Africa Artificial Intelligence & Privacy Report 2025

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AFRICA AI PRIVACY REPORT 2025

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It reflects extensive research and engagement with key stakeholders to explore the evolving intersection of artificial intelligence, data protection, and privacy in Africa. The insights presented in this report aim to contribute to ongoing discussions on responsible AI governance, ensuring that legal and policy frameworks adequately address emerging challenges while fostering innovation.

The team expresses its sincere gratitude to the McGovern Foundation for its invaluable support in making this work possible. Additionally, we extend our appreciation to all stakeholders who generously shared their knowledge and experiences on artificial intelligence and data governance. Their contributions have enriched this report, providing a nuanced understanding of the opportunities and risks that AI presents within the African context and beyond.

Executive Summary

Artificial Intelligence (AI) is rapidly transforming Africa's digital landscape, with applications spanning numerous sectors that include financial services, healthcare, law enforcement, education, and governance. While AI presents significant opportunities for economic growth, efficiency, and innovation, it also raises pressing concerns about data privacy, security, and ethical governance. As AI adoption increases, many African nations are faced with the challenge of developing robust regulatory frameworks to balance technological advancement with fundamental rights protection.

The Africa AI Privacy Report 2025 explores these challenges and opportunities, providing an in-depth analysis of the evolving AI privacy landscape in Africa. It highlights global approaches to AI governance, sector-specific privacy concerns, current regulatory gaps, and emerging best practices while offering strategic policy recommendations to guide responsible AI deployment across the continent.

HIGHLIGHTS

AI has a growing influence on privacy. AI is transforming industries across Africa, but it is also raising privacy concerns, particularly regarding surveillance, data protection, and algorithmic bias. These concerns are well visible in sectors such as:

- Law Enforcement and Surveillance: AI-powered surveillance technologies, including facial recognition and predictive policing, are increasingly used across Africa. However, there is a growing concern that such systems could lead to privacy violations, mass surveillance, and discriminatory profiling. For instance, Kenya, Uganda and Zimbabwe have integrated AI-driven surveillance under "Safe City" initiatives, raising concerns about misuse and lack of transparency.
- **Healthcare**: AI is enhancing diagnostics and patient care, but it also raises issues around sensitive health data security. For example, Ghana's MinoHealth AI Labs is applying deep learning to automate radiology, while Tanzania and Zambia have adopted AI-powered tuberculosis detection tools. However, without strict privacy safeguards, such innovations risk exposing sensitive patient data to breaches or unauthorized use.
- **Financial Services:** AI is driving fintech growth through credit scoring, fraud detection, and customer profiling. Yet, concerns over biased algorithms and lack of financial data protection persist. In Nigeria, AI-driven credit assessments are being used by digital lenders, but consumers face limited transparency on how their financial data is processed and shared.
- **Judicial Systems:** AI is being introduced in legal research, court transcriptions, and case management. Morocco, Tanzania and Egypt are examples of African countries that have begun using AI to transcribe court rulings, yet concerns remain regarding accuracy, data security, and fairness in automated legal decision-making.

More countries are developing AI regulation on the continent. Presently, 13 African countries have developed national AI strategies - Mauritius, Egypt, Ghana, Senegal, Benin, Algeria, Tunisia, Ethiopia, Rwanda, South Africa, Nigeria, Kenya and Zambia. However, the regulatory landscape is fragmented, and enforcement mechanisms remain weak.

Regulatory gaps still exist in Africa, particularly as relates to AI-Specific Legislation and Regulation. Many African countries lack AI-specific legislation for governing AI's rapid evolution, with existing data protection regulations proving inadequate to address AI-driven privacy risks. While 13 countries have made strides in developing national AI strategies, these efforts still fall short in explicitly addressing AI's impact on privacy, as many of these countries continue to lack AI-specific provisions, leaving issues like algorithmic decision-making, AI profiling, and bias largely unregulated.

There is a need to strengthen AI Governance through data protection frameworks. While data protection laws and Data Protection Authorities (DPAs) serve as critical regulatory mechanisms for artificial intelligence (AI) governance in Africa, they alone are insufficient to fully address the unique risks and challenges posed by AI systems. The complexity and opacity of AI models, often referred to as the "black box" problem, make it difficult to apply traditional data protection principles such as transparency, accountability, and fairness in a meaningful way.

Conventional safeguards like Data Protection Impact Assessments (DPIAs) may not adequately account for AI-specific risks such as algorithmic bias, automated decision-making, and discriminatory outcomes. To bridge this gap, countries should consider leveraging AI-related provisions within data protection laws, including clear guidelines for AI risk assessments, algorithmic transparency requirements, and regulatory oversight of AI-driven data processing.

There is growing advocacy for the role of AI Ethics and African Cultural Values. This growing advocacy for AI frameworks seeks to reflect African moral traditions, emphasizing community-focused ethics, fairness, and inclusivity. Incorporating principles like Ubuntu into AI governance ensures that technology aligns with societal values. However, few African nations have established AI ethics guidelines, making it critical to integrate ethical AI principles into national and regional policies.

AI-driven data processing presents significant risks on the continent, including bias and discrimination from flawed datasets, increased privacy concerns due to AI-powered surveillance, and tensions over data sovereignty as countries seek greater control over cross-border data flows. Additionally, regulatory gaps leave legal frameworks struggling to keep pace with rapid AI advancements, increasing the risk of data misuse and inadequate safeguards for individuals.

The region still struggles with cross-border data governance challenges. Africa's fragmented data protection landscape complicates cross-border data flows, particularly in AI applications that rely on large datasets. Seemingly, countries with strong data localization laws, such as Zambia pose challenges to regional AI integration.

AI presents immense opportunities for Africa's development, but it also introduces complex privacy and ethical challenges that require urgent policy action. The Africa AI Privacy Report 2025 underscores the need for AI-specific regulations, stronger institutional oversight, and ethical AI frameworks grounded in African cultural values. By taking proactive steps to govern AI responsibly, African nations can harness AI's potential while safeguarding fundamental privacy rights and ensuring equitable technological advancement.

Introduction

Artificial Intelligence (AI) is transforming industries across the globe, offering unprecedented opportunities while simultaneously introducing complex risks and deepening existing disparities. According to the International Monetary Fund (IMF), nearly 40% of jobs in emerging markets and 26% in low-income countries are exposed to AI, compared to 60% in advanced economies, where cognitive tasks are more prevalent. While lower exposure to AI-driven disruptions may seem advantageous for emerging economies, it also means these regions are less positioned to reap the benefits of AI-driven productivity gains. This imbalance exacerbates the digital divide, widening income disparities both within and between countries.

Beyond economic concerns, AI presents significant risks, including algorithmic bias and discrimination due to unrepresentative datasets, opacity in decision-making processes, and growing inequalities in AI access and inclusion. AI-powered surveillance, the misuse of personal data, and cybersecurity vulnerabilities further compound these challenges, raising serious privacy concerns.² As AI systems become more sophisticated, ensuring accountability, transparency, and fairness in their deployment is

¹ IMF (2024), Staff Discussion Paper on "Gen-AI: Artificial Intelligence and the Future of Work," International Monetary Fund

² World Bank (2024) Global trends on AI governance, evolving country approaches, World Bank Group

paramount. These growing risks have spurred regulatory efforts worldwide, prompting governments and regional bodies to introduce laws, frameworks, and guidelines aimed at balancing innovation with ethical and legal safeguards.

In response to these challenges, various countries and regional organizations have developed AI governance mechanisms that reflect a blend of local legal traditions and global ethical principles. Whether through comprehensive legislation, sector-specific regulations, or nonbinding guidelines, the overarching goal remains the same—fostering AI-driven innovation while upholding individual rights, data protection, and societal well-being.

This report provides a comprehensive analysis of AI governance frameworks, offering insights into global, regional, and national approaches to AI regulation. It begins by examining the intersection of AI and privacy, highlighting how AI is reshaping privacy conversations, particularly in Africa. The report then explores global AI governance frameworks, identifying key international standards and best practices before shifting focus to Africa's regulatory landscape. It delves into the continent's AI policies, frameworks, and emerging trends, particularly in key sectors such as financial services, healthcare, security and surveillance, education and research, and the administration of justice.

Additionally, the report assesses the adequacy of existing data protection and privacy laws in governing AI, evaluates ethical AI principles in African contexts, and outlines pressing challenges, including bias, discrimination, and regulatory gaps. Finally, it offers policy recommendations and a forward-looking perspective on AI governance, providing country-specific analyses of AI regulations, data protection laws, and AI-related initiatives across Africa. Through this comprehensive approach, the report seeks to inform and support policymakers, businesses, and civil society in navigating the evolving AI landscape while ensuring privacy and fundamental rights remain protected.

The Intersection of AI, Data Protection and Fundamental Human Rights

The rise of Artificial Intelligence (AI) presents immense potential to improve social welfare while also introducing significant risks.³ Seemingly, the increasing interconnectedness of data protection and AI regulation is emerging as essential pillars of the modern legal framework. As innovation reshapes Africa's digital landscape, the intersection of Artificial Intelligence (AI), data protection, and privacy has become a critical area of discussion, influencing policy, governance, and the protection of fundamental rights.

To begin with, AI relies heavily on data, enabling it to collect and process vast amounts of information. This enhanced capability significantly increases its ability to observe human activity, such as through biometric identification in public spaces, raising serious privacy concerns.⁴ Additionally, due to AI's self-learning capabilities and growing autonomy, along with its ability to rapidly analyze data and explore decision paths that humans might not have thought about, it can identify correlations within datasets

³ G. Mazzini, A System of Governance for Artificial Intelligence through the Lens of Emerging Intersections between AI and EU Law, in A. De Franceschi, R. Schulze (eds), Digital Revolutions – New challenges for Law, Munich: C.H. Beck, 2019, pp. 1, 3-4.

⁴ Ufert, F. (2020) <u>AI Regulation through the lens of Fundamental Rights: How well does the GDPR address the challenges posed by AI?</u>, European Papers.

without establishing causation.⁵ As a result, AI may generate solutions that are difficult for humans to comprehend, making decisions without clear reasoning. This lack of transparency, known as the "black-box phenomenon," significantly reduces AI's explainability and raises concerns about accountability.6

In light of the fundamental rights of privacy, personal data protection, and non-discrimination, the main concerns surrounding AI constitute its increased capacities of human observation, the potential to de-anonymise large data sets, opaque decision-making, and the production of discriminatory results.⁷ Despite this, efforts to regulate AI through the lens of fundamental rights law remain largely underdeveloped, highlighting the need for a more structured and rights-based approach to AI governance. Key concerns from a fundamental rights perspective include biased and discriminatory AI systems, as well as AI-driven infringements on privacy and data protection.8 For instance, the concept of specific consent requires that consent be informed, meaning that individuals must not only be aware that their personal data is being processed but also understand how and for what purposes it is being used. 9 In theory, this requirement should serve as a safeguard against fundamental rights violations by AI systems handling personal data. However, obtaining truly informed consent becomes challenging when AI systems generate unpredictable outcomes. 10 Additionally, the common method of securing consent—such as clicking "I have read and agree to the Terms"—has been widely criticized as one of the biggest misconceptions on the internet. 11 This practice risks undermining the very protection that specific consent is meant to provide, making it an increasingly ineffective safeguard in the face of AI-driven data processing. This raises a critical question: To what extent do existing data protection laws across the continent adequately address the challenges AI poses to privacy, personal data protection, and non-discrimination—three key intersections between AI and fundamental rights?

How AI is Reshaping Privacy Conversations in Africa

From the foregoing, it goes without saying that AI is significantly reshaping privacy conversations worldwide and more so in Africa by challenging existing privacy frameworks and policies. The introduction of AI in sectors such as finance, healthcare, security, and education has led to a growing demand for robust privacy protections and clearer regulations governing AI's use.

⁵ Ufert, F. (2020) AI Regulation through the lens of Fundamental Rights; How well does the GDPR address the challenges posed by AI?, European Papers.

⁶ Ufert, F. (2020) AI Regulation through the lens of Fundamental Rights; How well does the GDPR address the challenges posed by AI?, European Papers.

⁷ Ufert, F. (2020) AI Regulation through the lens of Fundamental Rights: How well does the GDPR address the challenges posed by AI?, European Papers.

⁸ F. Fitsilis, Imposing Regulations on Advanced Algorithms, Berlin: Springer, 2019, p. 13; R. Calo, Peeping HALs: Making Sense of Artificial Intelligence and Privacy, in European Journal of Legal Studies, 2010, p. 171; L. Marin, K. Kraijciková. Deploving Drones in Policing Southern European Border: Constraints and Challenges for Data Protection and Human Rights, in A. Zavrsnik (ed.), Drones and Unmanned Aerial Systems, Berlin: Springer, 2016, p. 110.

⁹ Court of Justice, judgment of 24 September 2019, case C-136/17, GC and Others v. CNIL, para. 62.

¹⁰ Ufert, F. (2020) AI Regulation through the lens of Fundamental Rights: How well does the GDPR address the

challenges posed by AI?, European Papers.

11 S. Wrigley, Taming Artificial Intelligence, cit., p. 192; S. Hänold, Profiling and Automated Decision-Making, cit., pp. 137 and 147.

In the financial services sector, for example, AI technologies such as automated lending, fraud detection, and customer profiling rely on analyzing vast amounts of personal financial data. While these technologies can enhance efficiency and accessibility, they also raise concerns regarding transparency, consent, and the potential misuse of sensitive information. The debate over AI's role in financial privacy is heightened by concerns about individuals' ability to control their data and protect themselves from discriminatory practices, such as algorithmic bias.

Similarly, AI-powered biometric systems are increasingly being adopted in areas such as border control, law enforcement, and public safety across Africa. While these technologies offer benefits such as improved security and convenience, they also create new privacy risks. The use of facial recognition technology, for example, has been controversial in many parts of the world due to concerns over surveillance and the potential for misuse by governments or private companies. In Africa, where there are significant gaps in digital infrastructure and legal protections, the deployment of such technologies often occurs without adequate safeguards to protect privacy and human rights.

AI-driven health technologies, including diagnostic tools, electronic health records, and predictive health models, similarly rely heavily on personal health data and raise significant privacy concerns such as unauthorized access to sensitive medical information, inadequate data protection mechanisms, and the risk of discrimination based on health data.

African countries are recognizing the need for a comprehensive approach to AI governance, with privacy and data protection being central elements of these discussions. National and regional data protection laws are being developed with the aim to provide a regulatory framework for the protection of individuals' privacy in the context of AI and other emerging technologies. However, gaps in implementation and enforcement remain, particularly in addressing the rapid pace of AI innovation and the complexity of cross-border data flows.

International efforts to establish guidelines for AI governance are also influencing privacy conversations in Africa with the likes of the UNESCO Recommendation on the Ethics of Artificial Intelligence, the G7 Hiroshima Process on Generative AI, and the European Union's AI Act serving as examples of global initiatives that are setting the stage for national and regional AI governance frameworks in the continent. There is thus a growing recognition of the need for AI regulations that not only address privacy concerns but also promote ethical AI practices.

Global AI Governance Frameworks and Standards

The governance of artificial intelligence (AI) has become a critical global issue, with various frameworks, principles, and regulatory efforts emerging to guide the ethical and responsible development, deployment, and use of AI systems. According to the Organisation for Economic Cooperation and Development (OECD) AI Policy Observatory,¹² there are over 1000 AI policy initiatives worldwide. Various professional societies such as the ACM, IEEE, NIST, ISO/IEC 23894:2023 have drafted frameworks establishing technical means of operationalizing responsible AI principles as have international organisations such as OECD/G20 AI Principles, UNESCO Recommendations on the Ethics of AI, the

¹² OECD.AI (2021), <u>Database of National AI Policies</u>, powered by EC/OECD (2021)

CoE Treaty on Artificial Intelligence, UN General Assembly resolution on AI, various notable national AI frameworks and private sector stakeholders.¹³

UN General Assembly Resolution on AI

On 21st March 2024, the United Nations passed a resolution¹⁴ on AI urging member states to guarantee the development of safe, secure and trustworthy AI systems that respect human rights. The resolution recognizes that AI systems should be human centric, reliable, explainable, ethical, inclusive, promote and protect human rights, international law, privacy preserving, sustainable development oriented and responsible.¹⁵ It further recognizes that improper or malicious design, development and deployment and use of AI systems without adequate safeguards poses risks that could hinder achievement of the 2030 Agenda for sustainable development; widen digital divides; reinforce structural inequalities and biases; lead to discrimination; undermine information integrity and access to information; undercut the protection, promotion and enjoyment of human rights and fundamental freedoms.¹⁶ Although the resolution is non-binding, it communicates the United Nations' commitment towards ensuring responsible innovation in AI.

The UN General Assembly Resolution on AI was backed by the support of the following African countries: Cabo Verde, Côte d' Ivoire, Djibouti, Equatorial Guinea, Kenya, Liberia, Morocco, Sierra Leone, South Africa and Zambia.¹⁷

UNESCO Recommendations on Ethics of Artificial Intelligence

In 2020, UNESCO embarked on a two-year project to develop a global standard for artificial intelligence. It drafted recommendations for AI with the aim to formulate ethical values, principles and policy recommendations for the research, design, development, deployment and usage of AI, to make AI systems work for the good of humanity, individuals, societies, and the environment. The UNESCO draft Recommendation sets out about a dozen principles, five Action Goals, and eleven Policy Actions. Notable among the UNESCO recommendations is the emphasis on Human Dignity, Inclusion, and Diversity. UNESCO also expresses support for Human Oversight, Privacy, Fairness, Transparency and Explainability, Safety and Security, among other goals. Understandably, UNESCO is interested in the scientific, educational, and cultural dimensions of AI, the agency's program focus.¹⁸

The recommendations aim to:

• Provide a universal framework of values, principles and actions to guide states in the formulation of their legislation, policies or other instruments regarding AI consistent with international law;

¹³ World Bank (2024), Global trends on AI governance, evolving Country Approaches, World Bank Group

¹⁴ UN General Assembly (2024), <u>Seizing the opportunities of safe, secure and trustworthy artificial intelligence</u> systems for sustainable development, United Nations

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Mishra V. (2024), General Assembly adopts Landmark Resolution on Artificial Intelligence, United Nations

¹⁸ CAIDP (2023), <u>Artificial Intelligence and Democratic Values Index</u>, Center for Artificial Intelligence and Digital Policy.

- Guide the actions of individuals, groups, communities and private sector companies to ensure the embedding of ethics in all stages of AI system lifecycle;
- Protect, promote and respect human rights fundamental freedoms, human dignity and equality;
- Foster multi stakeholder, multidisciplinary and pluralistic dialogue and consensus building about ethical issues relating to AI systems; and
- Promote equitable access to developments and knowledge in the field of AI and the sharing of benefits with particular attention to the needs of low income and developing countries.

While the Recommendations provide significant foundation for states to follow when drafting their national AI strategies and frameworks, some of the key challenges of implementing this Recommendations are how broad the guidelines are and the lack of specific actionable steps pose difficulties for organisations to translate them into concrete national policies or sector specific guidelines. The recommendations also highlight the risk of AI exacerbating global inequalities but fail to provide detailed strategies for ensuring equitable access to AI technologies across various regions.

To enhance the impact of the Framework, UNESCO should revise its guidelines by incorporating specific action plans with detailed case studies to support effective implementation, investing in capacity-building initiatives—especially in low- and middle-income countries—to strengthen AI governance, and establishing mechanisms for continuous review and adaptation to keep pace with technological advancements. Additionally, fostering greater public engagement and education on AI ethics will ensure diverse perspectives are considered, while promoting international collaboration will facilitate the sharing of best practices, resources, and knowledge for a more coordinated and equitable global approach to AI ethics.

Adopted in 2021, the Recommendation on the Ethics of Artificial Intelligence is applicable to all 194 member states of UNESCO, which includes all 54 African countries. ¹⁹ Seemingly, UNESCO is deploying an assessment methodology in 22 African countries to identify strengths and gaps, in a bid to expand digital infrastructure and improve skills - factors crucial for responsible AI integration. ²⁰

Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law

The Council of Europe is an international human rights organization with forty-six member States.²¹ On 17th May 2024 it adopted the first global legally binding instrument²² designed to ensure that AI upholds common standards in human rights, democracy and the rule of law and to minimise the risk of those rights and principles being undermined as a result of the use of AI.²³ Opened up for signature on 5th September

¹⁹ UNESCO (n.d), <u>List of the Member States and the Associate Members of UNESCO and the date on which they became Members (or Associate Members) of the Organization</u>, pax.unesco.org

²⁰ UNESCO (2025), <u>Harnessing emerging technologies for sustainable development in Africa, including through the implementation of the Recommendation on the Ethics of AI, unesco.org.</u>

²¹ COE (n.d), Council of Europe Key Facts Accessed 10 January 2025.

²² COE (2024), <u>Framework Convention on Artificial Intelligence and Human Rights</u>, <u>Democracy and the Rule of Law</u>, Council of Europe Treaty Series.

²³ COE (n.d) Council of Europe and Artificial Intelligence, Accessed on 10th January 2025.

2024²⁴ to both member and non-member states, the Treaty highlights the need to establish a globally applicable legal framework setting out common general principles governing AI systems²⁵. It aims to ensure that activities within the lifecycle of AI systems are fully consistent with human rights, democracy and rule of law.²⁶ More importantly, it sets out general principles related to activities within the lifecycle of AI system; human dignity and individual autonomy,²⁷ transparency and oversight,²⁸ accountability and responsibility,²⁹ equality and non-discrimination,³⁰ privacy and data protection,³¹ reliability and Safe Innovation.³² This treaty represents a major milestone in AI governance by setting legally enforceable standards for AI systems.

The Framework Convention was drafted by the 46 member states of the Council of Europe, with the participation of all observer states: Canada, Japan, Mexico, the Holy See and the United States of America, as well as the European Union, and a significant number of non-member states: Australia, Argentina, Costa Rica, Israel, Peru and Uruguay. Its signatories include Andorra, Georgia, Iceland, Liechtenstein, Montenegro, Norway, Republic of Moldova, San Marino, United Kingdom, Canada, European Union, Israel, Japan, and the United States of America.³³ Other non-member States may accede to the Convention by invitation once it has entered into force, subject to unanimous consent from the Parties to the Convention following consultations by the Committee of Ministers of the Council of Europe.³⁴

While not predominantly featured in the development and adoption process, the Council of Europe is actively seeking to engage, on a peer-to-peer basis, with like-minded African countries and with regional organisations, particularly the African Union, to promote global governance of AI in the context of human rights, democracy and the rule of law.³⁵

²⁴ COE (n.d Committee on Artificial Intelligence (CAI), Accessed on 10th January 2025.

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Preamble to the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law.

Article 1 of the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law.

Article 7 of the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law.

Article 8 of the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law.

Article 9 of the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law.

Article 10 of the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law,

Article 11 of the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law.

Article 12 of the <u>Council of Europe Framework Convention on Artificial Intelligence and Human Rights</u>, <u>Democracy and the Rule of Law.</u>

³³ Council of Europe (n.d), <u>The Framework Convention on Artificial Intelligence</u>, coe.int. Accessed 22 March 2025.

³⁴ Babická K., Giacomin C. (2024), <u>Understanding the Scope of the Council of Europe Framework Convention on AI</u>, Opinio Juris.

³⁵ Council of Europe (2025), African engagement in Global AI Governance, coe.int.

OECD/G20 Principles of Trustworthy AI

The other notable global AI policy framework is the OECD AI Principles for trustworthy AI. This is a comprehensive framework aimed at fostering innovation and trust in AI by promoting responsible stewardship of trustworthy AI. It was first adopted in 2019 and revised in 2023 and 2024 to reflect technological advancements, including Generative AI. These principles have been endorsed by 47 countries including both members and non-members of the OECD as well as the G20 member countries. The principles guide AI actors in their efforts to develop trustworthy AI and provide policy makers with recommendations for effective AI policies. Countries use the OECD AI Principles and related tools to shape policies and create AI risk frameworks, building a foundation for global interoperability between jurisdictions. More specifically, the OECD AI Principles provide recommendations including two substantive sections: Principles for responsible stewardship of trustworthy AI and national policies and international co-operation for trustworthy AI. The document outlines principles and recommendations for AI development and deployment, emphasizing human rights, democratic values, and sustainable development.

Of the 47 countries listed as governments that have committed to the OECD AI Principles, only 2 are African States: Egypt and South Africa.³⁷ Since signing on to the OECD AI Principles in 2019, countries have been using them as guidance to craft policies to tackle AI risks and capitalise on opportunities.

Universal Guidelines for AI (UGAI)

One of the most notable non-binding international agreements that have influenced global AI policy is the Universal Guidelines for AI (UGAI). The UGAI were released at the Global Privacy Assembly Conference (formerly ICDPPC), held at the European Parliament in October 2018. The UGAI's main purpose is to promote transparency and accountability in the development and deployment of AI systems and to ensure that humans retain control over the systems they create³⁸. The guidelines lay down twelve core principles to regulate these intelligent computational systems and propose recommendations that can improve and inform their design. These include the right to transparency, human determination, identification obligation, fairness obligation, assessment and accountability obligation. To emphasize the need to ensure that AI systems remain within human control, the guidelines uniquely provide that where it is no longer possible to confine the AI system within human control then the system must be terminated. Overall, the guidelines present a more forward-looking approach that imposes obligations on policy makers as well as AI developers to incorporate practical AI assessments in the design and deployment process of the AI models as well as AI policy frameworks. However, they remain challenged with implementation due to the lack of enforcement mechanisms.

UGAI was endorsed by organisations and individual experts across African countries like South Africa, Nigeria, Ghana, and Kenya.³⁹

³⁶ OECD (2019), <u>AI Principles, the principles for trustworthy AI</u>, adopted on 22 May 2019 and updated on 3 May 2024.

³⁷ OECD, AI Policy Observatory (n.d), OECD AI Principles Overview, OECD, Accessed 22 March 2025.

³⁸ CAIDP (2018), <u>Universal Guidelines for AI</u>, Center for Artificial Intelligence and Digital Policy.

³⁹ CAIDP (n.d), <u>Universal Guidelines for AI (UGAI)</u>, Center for AI and Digital Policy. Accessed 22 March 2025.

G7 Hiroshima process report on generative artificial intelligence

The G7 Hiroshima process report on GenAI presents the results of an early stocktaking questionnaire that was developed to guide discussions for G7 countries in addressing opportunities and challenges related to GenAI.⁴⁰ The report and questionnaire results represent a snapshot in time and indicative trends identified in the first half of 2023. The report views disinformation and associated manipulation of opinions as the dominant risks posed by GenAI among risks outlined in the questionnaire. Most G7 members also considered intellectual property right infringement as well as rights to privacy as major risks. Threats to security (including cybersecurity), manipulation and improper use of data and threats to human rights were also highlighted in additional risks. The report also outlines productivity gains, promoting innovation and entrepreneurship and improving healthcare, helping to solve the climate crisis, and helping to scale personalised education for all as the top five opportunities of generative AI to help achieve national and regional goals.

The report has been reinforced by further research papers which followed in 2024 highlighting key risk areas of GenAI similar to those flagged by the G7. The National Institute of Standards and Technology (NIST) published a similar report themed AI in Risk Management Framework (RFM); Generative Artificial Intelligence Profile which supports most of the above GenAI risks. The NIST report makes further progress by assessing risks based on an established RMF. While the Hiroshima report was an outcome of a questionnaire feedback from G7 governments, the NIST report does not classify risk from most dominant risks. Instead, it introduces five dimensions for assessing GenAI risk, including the stages of the AI lifecycle, the scope, the source of AI risk and the timescale.⁴¹

While not specifically focused on Africa, the G7 Hiroshima Process report on generative AI could significantly impact the continent through its emphasis on responsible AI development and international collaboration, potentially offering opportunities for African nations to leverage AI for development and mitigating risks.

ISO/IEC JTC 1/SC 42 – Artificial Intelligence

ISO/IEC JTC 1/SC 42 is a subcommittee focused on the standardization of Artificial Intelligence (AI). It operates under the Joint Technical Committee ISO/IEC JTC 1, which is a collaboration between the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC).⁴² The following are the key aspects of the ISO/IEC JTC 1/SC 42 standards that the subcommittee has developed so far:

Scope: The subcommittee's work includes developing standards for AI, providing guidance to
other ISO and IEC committees on AI applications, and serving as the focal point for AI
standardization

⁴⁰ OECD (2023), <u>G7 Hiroshima Process on Generative Artificial Intelligence (AI): Towards a G7 Common Understanding on Generative AI</u>, OECD Publishing, Paris.

⁴¹ NIST (2024), <u>Artificial Intelligence Risk Management Framework: Generative Artificial Intelligence Profile</u>, NIST Trustworthy and Responsible AI.

⁴² ISO (n.d), <u>ISO/IEC JTC 1/SC 42 Artificial intelligence</u>, iso.org.

- Structure: It consists of several working groups, each focusing on different areas such as foundational standards, data, trustworthiness, use cases and applications, computational approaches, and computational characteristics of AI systems.
- Liaisons and Joint Working Groups: ISO/IEC JTC 1/SC 42 collaborates with other committees and organizations through various joint working groups. These groups address topics like AI-enabled health informatics, functional safety and AI systems, natural language processing, and conformity assessment schemes for AI systems.
- Sustainable Development Goals: The subcommittee contributes to several Sustainable Development Goals (SDGs) by developing standards that support various aspects of sustainability.
- *Publications:* As of now, the subcommittee has published 33 ISO standards and has 36 standards under development.

Although not specifically focused on Africa as a region, this committee contributes with 46 standards to the Sustainable Development Goals (SDGs) that include SDG 1, and SDG 3-16.⁴³

United Nations System White Paper on Artificial Intelligence

This White Paper was developed as a follow up to the joint session of the High-level Committee on Management (HLCM) and the High-level Committee on Programs (HLCP) on the use and governance of AI and related technologies in October 2023. The Paper was prepared by the Inter-Agency Working Group on Artificial Intelligence. The White Paper analyses UN systems institutional models, functions, and existing international normative frameworks applicable to global AI governance.⁴⁴

The White Paper focuses on three key areas with focus area one discussing existing normative and policy instruments within the United Nations system that serve to inform and shape AI governance. Notably, the UNESCO recommendations on ethics of AI are emphasized as one of the key AI frameworks that was established to guide member states towards responsible AI development and is complemented by tools such as readiness assessment methodologies. International legal frameworks such as the ICCPR that establishes the right to privacy, freedom of expression and the right to fair trial as well as the Convention on Rights of the Child are largely discussed as one of the binding international legal instruments establishing obligations to be complied with by UN member states.

The second focus area of this White Paper relates to recent proposals for international AI governance institutions that are inspired by institutional models or processes of existing entities such as the Intergovernmental Panel on Climate Change, the Intergovernmental Science Policy Platform and Biodiversity and the IAEA. The main aim for the call for an international AI governance institution is to establish a suitable governance model, robust governance structure and effective norm making processes for AI governance.

43 ISO (n.d), ISO/IEC JTC 1/SC 42 Artificial intelligence, iso.org.
 44 UN (2024), White Paper on Artificial Intelligence, prepared by the Inter-Agency Working Group on Artificial

Intelligence, United Nations Systems.

The third and last focus area pertains to lessons learnt from existing governance structures, inclusive normative processes and agile and anticipatory approaches within the United Nations system. The analysis covers aspects such as disproportionality, large role of the private sector and the related concentration of market power, as well as the need to balance innovation capabilities with safety aspects, legal liability, the growing AI divide, the need for inclusivity, the proliferation of principles and guidelines related to AI but lack of enforcement, the need to regularly update technical and safety standards, in line with the rapid development of AI, and other issues.

Global AI governance frameworks have taken important steps to establish ethical principles and policy guidelines to ensure AI is developed and deployed in ways that respect human rights, promote fairness and transparency, and mitigate risks such as bias, discrimination, and security threats. However, challenges remain, particularly in translating broad principles into actionable policies and ensuring global cooperation on AI regulation. A coordinated, multi-stakeholder approach is still essential to translating ethical principles into practical policies that uphold privacy, data protection, and fundamental human rights.

Comparative Analysis: Global AI Governance Approaches

Regions around the world have adopted diverse approaches to AI governance, seeking to foster innovation while addressing the potential risks associated with these technologies. This comparative analysis examines the regulatory frameworks across Europe, United States, Canada, South America, Pacific Asia, the Middle East, and Oceania, highlighting their efforts to manage the development, deployment, and ethical considerations surrounding AI systems.

Europe

European Union

On 1st August 2024, the European Union adopted the Artificial Intelligence Act (AI Act), to promote the uptake of human centric and trustworthy AI while ensuring a high-level protection of health, safety and fundamental rights of individuals.⁴⁵ The Act establishes a comprehensive framework for the development, distribution, and deployment of AI systems within the EU. While the Act is currently in effect, its compliance requirements will be implemented progressively from 2025 to 2030⁴⁶. This phased approach ensures that organizations worldwide intending to offer AI systems in the EU market align with the Act's provisions. A fundamental aspect of the AI Act is the creation of harmonized regulations for AI systems before introducing them on the EU market. This uniform approach ensures that all AI systems, irrespective of their origin, adhere to consistent standards and ethical considerations. At its core, the AI Act adopts a risk-based approach, classifying AI systems according to the potential risks they pose. The

⁴⁵ Article 1 of the European Union Artificial Intelligence Act.

⁴⁶ European Union Artificial Intelligence Act.

Act defines categories such as Prohibited,⁴⁷ high risk,⁴⁸ limited risk,⁴⁹ low risk as well as general purpose AI models.50

Risk classification	Details
Prohibited AI Practices	The Act prohibits certain AI practices including the deployment or use of systems that are purposefully manipulative or deceptive, systems used for social scoring that lead to detrimental outcomes, predictive policing, the use of real time biometric identification systems in public spaces for law enforcement except where the use is strictly necessary.
High-Risk	A system is classified as high risk where (1) it is intended to be used as a safety component of a product or a product covered by EU laws under Annex I of the Act and is required to undergo a third-party conformity assessment; or (2) the system forms part of the list provided under Annex III of the Act, subject to exceptions.
	These systems are subject to mandatory requirements such as technical documentation, record keeping, risk management, human oversight, etc. More so, the Act allocates key responsibilities to key actors along the systems' value chain. This chain includes providers, authorized representatives, importers, distributors and deployers.
Limited Risk	These systems present a risk of deceit such as chatbots. To ensure that humans are aware that they are interacting with an AI system, the Act imposes transparency obligations on them
Low Risk	AI systems that present minimal risk such as spam filters do not have mandatory obligations under the Act.
General Purpose AI Models (GPAI)	The Act distinguishes GPAI models with systemic and non-systemic risks. A model is classified under systemic risk where it has high impact capabilities or based on the decision of the commission taking into account the criteria under Annex XIII.

Article 5 of the <u>European Union Artificial Intelligence Act.</u>
 Chapter III of the <u>European Union Artificial Intelligence Act.</u>
 Article 50 of the <u>European Union Artificial Intelligence Act.</u>
 Chapter V of the <u>European Union Artificial Intelligence Act.</u>

Generally, providers of GPAI models must draw up technical documentation of their models, draw up a policy to comply with copyright laws, and publicize a summary of the content used for training the model. On the other hand, providers of GPAI models with systemic risk must mitigate the systemic risk, track and report serious incidents and ensure adequate level of cybersecurity.

The EU AI Act, while primarily focused on EU markets, indirectly impacts Africa through its extraterritorial application, potentially influencing AI governance and regulation in African countries, especially those targeting the EU market.

International companies looking to enter European markets often adjust their global operations to comply with European standards. This trend of European regulatory influence in Africa is not new. For example, after the EU adopted the GDPR in 2016, many African countries introduced comparable privacy laws. Given market dynamics and cross-border business interactions, it is likely that numerous African nations will adopt EU-aligned regulatory frameworks.⁵¹

The United Kingdom

Following its departure from the EU, the UK has charted an independent course to regulating AI. Instead of a comprehensive AI legislation, the UK relies on existing laws related to consumer protection, data governance, and non-discrimination, applying them to AI technologies within their respective domains. Additionally, the government has introduced non-binding guidelines, such as the "pro-innovation" approach to AI regulation⁵², which outlines principles for safe and ethical AI development. Beyond that, it offers supportive tools and resources like the AI Standards Hub⁵³ and various public-sector guides⁵⁴ have been established to assist organizations in the responsible deployment of AI systems. By initially utilizing existing sectoral regulations and providing non-binding guidance, the government aimed to foster flexibility for AI development. Its approach seeks to balance the promotion of AI innovation with the imperative to mitigate potential risks.

Still, the government recognizes the need for a more structured oversight and has since signalled forthcoming legislation to address complexities of advanced AI systems. In the King's Speech delivered on 17th July 2024, the King indicated plans to "[...] establish the appropriate legislation to place requirements on those working to develop the most powerful artificial intelligence models"55, suggesting a move towards binding regulations for advanced AI systems. While specific legislative proposals are yet to be detailed, experts suggest that "It is not, however, expected to be as comprehensive as the EU's recently published AI Act."56

⁵¹ Monyango F., Otieno Q. (2024), How EU law will impact AI regulation in Africa, Business Daily.

⁵² GOV.UK (2024), <u>A Pro-Innovation Approach to AI Regulation: Government Response</u>, presented to Parliament by the Secretary of State for Science, Innovation and Technology by the Command of His Majesty.

⁵³ AI Standards Hub (n.d), <u>About the AI Standards Hub</u>

⁵⁴ GOVUK (2019), A guide to using Artificial Intelligence in the Public Sector, Government of UK.

⁵⁵ GOV.UK (2024), The King's Speech 2024, Government of UK.

⁵⁶ Heywood D. (2024), UK AI and data legislation announced in King's Speech, Taylorwessing.com

The UK AI Governance Strategy is influencing Africa through partnerships and initiatives such as the UK government's AI for Development programme. This programme, supported with other partners that includes Canada, the Bill and Melinda Gates Foundation, the USA and partners in Africa, seeks to fund safe and responsible AI projects for development around the world, beginning in Africa, with £80 million collaboration announced at AI Safety Summit.⁵⁷

The programme aims to expand AI benefits to 700 million people across 46 African languages, position at least five African countries as key players in global AI discussions—particularly in leveraging AI for the Sustainable Development Goals—establish or scale up a minimum of eight responsible AI research labs in African universities, support at least ten nations in developing robust regulatory frameworks for responsible and equitable AI, and reduce barriers to entry for African AI innovators in collaboration with the private sector.⁵⁸

North America

Across North America, different layers of governance—from federal frameworks to provincial or state-level bills—play a prominent role in AI safety and governance. These different layers of regulation are designed to foster innovation while ensuring that AI technologies are developed and deployed ethically, safely, and in a way that respects individual rights.

United States of America

The United States of America (USA) has adopted a multifaceted yet sparse approach to AI governance, encompassing federal executive actions, legislative measures, non-binding frameworks, and state-level initiatives. This strategy aims to foster innovation while ensuring the safe and ethical deployment of AI technologies across various sectors.

• Federal Executive Actions

In October 2023, President Joe Biden issued the *Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence.* ⁵⁹ This Presidential directive establishes new standards for AI safety and security, protects Americans' privacy, advances equity and civil rights, and promotes innovation and competition. It mandates federal agencies to develop guidelines preventing the misuse of AI technologies and encourages collaboration between government, industry, and academia to address AI challenges.

Legislative Measures

In an effort to build a comprehensive framework for AI safety within the U.S.A, several important legislative efforts have been made to regulate AI, offering a framework for its responsible development and deployment:

⁵⁷ Gov.UK (2023), <u>UK unites with global partners to accelerate development using AI</u>, gov.uk

⁵⁸ Gov.UK (2023), <u>UK unites with global partners to accelerate development using AI</u>, gov.uk

⁵⁹ White House (2023), <u>Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence</u>, The Daily Journal of the United States Government.

Legislation	Details
The AI Training Act ⁶⁰	It requires the Office of Personnel Management ⁶¹ to establish AI training programs for federal employees, focusing on AI literacy, including understanding AI applications, limitations, and ethical considerations.
The National AI Initiative Act of 2020 ⁶²	It coordinates a national strategy for AI research and development across federal agencies, establishing the National AI Initiative to ensure continued U.S. leadership in AI.
The AI in Government Act ⁶³	It aims to improve the use of AI in federal agencies and enhance public services by establishing the AI Centre of Excellence ⁶⁴ within the General Services Administration. ⁶⁵
The AI Consent Act ⁶⁶ (draft legislation)	This proposed bill seeks to protect consumer privacy by requiring companies to obtain explicit consent from users before using AI to process personal data.
The Algorithmic Accountability Act ⁶⁷ (draft legislation)	This draft law would require companies to conduct impact assessments for high-risk AI systems, aiming to prevent bias and discrimination.
The No Fakes Act of 2023 ⁶⁸ (draft legislation)	Focused on combating the spread of "deep fakes," this Act seeks to prohibit the unauthorized creation or distribution of digital replicas of individuals. ⁶⁹

State Level Initiatives

⁶⁰ Congress.Gov (n.d), Statute at Large 136 Stat. 2238 - Public Law No. 117-207 (10/17/2022).

⁶¹ OPM (n.d), <u>US Office of Personnel Management</u>, Accessed on 10th January 2025.

⁶² Congress.GOV (n.d), H.R.6216 - National Artificial Intelligence Initiative Act of 2020, 116th US Congress (2019-2020)

⁶³ Congress.GOV (n.d), <u>H.R.2575 - AI in Government Act of 2020</u>, 116th US Congress (2019-2020)

⁶⁴ CBO (2020), <u>H.R. 2575</u>, <u>AI in Government Act of 2019</u>, Congressional Budget Office.

⁶⁵ GSA (n.d), Delivering effective and efficient government services for the American people, US General Services Administration.

⁶⁶ Congress.GOV (n.d), All Information (Except Text) for S.3975 - AI CONSENT Act, 118th Congress (2023-2024).

Congress.GOV (n.d), <u>S.2892 - Algorithmic Accountability Act of 2023</u>, 118th Congress (2023-2024).
 Congress.GOV (n.d), <u>S.4875 - NO FAKES Act of 2024</u>, 118th Congress (2023-2024).

⁶⁹ Sample I. (2020), What are deepfakes – and how can you spot them? The Guardian.

In addition to federal actions, several states have adopted their own AI regulations to address localized concerns. Some notable examples include:

Legislation	Details
The Colorado AI Act ⁷⁰	Effective May 17, 2024, this law requires developers of high-risk AI systems to take reasonable precautions to prevent algorithmic discrimination, mandating risk management practices, impact assessments, and consumer notification processes.
New York State's AI Bill ⁷¹	This bill aims to ensure transparency and accountability in AI systems deployed within the state, seeking to protect New York residents from risks associated with AI systems by ensuring safety, transparency, data privacy, and protection against algorithmic discrimination. It seeks to give individuals the right to opt out of automated systems, understand AI-driven decisions, and demand human interaction when necessary.
The California AI Transparency Act ⁷²	Effective in 2024, this law requires providers of generative AI systems to disclose when content is AI-generated, mandate publicly available detection tools, and ensure clear disclosures in AI-generated content by January 2026. Key provisions include:
	o AI Detection Tools: Providers must offer publicly accessible AI detection tools at no cost, enabling users to assess whether content was created or altered by the provider's GenAI system.
	o <i>Manifest Disclosures</i> : Users should have the option to include clear and conspicuous disclosures in AI-generated content, indicating its artificial origin in a manner understandable to a reasonable person.
	o <i>Latent Disclosures</i> : Where technically feasible, AI-generated content must contain embedded information about its provenance, either directly or via a link to a permanent website, providing transparency regarding its creation.

Colorado General Assembly (n.d), <u>SB24-205 Consumer Protections for Artificial Intelligence Concerning consumer protections in interactions with artificial intelligence systems.</u>
 The New York State Senate (n.d), <u>The New York Artificial Intelligence Bill of Rights</u>, 2023-S8209 New York.
 California Legislative Information (n.d), <u>SB-942 California AI Transparency Act</u>.

o *License Revocation*: Providers aware of third-party modifications that disable required disclosures in licensed GenAI systems must revoke the license within 96 hours; licensees must cease using the system upon revocation.

Collectively, the federal and state-level regulations demonstrate a growing commitment to ensuring AI is safe, transparent, and fair. However, the fragmented approach to AI regulation across states creates challenges for businesses operating nationwide, potentially leading to legal uncertainties and disparities in individual protections.

Non-binding Frameworks

In addition to formal legislative efforts, the U.S. has adopted several non-binding frameworks that outline ethical and safety principles for AI deployment: A *Blueprint for an AI Bill of Rights*⁷³ was published in October 2022, outlining the principles to protect civil rights and democratic values in AI development. Similarly, in January 2023, the *NIST AI Risk Management Framework*⁷⁴ was developed by the National Institute of Standards and Technology (NIST)⁷⁵ in collaboration with the private and public sectors. It provides guidance on managing risks associated with AI technologies. In July 2024, NIST also published a complementary Framework called the *Artificial Intelligence Risk Management Framework: Generative Artificial Intelligence Profile*⁷⁶ in response to President Biden's Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence.⁷⁷

Historically, U.S. engagement in Africa has primarily centered on social programs, yielding significant positive outcomes. However, American policymakers have seldom prioritized economic partnerships with the continent, creating a gap that other global players, particularly China, have sought to fill.⁷⁸

As African nations increasingly turn elsewhere for economic alliances, integrating AI and other digital technologies into U.S. diplomacy and foreign assistance initiatives can drive development progress, particularly in trade and investment. Strengthening economic ties between the U.S. and Africa will help shift the relationship from one based on aid to a partnership founded on shared economic interests and values.⁷⁹

White House (n.d), <u>Blueprint for an AI Bill of Rights: Making Automated Systems Work For The American People</u>, accessed 25th February 2025.

NIST (n.d), <u>Artificial Intelligence Risk Management Framework (AI RMF 1.0) AI 100-1</u>, National Institute of Standards and Technology.

⁷⁵ National Institute of Standards and Technology.

NIST (2024), <u>Artificial Intelligence Risk Management Framework: Generative Artificial Intelligence Profile</u>, National Institute of Standards and Technology.

White House (2023), <u>Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence</u>, The Daily Journal of the United States Government.

⁷⁸ Day R. (2025), <u>U.S. Development Agencies Should Embrace AI to Transform the U.S.-Africa Relationship</u>, Carnegie Endowment

⁷⁹ Day R. (2025), <u>U.S. Development Agencies Should Embrace AI to Transform the U.S.-Africa Relationship</u>, Carnegie Endowment

Canada

Canada has introduced significant AI legislation to guide the ethical and safe development of AI technologies:

❖ Artificial Intelligence and Data Act (AIDA)

In June 2022, Canada introduced the Artificial Intelligence and Data Act (AIDA)⁸⁰ as part of Bill C-27, the Digital Charter Implementation Act.⁸¹ The Act aims to establish a legal framework for the responsible design, development, deployment, and operation of AI systems in Canada. Its key objectives are to ensure that AI systems deployed in Canada are safe, non-discriminatory, and align with human rights expectations. It mandates that organizations implement measures to identify, assess, and mitigate risks related to health, safety, and security. It prohibits the reckless or malicious use of AI systems that could result in serious harm to individuals or their interests, thereby safeguarding citizens from potential AI-induced risks. To ensure enforcement, the Act grants the Minister of Innovation, Science, and Industry the authority to oversee and enforce compliance with AIDA, ensuring adherence to established standards.

Voluntary Code of Conduct

In addition to AIDA, in September 2023 Canada launched a Voluntary Code of Conduct on the Responsible Development and Management of Advanced Generative AI Systems⁸². The code sets voluntary commitments for organizations to demonstrate responsible development and management of generative AI technologies.

Directive on Automated Decision-Making

Furthermore, the Canadian government has implemented a Directive on Automated Decision-Making for federal agencies.⁸³ This directive provides a framework to ensure that automated decision systems are used in a manner that is compatible with core administrative law principles of transparency, accountability, legality, and procedural fairness.

South America

South American countries are rapidly recognizing the potential of AI to drive economic growth and social development, often through a combination of legislation and national strategies that prioritize data protection, ethics, and collaboration among stakeholders.

⁸⁰ ISED (n.d), Artificial Intelligence and Data Act, Government of Canada.

LegisInfo (n.d), An Act to enact the Consumer Privacy Protection Act, the Personal Information and Data Protection Tribunal Act and the Artificial Intelligence and Data Act and to make consequential and related amendments to other Acts, Parliament of Canada.

⁸² ISED (n.d), Voluntary Code of Conduct on the Responsible Development and Management of Advanced Generative AI Systems, Government of Canada.

⁸³ Government of Canada, Directive on Automated Decision-Making.

Brazil

Following its AI Strategy⁸⁴ and the AI Summary of the Brazilian Artificial Intelligence Strategy, (EBIA)⁸⁵ published in 2021, Brazil proposed Bill No. 2,338/202386 ("Brazil's Proposed AI Bill") in May 2024 to govern various aspects of AI, including algorithmic design and technical standards and reinforce the principles established by Brazil's General Data Protection Law (LGPD). Similar to the EU AI Act's approach, a key requirement under this Bill is for AI providers to complete a risk assessment before placing an AI system on the market, while indicating the AI's intended purposes and possible applications. Its risk-based approach classifies risk associated with AI systems as either excessive or high risk.

Excessive Risk

Scope: Includes systems that use subliminal techniques with the potential to harm or endanger health or safety, exploit vulnerable groups, or enable government agencies to assign social scores to individuals.

Oversight: The Bill seeks to appoint a specific authority to regulate "excessive risk" AI solutions.

High Risk

Scope: Covers AI deployed in critical infrastructure, professional education and training, hiring processes, decisions about public goods access, prioritizing emergency responses, administration of justice, autonomous vehicles, and biometric identification systems.

Requirements: Providers are expected to meet service quality standards and design these AI tools so that human oversight remains integral throughout their operation.

Peru

On 2nd May 2024, Peru's Council of Ministers published the draft Regulation for AI Law No. 31814⁸⁷ aiming to promote AI as a catalyst for economic and social development. This legislation applies to public administration, private enterprises, and civil society, establishing foundational principles for AI utilization.

Key Principles Outlined in the Draft Law

o Safety, Proportionality, and Reliability: AI systems must be secure, function as intended and minimize associated risks through a proportionate approach.

⁸⁴ EBIA (2021), Estratégia Brasileira de Inteligência Artificial, Government of Brazil.

EBIA (2021), Estratégia Brasileira de Inteligência Artificial, Government of Brazil.
 Draft Bill no. 2338/2023 Regulation of artificial intelligence in Brazil

⁸⁷ Official Newspaper of the bicentennial the Peruvian, Ley Oue Promueve El Uso de La Inteligencia Artificial en Fav Lev N 31814 2192926 1.

- o *Transparency and Explainability:* Implementing algorithmic transparency and traceability measures is essential under the draft law. The aim being to provide users with clear information to understand AI system impacts.
- o *Human Responsibility and Oversight*: individuals bear ultimate responsibility for AI system outcomes, necessitating ethical, civil, administrative, and criminal accountability, along with mechanisms for human intervention.

• Emphasis Areas of the Proposed Law

- o *Risk-Based Security Standards:* Setting out security standards tailored to the specific risks posed by various AI applications, ensuring proportionate and effective safeguards.
- o *Inclusive, Multi-Stakeholder Governance:* Encouraging collaboration among government entities, private sector participants, academia, and civil society to ensure comprehensive AI governance.
- o *Internet Governance Principles:* Aligning AI development with established internet governance frameworks to promote openness and security.
- o AI Privacy: Implementing measures to protect personal data within AI systems and ensuring compliance with data protection regulations.

Complementing this regulatory framework, Peru's National AI Strategy (2021-2026)⁸⁸ provides a roadmap for AI integration across public and private sectors.

Colombia

Colombia has adopted a progressive approach to AI governance by implementing various policies and initiatives to promote responsible AI adoption to stimulate innovation across economic sectors and enhance institutional capacity to manage associated risks.

In November 2019, Colombia established the National AI Strategy Policy (CONPES 3975)⁸⁹ which outlines Colombia's National Policy⁹⁰ for Digital Transformation and Artificial Intelligence. The policy aims to increase the creation of social and economic value through the digital transformation of both the public and private sectors. It focuses on reducing barriers, strengthening human capital, and developing ethical frameworks to guide AI implementation.

In 2021 an AI Expert Mission⁹¹ was launched bringing together a diverse group of interdisciplinary experts from Latin America, Asia, Australia, the U.S., Canada, and Europe. This initiative focused on "translating Colombia's national AI policies into practice, particularly in areas such as education, the

⁸⁸ Government and Digital Transformation Secretariat - Peru, First Draft of Peruvian National AI Strategy, OECD.

⁸⁹ National Council of Economic and Social Policy (2019), <u>Política Nacional Para La Transformación Digital E Inteligencia Artificial</u>, Republic of Colombia.

National Council of Economic and Social Policy (2019), Política Nacional Para La Transformación Digital E Inteligencia Artificial, Republic of Colombia.

⁹¹ IDB (n.d), fAIr LAC Colombia project, Republic of Colombia.

future of work, and gender" 192. The mission emphasized attracting talent, developing innovative multi-stakeholder models to manage AI's impact on employment, and leveraging AI for ecological sustainability.

Chile

In 2021, Chile introduced its National Policy and Action Plan 2021-2030 on AI⁹³, known as the "AI National Policy," which focuses on three key dimensions: the development of enabling factors, the advancement of AI technologies, and the integration of ethics, safety, and socio-economic considerations. Building on this foundation, Chile unveiled its draft AI legislation, the "Proposed AI Bill⁹⁴" on 7th May 2024. Drawing inspiration from the EU AI Act, the Proposed AI Bill aims to foster AI innovation while safeguarding human rights through a risk-based framework that also encourages self-regulation for lower-risk applications.

Scope and Applicability of the Proposed AI Bill

The Bill applies to:

- o *Suppliers and Implementers:* Both domestic and international entities whose AI systems' outputs are utilized within Chile.
- o *Importers and Distributors:* Including their representatives operating in Chile.

Exemptions include AI systems developed for national defence, research, testing, and open-source AI components.

Guiding Principles

The Bill emphasizes human oversight to ensure AI serves humanity while upholding transparency and data privacy. It prioritizes fairness, consumer protection, and the elimination of biases, mandating compliance with existing privacy and data protection laws to safeguard individual rights.

Risk-Based Classification

Similar to the EU AI Act, the Bill adopts a risk-based approach, categorizing AI systems into unacceptable, high risk, limited risk and non-evident risk.

Risk Classification	Details
Unacceptable Risk	The Bill prohibits AI systems that are incompatible with fundamental rights, such as those inducing harmful behaviours or enabling discriminatory social classification.

⁹² Berkman Klein Center (2022), <u>BKC Scholars Helped Guide Colombia's AI Policy Implementation as Part of the Country's 'AI Expert Mission.</u>' Harvard.edu

⁹³ Ministry of Science, Technology, Knowledge and Innovation (n.d) <u>Política Nacional De Inteligencia Artificial</u>, Republic of Chile.

⁹⁴ Ministry General Secretary of the Presidency (2024), <u>Proyecto De Ley De Inteligencia Artificial</u>, Republic of Chile.

High Risk	AI systems that may adversely affect health, safety, fundamental rights, or the environment. These systems are subject to stringent requirements, including risk management, data governance, and human oversight.
Limited Risk	AI systems that pose minimal risks are required to operate under transparent conditions by informing users of AI interaction.
Non-Evident Risk	AI systems not falling into the above categories are considered low risk.

Argentina

Argentina is working towards establishing a comprehensive framework to regulate AI with an emphasis on promoting ethical and responsible use across various sectors. To achieve this, the country has developed a *draft National AI Plan*⁹⁵ designed to facilitate the adoption and advancement of AI technologies. This plan seeks to foster innovation while ensuring that AI development aligns with ethical principles and addresses societal needs.

In June 2023, the Undersecretariat of Information Technologies issued *Resolution 2/2023*⁹⁶ approving the "*Recommendations for a Reliable Use of Artificial Intelligence.*" These guidelines are directed towards the public sector, emphasizing key principles such as security, non-discrimination, sustainability, privacy, data protection, human supervision, transparency, explainability, responsibility, accountability, education and governance in AI development.

Notably, in August 2024, Argentine lawmakers introduced *Bill 3003-D-2024*⁹⁸ to establish a legal framework for the responsible use of AI in Argentina, safeguarding citizens' rights and promoting ethical and transparent AI applications. It categorizes AI systems based on the risks they may pose into unacceptable, high, medium, and low, imposing corresponding obligations on providers, distributors, importers and deployers⁹⁹ to reinforce accountability and consumer protection within the local context.

Whereas there are benefits to leveraging global insights on AI regulation to shape its path in the AI ecosystem, reliance on global insights and frameworks for AI regulation may limit the autonomy of African countries in shaping their regulatory approaches tailored to their unique socio-economic and technological contexts. Additionally, differences in ethical perspectives and cultural norms between regions pose challenges in adopting global ethical guidelines, potentially leading to disparities in

⁹⁵ Bnamericas (2019), Argentina Advances National Al Plan, BN Americas.

⁹⁶ IAPP (2023), <u>Argentina issues Recommendations for Reliable AI</u>, International Association of Privacy Professionals.

⁹⁷ Marta Z. (2023), The "Recommendations for a Reliable Artificial Intelligence" Were Approved, Lerman & Szlak

Applicable Legal Regime For The Responsible Use Of The Artificial Intelligence In The Argentine Republic, Republic of Argentina.

⁹⁹ Digital Policy Alert (n.d), <u>Argentina: Introduced Bill 3003-D-2024 establishing a legal framework for regulation of the responsible use of AI including quality of service requirement</u>, Accessed on 11th January 2025.

¹⁰⁰ Ogonjo F. (2024), Global Developments in AI Regulation and Possible Impact on AI Regulation in Africa, CIPIT.

implementing AI policies in Africa.¹⁰¹ With the formulation of policy at its nascent stages, the continent is still grappling with fully understanding the extent to which AI can be utilized while considering socio-economic constraints, digital disparities and the creation of infrastructure while still exploring innovation capabilities.

There is a growing trend of regional cooperation and knowledge sharing particularly within the context of the Global South. Countries such as Brazil and Colombia are increasingly using AI in sectors such as agriculture, healthcare and education, experiences that easily serve as models for African countries. Only 6 out of 33 countries in Latin American Countries (LAC) have formulated specific strategies or agendas for AI adoption and promotion¹⁰², comparable to 13 out of 54 countries in the African region.

Additionally, both regions face similar challenges in leveraging AI, such as limited infrastructure, digital literacy gaps and ethical concerns which lead to similar or joint initiatives and solutions. Notable initiatives are such as the AI Readiness Assessment project being piloted by UNDP across LAC and Africa offering respective governments guidance on ethical AI regulatory approaches.¹⁰³

The Pacific Asia

Countries in Pacific Asia have developed varied regulatory approaches toward Artificial Intelligence (AI), ranging from stringent national laws to more flexible, principle-based frameworks. Despite differing priorities across nations, the overarching theme in the region is a focus on aligning AI security and ethical practices with broader economic objectives.

China

China has been proactive in establishing a regulatory framework for AI governance, emphasizing social stability, data security, and economic growth. Several key measures have been implemented:

• Algorithmic Recommendation Management Provisions

Effective from March 2022 these provisions¹⁰⁴ regulate the use of algorithmic recommendation services, requiring service providers to uphold user rights, ensure transparency and prevent the dissemination of harmful information.

Interim Measures for the Management of Generative AI Services

¹⁰¹ Ogonjo F. (2024), <u>Global Developments in AI Regulation and Possible Impact on AI Regulation in Africa</u>,

¹⁰² Muschett M., Opp R. (2024), <u>The AI Revolution is Here: How Will Latin America and the Caribbean Respond?</u>, UNDP.

¹⁰³ Muschett M., Opp R. (2024), <u>The AI Revolution is Here: How Will Latin America and the Caribbean Respond?</u>, LINDP

Chen Q. (2024), <u>China's Emerging Approach to Regulating General-Purpose Artificial Intelligence: Balancing Innovation and Control</u>, Asia Society Policy Institute.

Implemented on 15th August 2023, these measures¹⁰⁵ oversee generative AI technologies, addressing privacy concerns, data security, and content screening while promoting innovation. They apply to both domestic and foreign companies offering AI services in China - emphasizing transparency and security without stifling technological development.

Deep Synthesis Management Provisions

Effective from January 2023, these regulations¹⁰⁶ govern the use of deep synthesis technologies, including deep fakes, to ensure that such technologies are not misused for illegal activities and that generated content is clearly labelled to maintain information integrity.

Proposed Artificial Intelligence Law

China is deliberating the *Artificial Intelligence Law of the People's Republic of China*¹⁰⁷ which aims to establish generalized standards for AI developers and deployers, with stricter requirements for high-risk or "critical" systems. Still in its draft form, this law seeks to make AI developers, providers, and users liable for misuse, with allowances for the use of copyrighted materials in training AI models.

Scientific and Technological Ethics Regulation

This regulation¹⁰⁸ underscores the ethical principles that must guide scientific and technological activities, including AI development to ensure they contribute positively to society and adhere to moral standards.

The race to dominate Africa's artificial intelligence and critical infrastructure sectors is deeply geopolitical, with China aggressively positioning itself as a frontrunner. Through the Forum on China-Africa Cooperation (FOCAC), China aims to solidify its leadership within the Global South by strengthening ties with Africa, viewing it as both a strategically valuable market and a geopolitical partner. ¹⁰⁹

Over the past two decades, China has expanded its global influence by developing communication networks and enhancing data-surveillance capabilities, with a strong focus on Africa's growing technology markets. A key driver of this expansion has been President Xi Jinping's Belt and Road Initiative (BRI). Since its launch in 2013, many African leaders have aligned with Xi's perspective that inadequate infrastructure is a significant barrier to economic growth. As a result, 40 out of 54 African nations have entered into BRI agreements. III

¹⁰⁵ Atanasovska D., Trombevski D. (2024), <u>China's Evolving AI Regulations and Compliance for Companies</u>, GDPR Local.

Yu C., Li B. (2024), <u>AI explained: AI regulations and PRC court decisions in China | Perspectives</u>, Reed Smith LLC.

¹⁰⁷ CSET (2024), <u>Artificial Intelligence Law of the People's Republic of China (Draft for Suggestions from Scholars)</u>, Center for Security and Emerging Technology.

GU A., YOU P., ZHENG C., ZHANG M., YU F. (2023), <u>China Released New Ethics Rules Requiring Company's Internal EC</u> Han Kun Law Offices.

Eom Yeon T. (2024), Why Africa Matters to South Korea's Indo-Pacific Strategy, Asia Pacific Foundation of Canada.

¹¹⁰ Nkwanyana K. (2021), <u>China's AI Deployment in Africa poses risks to Security and Sovereignty</u>, Australian Strategic Policy Institute.

¹¹¹ Nkwanyana K. (2021), <u>China's AI Deployment in Africa poses risks to Security and Sovereignty</u>, Australian Strategic Policy Institute.

Some analysts suggest that China's engagement in Africa extends beyond economic interests, potentially serving as a channel to promote its governance model, which emphasizes surveillance technology. Beijing's strategic priorities in the region range from securing access to <u>rare-earth metals</u> to maintaining control over crucial maritime routes, ¹¹² an approach consistent with China's broader influence strategies in regions such as South America and Eastern Europe.

Japan

Initially Japan embraced an agile governance approach to AI by emphasizing flexibility and adaptability through non-binding guidelines and voluntary standards. It has since shifted its strategy towards a proposed legislation (the "Japanese AI Act¹¹³"), although considered "*rough*". This shift in the Japanese AI regulation strategy outlines a growing recognition among lawmakers of the need for clear, coherent, and comprehensive regulation to address the challenges posed by rapidly advancing AI technologies. Below is an overview of Japan's AI initiatives, from its early non-binding guidelines to its current legislative proposals.

Non Binding Guidelines and Voluntary Standards

Guidelines	Details
AI Governance in Japan Ver. 1.1 ¹¹⁵	Published by the Ministry of Economy, Trade and Industry (METI), these guidelines provide a comprehensive overview of AI principles and rule-making trends both domestically and internationally. It offers a structured framework for implementing the Social Principles of Human-Centric AI, focusing on human dignity, diversity, inclusion, and sustainability.
AI Utilization Guidelines ¹¹⁶	Issued by the Ministry of Internal Affairs and Communications (MIC), these guidelines present principles for AI utilization, aiming to foster trust in AI systems. They emphasize the importance of human-centric AI, privacy protection, security, fairness, accountability, and transparency.

Expert Group On How Ai Principles Should Be Implemented (2021), Report from the Expert Group on how AI principles should be implemented, Republic of Japan.

¹¹² International Forum for Democratic Studies (2017), <u>Sharp Power: Rising Authoritarian Influence: New Forum Report</u>, National Endowment for Democracy.

Fujikouge T., Kosuge N., Matsumoto F. (2024), <u>Understanding AI Regulations in Japan - Current Status and Future Prospects</u>, DLA Piper.

¹¹⁴ Ibid.

The Conference toward AI Network Society (2019), <u>AI Utilization Guidelines Practical Reference for AI Utilization</u>.

AI Guidelines for Business Ver. 1.0 ¹¹⁷	In April 2024, METI and MIC jointly released these
	guidelines to support voluntary efforts by business
	operators in AI utilization. They integrate and update
	existing guidelines, reflecting recent technological
	advancements and international discussions on AI

social implementation.

Proposed Legislation

Basic Law for the Promotion of Responsible AI (Japanese AI Act)¹¹⁸: In February 2024, the Japanese government disclosed a draft of the Japanese AI Act aiming to establish enforceable regulations for AI development. The proposed legislation requires AI developers and deployers to disclose information about their systems and implement safeguards to protect human rights.

<u>Japan International Cooperation Agency Knowledge Forum Exploring how AI will Change Africa</u> (October 2024)

The JICA Ogata Sadako Research Institute for Peace and Development, in partnership with the United Nations University, held a knowledge forum titled "How Will AI Change Africa?" on July 30, 2024. The discussion emphasized the significance of African ownership, collaboration, and cross-regional partnerships. ¹¹⁹ JICA Executive Director Mine underscored the creativity and innovation of African students, encouraging Japanese policymakers to welcome more African students and young professionals to leverage their expertise in both natural and social sciences. The forum also highlighted the entrepreneurial potential of African startups and the concept of "brain circulation," where African talent—some of which may receive training in Japan—could work alongside Japanese professionals to foster mutual growth and drive solutions to global challenges.

South Korea

South Korea's National Strategy for AI¹²⁰ serves as a foundational framework guiding the country's AI initiatives. In December 2023, South Korea's Ministry of Culture, Sports, and Tourism, through the Korean Copyright Commission, released the "*Guide on Generative AI and Copyright*¹²¹." The guide addresses the intersection of generative AI technologies and copyright law aiming to clarify legal uncertainties and promote responsible AI use. It provides guidance to AI businesses, copyright holders, and users, emphasizing compliance with existing laws and ethical considerations. It also delineates the criteria and procedures for registering AI-generated works for copyright protection, clarifying the legal status of such creations.

Supra note /8.

¹¹⁷ METI (2024), AI Guidelines for Business Ver 1.0 Compiled, Ministry of Economy, Trade and Industry.

¹¹⁸ Supra note 78.

¹¹⁹ JICA Ogata Research Institute (2024), Knowledge Forum: Exploring How AI Will Change Africa, jica.go.jp.

¹²⁰ MSIT (n.d), National Strategy for Artificial Intelligence, Ministry of Science and ICT.

¹²¹ Ministry of Culture, Sports and Tourism (2024), Guide on Generative AI and Copyright, Republic of Korea.

In 2024, the South Korean National Assembly passed the South Korean Basic AI Act (the "South Korean AI Act¹²²") that encompasses various sub-strategies targeting specific sectors such as data activation and semiconductors, aiming to position South Korea as a global leader in AI technology¹²³. Additionally, the country has also enacted the South Korean Basic AI Act, which will take effect in January 2026. The Act aims to enhance national AI competitiveness and create a reliable environment for AI use. Key components include the establishment of a National AI Committee and an AI Safety Research Institute to oversee AI policy, support measures for AI development such as research and data centres, and the implementation of safety and reliability standards for high-risk and generative AI to mitigate societal impacts.

South Korea is strategically positioning itself by offering customized AI infrastructure services to countries with emerging AI capabilities, including several in Africa. This approach not only caters to the unique technological needs of these markets but also strengthens South Korea's global influence in AI and innovation.¹²⁴

In a joint declaration following the Korea-Africa Summit, both regions underscored their shared commitment to developing quality, reliable, sustainable, and resilient infrastructure, including smart infrastructure, as a fundamental pillar for strengthening development cooperation. ¹²⁵ This emphasis reflects a mutual recognition that advanced, future-ready infrastructure is essential for driving economic growth, fostering innovation, and ensuring inclusive digital transformation across Africa.

South Korea is expanding AI collaboration with African nations through notable initiatives that include partnering with Nigeria to establish an ICT and AI training center and introducing AI-powered water purification systems in water-scarce regions like Madagascar and Kenya. ¹²⁶ These efforts emphasize technology transfer and capacity building, reinforcing South Korea's commitment to driving AI-enabled development in Africa.

As more African nations integrate digital solutions, the alignment between South Korea's advanced AI expertise and Africa's growing digital landscape has the potential to foster long-term economic and technological growth.

India

India is in the process of formulating and implementing policy frameworks to govern various aspects of AI regulation. While comprehensive AI-specific regulations are still evolving, several initiatives and guidelines are in place to guide the responsible development and deployment of AI technologies.

¹²⁴ Eom Yeon T. (2024), Why Africa Matters to South Korea's Indo-Pacific Strategy, Asia Pacific Foundation of Canada.

¹²² Chairman of the Science, Technology, Information, Broadcasting and Communications Committee) (n.d), <u>Basic Law on the Development of Artificial Intelligence and Creation of Trust Base (Alternative)</u>, National Assembly Bill Information System.

¹²³ Ibid.

¹²⁵ President of the Republic of Korea (2024), <u>Press Release: Joint Declaration of the 2024 Korea-Africa Summit</u>, president go.kr

¹²⁶ Eom Yeon T. (2024), Why Africa Matters to South Korea's Indo-Pacific Strategy, Asia Pacific Foundation of Canada.

• National Strategy for Artificial Intelligence

India's AI strategy, dubbed "AI for All", aims to leverage AI for inclusive growth and development. This vision is articulated through the National Strategy for Artificial Intelligence ('NITI Aayog")¹²⁷ which encourages scalable AI solutions for global deployment.

Spearheaded by NITI Aayog, the strategy focuses on integrating AI across sectors such as healthcare, agriculture, education, and smart cities. It emphasizes the development of scalable solutions that can be deployed globally, positioning India as a leader in AI innovation.

In February 2021, India released Part 1 of its Principles for Responsible AI as a continuation of its national AI strategy, outlining a framework for building an ethical and responsible AI ecosystem across various sectors. This was followed by Part 2 in August 2021, which focused on translating the ethical principles from Part 1 into practical implementation.¹²⁸

Digital India Act

To regulate high-risk AI systems, the Indian government is drafting the Digital India Act (DIA)¹²⁹ intended to replace the outdated Information Technology Act of 2000. The DIA aims to address contemporary digital challenges, including those posed by AI, ensuring user safety and privacy while fostering innovation.

Although India's approach to AI regulation has at times seemed uncertain, the country is making steady progress toward developing a clear regulatory framework and governance mechanism, particularly as it takes on a more significant role in international AI cooperation.¹³⁰

Middle East

The Middle East has demonstrated ambitious goals for AI-driven economic diversification. Many nations here emphasize tailored regulations to harness AI's potential responsibly, reflecting a balance between legal oversight and strategic investments.

Israel

Israel is developing a nuanced approach to AI governance, with sector-specific self-regulation and modular experimentation. This strategy is detailed in the *Israeli AI Regulation and Policy White Paper*¹³¹ (the "White Paper") which outlines ethical principles and practical recommendations for AI development and deployment, as well as a *Policy on Artificial Intelligence Regulation and Ethics*¹³² (the "*Israel's AI Policy*") unveiled in December 2023.

¹²⁷ NITI Aayog (2018), National Strategy for Artificial Intelligence.

¹²⁸ Shaheen N. (2025), The Future of AI Regulation in South Africa, India, and Brazil, Crowell.

¹²⁹ Drishtiias (2023), <u>India's Digital Future</u>: The Digital India Act 2023, Accessed 11th January 2025.

¹³⁰ Sharma P., Sarma A., Basrur A., Tripathi P. (2023), <u>AI Governance in India: Aspirations and Apprehensions</u>, Observer Research Foundation.

¹³¹ Cahane A. (2022), Israeli AI Regulation and Policy White Paper: a first glance, Robotics and AI Society.

¹³² Ministry of Innovation, Science and Technology (2023), <u>Israel's Policy on Artificial Intelligence Regulation and Ethics</u>, Government of Israel.

Israel's AI White Paper

Similar to the EU's AI Act, the White Paper adopts a risk-based approach, tailoring regulatory measures to the specific risks associated with different AI applications.

Furthermore, the White Paper favours sector-specific self-regulation, allowing industries to develop guidelines that address their unique challenges and opportunities. Additionally, Israel promotes modular experimentation through initiatives like regulatory sandboxes, providing controlled environments for testing AI technologies under regulatory supervision.

Israel's AI Policy

Israel's AI Policy outlines the nation's approach to artificial intelligence, emphasizing innovation, ethical considerations, and international collaboration. Key initiatives include investing in AI research and development, establishing regulatory frameworks to ensure responsible AI use and fostering partnerships with global AI leaders. The strategy also highlights the importance of public engagement and education to prepare the workforce for AI integration across various sectors.

The main recommendations from Israel's AI Policy are:

- Adopting sectoral regulation
- Consistency with existing regulatory approach of leading countries and international organizations
- Adopting a risk-based approach
- Using "soft" regulatory tools intended to allow for an incremental development of the regulatory framework
- Fostering cooperation between the public and the private sectors.

Saudi Arabia

Saudi Arabia's *National Strategy for Data and Artificial Intelligence (NSDAI)*¹³³ outlines an ambitious plan to position the kingdom among the world's leading AI economies by 2030. This strategy emphasizes attracting over \$20 billion in investments and fostering a robust ecosystem of more than 300 AI startups.¹³⁴

Incentives for External Investors and Startups

To achieve these objectives, Saudi Arabia is implementing several initiatives:

¹³³ Saudipedia (2020), National Strategy for Data and AI (NSDAI), Accessed 11th January 2025.

¹³⁴ Malic C. (2020), Saudi national AI strategy sets \$20 billion investment target, carringtonmalin.com

- o Investment Funds: The Public Investment Fund (PIF) has announced the establishment of a \$40 billion¹³⁵ fund dedicated to AI, aiming to attract and support both local and international startups.
- o Regulatory Sandboxes: The kingdom offers world-class regulatory sandboxes¹³⁶ to facilitate the development and deployment of AI-powered technologies, providing a controlled environment for innovation.
- Startup Ecosystem: By 2030¹³⁷Saudi Arabia aims to host more than 300 active data and AI startups, creating a vibrant ecosystem that encourages entrepreneurship and technological advancement.

Legal and Ethical Frameworks

Saudi Arabia is committed to establishing robust legal and ethical guardrails to ensure responsible AI adoption leveraging the existing legal privacy framework while building its Ethical AI framework:

- o Personal Data Protection Law (PDPL)¹³⁸: Enacted to safeguard individual privacy, the PDPL regulates the collection, processing, and sharing of personal data, ensuring that AI systems operate within defined ethical boundaries.
- o Ethical AI Framework: Developed by the Saudi Data and Artificial Intelligence Authority $(SDAIA)^{139}$, this framework ensures that AI technologies are used ethically, with a focus on data security and individual control over personal information.

United Arab Emirates

The United Arab Emirates (UAE) has demonstrated a proactive approach to AI by establishing the world's first dedicated AI Ministry in 2017.¹⁴⁰ The Ministry of State for Artificial Intelligence, Digital Economy, and Remote Work Applications, led by Minister Omar Sultan Al Olama, coordinates National AI initiatives and policies.

National AI Initiatives

AI Initiative	Details
National Program for Artificial Intelligence	This program serves as a comprehensive framework and set of resources ¹⁴¹ to integrate AI technologies across various sectors aiming to

¹³⁵ Booth H. (2024), Yasir Al-Rumayvan - Governor of Saudi Arabia's Public Investment Fund, Time.

¹³⁶ Gov.SA (n.d), National Strategy for Data and AI, Kingdom of Saudi Arabia.

¹³⁸ SDAIA (n.d), Data Protection, Saudi Data and Artificial Intelligence Authority.

¹³⁹ ITButler (n.d), SDAIA's Framework for Ethical AI and Data Privacy in Saudi Arabia, Accessed 12th January 2025.

¹⁴⁰ Katzenberg J. (2024), Omar Al Olama, Time.

¹⁴¹ UAE (n.d), AI Resources - The Official Portal of the UAE Government, Telecommunications and Digital Government Regulatory Authority.

	enhance government performance and create innovative solutions for future challenges.
AI Ethics Principles and Guidelines	The UAE has developed a set of ethical guidelines ("AI Ethics Principles & Guidelines") ¹⁴² to ensure responsible AI development and deployment. These principles emphasize fairness, transparency, and accountability, guiding AI practitioners in aligning their systems with societal values.
Generative AI Guide	Recognizing the transformative potential of generative AI, the UAE has published a guide ¹⁴³ to facilitate its adoption in sectors such as education, healthcare, and media. The guide outlines best practices and ethical considerations for utilizing generative AI applications.

Notably, in September 2023 the *Dubai International Financial Centre (DIFC)* enacted Regulation 10,¹⁴⁴ becoming the first in the Middle East, Africa, and South Asia (MEASA) region to regulate the processing of personal data through autonomous and semi-autonomous systems, including AI.

The UAE, and Saudi Arabia have shown a strong commitment to advancing and implementing AI technologies. Businesses in these countries are making significant investments in emerging technologies, with government support as early adopters. However, AI adoption has been slower outside the Gulf economies, primarily due to variations in infrastructure and access to skilled labor—both essential factors for AI development.¹⁴⁵

Oceania

In Oceania, policymakers generally take a measured view of AI, emphasizing voluntary standards, consultative policy papers, and discussions around ethics. This approach aims to manage AI's risks while preserving an environment conducive to research and innovation.

Australia

Australia is advancing its AI governance through a series of strategic initiatives aimed at ensuring the safe and responsible development and deployment of AI technologies.

AI Action Plan

¹⁴² UAE (2022), <u>AI Ethics Principles and Guidelines</u>, Minister of State for Artificial Intelligence, Digital Economy and Remote Works Applications Office.

¹⁴³ UAE (2023), <u>100 Practical Applications and Use Cases of Generative AI</u>, Minister of State for Artificial Intelligence, Digital Economy and Remote Work Applications Office.

¹⁴⁴ DIFC (n.d), Regulation 10 - Interoperability and Innovation, Accessed 12th January 2025.

¹⁴⁵ Anderson S., Clark H., Boxshall R., Hosseini A. (n.d), <u>US\$320 billion by 2030? The potential impact of Artificial Intelligence in the Middle East</u>, PWC.

The Australian Government has implemented an *AI Action Plan*¹⁴⁶ to position Australia as a global leader in AI by fostering innovation and building public trust in AI technologies. The plan outlines strategies to promote AI development while ensuring that its adoption aligns with national interests and ethical standards.

Voluntary AI Safety Standard

In August 2024, the Australian Government introduced the *Voluntary AI Safety Standard*¹⁴⁷ that provides practical guidance for Australian organizations on the safe and responsible use of AI. The standard comprises ten guardrails that address various aspects of AI governance including accountability processes, risk management, data governance, and human oversight. It serves as an immediate measure to guide businesses in implementing best practices ahead of potential mandatory regulations.

Policy on Responsible AI Usage within Government

In September 2024, the Australian Government published a policy on responsible AI usage within government agencies¹⁴⁸. The policy encourages agencies to appoint accountable officials and conduct structured risk assessments, reflecting a commitment to secure AI deployments in public sector operations. The policy emphasizes the importance of transparency, accountability, and ethical standards in AI applications used by government entities.

New Zealand

New Zealand prioritizes ethical and human-focused AI, advancing this commitment through a range of key initiatives:

Algorithm Charter for Aotearoa New Zealand¹⁴⁹

Launched in July 2020, this charter represents a commitment by government agencies to manage their use of algorithms in a fair, ethical, and transparent manner. It aims to ensure that data-driven decisions are made responsibly, with appropriate human oversight and consideration of the impacts on individuals and communities.

Privacy Act 2020

The Privacy Act 2020¹⁵⁰ governs the handling of personal information in New Zealand, including data used in AI systems. It sets out principles for the collection, use, and disclosure of personal data, ensuring that AI implementations respect individuals' privacy rights. The Office of the Privacy Commissioner

¹⁴⁶ OECD (2023), <u>Australia's AI Action Plan</u>, Australian Government.

¹⁴⁷ Department of Industry, Science and Resources (2024), <u>Voluntary AI Safety Standard</u>, Australian Government.

Digital Transformation Agency (2024), Policy for the Responsible use of AI in Government, Australian Government.

¹⁴⁹ Stats.nz (2020), Algorithm Charter For Aotearoa New Zealand, Government of New Zealand.

¹⁵⁰ Parliamentary Counsel Office (n.d), <u>Privacy Act 2020</u>, Government of New Zealand. Accessed 12th January 2025.

provides guidance¹⁵¹ on applying these principles to emerging technologies, including the use of generative AI tools.

Cabinet Paper on AI Regulation (July 2024)

In July 2024, the Minister of Science, Innovation, and Technology published a Cabinet paper proposing a strategic approach to AI¹⁵² in New Zealand. The paper advocates for a "*light-touch, proportionate, and risk-based approach*¹⁵³," aiming to boost public and economic confidence in AI while encouraging innovation.

Conclusion

In conclusion, the AI regulatory approaches across different regions reveal a broad spectrum of strategies that seek to balance innovation, economic growth, and ethical considerations. The Pacific Asia countries exhibit a blend of strict laws and flexible guidelines, with China taking a proactive stance through a series of targeted regulations to ensure data security, social stability, and responsible AI deployment. Japan, initially focused on voluntary frameworks, has shifted towards more formalized legislation, emphasizing human rights and transparency. South Korea has its eyes set on robust national strategies and AI-specific acts while India's emphasis on inclusivity, through its "AI for All" initiative, reflects a commitment to leveraging AI for socioeconomic development.

The Middle East shows ambition in its AI regulatory frameworks, with nations like Saudi Arabia and the UAE seeking to establish leadership in AI technology while addressing ethical and legal concerns. Israel stands out for its sector-specific self-regulation and a risk-based approach to AI oversight, while in Oceania, Australia and New Zealand maintain a careful balance between fostering innovation and ensuring responsible AI usage, prioritizing ethical frameworks and voluntary standards.

Europe's approach, spearheaded by the EU's AI Act, remains one of the most comprehensive and stringent, focusing on risk-based regulation and strict governance to ensure safety, fairness, and accountability in AI applications. The EU's emphasis on ethical AI aligns with its broader commitment to human rights, providing a clear example of regulation that seeks to protect individuals while promoting technological advancement. The United States, while less centralized in its regulatory approach, focuses heavily on fostering innovation and maintaining AI leadership through initiatives like the AI Bill of Rights and the National AI Initiative Act. However, it faces challenges in harmonizing state-level regulations with federal efforts, creating a more fragmented landscape.

In light of Africa's nascent AI policy development and implementation, drawing on global insights for AI regulation would offer valuable guidance. However, over-reliance on international frameworks may restrict African countries' ability to develop regulatory approaches suited to their unique socio-economic and technological contexts.¹⁵⁴ Moreover, differences in ethical perspectives and cultural norms across

¹⁵¹ Privacy Commissioner (2023), <u>Artificial Intelligence and the Information Privacy Principles</u>, Government of New Zealand.

Ministry of Business, Innovation and Employment (2024), <u>Approach to work on Artificial Intelligence</u>, Government of New Zealand.

¹⁵³ Ibid

¹⁵⁴ Ogonjo F. (2024), Global Developments in AI Regulation and Possible Impact on AI Regulation in Africa, CIPIT.

regions create challenges in adopting global ethical guidelines, potentially leading to inconsistencies in AI policy implementation.

Africa continues to navigate the balance between leveraging AI's potential, addressing socio-economic constraints, bridging digital divides, and building infrastructure while fostering innovation. Collectively, these regions' varying strategies underscore a global recognition of AI's transformative potential, with each adapting its regulatory frameworks to address local needs, values, and priorities while navigating the complexities of ensuring ethical and responsible AI development.

AI Governance in Africa: Policies, Frameworks, and Emerging Trends

Africa occupies a unique position in the global AI landscape, marked by its rich cultural diversity, evolving social dynamics, and distinct economic challenges. As the continent rapidly embraces AI to address pressing issues in sectors such as agriculture, healthcare, education, and financial services, it faces the significant challenge of relying largely on technologies developed outside its borders. This reliance on foreign AI systems often introduces issues such as bias, misalignments with local values, and disparities in data governance, which amplify privacy and ethical concerns. Additionally, the deployment of AI raises critical issues, such as the adequacy of informed consent, transparency of algorithms, and the accountability of developers and deployers. 156

Common Challenges

Challenges persist even across national approaches to governance that include resource limitations, infrastructure constraints, and the need for enhanced technical expertise. The Global and Continental AI Governance Trends report highlights that many African nations face significant hurdles in implementing comprehensive AI governance frameworks, particularly in terms of funding and institutional capacity.¹⁵⁷

Infrastructure development remains a critical concern, with many countries struggling to provide the necessary technological backbone for AI implementation. According to the International Telecommunication Union, Africa still records the highest fixed Internet costs in the world, with broadband Internet services representing 14.8% of the monthly gross national income per capita, compared to a global average of 2.9%. 158

Alive to the challenges and opportunities of AI, the continent has made efforts to regulate adoption and use of AI. Future directions in African AI governance show promising trends toward increased regional cooperation and harmonized standards. Many countries are moving toward more structured approaches to

¹⁵⁵ AU (2024), African Union Continental AI Strategy, The African Union.

¹⁵⁶ CIPESA (2024), The Impact of Artificial Intelligence on Data Protection and Privacy: A Walk-through Rights of a Data Subject in Africa.

¹⁵⁷ WorldBank (2024), The Global Trends in AI Governance Report, World Bank Group.

¹⁵⁸ Africa Policy Lab (n.d), Advancing Responsible & Impactful AI Governance across Africa, Lawyers Hub

AI governance, with emphasis on ethical considerations and human rights protection.¹⁵⁹ The African Union's Digital Transformation Strategy 2020-2030 provides a continental framework that supports these national efforts, encouraging member states to develop comprehensive AI strategies while maintaining focus on local contexts and needs.¹⁶⁰ While we look up to universal/global standards of AI, we must ensure that those principles are tailored to meet our local contexts while maintaining relevance globally.¹⁶¹

Continental Approaches

The African Union (AU) has taken a proactive role in shaping AI governance across the continent. In July 2024, the AU Executive Council endorsed the Continental AI Strategy during its 45th Ordinary Session in Accra, Ghana (African Union [AU], 2024). This strategy underscores Africa's commitment to an Africa-centric, development-focused approach to AI, promoting ethical, responsible, and equitable practices (African Union [AU], 2024).

With the aim of strengthening regional and global cooperation as well as position Africa as a leader in inclusive and responsible AI development, the Continental AI Strategy calls for unified national approaches among AU Member States to navigate AI-driven change. The strategy recognises the potential of AI to stimulate economic growth, create new industries, drive innovation, generate employment opportunities, and support the preservation of Africa's cultural heritage. 163

Guided by the principles of ethics, inclusion and diversity, human rights and human dignity, people's well-being, peace and prosperity, the strategy prioritises the development and adaptation of AI systems to Africa's context. ¹⁶⁴ It emphasises a multi-tiered governance approach grounded in ethical principles, democratic values, and human rights to mitigate risks and promote transparency and accountability. ¹⁶⁵

The strategy proposes a framework that is people-centric, development-oriented, and inclusive with the following focus areas:

- Harnessing AI's benefits for Africa's development: This involves promoting the use of AI in key sectors such as healthcare, agriculture, education, and environmental protection.
- Building AI capabilities across the continent: This includes investing in research and development, infrastructure, and skills development to strengthen Africa's AI ecosystem.
- Minimising AI's risks and maximising its societal benefits: This involves addressing ethical concerns, ensuring data protection, and promoting responsible AI development and use.
- Stimulating investment in AI research and innovation: This includes creating incentives for investment in AI and supporting the development of an African AI industry.

161 Ibid

¹⁵⁹ Lawyers Hub (2024), AI Policy Updates.

¹⁶⁰ Ibid

¹⁶²AU (2024), African Union Continental AI Strategy, The African Union.

¹⁶³ AU (2024), African Union Continental AI Strategy, The African Union.

¹⁶⁴ AU (2024), African Union Continental AI Strategy, The African Union.

¹⁶⁵ White & Case LLP. (2025). AI Watch: Global regulatory tracker - African Union.

• Fostering cooperation and partnerships on AI: This involves promoting collaboration among African countries, as well as with international partners, to advance AI development and governance.

Additionally, the AU Continental AI Strategy serves as a guiding framework for African countries as they develop their national AI strategies and regulatory frameworks. Notably, a number of countries in the continent are in the process of developing national AI strategies or forming task forces to look into the regulation of AI.

The Strategy emphasizes that AI must serve as a force for good, enabling social and economic development while respecting human rights. This includes harmonizing data protection laws across the continent to address cross-border data flows and ensuring accountability in AI governance¹⁶⁶. It recognizes the contributions of data protection laws across the continent but points out that they might be insufficient in addressing algorithmic bias and discrimination issues. It calls on the countries in the region to update their data protection laws in consideration of the new uses and applications of AI generated data. Additionally, it proposes that the governance of AI in the continent takes up a multi-tiered approach which will ensure the responsibility of AI ecosystems, equal distribution of the benefits of AI, risk mitigation and transparency and accountability in the development and use of AI in Africa. For this approach to be robust, it proposes the alignment of AI regulation with existing laws and frameworks including intellectual property, access to information, electronic communication and transaction laws, consumer protection laws, cybersecurity laws et al.¹⁶⁷

In addressing risk identification and mitigation, the strategy calls for the development and roll-out of AI assessments and evaluation tools such as UNESCO's Ethical Impact Assessment. As a supplementary measure it also proposes ongoing research and evaluation to identify new risks, assess efficacy of governance tools, review of global best practices, co-development of policy innovations with policy makers and regulatory sandboxing. In policy makers and regulatory sandboxing.

Nevertheless, to strengthen AI governance across the continent, several key actions are recommended:

Establish continental standards	
for:	 AI system testing and certification
	 Data protection and privacy
	 Cross-border data flows
	 Indigenous knowledge protection

¹⁶⁶ Ibid.

¹⁶⁷ Supra, note 134.

¹⁶⁸ Ibid.

¹⁶⁹ Ibid.

Develop capacity building	
programs focusing on:	 Technical expertise in AI governance
	 Policy development and implementation
	 Regulatory enforcement
	 Community engagement
Create mechanisms for:	
	 Regular policy review and updates
	 Stakeholder consultation
	 Impact assessment
	 Cross-border coordination
Strengthen institutional frameworks through:	
	 Regional centres of excellence
	 Collaborative research programs
	 Knowledge sharing platforms
	Technical assistance programs

Regional Approaches

The landscape of AI governance across Africa presents a complex mosaic of regulatory approaches and policy initiatives, reflecting the continent's varied stages of technological development and differing national priorities. African nations have increasingly recognized the need for structured approaches to AI governance, though implementation levels and methodologies vary significantly across regions. This diversity in approach reflects both the challenges and opportunities facing African nations as they work to harness AI's potential while ensuring responsible and ethical development.

East Africa

East Africa has become a focal point for AI governance. While the AI landscape in East Africa is still nascent, countries in this region are increasingly using Generative AI tools and contemplating AI regulation. As the fastest growing region in Africa—with a growth rate of 4.7% in 2024 and an expected rate of 5.7% in 2025–26—East Africa may be positioned to lead Africa's AI movement.¹⁷⁰

¹⁷⁰ Kayondo S. (2024), East Africa's AI Revolution: Growth, Innovation, and Challenges, Natlawreview.

For instance, Uganda has seen a surge in the use of Generative AI tools like ChatGPT, Gemini, and Perplexity AI. Additionally, the government has established a National AI Taskforce to develop a comprehensive report that will guide the country's AI strategy.¹⁷¹ This aligns with efforts in neighboring countries such as Rwanda, Kenya, and Tanzania, which are also advancing their AI policy and regulatory frameworks.

Rwanda has emerged as a regional leader, setting a strong precedent with the launch of its comprehensive National Artificial Intelligence Policy. The policy is closely aligned with Rwanda's Vision 2050 and the Smart Rwanda Master Plan,¹⁷² emphasizing Rwanda's ambition to become an African hub for innovation and a Centre of Excellence in AI.¹⁷³ The country's AI policy focuses on six key areas: AI literacy, infrastructure, data strategy, sectoral adoption, legal frameworks, and ethical considerations, creating a robust foundation for AI's development in the region. The Rwandan approach to AI governance is distinctive for its commitment to fostering a trusted data ecosystem, which is essential for AI systems to function effectively and responsibly.

Kenya's approach to AI governance is more pragmatic, focusing on immediate, practical applications of AI while also laying the groundwork for broader regulatory frameworks. The launch of Kenya's National AI Strategy in April 2024 marked a significant milestone in the country's efforts to build a governance framework that can guide the responsible adoption of AI technologies.¹⁷⁴ Kenya has paid special attention to sector-specific challenges, particularly in regulating AI-driven disinformation, a growing concern in the era of social media. Furthermore, the establishment of task forces, such as the Media Council of Kenya's taskforce on Data and AI Guidelines, reflects the country's targeted and responsive approach to AI regulation.¹⁷⁵

The Kenyan government has also taken decisive steps to regulate the misuse of AI-driven tools that threaten democracy, as evidenced by President William Ruto's announcement of new regulatory measures aimed at preventing the abuse of AI technologies. These measures are part of a broader initiative to strengthen public participation and improve governance while boosting service delivery through technological innovation.

Key drivers of AI growth in East Africa include the region's rapid digital transformation, with Kenya at the forefront in digital maturity, as highlighted by the Global System for Mobile Communications (GSMA).¹⁷⁷ The expansion of e-payment and fintech solutions has also played a crucial role in accelerating digital adoption. In Kenya, for instance, the widespread use of M-Pesa has significantly boosted financial inclusion, surpassing 80% in recent years, according to the Central Bank of Kenya

¹⁷¹ Kayondo S. (2024), East Africa's AI Revolution: Growth, Innovation, and Challenges, Natlawreview.

¹⁷² Davis T and Trott W. (2024), The Regulation of Artificial Intelligence through Data Protection Laws: Insights from South Africa, African Journal on Privacy and Data Protection.

¹⁷³ Gryz J and Rojszczak M. (2021), Black Box Algorithms and the Rights of Individuals: No Easy Solution to the "Explainability" Problem, Internet Policy Review.

¹⁷⁴ Nalubega T and Uwizeyimana DE. (2024), Artificial Intelligence Technologies Usage for Improved Service Delivery in Uganda, Africa's Public Service Delivery & Performance Review 11

¹⁷⁵ International Monetary Fund (2024), <u>Gen-AI: Artificial Intelligence and the Future of Work</u>, IMF Staff Discussion Paper.

World Bank (2024), Global Trends on AI Governance, Evolving Country Approaches, World Bank Group.

¹⁷⁷ Kayondo S. (2024), East Africa's AI Revolution: Growth, Innovation, and Challenges, Natlawreview.

(CBK).¹⁷⁸ On the regulatory front, existing electronic laws have laid the foundation for governing software businesses and supporting technological advancements in the region.

Similarly, the expanding data centers, cloud infrastructure, and significant FDI is also contributing to the region's growth. Microsoft and G42's \$1 billion initiative includes AI model development in Swahili, an AI Innovation Lab, connectivity investments, and secure cloud services in collaboration with Kenya, efforts which will enhance computing power and support AI scalability across the region.¹⁷⁹

Despite positive advancements, AI adoption in East Africa faces key legal and regulatory challenges. Inadequate AI infrastructure, including limited AI-optimized hardware and high-speed networks, hinders widespread adoption. The shortage of skilled AI professionals is further exacerbated by an outdated education system. Rising digital taxes, such as VAT and DSTs on electronic services, increase costs and slow digital inclusion. Additionally, restrictive measures like internet and mobile money shutdowns, particularly during elections, disrupt economies and erode investor confidence. Without strategic interventions, AI-driven technological convergence could amplify sector-wide disruptions in communications, banking, health, and education. 182

While East Africa is positioned for AI expansion and growth, the speed and depth of such AI development will be determined by domestic and global factors including the surge in global AI investment in the region and countries' approaches to regulation.

West Africa

West African countries are taking an approach to AI governance that prioritizes an Africa-centric framework, focusing on developing local solutions, prioritizing data sovereignty, promoting ethical considerations, and fostering collaboration between governments, academia, and the private sector. The region also seeks to actively address potential risks and inequalities by building capacity through education and training initiatives, while aiming to leverage AI for socio-economic development.

West Africa is seeing strong leadership in AI governance, particularly from Nigeria, which has positioned itself as a pioneer on the continent. Nigeria's journey began with the establishment of the National Centre for Artificial Intelligence and Robotics (NCAIR) in November 2020¹⁸³, the first dedicated AI center in Africa. This was followed by the drafting of the National AI Policy in March 2023,¹⁸⁴ developed through a collaborative process involving government bodies, industry experts, and academia. The policy aims to position Nigeria as a leader in AI governance and innovation in Africa. The publication of the draft National AI Strategy (NAIS) in August 2024¹⁸⁵ for public participation marked another key milestone, allowing stakeholders to contribute to the development of Nigeria's AI regulatory framework.

¹⁷⁸ Kayondo S. (2024), East Africa's AI Revolution: Growth, Innovation, and Challenges, Natlawreview.

¹⁷⁹ Kayondo S. (2024), East Africa's AI Revolution: Growth, Innovation, and Challenges, Natlawreview.

¹⁸⁰ Ibid

¹⁸¹ Ibid

¹⁸² Ibid

¹⁸³ NCAIR (n.d) The National Centre for Artificial Intelligence and Robotics

White & Case (2025), AI Watch: Global regulatory tracker - Nigeria, whitecase.com

¹⁸⁵ White & Case (2025), AI Watch: Global regulatory tracker - Nigeria, whitecase.com

Ghana's national AI strategy¹⁸⁶ focuses heavily on ethical considerations, digital literacy, and capacity building. In partnership with the Mozilla Foundation, Ghana has developed AI ethics guidelines that shape the country's approach to AI development. The Digital Ghana Agenda,¹⁸⁷ which incorporates AI as a key component, emphasizes education and training to ensure that Ghanaians are equipped to engage with AI technologies. Public-private partnerships have been a hallmark of Ghana's strategy, with the country collaborating with international technology companies and academic institutions to promote AI research and development.¹⁸⁸

In Benin, the National Strategy for Artificial Intelligence and Big Data (SNIAM), spearheaded by the Ministry of Digital and Digitalization, aims to establish Benin as a prominent player in the AI and big data domains by 2027. ¹⁸⁹ This strategy was officially adopted by the Council of Ministers on 18 January 2023 and focuses on technological solutions tailored to the nation's needs, especially in sectors like education, health, agriculture, living environment, and tourism. Additionally, Senegal, ¹⁹⁰ Sierra Leone, ¹⁹¹ have also enacted national AI strategies demonstrating their commitment to leveraging artificial intelligence for economic growth, innovation, and public service enhancement.

West African countries are advancing AI governance through an Africa-centric approach that prioritizes local solutions, data sovereignty, ethics, and cross-sector collaboration. Nigeria leads with the National Centre for AI and Robotics (NCAIR) and its National AI Strategy (NAIS), while Ghana integrates AI into its Digital Ghana Agenda, emphasizing ethics and capacity building. Benin's AI and Big Data Strategy (SNIAM) focuses on key sectors like health and education, as do Senegal and Sierra Leone strategies demonstrating the region's commitment to leveraging AI for innovation, economic growth, and public service enhancement.

North Africa

AI advancements in the North African countries have yet to meet the expectations and challenges of the AI revolution, as the digital divide between the Global North and South remains significant. The governments in the region have made limited investments in structuring and governing data generated by state institutions, businesses, and society. Like many Global South nations, they face challenges related to data accessibility, infrastructure, and human capital. However, these countries hold strong potential to overcome these barriers, thanks to their vibrant innovation ecosystems, a tech-savvy youth eager to embrace AI, dynamic startup environments, and a skilled AI-focused diaspora willing to contribute to development efforts.

Egypt's National AI Strategy, launched in 2020, focuses on AI's potential to improve sectors such as

¹⁸⁶ Penplusbytes (2024), Putting the Spotlight on Ghana's AI Strategy

¹⁸⁷ NCA (n.d), Ghana's Digital Agenda, National Communications Authority

¹⁸⁸ Eke DO and Wakunuma K (eds), Responsible AI in Africa: Challenges and Opportunities (Springer 2023)

¹⁸⁹ DigWatch (2023), <u>The National Strategy for Artificial Intelligence and Big Data (SNIAM) of Benin</u>, Geneva Internet Platform

¹⁹⁰ UNESCO (n.d), Senegal | Global AI Ethics and Governance Observatory

¹⁹¹ ALT (n.d), AI Governance in Africa, Alt Advisory Africa

¹⁹² Trigui H, Guerfali F, Harigua-Souiai E, et al. Exploring AI governance in the Middle East and North Africa (MENA) region: gaps, efforts, and initiatives. Data & Policy. 2024;6:e83. doi:10.1017/dap.2024.85.

¹⁹³ Trigui H, Guerfali F, Harigua-Souiai E, et al. Exploring AI governance in the Middle East and North Africa (MENA) region: gaps, efforts, and initiatives. Data & Policy. 2024;6:e83. doi:10.1017/dap.2024.85.

healthcare, agriculture, and transportation, while also addressing the ethical and regulatory challenges posed by AI. The Egyptian President Abdel Fattah El-Sisi unveiled the second edition of the National Artificial Intelligence Strategy 2025–2030, reinforcing the country's commitment to harnessing AI for innovation, economic growth, and improved living standards. The strategy aims to position Egypt as a leading AI hub in the MENA region, with a goal of increasing the ICT sector's GDP contribution to 7.7% by 2030. It is built on six key pillars: governance, infrastructure, technology, data, ecosystem, and talent. The plan also sets ambitious targets, including the creation of over 250 AI companies and training 30,000 AI professionals by 2030.

Morocco has similarly prioritized AI in its national development agenda, focusing on fostering innovation while ensuring that AI deployment respects human rights and ethical norms. The country has adopted a multi-faceted approach that integrates AI into its industrial and economic strategies, while simultaneously considering the social and ethical impacts of AI technologies.

Morocco has strengths relating in particular to connectivity, access to data, cybersecurity, and the protection of personal data, which are fundamental and structuring foundations of any AI ecosystem efficiently.¹⁹⁶

While Tunisia lacks specific AI regulation, it has had AI related initiatives including most recently, the announcement that its first public institute that specialises in artificial intelligence (AI) starting its work at the University of Tunis in September of 2024.¹⁹⁷

North African countries are at a pivotal moment in their AI development journey. While challenges such as limited infrastructure, data accessibility, and governance gaps persist, the region has demonstrated a strong commitment to AI-driven transformation. Countries like Egypt, Morocco, and Tunisia are leveraging their innovation ecosystems, skilled youth, and growing AI talent pools to position themselves as regional leaders. Egypt's ambitious AI strategy, Morocco's structured approach to AI integration, and Tunisia's recent establishment of a dedicated AI institute reflect a broader regional effort to harness AI for economic and societal advancement.

Southern Africa

The Southern African Development Community (SADC) Regional Economic Community (REC) member states, particularly Namibia and South Africa, have taken steps toward fulfilling their commitment to developing AI policies and regulations to mitigate high-risk AI use, as outlined in the Windhoek Statement on AI. 198

South Africa led these efforts by implementing recommendations from AI and 4IR experts, including establishing an AI Institute¹⁹⁹ and investing in human capital. The Department of Communications and

¹⁹⁴ Malin C (2025), Egyptian president launches 2025-2030 National AI Strategy, Middle East AI News.

¹⁹⁵ Malin C (2025), Egyptian president launches 2025-2030 National AI Strategy, Middle East AI News.

¹⁹⁶ Lafram A., Bahji S.(n.d), <u>Artificial Intelligence in Morocco: Towards Holistic, Responsible and Ethical National AI Strategy for Moroccan Competitiveness and Strategic Intelligence.</u>

¹⁹⁷ Sawahel W. (2024), <u>Tunisia's first public AI institute to start its work soon</u>, University World News.

¹⁹⁸ UNESCO (2022) <u>Windhoek Statement on Artificial Intelligence in Southern Africa, Windhoek (Namibia), 9</u> <u>September 2022</u>.

¹⁹⁹ AII-SA (n.d), AI, IT & Digital Innovation in South Africa, AI Institute - South Africa

Digital Technologies established the AI Expert Advisory Council and launched the Artificial Intelligence Institute of South Africa (AIISA).²⁰⁰ South Africa collaborated with the Smart Africa Alliance to create the Smart Africa Blueprint on AI,²⁰¹ which influenced the country's AI strategy development. The country's approach is particularly noteworthy for its emphasis on research and development, evidenced by the establishment of the WEF Affiliated AI Centre focusing on AI Ethics and the Centre for Artificial Intelligence Research (CAIR).²⁰² Additionally, policymakers prioritized finalizing the draft Cloud and Data Policy as well as the development of a clear national AI policy.²⁰³

Meanwhile, Namibia engaged in discussions with UNESCO to implement the UNESCO Recommendation on AI, a project led by the Ministry of Higher Education, Training, and Innovation, in tandem with the UN agency.²⁰⁴

Beyond these countries, Zambia also made strides in AI development by launching its National AI Strategy²⁰⁵ in collaboration with the Tony Blair Institute for Global Change and other international partners. The strategy aims to accelerate digital transformation, create new job opportunities, enhance public service efficiency, and boost economic growth through AI-driven innovation.²⁰⁶

Similarly, Zimbabwe advanced its AI agenda by completing the National Artificial Intelligence (AI) Policy Framework, a key step in its broader efforts to drive digital transformation and position AI as a catalyst for economic and technological development.²⁰⁷

Tanzania has developed the 2022 Policy Framework for Artificial Intelligence in the Health Sector, ²⁰⁸ offering a structured approach to integrating AI into healthcare. The framework defines key processes, technologies, and stakeholder roles to enhance AI-driven health outcomes. The Ministry of ICT is working on an AI Policy that reflects a broader concern among policymakers about the ethical, social, and economic implications of unregulated AI technologies. This call for regulation was further amplified in 2024 during a high-profile session led by Minister Nape of the Ministry of ICT. ²⁰⁹

The progress made by SADC member states highlights a growing recognition of AI's transformative potential across various sectors. South Africa's leadership in AI policy development, research, and institutional investments sets a precedent for other countries in the region. Namibia, Zambia, and Zimbabwe's efforts further demonstrate a commitment to structured AI governance, aligning with global best practices. Tanzania's sector-specific approach to AI also underscores the diverse strategies countries are adopting to integrate AI into national development agendas. However, the successful implementation

²⁰⁰ OECD.AI, 'Database of National AI Policies' (OECD 2024).

²⁰¹ Smartafrica (n.d), Artificial Intelligence for Africa

²⁰² Agwaibor S. (2024), African AI Startups: Navigating Growth amidst Infrastructure Gaps, Techcabal Insights.

²⁰³ Michalsons (2025), South Africa National AI Policy

²⁰⁴ Terblanché N. (2024), <u>Namibia will focus on ethical AI development under UNESCO's guidance</u>, Windhoek Observer

²⁰⁵ Malin C. (2024), Zambia launches AI Strategy to boost jobs & economy, Africa AI News.

²⁰⁶ Malin C. (2024), Zambia launches AI Strategy to boost jobs & economy, Africa AI News.

²⁰⁷ Bureau B. (2024), National Al Policy Framework Compete, The Herald.

²⁰⁸ TMC (2025), <u>Beyond Fragmentation: Why Tanzania Needs a National AI Strategy for Sustainable Growth</u>, Tech & Media Convergency.

²⁰⁹ TMC (2025), <u>Beyond Fragmentation: Why Tanzania Needs a National AI Strategy for Sustainable Growth</u>, Tech & Media Convergency.

of these strategies will depend on sustained political will, investment in AI infrastructure, and the development of local talent. As AI continues to shape the global economy, African nations must collaborate, share best practices, and refine their policies to ensure AI-driven growth remains ethical, inclusive, and beneficial to all.

National AI Strategies

Nations are developing National AI Strategies to harness the power of artificial intelligence for innovation and economic growth. These strategies aim to drive progress in sectors such as healthcare, education, and infrastructure, empowering communities and positioning Africa as a leader in the global digital economy.²¹⁰

Presently, twelve²¹¹ countries in the continent have established national AI policies and strategies, each at varying stages of implementation. Meanwhile, Kenya and Morocco have begun discussions on formulating their own AI strategies.

²¹⁰ Lawyers Hub Africa (n.d) *National AI strategies in Africa*, *AI Policy Lab*. Available at: https://www.aipolicy.africa/national-strategies (Accessed: 19 February 2025).

These countries are Tunisia, Algeria, Egypt, Ethiopia, Rwanda, Mauritius, South Africa, Nigeria, Benin, Ghana, Senegal, and Zambia.



1. Mauritius Artificial Intelligence Strategy

Mauritius AI Strategy at a Glance

Year Launched: 2018

Key Sectors: Manufacturing, healthcare, fintech, transport, agriculture

Major Challenges: Productivity decline, tech adoption reluctance, AI talent shortage, high AI costs

Strategic Recommendations: AI governance, regulatory updates, AI start-up incentives, AI research

investment

Mauritius became the first African country to publish a National AI Strategy in 2018, setting a precedent for AI-driven economic transformation. The strategy aims to position AI as a key driver of growth, with a

focus on sectors such as manufacturing, healthcare, fintech, transport, and agriculture.²¹² To achieve this, it prioritizes sectoral AI adoption, capacity building, ethical AI development, and public awareness.

Despite its ambitious vision, Mauritius faces several challenges in implementing AI. Economic barriers such as declining productivity, slow technology adoption, and a shortage of skilled AI professionals pose significant hurdles. Social and environmental concerns, including traffic congestion, crime, climate change, and resistance to automation, further complicate AI integration. Additionally, the high costs of AI systems make adoption difficult, particularly in key sectors like transportation.

To address these challenges, the strategy recommends several key initiatives. It proposes the establishment of the Mauritius Artificial Intelligence Council (MAIC) to oversee AI policy and innovation. AI and fintech start-ups should be supported through tax incentives, grants, and financing mechanisms to encourage growth. Developing AI talent is also a priority, requiring investment in research, training, and attracting skilled professionals to build local capacity. Furthermore, the strategy highlights the need to update legal and regulatory frameworks to accommodate AI-driven industries, particularly in fintech and data protection. It also suggests the creation of a technology park to foster AI-driven entrepreneurship and collaboration between the private sector, start-ups, and research institutions.

By implementing these measures, Mauritius seeks to balance technological progress with ethical considerations, ensuring AI contributes to economic and social development. While challenges remain, the country's proactive approach positions it as a potential leader in AI adoption across Africa.

2. Egypt National AI Strategy

Egypt AI Strategy at a Glance

Year Launched: 2021

Key Sectors: Healthcare, Education, Agriculture, Government, Manufacturing, Tourism, Energy,

Pillars: Governance, Technology, Data, Compute Infrastructure, Talents, Ecosystem

The National Council for Artificial Intelligence developed the national AI strategy, building on prior efforts from 2019 led by the Ministry of Communications and Information Technology and the Ministry of Higher Education and Scientific Research, with contributions from independent experts and private sector companies.²¹³ This first version of Egypt's AI strategy sought to localize AI development, reinforce Egypt's regional leadership, and position the country as a key global player in the field.²¹⁴ While the first version represents the initial milestone in the path of AI, the second version published and implemented in 2025 seeks to build on Egypt's current strengths and represents the start of the second phase for AI adoption in Egypt.²¹⁵ The Strategy seeks to move on more solid and clear grounds, recognizing that maximizing the potential of AI will increase resilience, productivity, growth, and innovation across the private and public sectors.²¹⁶

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²¹² Mauritius Working Group on AI (2018), Mauritius Artificial Intelligence Strategy.

²¹³ ANDP (2021) Egypt National Artificial Intelligence Strategy, Arab National Development Planning Portal

²¹⁵ Egypt National AI Strategy Second Edition 2025

²¹⁶ Ibid

Egypt has outlined six strategic objectives to drive socio-economic growth, innovation, and sustainability. These include ensuring ethical and responsible AI use through a comprehensive regulatory system and active global engagement, enhancing quality of life and sectoral efficiency with AI applications, and improving data accessibility by developing national governance frameworks. Additionally, Egypt aims to build a scalable AI infrastructure with strong cloud services, foster a thriving AI ecosystem by supporting startups and SMEs, and expand the quantity and quality of local AI talent to strengthen the country's position in the global AI landscape.²¹⁷

3. Ghana National AI Strategy

Ghana AI Strategy at a Glance

Year Launched: 2022

Key Sectors: Healthcare, Agriculture, Transportation, Energy, Financial services, Lands and Natural Resources, Environment and Circular Economy.

Objectives/Pillars: Expand AI education and training, empower youth for AI jobs of the future, deepen digital infrastructure and inclusion, facilitate data access and governance, coordinate a robust AI ecosystem and community, accelerate AI adoption in key sectors, invest in applied AI research, and promote AI adoption in the public sector.

Major Challenges: Incomplete internet penetration, Limited access to international, world-class cloud service providers, revenue mobilization challenges.

Strategic Recommendations: Has 31 recommendations including launching the "AI Ready Ghana" Program to equip young individuals, facilitating remote jobs or internships in AI by equipping people with on-the-job skill sets, developing tax incentives for youth in AI startups to boost entrepreneurship, disseminating local and international guidelines on trustworthy, safe, secure and ethical AI practices to AI developers and adopters, and establishing a Natural Language Processing Centre of Excellence to bridge local communication gaps and expand Ghanaian language lexicon.

In October 2022, Ghana concluded the drafting of its National Artificial Intelligence (AI) Strategy, a document which provides the country's strategic direction spanning from 2023 to 2033, with the aim of positioning the country as a leader in AI innovation on the African continent.

Developed by the Ministry of Communications and Digitalisation in collaboration with Smart Africa, German Agency for International Cooperation (GIZ), FAIR Forward, and The Future Society, the strategy defines a roadmap focusing on AI education, digital inclusion, data governance, and sectoral adoption through its eight (8) pillars.²¹⁸

Ghana faces several challenges in advancing AI adoption, particularly due to incomplete internet penetration, especially in rural areas, where affordability and reliability remain significant barriers to digital inclusion. Limited access to international, world-class cloud service providers further restricts AI startups, students, and practitioners, as the high costs make these essential resources unattainable.²¹⁹

²¹⁷ Ibid

²¹⁸ Penplusbytes (2024) Putting the Spotlight on Ghana's AI Strategy.

²¹⁹ Penplusbytes (2024) <u>Putting the Spotlight on Ghana's AI Strategy</u>.

Additionally, revenue mobilization challenges continue to impact the development and sustainability of AI initiatives, further hindering innovation and growth in the sector.

Its key initiatives in advancing AI adoption include launching the "AI Ready Ghana" program to equip young individuals with essential AI skills, facilitating remote jobs and internships by providing on-the-job training, and introducing tax incentives for youth-led AI startups to promote entrepreneurship. Additionally, the strategy emphasizes the dissemination of local and international guidelines on trustworthy, safe, and ethical AI practices to developers and adopters. To bridge local communication gaps, it also proposes establishing a Natural Language Processing Centre of Excellence to expand the Ghanaian language lexicon and enhance AI's linguistic capabilities.

4. <u>Senegal National AI Strategy</u>

Senegal AI Strategy at a Glance

Year Launched: 2023

Key Sectors: Health, Education, Justice

Major Challenges: Challenges in data collection and sharing across multiple sectors, often due to limited digitalization, Lack of official data on key economic aspects of digital transformation and on investment in AI and its adoption rates, gender divides and rural-urban gaps in technological infrastructure.

The Ministry of Communication, Telecommunications and the Digital Economy (MCTEN) is responsible for coordinating and overseeing AI-related initiatives in Senegal and launched Senegal's National Strategy for the Development of Artificial Intelligence (SNDIA) in September 2023.²²¹ The strategy builds on the Digital Strategy 2025, the National Data Strategy, and the National Cybersecurity Strategy among other recent policies, under the Emerging Senegal Plan. The country is yet to have a legal or regulatory framework specific to AI.²²²

Senegal continues to face significant challenges in AI and digital development. Investment in research and development remains low, with gross R&D expenditure at just 0.58% in 2015.²²³ There are also notable disparities in technological infrastructure, particularly along gender and rural-urban lines. In 2018, only 52.5% of rural households had access to electricity, compared to nearly 90% in urban areas.²²⁴ The gender gap in mobile phone access is evident, with female-to-male usage ratios ranging from 0.79 to 0.85, while internet usage among women is even lower at 0.7. Gender disparities also persist in education, where women account for less than 30% of higher education students and only 25% of researchers in STEM fields.²²⁵

To bridge these gaps, Senegal is implementing measures under the Senegal Digital 2025 strategy, aiming to promote greater digital inclusion and equity.

²²⁰ Ghana's National AI Strategy 2022.

²²¹ UNESCO (2023) Global AI Ethics and Global Observatory - Country Profile Senegal.

²²² UNESCO (2023) Global AI Ethics and Global Observatory - Country Profile Senegal.

²²³ Ibid

²²⁴ Ibid

²²⁵ Ibid

5. Benin National AI and Big Data Strategy

Benin AI and Big Data Strategy at a Glance

Year Launched: 2023

Key Sectors: Education, healthcare, agriculture, living conditions, tourism, public administration, environment, finance and economy, justice, media, infrastructure and transportation, port, security and defense, cybersecurity.

Major Challenges:Challenges linked to data, relating to the collection, preparation, access, storage and governance of the data required to operate artificial intelligence mechanisms; The legal and regulatory challenges associated with artificial intelligence, specifically its governance and regulation; and Ethical challenges, specifically issues relating to data protection and the protection of fundamental rights.

Strategic Recommendations: Implement use-case and high-impact initiatives, strengthen human capacities on AI and the management of big data, provide better support to capital development, and update frameworks - institutional and regulatory and big data management.

The process of developing Benin's National Artificial Intelligence and Big Data Strategy (SNIAM) was headed up by the Ministry of Digital Affairs and Digitalization, in an approach involving all the stakeholders and following a holistic approach focused on technological solutions suited specifically to our country's needs, particularly in the fields of education, healthcare, agriculture, living conditions, tourism, and on the understanding of the use cases applicable to the Beninese context.²²⁶

The strategy is built on key principles essential for its success. It follows an **iterative and incremental implementation** approach, allowing for a phased rollout of high-impact initiatives, with adjustments made based on initial outcomes within an evolving regulatory framework. **Resource pooling** ensures that institutional, organizational, and technical solutions are shared across sectors to maximize efficiency.²²⁷ **Accountability** is central, requiring the involvement of all stakeholders—including the government, private sector, and public—in the design, implementation, and evaluation of the strategy, fostering mutual responsibility. Lastly, **results-based management** emphasizes measurable outcomes over activities, ensuring that clear objectives, indicators, and targets are established at every stage.²²⁸

6. Algeria National AI Strategy

Algeria AI Strategy at a Glance

Year Launched: 2024

Objectives/Pillars: Scientific Research, Building local expertise, creating a supportive environment for

ΑI

Sectors: Education, Health, Transport, Energy

²²⁶ Ministry of Digital Affairs and Digitalization (2023) <u>Benin National Artificial Intelligence and Big Data Strategy</u> 2023.

²²⁷ Ministry of Digital Affairs and Digitalization (2023) <u>Benin National Artificial Intelligence and Big Data Strategy</u> 2023

²²⁸ Ministry of Digital Affairs and Digitalization (2023) <u>Benin National Artificial Intelligence and Big Data Strategy</u> 2023.

Algeria launched its national strategy for artificial intelligence (AI) in December 2024 during the 3rd African Start-up Conference in Algiers. The initiative aims to develop local AI solutions and implement them across various sectors to reduce reliance on imported technologies. This strategy focuses on six key areas, including scientific research, creating a supportive environment for AI, building local expertise, and assisting start-ups to provide solutions that meet business needs. The strategy follows Algeria's national digital transformation plan, introduced earlier in the year with the aim of accelerating the country's digital transition, which has been a priority since President Abdelmadjid Tebboune took office in 2019.

7. Tunisia National AI Strategy

Tunisia AI Strategy at a Glance

Year Launched: 2018

Key Sectors: Education, Innovation and Entrepreneurship, Agriculture,

Tunisia's 'National AI Strategy: Unlocking Tunisia's Capabilities Potential' was developed in 2018 following a workshop hosted by the UNESCO Chair on Science, Technology, and Innovation Policy, in collaboration with the National Agency for Scientific Research Promotion-ANPR.²³²

Since then, the Ministry of Technology, Ministry of Industry, Ministry of Economy, and Ministry of Higher Education signed a memorandum of understanding in 2022 to guide the development and implementation of the national AI strategy.²³³ The agreement sets the strategic direction for AI initiatives and paves the way for a comprehensive study on its execution. It also aims to define priority areas, outline key projects, establish a timeline for completion, and estimate the financial requirements for successful implementation.²³⁴

8. Ethiopia National AI Policy

Ethiopia AI Policy at a Glance

Year Launched: 2024

Key Sectors: Agriculture, Tourism, Mining, Textile, Construction, Pharmaceutical, Manufacturing, and Creative Arts.

Major Challenges/Opportunities: Need for building robust electrification infrastructure throughout the country, needs for a national fibre-backed communications infrastructure that can sustain Terabit connectivity among regional hubs,²³⁵ support and incentivise the set up of regional hubs/public computing centres (alternatively known as Community Technology Centres) where anyone can access key information and services on the network without requiring their own device.²³⁶

²²⁹ Ecofinagency (2024), <u>Algeria Unveils AI Strategy to Boost Digital Transformation</u>, ecofinagency.com.

²³⁰ Ecofinagency (2024), Algeria Unveils AI Strategy to Boost Digital Transformation, ecofinagency.com.

²³¹ Ibid

²³² MENA Observatory (n.d) <u>Tunisia National AI Strategy</u>.

²³³ MENA Observatory (n.d) <u>Tunisia National AI Strategy</u>.

²³⁴ Ibid

²³⁵ Ethiopia National AI Policy 2024.

²³⁶ Ibid

Following three years of consultations with key stakeholders, Ethiopia's Council of Ministers unanimously endorsed the country's national artificial intelligence (AI) strategy during its 37th regular meeting in 2024.²³⁷

To guide its efforts towards implementing various initiatives to accelerate technology adoption for social and economic growth while fostering a competitive AI industry that aligns with national security priorities the Ethiopian government introduced a comprehensive national AI policy.²³⁸

The policy defines the government's vision and objectives for AI development, establishing a technological framework to enhance stakeholder collaboration. It also provides guidelines for data governance, management, and human resource development to support sustainable AI integration.²³⁹ It aims to improve financial literacy, credit scoring, and reduce transaction costs and market frictions, while fostering investment opportunities. Additionally, the policy highlights the fragility of businesses due to low financial literacy, making them vulnerable to market changes and underscores the importance of financial literacy for adopting formal financial products like credit cards and mortgages.²⁴⁰

9. Rwanda National AI Policy

Rwanda AI Policy at a Glance

Year Launched: 2022

Key Sectors: Healthcare, Banking & Digital payments, Transportation, Agriculture, Manufacturing, Construction, Public Administration and Education, and E-commerce and trade

Objectives: Positioning Rwanda as Africa's AI Lab and Responsible AI Champion, Building 21st Century Skills and AI Literacy, Creating an Open, Secure, Trusted Data Ecosystem as an Enabler of the AI Revolution, Driving Public Sector Transformation to Fuel AI Adoption, and Accelerating Responsible AI Adoption in the Private Sector.

Major Challenges: For the start-up community it is access to business resources and financing.

Strategic Recommendations: Reskill the workforce with 21st Century AI and data skills, Set world-class AI university education and applied research, Adapt Rwanda's education to globally competitive STEM skills, Ensure access to affordable, reliable, secure storage and computing, Position Rwanda as cloud infrastructure host serving the region, Create greater availability and accessibility of AI-ready data, Strengthen AI policy and regulation and ensure public trust in AI, Operationalize and share Rwanda's AI ethical guidelines, Improve public service delivery using AI, and Support private sector adoption of AI to drive national investments.

The National Artificial Intelligence Policy for the Republic of Rwanda serves as a roadmap to enable Rwanda to harness the benefits of AI and mitigate its risks. Building on the mission of the Vision 2050, Smart Rwanda Master Plan and other key national plans and policies, it equips Rwanda to harness AI for

²⁴⁰ Diplomacy.edu (2024) Ethiopia Council of Ministers approves AI Policy, Diplo

Artificial Intelligence Institute (2024) <u>The Council of Ministers Unanimously Decide to Implement the National Artificial Intelligence Policy</u>, AII.
 Artificial Intelligence Institute (2024) <u>The Council of Ministers Unanimously Decide to Implement the National</u>

²³⁸ Artificial Intelligence Institute (2024) <u>The Council of Ministers Unanimously Decide to Implement the National Artificial Intelligence Policy</u>, AII.

²³⁹ Ibid

sustainable and inclusive growth.²⁴¹ The National AI Policy was developed by MINICT and RURA, with support by GIZ FAIR Forward, the Centre for the 4th Industrial Revolution Rwanda (C4IR) and The Future Society (TFS).²⁴²

The AI policy prioritizes workforce reskilling, world-class AI education, and STEM curriculum adaptation to build AI talent. It aims to position Rwanda as a regional AI hub by facilitating student exchanges, ensuring access to cloud computing, and developing AI-ready data. Strengthening AI policy, fostering public trust, and enhancing regulatory capacity are key to responsible AI adoption. The strategy also promotes AI-driven public service delivery, private sector AI adoption, and Rwanda's competitiveness through international collaboration, positioning the country as a leader in AI innovation and investment.²⁴³

10. South Africa National AI Policy

South Africa AI Plan at a Glance

Year Launched: 2024

Key Sectors: leverage opportunities across all sectors in our economy

Objectives: Economic transformation, social equity, sustainable development, and global leadership

Major Challenges: Digital divide, historical inequities, institutional inertia, outdated regulatory

frameworks

Strategic Recommendations: Talent/Capacity development, develop robust digital infrastructure, advance research and innovation, develop guidelines for ethical and effective AI deployment in the public sector, ethical AI guidelines development, ensure fairness and mitigate bias, ensure safety, security, transparency and explainability, and prioritise privacy and data protection.

The Department of Communications and Digital Technologies (DCDT) played a leading role in shaping AI regulation in South Africa. Building on the release of its National AI Plan in April 2024, the DCDT advanced its efforts by introducing the South African National AI Policy Framework²⁴⁴, demonstrating its ongoing commitment to establishing a comprehensive and structured approach to AI governance.

The AI policy will be implemented through twelve strategic pillars aimed at fostering innovation while ensuring ethical AI development. Key areas include talent development through AI education and industry partnerships, investment in digital infrastructure to enhance connectivity, and support for AI research and startups.²⁴⁵ The policy promotes ethical AI guidelines, strengthened data protection, and robust cybersecurity measures to safeguard systems and mitigate risks. Transparency, fairness, and human oversight will be prioritized to build public trust and accountability. Additionally, AI development will align with societal values, promoting well-being, equality, and sustainability.²⁴⁶

²⁴¹ ICTWorks (2023), Introducing the National Artificial Intelligence Policy for Rwanda.

²⁴² ICTWorks (2023), Introducing the National Artificial Intelligence Policy for Rwanda.

²⁴³ ICTWorks (2023), <u>Introducing the National Artificial Intelligence Policy for Rwanda</u>.

²⁴⁴ Michalsons (2025), South African National Al Policy: Guidance and Overview, Michalsons.

²⁴⁵ Michalsons (2025), South African National AI Policy: Guidance and Overview. Michalsons.

²⁴⁶ Michalsons (2025), South African National AI Policy: Guidance and Overview. Michalsons.

South Africa continues to grapple with historical challenges that hinder AI adoption and development. The persistent digital divide, marked by unequal access to technology and education, remains a major obstacle to equitable AI integration.²⁴⁷ Socio-economic disparities rooted in historical injustices further slow AI adoption, necessitating inclusive policies to ensure broad access to its benefits. Institutional inertia and bureaucratic resistance to change also impede the rapid deployment of new technologies, highlighting the need for strong leadership and clear policy direction. Additionally, outdated regulatory frameworks struggle to keep pace with AI advancements, making legal reforms essential to fostering a supportive environment for AI growth.

11. Nigeria National AI Strategy

Nigeria AI Strategy at a Glance

Year Launched: 2024

Key Sectors: Finance, Agriculture, Education, Healthcare, and Manufacturing

Major Challenges: High and unstable inflation, Limited investment in AI R&D, Limited access to reliable power, Unstable and high energy costs, Reduced consumer spending power, Potential for social unrest

Key Objectives: Economic Growth and Competitiveness, Social Development and Inclusion, Technological Advancement and Leadership,

Strategic Recommendations: Building Foundational AI Infrastructure, Building and Sustaining a World-class AI Ecosystem, Accelerating AI Adoption and Sector Transformation, Ensuring Responsible and Ethical AI Development and Developing a Robust AI Governance Framework

Nigeria National AI Strategy sets a path to achieve the vision "to be a global leader in harnessing the transformative power of AI through responsible, ethical, and inclusive innovation, fostering sustainable development through collaborative efforts.²⁴⁸ This inaugural National Artificial Intelligence (AI) Strategy, is a landmark initiative aimed at harnessing the transformative potential of AI to drive sustainable development, innovation, national productivity, and human well-being, which seeks to solidify Nigeria's position as a champion in AI adoption on the African continent, building on the nation's pioneering establishment of the National Centre for AI and Robotics (NCAIR) and various AI-specific government initiatives to foster a knowledge-based economy and promote research and development in AI systems.²⁴⁹

The Strategy outlines Nigeria's national AI vision for 2024–2028 highlighting the country's guiding principles and aspirations for AI development and deployment. It emphasizes responsible and ethical conduct, ensuring that AI technologies are designed and used with careful consideration of their societal impacts. Inclusivity and shared prosperity are central to this vision, ensuring that AI innovation is accessible to all and leaves no one behind. The strategy also prioritizes innovation and adaptation, sustainability, collaboration, and global leadership in AI. Transparency, accountability, and a human-centric approach are key principles, along with a strong focus on data ethics, individual agency, and effective risk management.

²⁴⁷ Michalsons (2024), South Africa National AI Policy Framework 2024.

²⁴⁸ NITDA (n.d) National AI strategy - NCAIR - NITDA, Accessed 19th February 2025.

²⁴⁹ NITDA (n.d) National AI strategy - NCAIR - NITDA, Accessed 19th February 2025.

The Nigerian AI Strategy highlights several key challenges that could hinder the development of a sustainable AI ecosystem. One major issue is high and unstable inflation, which stood at 26.72% in September 2023. 250 This economic uncertainty discourages long-term investments, a crucial factor for AI growth. Additionally, reduced consumer spending power limits demand for AI-powered products and services, slowing market expansion and innovation. The potential for social unrest further complicates the investment landscape, creating an unstable environment that discourages long-term projects like AI development.251

Unstable and high energy costs pose another significant challenge, as AI infrastructure requires substantial computational resources. High operational expenses due to expensive electricity make AI adoption less attractive to businesses. Limited access to reliable power further disrupts AI model training and deployment, affecting performance and slowing research and development efforts. Lastly, inadequate investment in AI research and development weakens Nigeria's ability to compete globally and develop homegrown AI solutions. Addressing these challenges is essential to fostering a thriving AI ecosystem in the country.²⁵²

12. Kenya National AI Strategy

Kenya AI Strategy at a Glance

Year Launched: 2025

Key Sectors: Agriculture, Security, Healthcare, Education, and Public service delivery

Pillars: AI Digital Infrastructure, Ethical and Inclusive AI, Research and Innovation, AI for National

Development

Strategic Recommendations: modernize digital infrastructure, establish robust data governance frameworks, boost AI research capabilities, develop a talent pipeline, create agile regulatory frameworks, accelerate public-private investments, and foster ethical AI development.

Kenya's Artificial Intelligence (AI) Strategy envisions the country as the leading AI hub for model innovation, driving sustainable development, economic growth, and social inclusion while positioning itself as an AI research and application leader in Africa. The strategy provides a comprehensive framework to guide Kenya in harnessing the transformative power of AI, ensuring its deployment benefits all sectors of society while adhering to ethical principles and inclusivity.

Kenya's AI Strategy envisions the country as a leading hub for AI model innovation, focused on developing solutions tailored to local challenges through strong governance, innovation, and capacity building. It aims to drive equitable and sustainable AI adoption, ensuring that all citizens benefit from this transformative technology. The strategy calls on stakeholders to collaborate in achieving this vision and solidifying Kenya's role in AI development.²⁵³

13. Zambia National AI Strategy

²⁵⁰ Ibid

²⁵¹ Ibid

²⁵² Ibid

²⁵³ Kenya's National AI Strategy 2025 - 2030.

Zambia AI Strategy at a Glance

Year Launched: 2024

Key Sectors: Healthcare, Agriculture, e-government services, Education and FDI incentives

Strategic Recommendations: Digital trees, Reliable data, Trust and confidence, Innovation and

Entrepreneurship, and Partnership and collaboration

Zambia's Ministry of Technology and Science officially unveiled its Artificial Intelligence Strategy in 2025 in Lusaka, providing a clear roadmap to accelerate digital transformation, drive economic growth, improve public services, and generate new job opportunities.²⁵⁴ Developed in collaboration with the Tony Blair Institute for Global Change and supported by the government of Finland and other partners, the strategy aims to guide stakeholders in harnessing AI for national development.²⁵⁵ The government's increasingly comprehensive approach to digital policy has targeted technology adoption, e-government services, education and foreign direct investment (FDI) incentives, working with local and global stakeholders.²⁵⁶ The strategy documents five building blocks; 'digital trees' to enhance connectivity, 'reliable data' for efficiency and sustainability; 'trust and confidence' to safeguard cyberspace; 'innovation, entrepreneurship'; and a 'partnership and collaboration' platform to exchange ideas and support innovation.

A Case for Regional Collaboration

The regional approaches to AI governance in Africa are diverse, reflecting the continent's unique socio-political, economic, and technological contexts. While individual nations in Africa are making progress, there is a growing recognition of the need for regional collaboration and harmonization. The African Union's Continental AI Strategy provides a framework for member states to develop AI policies and regulations that align with continental priorities, such as human rights, economic development, and ethical governance. It encourages countries to adopt common standards and share best practices in AI regulation, helping to build a cohesive and coordinated approach to AI governance across the continent.

Additionally, regional initiatives, such as the Pan-African AI Network²⁵⁷ play an essential role in fostering collaboration and knowledge-sharing among African nations. These initiatives provide platforms for governments, businesses, and academic institutions to engage in dialogue, share insights, and collaborate on AI research and policy development. Through such efforts, African countries can work to ensure that AI serves the interests of the continent and its people, promoting innovation while safeguarding human rights and ethical standards.

²⁵⁴ Malin C. (2024) Zambia launches AI Strategy to boost jobs & economy, Africa AI News.

²⁵⁵ Malin C. (2024) Zambia launches AI Strategy to boost jobs & economy, Africa AI News.

²⁵⁶ Ibid

²⁵⁷ African AI Network.

AI Adoption and Privacy Across Key Sectors in Africa

This section analyses the current and potential use of AI in employment, healthcare, security and surveillance, in various countries. It also identifies ethical and legal considerations related to AI use in these sectors.

Financial Services and Digital Lending

The financial technology sector is undergoing a major shift with the rise of AI, shaping the future of finance in unprecedented ways. As AI adoption accelerates, 90% of financial professionals are already utilizing Predictive AI, while 60% see Generative AI as an emerging tool with significant cost-saving potential.²⁵⁸ However, as we embrace this transformation, data privacy concerns remain critical, posing intricate challenges that need addressing.

AI innovation in the financial sector is boosting efficiency, productivity, and competitiveness. Automated processes are streamlining accounting and bookkeeping, reducing manual workload, and improving accuracy through real-time financial analytics.²⁵⁹ Banks are leveraging AI to deliver personalized services by analyzing comprehensive customer interactions, enabling tailored financial advice and product offerings. Additionally, AI-powered chatbots and virtual assistants are enhancing customer service by providing 24/7 support for tasks such as account management and complaint resolution, ensuring a more seamless client experience.²⁶⁰

Use cases in Africa are numerous. For instance, Namibia has made notable advances in using AI within its banking sector. The Standard Bank Namibia uses an AI tool called Python to analyse customer complaints from social media platforms like Facebook and X. This AI-driven analysis enables the bank to proactively identify and mitigate potential risks more efficiently.²⁶¹

In addition, Standard Bank South Africa introduced a chatbot available on WhatsApp during the Covid period to provide customers with real-time updates on services and offerings while addressing frequently asked questions efficiently.²⁶² A similar chatbot called ''Ti-A'' operates in Standard Bank Namibia.²⁶³ In 2021, Nedbank Namibia launched "Enbi," an AI-driven virtual assistant integrated into their Money app and online banking platforms. Enbi enhances the customer experience by streamlining everyday banking interactions and managing customer inquiries with ease.²⁶⁴ These advancements demonstrate how AI is transforming banking services in Namibia.

²⁵⁸ Delev Z. (2024), The Future of Finance: Adapting to AI and Data Privacy Laws, GDPR Local.

²⁵⁹ Delev Z. (2024), The Future of Finance: Adapting to AI and Data Privacy Laws, GDPR Local.

²⁶⁰ Delev Z. (2024), The Future of Finance: Adapting to AI and Data Privacy Laws, GDPR Local.

²⁶¹ Lazarus S. 22 (2024). *Namibian Banks embrace AI to boost Efficiency and Save Millions*. The Namibian Investigative Unit.

²⁶² BankServeAfrica (2020), Standard Bank launches WhatsApp Chatbot to keep Customers Informed.

²⁶³ Lazarus S. (2024), Namibian banks embrace AI to boost efficiency and save millions, The Namibian Investigative Unit

²⁶⁴ Lazarus S. (2024), <u>Namibian banks embrace AI to boost efficiency and save millions</u>, The Namibian Investigative Unit.

In the case of lending, banks and lending institutions are increasing their investments in advanced technologies such as AI to expedite loan processing and combat fraud. According to <u>BioCatch's 2024 AI</u>, <u>Fraud, and Financial Crime Survey Report</u>, 94% of organizations use AI/ML technologies to understand lending risk, and 87% report AI has increased the speed with which their organization responds to potential threats. AI is now being used in credit scoring, loan approval and fraud detection.

Despite the benefits offered by these innovations, the sensitive nature of financial data, combined with AI's need for vast datasets, amplifies privacy and data security concerns. Financial institutions must strike a careful balance between leveraging AI for improved efficiency and addressing anxieties over data access and usage.²⁶⁵ As AI development increasingly depends on collecting extensive personal data, concerns about surveillance and potential misuse continue to grow, making robust data protection measures essential.

Unlocking the Power of Privacy Enhancing Technologies in Financial Services

Gartner forecasts that by 2025, 60% of major organizations and government entities will adopt privacy-enhancing computation techniques for applications like data analysis, strategic monitoring, and cloud computing. 266 The UK's information commissioner further backed this notion upon the launch of the ICO's PETs guidance stating, "If your organisation shares large volumes of data, extraordinary category data, we recommend that over the next five years, you start considering using PETs. PETs enable safe data sharing and allow organisations to make the best use of the personal data they hold, driving innovation." 267

For financial services firms, PETs enable secure, privacy-preserving, and efficient data utilization, allowing organizations to make intelligence-driven decisions in real-time while maintaining compliance and trust. For instance, PETs-powered solutions enhance secure and private data usage by allowing banks to crossmatch, search, and analyze regulated data across different silos while keeping sensitive information protected during processing.²⁶⁸ This privacy-preserving approach enables the use of more comprehensive datasets, leading to improved decision-making, better enterprise data quality, fewer false positives, and greater efficiency in internal processes such as financial crime investigations.

Without doubt, the ongoing development and integration of AI in finance are set to drive significant changes in global financial markets, requiring regulatory adaptations. Financial institutions are expected to double their investment in AI technologies by 2027,²⁶⁹ highlighting AI's growing role in the sector. However, alongside its benefits, AI also presents challenges, including potential biases in decision-making and increased exposure to cyber threats, underscoring the need for careful oversight and risk management.

²⁶⁵ Delev Z. (2024), The Future of Finance: Adapting to AI and Data Privacy Laws, GDPR Local.

²⁶⁶ Williams E. (2024), <u>Unlocking the Power of Privacy Enhancing Technologies in Financial Services</u>, International Banker.

²⁶⁷ Williams E. (2024), <u>Unlocking the Power of Privacy Enhancing Technologies in Financial Services</u>, International Banker.

²⁶⁸ Williams E. (2024), <u>Unlocking the Power of Privacy Enhancing Technologies in Financial Services</u>, International Banker.

²⁶⁹ Delev Z. (2024), <u>The Future of Finance: Adapting to AI and Data Privacy Laws</u>, GDPR Local.

Healthcare, AI and Privacy

The rapid advancement of AI in healthcare has sparked ongoing discussions about its development and regulation. Many AI technologies are owned and managed by private entities, which, along with clinics and public institutions, play an increasingly significant role in collecting, using, and safeguarding patient health data. This shift raises critical concerns about privacy, data security, and the ethical implementation of AI in healthcare.

Unquestionably, AI is making significant strides across health practice. As of 2020, the use of AI in the USA and Canada has cut healthcare expenses by 25% and 12% respectively, allowing the underlying healthcare providers to dedicate more of their limited resources to patient care matters. Success has been documented in the case of radiology, particularly in the analysis of diagnostic imaging. For instance, researchers at Stanford have developed an algorithm capable of interpreting chest X-rays for 14 different pathologies within seconds. Beyond radiology, AI is poised to transform fields such as radiation oncology, organ allocation, and robotic surgery in the near future. In the U.S., the FDA recently approved one of the first machine learning applications in clinical care—software designed to detect diabetic retinopathy from diagnostic images.

In Malawi, AI-powered fetal monitoring systems are used to reduce stillbirths and neonatal deaths. PeriWatch, an AI system that tracks mothers' and babies' vital signs in real-time to detect possible anomalies shortly before and after childbirth, has helped the Area 25 hospital in Malawi reduce its stillbirth and neonatal death rate by 82%.²⁷⁵ The technology continuously monitors the baby's vital signs during labor, alerting specialists to any irregularities and enabling faster interventions.

In Zambia, the DawaMom app provides personalized healthcare guidance to expectant mothers.²⁷⁶ Dawa Health clinicians conduct home visits to build this dataset, gathering information on demographics, medical history, and key health indicators. AI then processes this data, identifying patient risks and enabling early interventions for high-risk conditions.²⁷⁷

The OpCon Mozambique project was designed to apply Machine Learning (ML) algorithms to predict the risk of treatment interruptions among individuals receiving HIV care. This predictive model was integrated into Infómovel, a localized version of Dimagi's CommCare mobile health platform tailored to the Mozambican healthcare context²⁷⁸.

²⁷⁰ Murdoch, B. <u>Privacy and artificial intelligence: challenges for protecting health information in a new era</u>. BMC Med Ethics 22, 122 (2021).

²⁷¹ AHB (2021), <u>Unlocking the Potential of Artificial Intelligence for Healthcare in Africa</u>.

²⁷² Murdoch, B. <u>Privacy and artificial intelligence: challenges for protecting health information in a new era</u>. BMC Med Ethics 22, 122 (2021).

²⁷³ Murdoch, B. <u>Privacy and artificial intelligence: challenges for protecting health information in a new era</u>. BMC Med Ethics 22, 122 (2021).

²⁷⁴ Murdoch, B. <u>Privacy and artificial intelligence: challenges for protecting health information in a new era</u>. BMC Med Ethics 22, 122 (2021).

²⁷⁵ Ramirez-Camara E. (2024), <u>An AI system has cut stillbirths and neonatal deaths by 82% in a Malawi hospital</u>, Data Phoenix.

²⁷⁶ Mozilla (2024), Addressing AI Bias in Maternal Healthcare in Southern Africa.

²⁷⁷ Mozilla (2024), Addressing AI Bias in Maternal Healthcare in Southern Africa.

²⁷⁸ Machine Learning for Predicting Default from HIV Services in Mozambique (2018), Opcon Mozambique Final Report.

Similarly, in Eswatini, Jacaranda Health tested an AI-enabled digital health tool called PROMPTS to support immunization cases.²⁷⁹ PROMPTS is a two-way SMS platform designed to empower new and expecting mothers by delivering gestation-specific information to guide informed decision-making. The tool uses AI to facilitate real-time interactions and gathers detailed data on users' experiences with healthcare services, enhancing support for maternal and child health.²⁸⁰

In Ghana, MinoHealth AI Labs is revolutionizing radiology by leveraging deep learning and convolutional neural networks to automate medical imaging analysis.²⁸¹ Similarly, the Philips Foundation has implemented AI-powered software developed by Delft Imaging in 11 South African hospitals to assist in triaging and monitoring COVID-19 patients through X-ray imaging.²⁸² Delft Imaging's CAD4COVID software enhances existing diagnostic methods by assessing disease severity and progression, while its CAD4TB software was deployed in Tanzania and Zambia to support the detection of pulmonary tuberculosis.

Meanwhile, Ilara Health in Kenya is expanding access to affordable and accurate diagnostics in rural areas by integrating small, AI-powered diagnostic devices into primary healthcare, ensuring that essential medical services reach underserved communities.²⁸³

Despite its benefits, AI in healthcare differs significantly from traditional medical technologies, particularly in its susceptibility to specific errors and biases. Additionally, some AI systems may be challenging—or even impractical—for human medical professionals to fully supervise.²⁸⁴ Healthcare data breaches have increased globally, including in the United States, Canada, and Europe.²⁸⁵ While AI and other algorithms are not yet widely exploited by cybercriminals, they are contributing to the growing challenges in safeguarding health information.

Risks to Privacy for Health Data

The use of AI in health data analysis presents several risks, particularly in algorithm configuration and data handling. Large-scale health data processing can lead to profiling, where AI-generated personalized health profiles contain sensitive details such as diagnoses, treatments, genetic predispositions, and lifestyles. These profiles become valuable to insurers, pharmaceutical companies, and other stakeholders, raising concerns about potential misuse. Biased algorithms could reinforce stereotypes, limit access to essential healthcare services, or result in discrimination in employment and insurance coverage. The accuracy of AI predictions depends on data quality, yet errors during training and development may introduce biases. Additionally, the opacity of AI systems makes it difficult for individuals to understand automated decisions, undermining trust and control over their

²⁷⁹ Jacaranda Health (2023), <u>Pilot results: Testing an mHealth approach to reach the last mile of Eswatini's under-immunized infants.</u>

²⁸⁰ Jacaranda Health (2023), Pilot results: Testing an mHealth approach to reach the last mile of Eswatini's under-immunized infants.

²⁸¹ AHB (2021), Unlocking the Potential of Artificial Intelligence for Healthcare in Africa.

²⁸² AHB (2021), Unlocking the Potential of Artificial Intelligence for Healthcare in Africa.

²⁸³ AHB (2021), Unlocking the Potential of Artificial Intelligence for Healthcare in Africa.

²⁸⁴ Murdoch, B. (2021), Privacy and artificial intelligence: challenges for protecting health information in a new era.

²⁸⁵ Murdoch, B. (2021), Privacy and artificial intelligence: challenges for protecting health information in a new era.

²⁸⁶ Bernard S. (2024), <u>Artificial Intelligence and Health Data: a promising combination with potential privacy pitfalls</u>, Prineos

data. Another major risk is de-anonymization, where anonymized health data can be re-identified by cross-referencing with social media, wearables, and health apps.²⁸⁷

The development and deployment of healthcare AI are advancing rapidly, offering significant potential benefits to patients whose data fuel these innovations. However, the commercialization of healthcare AI presents critical privacy concerns. Since medical data is among the most sensitive and legally protected information, there are growing worries about how access, control, and usage by private entities might evolve as AI systems become more autonomous. Ensuring patient agency and informed consent in regulatory frameworks would align with the fundamental legal and ethical principles of liberal democracies.

Security, Law Enforcement, and AI Surveillance

Surveillance and predictive policing through AI is one of the more controversial trends but one that has important implications for the future of cities and societies, particularly as more cities leverage artificial intelligence (AI) to ensure safety and security for their citizens.²⁸⁸ It is thus difficult to disconnect the discussions about surveillance and predictive policing from recent debates about the societal, ethical and even geopolitical dimensions.²⁸⁹

The adoption of AI for security purposes has accelerated in recent years, enhancing policing services, fostering community engagement, and strengthening public trust. AI-driven technologies such as biometrics, facial recognition, smart cameras, and video surveillance are becoming more prevalent. A recent study found that AI-powered smart solutions could reduce crime by 30–40% and improve emergency response times by 20–35%.²⁹⁰ Cities are increasingly investing in real-time crime mapping, crowd management, and gunshot detection, with 84% using facial recognition and biometrics, 55% deploying in-car and body cameras, 46% utilizing drones and aerial surveillance, and 39% adopting crowdsourced crime reporting and emergency apps.²⁹¹ However, only 8% have implemented data-driven policing. According to the AI Global Surveillance (AIGS) Index 2019, 56 out of 176 countries have integrated AI into their surveillance systems, though with varying approaches.²⁹² Additionally, the International Data Corporation (IDC) projected that by 2022, 40% of police agencies would leverage digital tools such as live video streaming and shared workflows to enhance public safety and alternative response strategies.²⁹³

Use cases in the sector are such as in Santa Cruz, California, which in 2020 became the first U.S. city to ban predictive policing tools, while New York City now requires law enforcement to disclose their use of surveillance technologies.²⁹⁴ In Japan, the police force launched AI-enabled predictive policing in preparation for the Tokyo Olympics. The AI systems are capable of determining whether multiple crimes

²⁸⁷ Bernard S. (2024), <u>Artificial Intelligence and Health Data: a promising combination with potential privacy pitfalls</u>, Prineos.

²⁸⁸ Deloitte (n.d) Surveillance and Predictive Policing Through AI.

²⁸⁹ Deloitte (n.d) Surveillance and Predictive Policing Through AI.

²⁹⁰ Deloitte (2018) Emerging tech that can make smart cities safer.

²⁹¹ ESI ThoughtLab (2021) Smart City solutions for a riskier world.

²⁹² Deloitte (n.d) Surveillance and Predictive Policing Through AI.

²⁹³ Deloitte (n.d) Surveillance and Predictive Policing Through AI.

²⁹⁴ Deloitte (n.d) Surveillance and Predictive Policing Through AI.

were committed by the same person by comparing data relating to each crime. Using this information, AI predicts the criminal's next move.²⁹⁵

China has been the leading supplier of surveillance technology, having built one of the world's most advanced state-controlled monitoring systems. Through its Digital Silk Road initiative, Beijing is exporting these technologies globally, including to Africa, by providing loans, equipment, and technical expertise to support digital infrastructure development. 296 Over the past two decades. China has extended approximately \$160 billion in loans across nearly 1,200 agreements with African governments and state-owned enterprises.²⁹⁷

This expansion has created significant opportunities for Chinese tech firms such as CloudWalk, Dahua, Hikvision, Huawei, and ZTE to establish a presence in Africa. More than two dozen African nations have already engaged Chinese companies to develop 'smart' government services and data solutions.²⁹⁸

Botswana has deployed smart CCTV cameras with facial recognition features and capabilities to alert the police and make it easy to identify those that commit crime.²⁹⁹ Similarly, Mozambique has adopted high-definition surveillance camera systems, installing them in homes, private and public institutions, and along public roads. However, as in Botswana, there are no specific regulations governing the use of data collected through these surveillance systems.³⁰⁰

Zimbabwe is developing the \$60 billion Zim Cyber City, a smart city project designed to incorporate surveillance technology directly linked to law enforcement authorities.³⁰¹ In Kenya, cities like Nairobi have implemented video surveillance, tracking devices, software, and cloud storage systems through a partnership with Chinese telecom firm Huawei under the Safe City initiative. These technologies integrate public and private platforms to enhance services such as policing and traffic management, according to officials.302

In 2019, Mauritius introduced the Smart Traffic Management System (STMS), which uses Artificial Intelligence and Internet of Things to control traffic in towns. The STMS operates through a network of over 500 AI-powered cameras and sensors strategically placed along major roadways. These devices collect real-time data on traffic flow, speed, and road conditions, enabling the system to make data-driven decisions and proactively address traffic congestion.³⁰³

²⁹⁵ Ibid

²⁹⁶ Hiebert K. (2023), Rising Digital Surveillance threatens Africa's Democratic Progress, African Futures by AUDA-NEPAD.

²⁹⁷ Hiebert K. (2023), Rising Digital Surveillance threatens Africa's Democratic Progress, African Futures by AUDA-NEPAD.

²⁹⁸ Hiebert K. (2023), Rising Digital Surveillance threatens Africa's Democratic Progress, African Futures by AUDA-NEPAD.

²⁹⁹ Oarabile Mundongo. 2021. Londa Botswana Digital Rights And Inclusion 2020 Report. Paradigm Initiative.

³⁰⁰ Enersto Nhanale, 2021, Electronic surveillance in Mozambique: The risks and suspicions in a context of authoritarianism and military conflict The Media Policy and Democracy Project.

³⁰¹ Bhalla N., Harrisberg K. (2023), The rise of surveillance tech in Africa: What you need to know, Context.

³⁰² Bhalla N., Harrisberg K. (2023), The rise of surveillance tech in Africa: What you need to know, Context.

³⁰³ Tupsee RS, Pierre JD, Mungroo ZBA. (2024), AI For Sustainable Growth: A Case Study Of Mauritius' Strategic Vision, The SPRING Group.

Mapping the Supply of Surveillance Technologies in Africa Report. 304

African governments collectively spend up to \$1 billion annually on surveillance technologies, with growing evidence that these tools are being deployed unlawfully or in ways that violate fundamental human rights. Nigeria is the largest spender on the continent, having invested at least \$2.7 billion in surveillance technologies over the past decade. These tools have been used to monitor peaceful activists, opposition figures, and journalists, with annual expenditures in the hundreds of millions. Between 2013 and 2022, Nigeria's known surveillance contracts exceeded \$2.7 billion.³⁰⁵

Several African nations, including Nigeria, Ghana, and Zambia, have each invested over \$350 million in China's 'safe city' mass surveillance programs, while Malawi remains an exception, having not implemented this model. The extent and focus of surveillance vary across countries. Nigeria permits the widest range of government agencies to conduct surveillance and leads in acquiring technologies across five key categories: internet interception, mobile interception, social media monitoring, smart city surveillance, and biometric identification. Ghana has prioritized mobile spyware and 'safe city' surveillance, whereas Morocco has been a major consumer of internet and mobile interception tools, even using mobile surveillance on its own king. Zambia has significantly expanded its surveillance capabilities with a large-scale investment in a Chinese 'safe city' system, while Malawi's surveillance expenditures remain comparatively modest.³⁰⁶

AI is also playing a crucial role in combating organized crime in remote areas. EarthRanger³⁰⁷ leverages AI and predictive analytics to gather and visualize both historical and real-time data from protected areas, including wildlife movements, ranger patrol activities, spatial data, and identified threats. This technology has been instrumental in dismantling poaching networks in Tanzania's Grumeti Game Reserve and has supported sustainability efforts in Malawi's Liwonde National Park by helping local communities coexist with protected wildlife.³⁰⁸

Vumacam's automatic license plate recognition system in Johannesburg comprises over 2,000 vehicle tracking cameras which are connected to the South African Police Service's national database of suspicious or stolen vehicles, and this partnership between private sector and law enforcement has led to several arrests.³⁰⁹ However, Vumacam has already come under scrutiny for collecting potentially sensitive location data on private individuals with no links to crime.³¹⁰

The ethical design and adoption of AI in security and law enforcement remain highly complex and context-dependent, with regional perspectives varying significantly. While predictive policing faces

310 Ibid

³⁰⁴ Roberts, Tony; Gitahi, Judy; Allam, Patrick; Oboh, Lawrence; Oladapo, Oyewole; Appiah-Adjei, Gifty; et al. (2023). Mapping the Supply of Surveillance Technologies to Africa: Case Studies from Nigeria, Ghana, Morocco, Malawi, and Zambia. The Institute of Development Studies and Partner Organisations.

³⁰⁵ Roberts, Tony; Gitahi, Judy; Allam, Patrick; Oboh, Lawrence; Oladapo, Oyewole; Appiah-Adjei, Gifty; et al. (2023). Mapping the Supply of Surveillance Technologies to Africa: Case Studies from Nigeria, Ghana, Morocco, Malawi, and Zambia. The Institute of Development Studies and Partner Organisations.

³⁰⁶ Roberts, Tony; Gitahi, Judy; Allam, Patrick; Oboh, Lawrence; Oladapo, Oyewole; Appiah-Adjei, Gifty; et al. (2023). Mapping the Supply of Surveillance Technologies to Africa: Case Studies from Nigeria, Ghana, Morocco, Malawi, and Zambia. The Institute of Development Studies and Partner Organisations.

³⁰⁷ Sigsworth R. (2023), Cybercrime / AI and organised crime in Africa, Enact Africa.

³⁰⁸ Sigsworth R. (2023), Cybercrime / AI and organised crime in Africa, Enact Africa.

³⁰⁹ Sigsworth R. (2023), <u>Cybercrime / AI and organised crime in Africa</u>, Enact Africa.

resistance in privacy-conscious regions like the EU and North America—where concerns over surveillance and bias have led to bans in some cities—it is more widely accepted in Asia and Latin America. Africa's position on AI-driven security solutions is still evolving. As AI adoption grows across the continent, there is an opportunity for Africa to shape an approach that prioritizes transparency, accountability, and ethical AI governance, ensuring that emerging technologies serve to enhance security while safeguarding civil liberties.

A call to action includes emphasizing environmental data over personal data as over-reliance on personal data can undermine trust and raise privacy and civil rights concerns. To mitigate these risks, cities should prioritize the use of anonymous, aggregated, and non-identifiable data for insights. Advances in IoT and sensor technology enable the collection and analysis of environmental data, allowing for event prediction without relying on personal information. This approach enhances data privacy while maintaining the effectiveness of AI-driven solutions.

Education and Research

Artificial Intelligence (AI) is revolutionizing education, swiftly reshaping class-rooms and redefining online learning environments. AI tools are used to personalize learning experiences, automate administrative tasks, and provide new ways for students to interact with educational content.³¹¹ However, perspectives on AI in education differ significantly among educators, researchers, and policymakers. Some see AI as a game-changer, capable of personalizing learning, streamlining administrative tasks, and offering deep insights into student performance while others worry about its potential to displace human teachers, widen educational inequalities, or threaten student privacy.³¹²

In Africa, AI is presenting a significant opportunity to enhance teaching, research, and academic visibility across Africa. However, in many sub-Saharan African nations, technology integration in the education sector has been restrained, as elucidated by the French Development Agency and UNESCO in 2015.313 Afrobarometer's (2020) assessment underscores this reality with a digital non-readiness score of 56.6% for the region and a digital literacy rate of 31%. 314

Presently, local universities and independent academic institutions are uniquely positioned to conduct localized and innovative interdisciplinary research that directly benefits local communities. This advantage can be leveraged to build capacity, encourage innovation, and raise public awareness about the benefits of AI.

South Africa, in particular, has been proactive in embracing technology in education, with the potential of AI in primary schools gaining recognition. A prime example is South Africa's Centre for Artificial Intelligence Research (CAIR),³¹⁵ a national initiative established in 2011 that connects nine research

³¹¹ Ismail, Islam & Aloshi, Jihan. (2025). Data Privacy in AI- Driven Education An In-Depth Exploration Into the Data Privacy Concerns and Potential Solutions. Research Gate.

³¹² Ismail, Islam & Aloshi, Jihan. (2025). <u>Data Privacy in AI- Driven Education An In-Depth Exploration Into the</u> Data Privacy Concerns and Potential Solutions. Research Gate.

³¹³ Ideate Tech Policy Africa (2024), The Role of Artificial Intelligence in African Education Systems Case Study: The Use of Automated Decision-Making in Form One Placements in Kenya, CIPIT.

³¹⁴ Ideate Tech Policy Africa (2024), The Role of Artificial Intelligence in African Education Systems Case Study: The Use of Automated Decision-Making in Form One Placements in Kenya, CIPIT Centre for Artificial Intelligence Research

groups across six universities to build AI expertise, reflecting the South African government's commitment to creating structures that accelerate the development of policies to facilitate the implementation and scaling of AI across the nation.

Similarly, the ADvTech Group has taken a pioneering step by introducing its AI-powered digital learning platform, ADvLEARN, designed to enhance learning in Mathematics, Physical Sciences, and Mathematical Literacy. The platform utilises AI to provide personalised learning experiences, allowing students to progress at their own pace.³¹⁶

In Zambia, community hubs with internet access are being established in rural areas to empower women and girls with digital skills and educational resources, 317 with the aim of bridging the digital divide and promoting gender equality.

Mozambique is also taking advantage of AI through an application called Totara, 318 which is designed for learning platforms. Developed by EDU Digital, Totara uses AI to analyse a worker's profile, whether they are in human resources, technology or banking. Based on the user's training preferences, the platform recommends tailored learning content, enhancing skill development and career growth. 319

In Eswatini, an artificial teacher named Nomfundo has been developed to teach learners in schools across the country. Nomfundo delivers educational content, provides personalized instruction, and creates interactive learning experiences. This online-speaking chatbot is specifically trained on the Eswatini syllabus, covering subjects such as entrepreneurship, guidance and counseling, life skills, essay writing and grading, and siSwati translation. Trained with local content, Nomfundo is designed to meet the cultural and educational needs of Eswatini learners, ensuring a contextually relevant and engaging educational experience.³²⁰

Initiatives like Xander, an AI-powered language learning app, and Zeraki³²¹, an innovative technology company based in Nairobi, Kenya, are reshaping education and learning systems in East Africa. Zeraki operates the Zeraki Learning Management System (LMS), a robust platform offering an engaging learning experience through virtual classrooms, interactive content creation tools, and personalised learning modules.

The Convention on the Rights of the Child³²² defines a child as any person under the age of eighteen unless legal adulthood is attained earlier under applicable laws. Essentially, children's rights are human rights designed to protect them as individuals. In the digital space, these rights are particularly focused on privacy, with the Convention stating that no child should be subjected to arbitrary or unlawful interference with their personal data. Ensuring children's privacy is a shared responsibility among

³¹⁶ Ideate Tech Policy Africa (2024), The Role of Artificial Intelligence in African Education Systems Case Study: The Use of Automated Decision-Making in Form One Placements in Kenya, CIPIT.

³¹⁷ Khozi M. (2024), Breaking Digital Barriers: The Role of ICTs in Empowering Rural Women and Girls, UNDP.

³¹⁸ 360 Mozambique (2024), How is AI Helping Education and Work in Mozambique?, 360 Mozambique.

³¹⁹ 360 Mozambique (2024), How is AI Helping Education and Work in Mozambique?, 360 Mozambique.

³²⁰ Mthunzi Mdluli (2024), ONLINE ROBOT TEACHER FOR SCHOOLS, Times of Swaziland.

³²¹ Ideate Tech Policy Africa (2024), The Role of Artificial Intelligence in African Education Systems Case Study: The Use of Automated Decision-Making in Form One Placements in Kenya, CIPIT.

322 Article 1, Convention on the Rights of the Child.

parents, legal guardians, and others legally accountable for their well-being. In the EdTech sector, this duty extends to AI platform owners who manage these technologies, as well as policymakers and regulators responsible for data protection and safeguarding children's rights.

Strengthening the legal framework governing how AI-enabled Ed-tech platforms process data—especially children's data—offers significant benefits. As the primary users of these platforms, children are growing up in an era of datafication, where their digital footprints may be retained for extended periods. To fully harness the advantages of AI in Ed-tech while safeguarding children's rights, data collection and processing must be conducted responsibly and transparently.³²³

First, Ed-tech platforms should prominently display and strictly adhere to privacy policies on their websites. These policies must be easy for children to understand, which may necessitate the creation of two versions—one for parents, guardians, and the general public, and a simplified version tailored for children. Regardless of format, all privacy policies should explicitly address children's rights. Additionally, these policies should include clear details on how data is collected, processed, and managed, ensuring transparency and accountability in AI-driven education technologies.³²⁴

Administration of Justice

Judiciaries, prosecution services, and other specialized judicial bodies worldwide are increasingly exploring the integration of AI into judicial systems.³²⁵ In Africa, justice institutions, though progressive, have been slower to adopt technology intensively. However, the advent of the COVID-19 pandemic accelerated the adoption and integration of technology in judicial systems, with the shift including the use of virtual courts, e-filing systems, case management systems, and more.³²⁶ With the rapid integration of AI in specific sectors, the judiciary is not an exception. There is no doubt that AI has the potential to transform judicial processes in Africa.

AI is transforming judicial systems by automating routine tasks, reducing case resolution time, and easing the burden on courts. It enhances impartiality, minimizes human error, and promotes consistency in legal outcomes, such as reducing sentencing disparities.³²⁷ AI also supports judicial reasoning by analyzing large datasets, predicting case outcomes, and providing insights based on precedents. Additionally, tools like litigation risk assessment systems, document drafting aids, and emotion recognition technologies can improve efficiency and accuracy.³²⁸ AI-driven solutions can help handle minor disputes, prioritize cases, and allocate judicial resources effectively, making justice more accessible, affordable, and fair.

Loomis v. Wisconsin 2016

The COMPAS risk assessment tool gained controversy in 2016 when Eric Loomis received a six-year

³²³ CIPIT (2023), Data Privacy in Africa's Ed-Tech Platforms; Children's Right to Privacy, Strathmore University,

³²⁴ CIPIT (2023), Data Privacy in Africa's Ed-Tech Platforms; Children's Right to Privacy, Strathmore University.

³²⁵ UNESCO (n.d) AI and the Rule of Law: Capacity Building for Judicial Systems.

³²⁶ Lawyers Hub (2024) Artificial Intelligence & The Future Of Judicial Systems In Africa Report.

Lawyers Hub (2024) Artificial Intelligence & The Future Of Judicial Systems In Africa Report.

Lawyers Hub (2024) Artificial Intelligence & The Future Of Judicial Systems In Africa Report.

sentence partly based on his COMPAS score.³²⁹ Loomis challenged the decision, arguing that the proprietary nature of the algorithm denied him due process and that it incorporated race and gender. leading to bias. After being denied by a lower court, he appealed to the Wisconsin Supreme Court, which upheld the use of COMPAS in sentencing. Justice Ann Walsh Bradley ruled that while COMPAS should not be the sole determinant, it could inform decisions on sentencing, supervision, and probation. She acknowledged concerns about bias but stated that considering gender was necessary for statistical accuracy while emphasizing the need for judicial awareness of AI limitations and proper oversight of such tools.330

In criminal justice, AI is already being used to assist investigations and automate decision-making processes across various jurisdictions.331 For instance, the Chicago Police Department uses artificial intelligence to identify individuals who are at high risk of committing violence which has helped to prevent violence across the state.³³² On the other hand, the New York Police Department (NYPD) uses pattern recognition software to analyze information important to investigations and identify serial criminals, helping them work more efficiently.³³³

Police agencies in the United Kingdom utilize AI-powered programs for crime prediction, ensuring adherence to ethical and legal frameworks.³³⁴ In Germany, artificial intelligence is widely employed in legal research, fully aligned with principles of good faith. Similarly, France, Japan, South Korea, and India integrate AI into crime analysis and scientific research while maintaining compliance with ethical and legal standards.³³⁵

The People's Republic of China is a leading country in terms of the most widespread and unrestricted use of artificial intelligence.³³⁶ AI is used for total surveillance in China, one of the goals of which is crime prevention. Thousands of so-called facial recognition devices are installed throughout the country, and a smart camera is integrated with the social credit system, thus ultimately evaluating the citizens.³³⁷

R. (Bridges) v. Chief Constable of South Wales Police

³²⁹ Centre for Digital Ethics & Policy (2018), Sentence by Numbers: The Scary Truth Behind Risk Assessment Algorithms, Loyola University.

³³⁰ Centre for Digital Ethics & Policy (2018), Sentence by Numbers: The Scary Truth Behind Risk Assessment Algorithms, Loyola University.

331 UNESCO (n.d) AI and the Rule of Law: Capacity Building for Judicial Systems.

³³² Dolidze T. (2024), The Role of Artificial Intelligence in Criminal Justice - Reality and Perspective, Law and

³³³ Dolidze T. (2024), The Role of Artificial Intelligence in Criminal Justice - Reality and Perspective, Law and World.

³³⁴ Dolidze T. (2024). The Role of Artificial Intelligence in Criminal Justice - Reality and Perspective, Law and World.

³³⁵ Dolidze T. (2024), The Role of Artificial Intelligence in Criminal Justice - Reality and Perspective, Law and

³³⁶ Dolidze T. (2024), The Role of Artificial Intelligence in Criminal Justice - Reality and Perspective, Law and

³³⁷ Dolidze T. (2024), The Role of Artificial Intelligence in Criminal Justice - Reality and Perspective, Law and World.

In 2020, an individual challenged South Wales Police's use of facial recognition technology, arguing that it violated his right to privacy, the European Convention on Human Rights, and the Data Protection Act.³³⁸ The court ruled in his favor, acknowledging that the police had underestimated the significant impact of such systems on privacy, confidentiality, and personal data protection. This decision set an important precedent, emphasizing the need to balance technological advancements with safeguarding individual rights and preventing the misuse of personal data.³³⁹

Botswana has adopted the use of AI technology within its judiciary system, resulting in significant advancements. These advancements include the digitization of case files, leading to notable improvements in case file management at the Gaborone Magisterial District. The implementation of electronic systems for case file retrieval has significantly reduced the incidence of lost or misplaced files.³⁴⁰

In Eswatini, the UNDP Eswatini Accelerator Lab (AccLab) led an initiative to explore and experiment with the concept of virtual remand within the judicial system. This initiative aimed to revolutionise court processes, enhancing efficiency and ensuring the timely administration of justice. To initiate this exploration, the AccLab embarked on an extensive consultation process with key stakeholders within the Eswatini judiciary. These discussions centered on the potential benefits of a virtual remand system, including improved efficiency and reduced operational costs.³⁴¹

Namibia has successfully adopted the Namibia Case Information System (NAMCIS), an e-Justice portal. This portal allows users to conveniently track case statuses, access relevant documents, and view upcoming court dates online. By eliminating the need for physical court visits to inquire about case updates, NAMCIS enhances accessibility and convenience for court users. Furthermore, the Judiciary has established a dedicated Livestream section on its official website, enabling public access to select court proceedings. This initiative promotes transparency and public engagement with the judicial process. By digitizing court records, NAMCIS ensures their secure and reliable storage, minimizing the risk of data loss and significantly improving data search capabilities.²⁸³

Morocco, Tanzania, and Egypt are leveraging AI to enhance judicial processes through transcription, research, and language processing. In Morocco, AI is being used to transcribe rulings, conduct legal research, and retrieve archived texts, with future plans to automate court session recordings and address linguistic challenges related to the Darija dialect and the Amazigh language. Tanzania has implemented an AI-driven system for transcriptions and translations, enabling real-time, accurate processing of Kiswahili dialects and English across the mainland and Zanzibar. The judiciary of Tanzania adopted Almawave, an AI-driven transcription and translation system, to enhance administration and access to

³³⁸ Hunton, A. K. (2020). <u>UK court of appeal finds automated facial recognition technology unlawful in Bridges v South Wales police</u>.

³³⁹ Hunton, A. K. (2020). <u>UK court of appeal finds automated facial recognition technology unlawful in Bridges v</u> South Wales police.

³⁴⁰ Lawyers Hub (2024) Artificial Intelligence & The Future Of Judicial Systems In Africa Report.

³⁴¹ Zandile Mthembu (2024), <u>Virtual Remand Hearings: Transforming Access to Justice in Eswatini.</u> United Nations Development Programmme.

³⁴² Lawyers Hub (2024) Artificial Intelligence & The Future Of Judicial Systems In Africa Report.

³⁴³ Lawyers Hub (2024) Artificial Intelligence & The Future Of Judicial Systems In Africa Report.

justice by breaking down language barriers and improving court efficiency. With challenges in hiring stenographers for all 35 Court of Appeal judges, 9 High Court judges, and approximately 2,000 magistrates, the judiciary turned to artificial intelligence to alleviate the workload.³⁴⁴ Similarly, Egypt announced plans to integrate AI-powered speech-to-text transcription in its courtrooms, streamlining the documentation of court proceedings and improving efficiency.³⁴⁵

While AI has significantly improved efficiency in criminal investigations and proceedings, it also presents risks and challenges. Errors in data generation can lead to biased or incorrect decisions, as AI lacks self-criticism.³⁴⁶ Privacy and data security remain major concerns, especially with large-scale AI use. Transparency and accountability are crucial to ensure ethical decision-making. Additionally, the legal and regulatory landscape varies across jurisdictions, making AI integration in criminal law complex and requiring careful oversight.³⁴⁷

Given the rapid advancements in this field, it is essential for stakeholders within the judicial ecosystem to engage in discussions on both the opportunities and challenges of leveraging AI in judicial processes, particularly concerning its impact on human rights and the rule of law.

Ethical AI and Responsible Innovation in Africa

Ethical AI involves developing and deploying AI technologies in line with ethical principles, societal values, and legal standards.³⁴⁸ It prioritizes fairness, transparency, accountability, privacy, and human rights throughout the AI lifecycle. By integrating these principles, stakeholders strive to ensure AI systems serve society's best interests while reducing potential risks and harms.³⁴⁹

A key pillar of ethical AI is fairness, which ensures that AI systems do not discriminate against individuals or groups based on factors like race, gender, or socioeconomic status.³⁵⁰ Transparency is equally important, requiring AI algorithms and decision-making processes to be understandable and explainable to users and stakeholders.³⁵¹ This openness fosters trust and allows people to grasp how AI-driven conclusions are reached. Accountability is another critical component, holding developers, organizations, and users responsible for AI's outcomes and impacts. Clear accountability mechanisms

³⁴⁴ Lawyers Hub (2024) Artificial Intelligence & The Future Of Judicial Systems In Africa Report.

³⁴⁵ Lawyers Hub (2024) Artificial Intelligence & The Future Of Judicial Systems In Africa Report.

³⁴⁶ Dolidze T. (2024), The Role of Artificial Intelligence in Criminal Justice - Reality and Perspective, Law and World.

³⁴⁷ Dolidze T. (2024), <u>The Role of Artificial Intelligence in Criminal Justice - Reality and Perspective</u>, Law and World.

³⁴⁸ Abiero D. (2024), Ethical AI Development in Africa: Integrating Cultural Values and Addressing Global Disparities, CIPIT.

³⁴⁹ Abiero D. (2024), Ethical AI Development in Africa: Integrating Cultural Values and Addressing Global Disparities, CIPIT.

³⁵⁰ Youjin Kong (2022), 'Are "Intersectionally Fair" AI Algorithms Really Fair to Women of Color? A Philosophical Analysis.' Proceedings of the 2022 ACM Conference on Fairness, Accountability, and Transparency.

³⁵¹ Upol Ehsan, Q. Liao, Michael J. Muller, Mark O. Riedl and Justin D. Weisz. (2021), "<u>Expanding Explainability: Towards Social Transparency in AI systems</u>." Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems.

help address potential issues and minimize risks.³⁵²

Privacy protection is also essential in ethical AI, as safeguarding personal data and respecting individuals' privacy rights are crucial for maintaining trust and upholding ethical standards. Human oversight plays a vital role in ensuring that AI systems remain under human control, allowing intervention when necessary to prevent critical decisions from being left entirely to machines.³⁵³ Additionally, addressing biases in AI algorithms is key to promoting fairness and equity. Ethics-based auditing offers a practical way to align AI with ethical principles, using continuous evaluation and public policies to encourage responsible AI development and implementation.

Principles of Ethical AI in African Contexts

Ethical AI in Africa is a burgeoning field that is gaining increasing attention due to the rapid advancement and deployment of AI technologies across the continent.³⁵⁴ To tackle challenges like the absence of tailored guidelines and policies for Africa, stakeholders stress the importance of bringing African perspectives into the global conversation on responsible AI. This includes embedding African values, such as community-centeredness and interconnectedness, into AI ethics, ensuring that technologies are not only technically sound but also culturally relevant and socially aligned with local needs.³⁵⁵

The development and implementation of ethical AI in Africa face several challenges, with one major issue being the lack of guidelines and policies tailored to the continent's unique context.³⁵⁶ Global AI ethics discussions often fail to account for Africa's diverse cultural, social, and economic realities, creating a disconnect between ethical principles and on-the-ground needs.³⁵⁷ To bridge this gap, it is crucial to integrate African perspectives and values into global conversations on responsible AI. This ensures that AI technologies are not only technically sound but also culturally relevant and respectful of the continent's rich traditions.

African moral traditions and values are essential in shaping ethical AI development and governance in the region. Principles like community-focus, interconnectedness, and personhood should be integrated into AI design to ensure technologies align with local cultural and social contexts. 358 Incorporating these values into the global AI ethics conversation helps create AI systems that are not only technically robust but also socially acceptable, culturally sensitive, and trustworthy. Collaboration and engagement with diverse stakeholders—representing different backgrounds, interests, and perspectives—are key to building a

³⁵² William Arome Adah, Nathan Adelola Ikumapayi and Haruna Bashir Muhammed. (2023), "The Ethical Implications of Advanced Artificial General Intelligence: Ensuring Responsible AI Development and Deployment." SSRN Electronic Journal.

³⁵³ Abiero D. (2024), Ethical AI Development in Africa: Integrating Cultural Values and Addressing Global Disparities, CIPIT.

³⁵⁴ Abiero D. (2024), Ethical AI Development in Africa: Integrating Cultural Values and Addressing Global Disparities, CIPIT.

³⁵⁵ Abiero D. (2024). Ethical AI Development in Africa: Integrating Cultural Values and Addressing Global Disparities, CIPIT.

³⁵⁶ Dorine E, van Norren (2022), 'The ethics of artificial intelligence, UNESCO and the African Ubuntu perspective.' Journal of Information, Communication and Ethics in Society.

³⁵⁷ Dorine E. van Norren. (2022), 'The ethics of artificial intelligence, UNESCO and the African Ubuntu perspective.' Journal of Information, Communication and Ethics in Society.

358 Aisha Zahid Huriye.(2023), 'The Ethics of Artificial Intelligence: Examining the Ethical Considerations

Surrounding the Development and Use of AL.' American Journal of Technology.

dynamic and inclusive AI ethics policy ecosystem in Africa.³⁵⁹ This approach fosters trust, enhances social acceptance, and ensures AI development effectively addresses both challenges and opportunities on the continent.

Additionally, there have been several proposed strategies to promote ethical AI in Africa. Key solutions include implementing safeguards to balance AI's opportunities and risks, aligning AI frameworks with African values like Ubuntu, and ensuring fairness, transparency, and accountability to prevent bias. 360 Inclusive partnerships with communities, policymakers, and industry players help tailor AI solutions to local needs, while education and capacity-building initiatives integrate African ethical values into AI development. 361 Broadening AI knowledge empowers individuals to critically assess and advocate for responsible AI practices, ensuring that technological advancements remain culturally relevant, socially just, and ethically sound.

Advancing ethical AI in Africa requires a holistic approach that integrates technological progress with cultural values and societal well-being. By embedding African moral traditions, fostering inclusive collaboration, ensuring equitable practices, and investing in education and capacity-building, stakeholders can develop AI solutions that are not only innovative but also ethically responsible, socially impactful, and culturally relevant.

Data Protection and Privacy Laws

While AI holds immense potential for transformative impact across Africa and the globe, it also presents significant risks, including bias, discrimination, and a lack of explainability³⁶². From a data protection perspective, these risks are compounded by challenges such as limited transparency in how AI systems process and use information, inadequate or absent mechanisms for obtaining informed consent, concerns over data accuracy, and the excessive collection of personal and sensitive information. Additionally, AI systems may lead to unauthorized access to personal data, insufficient protection of data subject rights, and a failure to uphold key principles of data privacy and security.

Data Protection is an area gaining a lot of traction in Africa, with 39 out of 54 countries in the continent having a dedicated privacy/data protection law. At the continental level, we have the African Union Convention on Cyber Security and Personal Data Protection, commonly referred to as the Malabo Convention, which was adopted in 2014. This landmark agreement reflects Africa's commitment to building a robust Information Society and fostering a digital ecosystem that prioritizes trust and innovation³⁶³. At its core, the Malabo Convention calls on Member States to establish a comprehensive legal framework that safeguards personal data while promoting digital growth across the continent. Although AI governance is at the top of discussions on the digital economy and digital transformation, no country in Africa has adopted a standalone law for the regulation of AI. However, countries such as

³⁶²Tsebee D., Oloyede R. (2024), <u>DPAs and AI Regulation in Africa</u>, International Association of Privacy Professionals.

³⁵⁹ Angeline Wairegi, Melissa Omino and Isaac Rutenberg.(2021), 'AI in Africa: Framing AI through an African Lens.'

³⁶⁰ Abiero D. (2024), Ethical AI Development in Africa: Integrating Cultural Values and Addressing Global Disparities, CIPIT.

³⁶¹ Ibid

³⁶³ AU (n.d), African Union Convention on Cyber Security and Personal Data Protection, African Union.

Kenya, Uganda, Nigeria, Benin, Mauritius, Rwanda, Ghana, Algeria and Senegal have draft National AI strategies or are in the process of developing one.

As the countries on the continent grapple with the development of dedicated laws on Artificial Intelligence, the provisions of their data protection law particularly on automated decision making are what governs AI. Of the 39 countries in Africa with a data protection law, 35 of them recognize the right not to be subjected to automated decision-making with legal consequences. What this means, is that the regulation of AI is largely by default regulated by the Data Protection law at national levels. This perspective is supported by the decisions of data protection authorities over organizations processing personal data of its citizens by automated means. 365

Additionally, the Data Protection Authorities have been at the centre stage in advocating for a legal framework for the regulation of AI. In Kenya for example, the Data Commissioner Ms. Immaculate Kassait has called for ethical/responsible adoption of AI, including the need to adopt data protection principles, enable data subject rights, implement appropriate technical and organizational measures as well as conduct Data Protection Impact Assessments in the processing of personal data for use by Artificial Intelligence Systems³⁶⁶. Similarly, in Nigeria, the National Commissioner for the Nigeria Data Protection Commission Dr. Vincent Olatunji and the Minister for Communication, Innovation and Digital Economy have expressed sentiments on the need for Nigeria to regulate emerging technologies including AI.³⁶⁷

Adequacy of Data Protection Laws in regulating AI

Although data protection laws and Data Protection Authorities (DPAs) play a pivotal role in regulating artificial intelligence (AI), these frameworks are insufficient on their own to comprehensively address the unique challenges posed by AI³⁶⁸. For instance, the application of core data protection principles, such as transparency, accountability, and fairness, is often inadequate when dealing with AI systems due to AI's complexity and opacity often referred to as the "black box" problem. Moreover, traditional safeguards like Data Protection Impact Assessments (DPIAs) may fall short without specific guidelines for addressing AI-related risks such as algorithmic bias or discrimination.³⁶⁹

Despite data protection laws mandating compliance with purpose limitation and data minimization principles, many African data protection frameworks, such as Nigeria's NDPR and Kenya's Data Protection Act, fall short in addressing the specific challenges posed by AI systems. While these laws emphasize the importance of limiting data use to specified purposes, they lack explicit provisions to govern the lifecycle of AI systems comprehensively³⁷⁰. This gap is particularly concerning given the nature of AI systems, which rely on vast amounts of data sourced from web scraping, social media

³⁶⁴ PLA (2024), <u>Automated Decision-Making under African Data Protection Laws</u>, Privacy Lens.

Tsebee D., Oloyede R. (2024), <u>DPAs and AI Regulation in Africa</u>, International Association of Privacy Professionals.

³⁶⁶ ODPC (n.d), <u>Compliance with Data Protection Regulations in Wake of Growing AI Regulations</u>, Office of the Data Protection Commissioner (ODPC).

³⁶⁷Jaiyeola T. (2023), AI Can Be Regulated, Says NDPC, Punch Nigeria.

³⁶⁸ AU (2024), African Union Continental AI Strategy, The African Union.

³⁶⁹ Ibid

³⁷⁰ Davis T., Trott W. (2024), <u>The Regulation of Artificial Intelligence through Data Protection Laws: Insights from South Africa</u>, African Journal on Privacy and Data Protection.

platforms, and user-generated inputs. The aggregation of these data sources enables AI systems to infer sensitive personal information, such as health status³⁷¹, political affiliations, or religious beliefs, even from seemingly harmless datasets. Without explicit safeguards, this extensive data collection and processing can lead to significant privacy violations and other rights infringements³⁷². For example, repurposed data might be used for activities like surveillance, potentially stifling freedoms such as expression and association.³⁷³

The "black box" nature of many AI systems means that even though the principle of accountability mandates that data controllers are responsible for data processing, it becomes difficult to trace or explain how decisions are made³⁷⁴. This lack of transparency limits individuals' ability to challenge or understand AI-driven decisions, undermining the principle of fairness. Additionally, AI systems often rely on training data that may be incomplete or biased, particularly since many AI systems used or being adopted in Africa are developed outside the continent³⁷⁵. As a result, these systems may not adequately represent the diverse cultural and social contexts within African societies³⁷⁶. Despite these realities, the current data protection frameworks, including the Malabo Convention, which primarily focus on data privacy and security, do not sufficiently address these complexities, nor do they provide clear guidance on ensuring AI systems are fair, inclusive, and accountable, highlighting the need for more nuanced and region-specific regulations in Africa.³⁷⁷

The provisions on automated decision-making (ADM) in many African data protection laws, while a step in the right direction, remain insufficient in fully addressing the complexities and risks inherent in AI systems³⁷⁸. Although some African data protection laws emphasize the need for transparency and accountability in ADM, the lack of a clear, unified definition of "automated decision-making" limits the effectiveness of these provisions. For instance, the Protection of Personal Information Act (POPIA) in South Africa requires organizations to provide clear and understandable information about how decisions using ADM are made, including the logic behind them, and to allow individuals to contest unfair decisions³⁷⁹. Similarly, the Nigeria Data Protection Regulation (NDPR) of 2019 stresses the need for organizations to inform individuals about the use of their personal data for automated decision-making, including the consequences such processing may have on them.

In Kenya, the Data Protection Act of 2019 has similar provisions, with individuals having the right not to be subjected to automated decision-making that has legal effects unless such processing is necessary for the performance of a contract or is legally mandated or a data subject has given their consent. Data controllers and processors are also required to inform data subjects of the logic involved in reaching the conclusion, with the data subjects having a right to request for human intervention.

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³⁷¹ Steimers A., Moritz S. (2022), Sources of Risk of AI Systems, International Journal of Environmental Research and Public Health 3641.

³⁷² CIPIT (2024), <u>Unveiling Privacy in the AI Era.</u> Strathmore University.

³⁷³ CIPESA (2024), The Impact of Artificial Intelligence on Data Protection and Privacy.

³⁷⁴ Gryz J., Rojszczak M. (2021), <u>Black Box Algorithms and the Rights of Individuals: No Easy Solution to the</u> "Explainability" Problem, Internet Policy Review.

³⁷⁵ AU (2024), African Union Continental AI Strategy, The African Union.

³⁷⁶ AU (2024), African Union Continental AI Strategy, The African Union.

³⁷⁷ AU (2024), African Union Continental AI Strategy, The African Union.

³⁷⁸ Davis and Trott (n 340).

³⁷⁹ Protection of Personal Information Act 2019.

These provisions highlight a common trend across several African jurisdictions namely, an emphasis on the rights of data subjects with respect to automated data processing and decision-making. However, despite these provisions, African data protection laws still fall short of providing robust safeguards to address the broader challenges posed by AI systems. While the emphasis on transparency is crucial, the complexity and opacity of many AI systems particularly those developed outside Africa remain a significant concern. These laws lack clear frameworks to ensure that AI systems are designed and implemented in a way that is culturally sensitive, inclusive, and fair.³⁸⁰

Risks and Challenges in AI and Privacy

As technology continues to evolve, the use of Artificial Intelligence (AI) introduces significant risks and challenges, particularly in privacy and data protection. AI systems rely on vast amounts of personal data, raising concerns about how data is collected, processed, stored, and shared. One major challenge tied to the collection and processing of such voluminous quantities of data is **bias and discrimination in AI systems**, where flawed or unrepresentative datasets can lead to unfair outcomes, reinforcing existing inequalities.³⁸¹ Additionally, AI-driven surveillance increases **data privacy concerns**, as governments and corporations may exploit AI for mass data collection and monitoring. Issues of **data sovereignty and cross-border data flows** further complicate AI development, with countries seeking to assert control over data generated within their borders. Compounding these risks are **gaps in regulatory and institutional capacity**, where legal frameworks struggle to keep pace with AI advancements, leaving individuals vulnerable to data misuse. Addressing these challenges requires a mix of solutions including robust laws, ethical AI development, and responsible data governance to ensure innovation does not come at the cost of fundamental rights.³⁸²

Bias and Discrimination in AI Systems

Bias in Artificial Intelligence (AI) refers to systematic errors in AI systems that lead to unfair or discriminatory outcomes, often favoring or disadvantaging certain groups. These biases can arise from historical inequalities, flawed training data, algorithmic design, and human influence during AI development. For instance, if an AI system is trained on unrepresentative or skewed datasets, it may reinforce existing social biases rather than eliminate them. A well-documented example is facial recognition technology, which has been found to be significantly less accurate for individuals with darker skin tones due to the lack of diversity in training data. Similarly, AI-driven hiring tools have demonstrated biases against women and underrepresented groups because they have been trained on past hiring decisions that reflect systemic discrimination.

The consequences of AI bias can be far-reaching, affecting areas such as criminal justice, financial services, healthcare, and recruitment. Predictive policing tools, for example, have been criticized for

³⁸⁰ AU (2024), African Union Continental AI Strategy, The African Union.

³⁸¹ Van Rijmenam Mark., (2023), Privacy in the Age of AI: Risks, Challenges and Solutions. The Digital Speaker

³⁸² Gisma University of Applied Sciences, (2024), AI and Ethics: Navigating the Challenges and Opportunities.

³⁸³ Mehrabi, N., Morstatter, F., Saxena, N., Lerman, K., Galstyan, A., (2021), <u>A Survey on Bias and Fairness in Machine Learning</u> ACM Computing Surveys.

Leslie, D. (2020). <u>Understanding bias in facial recognition technologies: an explainer.</u> The Alan Turing Institute.

³⁸⁵ UN Women, (2025). How AI reinforces gender bias - and what we can do about it.

disproportionately targeting marginalized communities, while AI-powered credit scoring systems may deny loans to individuals based on flawed correlations rather than their actual creditworthiness.³⁸⁶ These biases not only exacerbate social inequalities but also undermine public trust in AI-driven decision-making.

To address these issues, it is essential to design AI systems with fairness and inclusivity in mind. This includes using diverse and representative datasets, developing bias-detection mechanisms, implementing fairness-aware algorithms, and conducting regular audits to monitor AI behavior over time. Additionally, policymakers and regulatory bodies must establish clear guidelines to ensure AI applications do not perpetuate discrimination.³⁸⁷ As AI continues to play a greater role in society, creating systems that are transparent, accountable, and fair is critical to ensuring ethical and responsible AI development.

Data Privacy and Surveillance Concerns

Artificial Intelligence (AI) and digital technologies have raised significant concerns about data privacy and mass surveillance. AI systems rely on vast amounts of personal data to function effectively, often collecting and analyzing information from social media, online transactions, healthcare records, and even biometric data.³⁸⁸ This widespread data collection increases the risk of unauthorized access, data breaches, and misuse of personal information.³⁸⁹ Additionally, AI-powered surveillance tools, such as facial recognition, predictive analytics, and automated monitoring systems, have been deployed by governments and corporations, often without adequate safeguards. These technologies can track individuals' movements, monitor online activities, and even predict behavior, raising questions about the erosion of personal privacy and the potential for abuse by authoritarian regimes or powerful corporations.³⁹⁰

One of the biggest challenges in addressing AI-driven surveillance is the lack of robust and specific data protection frameworks and enforcement mechanisms in many jurisdictions.³⁹¹ While regulations like the General Data Protection Regulation (GDPR) in the European Union and Kenya's Data Protection Act, 2019 set strict requirements for data collection, storage, and processing, many countries still lack comprehensive privacy laws.³⁹² Additionally, cross-border data flows complicate enforcement, as data collected in one jurisdiction may be stored and processed in another with weaker privacy protections. This lack of oversight creates opportunities for unethical data harvesting, profiling, and targeted manipulation, such as in cases where AI-powered advertising systems exploit personal data to influence consumer behavior or political opinions.³⁹³

To mitigate these risks, it is essential to establish stronger legal frameworks, increase transparency in

³⁸⁶ Ibid

³⁸⁷ Ibid

³⁸⁸ Van Rijmenam Mark., (2023), <u>Privacy in the Age of AI: Risks, Challenges and Solutions</u>, The Digital Speaker.

DataGuard, (2024), The Growing Data Privacy Concerns with AI: What You Need to know.

³⁹⁰ Antunes, E.M. (2021), Surveillance and Predictive Policing Through AI, Deloitte.

³⁹¹ Josa MJ., Bathroom AM., Alhabbash MI., Harara FES., Abu-Nasser BS., Abu-Naser SS., (2024), <u>AI and Ethics in Surveillance: Balancing Security and Privacy in a Digital World</u>, International Journal of Academic Engineering Research.

³⁹² World Bank (2019), <u>ID4D Practitioner's Guide: Version 1.0</u>, Washington, DC: World Bank. License: Creative Commons Attribution 3.0 IGO (CC BY 3.0 IGO).

³⁹³ Ibid

AI-driven data collection, and promote privacy-preserving technologies such as encryption and anonymization. Policymakers and technology developers must work together to create AI systems that respect fundamental rights to privacy while ensuring that innovations do not come at the expense of personal freedoms. Without proper safeguards, AI's potential to enhance efficiency and security could be overshadowed by its role in enabling widespread surveillance and diminishing civil liberties.³⁹⁴

Data sovereignty and cross-border data flows in AI development

As Artificial Intelligence (AI) development becomes increasingly data-driven, concerns around data sovereignty and cross-border data flows have gained prominence. Data sovereignty refers to the principle that data is subject to the laws and governance structures of the country where it is collected or processed.³⁹⁵ However, in an era where AI systems rely on global data networks, businesses and governments frequently transfer data across borders for storage, analysis, and processing. This has led to complex legal and regulatory challenges, particularly when data is sent to jurisdictions with weaker privacy protections or different legal standards.³⁹⁶ Jurisdictions with strict data localization laws, such as the European Union, require certain categories of personal data to be stored and processed within their national borders, citing national security and privacy concerns.³⁹⁷

The debate over cross-border data flows is further complicated by AI's dependence on large datasets for training and decision-making. AI models benefit from access to diverse data sources, but inconsistent regulatory frameworks can hinder collaboration and technological advancements.³⁹⁸ For instance, the General Data Protection Regulation (GDPR) in the European Union imposes stringent conditions on the transfer of personal data outside the EU, requiring recipient countries to provide an adequate level of data protection.³⁹⁹ Similarly, Kenya's Data Protection Act, 2019, mandates that data transfers be conducted in a manner that ensures privacy rights are upheld.⁴⁰⁰ These regulations, while essential for data security and individual privacy, can create barriers for multinational companies and AI researchers who rely on cross-border data sharing to develop more accurate and inclusive AI models.

To address these challenges, there is a growing push for international cooperation in data governance. Agreements such as the EU-U.S. Data Privacy Framework and regional initiatives like the African Union's Data Policy Framework seek to balance the need for data protection with economic and technological growth. Additionally, privacy-enhancing technologies (PETs), such as federated learning and differential privacy, are emerging as potential solutions that allow AI models to be trained on decentralized data without compromising individual privacy or violating sovereignty laws. Moving

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³⁹⁴ ACLU (2024), <u>ACLU Warns that Biden-Harris Administration Rules on AI in National Security Lack Key Protections</u>.

³⁹⁵ Chen, M. (2024), What is Data Sovereignty? Oracle

³⁹⁶ National Board of Trade, (2014). <u>No Transfer, No Trade: the Importance of Cross-Border Data Transfers for Companies Based in Sweden</u>. Kommersekollegium

³⁹⁷ Van Quathem, K., & de Meneses A.O., (2014). <u>EU Rules Restricting the International Transfers of Non-Personal</u> Data. Covington.

³⁹⁸ Cordella, A., & Gualdi, F. (2024): Regulating generative AI: The limits of technology-neutral regulatory frameworks. Insights from Italy's intervention on ChatGPT. Government Information Quarterly.

³⁹⁹ Van Quathem, K., & de Meneses A.O., (2014). <u>EU Rules Restricting the International Transfers of Non-Personal Data</u>. Covington.

⁴⁰⁰ Section 48 of the Data Protection Act, 2019, Republic of Kenya.

forward, policymakers, AI developers, and global institutions must collaborate to create harmonized data governance structures that enable secure, ethical, and innovation-friendly AI development while respecting national interests and privacy rights.

Gaps in Regulatory and Institutional Capacity

The rapid advancement of Artificial Intelligence (AI) has outpaced the development of regulatory and institutional frameworks, leaving significant gaps in governance, enforcement, and oversight. While AI technologies are being deployed across various sectors—including healthcare, finance, and security—many countries lack comprehensive legal frameworks to address issues such as bias, privacy violations, accountability, and ethical concerns. Existing laws, such as Kenya's Data Protection Act, 2019, the EU's General Data Protection Regulation (GDPR), and other regional policies, offer a foundation for AI governance. However, these regulations primarily focus on data protection and often fail to address the unique risks posed by AI systems, such as algorithmic discrimination, autonomous decision-making, and the potential for large-scale misinformation.

Another critical challenge is the limited institutional capacity to enforce AI-related regulations effectively. Many data protection authorities and regulatory bodies face resource constraints, including a lack of skilled personnel, inadequate funding, and outdated technological infrastructure. This makes it difficult for regulators to audit AI systems, investigate data breaches, or impose sanctions on non-compliant entities. In developing countries, the challenge is even more pronounced, as regulatory institutions often struggle with competing priorities and may lack technical expertise to oversee AI's complex and evolving nature.

Without well-equipped institutions, AI governance remains largely reactive rather than proactive, increasing the risk of unchecked AI deployment that could harm individuals and societies. Furthermore, regulatory fragmentation across different jurisdictions makes it difficult to establish a coordinated global approach to AI governance. While some countries have adopted national AI strategies and ethical guidelines, the lack of harmonized international standards has resulted in inconsistent regulatory practices. This fragmentation complicates compliance for multinational AI developers and businesses, leading to legal uncertainty and potential regulatory loopholes that could be exploited. To bridge these gaps, governments and regulatory bodies must invest in AI research, build institutional expertise, and foster international cooperation to develop adaptive and future-proof AI governance frameworks. Additionally, collaboration between policymakers, industry leaders, civil society, and academia is essential to ensure that AI regulations are not only effective but also inclusive and innovation-friendly.

⁴⁰¹ Wheeler, K. (2025). How The EU AI Act is Shaping the Future of AI Regulation. Technology Magazine.

⁴⁰² Mehrabi, N., Morstatter, F., Saxena, N., Lerman, K., Galstyan, A., (2021), <u>A Survey on Bias and Fairness in Machine Learning</u> ACM Computing Surveys.

⁴⁰³ European Parliament, (2020). <u>The impact of the General Data Protection Regulation (GDPR) on artificial intelligence</u>

⁴⁰⁴ Statewatch, (2022). <u>Data protection: 80% of national authorities underfunded, EU bodies "unable to fulfil legal</u> duties".

⁴⁰⁵ Paradigm Initiative, (2022). Policy brief: Artificial Intelligence in Kenya

⁴⁰⁶ Csernatoni, R. (2024). <u>The AI Governance Arms Race: From Summit Pageantry to Progress?</u>. Carnegie Endowment for International Peace.

⁴⁰⁷ Sondergaard, P. (2020). Multinational AI Governance – The threat of "fragmentation of AI". 2021.ai

⁴⁰⁸ Pratt, J. & Tanjaya, R. (2025). <u>Documenting the Impacts of Foundation Models</u>. Partnership on AI.

Policy Recommendations and Future Outlook

Strengthening AI-Specific Legislation in Africa

As Artificial Intelligence (AI) continues to transform industries across Africa, the need for robust, AI-specific legislation has become increasingly urgent. While 36 out of the 54 nations have enacted data protection laws, representing over 66% of the continent, these frameworks primarily focus on personal data privacy and do not comprehensively address the unique challenges posed by AI. 409 Current legal frameworks often lack provisions on algorithmic accountability, ethical AI deployment, bias mitigation, and AI safety standards, leaving regulatory gaps that could expose citizens to unfair discrimination, misinformation, and privacy violations.

Recognizing these challenges, several African nations have begun developing AI strategies and guidelines to regulate the use and development of AI technologies:

- **Kenya**: The draft Kenya National AI Strategy (2025-2030) was recently published as the drafters sought the public's input to help create a comprehensive document. It aims to integrate AI into key sectors such as healthcare, agriculture, and financial services, with a focus on responsible AI adoption. Additionally, Kenya's Data Protection Act, 2019, though not AI-specific, provides a foundation for governing AI-driven data processing.
- **South Africa:** In 2024, South Africa released the National Policy Framework on AI to guide ethical AI development and its application in government services. The country has also engaged in public-private partnerships to ensure AI regulation aligns with industry needs.
- Nigeria: The National Information Technology Development Agency (NITDA) has introduced guidelines on AI and data governance, emphasizing transparency, accountability, and fairness in AI-powered decision-making. Nigeria is also working towards a National AI Strategy to create a regulatory environment that fosters innovation while addressing AI-related risks.
- **Egypt**: Egypt launched its National AI Strategy (2021-2025), focusing on AI capacity-building, investment in AI research, and responsible AI adoption across sectors such as education, health, and security.

To strengthen AI governance, African policymakers must develop clear, AI-specific laws and regulatory frameworks that balance innovation with ethical safeguards. These laws should focus on transparency, accountability, and fairness in AI decision-making, requiring AI developers and organizations to conduct impact assessments before deploying AI systems that could significantly affect individuals or communities. Additionally, legal frameworks should promote explainable AI (XAI)—ensuring that AI-generated decisions are interpretable and challengeable.

Furthermore, regional cooperation will be critical in shaping AI legislation across Africa. Since AI technologies and data flows are cross-border by nature, African nations should work towards harmonized

⁴⁰⁹ Lawyers Hub (2024), Africa Privacy Report 2023/2024, lawyershub.org

AI policies that align with continental frameworks such as the African Union (AU) Data Policy Framework and international standards like the OECD AI Principles. A pan-African approach to AI governance would enhance regulatory certainty, foster responsible AI innovation, and prevent regulatory fragmentation that could slow down AI adoption.

Lastly, strengthening AI legislation must be accompanied by investment in regulatory capacity-building. Governments should empower AI oversight bodies with technical expertise, funding, and enforcement authority to effectively regulate AI-driven technologies. Additionally, multi-stakeholder engagement—including government, private sector, academia, and civil society—is essential to ensuring that AI laws reflect societal values, protect fundamental rights, and promote Africa's digital transformation.

o Regulatory Sandboxes for AI and Privacy

Regulatory sandboxes have emerged as a critical tool for balancing innovation with privacy safeguards. A regulatory sandbox is a controlled environment where AI developers, businesses, and policymakers can test AI-driven products, services, and policies under real-world conditions while ensuring compliance with data protection and privacy laws. This approach allows regulators to observe potential risks, refine legal frameworks, and provide tailored guidance without stifling technological advancement.

In the context of AI and privacy, regulatory sandboxes serve several purposes:

- Testing AI Models for Bias and Fairness: Sandboxes provide an opportunity for AI systems to be evaluated for algorithmic bias, discrimination risks, and fairness before full-scale deployment.
- Assessing Data Protection Compliance: Companies can experiment with AI-driven data processing while adhering to privacy regulations, ensuring that automated decision-making does not violate user rights.
- Developing AI Governance Frameworks: Regulators use insights from sandboxes to shape AI
 policies, ethical guidelines, and sector-specific regulations that are adaptable and informed by
 real-world use cases.

Several African countries are beginning to explore regulatory sandboxes for AI and data governance:

- Kenya: The Office of the Data Protection Commissioner (ODPC) is working on a Regulatory Sandbox Framework to test data-driven innovations while ensuring they comply with the Data Protection Act, 2019.⁴¹¹
- Nigeria: The National Information Technology Development Agency (NITDA) has AI regulatory sandboxes where businesses and startups can test AI applications within privacy-preserving

⁴¹¹ ODPC (2024), <u>Strategic Plan 2023 - 2027: Promoting personal data protection by design or default</u>, Republic of Kenya

⁴¹⁰ Datasphere Initiative (2025), Africa Sandboxes Outlook Report, thedatasphere.org

guidelines.412

• South Africa: The Financial Sector Conduct Authority (FSCA) operates a sandbox for fintech and AI innovations, ensuring that AI-driven financial services adhere to consumer protection and data privacy standards.⁴¹³

To enhance the effectiveness of regulatory sandboxes, African policymakers should promote multi-stakeholder participation by involving regulators, tech developers, legal experts, and civil society, ensuring diverse perspectives in AI governance. Cross-border cooperation is essential for harmonizing AI regulations across regional economic blocs like the East African Community (EAC) and ECOWAS. Additionally, clear exit strategies should be established to guide AI innovations from sandbox testing to full-scale deployment while upholding privacy safeguards. By leveraging regulatory sandboxes, African countries can foster responsible AI innovation, strengthen data protection, and ensure AI systems remain ethical, transparent, and privacy-conscious.

• Ethical AI and Capacity Building for Policymakers

Ethical AI refers to the development, deployment, and use of AI systems in a manner that aligns with human rights, transparency, accountability, and inclusivity. Key ethical concerns in AI include bias and discrimination, data privacy, explainability, and the societal impact of automated decision-making.

In Africa, the ethical use of AI is particularly important given the continent's diverse socio-economic and cultural landscape. AI-driven systems must be designed to respect human dignity, minimize bias, and ensure equitable access to AI benefits. However, many African policymakers face capacity gaps in AI governance, making it difficult to craft, implement, and enforce responsible AI regulations.

The Need for Capacity Building

To effectively regulate AI and address ethical concerns, African policymakers need:

- Technical Understanding of AI Systems Policymakers should have foundational knowledge of machine learning, data governance, and algorithmic decision-making to assess AI's impact on privacy, fairness, and security.
- Legal and Regulatory Training Given the rapid evolution of AI, laws and policies must be adaptive. Policymakers must stay informed on international AI governance trends, such as the EU AI Act and the OECD AI Principles, while tailoring policies to Africa's unique context.
- Cross-Sector Collaboration Ethical AI governance requires engagement with AI developers, legal experts, human rights advocates, and the private sector to ensure that policies are holistic and inclusive.
- Public Awareness and Stakeholder Engagement Building trust in AI requires policymakers to communicate AI risks and safeguards to the public and ensure that citizens understand their rights

⁴¹² Okorie J. (2024), Nigeria to establish AI, IoT, blockchain research centres across the six Geopolitical Zones, Techpoint

Datasphere Initiative (2025), Africa Sandboxes Outlook Report, thedatasphere.org

in an AI-driven world.

To strengthen ethical AI and capacity building for policymakers, African governments and regional organizations should invest in AI education and training programs for regulators and public officials. It is also critical to foster partnerships with universities, research institutions, and international AI policy bodies to create localized AI governance frameworks. Governments should also encourage AI policy research to assess the impact of AI on African economies, labor markets, and democratic governance.

By prioritizing ethical AI and regulatory capacity building, African nations can ensure that AI technologies align with human rights principles, foster economic growth, and protect citizens from harm.

o Public Awareness and Digital Literacy on AI and Privacy

Public awareness and digital literacy have become essential in ensuring that individuals understand how AI systems operate, their potential risks, and the safeguards available to protect personal data and privacy. Without adequate awareness, individuals may unknowingly expose themselves to data misuse, algorithmic bias, and surveillance risks, while lacking the knowledge to question, challenge, or opt out of AI-driven decisions that impact their lives.

Digital literacy in the AI era goes beyond basic technical skills—it encompasses the ability to critically assess how AI systems collect, process, and utilize data, as well as the rights and responsibilities associated with digital interactions. Educating the public on these aspects empowers individuals to make informed choices, advocate for their privacy, and demand transparency from AI developers and policymakers.

Key focus areas for public awareness and digital literacy include:

- 1. Understanding AI and Its Role in Society Demystifying AI technologies, explaining their functions, and highlighting both their benefits and ethical concerns.
- 2. Data Protection and Privacy Rights Educating individuals on how their data is collected, stored, and shared, and providing guidance on privacy-preserving practices such as data minimization and encryption.
- 3. Algorithmic Bias and Fairness Raising awareness of discriminatory AI outcomes and equipping people with knowledge on how bias can influence hiring, credit scoring, law enforcement, and healthcare decisions.
- 4. Responsible Use of AI-Powered Tools Encouraging individuals to adopt safe and ethical AI interactions, including verifying sources of AI-generated content and understanding the implications of deepfakes and misinformation.
- 5. Cybersecurity Awareness Teaching best practices for safeguarding personal data in an AI-driven digital environment, such as strong authentication methods, recognizing phishing attempts, and avoiding AI-powered fraud schemes.

Public awareness campaigns, digital literacy initiatives, and collaborations with educational institutions,

civil society, and technology firms are critical in ensuring that AI and privacy discussions are accessible to all, not just experts and policymakers. By fostering a digitally literate population, societies can build trust in AI systems, encourage responsible AI use, and empower individuals to engage in meaningful conversations about privacy and ethical AI governance.

o Cross-Border Cooperation on AI Governance

AI's development and deployment increasingly transcend national borders, necessitating strong cross-border cooperation on AI governance. Given that AI technologies impact global economies, security frameworks, and human rights, countries must work together to establish harmonized policies, ethical standards, and regulatory frameworks that ensure AI is used responsibly and equitably across jurisdictions.

One key challenge in AI governance is regulatory fragmentation, where different countries enforce varying AI laws and standards. This lack of uniformity can lead to compliance challenges for businesses, ethical concerns regarding AI-driven decision-making, and risks of regulatory arbitrage, where companies relocate to jurisdictions with weaker AI regulations. Cross-border cooperation aims to address these gaps by promoting policy alignment, knowledge-sharing, and mutual recognition of AI governance standards.

Key areas of cooperation include:

- 1. Developing Common AI Ethics and Standards Establishing international guidelines that promote fairness, accountability, and transparency in AI systems, ensuring that ethical principles are upheld across borders.
- 2. Data Governance and Cross-Border Data Flows Crafting agreements on data protection and privacy standards, balancing national security interests with the free flow of data necessary for AI innovation.
- 3. AI Safety and Risk Mitigation Collaborating on AI safety protocols, cybersecurity measures, and risk assessment frameworks to prevent misuse and ensure AI reliability in critical sectors like healthcare and finance
- 4. Joint Research and Capacity Building Encouraging countries to share best practices, invest in AI research collaborations, and build technical expertise, particularly for nations with limited AI regulatory capacity.
- 5. AI and Human Rights Protection Strengthening international cooperation to prevent AI-driven human rights violations, such as mass surveillance, algorithmic discrimination, and unethical deployment of AI in law enforcement or warfare.

Regional bodies like the African Union (AU), European Union (EU), and United Nations (UN) are already playing a role in shaping multilateral AI governance discussions, while bilateral agreements between nations are helping to bridge policy gaps and facilitate AI innovation in a responsible manner. Strengthening these cross-border partnerships will be crucial in ensuring AI development aligns with global ethical, legal, and human rights standards.

Conclusion

To conclude, the adoption and regulation of AI in Africa presents both opportunities and significant challenges. AI systems, often developed outside the continent and trained on non-inclusive datasets, risk amplifying biases, infringing on human rights, and deepening inequalities through the AI divide. While data protection laws across Africa provide a foundation for safeguarding individual rights, they remain inadequate to address the complexities of AI, particularly regarding automated decision-making, transparency, and accountability. The absence of consistent definitions, mechanisms to address algorithmic opacity, and frameworks for inclusive AI development further exacerbates these shortcomings.

Additionally, a significant challenge for incorporating AI in Africa lies in the ability of businesses to identify compelling and viable use cases that can attract investor funding with a reasonable expectation of strong returns. While the continent is experiencing a rise in local actors engaging in AI knowledge creation, capacity building, and innovation, fueled by enhanced computational capacity and increased funding for start-ups, gaps remain. Many countries still face a shortage of skilled, home-grown AI talent and mentorship programs, despite the growing availability of upskilling and training opportunities in AI. This creates a barrier to unlocking the full potential of AI-driven solutions across various sectors.

Although the AU AI Continental Strategy offers a pivotal blueprint, emphasizing ethical AI development, adaptable regulations, and the need to respect Africa's unique cultural and social context, its successful implementation demands coordinated efforts from policymakers, private sector stakeholders, and civil society to address gaps in existing data protection laws, foster inclusive AI ecosystems, and prioritize capacity building.

Facilitating the exchange of best practices, knowledge transfer, and joint research efforts between member states is essential. By tackling key challenges such as talent development, funding, and data accessibility, African countries can collectively harness AI's transformative potential, driving economic growth, enhancing social outcomes, and promoting a more equitable and inclusive future for all.

Overall, African nations must urgently adopt a harmonized approach to AI governance that incorporates robust data protection principles, such as transparency, fairness, and accountability, throughout the AI lifecycle. Investments in homegrown AI solutions, informed by diverse African perspectives, are essential to ensure that AI serves as a tool for empowerment rather than exploitation. Governments, regulators, and stakeholders must act now to strengthen AI governance frameworks, bridge the AI divide, and foster an ecosystem that upholds African values and rights. This includes enacting targeted legislation, investing in research, and ensuring that AI systems deployed in Africa align with its local context, cultures and values.

Country-Specific Analysis

Kenya

Data Protection

A data protection regulation framework is in place in Kenya, with the Data Protection Act (2019) (DPA)⁴¹⁴ serving as the key legislation safeguarding the fundamental right of privacy protected under the Constitution of Kenya (2010). The DPA is supplemented by several regulations including the Compliance and Enforcement Regulations (2021)⁴¹⁵ providing for complaints handling procedures and enforcement mechanisms, the Registration of Data Controllers & Data Processors Regulations (2021),⁴¹⁶ and the Data Protection General Regulations (2021)⁴¹⁷ which elaborates on the rights of data subjects and principles of data protection. The Kenyan DPA establishes the Office of the Data Protection Commissioner (ODPC) which implements the Act and its supplemental Regulations as well as resolves disputes on data protection issues.⁴¹⁸

In addition to the DPA and its regulations, the ODPC has also issued certain guidances on various relevant issues in data protection law implementation, including on registration of data controllers and data processors, ⁴¹⁹ processing of personal data for electoral purposes, on data protection impact assessments, ⁴²⁰ on consent, ⁴²¹ and on complaints management ⁴²² and alternative dispute resolution processes. ⁴²³

AI Regulation

With regard to AI regulation, there are no specific legal or regulatory frameworks governing AI in the country. In 2018, Kenya established the Blockchain and Artificial Intelligence Task Force to investigate the potential benefits of AI in the public sector, with the Task Force recommending the development of a regulatory framework. More recently, there have been steps by the government taken towards regulation by the ongoing development of the Kenya National AI Strategy (2025-2030), which is undergoing public consultations and expected to be launched by the Ministry of ICT in early 2025. The draft Strategy outlines a vision for Kenya to be positioned as a leading hub for AI model innovation, creating tailored solutions for local challenges by prioritising governance, innovation and capacity building. Additionally, it is a priority to ensure equitable and sustainable AI benefiting all citizens.

⁴¹⁴ ODPC (n.d), The Kenya Data Protection Act (No. 24 of 2019), Office of the Data Protection Commissioner.

⁴¹⁵ ODPC (n.d), <u>The Data Protection (Compliance and Enforcement) Regulations</u>, 2021, Office of the Data Protection Commissioner.

⁴¹⁶ ODPC (n.d), <u>The Data Protection (Registration of Data Controllers and Data Processors) Regulations</u>, 2021, Office of the Data Protection Commissioner.

⁴¹⁷ ODPC (n.d), <u>The Data Protection (General) Regulations</u>, 2021, Office of the Data Protection Commissioner.

⁴¹⁸ ODPC (n.d), <u>The Kenya Data Protection Act (No. 24 of 2019)</u> Section 5, Office of the Data Protection Commissioner.

⁴¹⁹ ODPC (n.d), Office of the Data Protection Commissioner, Guidance Note on Registration of Data Controllers and Data Processors, Office of the Data Protection Commissioner.

⁴²⁰ ODPC (n.d), Guidance Note on Data Protection Impact Assessment, Office of the Data Protection Commissioner.

⁴²¹ ODPC (n.d), Guidance Notes on Consent, Office of the Data Protection Commissioner.

⁴²² ODPC (n.d), Complaints Management Manual, Office of the Data Protection Commissioner.

⁴²³ ODPC (n.d), <u>The Alternative Dispute Resolution (ADR) Framework/ Guidelines</u>, Office of the Data Protection Commissioner. Office of the Data Protection Commissioner.

In April 2024, the Kenya Bureau of Standards (KEBS) published the "Draft Information Technology Artificial Intelligence Code of Practice for AI Applications"424 for public comments. The Draft Code is intended to govern the development, deployment and use of AI systems in a responsible way. It outlines principles to ensure that there is development of trustworthy AI systems that prioritise transparency and accountability, explainability and minimization of risks. However, the Code has not been finalized and is not yet operational.

In 2025, the NRF Kenya Call on Artificial Intelligence for Cultural Heritage (KAICH)⁴²⁵ invited submissions from researchers, professionals, and practitioners interested in advancing the use of AI in cultural heritage conservation. The call seeks to promote interdisciplinary research on both tangible and intangible heritage, utilizing AI models, tools, and methodologies for conservation, study, and broader public access to cultural heritage (CH).

The Robotics Society of Kenya drafted the Kenya Robotics and Artificial Intelligence Society Bill 2023⁴²⁶ to establish a regulatory framework for AI governance in Kenya. However, the Bill remains in draft form and has yet to be published in the Kenya Gazette. It has not received government backing and has faced opposition from key private sector players and stakeholders.

Beyond the above draft documents, AI in Kenya is affected by other laws such as the DPA which provides for the right not to be subject to a decision which is solely based on automated processing, and the Consumer Protection Act of 2012 which will apply to the protection of customers who use AI products and systems. Additionally, the existing Computer Misuse and Cybercrimes Act of 2018 applies to the owners or operators of systems designated as critical infrastructure, which may apply to AI systems if considered critical information infrastructure.

Section 22 of the DPA is applicable to the adoption and regulation of AI as it provides for algorithmic transparency, need for data controllers and processors to inform data subjects on automated individual decision making, as well as providing rationale on the decisions. 427 In the education sector, Kenva faced scrutiny in using automated decision making within admission processes, suggesting the need for transparency in the use of such automated systems. 428

AI Taskforce

Kenya's Cabinet Secretary for ICT in 2019 established the Distributed Ledgers Technologies and Artificial Intelligence Taskforce (the "Taskforce"). 429 The mandate of the Taskforce was to explore and analyze upcoming digital technologies that demonstrate great potential to transform Kenya's economy, including disruptive technologies that are currently shaping the global economy such as distributed ledger technologies (Blockchain and hashgraph), artificial intelligence (Al.), 5G wireless technology, and the

⁴²⁴ DataGuidance (2024), <u>Draft Kenva Standard on Information Technology - Artificial Intelligence- Code of</u> Practice for AI Applications (DKS 3007:2024), 2024, Kenya Bureau of Standards.

⁴²⁵ NRF (2025), Application of Artificial Intelligence (AI) in Cultural Heritage, National Research Fund.

⁴²⁶ White & Case (2024), AI Watch: Global regulatory tracker - Kenya, whitecase.com.

⁴²⁷ ODPC (n.d), The Kenya Data Protection Act (No. 24 of 2019) Section 22, Office of the Data Protection Commissioner.

⁴²⁸ Centre for Intellectual Property and Information Technology Law (2024), Unveiling Privacy in the AI Era; Navigating Surveillance, Ethics, and Equitable Solutions", Strathmore University.

429 White & Case (2024), AI Watch: Global regulatory tracker - Kenya, whitecase.com.

internet of things.⁴³⁰ The Taskforce in its report noted that the challenge for regulation of AI is how to balance supporting innovation and competition while protecting customers, market integrity, financial stability, and human life.

AI Initiatives

In 2024, Microsoft launched an AI skilling initiative in Kenya, with the aim of having a significant impact on the country's digital economy by fostering innovation and digital transformation across various sectors. ⁴³¹ It is part of Microsoft's commitment to democratise AI and empower individuals with the skills needed to thrive in the digital economy, aligned with Kenya's Vision 2030 and Digital Masterplan. The programme intends to train 1 million people in AI and cybersecurity by 2027. ⁴³²

In celebration of Data Privacy Day 2024, the Office of the Data Protection Commissioner (ODPC) in Kenya launched an innovative AI chatbot to enhance data privacy awareness and support among citizens and businesses. The chatbot – LindaData aims to provide accessible and real-time assistance to individuals and organizations seeking information on data protection regulations, best practices, and compliance guidelines. As

In 2018, the Kenya National Police Service adopted a facial recognition system to identify vehicles involved in crimes through CCTV cameras and Automatic Number Plate Recognition. As this technology analyses faces in real time through a large number of cameras, there have been concerns raised on the challenges of algorithmic transparency, surveillance and privacy.⁴³⁵ With such privacy concerns arising on the use of AI systems within the country, there is a need to address these challenges through policy frameworks in line with global best practices.

In 2024, President Ruto announced that the Government of Kenya will host the Global Data Festival in 2026, 436 to catalyze global progress on data, technology, and AI for economic and social progress. The festival will be organized with the Global Partnership for Sustainable Development Data.

Rwanda

Data Protection

430 White & Case (2024), AI Watch: Global regulatory tracker - Kenya, whitecase.com.

⁴³¹ CIOAfrica (2024), Microsoft Launches AI Skilling Initiative In Kenva, cioafrica.co

⁴³² CIOAfrica (2024), Microsoft Launches AI Skilling Initiative In Kenya, cioafrica.co

⁴³³ ODPC (2024), <u>ODPC Launches AI Chatbot as Kenya Marks Data Privacy Day 2024</u>, Office of the Data Protection Commissioner.

⁴³⁴ ODPC (2024), <u>ODPC Launches AI Chatbot as Kenya Marks Data Privacy Day 2024</u>, Office of the Data Protection Commissioner.

⁴³⁵ Paul Wanjama (2018), Police launch Facial Recognition System to Nab Criminals.

⁴³⁶ Data4sdgs (2024), <u>President Ruto announces Kenya as the host of the 2026 Global Data Festival</u>, Global Partnership for Sustainable Development Data.

Rwanda has in place the <u>law relating to the protection of personal data and privacy (Data Protection Law)</u> which has been in effect since 2021.⁴³⁷ The law establishes the principles guiding the processing and use of personal data, and the roles of data controllers, data collectors and processors on the protection and safe use of personal data. The Act also provides for the National Cyber Security Authority (NCSA) which is the supervisory authority on matters of data protection regulation and implementation.⁴³⁸

AI Regulation

The <u>National Artificial Intelligence Policy</u> for Rwanda was approved in 2023 and is a road map to enable Rwanda to harness the benefits of AI whilst mitigating its risks. It makes provision for trustworthy AI adoption in the public sector, and prioritises the need to harness AI for sustainable and inclusive growth in the country. This AI adoption has been demonstrated in Rwanda, for instance, through its use in improving healthcare in the country through streamlining procurement of healthcare supplies.⁴³⁹

The Policy also advocates for the development and operationalization of the "Guidelines on the Ethical Development and Implementation of AI", while creating a network of AI Ethics Officers across the government institutions to champion these guidelines.⁴⁴⁰

Further, other laws such as the Data Protection Law can affect AI use in the country, for instance, the law provides for data subjects rights in relation to automated decisions. The Act states that it applies to processing of personal data through an automated platform, and by stating that the data subject has the right not to be subject to a decision based solely on automated personal data processing, including profiling, which evaluates an individual on personal aspects and make predictions flowing from these characteristics, and may produce significant or legal consequences on the individuals.⁴⁴¹

These laws, as well as the National AI Policy provide a proactive basis and a direction for the adoption of a broader regulatory framework concerning AI adoption in the country, even as innovation gradually increases within the country.

AI Initiatives

In 2020, at the World Economic Forum (WEF) Annual Meeting in Davos, the Government of Rwanda signed an agreement with WEF to establish the Centre for the Fourth Industrial Revolution (C4IR) Rwanda. As part of a global network of 19 centers, C4IR Rwanda is at the forefront of shaping the Fourth Industrial Revolution, leveraging local expertise to drive global impact. Aligned with Rwanda's national development priorities, the center focuses on data economy, data governance, artificial intelligence (AI), and machine learning (ML) to accelerate responsible and inclusive technological advancements.

⁴³⁷ RwandaLII (n.d), Rwanda Law on the Protection of Personal Data (Law No 058/2021), article 2 and 21.

⁴³⁸ RwandaLII (n.d), Rwanda Law on the Protection of Personal Data (Law No 058/2021), article 3.

⁴³⁹ African Development Bank (2022), <u>How Rwanda is using Artificial Intelligence to improve healthcare</u>, African Development Bank.

⁴⁴⁰ Republic of Rwanda, Ministry of ICT and Innovation, <u>The National AI Policy</u> (2023), 5.

⁴⁴¹ RwandaLII (n.d.), Rwanda Law on the Protection of Personal Data (Law No 058/2021), article 2 and 21.

⁴⁴² C4IR (n.d), About Us, Centre for the Fourth Industrial Revolution. Accessed 28 February 2025.

⁴⁴³ C4IR (n.d), <u>About Us.</u> Centre for the Fourth Industrial Revolution. Accessed 28 February 2025.

The Kigali Innovation City is a growing tech hub home to CMU-Africa, large corporations, and technology companies, with the goal of driving Rwanda's economic growth through digital transformation.⁴⁴⁴

Additionally, Rwanda is set to become a hub for AI research and innovation as InstaDeep,⁴⁴⁵ a London-based global technology company, prepares to establish its office in Kigali. Announcing the move during an annual gathering of the African machine learning and AI community, the CEO Karim Beguir emphasized the company's commitment to advancing AI solutions tailored for Africa and strengthening the continent's AI ecosystem.

Tanzania

Data Protection

The <u>Personal Data Protection Act</u> (Cap 44 of 2023) is enacted in Tanzania and is based on article 16 of the Constitution of the United Republic of Tanzania which provides for the right to privacy. ⁴⁴⁶ The Tanzania PDPA provides principles to guide the collection and processing of personal data, and also establishes the Personal Data Protection Commission (PDPC) as the regulatory body charged with implementing the PDPA. ⁴⁴⁷ The PDPA also establishes a board that is responsible for overseeing the PDPC, with the board being appointed in January 2024. ⁴⁴⁸ The appointment of the board members has been questioned regarding their objectivity and transparency, with research indicating the need for a transparent and competitive process guaranteeing more trust and efficiency in the board's work. ⁴⁴⁹

Additional regulations are in place to supplement the PDPA including the <u>Personal Data Protection</u> (<u>Personal Data Collection and Processing Regulations, 2023</u>)⁴⁵⁰ as well as the guidelines for complaint handling found in the <u>Personal Data Protection</u> (<u>Complaints Settlement Procedures Regulations, 2023</u>).⁴⁵¹

AI Regulation

AI regulation is still at nascent stages in Tanzania, with no binding legal framework available. However, Tanzania launched the Tanzania Digital Economy Strategic Framework 2024-2034 which is a comprehensive strategy outlining the plan to integrate digital technologies into the various sectors in the digital economy, including the manufacturing, health, transportation and financial sectors, to name a few.⁴⁵²

⁴⁴⁹ Deo Shao et al., <u>Comparative Analysis of Data Protection Regulations in East African Countries</u>, Emerald Publishing Limited, 8.

⁴⁴⁴ Carnegie Mellon University (n.d), <u>Kigali Innovation City</u>, africa.engineering.cmu.edu

⁴⁴⁵ Rwanda in Zimbabwe (n.d), Rwanda to become hub for AI research in Africa, Republic of Rwanda.

⁴⁴⁶ The United Republic of Tanzania, Personal Data Protection Act, Chapter 44, (2023).

The United Republic of Tanzania, Personal Data Protection Act, Chapter 44, (2023), article 6.

⁴⁴⁸ Ibid, article 8.

⁴⁵⁰ The United Republic of Tanzania, <u>The Personal Data Protection (Personal Data Collection and Processing)</u> Regulations, 2023.

The United Republic of Tanzania, <u>Personal Data Protection (Complaints Settlement Procedures Regulations</u>, 2023

⁴⁵² Ministry of ICT (2022), <u>Tanzania Digital Economy Strategic Framework</u> (2024-2034), The United Republic of Tanzania.

Concurrently, the Tanzania Bureau of Standards (TBS) stated that it was taking steps to develop standards to address security concerns regarding artificial intelligence with the objective of the safe and effective use and integration of AI technologies.

In 2022, Tanzania adopted the Policy Framework for AI in the Tanzania Health Sector, 453 to govern the application of digital technologies, including AI, to provide guidance on the delivery of health services and the resilience of the health sector. The Policy refers to several initiatives in place on AI and health in Tanzania, including the uses of AI in clinical settings and biomedical research, health system administration as well as management. 454 The Policy is aimed at providing a basis for the development of national policies as well as regulatory mechanisms to shape the adoption of AI in the health sector while addressing challenges and leveraging the opportunities of AI. 455

The National Digital Education Guidelines for AI in Education⁴⁵⁶ provide a roadmap for AI integration in teaching and learning. From a jurisprudential perspective, the risks presented to data privacy by AI tools have been observed and litigated in Tanzania. In 2023, a USD 4.3 million lawsuit (ongoing) was brought against Vodacom Tanzania in the Tanzanian High Court by Sayida Masanja, a businessman. Masanja alleged that Vodacom shared his personal information with OpenAI's ChatGPT without his consent.⁴⁵⁷

AI Initiatives

There is some gradual uptake of AI in the country with AI tools developed and being used in various sectors including in agriculture, such as <u>Agrobot</u>, a service that uses AI to assist farmers in acquiring accurate and reliable agricultural information. Additionally, the courts in Tanzania have adopted AI solutions such as transcriptions and translation systems, where the Judiciary of Tanzania partnered with Almawave, an Italian artificial intelligence firm, to implement AI-powered transcription and translation systems in courtrooms.⁴⁵⁸ and are planning to adopt AI to enhance its delivery of e government services.

Tanzania's Higher Learning Institutions are integrating AI tools spanning various areas, including personalized learning, intelligent tutoring, virtual laboratories, simulations, chatbots, virtual assistants, data analytics, and predictive modeling. These technologies are designed to support educators, improve learning outcomes, and enhance the overall teaching and learning experience. Examples of AI-powered educational technologies adopted by universities include Intelligent Tutoring Systems (ITS) such as Carnegie Learning's Cognitive Tutor, Knewton, and DreamBox Learning, which provide personalized guidance and adaptive learning experiences for students.

⁴⁵³ Ministry of Health, Policy Framework for AI in the Tanzania Health Sector, The United Republic of Tanzania.

⁴⁵⁴ Ibid, p3.

⁴⁵⁵ Ibid, p7.

⁴⁵⁶ TMC (2025), <u>Beyond Fragmentation: Why Tanzania Needs a National AI Strategy for Sustainable Growth</u>, Tech & Media Convergency.

⁴⁵⁷ Sayida Daud Masanja Versus Vodacom T. Public L.t.d Co. (Civil Case No. 06 of 2023) [2024] TZHC 1240.

⁴⁵⁸ TMC (2025), <u>Beyond Fragmentation: Why Tanzania Needs a National AI Strategy for Sustainable Growth</u>, Tech & Media Convergency.

⁴⁵⁹ Mathew N., Mgina J. (2024), <u>Utilization of Educational Artificial Intelligence Tools in Higher Learning</u> Institutions in Tanzania and the Challenges Encountered, A Literature Review, IJNRD.

⁴⁶⁰ Mathew N., Mgina J. (2024), <u>Utilization of Educational Artificial Intelligence Tools in Higher Learning Institutions in Tanzania and the Challenges Encountered.</u> A <u>Literature Review</u>, IJNRD.

Uganda

Data Protection

The Data Protection and Privacy Act (DPPA) (2019)⁴⁶¹ regulates the collection, processing, use and disclosure of personal data. The Act is supplemented by the Data Protection and Privacy Regulations which came into effect in 2021.⁴⁶² The Constitution of the Republic of Uganda provides for the right to privacy of information and is the basis for the data protection provisions in the country. To implement the rules on protection of personal data, the Personal Data Protection Office (PDPO) was established in 2021, operating under the National Information Technology Authority.⁴⁶³ The PDPO is tasked with overseeing the implementation of the DPPA. The Act also provides for the appointment of the PDPO's oversight board,⁴⁶⁴ raising questions on the PDPO's independence.⁴⁶⁵

The Act regulates the collection and processing of personal data, outlining the rights of individuals (data subjects) and the responsibilities of those involved in handling the personal data -the data collectors, data controllers and data processors. Noting that data is at the core of the AI lifecycle, the Data Protection and Privacy Act inevitably regulates all AI related data processing activities that involve personal data. A key section that addresses AI related activities is Section 27 which provides for the rights in relation to automated decision making. While neither the Act nor the regulations⁴⁶⁶ define what entails automated decision making, a key feature of AI is its autonomy. Section 27 (1)⁴⁶⁷ provides that a data subject may notify the data controller to ensure that any decision taken by or on behalf of the data subject is not solely based on processing by automatic means.

Where a decision which significantly affects a data subject is based solely on automated means then the data controller must -as soon as reasonably practicable- notify the data subject that the decision was taken on that basis and the data subject may write to the data controller with a request to reconsider the decision within twenty one days after receiving the notification from the data subject. Within twenty one days after receiving the notice, the data controller must inform the data subject of the steps taken to comply with the notice. If the data subject is not satisfied, they have a right to submit a complaint to the Personal Data Protection Office within fourteen days. If the Personal Data Protection Office is satisfied with the complaint, the authority must order the data controller to comply. This provision ensures transparency, human involvement (human in the loop), fairness and accountability in the decision-making process.

AI Regulation

Uganda has in place a task force on artificial intelligence which was established by the Uganda Communication Commission to develop a comprehensive framework on integrating AI into the

⁴⁶¹ PDPO (n.d), The Data Protection and Privacy Act (2019), The Republic of Uganda.

⁴⁶² PDPO (n.d), The Data Protection and Privacy Act (2019), The Republic of Uganda.

⁴⁶³ PDPO (n.d), The Data Protection and Privacy Act (2019) Section 4, The Republic of Uganda.

⁴⁶⁴ Ibid.

⁴⁶⁵Deo Shao et al., <u>Comparative Analysis of Data Protection Regulations in East African Countries</u>, Emerald Publishing Limited, 8.

⁴⁶⁶ PDPO (n.d), The Data Protection and Privacy Regulations, 2021, Laws of Uganda.

⁴⁶⁷ PDPO (n.d), <u>The Data Protection and Privacy Regulations</u>, 2021, Regulation 38, Laws of Uganda.

⁴⁶⁸ PDPO (n.d), The Data Protection and Privacy Act (2019) Section 27 (2), The Republic of Uganda.

development agenda of the country.⁴⁶⁹ It is focused on the adoption of AI within the communication sector, assessment of infrastructure, and addressing data management practices and cybersecurity measures.⁴⁷⁰ While no national AI strategy exists, there have been government reports intimating the development of new legislation focused on AI which will lay the basis of a legal framework to adopt AI usage while providing guidance on emerging risks.⁴⁷¹

Previously, the Government of Uganda adopted the <u>National 4IR Strategy</u> which was aimed at positioning Uganda in the adoption of 4IR applications encompassing AI, harnessing them for growth, competitiveness and human development.⁴⁷² The Expert National Task Force on the Fourth Industrial Revolution was established to advise the government on domesticating technology from the fourth industrial revolution to fast track the country's economic development.⁴⁷³ These are fragmented institutions and frameworks relating to AI governance and regulation in the country. It is hoped that Uganda will prioritise the adoption of effective regulatory frameworks based on best practices in the region, and globally, to promote the responsible development and adoption of AI in the country.

The National 4IR strategy

As early as 2018, President Yoweri Museveni established a Nation Expert Taskforce on the 4IR and assessment of Uganda's 4IR opportunities and readiness was conducted to identify the areas that must be further developed.⁴⁷⁴ The strategy's main mission is to transform and accelerate Uganda's development into an innovative, productive and competitive society using 4IR technologies by 2040.⁴⁷⁵

The initiative aims to assess and advance Uganda's readiness for the Fourth Industrial Revolution (4IR) through a series of strategic objectives. It seeks to conduct a national environmental scan to evaluate the current status of 4IR initiatives across various sectors. Additionally, it will review existing national policies, regulations, and standards to identify gaps and opportunities for innovation. A key focus is to develop a comprehensive national strategy for the adoption and promotion of 4IR technologies, ensuring alignment with economic and social development goals. The initiative will also identify challenges and risks associated with 4IR adoption and recommend an optimal national framework that positions Uganda as a regional leader in 4IR innovation and implementation.

AI Taskforce

On 4th July 2024, the Uganda Communications Commission (UCC) established an AI task force aimed at creating a framework for the adoption and utilization of AI in Uganda.⁴⁷⁶ The task force will focus on developing policies that promote responsible AI use, enhance innovation and improve service delivery in Uganda.⁴⁷⁷

⁴⁷¹ NTV Uganda (2024), AI Experts say New Policy and Strategy in the Offing.

⁴⁶⁹ Francisco Adongo (2024), <u>UCC Unveils Task Force to Drive Adoption of Artificial Intelligence in Communications Sector</u>, Eagle.com.

⁴⁷⁰ Ibid.

⁴⁷² FSD Uganda (n.d), Uganda's National 4IR Strategy (2020), the Government of Uganda, Ministry of ICT.

⁴⁷³ OECD (2023), Expert National Task Force on the Fourth Industrial Revolution.

⁴⁷⁴ FSD Uganda (n.d), <u>Uganda's National 4IR Strategy</u> (2020), the Government of Uganda, Ministry of ICT.

⁴⁷⁶ UCC (n.d), Market Performance Reports, Uganda Communications Commission.

⁴⁷⁷ UCC (n.d), Market Performance Reports, Uganda Communications Commission.

Uganda's Intelligent Transport Monitoring System

In November 2023, Uganda launched its Intelligent Transport Monitoring System (ITMS)⁴⁷⁸ for number plate tracking and vehicle registration. It was installed by a Russian Company – M/s Joint Stock Co. Global Security⁴⁷⁹. The system utilizes AI, data analytics and IoT to improve road safety and traffic management. The system builds on the country's existing traffic surveillance system with a network of surveillance cameras and mandatory cellular network connected tracking devices.⁴⁸⁰ The new plates will have an attached sim card equipped device provided by the state-owned telecommunications company, Uganda Telecommunications Limited (UTL).⁴⁸¹ According to the Commissioner of Police, the new solution provides tracking of all vehicles in real time at the Police command centers of Naguru and Nateete.⁴⁸² Despite the system's promised efficiency and stronger law enforcement, Human Rights Watch has raised concerns that the new surveillance system -which allows the government to track the real time location of all vehicles in the country- undermines privacy rights and creates serious risks to freedom of association and expression.⁴⁸³ Human Rights Watch was also alarmed that the government has limited public scrutiny of the technical system and its capabilities and the contract with the Russian Company has no plans for oversight and human rights mitigation around the project.⁴⁸⁴

Huawei CCTV surveillance technology

In 2019, the government of Uganda procured a \$126 million worth Closed-Circuit Television Camera (CCTV) surveillance technology from the Chinese telecommunications company Huawei to monitor public spaces across Uganda. The installation of the CCTV cameras was phased out starting in July 2019 The second phase rolled out in 2020 with 20 facial recognition cameras connected to 107 monitoring centers at different police stations within 2,319 mapped countryside municipalities and major towns. The Uganda Police spokesperson asserted that the cameras are already transforming modern day policing in Uganda with facial recognition and artificial intelligence as part of policing and security. Nevertheless, the system continues to raise concerns towards human rights and democracy.

AI4Health Incubation Grant Initiative

⁴⁷⁸ Ministry of Works and Transport (2024), Digital Number Plates Launched, NTV Uganda.

⁴⁷⁹ ITMS (n.d), <u>ITMS Project</u>, The Intelligent Transport Monitoring System. Accessed on 25th January 2025.

⁴⁸⁰ Monitor Reporter (2023), Scrap new surveillance system, HRW tells Govt, Monitor.

⁴⁸¹ Monitor Reporter (2023), Scrap new surveillance system, HRW tells Govt, Monitor.

⁴⁸² ITMS (n.d), <u>Uganda Revs Up Digital Transformation: New Date Set for Digital Car Number Plates Rollout.</u> The Intelligent Transport Monitoring System.

⁴⁸³ ITMS (n.d), <u>Uganda Revs Up Digital Transformation: New Date Set for Digital Car Number Plates Rollout.</u> The Intelligent Transport Monitoring System.

⁴⁸⁴ HRW (2023), <u>Uganda: Rights Concerns Over License Plate Tracking Surveillance System Jeopardizes Right to Privacy</u>, Human Rights Watch.

⁴⁸⁵ Monitor Reporter (2023), Scrap new surveillance system, HRW tells Govt, Monitor.

⁴⁸⁶ PI (2020), <u>Huawei infiltration in Uganda</u>, Privacy International.

⁴⁸⁷ PI (2020), <u>Huawei infiltration in Uganda</u>, Privacy International.

⁴⁸⁸ Kamusiime W. (2019), Police Refutes Claim Of Spying On Opposition, Uganda Police Force.

⁴⁸⁹ Unwanted Witness (2020), <u>Surveillance, Censorship threaten Internet Freedom and Democracy in Uganda,</u> says Unwanted Witness, unwantedwitness.org

The country's focus on healthcare applications of AI is particularly noteworthy, as demonstrated by the launch of the AI4Health Incubation Grant initiative. This program exemplifies Uganda's commitment to leveraging AI for specific sectoral development while maintaining regulatory oversight.

Morocco

Data Protection

Morocco's law governing privacy and data protection is Law No 09-08, dated February 18, 2009 relating to protection of individuals with regard to the processing of personal data and its implementation Decree n° 2-09-165 of May 21, 2009 (together, the DP Law). The Law provides for data subject rights and data controller and processor obligations, but does not provide a legal requirement to notify of a data breach. Additionally, the Law is particularly comprehensive with respect to the circumstance under which consultation with the Moroccan data protection authority (CNDP) is required before companies can engage in data processing activities.⁴⁹⁰

In the international sphere, Morocco is a signatory to the Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data (Convention 108) and the Protocol amending Convention 108 (Convention 108+).⁴⁹¹

AI Regulation

The UNESCO & UMP6 Initiative, originating from the Forum on Artificial Intelligence in Africa 2018, resulted in the adoption of the Benguérir Declaration, emphasizing the promotion of AI for human-centered development aligned with human rights principles.⁴⁹²

Morocco is working towards launching its national AI strategy with the proposed model encapsulating the acronym "LAFBAH", to provide a thorough and forward-thinking strategy that is specifically adapted to Morocco's particular context. Morocco seeks to create a strong and inclusive AI strategy by concentrating on leadership & vision, adaptive governance, forward thinking, breakthrough innovations, agility in implementation, and human centred approach. This approach seeks to use AI to advance human-centred ideals, economic expansion, and environmental development while upholding moral and ethical principles. 493

In 2024, opposition lawmakers in Morocco's House of Councillors introduced a bill aimed at regulating artificial intelligence (AI) to prevent its misuse and negative consequences. Spearheaded by the Moroccan Labour Union's parliamentary group, the bill proposed establishing a dedicated agency to oversee AI governance. According to the bill's explanatory memorandum, this National Agency for Artificial Intelligence would be responsible for developing, implementing, and updating Morocco's AI strategy in

Ethical National AI Strategy for Moroccan Competitiveness and Strategic Intelligence.

⁴⁹⁰ One Trust (n.d), Morocco - Data Guidance.

⁴⁹¹ One Trust (n.d), Morocco - Data Guidance.

 ⁴⁹² Trigui H, Guerfali F, Harigua-Souiai E, et al. Exploring AI governance in the Middle East and North Africa (MENA) region: gaps, efforts, and initiatives. Data & Policy. 2024;6:e83. doi:10.1017/dap.2024.85
 ⁴⁹³ Lafram A., Bahji S.(n.d), Artificial Intelligence in Morocco: Towards Holistic, Responsible and

alignment with global advancements.⁴⁹⁴ The agency would serve three key purposes: raising awareness of AI's significance in both the public and private sectors, nurturing a new generation of AI experts, and enhancing workforce efficiency across national institutions.

AI Initiatives

Morocco has launched several AI-focused initiatives, including the AI Khawarizmi program, which allocates 50 million dirhams (5 million USD) to fund AI research projects. The country has also established multiple AI research centers within universities and technological institutions, such as the International Centre for Artificial Intelligence at Mohammed VI Polytechnic University. These efforts reinforce Morocco's position as a regional AI hub and contribute to the growth of an African innovation ecosystem. Additionally, Morocco has created public institutions dedicated to AI and introduced specialized training programs to enhance digital skills development.

Benin

Data Protection

The data protection framework in Benin is regulated under two primary legislative instruments, namely the Law No. 2017-20 of April 20, 2018 on the digital code and the Law No. 2009-09 of May 22, 2009 dealing with the Protection of Personally Identifiable Information. Law No. 2009-09 establishes a comprehensive framework for the protection of personal data in Benin, introducing various elements including the rights of individuals, requirements for consent, limitations on data processing, and the establishment of the Beninese data protection authority (APDP) as the supervisory authority. This broad approach to data protection was supplemented by the more detailed Digital Code in 2018.

The Fifth Book of the Digital Code, on personal data protection, regulates and clarifies several matters, such as joint controllership of data, conditions for consent, data breach notifications, processing for research and other purposes, and impact assessments. According to Article 430 of the Digital Code, a Data Protection Officer (DPO) must be appointed when the data controller is a state-owned organisation or when the activities of the data controller or data processor involve monitoring individuals or processing of sensitive data on a large scale. Although the Digital Code does not impose a strict duty for the appointment of a DPO, organisations with a DPO are exempt from notifying the APDP of data processing (Article 408 of the Digital Code). Data controllers are also required to notify the Commissioner of the APDP of any breach to the security safeguards of personal data (Article 427 of The Law on the Digital Code).

AI Regulation

Benin had established a strong institutional and legal framework for digital transformation, anchored by the Code of Digital Affairs, adopted on June 13, 2017, and later amended by Law No. 2020-35 on January

⁴⁹⁴ Akindurodoye F. (2024), <u>Mauritius comes first as Morocco ranks 6th for AI adoption in Africa</u>, techpressionmedia.com.

⁴⁹⁵ Lafram A., Bahji S.(n.d), <u>Artificial Intelligence in Morocco: Towards Holistic, Responsible and Ethical National AI Strategy for Moroccan Competitiveness and Strategic Intelligence.</u>

6, 2021.⁴⁹⁶ Coupled with a thriving digital ecosystem, these foundations provided a solid basis for developing a comprehensive Artificial Intelligence (AI) strategy.

Consequently, in 2023, Benin published the National Strategy for Artificial Intelligence and Big Data which seeks to establish a strong and sustainable digital ecosystem by prioritizing key areas such as developing national data infrastructure, advancing AI-driven solutions, investing in human capital, fostering research and innovation, and implementing a comprehensive AI governance framework.⁴⁹⁷ The strategy was spearheaded by the Ministry of Digital and Digitalization, with the aim of establishing Benin as a prominent player in the AI and big data domains by 2027.

The strategy is structured into four programs, implemented over three phases within five years, and includes 123 targeted actions affecting both the public and private sectors. The initiative aims to leverage current and future opportunities in AI and big data, and is rooted in Benin's National Development Plan 2018-2025 (PND) and the Government Action Program (PAG) 2021-2026, to align with national priorities that identify the digital economy as a key driver of structural economic transformation, with AI and big data playing a pivotal role in this shift.⁴⁹⁸

AI Initiatives

Organized by the Ministry of Digital Affairs and Digitalization, the Digital Entrepreneurship and Artificial Intelligence Trade Show (known as SENIA in French) takes place annually. Attracting almost 1,000 participants, the event reflects Benin's drive to become a major player in artificial intelligence (AI) in West Africa.⁴⁹⁹ The debates and meetings aim at sparking high-impact initiatives that will benefit public administration, businesses and Benin's society.

One of the many solutions being developed in Benin include a chatbot created for the Benin government by the Digital Information Systems Agency (known by its French acronym ASIN) in collaboration with Isheero. On Unlike Chat GPT, whose use is restricted in Africa, the GPT BJ chatbot was developed for Benin. The GPT BJ compiles the country's general tax code, penal code, digital code and labour code, and can provide targeted answers on Beninese regulations.

MTN Benin and Ericsson (NASDAQ: ERIC) partnered on the deployment of an Artificial Intelligence (AI) and Machine Learning (ML) solution in Africa to address throughput challenges. A network management system utilizing AI and ML was designed to address throughput degradation ultimately providing improved customer satisfaction. ⁵⁰²

Additionally, a memorandum of understanding between the University of Benin and OpenBinacle Group, on the deployment of Artificial Intelligence to standardise and preserve Nigerian indigenous languages,

⁴⁹⁶ D4D Access (2024), Benin National Artificial Intelligence and Big Data Strategy, Global Gateway.

⁴⁹⁷ White & Case (2024), AI Watch: Global regulatory tracker - African Union, whitecase.com

⁴⁹⁸ DigWatch (2023), <u>The National Strategy for Artificial Intelligence and Big Data (SNIAM) of Benin</u>, Geneva Internet Platform.

⁴⁹⁹ Intracen (2024), Benin payes the way for AI and big data with SENIA, International Trade Center.

⁵⁰⁰ Intracen (2024), Benin paves the way for AI and big data with SENIA, International Trade Center.

⁵⁰¹ Intracen (2024), Benin payes the way for AI and big data with SENIA, International Trade Center.

⁵⁰² OFODILE U., Hossam K. (2022), <u>MTN Benin and Ericsson deploy Artificial Intelligence and Machine Learning Network Solution in Africa</u>, Ericsson.

was birthed in 2024.⁵⁰³ The research activities cover a broad range of Artificial Intelligence Applications including Machine Translation, Machine Learning, Generative AI, Natural Language Processing (NLP) Deep Learning and Linguistics.

Tunisia

Data Protection

Tunisia's data protection framework was established in 2004 with the passage of the Organic Act No. 2004-63, creating the national data protection authority, INPDP.⁵⁰⁴ Despite its progressive stance, enforcement was weak under Ben Ali's rule. Following the 2011 Jasmine Revolution and democratic reforms, data processors only began complying with regulations in 2015. While Tunisia adopted a new constitution in 2014, its data protection laws remained unchanged, with additional regulations introduced in 2007. In 2018, INPDP President Chawki Gaddes called for legal modernization to align with Tunisia's democratic values and international commitments, particularly the principles of Convention 108.⁵⁰⁵

AI Regulation

Tunisia currently lacks a national AI strategy. However, in April 2019, the Ministry of Industry and Small and Medium-sized Enterprises introduced the AI Roadmap as part of the "Industry 4.0" strategy. In 2018, the government took a significant step to foster innovation by introducing the "Startup Act" (n°2018–20), a legal framework specifically designed to benefit innovators, startups, entrepreneurs, and investors. These measures have collectively created a supportive environment that has significantly boosted AI innovation and growth in the country. Looking ahead, the National Council of the Order of Veterinarians is finalizing the AGRIVET SMART standards framework to guide AI applications in agrifood and animal husbandry. SOT

AI Taskforce

In April 2018, the Ministry of Higher Education and Scientific Research (Secretary of State for Research) launched TASK FORCE IA to develop a national AI strategy.

AI Initiatives

Tunisia has been actively working on AI development despite facing political instability. The "Industry 4.0" strategy has led to key initiatives such as the Smart Industry Forum 2019 and the annual AI Hack Tunisia competition. Collaborations with the National School of Administration of Tunis resulted in the

⁵⁰³ Uniben (2024), <u>Uniben Kicks Off Implementation of MOU on AI Research to Preserve Nigerian Indigenous Languages</u>, uniben.edu.

⁵⁰⁴ ALT (n.d), Tunisia Data Protection Factsheet, Data Protection Africa.

⁵⁰⁵ ALT (n.d), Tunisia Data Protection Factsheet, Data Protection Africa.

⁵⁰⁶ Trigui H, Guerfali F, Harigua-Souiai E, et al. Exploring AI governance in the Middle East and North Africa (MENA) region: gaps, efforts, and initiatives. Data & Policy. 2024;6:e83. doi:10.1017/dap.2024.85.

⁵⁰⁷ Trigui H, Guerfali F, Harigua-Souiai E, et al. Exploring AI governance in the Middle East and North Africa (MENA) region: gaps, efforts, and initiatives. Data & Policy. 2024;6:e83. doi:10.1017/dap.2024.85.

establishment of an AI chair and a large-scale training program for 5,000 public officials in December 2020. 508

Several universities have since integrated AI into their curricula, with plans to establish an engineering school dedicated solely to AI. Pristini School of AI became the first university in Tunisia and Africa specializing in AI.⁵⁰⁹ Tunisian startups have also contributed significantly, particularly through TUNBERT initiatives, which focus on natural language processing for the Tunisian Arabic dialect and underrepresented languages.⁵¹⁰ Additionally, the AI startup ecosystem continues to grow, with InstaDeep emerging as a leading success story.

Nigeria

Data Protection

On 12 June 2023, the Nigeria Data Protection Act, 2023 ("the Act" or "NDPA") replaced the Nigerian Data Protection Regulations (NDPR) 2019. The Act establishes the legal framework for the regulation of personal data in Nigeria and the NDPR Implementation Framework 2019 issued under the National Information Technology Development Agency (NITDA) Act. The Nigeria Data Protection Commission (NDPC or "the Commission") is charged with the implementation and enforcement of rules and regulations set out in the Act.

Data controllers and data processors of major importance (domiciled, resident, or operating in Nigeria and processes or intends to process personal data of Data Subjects in Nigeria within the threshold that the Commission may prescribe or such other class of data controller or data processor that is processing personal data of particular value or significance to the economy, society or security of Nigeria as the Commission may designate) must register with the Commission within six months of the Act's commencement or upon becoming of major importance.

The registration process requires data controllers and processors to submit detailed information to the Commission. This includes their name, address, and details of their Data Protection Officer, along with descriptions of the personal data, categories, and number of data subjects involved. They must also outline the purposes of data processing, categories of recipients for data disclosure, and details of any representative data processors. Additionally, organizations must specify the countries to which data will be transferred and provide a description of risks, safeguards, security measures, and mechanisms in place to protect personal data. The Commission may also request any other relevant information necessary for compliance.

The Act stipulates that data controllers of major importance must appoint a Data Protection Officer; and data controllers and data processors of 'major importance' are mandated to register with the NDPC within six months of the commencement of the Act or upon becoming a data controller or data processor of

⁵⁰⁸ Trigui H, Guerfali F, Harigua-Souiai E, et al. <u>Exploring AI governance in the Middle East and North Africa</u> (MENA) region: gaps, efforts, and initiatives. Data & Policy. 2024;6:e83. doi:10.1017/dap.2024.85.

⁵⁰⁹ Trigui H, Guerfali F, Harigua-Souiai E, et al. <u>Exploring AI governance in the Middle East and North Africa (MENA) region: gaps, efforts, and initiatives.</u> Data & Policy. 2024;6:e83. doi:10.1017/dap.2024.85.

⁵¹⁰ Trigui H, Guerfali F, Harigua-Souiai E, et al. Exploring AI governance in the Middle East and North Africa (MENA) region: gaps, efforts, and initiatives. Data & Policy. 2024;6:e83. doi:10.1017/dap.2024.85.

major importance. These include a data controller or data processor that is domiciled, resident in, or operating in Nigeria and processes or intends to process personal data of more than such number, as will be determined by the NDPC, of data subjects who are within Nigeria.

AI Regulation

There are currently no specific laws or regulations that directly regulate AI in Nigeria. Several laws in Nigeria impact AI development and use, even though they do not directly regulate it. Key examples include Cybercrimes (Prohibition, Prevention, etc.) Act (2015), which addresses cybersecurity concerns; the Nigeria Data Protection Act (2023), which governs data privacy; and the SEC Rules on Robo-Advisory Services, which regulate AI-driven financial advisory services. Additionally, the Federal Competition and Consumer Protection Act (2018) ensures fair market practices, the Copyright Act (2022) protects intellectual property, and the Nigerian Communication Commission Act (2003) oversees digital communications—each playing a role in shaping Nigeria's AI landscape. In addition, in 2023, Nigeria signed the Bletchley Declaration on AI, along with 28 other nations, including the UK and France, committing to AI development that mitigates risk.⁵¹¹

AI Initiatives

A distinguishing feature of Nigeria's AI governance approach is its sector-specific initiatives. For example, the Nigerian Bar Association's introduction of AI guidelines for legal professionals in August 2024⁵¹² provides much-needed direction on the ethical use of AI in the legal field. The Guidelines focus on the application of AI in the Nigerian legal sector and provide an overview of relevant AI concepts, legal considerations, and practical implementation strategies. In addition, the Guidelines stress responsible AI adoption, human oversight, data privacy, and transparency in decision-making processes.

The 3 Million Technical Talents (3MTT) program⁵¹³, launched in October 2023, aims to provide training in key digital skills, including AI, to young Nigerians, ensuring that the country builds a sustainable AI workforce. Additionally, the Nigeria Artificial Intelligence Research Scheme (NAIRS), which offers grants for AI startups and researchers, highlights the country's focus on local innovation and capacity building.

In 2024, The Federal Ministry of Communications, Innovation & Digital Economy (FMCIDE) announced new support from Google to advance AI talent development in Nigeria. Through a \$\frac{1}{2}.8\$ billion Google.org grant to Data Science Nigeria, this initiative seeks to strengthen the Ministry's AI-driven programs, equipping youth and underemployed Nigerians with essential AI skills and education. 514

In 2025, the Federal Executive Council (FEC), led by President Bola Ahmed Tinubu, approved two key initiatives by the Ministry of Communications, Innovation & Digital Economy to enhance Nigeria's digital landscape. The Nigeria Universal Communication Access Project,⁵¹⁵ a public-private partnership,

⁵¹¹ White & Case (2025), AI Watch: Global regulatory tracker - Nigeria, whitecase.com.

⁵¹² White & Case (2025), AI Watch: Global regulatory tracker - Nigeria, whitecase.com.

⁵¹³ NITDA (n.d), <u>3 Million Technical Talent</u>, National Information Technology Development Agency.

⁵¹⁴ FMCIDE (2024), Ministry Announce N2.8billion Google Support to Advance AI Talent Development in Nigeria, Government of Nigeria.

⁵¹⁵ Israni S. (2025), Nigeria's Bold Move In AI And Connectivity, CIO Africa.

will expand mobile connectivity to over 21 million people in 4,834 underserved rural communities, complementing the ongoing 90,000km fiber Project Bridge. Additionally, Nigeria is establishing the National AI Trust, a pioneering body of AI experts and government officials to oversee AI development, drive strategic investments, and position the country as a leader in AI innovation.⁵¹⁶

Côte d'Ivoire

Data Protection

Data protection in Cote d'Ivoire is governed by Law No. 2013-450 on the Protection of Personal Data (the Law). Other key regulatory instruments include Decision No. 2015-079 of February 4, 2015, which approves the processing of personal data by Cargill West Africa, and Decree No. 2015-79 of the same date, which outlines the conditions for filing notifications, requests, and authorizations for personal data processing. Additionally, Order No. 511/MPTIC/CAB of November 11, 2014, defines the qualifications and responsibilities of a Data Protection Officer (DPO), setting out the conditions for their appointment and role in ensuring compliance with data protection regulations.

The primary authority for data protection in Côte d'Ivoire is the Autorité de régulation des télécommunications/TIC de Cote d'Ivoire (ARTCI). ARTCI's primary role is to guarantee that the use of information and communication technologies does not violate or pose a risk to the freedoms and privacy of users across the nation. In Côte d'Ivoire, any processing of personal data must be preceded by a notification to ARTCI.

This notification should include an assurance that the processing complies with the Law. Following this notification, ARTCI will provide an electronic receipt, and only then can the data processing proceed. The Law recognises the role of a personal data protection correspondent. This entity, possessing the necessary qualifications, is either a natural or legal entity independently appointed by the data controller.

Their main duty is to monitor and ensure the controller's compliance with the Law's obligations. They are required to maintain an easily accessible record of all processing activities, which should be made available to anyone who requests for it. Additionally, they must not face any disciplinary action from the controller for carrying out their duties. It is important to note that the data controller or their legal representative cannot be designated as the DPO.

AI Regulation

As of February 2025, Côte d'Ivoire does not have a comprehensive legal framework specifically regulating artificial intelligence (AI). However, the country is actively taking steps toward developing such regulations. In May 2024, the Autorité de Régulation des Télécommunications/TIC de Côte d'Ivoire (ARTCI) initiated a public consultation to formulate a national strategy on AI and the metaverse. This initiative aims to gather input from various stakeholders to shape policies that will govern AI applications and address associated challenges.

AI Taskforce

⁵¹⁶ Israni S. (2025), Nigeria's Bold Move In AI And Connectivity, CIO Africa.

Currently, there is no dedicated national AI taskforce in Côte d'Ivoire. Nonetheless, ARTCI's proactive measures, such as conducting studies on the impact of information and communication technologies (ICT) and AI on personal data protection, indicate a growing institutional focus on AI governance. These efforts involve public participation and are likely to inform the establishment of formal AI regulatory bodies in the future.

AI Initiative

Côte d'Ivoire's Data Protection Authority initiated a comprehensive study to assess the impact of emerging technologies, including drones, video surveillance, biometrics and AI, in the professional and private sectors, inviting public input to ensure a well-rounded regulatory intervention.⁵¹⁷ Another study was initiated in April 2024 on the challenges and issues of AI, 5G networks and services, and the metaverse for developing the digital economy in Côte d'Ivoire, with the aim of promoting an inclusive, ethical and responsible adoption of emerging technologies by highlighting their benefits to the country.⁵¹⁸

In February 2025, Cote d'Ivoire kicked off its first edition of the International Exhibition on Artificial Intelligence, Defense, and Space in Abidjan, the economic capital of Cote d'Ivoire. The two-day international exhibition, gathered more than 3,000 representatives from governments, enterprises, and research institutions, and sought to promote the deep application of artificial intelligence technology, particularly in the fields of defense and aerospace. Its exhibition featured cutting-edge technological equipment such as intelligent drones and satellite mapping systems, alongside multiple thematic seminars exploring the application of AI and aerospace technologies in Africa's security, agriculture, healthcare, and other fields. 20

Côte d'Ivoire launched its IT and biotech park, located on the outskirts of Abidjan. The free trade zone, known as the Village of Information Technology & Biotechnology (viTib), caters to both small and large enterprises in the ICT and biotechnology sectors.⁵²¹

The country is harnessing the power of artificial intelligence (AI), digital twin technology, and machine learning (ML) to help energy companies meet their emissions reduction goals through CERiusTM, an AI-driven software solution being deployed at Azito, the largest gas power plant in Côte d'Ivoire. ⁵²²

Ecosystem support for startups.

Alain Capo Chichi, the founder of Cerco/Open, is grateful for the supportive ecosystem in Côte d'Ivoire. The startup launched the first smartphone with more than 50 African languages, including 17 Ivorian dialects, integrated via AI.⁵²³ In Côte d'Ivoire, the government took the lead by introducing a tax, customs and administrative incentive scheme for digital startups in January of 2023 to encourage their development. This is a "law on the promotion of digital startups with an incentive scheme comprising, in particular, tax and customs benefits, as well as other administrative measures, assistance and facilitation for national digital startups, from the creation to the development phase, whatever the sector of activity."⁵²⁴

⁵²³ Coulibaly A. (2023), <u>Tech: Côte d'Ivoire, paving the way for a future digital hub?</u>, Resilient Digital Africa.

⁵¹⁷ Oloyede R., Tsebee D. (2024), <u>DPAs and AI regulation in Africa</u>, IAPP.

⁵¹⁸ Oloyede R., Tsebee D. (2024), <u>DPAs and AI regulation in Africa</u>, IAPP.

⁵¹⁹ Xinhua (2025), <u>Cote d'Ivoire holds int'l exhibition to promote AI application in Africa</u>, English.news. ⁵²⁰ Xinhua (2025), <u>Cote d'Ivoire holds int'l exhibition to promote AI application in Africa</u>, English.news.

⁵²¹ FDI Intelligence (n.d), Côte D'Ivoire offers attractive Climate for Tech Investors, fdiintelligence.com.

⁵²² CERiusTM, Ge Vernova.

⁵²⁴ Coulibaly A. (2023), <u>Tech: Côte d'Ivoire, paving the way for a future digital hub?</u>, Resilient Digital Africa.

Democratic Republic of Congo (DRC)

Data Protection

The protection of personal data is enshrined in Digital Code Law No. 23-010, enacted on March 13, 2023, and officially published on April 11, 2023. This law, which took effect upon approval, serves as the legal foundation for digital governance. While several implementing decrees referenced in the law are yet to be issued, a Ministerial Decree was adopted on August 17, 2024, by the Minister for Post, Telecommunications, and Digital (PTN). 525

As a general rule, the collection and processing of personal data, whether sensitive or not, is prohibited. However, it may be permitted with the prior and explicit consent of the individual concerned or upon request by the public prosecutor's office, provided that proof of consent is always available. Additionally, individuals have the right to withdraw their consent at any time.⁵²⁶

AI Regulation

DRC currently lacks AI regulations. The DRC is participating in regional initiatives on AI governance, such as the AU Continental AI Strategy; it is also involved in projects that promote AI and the rule of law, such as the training program for judicial operators on AI and human rights, supported by UNESCO.

There are arguments for implementing AI regulations continent-wide and enhancing AI literacy in the DRC. A continental approach to AI governance could help harmonize regulations and promote responsible AI development across Africa. Enhancing AI literacy is crucial to ensure that citizens and policymakers understand the potential benefits and risks of AI and can participate in informed discussions about AI governance. However, it is imperative that the DRC develops a comprehensive data protection law and AI regulatory framework to ensure responsible AI development and use. The current legal framework is fragmented and does not adequately address the unique challenges posed by AI.

AI Taskforce

Currently, the DRC does not have established AI-specific regulations or a dedicated national AI taskforce. The lack of a formal regulatory framework means there are no specific guidelines or policies addressing AI development, deployment, or ethics within the country.

AI Initiatives

Despite the absence of formal regulations, there are grassroots initiatives leveraging AI to address local challenges. For instance, KivuGreen, a youth-led enterprise in North Kivu, utilizes AI to provide small-scale farmers with real-time weather forecasts and climate-smart agricultural advice. This initiative aims to enhance climate resilience and food security among farming communities. Additionally, UNESCO has collaborated with the DRC's judiciary to enhance understanding of AI's implications for human rights and cybersecurity. In December 2023, training sessions were conducted to empower judicial

⁵²⁵ DLA Piper (2024), <u>Democratic Republic of Congo - Data Protection Laws of the World</u>, dlapiperdataprotection.com

⁵²⁶ DLA Piper (2024), <u>Democratic Republic of Congo - Data Protection Laws of the World</u>, dlapiperdataprotection.com

operators with knowledge about AI and the rule of law, focusing on both opportunities and challenges associated with AI technologies.

In 2024, a joint programme led by SDG Fund aimed to enhance data integration and sharing among government entities, private agri-techs, and 13 Ministry of Agriculture platforms, establishing a unified smallholder farmer database. S27 It sought to support 10 agri-tech ventures, with a focus on women-led enterprises, by providing technical assistance, investment opportunities, and a data accelerator, targeting \$2 million in funding. Additionally, the programme aims to improve digital literacy for 500,000 smallholder farmers, prioritizing women and youth, to be achieved by training 500 extension workers and leveraging existing platforms, AI-powered messaging, and low-cost digital literacy campaigns in collaboration with mobile operators. S28

Republic of Congo

Data Protection

The Republic of Congo is among the increasing number of African nations enacting cybersecurity legislation and is a signatory to the African Convention on Cybersecurity and Personal Data Protection. The country has established three key laws: the Personal Data Protection Law, the Cybersecurity Law, and the Cybercrime Law.⁵²⁹ Law No. 29-2019 on data protection outlines data processing obligations for controllers⁵³⁰ and applies to all processing activities within the Republic of Congo or where its law applies. It also covers controllers inside or outside the country using processing means in Congolese territory. However, enforcement remains weak due to the lack of a Data Protection agency.⁵³¹

While these laws address fundamental cybersecurity concerns, they lack provisions for AI, creating a regulatory gap in its use, integration into cybersecurity measures, and protection against AI-driven threats, particularly those involving foreign actors.

AI Regulation

The Congolese legal landscape does not include any AI-related law. As seen with already existing laws, the country lacks proper enforcement.⁵³² The absence of proper AI legislation constitutes an even bigger threat considering that most citizens and entities already use various foreign-made AI tools without any control, this may constitute an open door for attacks.⁵³³

⁵²⁷ Joint SDG Fund (2024), <u>Digital Transformation: Democratic Republic of Congo</u>, jointsdgfund.org.

⁵²⁸ Joint SDG Fund (2024), Digital Transformation: Democratic Republic of Congo, jointsdgfund.org.

⁵²⁹ Mboulou, J. (2024) <u>The Congolese Legislation Readiness against AI Development and Foreign Attacks and Perspective of International Cooperation.</u> Open Access Library Journal, 11, 1-14.

⁵³⁰ Articles 31-45

⁵³¹ Mboulou, J. (2024) <u>The Congolese Legislation Readiness against AI Development and Foreign Attacks and Perspective of International Cooperation.</u> Open Access Library Journal, 11, 1-14.

Mboulou, J. (2024) The Congolese Legislation Readiness against AI Development and Foreign Attacks and Perspective of International Cooperation. Open Access Library Journal, 11, 1-14.
 Ibid

The country however launched "Vision Congo Digital 2025," a national strategy designed to advance e-citizenry and e-government.⁵³⁴ The initiative highlights the need to modernize the legal framework to effectively address emerging challenges in privacy, data protection, and cybersecurity in the digital era.

AI Initiatives

Since September 2021, several initiatives have emerged within the Congolese digital innovation ecosystem. Among them, the Brazza Cybersecurity Forum, organized by Skytech Congo, raised awareness about the strategic importance of cybersecurity for public authorities and businesses. The 1st National Forum for Technological Innovation (FONIT), supported by the UNDP Congo Acceleration Laboratory, identified 15 innovative digital solutions, which were integrated into a national database. 535

The 3rd edition of the Congo Digital Forum, held under the high patronage of the Prime Minister, brought together experts from Africa, Europe, and America to discuss digital transformation. Additionally, a symposium led by a youth-focused NGO addressed the digital divide among young people, while the launch of the White Paper on Posts, Telecommunications, and the Digital Economy provided a comprehensive assessment of the sector and anticipated the impact of rapid technological advancements on markets. Furthermore, local media discussions are increasingly focusing on the importance of training women and girls in digital technology to foster women's participation in tech entrepreneurship.

In 2022, the Economic Commission for Africa (ECA) and the Government of the Republic of Congo launched the African Research Center for Artificial Intelligence (ARCAI)⁵³⁷ in Brazzaville. Situated at Denis Sassou-Nguesso University in Kintélé, ARCAI is dedicated to advancing AI research with a human-centered approach, aiming to maximize socio-economic benefits while addressing the challenges of AI adoption.

In line with Vision Congo Digital 2025, in 2023, UNESCO supported the Congolese judiciary in strengthening their understanding of cybersecurity and the opportunities and challenges of AI, particularly in relation to human rights, using its Global Toolkit on AI and the Rule of Law.⁵³⁸ It partnered with the Centre Africain de Recherche en Intelligence Artificielle (CARIA) and the Smart Africa Digital Academy to deliver a training series in Brazzaville, where 80 judicial actors from the Congolese justice system participated.⁵³⁹

South Africa

Data Protection

The Information Regulator plays a key role in ensuring compliance with data protection laws, consulting stakeholders, and managing complaints, making it one of the more developed frameworks in the region.

⁵³⁴ UNESCO (2023), <u>Empowering Congolese Judicial Operators with AI and the Rule of Law Training in Brazzaville</u>, unesco.org

⁵³⁵ SEINZOR M. (2022), The Era of the Digital: The Republic of Congo in the Starting Block, UNDP.

⁵³⁶ Ihid

⁵³⁷ UNECA (2022), AI Research Center, Congo Brazaville, uneca.org

⁵³⁸ UNESCO (2023), <u>Empowering Congolese Judicial Operators with AI and the Rule of Law Training in Brazzaville</u>, unesco.org

⁵³⁹ Ibid

South Africa's data protection framework the Protection of Personal Information Act (POPIA) does not specifically address AI. However, as is the common trend within the region, its principles of data protection and data subject rights are relevant to AI systems. The government is also actively involved in international discussions on AI governance and regulation, advocating for a human-centric approach that prioritizes human security.

AI Regulation

South Africa has developed a national AI strategy, The National Artificial Intelligence (AI) Policy Framework which promotes the integration of AI technologies to drive economic growth, enhance societal well-being, and position South Africa as a leader in AI innovation. The framework's focus is on ethical AI development and use, data governance, and human-centered AI. It also addresses capacity building, economic development, and cybersecurity.

The South African vision for AI is to focus on risk management for human-centered AI, ensuring that AI technologies are designed to complement human decision-making and enhance human capabilities, rather than replace them.

AI Taskforce

In 2020, President Cyril Ramaphosa announced the establishment of a Presidential Commission on the Fourth Industrial Revolution to guide the country's technological advancement, including AI. This commission plays an important role in shaping South Africa's AI strategy and ensuring that AI technologies are employed responsibly and effectively.

In 2024, South Africa established an AI Expert Advisory Council⁵⁴⁰ that sought to coordinate, in collaboration with the Department of Communications and Digital Technologies, the formulation of effective and ethical AI governance frameworks in order to guide the development of a national AI policy that would align with both national and continental objectives.

AI Initiatives

The South African model includes multiple AI research hubs hosted within various institutions. The Tshwane University Of Technology AI Hub focuses on developing technologies that support SMMEs and local communities, while The University Of Johannesburg AI Hub concentrates on projects including AI in mining, farming, and criminal justice system development.⁵⁴¹ This distributed approach to research and development has created a robust ecosystem for AI innovation while maintaining regulatory oversight.

South Africa's decision to grant a patent to an AI inventor in 2021 sparked debate on the legal status of AI-generated inventions. This decision challenged traditional notions of inventorship and raises questions about the applicability of existing IP laws to AI-generated creations, an important consideration which will undoubtedly spring up across the continent.

⁵⁴⁰ DigWatch (2024), <u>South Africa to establish AI Expert Advisory Council to shape Future Regulations</u>, Geneva Internet Platform.

⁵⁴¹ Okorie IJ (2024), South Africa Publishes a National AI Policy Framework, Seeks Feedback, TechPoint Africa.

Botswana

Data Protection

Botswana has made significant strides in data protection with the enactment of the **Data Protection Act**, **2024**. Assented to by Parliament on August 19, 2024, and effective from October 29, 2024, this Act supersedes the previous Data Protection Act of 2018. It establishes comprehensive guidelines for the lawful processing of personal data, emphasizing principles such as **lawfulness**, **fairness**, **transparency**, **purpose limitation**, **data minimization**, **accuracy**, **storage limitation**, **integrity**, **confidentiality**, **and accountability**. The Act also introduces robust rights for individuals regarding their personal information and enforces substantial penalties for non-compliance. The **Information and Data Protection Commission** is tasked with overseeing adherence to these regulations, ensuring that data controllers and processors operate within the legal framework.

AI Regulation

As of August 2023, Botswana does not have a dedicated national AI strategy or specific regulations governing artificial intelligence. However, the government acknowledges the transformative potential of AI and is actively exploring its applications across various sectors. In May 2023, the government expressed support for AI initiatives aimed at bolstering the country's development. Additionally, experts at the AI4IA conference held in Gaborone in September 2024 emphasized the need for equitable access and responsible use of AI technologies. These discussions underscore the importance of developing a cohesive AI policy framework that aligns with international best practices and addresses ethical considerations.

AI Taskforce

While Botswana has not established a formal AI taskforce or advisory council, the government has demonstrated a commitment to fostering AI readiness. A study analyzing the country's AI readiness landscape, published in 2023, recommended the development of a national AI strategy to set a clear vision for AI adoption. This recommendation aligns with the government's recognition of AI's potential and the need for structured guidance to harness its benefits effectively.

AI Initiatives

In the absence of a formalized AI policy, Botswana has witnessed grassroots initiatives leveraging AI for societal benefits. Researchers have employed drones and AI technologies to enhance wildlife monitoring and combat poaching, showcasing AI's practical applications in conservation efforts. These initiatives highlight the innovative use of AI in addressing local challenges and underscore the potential for broader applications across various sectors.

In summary, Botswana is progressively enhancing its data protection landscape with the recent enactment of the Data Protection Act, 2024. While the country currently lacks a dedicated AI regulatory framework, ongoing governmental support and emerging initiatives indicate a growing recognition of AI's potential.

The development of a national AI strategy and the establishment of dedicated taskforces could further solidify Botswana's position in the evolving AI landscape.

Egypt

Data Protection

Egypt has established a structured data protection framework with the **Personal Data Protection Law No. 151 of 2020 (PDPL)**, which came into effect in 2021. The law regulates the collection, processing, storage, and transfer of personal data, with a strong emphasis on user consent and data subject rights. It applies to both local and foreign entities handling Egyptian citizens' data.

The **Egyptian Data Protection Center (EDPC)**, established under the law, is responsible for enforcement, ensuring compliance, and issuing penalties for non-compliance. The law also outlines strict cross-border data transfer rules, requiring explicit approval from the EDPC before transferring data outside Egypt.

However, Egypt's data protection law does not explicitly cover AI-specific risks, leaving a gap in addressing how AI systems process personal data. Despite this, general data protection principles—such as purpose limitation, transparency, and security measures—apply to AI-driven data processing.

AI Regulation

Egypt is one of the leading African countries in AI policy development. In 2021, it launched its **National AI Strategy**, and further published a second Edition in 2024, focusing on integrating AI into various sectors, such as healthcare, agriculture, and government services, while also emphasizing ethical AI development.

The strategy prioritizes key areas, including AI research and innovation, fostering collaboration between universities and the private sector to drive AI advancements. It also emphasizes AI capacity building, integrating AI education into academic curricula and training professionals to enhance expertise in the field. Additionally, the strategy promotes ethical and responsible AI, ensuring AI technologies are developed and used in ways that mitigate bias, protect data privacy, and uphold ethical standards.

Additionally, Egypt actively participates in international AI governance discussions and has positioned itself as a regional leader in AI adoption.

AI Taskforce

To oversee AI development, Egypt established the **National Council for Artificial Intelligence**, which operates under the Ministry of Communications and Information Technology (MCIT). The council is responsible for:

- Setting AI policy and regulatory frameworks.
- Advising the government on AI-related issues.

• Coordinating public-private sector partnerships in AI development.

In 2023, the council initiated discussions on updating regulations to address AI-generated content, misinformation, and the ethical use of AI in governance.

AI Initiatives

Egypt has launched several AI initiatives aimed at boosting local AI capabilities and fostering innovation. Some notable projects include:

- **AI-powered Healthcare** Egypt has deployed AI in early disease detection, particularly in diagnosing cancer and diabetic retinopathy.
- AI in Agriculture AI-powered solutions help optimize irrigation and crop monitoring, improving agricultural productivity.
- Smart Government Services AI-driven chatbots and automated systems have been introduced to enhance public service delivery.

Egypt also collaborates with international organizations, such as the UN and African Union, to develop AI policies and frameworks aligned with global best practices.

Egypt has made significant progress in both data protection and AI governance. With a dedicated data protection law and enforcement agency, as well as a national AI strategy and council, the country is setting a strong foundation for AI development while ensuring data privacy. Moving forward, refining AI-specific regulations and aligning data protection frameworks with AI governance will be crucial to sustaining responsible AI growth.

Senegal

Data Protection

Senegal's data protection framework is governed by Law No. 2008-12 of 25 January 2008, which applies to all personal data processing within Senegal or where Senegalese laws apply. Data controllers must ensure data is collected lawfully, used for specified purposes, kept relevant and accurate, and retained only as necessary. The law requires prior authorization from the Senegalese Data Protection Authority (CDP) for processing sensitive data, including genetic, biometric, and criminal record data, as well as data involving national identification numbers or interconnection of files. While appointing a Data Protection Officer (DPO) is not mandatory, data controllers must notify or obtain approval from the CDP before processing personal data. The CDP plays a key role in advising stakeholders, authorizing data transfers, maintaining a processing directory, and cooperating with international data protection authorities. Senegal's regulatory approach includes notification, authorization, and opinion regimes, ensuring oversight of data processing, particularly for sensitive information and government-led automated processing activities.

⁵⁴² DLA Piper (2024), <u>Data protection laws in Senegal</u>, dlapiperdataprotection.org

In 2018, Senegal's DPA advised financial sector entities to integrate data protection measures into technological innovations, such as AI and online banking, in a manner compliant with the country's data protection law. Additionally, the Authority published guidance on using biometric technologies in the workplace, including considerations for facial recognition technology. 543

AI Regulation

In 2023, Senegal published its AI strategy with the aim of contributing to the country's national development plan by developing human capacity, supporting solutions that address development problems, fostering public-private partnerships, and creating an inclusive and trusted AI ecosystem. 544 This strategy builds on the Digital Strategy 2025, the National Data Strategy, and the National Cybersecurity Strategy among other recent policies, under the Emerging Senegal Plan. There is not yet a legal or regulatory framework specific to AI.⁵⁴⁵

AI Initiatives

The international NGO Libraries Without Borders (LWB) is working to enhance teachers' proficiency in French to improve student outcomes. With support from Agence Française de Développement and in collaboration with the Senegalese Ministry of Education, LWB has integrated AI into its Karibu language learning app to provide tailored educational tools for teachers. 546 The goal of the app is to create a more personalized, engaging, and effective learning experience, by generating exercises based on the user's level and interests, allowing them to write within the app and receive detailed, individualized feedback.

The launch of the Single Port Window marked a significant innovation in Senegal's e-commerce sector, providing a digital platform to enhance the efficiency and security of international trade operations at the Autonomous Port of Dakar. 547 According to the Director of Customs Information Systems, "This platform complements the existing system, integrating pre-customs clearance with Obus and customs clearance through the GAINDE system. With the Single Port Window, we can now bridge the remaining gaps in the process."548

In 2023, the Ministry of Communication, Telecommunications, and Digital Economy of Senegal (MCTEN) signed a Memorandum of Understanding (MoU) with Presight AI (ADX: PRESIGHT), a G42 company working on AI-powered big data analytics, to drive digital transformation and economic growth for Senegalese citizens.⁵⁴⁹ Through this partnership, Presight AI collaborated with MCTEN to implement big data analytics and AI-driven solutions aimed at enhancing government services, improving operational efficiency, fostering a business-friendly environment, and advancing socio-economic development across the country. 550

⁵⁴³ Oloyede R., Tsebee D. (2024), <u>DPAs and AI regulation in Africa</u>, IAPP.

⁵⁴⁴ White & Case (2024), AI Watch: Global regulatory tracker - African Union, whitecase.com.

⁵⁴⁵ UNESCO (n.d), Senegal - Global AI Ethics and Governance Observatory, unesco.org. Accessed 3 March 2025.

⁵⁴⁶ AFD (2025), Using AI to improve language learning in Senegal, afd fr

⁵⁴⁷ Londa (2023), Digital Rights and Inclusion in Africa Report, Paradigm Initiative.

⁵⁴⁸ Londa (2023), Digital Rights and Inclusion in Africa Report, Paradigm Initiative.

⁵⁴⁹ Presight (2023), The Senegalese Ministry of Communication, Telecommunications and Digital Economy and Presight AI sign an MOU to Enhance the Country's Digital Transformation, presight.ai. 550 Ibid

Burkina Faso

Data Protection

Burkina Faso enacted Law No. 010-2004/AN on the Protection of Personal Data in 2004, making it one of the earliest adopters of a modern data protection law in the African region. On March 30, 2021, Law No. 001-2021 on the protection of persons with regard to the processing of personal data was adopted, effectively repealing and replacing the 2004 Act. 551

The 2021 Act enhances the protection of personal data, notably by extending its jurisdiction to include all data controllers who carry out processing activities arising from Burkina Faso, even if such controllers have no physical presence in the country and even if they do not use any means of processing on the national territory. It also oversees cross-border data transfers and offers a more detailed right for individuals to be informed. It also oversees cross-border data transfers and offers a more extensive right to be informed for individuals. The 2021 Act further mandates that, when data is transferred to a third country, a contract must be established with the receiving party. This contract should incorporate a clause pertaining to the return of data and require encryption of the data. Additionally, it mandates the hosting of health data within Burkina Faso unless an exemption is provided by the Commission de l'Informatique et des Libertés (CIL). The CIL is the independent administrative and controlling authority in charge of compliance with the Law. The Law does not provide any specific obligation to appoint a data protection officer (DPO) or any other equivalent support. The Law also does not generally require notifying the data subject in the event of a security breach. However, Article 21 specifies that if information is erroneously sent to a third party, any correction or deletion of that information must be communicated to the third party, except when the CIL grants an exemption.

AI Regulation

Burkina Faso has no dedicated AI law and has not published an AI Strategy.

AI Initiatives

Terre des Hommes (Tdh) in collaboration with Burkina Faso's Ministry of Health developed the Integrated e-Diagnosis Approach (IeDA), a digital health innovation designed to enhance primary healthcare services for newborns, children, and mothers in West Africa and Asia. ⁵⁵² IeDA digitizes the WHO's Integrated Management of Childhood Illness (IMCI) medical protocol, enabling real-time data analysis to improve healthcare quality and inform policy decisions. By the end of 2022, IeDA had been implemented in 86% of Burkina Faso's primary health centers and expanded to over 60 health facilities across Mali, Guinea, and Niger. ⁵⁵³

UNICEF's Office of Innovation is also advancing accessibility through language technologies that empower marginalized communities in the country. The U-Youth app now features text-to-speech and

⁵⁵¹ DigWatch (2021), Burkina Faso Data Protection Act, Geneva Internet Platform.

⁵⁵² TDH (n.d) <u>IeDA – A digital solution to save children's lives, Terre de Hommes</u>. Accessed 3 March 2025.

⁵⁵³ TDH (n.d) <u>IeDA – A digital solution to save children's lives.</u> Terre de Hommes. Accessed 3 March 2025.

translation capabilities for Moore, the native language of nearly half the population.⁵⁵⁴ Developed in partnership with local vendors, the system integrates a French-to-Moore dictionary with tailored adaptations to ensure accurate pronunciation.⁵⁵⁵

In 2024, EON Reality, dealing in Virtual Reality (VR) and Augmented Reality (AR) for knowledge transfer in education and industry, expanded into Burkina Faso with the launch of the country's first Spatial AI Center. This initiative aims not only to enhance the educational landscape through cutting-edge technology but also to empower Burkinabe youth and professionals for the impending global economic and technological shifts, fostering growth and innovation. The state of the impending global economic and technological shifts, fostering growth and innovation.

To address the substantial challenges from plant pests and diseases posing threats to both food security and economic stability, a mobile application, PlanteSaine, was introduced that is powered by Artificial Intelligence (AI) models and explicitly designed for maize, tomato, and onion farmers in Burkina Faso. ⁵⁵⁸ PlanteSaine provides farmers with real-time identification of pests and diseases. Farmers capture images of affected plants with their smartphones, and PlanteSaine's AI system analyzes these images to provide accurate diagnoses. ⁵⁵⁹

Running in 2025, the Robotics for Good Youth Challenge Burkina Faso is a prestigious Burkina Faso National Event of the Robotics for Good Youth Challenge, where teams showcase their skills in a UN-based global robotics competition, focusing on the critical area of disaster response. The competition is open to any individual or team willing to design, build, and code a robot to address the proposed challenge of disaster response in the competition game board, contributing to the advancement of the United Nations Sustainable Development Goals.

Cabo Verde

Data Protection

Cape Verde was the first African country to establish a comprehensive data protection framework with Law No. 133-V-2001 on the Protection of Personal Data, later amended by Laws No. 41/VIII/2013 and No. 121/IX/2021.⁵⁶¹ The law applies to data controllers and processors based in Cape Verde, as well as those processing data of Cape Verdean residents, regardless of location. It governs data processing related to service provision, behavioral tracking, and international data transfers. The 2021 Amendment mandates the appointment of a Data Protection Officer (DPO) for large-scale or sensitive data processing, as well as

⁵⁵⁴ UNICEF Innovation (2024), At the Frontier of Tech Innovations for Inclusive Environmental and Social Impact, UNICEF.

⁵⁵⁵ Ibid

⁵⁵⁶ Irvine (2024), Empowering Burkina Faso's Future: EON Reality Transforms Education with Immersive XR and AI Technologies, EON Reality.

⁵⁵⁷ Irvine (2024), Empowering Burkina Faso's Future: EON Reality Transforms Education with Immersive XR and AI Technologies, EON Reality.

⁵⁵⁸ Appiah, Obed, Kwame Oppong Hackman, Belko Abdoul Aziz Diallo, Kehinde O. Ogunjobi, Son Diakalia, Ouedraogo Valentin, Damoue Abdoul-Karim, and Gaston Dabire. 2024. "PlanteSaine: An Artificial Intelligent Empowered Mobile Application for Pests and Disease Management for Maize, Tomato, and Onion Farmers in Burkina Faso" Agriculture 14, no. 8: 1252.

⁵⁵⁹ Ibid

⁵⁶⁰ ITU (2025), Robotics for Good Youth Challenge Burkina Faso, AI for Good.

⁵⁶¹ Persistent Stories (2024), <u>Data Protection Compliance in Africa</u>, persistent energy.

for public authorities, except courts and prosecutors. It has also established the national data protection authority, the Comissão Nacional de Proteção de Dados Pessoais (CNPD). In case of a data breach, controllers must notify the CNPD within 72 hours and inform affected individuals unless the breach poses minimal risk to their rights and freedoms.

AI Regulation

Despite ranking 6th amongst African countries in the International Monetary Fund's (IMF) AI Preparedness Index (AIPI) report 2024⁵⁶² which evaluates AI readiness across 174 countries, focusing on digital infrastructure, human capital, technological innovation, and legal frameworks, Cape Verde does not have a dedicated AI legislation.

AI Initiatives

The Cape Verde Smart City Foundation was founded in 2018, by Eng. Loide Monteiro, urban ambassador of UN-habitat cape Verde, and a businesswoman with over 20 years of experience in urban planning and development. The Partnership seeks to implement the SDGs through the promotion of urban innovation with its Smart city academy focusing on research and development, skills development, business incubation and events.⁵⁶³

The Agricultural Transition using the Internet of Things and Artificial Intelligence project, 564 is a collaboration between the University of Cape Verde and UNDP's Accelerator Lab, as part of the broader Monitoring Tools and Artificial Intelligence for Smart Agriculture initiative aimed at promoting sustainable development through innovation. The project is structured around three key pillars: research, which focuses on defining sensor specifications for soil and climate monitoring, testing systems, and analyzing collected data; a pilot phase, which involves implementing a smart irrigation system on an APRSF plot as a case study; and training, which equips APRSF members with drone operation skills and expertise in smart agriculture systems while also training researchers and students involved in the initiative. 565

The Gambia

Data Protection

The Gambia currently has no dedicated data protection law. However, the Gambia introduced the Information and Communications Act (ICA) in 2009. This act is designed to oversee the restructuring, advancement, and regulation of the information and communications sector in the Gambia. The data protection and privacy regulations outlined in the ICA primarily apply to providers of information and communications services. Moreover, in May 2019, the Public Utilities Regulation Authority (PURA)

⁵⁶² Chisom M. (2024), Top 10 African countries advancing for AI readiness in 2024 – IMF, Business Day.

⁵⁶³ IEAI (n.d), <u>Letter of Intent with Cape Verde Smart City Foundation</u>, Institute for Ethics in Artificial Intelligence. Accessed 3 March, 2025.

⁵⁶⁴ Araújo S. (2024), <u>Agricultural Transition Using the Internet of Things and Artificial Intelligence</u>, UNDP Accelerator Labs.

⁵⁶⁵ Araújo S. (2024), <u>Agricultural Transition Using the Internet of Things and Artificial Intelligence</u>, UNDP Accelerator Labs.

released its Draft Data Protection and Privacy Policy Strategy 2019. It is important to note, however, that this policy document does not presently have the status of law.

AI Regulation

The Gambia does not have a dedicated AI law or regulation. However, as encapsulated in its Digital Economy Master Plan 2023 - 2033, The government has implemented several policies and regulations to support the development of digital infrastructure in The Gambia. Find 2018, the government published the Information and Communication Technology for Development (ICT4D) Policy Statement 2018-2028, which outlines the government's vision and strategy for developing ICT. The policy statement emphasizes the need to establish a digital economy and the importance of digital infrastructure in achieving this goal. The policy statement sets out several key objectives for developing digital infrastructure, including expanding broadband connectivity, establishing data centers, and promoting innovation and entrepreneurship in the ICT sector. In addition, the Gambia's national broadband policy outlines the need to create a holistic framework for the country to fully harness new technologies such as the Internet of Things (IoT), data analytics (DA), and artificial intelligence (AI).

AI Initiatives

Organized by the Commonwealth Secretariat and delivered by Australia's Queensland Cyber Infrastructure Foundation (QCIF), university educators in Gambia underwent a program, training them in Python programming and Artificial Intelligence (AI).⁵⁶⁸ This initiative represented a significant step in strengthening AI research capacity, showcasing practical applications in environmental management, infrastructure, and transport.

Presight, a data analytics company powered by Generative AI, signed a Memorandum of Understanding (MOU) with Gambia's Ministry of Communications and Digital Economy (MOCDE) at Gitex Africa 2024. The partnership aims to accelerate Gambia's digital transformation by strengthening its communications infrastructure and advancing cybersecurity measures. Under the agreement, Presight and MOCDE will collaborate to enhance digital services and fortify cybersecurity across the nation. 570

Ghana

Data Protection

⁵⁶⁶ Ministry of Communications and Digital Economy (n.d), <u>National Digital Economy Master Plan</u> 2023 - 2033, Government of The Gambia.

⁵⁶⁷ Ministry of Communications and Digital Economy (n.d), <u>National Digital Economy Master Plan</u> 2023 - 2033, Government of The Gambia.

⁵⁶⁸ The Commonwealth (2024), <u>Commonwealth empowers educators in The Gambia with artificial intelligence training</u>, thecommonwealth.org.

⁵⁶⁹ Presight (2024), <u>Presight Chosen to Propel Digital Transformation by Gambia's Ministry of Communications and Digital Economy</u>, presight.ai

⁵⁷⁰ Presight (2024), <u>Presight Chosen to Propel Digital Transformation by Gambia's Ministry of Communications and Digital Economy</u>, presight.ai

Ghana's data protection and privacy framework is primarily governed by the Data Protection Act, 2012 (Act 843)⁵⁷¹, which aims to safeguard individuals' privacy by regulating the processing of personal data. The Act establishes guidelines for lawful and exempt processing⁵⁷², outlining the responsibilities of data controllers, data processors, the Data Protection Commission (DPC), 573 and data subjects. It applies when a data controller is established in Ghana and processes data within the country, when a foreign data controller uses local equipment or a data processor in Ghana, or when the data originates from Ghana. Processing of personal data must not infringe on individuals' privacy rights and must be conducted lawfully and reasonably. Prior consent⁵⁷⁴ from the data subjects is generally required unless processing is necessary for contractual obligations, legal requirements, protecting legitimate interests, fulfilling statutory duties, or pursuing the legitimate interests of an employer or third party. The Data Protection Commission (DPC) serves as the primary regulatory body responsible for overseeing data protection compliance and establishing guidelines for data processing. While the Act refers to data protection officers as Data Protection Supervisors (DPS), their appointment is not mandatory. However, DPS are tasked with monitoring compliance with the Act. Additionally, the law mandates that both the data subject and the DPC must be notified in cases where unauthorized access or acquisition of personal data is suspected, providing sufficient details for the affected individual to take protective measures.

AI Regulation

There is no dedicated legal or regulatory framework around AI in Ghana. However, there are some regulations that cover aspects of the scope of AI. In the banking sector, for instance, there is the use of AI tools in electronic money transactions. The regulatory framework governing such use is mainly for the particular industry, and not AI as a developing concern for the jurisdiction. However, there is no regulatory framework governing the use of AI in these sectors. 575

Ghana's National Artificial Intelligence Strategy (2023–2033) outlines a comprehensive plan to harness AI for inclusive and sustainable socio economic development. Developed by the Ministry of Communications and Digitalisation with support from Smart Africa, GIZ FAIR Forward, and The Future Society, the strategy mission is to leverage AI for inclusive growth across all sectors, enhancing the quality of life for Ghanaians and establishing the country as a trailblazer in AI leadership. 576

AI Initiatives

⁵⁷¹ National Information and Technology Act (n.d), <u>Data Protection Act 2012</u>, Government of Ghana. Accessed 3 March 2025.

⁵⁷² National Information and Technology Act (n.d), <u>Data Protection Act 2012</u> Section 18, Government of Ghana. Accessed 3 March 2025.

⁵⁷³ National Information and Technology Act (n.d), <u>Data Protection Act 2012</u> Section 1, Government of Ghana. Accessed 3 March 2025.

⁵⁷⁴ National Information and Technology Act (n.d), <u>Data Protection Act 2012</u> Section 20, Government of Ghana. Accessed 3 March 2025.

⁵⁷⁵ International Bar Association (n.d), Insights On Public Policies To Ensure Ai's Beneficial Use As A Professional <u>Tool</u>, ibanet.org. Accessed 3 March 2025.

576 GigWatch (2022), <u>Ghana's National Artificial Intelligence Strategy (2023–2033)</u>, Geneva Internet Platform.

AI is being incorporated into various sectors, including agriculture, mining, energy, and healthcare, as the government actively invests in AI infrastructure, digital literacy, training programs, and physical infrastructure, aligning with the priorities outlined in the AU Continental AI Strategy.⁵⁷⁷

Several initiatives have been launched to promote diversity and build a more equitable workforce. Ghana Tech Lab⁵⁷⁸ supports women's participation in AI training programs, while the Ministry of Communication's 'Ms. Geek' program⁵⁷⁹ aims to boost gender diversity in STEM. Additionally, in 2016, the African Women Innovators Network partnered with Women in Tech Africa to launch the Business Innovation Lab in Ghana, which saw 30 female innovators undergo a programme aimed at providing them with the tools and opportunities to work together to develop their startup ideas.⁵⁸⁰

In 2018, Google established its first Africa-based AI research center in Accra. With the first cohort of AI residents joining the center in 2019, it is home to high-end research labs and has focused on how Africa can use AI to create relevant solutions to the continent's pressing problems, such as food insecurity and maternal mortality.⁵⁸¹ The research team is mostly African tech talent, and works closely with partners to develop AI solutions, first for Africa and then for the rest of the world.

Ghana is home to several homegrown AI pioneers driving innovation across various sectors. MinoHealth AI Labs is leveraging AI to automate medical diagnosis, prognosis, and disease forecasting for conditions like pneumonia, malaria, and tuberculosis. Kudigo AI focuses on enhancing customer service in retail and small businesses by streamlining interactions and optimizing operations. Likewise, Accra-based Aidah is revolutionizing customer engagement with its AI-powered messaging platform, which automates support and ticketing for businesses. S84

Guinea

Data Protection

The Law No. L/2016/037/AN on Cybersecurity and Personal Data Protection (the Law)⁵⁸⁵ governs the protection of personal data as well as the regulation of cybersecurity in the Republic of Guinea. The Law came into effect on 28 July 2016, and outlines requirements for combating cybercrime, as well as for the protection of personal and sensitive data. The Law sets limits on cross-border data transfers. The data controller is only authorized to transfer data to a country outside Guinea if such country ensures a level of privacy, fundamental rights, and freedoms of individuals that is equal to or greater than the protection

⁵⁷⁷ Stanley A., Ogenga F. (2024), <u>Regulating Artificial Intelligence in Africa: Strategies and Insights from Kenya, Ghana, and the African Union</u>, Wilson Center.

⁵⁷⁸ Stanley A., Ogenga F. (2024), <u>Regulating Artificial Intelligence in Africa: Strategies and Insights from Kenya, Ghana, and the African Union</u>, Wilson Center.

⁵⁷⁹ Ministry of Communication, Digital Technologies and Innovations (n.d), <u>Ms. Geek</u>, Government of Ghana. Accessed 3 March 2025.

⁵⁸⁰ Jackson T. (2016), Female business innovation lab launched in Ghana, Disrupt Africa.

⁵⁸¹ Ekhator O. (2024), 5 problems Google is solving with AI in Africa, Tech Point Africa.

⁵⁸² International Trade Administration (2024), <u>Ghana Artificial Intelligence</u>, Department of Commerce, United States of America.

⁵⁸³ KudiGo Homepage.

⁵⁸⁴ International Trade Administration (2024), <u>Ghana Artificial Intelligence</u>, Department of Commerce, United States of America.

⁵⁸⁵ Data Protection Africa (2022), Guinea Data Protection Factsheet, ALT Advisory.

provided by Guinea. Prior to any cross-border transfer of personal data, the data controller must seek approval from the personal data protection authority. The transfer of personal data outside Guinea is subject to rigorous and routine scrutiny by the authority, in accordance with its intended purpose.

While Article 47 of the Law provides for the creation of a personal data protection authority through regulatory measures, this authority has yet to be officially established. A data controller has the option to appoint a data protection officer (DPO), who must be adequately qualified for the role. The DPO is responsible for maintaining a list of all processing activities, which should be readily available to anyone who requests for it. Additionally, such DPO cannot face any punitive action from their employer for fulfilling their duties.

AI Regulation

Guinea has no dedicated AI legislation. However, Guinea's 'Digital Road Map' is designed to guide the country's digital transformation in alignment with its broader national development goals. The roadmap envisions Guinea becoming a leading digital economy in West Africa by 2025, with a focus on education, infrastructure expansion, and the secure use of data. The strategy draws from regional and international frameworks, such as the Arab Digital Economy Strategy, and aims to position Guinea to benefit from the 4th Industrial Revolution.

AI Initiatives

The Guinean government set ambitious digitalization goals to enhance public administration and improve access to public services. However, e-government platforms are at various stages of development, with most services currently designed for use by authorities and government organizations rather than the general public.⁵⁸⁷ As part of UNDP's work in Guinea, digitizing public administration and education has been identified as a key priority, a commitment reaffirmed in a 2021 meeting between the UNDP Resident Representative and the Prime Minister.⁵⁸⁸

In 2022, the Ministry of Posts, Telecommunications, and the Digital Economy established the National State Digitalization Agency (ANDE) to implement government policies, strategies, and programs aimed at modernizing public administration. Additionally, the Agency of Electronic Governance and State Informatization (ANGEIE) oversees the development of digital infrastructure and public platforms, coordinating IT efforts across government agencies—though it currently lacks an official website.⁵⁸⁹

In 2015, the Ministry adopted the 2016-2020 program, a strategy for developing telecommunications and the digital economy as a standalone sector, supported by the West African Communal Initiative Project (WARCIP). However, as of April 2023, the program had not been fully implemented, and the Ministry's

⁵⁸⁶ DigWatch (2020), <u>Guinea's Digital Road Map</u>, Geneva Internet Platform.

⁵⁸⁷ Savinkova V. (n.d), <u>E-Government Development in Guinea</u>, Center for African Studies HSE University. Accessed 3 March 2025.

⁵⁸⁸ Savinkova V. (n.d), <u>E-Government Development in Guinea</u>, Center for African Studies HSE University. Accessed 3 March 2025.

⁵⁸⁹ Savinkova V. (n.d), <u>E-Government Development in Guinea</u>, Center for African Studies HSE University. Accessed 3 March 2025.

website offers limited information under its "Achievements" section, with only select news and project updates available. 590

Liberia

Data Protection

There is currently no data protection or privacy legislation in Liberia however, Liberia's Constitution of 1986, under Article 16 provides that interference with an individual's privacy, family, or home is prohibited except through other lawful means prescribed by law.⁵⁹¹ As a result, there are no guidelines for the appointment of a DPO, registration with a data protection authority (DPA), cross-border data transfers, or breach notification requirements in Liberian law.

AI Regulation

There is no dedicated AI legislation or regulation.

AI Initiatives

The Fake News Detection project in Liberia, a challenge hosted by the Liberia Chapter, was established to develop an automated system that can analyze news content, identify patterns, and assess the credibility of information, thereby enabling citizens to make more informed decisions.⁵⁹²

In 2024, Liberia's efforts to combat tuberculosis through early prevention, diagnosis, and treatment received a major boost with the donation of four advanced artificial intelligence (AI)-powered X-ray machines. These machines, the first of their kind in the country, have been strategically placed in four major hospitals—TB Annex, JFK Medical Center, Redemption Hospital, and C.H. Rennie Hospital—across Montserrado and Margibi Counties to enhance early detection and improve patient outcomes. 594

During his presidency in Liberia, George Weah introduced the Pro-Poor Agenda for Prosperity and Development (PAPD), designed to drive inclusive growth and ensure equitable distribution of national wealth. This initiative laid the groundwork for his vision of leveraging AI as a tool to combat poverty and advance sustainable development across Africa.⁵⁹⁵

Smart AI, an advanced advertising platform for an e-commerce marketplace, has spent nearly a decade analyzing buyer behavior and intent and has quickly become a sought-after platform for employment

⁵⁹⁰ Savinkova V. (n.d), <u>E-Government Development in Guinea</u>, Center for African Studies HSE University. Accessed 3 March 2025.

⁵⁹¹ One trust Data Guidance (n.d), <u>Jurisdictions - Liberia</u>, dataguidance.com

⁵⁹² Omdena (2023), <u>Detecting Fake News Using AI in Liberia</u>, omdena.com.

⁵⁹³ Apofeed (2024), <u>Liberia: First Lady Dedicates Four AI X-ray Machines for Tuberculosis (TB) Diagnosis</u>, African Business.

⁵⁹⁴ Apofeed (2024), <u>Liberia: First Lady Dedicates Four AI X-ray Machines for Tuberculosis (TB) Diagnosis</u>, African Business

⁵⁹⁵ Michael T. (2025), <u>Former President George Weah's Vision for Africa's AI Development: A Path to Innovation and Growth</u>, Insights Liberia.

opportunities in Liberia. 596 Even during its beta phase, Smart AI gained significant traction, with over 100,000 Liberians successfully earning rewards and commissions through the platform.

Mali

Data Protection

Mali's data protection framework is primarily governed by Law No. 2013/015,⁵⁹⁷ which safeguards the right to privacy and other fundamental rights during personal data processing. The Autorité de Protection des Données à Caractère Personnel (APDP) was established under this law and officially launched in 2016 to oversee compliance. Law No. 2019-056 on the Repression of Cybercrime⁵⁹⁸ reinforces the role of Law No. 2013-015 as the main legal instrument protecting personal data in Mali. The law sets clear guidelines for the collection and processing of personal data and mandates annual reviews by the Supreme Court to assess and revise its provisions if necessary. An amendment in 2017 (Law No. 2017-070) refined the APDP's functions.

Under this framework, individuals have rights including access to their personal data, the ability to correct or delete inaccurate information, and the right to object to data processing for marketing purposes. Most data processing activities must be declared to the APDP, while certain sensitive categories—such as biometric data, genetic information, criminal records, and national identification numbers—require prior authorization. The APDP has the authority to impose monetary penalties and criminal sanctions on data controllers and processors who violate the law, ensuring strong enforcement of Mali's data protection regulations.

AI Regulation

Mali does not have a dedicated AI legislation.

AI Initiatives

In 2024, Malian authorities announced the construction of a new Artificial Intelligence and Robotics Center, ⁵⁹⁹ signaling the country's commitment to technological sovereignty and digital transformation. This initiative is expected to drive the development of AI solutions tailored to Mali's unique needs, though the center is not yet fully operational.

In parallel, Mohamed Malet, a digitalization consultant and founder of the start-up Greeney, launched the AI&T community in Mali. Open to AI enthusiasts, learners, and developers, the network aims to foster knowledge-sharing, accelerate innovation, and promote AI applications suited to the local context. It also seeks to make AI more accessible to a wider audience, strengthening Mali's growing digital ecosystem.

⁵⁹⁶ Foshan Chuangyi Technology Co., Ltd. (2023), <u>Smart AI: Liberia's Leading Online Job Platform Popularity</u>, <u>Helping to Create Millionaires and Offering Opportunities</u>, EIN Presswire.

⁵⁹⁷ Data Protection Africa (2022), Mali - Data Protection Factsheet, ALT Advisory.

⁵⁹⁸ AMRTP (n.d), Law No. 2019-056 on the Repression of Cybercrime.

⁵⁹⁹ International Trade Centre (2025), <u>The AI&T community is born in Mali, with the support of NTF</u>, intracen.org International Trade Centre (2025), <u>The AI&T community is born in Mali, with the support of NTF</u>, intracen.org

Initiatives such as Robots Mali as transforming the country's education sector. Robots Mali have generated children's story books and a teachers' guide through AI. The text for the books and guides is generated by Chat GPT, then translated by another transformer model to Bambara, the local language. ⁶⁰¹ They also use AI tools for image generation to go alongside the text.

In the health sector, the integration of artificial intelligence (AI) into cardiology represents a major advancement. Driven by HealthTech Mali, this innovation promises to improve the early diagnosis of heart diseases, thus reducing the risk of serious complications.⁶⁰²

Beyond the healthcare sector, recent projects, such as the deployment of 5G networks and the expansion of internet connectivity in rural areas, have improved access to information, boosted e-commerce, and strengthened online education. These initiatives contribute to reducing the digital divide and promoting economic and social development across the country.

Mauritania

Data Protection

Mauritania's Law No. 2017-020⁶⁰⁴ was drafted to regulate personal data protection and was adopted by the National Assembly in 2017, though it has yet to take effect. Under the law, data subjects have the right to access and contest data processing, request confirmation of whether their data is being processed, and receive information on the purpose, categories, recipients, and potential international transfers of their data. The law also mandates the establishment of the Autorité de Protection des Données à Caractère Personnel (APD) to oversee compliance and ensure that data processing does not infringe on public freedoms or privacy. However, the APD is not yet operational.

AI Regulation

Mauritania does not have a dedicated AI law. It published its AI National Strategy in 2024, aimed at, among others, building a knowledge-based society and promoting the development of a future generation of digitally skilled citizens. The announcement was made during a consultative workshop held in March, organized by the Ministries of Digital Transformation, Innovation and Modernization of Administration, and Higher Education and Scientific Research. The AI strategy aligns with the government's National Digital Transformation Agenda, which prioritizes digital infrastructure development and fostering an innovation-driven economy. It also supports the five-year implementation plan for research and innovation and the 10-year higher education strategy, both of which aim to position research and innovation as key drivers of socio-economic transformation and to build a skilled scientific workforce for a knowledge-based economy. 606

AI Initiatives

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⁶⁰¹ AI-for-Education (n.d), Robots Mali - Organisation Profile, aiforeducation.org

⁶⁰² Resilient Digital Africa (2024), E-health: AI changing the game in Mali, resilient.digital-africa.com

⁶⁰³ Resilient Digital Africa (2024), E-health: AI changing the game in Mali, resilient.digital-africa.com

⁶⁰⁴ Data Protection Africa (2022), Mauritania - Data Protection Factsheet, ALT Advisory.

⁶⁰⁵ Sawahel W. (2024), AI Strategy aims to develop digitally skilled citizens, University World News Africa Edition.

⁶⁰⁶ Sawahel W. (2024), AI Strategy aims to develop digitally skilled citizens, University World News Africa Edition.

In 2022, the Mauritanian Ministry of Digital Transformation, Innovation, and Modernization of Administration (MTNIMA) launched the "Agenda National de Transformation Numérique 2022-2025," providing a clear political framework for the country's digital transformation. Focused on sustainability, inclusivity, and human-centered development, the agenda is supported by the Digital Transformation Center Mauritania,⁶⁰⁷ which drives initiatives in digital government, digital skills, and the digital economy. The center also fosters collaboration between successful digital development efforts and serves as a key advisory partner for Mauritania's digital ecosystem.

Niger

Data Protection

Data protection in Niger is governed by Law No. 2017-28⁶⁰⁸, with the High Authority for the Protection of Personal Data (HAPDP) serving as the regulatory body. The law grants individuals several rights, including access to their personal data in an understandable format, the ability to oppose processing for legitimate reasons, and the right to rectify, update, or delete inaccurate or outdated data. Additionally, individuals are protected from decisions made solely through automated processing that may have significant legal consequences. The law also mandates the appointment of a personal data protection correspondent within companies processing personal data, serving as a point of contact for data subjects and interested parties.

AI Regulation

Niger lacks a dedicated AI law.

AI Initiatives

Niger Foods partnered with Innovative Solutions for Decision Agriculture (iSDA) to enhance farming in Niger State through AI-powered advisory services. Aligned with the Farmer Governor's vision, the initiative will leverage iSDA's Virtual Agronomist tool to provide real-time, data-driven insights to maize, soybean, and rice farmers, improving crop management and yields.⁶⁰⁹ The service offers tailored recommendations on fertilizer use, pest control, and soil nutrition, promoting both productivity and sustainability. Set to launch in 2025, the project will initially support 10,000 farmers, with plans to expand to 50,000, while also training field teams and youth on AI-driven agricultural support.⁶¹⁰

Sierra Leone

Data Protection

Sierra Leone currently has no data protection law enacted; however, the 1991 Constitution of Sierra Leone enshrines privacy rights and fundamental human freedoms, which will form the bedrock for any

⁶⁰⁷ Digital.Global (n,d), Digital Transformation Center Mauritania, bmz-digital.global

⁶⁰⁸ Data Protection Africa (2022), Niger - Data Protection Fact Sheet, ALT Advisory.

⁶⁰⁹ Niger Foods (2024), <u>Niger Foods and iSDA Africa in Collaboration to Revolutionize Agriculture with AI</u>, nigerfoods.com

⁶¹⁰ Niger Foods (2024), <u>Niger Foods and iSDA Africa in Collaboration to Revolutionize Agriculture with AI</u>, nigerfoods.com

data protection legislation. In 2022, the Government of Sierra Leone announced plans to develop a Data Protection Bill, which is yet to be finalised.

However, the Telecommunications Act, of 2006 provides a foundational layer for protecting personal data processed by telecommunications operators.

AI Regulation

The country does not have a dedicated AI law. In 2019, the Directorate of Science, Technology, and Innovation (DSTI) published Sierra Leone's National Innovation and Digital Strategy (NIDS)⁶¹¹ after conducting extensive research on the country's digital landscape, with support from the Tony Blair Institute for Global Change.

The strategy's vision, "digitization for all," was built on three key principles: Country-as-AI-lab, which focuses on leveraging data to enhance government decision-making and service delivery; Mobile first, aimed at increasing connectivity for more citizens; and Hybrid technologies, ensuring an inclusive, multi-channel approach to digital services.

AI Initiatives

AI Strengthening Healthcare Access (AISHA)⁶¹² utilizes Amazon Alexa's conversational capabilities to improve healthcare knowledge accessibility. It provides real-time medical answers (AISHA Answers), interactive quizzes (AISHA Quizzes), and in-depth lessons (AISHA Lessons) for healthcare workers. The team is working to expand access in low-resource settings, introduce Krio language support, and enhance its database with clear, informative content. Currently piloting in Sierra Leone, AISHA aims to strengthen healthcare delivery and education.⁶¹³

A portable point-of-care ultrasound technology is being used in low-income countries worldwide to enhance maternal care, including in Sierra Leone. The country has adopted BabyChecker,⁶¹⁴ an AI-powered ultrasound solution accessible via smartphones. This innovative tool enables community health workers, midwives, and nurses in primary healthcare settings to detect potential pregnancy risks, improving early diagnosis and maternal health outcomes.

Togo

Data Protection

Law No. 2019-014 (the Law)⁶¹⁵ governs data protection in Togo, outlining how persons, the state, local governments, and legal entities regulated by public or private law can collect, process, transmit, store, and use personal data. The Law applies to any processing carried out by a person in charge, whether established in the territory of the Togolese Republic, that uses processing means located in Togolese territory, except processing means used solely for transit in Togo.

⁶¹¹ Mandewa-Cole (2022), Inclusivity in Sierra Leone, Public Digital.

⁶¹² Obeysekare E. (n.d), Sierra Leone: AI Strengthening Healthcare Access (AISHA), Lehigh University.

⁶¹³ Obeysekare E. (n.d), Sierra Leone: AI Strengthening Healthcare Access (AISHA), Lehigh University.

⁶¹⁴ Atieno M. (2024), Portable AI Ultrasound Reducing Maternal Mortality in Sierra Leone, Science Africa.

⁶¹⁵ Data Protection Africa (2022), Togo - Data Protection Fact Sheet, ALT Advisory.

Data processing is subject to prior notice to the Togolese data protection authority (IPDCP) once operational. The IPDCP must issue a receipt allowing the applicant to carry out the processing activity within a limit of one month, without exempting them from any of their obligations.

The Law recommends the appointment of a DPO. Organisations should notify the IPDCP of the DPO's appointment. Where appropriate, the employee representative bodies must also be notified of the appointment.

AI Regulation

Togo does not have a dedicated AI law or regulation.

AI Initiatives

Togo AI Labs offers personalized mentorship for conducting research in AI/ML and Graph Neural Network (GNN) Projects. In June 2024, Lomé, the capital of Togo, became the focal point of technological innovation as it hosted the Artificial Intelligence Week. The event brought together experts, researchers, and enthusiasts to explore advancements, opportunities, and challenges in AI, with the aim of stimulating socio-economic development in Togo and Africa as a whole.

In 2021, researchers from the Center for Effective Global Action (CEGA) and Innovations for Poverty Action (IPA) published a working paper detailing the results of a first-of-its-kind contactless direct payments program. Led by the Government of Togo with support from the research team and GiveDirectly, the program demonstrated that machine learning targeting outperformed other policy options available at the time. The government worked with GiveDirectly, CEGA, and IPA, who brought together a team to use machine learning and mobile phone data to remotely identify, enroll, and pay over 138,500 Togolese in poverty suffering from COVID19 lockdowns. However, the findings suggested that while effective, this approach was best used as a supplemental tool alongside conventional methods, particularly during times of crisis.

Malawi

Data Protection

Malawi's Data Protection Act of 2024⁶¹⁹ regulates the processing of personal data, covering aspects such as data collection, storage, and transfer. It establishes key data subject rights, including access, correction, and deletion of personal data. The Act provides a comprehensive framework for data protection, outlining obligations for data controllers and processors while ensuring principles of data security and cross-border data transfers. Although it does not explicitly address AI, its provisions on data subject rights and data security could be applied to AI systems handling personal data, ensuring individuals can access, correct, or delete their data and that appropriate security measures are in place.

AI Regulation

⁶¹⁶ Togo AI Labs

Resilient Digital Africa (2024), Togo hosts its first Artificial Intelligence Week, resilient digital-africa.co

⁶¹⁸ GiveDirectly (2021), Study: AI targeting helped reach more of the poorest people in Togo, givedirectly.org

⁶¹⁹ Malawi Data Protection Act 2024.

Malawi currently has no specific AI regulations. Malawi's approach to AI governance appears to be guided by the AU's Continental Artificial Intelligence Strategy. Although Malawi has not yet developed a national AI strategy, the government is actively promoting AI innovation in sectors like healthcare and agriculture. Initiatives like the National Digitalization Policy and the Malawi 2063 vision demonstrate the country's commitment to digital transformation and leveraging technology for development.

AI Initiatives

Malawi launched its first-ever Centre for Artificial Intelligence and STEAM — Science, Technology, Engineering, Arts and Mathematics in 2023 at the Malawi University of Science and Technology. Established with support from various U.S.-based universities, the center aims to provide solutions to the country's innovation and technology needs.

Seemingly, Malawi has embarked on the promulgation of the UNESCO Recommendation on Ethics of Artificial Intelligence (AI) by fulfilling some of the stipulated obligations. To build its capacity for implementation, the country held a national conference and conducted a study on its readiness to adopt AI ethics, known as the Readiness Assessment Methodology (RAM).⁶²² To further support the development of policies for inclusive digital transformation and ethical AI standards, the project aimed to facilitate the creation of an AI Ethics strategy to address the challenges posed by innovative technologies and digital transformation in Malawi.⁶²³

Students from the Biomedical engineering class of the Malawi University of Sciences and Technology (MUST) developed a web and mobile application that utilises deep learning to diagnose measles through skin lesion analysis which gives results in 0.25 seconds, unlike PCR and immunoglobulin tests which take longer.⁶²⁴

Malawi has partnered with Chinese multinational Huawei to develop a Smart Village Initiative.⁶²⁵ President Lazarus Chakwera outlined the country's Smart Village Initiative plans at the Forum on China-Africa Cooperation (FOCAC) Summit, a diplomatic event hosted by China to bolster relations with African nations. The initiative seeks to bring digital transformation to rural areas across the country, improving connectivity and access to digital services, and will include the establishment of technical training centers in rural areas, to provide young people with necessary digital skills such as AI, cybersecurity and smart agriculture solutions.⁶²⁶

⁶²⁰ Centre for Intellectual Property and Information Technology Law (CIPIT) (2025), <u>Review of the Malawi Data Protection Act 2024</u>, Strathmore University.

⁶²¹ Masina L. (2023), <u>US Universities Help Malawi Establish First AI Center</u>, VOA News.

⁶²² UNESCO (n.d), Support to the Development of AI Ethical Standards in Malawi, core.unesco.org

⁶²³ UNESCO (n.d), Support to the Development of AI Ethical Standards in Malawi, core.unesco.org

⁶²⁴ Kunchezera B. (2024), <u>AI innovations by Malawian students: Tackling Health and Agricultural Challenges</u>, Development and Cooperation.

⁶²⁵ Sehloho M. (2024), <u>Google to open AI hub in Zambia, Malawi plans Smart Village Initiative</u>, connectingafrica.com.

⁶²⁶ Sehloho M. (2024), <u>Google to open AI hub in Zambia, Malawi plans Smart Village Initiative</u>, connectingafrica.com.

Zambia

Data Protection

Zambia's Data Protection Act of 2021 establishes a framework for data protection, including principles of data processing, data subject rights, and obligations for data controllers and processors. The Act places an obligation on data controllers to implement appropriate security measures to protect personal data. While the Act does not specifically address AI, its provisions on data security and cross-border data transfers could be relevant to AI systems that process personal data.

AI Regulation

Zambia has taken a proactive approach to AI governance through its national AI strategy⁶²⁷, developed in collaboration with the Finnish government and the Tony Blair Institute, to drive economic growth and enhance efficiency across sectors. This initiative positions Zambia as a potential leader in AI adoption and innovation within the SADC region.

The government has prioritized AI skills development, plans to host an AI conference to prepare for an AI-driven future, and emphasizes AI policies in the financial sector to support technological adoption. The AI strategy is built on five key pillars: enhancing digital connectivity ("digital trees") to facilitate AI adoption, ensuring access to quality data for sustainable AI solutions, promoting trust and confidence in cyberspace for responsible AI use, fostering innovation and entrepreneurship to support AI startups, and strengthening partnerships and collaboration to sustain AI development.

AI Initiatives

Tech giant Google is partnering with Zambia's government to set up an Artificial Intelligence Center of Excellence at the University of Zambia. According to the Zambian Ministry of Technology and Science's Facebook page, the AI Center comes after the signing of a Memorandum of Understanding (MoU) by the two parties in June 2024. Technology and Science Minister Felix Mutati claimed that the AI Center of Excellence will be the first of its kind in Southern Africa and will be housed at the Zambia Research and Education Network (ZAMREN) within UNZA.

Shortly after the Google partnership, Zambia announced plans to set up another Artificial Intelligence (AI) Centre of Excellence in Lusaka. The Science and Technology Minister Felix Mutati unveiled the initiative, which will convert Katoba Secondary School in Chongwe District into a hub for AI innovation and excellence.⁶³⁰

AI solutions are transforming the future of smallholder farming in Zambia, with innovations such as Netagrow Technologies gaining popularity. Netagrow Technologies is an AI and data-driven digital

⁶²⁷ Ministry of Technology and Science (2024), <u>Artificial Intelligence Strategy Launched</u>, <u>A Steppingstone To Wealth And Job Creation</u>, Republic of Zambia.

⁶²⁸ Sehloho M. (2024), <u>Google to open AI hub in Zambia</u>, <u>Malawi plans Smart Village Initiative</u>, connectingafrica.com.

⁶²⁹ Sehloho M. (2024), <u>Google to open AI hub in Zambia, Malawi plans Smart Village Initiative</u>, connectingafrica.com.

⁶³⁰ Mulenga A. (2024), Zambia to establish another AI Centre of Excellence, IT Web Africa.

enterprise to fill the information gap small-holder farmers experience by providing credible and timely information to optimize crop yield by guiding crop harvest schedules in Zambia.⁶³¹

Zimbabwe

Data Protection

Zimbabwe has further enacted the Cyber and Data Protection Act of 2021⁶³², which provides a foundation for governing data collection, processing, and protection. A similar feature is that the Act does not specifically mention AI, but it establishes a framework for data protection that could be relevant to AI systems.

AI Regulation

Zimbabwe has reportedly completed a national AI policy framework and is actively promoting AI adoption in various sectors, including agriculture, education, mining, and tourism. The government has stated the importance of developing policies that address disruptive technologies like AI, the Internet of Things, and blockchain technology.

The National AI Policy Framework⁶³³ is strategically aligned with the National Development Strategy 1 (NDS1) and the Smart Zimbabwe 2030 Master Plan. This alignment ensures that AI development and adoption contribute to the country's broader development goals and its vision for a digital economy.

In taking proactive steps to understanding AI, discussions are emerging in Zimbabwe about the potential benefits and challenges of AI. Benefits identified include improved productivity and effectiveness, inclusivity and empowerment among others. On the other hand, the threats identified are potential job displacement posed by AI, concerns about relevance and applicability of AI in the African context, the potential impact of AI on privacy and digital rights, and the concerns that AI could contribute to the spread of misinformation and disinformation.

AI Initiatives

AI adoption in Zimbabwe is still in its early stages, but it is already making an impact across various sectors. In healthcare, AI-powered diagnostic tools and telemedicine are expanding access to medical services. The agricultural sector is benefiting from smart farming techniques that improve crop yields and reduce losses. In finance, banks and fintech startups are leveraging AI for fraud detection and automating customer service. Meanwhile, AI-driven learning platforms are enhancing digital education, providing more interactive and accessible learning experiences.⁶³⁴

In early 2021, Zimbabwean President Emmerson Mnangagwa inaugurated the country's National Data Center, describing the Chinese-built facility as a crucial driver of economic growth. The center integrates data from government records and private sector entities, including banks, raising concerns among human

⁶³¹ UNDP (2024), Agrarian AI – The Future of Agriculture in Zambia, undp.org.

⁶³² Ministry of ICT, Postal and Courier Services (n.d), Cyber and Data Protection Act, Government of Zimbabwe.

⁶³³ Bureau B. (2024), National AI Policy Framework Complete, The Herald.

⁶³⁴ Dube K. (2025), The Future of Artificial Intelligence in Zimbabwe: Opportunities & Challenges, Medium.com

rights and civil society groups about potential government surveillance and suppression of dissent, potentially violating constitutional rights. This initiative is part of Zimbabwe's broader adoption of Chinese surveillance technology, with China providing nearly \$240 million to develop NetOne, the national mobile telecommunications network, which also operates its own data centers. Mnangagwa has publicly stated that the government can track individuals' movements, interactions, and even sleeping locations.

Angola

Data Protection

Angola has a data protection law, Law No. 22/11 on the Protection of Personal Data⁶³⁵, which establishes general data protection requirements. The law addresses data processing notifications, data subject rights, direct marketing, and data transfers. While the law does not explicitly mention AI, its provisions on data protection could be relevant to AI systems.

AI Regulation

Angola has not yet developed a specific national AI strategy. However, the country is actively modernising its infrastructure and institutions to embrace digital technologies, including AI.

The government has signed a Memorandum of Understanding with Presight to develop a Digital Transformation Programme for 2024,⁶³⁶ leveraging big data analytics and AI techniques, and it has the potential to significantly impact AI development and adoption in the country.

Undoubtedly, Angola recognises the role of technology in fostering citizen engagement and strengthening democracy. The government has highlighted the importance of technology in promoting social and cultural interaction while safeguarding national sovereignty.

AI Initiatives

Since 2017, Angola's parliament has undergone a digital transformation, shifting from paper-based documentation to electronic systems. AI-powered tools like Audimus⁶³⁷ now enhance legislative processes by transcribing audio to text, minimizing errors, and improving efficiency. The parliament also provides a 24/7 virtual library and operates a Parliamentary Academy to equip lawmakers and staff with legislative, administrative, and strategic skills that include AI training for parliamentary staff, reinforcing a more efficient and tech-savvy legislature capable of addressing global technological advancements.

Angola Cables, through its Symbioxvision project, played a crucial role in the early response to COVID-19 in Angola. Developed in collaboration with Instituto Respira Brasil, Symbioxvision utilized AI-driven analysis of X-ray images, CT scans, and patient history to detect COVID-19 cases. More than

⁶³⁵ Data Protection Africa (2022), Angola - Data Protection Fact Sheet, ALT Advisory.

⁶³⁶ Presight (2021), <u>The Government of Angola and Presight signed MoU to develop a transformation program for Digital Angola 2024</u>, presight.ai

⁶³⁷ 360 Mozambique (2024), <u>Angola Modernises Parliament with AI and Tech Innovation at SADC Forum</u>, 360mozambique.com.

300 X-ray images, collected between January and June 2020, were used to train the algorithm, which achieved an impressive accuracy rate of over 85% in diagnosing the virus.⁶³⁸

In addition, Angola has actively engaged with member states of the Southern African Development Community (SADC), the Community of Portuguese Language Countries (CPLP), and the United Nations to enhance its technological infrastructure, systems, and practices, particularly through the integration of artificial intelligence (AI).⁶³⁹

Angola's Minister of Telecommunications, Information Technology, and Social Communication, has previously highlighted collaborations with Brazil and Portugal, both of which have advanced space programs. Key initiatives include leveraging AI in satellite systems for agriculture, mining, and real estate management, alongside the "Conecta" project, which uses satellite technology to expand internet access to Angola's remote regions. With Angosat-2, the country is enhancing mobile and internet services, addressing previous coverage gaps.

On the global stage, Angola participated in the 2024 UN General Assembly's high-level week, showcasing its digital transformation and AI advancements over the past 25 years. Additionally, it has been involved in the Global Digital Compact reaffirming its commitment to shaping the international digital landscape and strengthening global cooperation.⁶⁴¹

Mauritius

Data Protection

The country established the Data Protection Act in 2017 to provide for the protection of the privacy rights of individuals in view of the developments in the techniques used to capture, transmit, manipulate, record or store data relating to individuals. This Act repealed and replaced the Data Protection Act 2004, so as to align with the European Union General Data Protection Regulation 2016/679 (GDPR). The updates to the law include the implementation of data protection impact assessments, notification of personal data breaches, stricter security requirements attached to data processing, and clearer standards around the details of lawful processing. 43

Additionally, Mauritius was one of the first African countries to establish an operational Data Protection Office, known as the Office of the Data Protection Commissioner, ⁶⁴⁴ setting an example for other nations.

AI Regulation

In 2018, Mauritius became the first African nation to release a National AI Strategy, paving the way for AI-driven economic growth. The strategy focuses on integrating AI into key sectors, including

⁶³⁸ Ramalheira, Lirio & Oliveira, Vasconselos. (2021), <u>Application of Artificial Intelligence in Angola (Difficulties and Application proposals)</u>, Research Gate.

⁶³⁹ Cumbi V. (2024), Angola strengthens ICT sector with global collaboration and AI initiatives. Further Africa.

⁶⁴⁰ Cumbi V. (2024), Angola strengthens ICT sector with global collaboration and AI initiatives, Further Africa.

⁶⁴¹ Cumbi V. (2024), Angola strengthens ICT sector with global collaboration and AI initiatives, Further Africa.

⁶⁴² Data Protection Office (n.d), Data Protection Act 2017, Government of Mauritius.

⁶⁴³ Data Protection Africa (2022), Mauritius - Data Protection Fact Sheet, ALT Advisory.

⁶⁴⁴ Data Protection Office Home Page, Government of Mauritius.

manufacturing, healthcare, fintech, transport, and agriculture. It emphasizes sector-specific AI adoption, workforce development, ethical AI practices, and increasing public awareness to ensure responsible and widespread implementation.⁶⁴⁵

The Financial Services Commission has the annexed Rules which may be cited as the Financial Services (Robotic and Artificial Intelligence Enabled Advisory Services) Rules 2020⁶⁴⁶ to address the adoption of AI in financial advisory services.

On July 27, 2024, Mauritius enacted the Finance (Miscellaneous Provisions) Act 2024, introducing new tax incentives and exemptions to support innovation and AI development. Effective July 1, 2024, companies with a Robotic and AI-Enabled Advisory Services license from the Financial Services Commission can benefit from an 80% tax exemption, provided they meet substance requirements. Additionally, a 15% investment tax credit, spread over three years, applies to capital expenditures on AI development and patents. The act also grants a full tax exemption on income from the sale of virtual assets and tokens, aligning it with the existing exemption on securities transactions.

AI Council

The Mauritius Emerging Technologies Council (METC) is a driving force for innovation, established to steer the nation toward a future of technological excellence. Its mission is to shape forward-thinking policies, foster the integration of emerging technologies for economic and social progress, and spearhead research that anticipates future needs.⁶⁴⁸ The Council is receiving public input on the National AI Policy for Mauritius.⁶⁴⁹

AI Initiatives

Mauritius held its first-ever AI Summit on May 9-10, 2024, at Le Meridien Hotel, Pointe aux Piments, under the esteemed patronage of UNESCO. Organized by the Ministry of Information Technology, Communication, and Innovation in collaboration with the Mauritius Emerging Technology Council (METC), the event focused on harnessing artificial intelligence (AI) to drive inclusive socio-economic development.⁶⁵⁰

The Mauritius Workers' Rights Advisor GPT⁶⁵¹ simplifies navigating the Workers' Rights Act of Mauritius 2024 for the different stakeholders ranging from employer, HR professional, or employee seeking clarity on their rights, providing reliable guidance and support.

⁶⁴⁵ Mauritius Working Group on AI (2018), Mauritius Artificial Intelligence Strategy.

⁶⁴⁶ Financial Services (Robotic and Artificial Intelligence Enabled Advisory Services) Rules 2020.

⁶⁴⁷ UNCTAD (2024), Mauritius Expands tax incentives for AI, IP, and virtual assets, investmentpolicy unctad.org

⁶⁴⁸ METC (n.d) Mauritius Emerging Technologies Council Home Page, Accessed 3 March 2025.

⁶⁴⁹ METC (n.d) Mauritius Emerging Technologies Council Projects, Accessed 3 March 2025.

⁶⁵⁰ UNESCO (2024), Mauritius hosts inaugural AI summit, unesco.org

⁶⁵¹ METC (n.d) Mauritius Emerging Technologies Council News, Accessed 3 March 2025.