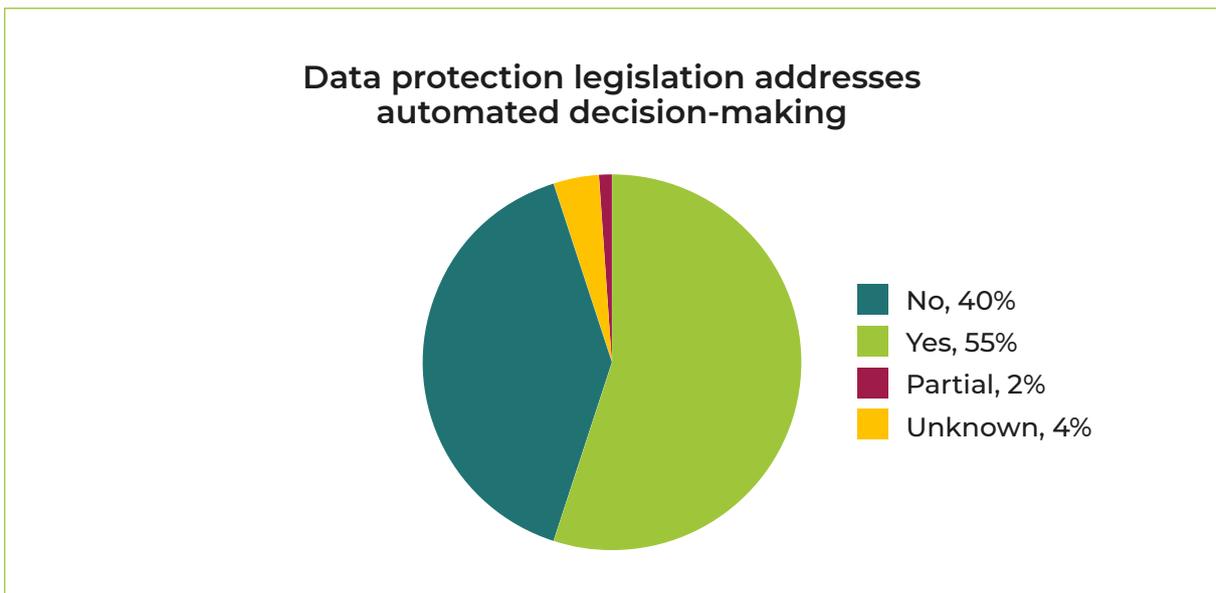
Dedicated AI legislation

We found that no country in Africa has yet developed and adopted dedicated AI legislation. The closest yet is Mauritius, which implemented licensing procedures for entities that provide investment and portfolio management services enabled by artificial intelligence in 2021.



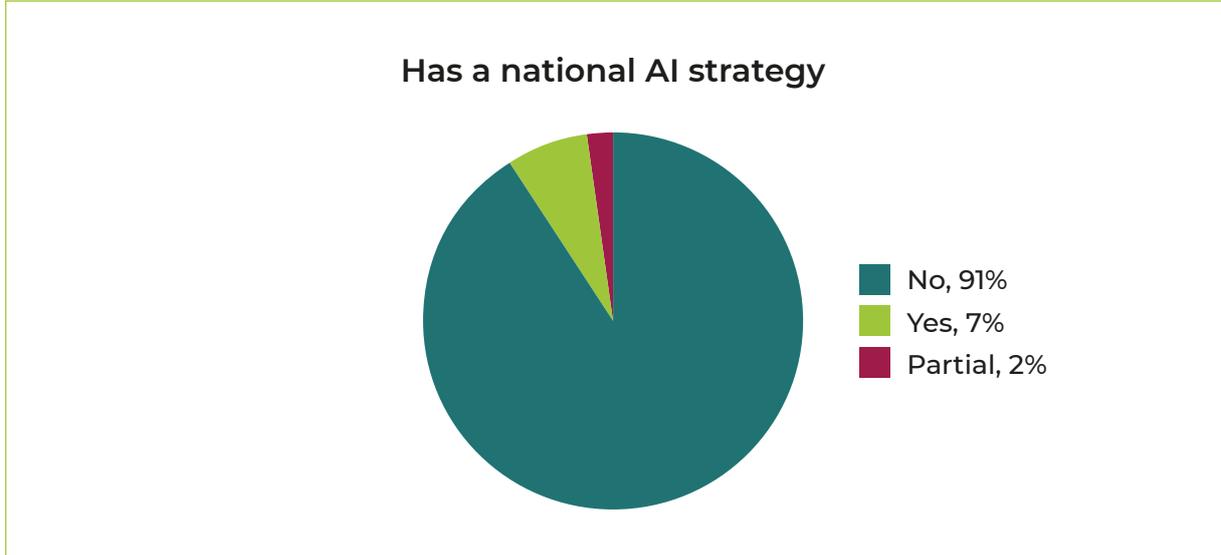
Data protection legislation on automated processing

As of May 2022, 55% of African countries have data protection legislation that provides data subjects with some degree of rights not to be subject to automated decision-making. It remains concerning, however, that 35% of the 55 countries do not have data protection legislation in force at all. 14% of countries have data protection legislation but it does not address automated decision-making and its impact on the rights of data subjects.



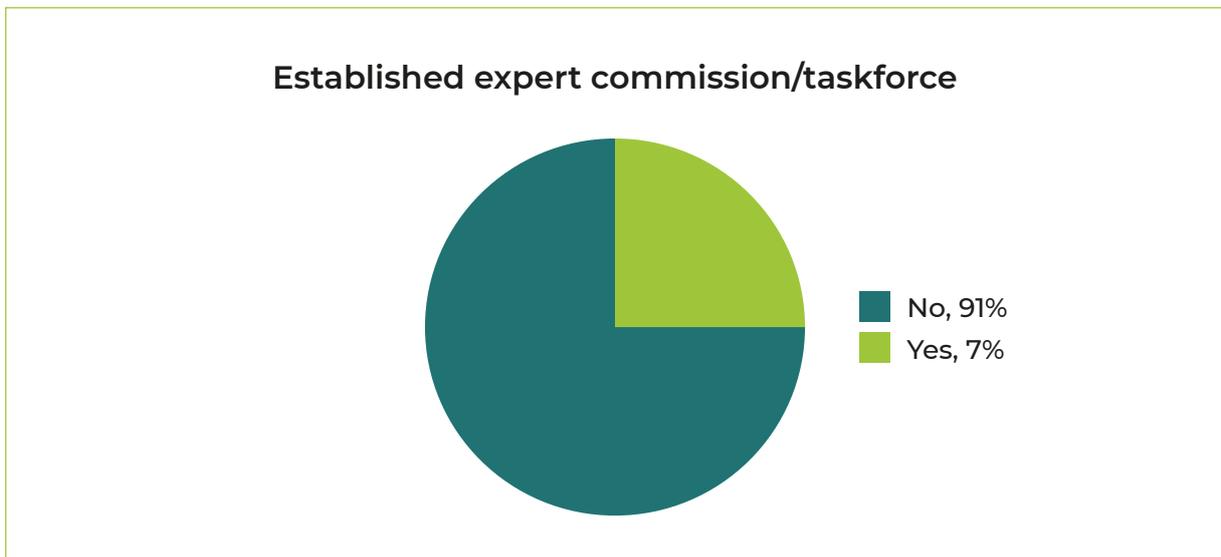
National AI strategies

Four countries – Egypt, Mauritius, Morocco, and Sierra Leone – have adopted national AI strategies, and one more (Uganda) has a national 4IR strategy that deals extensively with AI and related technologies. Tunisia appears to be in the process of developing a draft policy on AI.



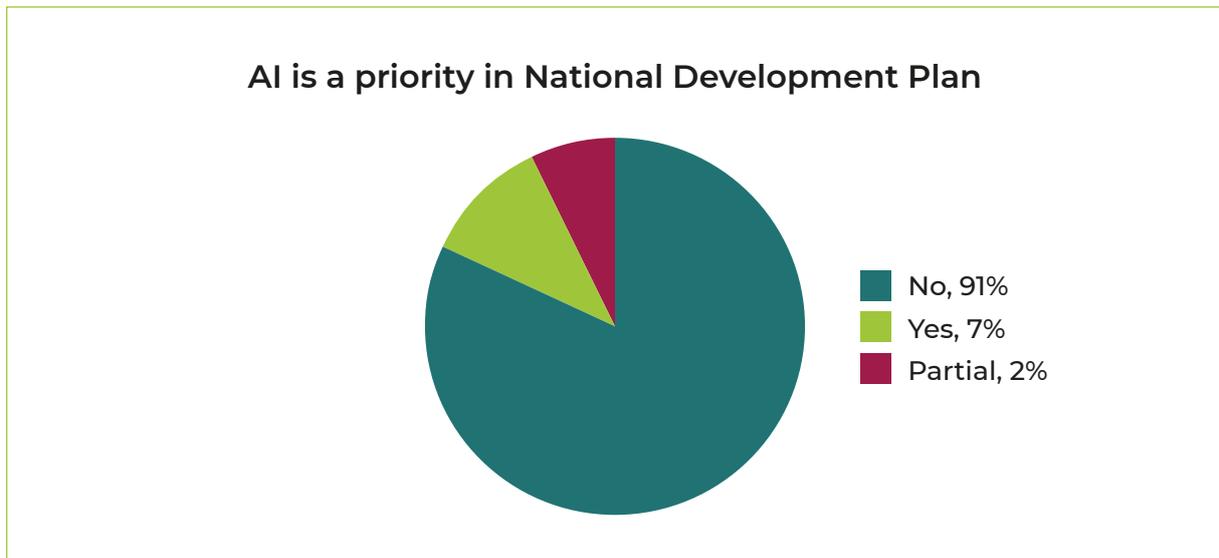
Expert bodies on AI

More encouragingly, a quarter of African countries have established expert commissions, taskforces, or similar entities to guide the country's adoption of AI.



AI prioritised in national planning

Nevertheless, it is surprising that only 11% of African countries – six in total – explicitly recognise AI as a priority in their National Development Plans, with a further four countries partially doing so.



These findings complement recent survey research conducted by the United Nations Educational, Scientific and Cultural Organisation (“UNESCO”) which [finds](#) that there is a “wide variation in the nature and scope of policy instruments used by countries in Africa for the governance of AI.” UNESCO found significant ongoing initiatives to govern the use of AI:

- Eighteen out of 32 countries have ongoing initiatives to guide the development of AI at the national level.
- The development and use of AI is a priority as per the national development plans in 21 out of 32 countries.
- Out of the 32 respondents, thirteen countries have launched AI strategies, thirteen have developed AI policies, six have reported enacting legislation to address some of the challenges of AI, twelve have established Centres of Excellence on AI, and three have reported issuing ethical guidelines for AI.
- According to research by UNESCO, the development and use of AI is listed as a priority in the national development plans in 21 out of the 32 countries in Africa surveyed.

Our research finds that many of AI policy initiatives in Africa are either not yet in the public domain. This indicates either that the development of AI frameworks remains opaque or that progress has been slow in reaching final outputs, or a combination of both. This is deeply concerning and implies a lack of public participation in and oversight over the development of AI regulatory frameworks in countries in Africa.

CONCLUSION

It is clear that progress on AI governance has been slow in many African countries, though it is promising to see AI getting more traction in several countries' policy agendas. However, progress cannot be measured purely in numbers; the quality and underlying logic of these policy initiatives are equally important.

As evidenced above, we were able to confirm 55 initiatives or responses aimed at the governance of AI by African Countries. Most of these – 30 out of 55 – were in the context of data protection.

Despite significant progress being made on the regulation of data protection on the continent in recent years, UNESCO has [noted](#) that “these legal provisions may need to be updated to the new uses and applications of data engendered by AI to offset biases and discriminations, including on the basis of race and gender, or loss of personal privacy through predictive analysis among others. Beyond data governance and personal data protection, there is also a need for legal protection against algorithmic bias and discrimination.”

It is concerning that such legal protection does not currently exist in Africa, despite the rapid adoption of AI tools for a wide range of uses across the continent. The predominant mode of AI governance through data protection likely falls short of the protections required to effectively govern AI. Equally, we anticipate the risk of states' national policies and strategies on AI to tend towards uncritically embracing AI-driven solutions, and prioritising opportunities for economic growth and competitiveness, without due consideration for safeguarding human rights and ensuring accountable, ethical, and transparent uses of AI.

In addition to the need for regulatory frameworks, there [are](#) also “significant human resource capacity gaps” that need to be plugged in order for the continent to be able to meaningfully and appropriately regulate AI and enforce such regulation. This requires building the capacities of the legislature, the executive, and the judiciary, in particular to engage with the ethical and human rights implications of AI.

In summary, there is a lot of work needed to ensure the effective governance of AI in Africa. However, a growing body of research and policy work, both regionally and internationally, provide important guidance and standards for African societies seeking to start this work (or continue it). Given the significant potential for AI technologies to either enable or infringe on human rights, it is work worth doing.