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**Draft Continental Artificial Intelligence Strategy**

**Harnessing AI for Africa’s Development**

**and Prosperity**

**May 2024**

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**Abbreviations**

|  |  |
| --- | --- |
| Term | Description |
| ACHPR | African Commission on Human and People’s Rights |
| AI | Artificial Intelligence |
| AI4D | Artificial Intelligence for Development |
| AMMI | African Masters in Machine Intelligence |
| APET | African High-Level Panel on Emerging Technology |
| ARCAI | African Research Centre of AI |
| AU | African Union |
| AUC | African Union Commission |
| AUDA-NEPAD | African Union Development Agency |
| CAIR | Centre for Artificial Intelligence Research |
| CESA | Continental Education Strategy for Africa |
| DIT | Digital Innovation Hub |
| DPF | Data Policy Framework |
| DTSfA | Digital Transformation Strategy for Africa |
| EIA | Ethical Impact Assessment |
| G7 | Group of 7 |
| G20 | Group of 20 |
| GenAI | Generative AI |
| GDP | Gross Domestic Product |
| GIZ | German International Development Agency |
| GPAI | Global Partnership for AI |
| GPT | General Purpose Technology |
| ICT | Information and Communication Technology |
| IDRC | International Development Research Centre |
| IoT | Internet of Things |
| ITU | International Telecommunications Union |
| OCR | Optical Character Recognition |
| OECD | Organisation for Economic Cooperation and Development |
| R&D | Research and Development |
| RAM | Readiness Assessment Methodology |
| REC | Regional Economic Community |
| RIA | Research ICT Africa |
| PwC | Price Waterhouse and Coopers |
| SDG | Sustainable Development Goals |
| SIDA | Swedish International; Development Agency |
| STI | Science, Technology and Innovation |
| STISA | Science Technology and Innovation Strategy for Africa |
| ToC | Theory of Change |
| TVET | Technical Vocational Education and Training |
| UN | United Nations |
| UNECA | United Nations Economic Commission for Africa |
| UNESCO | United Nations Educational, Scientific and Cultural Organisation |
| WEF | World Economic Forum |

**Executive Summary**

Artificial intelligence (AI) has great potential for Africa’s socio-economic transformation and cultural renaissance. It will contribute to the attainment of the African Union Agenda 2063 and Sustainable Development Goals. It presents huge opportunities for creating jobs, improving the delivery of public services, promoting gender equality and empowering women and girls, advancing agriculture, education, health, promoting freedom of expression and access to information in the digital spaces, protecting the environment and natural resources among others. However, these benefits are accompanied by AI risks and harms, ranging from bias due to the way data were trained on AI applications, potential discrimination of women and vulnerable groups (migrants, children, persons with disabilities and ethnic minorities), to job displacement, effect on indigenous knowledge and liability issues due to AI overtaking certain human operations. The risks are being deepened by Generative AI which include disinformation, infringement of data privacy, surveillance, racial stereotypes, and copyrights violations.

AI systems may perpetuate or amplify biases contained in datasets that they are trained on because, more often, data are not equitably sourced - data are usually sourced from developed countries and from non-diverse and inclusive developers' teams. Besides, AI systems may not yet be fully able to explain their decision-making. AI also present concerns for the overall protection and promotion of human rights and poses safety and security issues in civil and military settings, ranging from cyber threats to their application in disinformation for manipulation purpose of political systems and societies as the major risk lies in generative AI-produced and distributed information, which can be fully automated through untraceable deepfakes.

There is also an AI divide between and within countries and globally. These and other emerging risks exacerbated by advanced AI systems making them more complex to address, require the adoption and implementation of principles, frameworks and adaptable regulations on how to design, train and operate AI systems in a trusted and ethical manner, respecting the rights, culture and values of the African population.

To realise AI's positive and transformative potential for African development and mitigate potential risks, it is imperative to build the necessary capabilities. These range from sustained investment in infrastructure (reliable and efficient electricity, broadband connectivity, data infrastructure like data centre and cloud, and compute power) to huge sets of quality data, education and skills in AI, media and information literacy (MIL), research and innovation as well as capacities to develop, use and govern AI through programmes for the public sector, judiciary and parliamentarians among others. Africa also needs to build a vibrant and inclusive AI start-up enterprise ecosystem that develops and implements social and economic applications and systems, an ecosystem that conducts human rights due diligence processes, assessing impact, evaluating the gender related risks and defining mitigation measures.

Regional coordination and international partnerships are also needed to help Africa build the capacity to leverage AI in a manner that promotes social and economic development and preserves its peace and security. Finally, African AI systems require concerted investment by governments and the private sector in the region.

The Continental AI Strategy proposes a people-centric, development-oriented and inclusive approach around five focus areas and sixteen policy recommendations. The five focus areas are:

* Harnessing AI's benefits for African people, institutions, the private sector and countries, in line with Agenda 2063 (i.e., improving people's livelihoods, leaving no one and no place behind, with a focus on AI applications in agriculture, education, healthcare, public service delivery, climate change, and peace and security) and promoting the competitiveness of the African private sector.
* Addressing the risks associated with the increasing use of AI, with attention to governance, inclusion and diversity, human rights, gender equality, dignity, safety, peace and security, information integrity, and sustainable environment and ecosystem, considering African contexts, cultures, and values.
* Accelerating AU Member States' capabilities in infrastructure (energy, broadband, compute, data centres, cloud, IoT), AI talent and skills, datasets, innovation and research that underpin AI development,
* Fostering regional & international cooperation and partnerships to develop national and regional AI capabilities and advance Africa’s position on a global stage.
* Stimulating public and private investment in AI at national and regional levels.

As outlined in below diagram, the Strategy proposes fourteen action areas:

* The first action area provides for the establishment of an appropriate AI governance system and regulations at regional and national levels.
* The second action focuses on promoting the adoption of AI in the public sector, with a view to delivering efficient services to citizens, businesses and others.
* The third area of action aims to accelerate the adoption of AI in the core sectors outlined in Agenda 2063 and the Sustainable Development Goals (SDGs). Sectors with high social and economic value include agriculture, education, health, culture , climate change and adaptation.
* The fourth area of action will be the adoption of AI by the private sector, including small and medium enterprises.
* The fifth area of action focuses on creating an enabling environment for a vibrant and inclusive AI startup ecosystem.
* The sixth area of action aims to ensure the availability of high-quality and diverse datasets for AI. Data in an open format or through regulatory sandboxes is critical for the development of social and economic solutions. This action area also focuses on building the underlying data infrastructure for AI, like computing platforms such as high-performance computing, data centres and cloud services.
* The seventh action area focuses on promoting AI skills and talent in schools, colleges, workplaces and among the population, including the provision of upskilling and reskilling programmes and requirements for jobs at risk.
* The eighth action area promotes research and innovation in AI through partnerships between academia and the private and public sectors. This action line promotes the development of challenge-driven AI research in priority areas through collaboration between the research community and the public and private sectors.
* The ninth area of action provides for the adoption and implementation of ethical principles for AI that respect:
  1. Human rights gender equality and dignity within the framework of regional and international human rights law.
  2. Diversity, inclusivity and African culture and values (e.g. the inclusion of women as well as vulnerable groups including people with disabilities and minorities and values such as ubuntu, which respects collective community over individuality).
  3. Promotion of the protection of children in the face of AI as Africa is fast becoming a young continent.
  4. Responsible and unbiased use of AI , respecting intellectual property rights, and addressing potential societal and legal implications.
* The tenth area of action provides for the adoption and implementation of technical standards to ensure the safety and security of AI systems across the Continent.
* The eleventh action area aims at accelerating public and private investment in AI in Africa.
* The twelfth action area focuses on promoting regional cooperation and coordination with participation of relevant stakeholders from academia, civil society, media, governments, and the private sector to maximise the benefits and minimise the risks of AI.
* The thirteenth area of action provides for accelerated African participation in global AI governance.
* The fourteenth area of action promotes AI-related partnerships between Africa and the rest of the world, with a view to mobilising financial and technical resources for AI development in Africa.



The development of AI and the societal changes it will bring are just beginning. Africa should be well prepared for AI Revolution not only to address the challenges of AI, but also should be ready to become a key player in harnessing AI for its social and economic development. Successful implementation of the above actions will require prioritisation, coordination, resource mobilisation and knowledge sharing at the level of the AU, Regional Economic Communities (RECs) and Member States. The African Union will, therefore, endeavour to equip itself and its Member States and regional organizations with the necessary capacities and tools to optimise the benefits of AI for the African people.

# Introduction and Context

1.1 Introduction

The unprecedented speed and reach of Artificial Intelligence (AI) in recent years have sparked international debates and raised important questions about its impact and implications on global economies and societies. AI is already becoming a reality as an increasing number of industries and government institutions are integrating this technology, and an increasing number of users of AI applications are recorded every day across the world.

Many countries are seizing the opportunities for AI development as between 2017 and 2023, sixty-seven countries developed national AI strategies. These strategies largely focus on building private sector capabilities, enhancing national competitiveness, advancing research and innovation in AI, and developing AI-related education and skills at all levels.

On the other hand, AI’s impact on the global economy is impressive, according to Price Waterhouse and Coopers (PwC), AI automation has the potential to add $15.7 trillion to the world economy by 2030 and double economic growth rates by 2035 via productivity gains and transformation of how the government and business operate.[[1]](#footnote-1) This is equivalent to a 14% gain in global GDP.

Businesses and governments have realised AI's potential, investment in AI has increased many folds. Global corporate investment in AI increased from 2019 to 2020 by 40% to $67.9 billion. Governments’ spending and focus on AI have also increased. For instance, China's investment in AI is estimated to reach $38.1 billion in 2027, OECD analysis shows that the United States investment in AI increased seventeen-fold between 2001 and 2019, and Europe’s AI Watch data shows investments in the European Union are expected to reach €22.4 billion by 2025. [[2]](#footnote-2)

The international policy debate on Artificial Intelligence (AI) has also gained significant momentum with a myriad of initiatives and declarations on ethical and responsible AI. In March 2024, the UN General Assembly adopted its first resolution on AI encouraging countries to safeguard human rights and monitor AI risks. the UN has also established a Multi-stakeholder High-level Advisory Body on Artificial Intelligence with the aim of advancing recommendations for the international governance of AI. In early 2024, the Body published its Interim report for public input[[3]](#footnote-3) , and the final report is expected by August 2024.

The International Telecommunication Union (ITU) and 36 other UN agencies collaborated under the ITU’s AI for Good Global Summit processes, in 2021 UNESCO’s Member States unanimously adopted the Recommendation on the Ethics of AI as the first universal normative framework for the ethics of artificial intelligence where recommendations outline ten principles for responsible AI development, covering transparency, non-discrimination, human autonomy, prevention of harm, responsibility, privacy, social benefit, sustainability, accountability, and inclusion and include six areas of policy action. These principles and policy provide a global regulatory framework to assist countries in establishing their own ethical guidelines for AI deployment.

At the regional level, the European Parliament enacted an AI Act in 2024 that adopts a risk-based approach to the deployment and use of AI systems. The EU AI Act is part of a package of policy measures to support the development of trustworthy AI in the Eurozone, which also includes the AI Innovation Package and the Coordinated Plan on AI. The ASEAN adopted in 2024 a Guide on AI Governance and Ethics aiming at establishing common AI principles among its members, In Latin America and the Caribbean, an important initiative resulted in the development of the Santiago Declaration in 2023. Representing 20 nations from across the region and drawing from the UNESCO Recommendation on the Ethics of AI, the Santiago Declaration seeks to advance regional cooperation on AI governance and regulation, and improve regional capacity to ensure beneficial AI.

At the plurilateral level, the G7 and G20 have also produced principles and guidelines or set up international alliances or bodies to promote the ethical and responsible application of AI. The Organization for Economic Co-operation and Development (OECD has published its Recommendation on AI as a set of intergovernmental standards for trustworthy AI and launched the AI Policy Observatory in February 2020 to help countries develop and monitor the responsible development of AI.

For Africa, Artificial Intelligence (AI) presents enormous opportunities. It is a driving force for positive change as well as economic growth, social progress and cultural renaissance in Africa. Even though the benefits of AI remain high for the continent, recent developments indicate a growing concern about the AI divide between Africa and the rest of the world due to the lack of data, compute, and talent capabilities that are critical for AI development and use.

It’s within this context that , the Third Ordinary Session of the Specialized Technical Committees on Communication and ICT (STC\_CICT3 ) held in 2019 in Sharm El Sheikh , Egypt requested the AU Commission to establish a Working Group on Artificial Intelligence (AI) and work based on existing initiatives and in collaboration with regional Institutions to develop a common African approach on AI, a wide capacity building framework as well as establishment of an AI think tank to assess and recommend projects in line with Agenda 2063 goals.

The Fifth Specialized Technical Committee on ICT and Communication (STC-CICT) held in November 2023 in Addis Ababa, Ethiopia examined and approved a Conceptual Framework on AI that defines key elements of the Continental AI Strategy.

The 44 Th Ordinary Session of the African Union Executive Council tasked the AU Commission to expedite the development of a Continental AI Strategy that is comprehensive, forward-looking and action-oriented to effectively harness the potential of AI to transform the African economy and society in line with the AU Agenda 2063 goals, while managing associated risks and harms.

Against this background and building on the Conceptual Framework and outcome of the virtual multi-stakeholder consultations held in April 2024 on 4 topics namely: (i) Maximising the Benefit of AI for Africa; (ii) Addressing and Mitigating AI Risks and Fostering the Ethical Governance of AI in Africa; (iii) Building Capabilities for AI in Africa, and Fostering Regional and International Cooperation on AI, the AU Commission, developed a Continental AI Strategy that reflects the aspirations of African people and stakeholders.

The strategy is informed by previous initiatives and AU strategic frameworks and benefited from the guidance and support of a task force composed of experts from AUC Departments, AUDA-NEPAD, AU Specialized Institutions, the AU Working Group on AI, Regional Economic Communities, Regional and pan-African Organizations as well as UN Agencies dealing with AI in Africa, namely UNESCO and UNECA.

The Strategy is structured as follows: An overview of the global development of AI, including a definition of AI. Once the definition is established, the strategy presents the impact of AI on the global economy, followed by an overview of the current AI landscape in Africa. This is followed by the identification of strategic objectives and action areas, namely: maximising the benefits of AI by integrating AI into economic sectors; developing governance and ethical frameworks to contain the risks of AI; and building capabilities such as infrastructure, competence, skills, research and innovation, and data needed to harness AI for competitiveness and cultural renaissance. This is followed by areas for regional and international cooperation and investment in AI. The final section presents an implementation plan and recommendations on Capacity building.

* 1. Situation Analysis of AI Development in Africa

In recent years, there has been growing momentum and interest in using AI for social and economic development in Africa. The impact of AI on Africa's social and economic development is enormous. Price Waterhouse Coopers (PwC) estimates that AI could contribute up to $15.7 trillion to the global economy by 2030, with the African economy benefiting from up to $1.5 trillion, 8 or 6% of the continent's GDP. Therefore, the marginal return on investment in AI is high.[[4]](#footnote-4)

The AI industry is also growing across Africa – Data from the Center of Intellectual Property and Information Technology Law (CIPIT) shows that Africa has more than 2,400 organisations working on AI innovation, 41% of which are startups operating in various industries, including health, agriculture, education, law, and insurance.

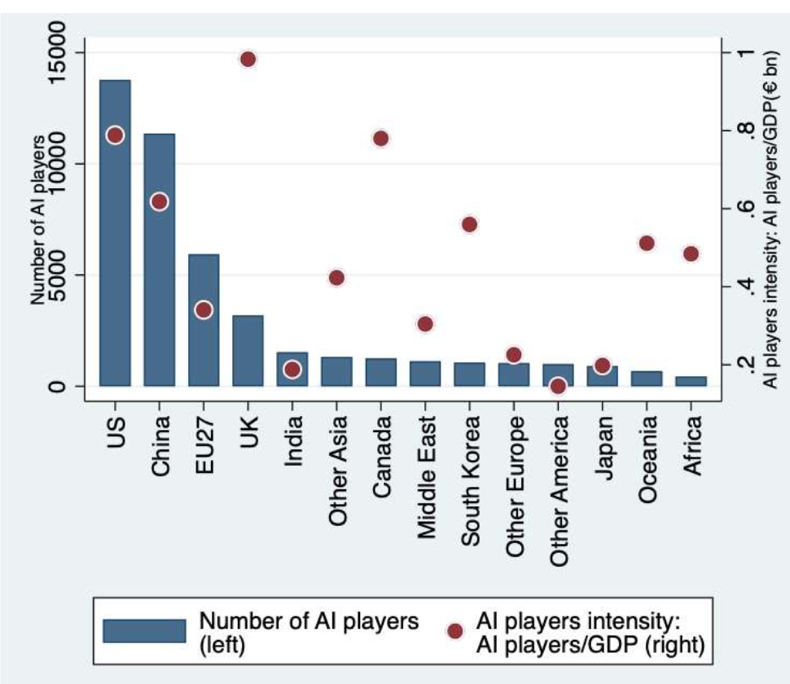
*Source: Centre of Intellectual Property and Information Technology Law*

***Figure 1: Number of organisations working on AI innovations across Africa***

Furthermore, Research conducted on African contributions to the GitHub shows an overall increase in the share of GitHub users, from 0.5% in 2010 to around 2.7% in 2020. The share of actual total contributions from African authors also increased from 0.3% in 2010 to about 2.3% in 2020.

Although, EU Joint Research Centre’s (JRC) comparison of Africa’s AI economic players, such as research institutes (including universities), firms and governmental institutions, with the other regions in 2021 indicates that the region’s contribution to AI remains small as the United States, China, the EU, the UK and India still dominate global AI development[[5]](#footnote-5) .

*Source: EU JRC, AI Watch Index 2021*



***Figure 2. Global AI Economy Players and AI Intensity***

Oxford Insight’s Global AI Index,[[6]](#footnote-6) places African countries among ‘waking up’ and ‘nascent’ nations in terms of AI investment, innovation, and implementation with Mauritius leading the region with AI readiness with a score of 53.27, followed by South Africa, Rwanda, Senegal and Benin in the 2023

To address this, several initiatives engaging countries with partners are also well advanced on the continent.

* In 2022, UNESCO convened the South Africa sub-regional forum on artificial intelligence, attended by seven southern African countries, which agreed to the Windhoek Statement on AI in Southern Africa Region , which recommends actions on data, education and governance across the region.[[7]](#footnote-7) UNESCO has also developed two methodologies to help countries implement the Recommendations on the Ethics of AI: the Readiness Assessment Methodology (RAM),[[8]](#footnote-8) which assesses a country’s readiness for an ethical AI ecosystem in line with the UNESCO Ethics Recommendation, and the Ethical Impact Assessment,[[9]](#footnote-9) which helps project teams assess the potential ethical impacts of the AI systems they are developing.
* The International Development Research Centre (IDRC) and Swedish International Development Agency (SIDA) have been supporting an African Observatory on Responsible Artificial Intelligence since 2022. The Observatory focuses on policy engagement, science communication, capacity development, network convening and research and knowledge generation.[[10]](#footnote-10) The IDRC and SIDA are also supporting an Artificial Intelligence for Development (AI4D) programme, which promotes inter-university collaboration for research and development of AI solutions to address development challenges.
* The FAIR Forward programme,[[11]](#footnote-11) implemented by the German Development Agency (Deutsche Gesellschaft für Internationale Zusammenarbeit) GIZ, in collaboration with various partners, aims to make AI more inclusive and sustainable through training and advisory services.
* The United Nations Economic Commission for Africa (UNECA) also played a key role in the establishment of the African Research Centre for Artificial Intelligence (ARCAI) in the Republic of Congo in 2022. ARCAI's main objectives are to provide technical training and skills, foster job creation, bridge the digital divide, promote inclusive economic growth and ensure Africa's sovereignty over modern digital tools.

At the regional level, efforts have been made to develop strategies and frameworks to build African countries’ AI capabilities.

* In 2018, the African Development Bank reviewed the implication of emerging technologies to its core focus areas, such as energy supply, industry manufacturing, regional integration, and well-being (including financial inclusion, smart cities, education and healthcare). The report, among others, recommends a coordinated regional vision to seize the opportunities provided by emerging technologies, build human resources capacity, develop adaptive and collaborative regulations and nurture the adoption of emerging technologies in the key sectors.[[12]](#footnote-12)
* In 2021, the African Commission on Human and Peoples’ Rights (ACHPR)[[13]](#footnote-13) adopted Resolution 473 on AI, robotics, and other new and emerging technologies. The resolution calls on Member States to ensure that the development and use of such technologies are compatible with the rights enshrined in the African Charter. It calls on AU Member States to maintain human control over AI and notes that this requirement should be codified as a human rights principle. The resolution commits to undertake a study to develop standards to address the challenges posed.
* The Smart Africa Alliance, together with several partners, has also developed an AI for Africa Blueprint,[[14]](#footnote-14), which emphasizes human capital development, AI adoption (from lab to market), networking, infrastructure, and regulation.
* The African Union High-Level Panel on Emerging Technologies (APET) and the African Union Development Agency (AUDA-NEPAD) published a 2021 a report “ “ AI For Africa : Artificial Intelligence For Africa’s Socio-Economic Development “focusing on continental challenges in line with the AU Agenda 2063.[[15]](#footnote-15) The report seeks to address concerns about job losses and the need to enhance job creation opportunities through the integration of AI in various sectors such as agriculture, healthcare, finance, telecommunications, transport, water management, and mining. Emphasis has also been placed on skills, infrastructure, research and innovation, regulation and partnerships
* AI is also increasingly becoming a focus for regional economic communities (RECs). REC digital strategies focus on ensuring that the foundations for AI, such as infrastructure, skills and regulations, are in place.

The integration of AI into national development plans is also gaining momentum as some African countries have already established AI institutes that are driving applications in key sectors such as agriculture, health and education.

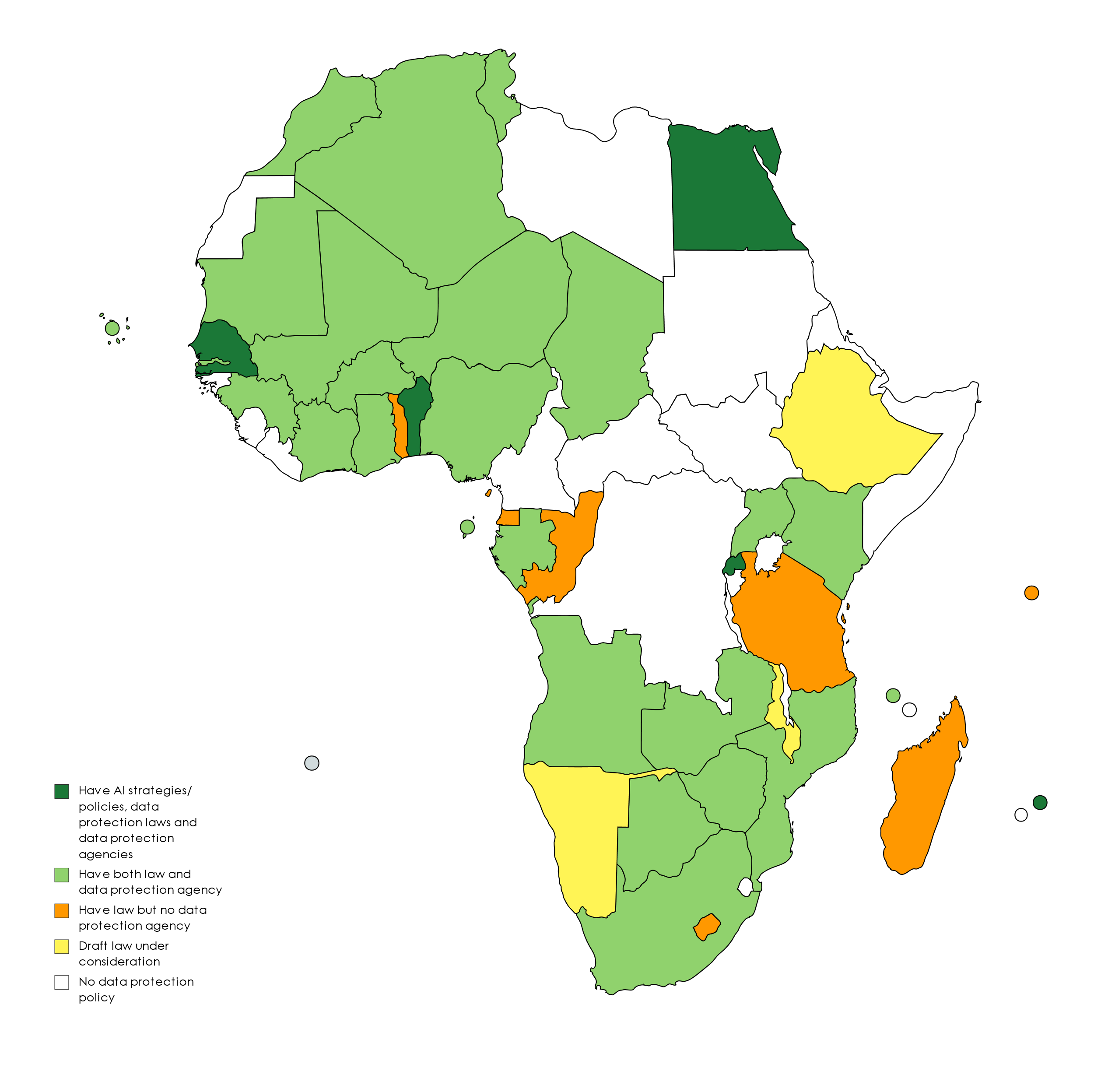
To date, five countries, Benin, Egypt, Mauritius, Rwanda and Senegal, have developed stand-alone AI strategies, while others, such as Kenya, South Africa and Uganda, are addressing AI in combination with other emerging technologies, such as blockchain or in the context of the Fourth Industrial Revolution.

* Benin's 2023 AI and big data strategy calls for laying the foundations for a robust, sustainable digital ecosystem. It focuses on building a national data infrastructure, promoting AI solutions, developing human capital, research and innovation, and implementing an AI governance framework.[[16]](#footnote-16)
* Egypt’s National AI strategy, adopted in 2021, covers the adoption, implementation, and use of AI in government, national development, human capacity building, and participation in AI-related international activities.[[17]](#footnote-17) Egypt focuses on building startup capacity by creating the necessary enabling environment and promoting R&D in AI, Natural language processing (NLP) is also among the priority areas in the national strategy.
* Mauritius’ AI strategy was first published in 2018.[[18]](#footnote-18) The strategy recognises the potential of AI and other emerging technologies to address a range of social and economic challenges and focus areas, including manufacturing, healthcare, fintech, agriculture, citizen and government services, smart ports and maritime traffic management. The regulatory approach is guided by accountability, ethics and inclusiveness to build public trust and create a robust AI ecosystem.
* Rwanda’s AI policy, published in 2023,[[19]](#footnote-19) serves as a roadmap to enable Rwanda to harness the benefits of AI and mitigate its risks. The policy focuses on positioning Rwanda as Africa's AI lab and responsible AI champion, building the skills, creating an open and secure data ecosystem, driving public sector transformation and accelerating responsible AI adoption.
* Senegal’s AI strategy, published in 2023, aims to contribute to the country’s national development plan. The strategy emphasises the need to develop human capacity in AI, support solutions that solve development problems, foster partnerships between the public and private sectors and create an inclusive and trusted AI ecosystem.

Whereas other countries such as, Ethiopia, Ghana, Kenya, Morocco, Nigeria, South Africa, Tunisia, and Uganda have also taken steps to define AI policies and establish institutions to drive AI development.

There has also been progress in addressing data issues across Africa. The number of countries with a data protection law has more than doubled in the last decade, and a third of these laws have been passed in the last five years.

Data compiled by Mutuku and Tinto in 2019[[20]](#footnote-20) shows that a third of African countries (25 countries) have made open data available through national open data portals, with almost all of these countries adopting open data policies, strategies and plans.



***Figure 3: Status of data protection legislation and agencies in Africa***

Some African countries are also recognising the importance of data and its role in the development of AI. Ghana, Nigeria, Rwanda, Sierra Leone, Senegal and South Africa have already drafted overarching data strategies that emphasise data literacy, data infrastructure, open government data, data sovereignty and data use.

Beyond data governance and personal data protection, there is also a need for legal protection against algorithmic bias and discrimination. Existing legal provisions may need to be updated to consider the new uses and applications of data generated by AI, to compensate for bias and discrimination, including on the basis of race and gender, or loss of personal privacy through predictive analytics, among others.

UNESCO's Artificial Intelligence Needs Assessment Survey conducted in 32 African countries identified the policy priorities and capacity building needs in 32 African countries. The survey noted the need to (i) Strengthen Multistakeholder driven policy initiatives for AI governance at the national level; (ii) Foster legal and regulatory frameworks for AI governance (iii) Enhance capacities among public administrations, judiciary and parliamentarians for AI governance and use, and (iv) facilitate cooperation between countries around some of the common priorities like personal data protection and data governance, leveraging AI for economic growth, development and digital transformation, updating education, skills and training systems, supporting AI research and development. If African nations are to build inclusive AI ecosystems, enlightened policymaking is essential.

1. Regional Policy Context for AI in Africa

This AI Strategy is in line with the African Union’s Agenda 2063 and strategies for digital transformation, science, technology and innovation. The AU Agenda 2063 envisions “an integrated, prosperous and peaceful Africa, driven by its own citizens, representing a dynamic force in the international arena”.[[21]](#footnote-21) Through Agenda 2063, African countries have committed to seven aspirations and AI will contribute to deliver on them as per below table:

***Table 1. AI Alignment with African Aspirations/Agenda 2063***

|  |  |  |
| --- | --- | --- |
| AU Agenda 2063 | Key Focus Areas and Sectors | Artificial Intelligence Alignment |
| A prosperous Africa based on inclusive growth and sustainable development, | Social and economic transformations, prosperity, employment, housing, education, agriculture, science and technology, natural resources and mitigation of the impact of climate change | * AI across Africa’s economic growth and social progress through supporting individuals to improve quality of life * Mainstreaming AI in priority sectors - agriculture, education, health, public service delivery, climate change and natural resources, media and culture, peace and security, regional trade, justice and law and order * Private sector use of AI and innovation in AI techniques, methods and apps |
| An integrated continent, politically united based on the ideals of Pan-Africanism and the vision of Africa’s Renaissance, | Integrated infrastructure, regional cooperation, trade and data movement across borders | * AI in priority sectors (infrastructure and trade) * Development of a consolidated AI Ecosystem |
| An Africa of good governance, democracy, respect for human rights, justice and the rule of law, | Leadership, democratic values, culture, universal principles of human rights, gender equality, justice and the rule of law, justice, public service | * AI digital transformation of government, * Transformation of the justice, law and order sector * Inclusive AI that supports human rights of marginalised groups including the diversity of persons with disability in Africa * AI use in the public Sector |
| A peaceful and secure Africa, | Conflict resolution, safety and security, human security, reduction of violent crimes | * Africa’s Role in Global Security and AI-driven Global Warfare, * AI and disinformation |
| An Africa with a strong cultural identity, common heritage, values and ethics, | Identity, heritage, culture, values such as Ubuntu folklore, languages, film, music, theatre, literature, religions and spirituality | * Inclusive and ethical AI respecting and protecting heritage, folklore, languages, film, music, theatre, literature, festivals, religions and spirituality * priority sector – media and culture |
| An Africa whose development is people-driven, relying on the potential of African people, especially its women and youth, and caring for children and | Inclusion of children, women and youth  Participation in decision making  Education, training and skills, jobs and economic opportunities  Innovation and creativity | * AI skills, AI in education, * Inclusive AI * AI research and innovation * AI for economic opportunities and employment |
| Africa is a strong, unified, resilient and influential global player and partner. | Participation in global governance  regional cooperation  financing African development | * Regional cooperation and international engagement * AI Governance * AI investment |

The AU Science, Technology and Innovation Strategy for Africa (STISA) 2024 places science, technology and innovation at the heart of Africa's socio-economic development and growth.[[22]](#footnote-22) Its priority areas include eradicating hunger, ensuring nutrition and food security, preventing and controlling disease and ensuring well-being, communication (physical and intellectual mobility), natural resource management and climate change, urban management and waste management, peace and security, and wealth creation. These priority areas are relevant to harnessing AI for Africa's development, which is in line with Agenda 2063.

Furthermore, the AI strategy is in line with the Digital Transformation Strategy for Africa (DTSfA) 36, which was endorsed at the 36th Ordinary Session of the African Union Executive Council in Addis Ababa, Ethiopia, in 2020. The DTSfA aims to harness digital and emerging technologies and innovation to transform Africa's societies and economies, promote Africa's integration, generate inclusive economic growth, stimulate job creation and secure the benefits of the digital revolution for socio-economic development. Other important policy frameworks include:

* The AU Convention on Cybersecurity and Personal Data Protection (Malabo Convention), adopted in 2014 and entering into force on 8 June 2023,
* The AU Data Policy Framework (DPF) serves as a blueprint to guide African countries’ efforts to establish effective data governance systems and harness data for innovation, private sector competitiveness and social and economic development.
* The Continental Education Strategy for Africa' (CESA 16-25) aims to revitalise the teaching profession, build education infrastructure, improve learning and completion rates, accelerate science and mathematics education, expand Technical and Vocational Education (TVET) and higher education opportunities.[[23]](#footnote-23)
* The Continental Strategy for Technical and Vocational Education and Training[[24]](#footnote-24) emphasises the importance of ensuring the relevance of education and training to meet the demand of social and economic development; the TVET Strategy places emphasis on promoting employability, sustainable livelihoods and responsible citizenship. There is also an emphasis on building capacity for creation and innovation, anchored in the framework of entrepreneurship.
* The AU Digital Security Strategy aims to protect African citizens, governments and businesses from breaches of cybersecurity breaches and cybercrime as information systems and digital infrastructure become more vulnerable in the growing digital economy.
* AU Child Online Safety and Empowerment Policy. The policy promotes safe online conduct and behaviours among children; empowering children with digital literacy and skills; increasing awareness of risks and safeguards among children, parents, educators, and other stakeholders; and strengthening legal and regulatory frameworks
* AU Strategy for Gender Equality & Women’s Empowerment 2018-2028,
  1. Drivers, Risks, Enablers and Inhibitors of AI Uptake in Africa

1.4.1 Drivers

The potential surge of AI in Africa is underpinned by several pivotal drivers. Firstly, the continuous improvement in the continent's digital landscape sets the foundation for tech advancements. Coupled with this is the view of AI as a catalyst for sustainable development, emphasising its relevance and necessity. Africa’s nascent digitalization process of its heritage and culture is making it less vulnerable to AI misuse and presents opportunities for an effective protection of its identity online as well as Africa's demographic makeup, characterised by a youthful population that largely consists of digital natives, further accentuates this trajectory.

Africa’s younger generation perceives AI as an opportunity to address the unique challenges intrinsic to the continent. Additional factors such as the increasing mobile penetration and the growth of financial inclusion facilitated by fintech innovations also play significant roles for accelerating AI adoption in Africa. Moreover, there's an upswing in government support and policies that foster a conducive environment for AI based solutions and applications. The emergence of entrepreneurial spirit in Africa, exemplified by the rise of innovation hubs, adds to Africa preparedness to adopt and implement AI technologies.

1.4.2 Risks

The risks associated with AI deployment in African contexts span various dimensions, including environmental impact, social inequalities, democratic values, and the preservation of indigenous knowledge. The main risks are:

**Environmental Risks:**

* AI systems, particularly those requiring extensive energy consumption for training and operation, contribute to increased CO2 emissions and exacerbate climate change. Additionally, the high demand for fresh water to cool data centers poses a threat to regions already facing water scarcity. With AI comes the massive introduction of electronic waste, which will also affect the environment.

**System-Level Risks:**

* Bias and Discrimination: AI systems trained on biased data or deployed in contexts with systemic discrimination can perpetuate and exacerbate social inequalities. Algorithmic biases, intersectional discrimination, and human biases influencing AI design are significant concerns.
* Privacy and Data Protection: AI systems collecting and processing vast amounts of personal data raise concerns about privacy breaches and unauthorised use of sensitive information, impacting individuals' rights and freedoms, especially among children who currently are already at the receiving end of cybercrime and also women and girls mostly as scams.

**Structural Risks:**

* Gender Equality: AI technologies risk widening gender disparities including gender digital divide, affecting job opportunities and reinforcing existing gender biases and discriminations especially amongst vulnerable women, youth and persons with disabilities as they are already disadvantaged.
* Job Displacement: Automation driven by AI may lead to job displacement, particularly in industries vulnerable to AI disruption, potentially exacerbating unemployment and income inequality.
* The AI Divide: Disparities in digital literacy and access to AI technologies could deepen existing inequalities between men and women and affect already marginalised groups and thus, limiting opportunities for part of populations and hindering Africa's competitiveness in the global AI landscape.
* Intellectual Property: generative AI technologies, in particular, raise concerns about risks to intellectual property rights in their appropriation and use of digital material.

**Risks to African Values**:

* Societal cohesion: Spread and manipulation of AI generated misinformation, disinformation and hate speech
* Democracy and Human Rights: External influence from AI technologies developed outside Africa may undermine democratic sovereignty, pan-Africanism values and civil liberties. AI-enabled election manipulation and dissemination of disinformation pose threats to the integrity of democratic processes, as does the unlawful surveillance of citizens that AI can facilitate.
* Subversion of Indigenous Knowledge: AI systems risk appropriating and misrepresenting indigenous knowledge, potentially eroding cultural heritage and perpetuating cultural exploitation. Additionally, inadequate representation of indigenous practices in AI models may lead to the marginalisation of indigenous communities and their knowledge systems that have always been part and parcel of African norms and values.

Addressing these risks requires a multifaceted approach involving policymakers, technologists, and civil society to ensure the responsible development and deployment of AI technologies in Africa.

1.4.3 Enablers

The Internet, together with the availability of data and compute, is the core infrastructure of the ecosystem in which AI thrives. In Africa, the rapid adoption of smartphones and increased use of the Internet, which has jumped from 20% in 2015 to 40% in 2023,[[25]](#footnote-25) is driving data and the use of various applications. The adoption of smartphones and increased use of social media are also driving user experience with AI solutions

The emergence of African led communities and networks, have also led to the development local AI-based solutions.

1.4.4 Inhibitors

Africa faces a number of challenges and barriers limiting AI uptake, notably gaps in Internet usage, a lack of computing platforms, limited data availability for training AI models, and a scarce supply of AI skills, which inhibit the use of AI for social and economic development.

Although internet usage is increasing, it is still not high enough to support AI development due to a number of factors, including affordability, limited skills and a lack of content that appeals to users.

Lack of data is a barrier to developing solutions that use language understanding or speech recognition in different African languages. Limited data infrastructure, such as data centres, storage facilities and high-performance computers, is also critical to the development of AI solutions.

While AI skills are improving, the continent lacks developers with the right AI skills and also faces challenges to attract and retain AI talent in a context of high global demand on AI professionals.

Limited awareness of AI among the workforce is the biggest barrier to AI adoption in the public and private sectors. There is still relatively little research and development in AI in Africa. This means that AI applications developed in other regions are likely to lack contextual relevance, particularly in terms of cultural and infrastructural factors, and will not be fit for purpose in Africa.

Investment in digital technologies in general and AI in particular remain low. There are no mechanisms for collaboration and knowledge exchange between researchers, academia and innovators. There are few centers of digital innovation which inhibits the value and impact of African innovation.

Due to limited infrastructure and skills, Africa’s AI ecosystem is still in its infancy in most countries. The ingredients for a successful startups’ ecosystem include the availability of capital and Digital Innovation Hubs (DIHs), government support and incentives, strong universities that produce breakthrough ideas and tools that can be readily commercialised and scaled, and an educated population that produces entrepreneurs and engages in debates about AI.

# Continental AI Strategy

2.1 Vision and Mission

The Continental AI Strategy supports the AU vision “**a peaceful and prosperous Africa, integrated, led by its own citizens and occupying the place it deserves in the global community and the knowledge economy”,** It is rooted in Africa’s unique challenges and opportunities as the continent can leverage its youth’s digital natives talent , natural resources, its huge market and geopolitical position to develop and promote an ethical, responsible and inclusive AI that empowers people and contributes to economic growth , social progress and cultural renaissance of the continent.

Vision

Africa-centric, Responsible and Ethical AI that Empowers People and Contributes

to the Continent Inclusive Growth, Resilience and Socio-economic Development.

Mission

The Mission of the AI Strategy is to harness AI for social, economic, and inclusive growth and cultural renaissance in Africa in line with the AU Agenda 2063 and the Sustainable Development Goals, to minimise the risks that AI poses to African people and countries, and to accelerate the development of the necessary AI capabilities of the AU Member States.

2.2 Guiding Principles

The following high-level principles guide the AI Strategy:

**Local First -** The production, development, use and assessment of AI in Africa will be foremost to address African challenges like healthcare delivery, food security, clean energy, climate change and water management and opportunities with African solutions. The growth of local talent and ecosystems is considered paramount to advancing AI solutions that are of public value and interest, serving the Continent’s needs and priorities, and respecting and preserving cultural values and customs.

**People-centred**- AI should promote inclusive growth, sustainable development, well-being and cultural renaissance. The production, development, use and assessment of AI in Africa will be foremost to address African challenges and opportunities with African solutions. AI solutions will address rural and remote areas specific challenges, such as agriculture, climate change (droughts and floods) and healthcare needs.

**Human Rights and Human Dignity**—The production, development, use and assessment of AI systems in Africa will always uphold human dignity, gender equality and respect and promote all the human rights set out under the African Charter on Human and Peoples’ Rights and its subsidiary instruments, as well as the Universal Declaration on Human Rights and related instruments of international human rights law.

**Peace and Prosperity** - The production, development, use and assessment of AI systems in Africa shall advance peaceful and prosperous African societies, where peace and prosperity are enjoyed by all who live in them, and where the natural environment is preserved and protected.

**Inclusion and Diversity -** The production, development, use and assessment of AI in Africa will be inclusive, leaving no one and no place behind and benefiting everyone, and respectful of the diversity of African people, cultures, languages, gender dimensions and nations. AI will not discriminate against anyone on the basis of sex, gender, race, ethnic origin, pregnancy status, economic status, age, any form of disability, language, religion, or political opinion, or any other ground as contemplated under the regional and international human rights canons. In particular, the opportunities of the AI revolution will be harnessed to empower African women.

**Ethics:** The Strategy should provide guidance and recommendations to enable member States to embrace a responsible AI concept. Biasness, widening inequalities, marginalization of certain groups who are not ready to embrace AI, loss of culture and identity, and widening of social and technological gaps should all be avoided.

**Cooperation and Integration**—The Continental Strategy will promote regionally integrated governance approaches and mechanisms and foster regional cooperation in advancing inclusive African AI capacities and ecosystems. **Member States, AUC, AU Organs, RECs, African Institutions, and International Organisations** shall cooperate to create capacity to enable African countries to self-manage their data and AI and take advantage of regional initiatives and regulated data flows to govern data appropriately.

**Skills Development, Public Awareness and Education**: AI solutions will be supported by formal and informal AI education to equip the African population with the necessary skills for the AI-driven future.

2.3 Overall Strategic Objectives

The Strategic Objectives foreseen to be reached by 2030 comprise the following:

1. Implement robust AI governance, regulations, standards, codes of conduct and best practices to manage AI risks and promote its growth.
2. Promoting the adoption of AI in the public sector, with a view to delivering efficient services to all citizens, businesses and others.
3. Accelerate the integration of AI in the core sectors outlined in the Digital Transformation Strategy, notably sectors with high social and economic value, including agriculture, education, health, climate change and natural resource management, and regional peace and security.
4. Accelerating the adoption of AI by the private sector, including small and medium-sized enterprises.
5. Create an enabling environment for a vibrant and inclusive AI start-up ecosystem focused on solving development problems.
6. Ensure the availability of high-quality and diverse datasets to underpin AI development and ensure the data infrastructure, such as data centres, compute platforms, and IoTs, is available for data storage and management.
7. Promote information integrity, media and information literacy
8. Promote AI skills and AI talent to prepare Africa’s workforce of tomorrow, with particular attention to women and girls,
9. Encourage research and innovation in AI through partnerships between academia and the private and public sectors.
10. Adopt and implement AI ethical principles that respect human rights, gender equality and African people’s dignity, respect diversity, inclusivity and African culture and values, and
11. Adopt and implement safety and security in the design, development and use of AI systems
12. Accelerate public and private investment in AI in Africa.
13. Promote regional cooperation and solidarity among AU Member States to maximise the benefits of AI, minimise its risks and share capabilities and resources.
14. Promote African participation in shaping the global AI governance system.
15. Stimulate AI-related partnerships between Africa and the rest of the world.

2.4 Focus Areas

The Focus Areas of the AI Strategy are:

1. Maximising the benefits of AI for social and economic development and cultural renaissance.
2. Enshrining principles of AI ethics and safeguarding AI use and development from harm to African people, societies and environments to support in minimising AI risks by drawing on global frameworks, guidelines and experience but developing them to respond to national and regional challenges.
3. Building capabilities in infrastructure, data sets, skills and education, research and innovation, and specialised AI platforms.
4. Fostering regional coordination and international cooperation; and
5. Accelerating AI investment.
6. Creating an inclusive governance and regulatory framework

***Figure 4: AI Strategy Focus Areas***

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***Figure 5*** presents the sections that elaborate on the strategic objectives and priority areas



***Figure 5: Focus areas and action areas for the AI strategy***

The remainder of this section sets out the policy recommendations and strategic actions to be undertaken to achieve each strategic objective.

* + 1. AI Governance and Regulation

Effective governance is a key mechanism for ensuring that the use and development of AI are inclusive of diverse populations, serve African agendas, and do not harm African people, societies or environments. Developing robust governance regimes for AI that are founded in ethical principles, democratic values, human rights and the rule of law, in line with Agenda 2063, should be a major priority for continental, regional and national actors.

As evidenced worldwide and described in the AI risks sections, even AI systems designed for the most legitimate purposes can harm individuals and societies. Mechanisms are needed throughout the AI lifecycle to mitigate the risks of harm these technologies pose and promote a culture of responsible AI development and use across the Continent.

A multi-tiered governance approach will be needed to ensure that responsible AI ecosystems are enabled, the benefits of AI are equally distributed, risks are mitigated and harms addressed, and that the development and use of AI across Africa is transparent and accountable to its people. African AI governance will consider emerging best practices both within the region and globally on AI policy and regulation and consider the different levels of AI use and adoption by diverse actors within African AI ecosystems. A robust governance regime for Africa will align with existing relevant national legislation and continental frameworks, augmenting them, and addressing regulatory gaps and policy areas.

Such an approach will consist of the following activities:

**Amendment and application of existing laws and frameworks:** There are a number of legal frameworks that lay important foundations for the responsible and just use and development of AI in Africa. These include:

* Intellectual Property laws
* Electronic Communications and Transactions laws
* Whistleblowing and protected disclosure laws
* Access to information laws
* Personal data protection laws
* Cybersecurity laws
* Consumer protection laws
* Antitrust and competition laws
* Gender equality and empowerment of women and girls' laws, including laws on combating gender-based violence

Ensuring these laws are enacted and fully implemented is a crucial first step to governing AI in Africa. Member states will need to review whether existing laws can be amended to safeguard AI-related harms.

**Identification of regulatory gaps:** Governments, with the support of the African Union and REC, will then need to consider what regulatory gaps exist to safeguard the development and use of AI and ensure the rule of law in its adoption across the Continent. Such gaps may include labour protections for gig and platform workers, standards for the public procurement of AI systems, and regulatory approval of AI for use as medical devices within health systems. As well as regulations related to social media, content generators and content distributors to be aligned with international normative frameworks and standards.

**Establishment of enabling policy frameworks:** National AI strategies are important starting points for governing AI. They should align with existing developmental priorities, identifying where AI can make a positive contribution to the realisation of key priority areas like, job creation, sustainable livelihoods, health , gender equality and wellbeing, education and financial services. The design of national AI strategies will be based on open public consultations involving a wide range of stakeholders, including the public and private sectors, academia and civil society.

**Development and roll-out of AI assessment and evaluation tools and institutional mechanisms:** Recent research has highlighted the importance of independent review mechanisms in mitigating the risk of harm associated with AI research and the rollout of AI systems. In particular, impact assessments, including UNESCO’s Ethical Impact Assessment, have been developed as best practices in the field for evaluating and measuring the real and potential impact of AI systems on individuals and societies. These tools are important instruments for understanding and redressing the actual impact of an AI system in different societal contexts and can draw on a range of methodologies to generate evidence of impact, including consultation with affected communities.

**Continuous research and evaluation-** Research is a crucial pillar of emerging governance frameworks. Ongoing African-led research is needed to:

* Assess new risks arising from AI development and use in Africa;
* Evaluate the efficacy of governance tools to promote the development and use of AI systems that are inclusive, fair, sustainable and just;
* Review best practice in AI governance coming out of similar country contexts worldwide;
* Co-develop policy innovations with policy-makers and stress test them in a safe environment; and
* Support regulatory sandboxing initiatives.

In addition, African-led research is needed to assess the short-, medium—and long-term ethical risks of AI to African people, societies, value systems, and their futures. The work of African organisations already working on AI governance and ethics, including the African Observatory on Responsible AI, should be leveraged to support the implementation of the AI Continental Strategy.



Figure 6. Tiers of AI Governance

The UNESCO ethical guidelines call on governments worldwide to establish the necessary institutional and legal frameworks to govern these technologies and ensure they contribute to the public good.[[26]](#footnote-26) Regional evidence and risk-based regulation is important to spur AI innovation, research and development while also reducing the risk it poses to rights, dignity, safety and security, among other things.

**High-Level Recommendations for AI Governance and Regulation**

* support member states to advance a multi-tiered governance approach grounded in AI ethics and geared toward advancing the equal distribution of AI’s benefits across the Continent, ensuring transparency and accountability in the use of AI, and enabling inclusive, diverse, vibrant and sustainable AI ecosystems and adoption in pursuit of Africa’s developmental goals.
* Support Member States to develop National AI Strategies in line with the Continental AI Strategy
* Member States should establish national bodies/councils comprising all national stakeholders to lay down the foundations of national AI strategies and to oversee the development of an AI governance framework.
* Establish institutional frameworks that govern AI at continental, regional and national levels.
* Promote agile, forward-looking and risk-based regulations at national and regional levels that promote accountability and transparency in the design and deployment of AI Systems.

**Associated Actions**

* Support Member States in integrating AI in National Development Plans and developing AI strategies, facilitate peer learning and knowledge exchange in conducting readiness assessments, and develop, implement and monitor National AI Strategies.
* Support Member States to establish independent institutions to conduct oversight on the use of AI, enforce compliance with standards as they emerge, and provide access to redress and remedy where violations occur.
* Establish a regional AI Observatory to provide AI governance support to the African Union and Member States, including research on AI governance approaches, technical assistance and capacity strengthening for policy-makers and oversight bodies.
* Invest in African-led research on the short, medium and long-term risks of AI to African societies, including through research funding, fellowships and the establishment of research chairs.
* Establish a regional independent AI Ethics Board, which reviews applications from AI research groups seeking to develop novel, large-scale AI systems with the potential to impact African societies significantly.
* Provide incentives for citizen-led solutions that identify and mitigate AI biases and high-risk issues within AI systems, such as AI Bounty Contests and Red-Teaming efforts.
* Establish regulatory standards for the public procurement of AI systems in Member States to promote fair, just and inclusive AI development and deployment.
* Adopt algorithmic or AI transparency registers to publicly list AI systems being used in Member States, the groups and individuals that may be affected, any incidents that occur from their use, and details on how to submit complaints or inquiries.
* Develop regulations models that Member States can adapt to their settings and needs,
* Develop flexible regulatory frameworks that can adapt to rapid technological advancements and emerging risks, allowing for repetitive updates and adjustments as needed to maintain effectiveness and relevance over time.
  + 1. Maximising AI Benefits for Socioeconomic Development and Cultural Renaissance

To maximise the benefits of AI, Africa will focus on people-centred development; AI will be used to create employment opportunities, improve quality of life and ensure its informed use by Africans. The strategy envisions the transformation of the public sector, the mainstreaming of AI in high-impact sectors such as healthcare, agriculture, education, culture and climate change and the development of the capacity of the private sector to benefit from AI and address its risks.

AI has the potential to significantly impact all sectors and the lives of everyone in Africa. Estimates suggest that capturing just 10% of the global AI market could generate substantial economic growth for the continent. However, the actual effects of AI on employment and socio-cultural well-being are not well understood in the African context.

It is crucial to make a balance between leveraging the benefits of AI for economic development and social progress while addressing potential challenges and ensuring inclusivity, ethics, and cultural preservation. Continuous analysis, monitoring, and stakeholder engagement are essential to navigate the evolving landscape of AI and maximize its positive impact in Africa.

Data collection, analysis, and policymaking are also needed to maximize AI's benefits and mitigate potential risks. This includes efforts to understand AI's impact on employment, gender equality, quality of life, and social well-being in Africa. Additionally, individuals, institutions, and households must be raised in awareness of AI's benefits and risks.

A regional AI observatory proposed above will be important to facilitate ongoing research and analysis of AI's socio-economic impacts. The observatory will engage stakeholders, identify key challenges, and provide guidance relevant to various sectors.

2.4.2.1 Public Sector’s Adoption of AI

AI has significant potential to improve the delivery of public services - such as safety net payments to citizens, tax collection, policing, utilities and traffic management. AI can play a role in improved resource allocation, better decision-making, real-time tracking, anomaly detection, multilingual service delivery, cost savings and allowing public services to focus on more critical tasks. Data collected from IoTs can enable better transport planning, crime prevention and utility maintenance. AI systems can be used to analyse images from a variety of sources to track and manage urban waste or even to respond to parliamentary requests from citizens. AI can also provide language translation services and extend required assistance to the diverse constituency of people with disabilities, thus enabling them towards meaningful and impactful participation to enable illiterate people to access public services.

The public sector can also play a major role in ensuring the availability of data for training AI algorithms. Government-led digital datasets can be generated from various databases and made available to the public through national open data portals. Academia and the private sector can then use such data to develop AI solutions that enable better delivery of public services.

Governments around the globe are adopting AI solutions to deliver better services. In Europe, for example, a study by the Joint Research Centre (JRC) has compiled a database of 686 AI programmes being used in the EU public sector.[[27]](#footnote-27) In Africa, however, the adoption of AI for public service delivery is still in its early stages.

First, the public sector needs to be aware of the potential of AI and related emerging technologies to deliver better services to citizens. This requires capacity building of the civil service. Second, it is important to encourage the development of digital government strategies that integrate AI. Third, there is a need to establish a triple helix between research and civil society as they present the voice of the ordinary citizens, the private sector and the public sector in the design and implementation of AI solutions for public services in Africa.

**High-Level Recommendations for Research and Analysis on Social, Economic and Cultural Impact of AI in Africa**

* promote the use of AI in the public sector to improve the performance and efficiency of public services by collecting information and sharing current AI use cases in the public sector and conducting research and analysis
* Promote the capacity of civil servants and decision-makers on the implementation and management of AI solutions;
* create innovation-friendly procurement processes across Africa.
* forge partnerships between the public and private sectors and research institutions; and establish regulatory sandboxes for AI innovation in the public sector to improve public services.

**Associated Actions**

* Build capacity of AU Member States on how to leverage AI in the public sector,
* Collaborate with development partners and the private sector to implement AI for public service delivery use cases in selected countries and roll out across the continent.
* Establish a regional database of AI solutions and use cases in the public sector
* Support research and analysis on AI integration in the public sector
* Enhance partnerships with private sector companies to access advanced AI technologies and expertise.
* Enforce mechanisms for transparency and accountability in AI decision-making processes.
* Start with small-scale and experimental projects to demonstrate the benefits of AI applications in different areas of public services.

2.4.2.2 AI in Priority Sectors

All sectors of the economy in Africa can benefit from AI and be negatively affected by it. However, AI will have a greater impact in some sectors than in others. Among the most promising are agriculture and food security, health, education, environmental protection, resilience to natural disasters and climate change mitigation, adaptation and building resilience. These priority sectors are also in line with Agenda 2063 and the SDGs. Africa is based on an agrarian economy. Therefore, agriculture and food security are important sectors for all countries on the continent. The health and education sectors are highlighted in the SDGs and Agenda 2063. As such, agriculture, health and education are the top three sectors to focus on for AI adoption in Africa. Global attention to climate change and the increasing impact of climate change on Africa, including wildfires in North Africa, drought in the Horn of Africa and the Southern Region and tropical cyclones in coastal regions. There is, therefore, a need to use advanced technologies such as AI to predict and analyse heat waves, heavy rainfall, floods, tropical cyclones and prolonged droughts and to mitigate and establish a robust adaptive capacity to the risks to the economy and society.

* + 1. Expanding AI Adoption in Agriculture in Africa

AI has significant potential to advance agriculture in Africa. AI technologies cut across various agricultural functions such as crop yield, irrigation, soil content sensing, crop monitoring, planting and weeding. AI technologies play a critical role in weather forecasting and soil monitoring, such as soil fertility, over-fertilisation, precision agriculture, early warning systems in weather forecast, greenhouse farming, automated irrigation, pest, disease and weed prediction.

There are already a number of small-scale use cases of AI in Africa, including tools for identifying and diagnosing crop diseases and pests, predicting the price of agricultural produce, providing expert advice and giving farmers access to financial services, so there is a need to document and share AI solutions in the sector.

**High-level Recommendations for AI Adoption in Agriculture in Africa**

* Promote the widespread adoption of AI in the agricultural sector in Africa through the exchange of experience in deploying AI in agriculture use cases.
* Designate a centre of excellence to conduct research and build a knowledge base on use cases in agriculture on the continent to facilitate the sharing of experiences and solutions.

**Associated Actions**

* Designate centres of excellence in Africa to conduct analysis on AI in Agriculture and build a knowledge base on use cases on the continent.
* Support AU Member States’ efforts to adopt AI in the agriculture sector and promote an exchange of knowledge and experience on user cases.
* Raise awareness of the potential benefits and risks of AI in agriculture.
  + 1. Expanding AI Adoption in the African Health Sector in Africa

Innovations in AI underpin modern diagnosis, disease detection, treatment and the search for a cure. AI is also being used for diagnostic prediction and early cure or treatment of health challenges such as cancer, malaria and Tuberculosis. AI-enabled robots can support the autonomy and quality of life of the elderly and/or dependents and a diverse constituency of persons with disabilities. AI-powered systems can speed up the retrieval, processing, triage, diagnosis and follow-up of patient information. AI is also being used to analyse medical images and assist in the diagnosis process. AI systems can be used to provide information to the public and healthcare providers.

African healthcare is one of the key sectors that has seen extensive use of AI solutions during the COVID-19 pandemic. The sector has a wide range of AI use cases, from integrated oncology management systems that track cancer patients to solutions that identify and distribute medical supplies. The diversity of AI applications raises ethical issues, such as the reliance on algorithms for patient care. There is, therefore, a need to raise awareness of the potential benefits and share experiences on innovative use cases to promote affordable, better quality and accessible products.

**High-level Recommendation for AI Adoption in the Health Sector in Africa**

* Promote the widespread adoption of AI in the health sector in Africa through the exchange of experience in deploying AI in healthcare use cases.
* Designate a centre of excellence to conduct research and build a knowledge base on use cases in the health sector on the continent to facilitate the sharing of experiences and solutions.

**Recommendations and Actions**

* Designate centres of excellence in Africa to conduct analysis on AI in health and build a knowledge base of use cases on the continent.
* Support AU Member States’ efforts to adopt AI in the health sector and promote an exchange of knowledge and experience on use cases,
* Raise awareness of the potential benefits and risks of AI in the health sector from grassroots to national and regional scale
* Develop AI algorithms and tools that highlight the specific healthcare needs and challenges faced by African countries, such as infectious diseases, maternal and child health, and non-communicable diseases.
  + 1. Expanding AI Adoption in the Education Sector in Africa

While AI can help improve access, quality and affordability of education, it also poses a wide range of risks to education. The proliferation of Generative AI applications has already raised concerns in education. UNESCO's Beijing Consensus on AI and Education "AI and education: Guidance for policy-makers” and Guidance for Generative AI in education and research" proposes key steps to regulate GenAI tools, including mandating data protection and setting an age limit for independent conversations with GenAI platforms.[[28]](#footnote-28) Therefore, there is a need to ensure that AI systems serve human-centred values and protect and secure personal data. AI must also not threaten teachers’ rights and undermine learners’ thinking processes and creativity, which in turn negatively affects innovation. Yet Africa is a young continent where innovation plays a central role in the establishment of an African-owned and Africa-driven solutions.

Despite the risks, AI has the potential to facilitate higher-order thinking if guided by proper instructional design and support formative assessment on basic skills. AI is being integrated to Tutoring Systems (ITS), which tailor and present learning content and personalized learning pathways based on data-informed analytics , learnings' processes. There are also There is also a potential to use AI for assisting students with disabilities but the design and development of assistive algorithms and AI tools must be incentivized. . Examples include voice assistants that allow students with reading difficulties to search for books using only voice commands, AI-powered screening tools that can help identify dyslexia at an early stage, and AI and augmented reality applications that can help children with hearing difficulties to read by translating text into sign language. AI applications have the potentials to support administrative tasks for teachers, such as automating the recording of attendance, marking assignments and use chatbots to answer the standardized repeatedly.

The potential applications and risks of AI in education require increased awareness of the use of AI in learning, teaching, assessment and research. The potential benefits and risks of AI in education on the continent should also be studied to inform policy and investment.

The long-term investment in AI human capital needs to begin at the primary education level and continue in secondary and tertiary education and, more importantly, at the workplace. This demands the modernisation of curriculums and encourages a shift away from educating for specific jobs towards acquiring skills that allow graduates to adapt to evolving tasks arising from technological change. Reviewing the curricula in the education system, starting from early childhood learning and primary schools (e.g., introducing basic coding, foundational mathematics, logical and critical thinking, and utilization of basic open source or robotics), could increase the skills necessary for the future study of AI. Secondary education should integrate coding and AI into the curriculum. Children should be taught computational thinking, coding, applied logic and creative approaches to problem-solving.

Africa should also build AI skills in higher education. This requires integrating AI into computer science and mathematics education and establishing advanced research in various AI domains

**High-level Recommendation for AI Adoption in the Education Sector in Africa**

* Promote the widespread adoption of AI in the education sector in Africa through the exchange of experience in deploying AI in education use cases.
* Assess skills requirements at basic, secondary and tertiary education levels to identify key challenges that Member States face in building AI skills
* Designate a centre of excellence to conduct research and build a knowledge base on policies and competency frameworks on AI and continuously review the trends of AI development and their long-term impact of AI on education, teaching and learning, in order to provide a valid and robust evidence-based foundation for policy-making
* Base regulations on AI systems that promote trustworthy AI for education, build national and institutional pre-emptive validation mechanisms for both general AI systems to be deployed in education at scale and educational tools incorporating AI technology. The validation mechanism should combine methods of trials, simulations, model-centred approaches, and expert opinions to verify AI systems. The validation criteria should at least cover the following aspects of the AI system and its usage: security, bias, accuracy, human accountability for protection of data privacy and legal data ownership, explainability of AI models, linguistic and cultural representativeness of data used to train the AI model and projection of values, appropriateness for users at different ages and with different abilities as well as necessary age threshold for independent use, collection and use of users’ data, intended business models and impact on teachers’ rights, and algorithm-directed human behaviours and impact on human agency.
* Formulate national policies or strategies related to AI in education based on a fundamental trade-off between forward-looking yet unproven values of AI for education versus the urgent needs for other vital conditions for education with a vision to avoid the techno-solutionism. Integrate all digital infrastructure and AI tools by a human-centred approach to serve education.
* Develop AI competency frameworks and appropriate training programmes in alignment with digital and/or general competency frameworks for teachers to review and define their roles and required competencies. Support teachers to respond to the challenges and opportunities of AI for education with full recognition that human interaction and collaboration between teachers and learners must remain at the core of education and that teachers cannot be displaced by AI as well as ensure that their rights and working conditions are protected.
* Develop AI competency frameworks for students and enhance government-sanctioned curriculum or education programmes on AI. Define and develop students’ AI competencies without losing sight of the need for foundational skills such as literacy and numeracy including a human-centred mindset on AI, understanding and practices on AI ethics, and foundation AI knowledge and skills required for effective human–AI interaction. Take institutional actions to enhance AI literacy across all layers of society and to support higher education and research institutions in developing or enhancing courses and research programmes to develop local AI talent, in order to create a massive pool of local AI professionals who have the expertise to design, programme and develop AI systems.
* Develop guidance for local education authorities or institutions on weighing of benefits and risks of the use of AI for different ages of students, different subjects, and different education objectives and promote an evidence-based approach to the system-wide tests on the use of AI in teaching and learning where the benefits of AI use clearly outweigh the risks. Promote analyses and sharing of evidence-based successful practices and AI in education use.
* Develop gendered policies on education to make sure women and girls are not left out of the digital economy powered by AI and work towards increasing the opportunities of girls’ and women’s participation in science, technology, engineering, and mathematics (STEM) and information and communication technologies (ICT) disciplines

**Associated Actions**

* Support AU Member States’ efforts to formulate and implemental national policies on AI in education
* Support AU Member States to develop validation mechanisms to verify AI systems to be adopted in education
* Support AU Member States to develop national AI competencies for teachers and students.
* Designate centres of excellence in Africa to conduct analysis on AI in education and build a knowledge base of policies, frameworks, endogenous educational AI tools, and use cases in the continent.
* Support AU Member States’ efforts to develop and adopt guidance on pedagogically proper and age-appropriate design and test of the use of AI in the education sector and promote an exchange of knowledge and experience on use cases,
* Develop AI applications specialized to address specific challenges in African education, such as language diversity, access to quality education, and teacher shortages.
* Invest in capacity building training educators and students in AI technologies, coding, and data science.
  + 1. Expanding AI Adoption for Climate Change Adaptation and Building Resilience in Africa

The use of AI can help address the adverse effects of climate change. Existing AI systems include tools that predict the weather, track heat waves and cyclones, and identify pollution. AI, satellite imagery and ecological expertise are often used to map the impact of deforestation on the climate crisis. According to the World Meteorological Organisations’ State of the Climate in Africa 2022, more than 110 million people on the continent were directly affected by weather, climate and water-related hazards in 2022, causing more than US$ 8.5 billion in economic damage.[[29]](#footnote-29)

Despite the negative impact of climate change on hundreds of millions of people and the potential use cases that can help predict and analyse heat waves, heavy rainfall, floods, tropical cyclones and prolonged droughts and mitigate the risks to the economy and society, there have been limited AI applications for climate change adaptation and building resilience in Africa. There is, therefore, a need to increase awareness and capacity of AI applications, public and private partnerships and international cooperation in developing AI solutions to mitigate and provide a robust adaptative capacity to the adverse effects of climate change in Africa, thus building resilience against the natural phenomenon.

**High-Level Recommendations for Leveraging AI for Climate Change Adaptation and Building Resilience in Africa**

* Promote the adoption of AI for climate change adaptation and resilience in Africa.
* Raise awareness among Member States of the potential benefits of adopting AI to mitigate, adapt to, and build resilience against the risks of climate change.
* Designate a centre of excellence to conduct research and build a knowledge base on use cases for mitigation, adaptation and resilience building against climate change on the continent. This will facilitate the sharing of experiences and solutions intra- and inter-regionally.

**Associated Actions**

* Designate centres of excellence in Africa to conduct analysis on AI for climate change adaptation and building resilience in Africa and build a knowledge base of use cases on the continent.
* Support AU Member States’ efforts to adopt AI to address the challenges of climate change and promote an exchange of knowledge and experience on use cases,
* Raise awareness of the potential benefits and risks of AI in climate change adaptation and building resilience in Africa.
* Apply AI technologies for precision agriculture techniques that optimize resource use, and enhance resilience to climate variability and extreme weather conditions.
* Develop AI-powered early warning systems for extreme weather events, such as hurricanes, floods, and droughts, to enable timely response and preparedness measures.

2.4.2.3 Adoption of AI by the Private Sector

For the private sector, AI provides greater work productivity, logistics optimization, automation of routine processes, faster business decisions and more accurate consumer market prediction. The private sector is also a partner in the adoption of AI because it is responsible for providing the required infrastructure, skills and computing resources.

However, the adoption of AI by the African private sector remains very low due to limited capacity and lack of awareness. It is crucial to raise the private sector's awareness and identify high-potential projects that can promote public-private partnerships. Initiatives and platforms that engages the private sector in investing in AI and supporting national AI development are crucial to raising the portfolio of African private sector investment, creating an African AI market and attaining competitiveness at global levels.

**High-Level Recommendations for Increasing AI Adoption by the Private Sector**

* Establish a forum to bring the private sector together with other players to raise the sector's awareness of AI opportunities, risks and investment in AI solutions in the region.
* Encourage Member States to promote private sector AI readiness and provide guidance and policy actions, especially regarding the use of AI by small and medium enterprises to improve competitiveness.

**Associated Actions**

* Launch regional forums that bring private sector players together to discuss the adoption of AI in Africa,
* Raise the awareness of the private sector in the continent on AI benefits and risks.
* Encourage Member States to promote private-sector AI readiness.
* Collaborate with startups, or research institutions to establish metrics to evaluate the effectiveness of AI implementations and adjust strategies accordingly.

2.4.2.4 Building Vibrant, Inclusive And Diverse AI Start-up Ecosystem

The African start-up ecosystem is growing, especially in Egypt, Kenya, Nigeria and South Africa; however, more work needs to be done in other countries to create conducive environments for digital technology start-ups in general and AI start-ups in particular.

Africa’s start-ups need to be nurtured through funding, mentorship, training, intellectual property, capacity building and promotion of their interaction with their peers on other continents. Investing in Digital Innovation Hubs (DIH) can play an important role in creating platforms and an ecosystem for start-ups to grow.

To further encourage spin-offs from AI research and test their market readiness, African AI business incubators and accelerators should be created and should work closely with leading universities. Moreover, funding schemes can support more target-oriented research projects between academia and industry. Access to data is critical for start-up innovation. The government should, therefore, encourage access to diverse sets of data through regulatory sandboxes that promote responsible AI innovation. Regulatory sandboxes provide for legislative amendments that allow for trials, within a limited geographical area or time period and measures for close monitoring when supervision is required.

Harmonised policies and regulations, guidelines that provide funding, training, skills and mentorships across Africa, mainstreaming gender equality are needed to further a vibrant and inclusive start-up ecosystem. AU Member States should also implement innovative regulatory sandboxes that provide startups with opportunities to exploit data and test new technologies and/or business models within specific parameters.

**High-level recommendations for Fostering the AI Startups’ Ecosystem**

* Support the development of a regional toolkit for regulatory harmonisation to create an enabling environment for start-ups in the continent.
* Foster collaboration between the government, private sector, academia, civil society, and regional and international organisations to skill up and build startups' capacity to deploy inclusive and development-orientated AI solutions and systems in Africa .
* Encourage female entrepreneurship, participation and engagement in all stages of an AI system life cycle and support schemes, as well as policies that aim at a balanced gender participation in AI research, gender representation on digital and AI companies’ top management positions, boards of directors and research teams. Ensure that public funds (for innovation, research and technologies) are channelled to inclusive programmes and companies, with clear gender representation, and that private funds are similarly encouraged through affirmative action principles.
* Policies on harassment-free environments should be developed and enforced, together with the encouragement of the transfer of best practices on how to promote diversity throughout the AI system life cycle

**Associated Actions**

* Develop a toolkit on the enabling environment (funding, incentives, networking, business and other skills, infrastructure access, intellectual property, etc..) for AI startups in Africa , Mainstream gender equality and support Member States in empowering AI start-ups to work on products that solve development challenges.
* Establish the AI for development in Africa funding and award outstanding programme for stratups,
* Host regional award program for innovative development-oriented AI solutions.
* Support innovation forums for community building and to promote the interlinkages between research institutions and the AI startups.
* Establish a regional mechanism and engage in international dialogues to share best practices and expertise on vibrant AI startups ecosystems.
* Establish a mechanism to provide continuous review of the existing startups ecosystems within African countries and develop recommendations for improvement.
  + 1. Building Africa’s Capabilities to Leverage AI for Development

AU Member States' infrastructure capabilities, particularly in the areas of energy, broadband connectivity, data centres and cloud computing, computing platforms such as high-performance computing and IoTs and quality data are key to the development of AI.

The development and deployment of AI necessitate the application and utilisation of advanced infrastructure - compute and data infrastructure, such as data centres, that, in turn, use vast amounts of electricity. Access to reliable energy sources and broadband, storage, and compute infrastructure is therefore critical for promoting innovation and leveraging AI for social and economic development. Significant electricity is required to run networks and equipment, keep facilities at the appropriate temperature, enable security measures, and more. Power outages are common in most African countries, with generators and UPS systems often being relied on as primary power sources. Therefore, efforts that explore renewable energy sources to power broadband networks, computing platforms, data center facilities, and IoT devices are critical for the deployment of AI solutions.

2.4.3.1 Datasets and Computing Platforms for AI Development in Africa

Data is foundational to AI innovation and adoption. AI works by identifying patterns in available data and then applying this knowledge to new data sets. A large number of datasets are therefore required to find patterns in the data. Data also need to be of high quality, diverse, inclusive and locally produced to address local problems effectively. However, there is a significant gap in the quality, inclusiveness and availability of data for AI models in Africa. Most data from the public and private sectors remain inaccessible. Public and private organisations often do not have sufficient infrastructure, resources, and data-management protocols in place to collect data and make it accessible for accelerating AI uptake.

On the other hand, most of the data on the African population is now available to a handful of companies. The AU Member States are aware that data has become an asset of the twenty-first century. On the one hand, there is a need to protect personal data; on the other, it is important to ensure open and secure data available to feed AI algorithms. The African Union Data Policy Framework provides the common vision and principles to collect, manage and make data available in a manner that respects the privacy of individuals. It provides recommendations to guide African countries in developing their national data systems and capabilities to effectively use and derive value from data, including the creation of datasets that underpin AI development.

There have been efforts to make open public sector data, including open government data, geo-data (e.g. maps) and transportation data, available for research and education, but with varying quality and consistency. Therefore, it is important to promote the creation of more openly available datasets to facilitate AI innovation and economic development.

Harnessing data for AI also requires computers with high computational and processing power because of the need to manipulate large data sets and scan all possibilities for every decision. Most African countries lack powerful computing resources with advanced graphics-processing units in their research institutions and universities. While international research and education networks provide opportunities for interconnecting to international compute resources, the lack of adequate bandwidth and data sovereignty regulations make it difficult to use such systems to experiment with AI solutions. It is therefore important to invest in compute resources at high performance and cloud computing resources for AI-related applications and research and development.

AI also requires extensive storage capacity, which can be provided through institutional, commercial, and carrier-neutral data centres. However, the number of reliable, high-tier data centres is limited in Africa. Statistics from the datacentre map[[30]](#footnote-30) indicate the presence of 5364 larger data centres from 127 countries in 2023. Africa, which represents 15% of the global population, accounts only for 1.8% (106) of these data centres in 2023.

About 10% of the data centre demand in Africa is currently served; therefore, there is a wider gap in accessing the required storage to deploy AI solutions. There is also a need to deploy IoTs that can be used as a source of big data that, in turn, is crucial for training AI models. The African region is still in the early deployment phases of IoT use in key sectors and cities. The development of AI should, therefore, ensure that IoT devices are widely available and quality data is gathered and stored for use in the development and deployment of AI solutions.

**High-Level Recommendations for Data & Computing Platforms**

* AU Member States should Develop data policies and strategies that facilitate access and sharing of non-personal data for AI within the context of the Data Policy Framework. The strategies need to promote the collection, management, and use of national datasets and the creation of data governance frameworks. They should address issues of localisation and cross-border data transfers, mechanisms for building data skills, public, private and research access to open data and research and innovation on data.
* AU member states should establish data governance frameworks and protocols with standards for sharing data ethically, responsibly and securely based on the recommendations of the AU Data Policy Framework.
* Raise awareness of data needs for AI. It will promote regional data pools and data markets (e.g., in areas such as climate change) to foster exchange and facilitate the development of AI models.
* Promote access to globally available data sets that can contribute to designing AI tools for solving development problems. The aim is to enable the collection, sharing and analysis of data for AI development.
* Support analysis on the intersection between data infrastructure and AI in Africa This will include IoT, data infrastructure and compute platform requirement analysis, policy, regulatory and investment needs to accelerate infrastructure availability for AI.
* Develop national legal framework and establish national institution for data governance including the protection of personal data.

**Associated Actions**

* AU Member States should develop data strategies that:
  + Establish clear data governance: define roles, responsibilities, and decision-making processes for the data exchange, ensuring compliance with the data protection regulations
  + Develop data pools from the public and private sectors by onboarding all data providers.
  + Define data standards and formats: establish guidelines for consistent data formats, metadata, and quality standards.
  + Develop data security and privacy measures: Implement robust security measures and ensure compliance with data protection regulations.
  + Build data infrastructure: Create a scalable and secure platform with APIs for data access and high availability.
  + Provide access to data, and Spur data use and innovation.
* Accelerate the development of national and regional data strategies, legislations and policies that encourage accessibility of public and private data for AI models.
* Raise awareness of decisionmakers, policymakers, private sectors and other data providers.
* Promote regional data pools that facilitate the deployment of development-oriented AI solutions.
* Support research and analysis on data infrastructure requirements for AI in Africa.
* Host public and private forums to raise awareness and encourage investment in data infrastructure for AI in Africa.
* Encourage cross border data sharing among Member States to support the development and deployment of AI systems through a regulated mechanism.
* Invest in the development of digital and data infrastructure, including high-speed internet connectivity, cloud computing resources, and data centers, to support the storage, processing, and analysis of large-scale datasets for AI applications.

2.4.3.2 AI Skills and Talent

The long-term adoption of AI for sustainable development and cultural renaissance requires the building of twenty-first-century competencies. Schools should not be confined to teaching how to use digital technology but also enable students to use technology for coding, data analysis and modelling and create their own innovation in AI. At the higher end, specialised courses allow college students to develop sophisticated programming using complex algorithms. The digital economy also demands soft skills like complex problem-solving, critical thinking, creativity and design, collaboration and team-building, social intelligence, and cross-cultural competencies, including gender awareness and effective virtual tools for work and collaboration.

The development and deployment of AI require generic skills as well as awareness of its ethical dimensions. In addition to a set of generic skills, AI-related workers need communication, problem-solving, creativity, and teamwork-related skills. AI offerings in higher education should not only focus on technical but also on ethical aspects. Knowledge of artificial intelligence and related fields, such as ethics and data protection associated with AI applications, will be important in study programmes. Vocational education institutions, on their part, should have the opportunities to use AI and its impacts on various work tasks to enable the creation of solid foundations for applying it in working life. There is also a need for reskilling teachers in the field of AI.

There is a need to establish a package for unemployed youths who have left several educational institutions when they complete their studies. Several institutions do have a database for such groups of people. Henceforth, they have to be strategically positioned towards the adoption and embracing of AI as they job hunt or create jobs. This is in line with the key benefits of AI in establishing job opportunities, and thus, those who await job opportunities but are no longer within a formal or non-formal education system must be considered.

School dropouts who might not have the chance to return to the formal or informal education system also need to be considered. At the same time, they will need the required AI skills to harness the employment opportunities that will emanate from the economic benefits of AI. Thus, they need a specialised, tailor-made AI capacity-building initiative to bridge the gap.

People who are in the workplace will need to demonstrate that their skills are up to date. In addition to generic AI competencies in the workplace, there is a need to increase the skills of the judiciary and media. UNESCO has already launched Programme on and the Rule of Law[[31]](#footnote-31) that aims to equip judicial operators to harness the benefits of AI while mitigating its risks. UNESCO also published a Handbook entitled “Reporting on Artificial Intelligence: A Handbook for Journalism Educators”,[[32]](#footnote-32) that is aimed at increasing the awareness of journalists on AI and improving accurate reporting on the technology. Parliamentarians and diplomats also need specialised training on AI benefits, risks, capabilities and international governance and cooperation to ensure they participate in regulating AI and fostering international coordination. Finally, there is a need for increasing AI awareness of the population. Widely available and resource-efficient formats, such as e-learning, can be used to reach large numbers of people.

**High-Level Recommendations for Building AI Skills and Talent**

* Promote development skills to leverage AI for development and mitigate its risks at all levels. In particular:
* Assess skills requirements and key challenges that Member States face in building AI skills.
* Assess AI’s implication on the African labour market namely vulnerable groups, to avoid exacerbating socioeconomic inequalities.
* Promote the growth of AI expertise and develop public policies to attract and retain AI talents within Africa
* Support the development of a model AI curriculum for basic and higher education, the workforce and the public looking at the diversified established positions within that Member States adopt to their settings. Mainstream girls and women to make sure they are not left out of the digital environment powered by AI.
* Incorporate mechanisms for upskilling teachers and faculty in AI benefits and risks. It will also work with partners to develop and provide an AI curriculum and training for parliamentarians and diplomats on the continent.
* Encourage Member States to adopt education strategies and plans that integrate AI's positive and negative implications.
* Promote the sharing of good experiences among its Member States in developing skills for the AI era.
* Incorporate mechanisms for upskilling teachers and faculty in AI benefits and risks. It will also work with partners to develop and provide an AI curriculum and training for parliamentarians and diplomats on the continent

**Associated Actions**

* Assess skills requirements in the field of AI in Africa, paying attention to basic education, higher education the workforce and special AI skills needed to build a critical mass of experts trained in machine learning, data sciences and AI ethics.
* Promote the development of model AI curriculums and training toolkits (e.g., for educators, diplomats, parliamentarians, journalists, civil servants and the public).
* Promote sharing of experience and resources in skills development relevant to AI in Africa.
* Invest in programs that enhance AI skills development and capacity building , establish training initiatives, workshops, and partnerships between universities, research institutions, and the private sector to equip individuals and organizations with the necessary skills to address the potential job displacement and ensure a skilled workforce is available to drive AI-related initiatives.

2.4.3.3 Fostering AI Research and Innovation

Research and innovation are critical for optimising AI’s benefits and minimising its risks to Africa. The AI field is one of the most researched and innovative areas of our time. Research on learning and reasoning, perception, representation, speech, and language modelling, as well as investigations on responsible AI and AI safety, is being conducted worldwide in different labs funded by the private and public sectors. Africa invests in AI research insignificantly, and it does not show up in citations in leading AI journals or in patents. The United States, China, India and Europe are global leaders in this area.

Africa needs to conduct its own research to establish its own localised position and support innovation to advance solutions that address challenges identified in Agenda 2063 and Suitable development goals. Aspects such as the preservation of local languages, media and culture and how creative industries can be impacted positively and negatively need to be investigated. Thus, AI research and innovation that takes the African context is critical. Research is also needed to understand the ethical and legal, safety and security implications of AI on African people.

Research and innovation require the presence of highly trained and well-equipped researchers who dedicate their time and energy to investigating the different facets of AI and are open to collaborating globally. Researchers need centres of excellence that are equipped with state-of-the-art tools (GPUs, Cloud, HPC, etc.) and access to data sets to train algorithms. They need funding to participate in AI conferences irrespective of any gender dimensions and purchase and access to resources. Innovation requires creating a thriving AI ecosystem by supporting local entrepreneurship, fostering an academic scientific environment full of ideas, inventions, discoveries and innovation efforts and building partnerships between academia and enterprises. This implies research and innovation in AI will be resource incentives; thus, governments, the private sector and development partners must provide funding to facilitate responsible AI solutions that address Africa’s social and economic challenges.

**High-Level Recommendation for Facilitating AI Research and Innovation in Africa**

* Support the mapping of AI research gaps in Africa to facilitate research and innovation and address the continent's unique challenges.
* Encourage AI research across the continent and foster collaboration between regional centres of excellence, collaborating and conducting responsible AI research and innovation. Identify sectors of opportunity for establishing AI testbeds and experimentation.
* Stimulate and develop user-centred research on how users optimize their use of AI and generative AI in light of media and information literacy.
* Support researcher and development of innovative products around Media and Information Literacy by design, that generative AI enabled Media and Information Literacy learning in the classroom, outside classrooms as well as in digital spaces.
* Support the development expansion and establish partnership with relevant Media and Information Literacy research group and think tanks in Africa and globally. Build research and innovation capabilities, including access to datasets and compute platforms.
* Provide training and development opportunities to a new generation of researchers, innovators, and entrepreneurs, and promote collaboration between academia, industry, and research entities.
* Strengthen regional collaboration by building inclusive, interconnected, collaborative, and interdisciplinary research and innovation ecosystem.
* Facilitate access to African researchers and innovators to global knowledge exchange and capacity building programs through collaborations with the global academic and innovation ecosystems.
* Mobilise technical and financial resources to facilitate researchers’ and innovators’ access to funding and testbed and connect with international partners.
* Facilitate international collaborations in AI research and development to address global challenges in agriculture, healthcare, education, infrastructure, energy and climate change, and address ethical and safety issues related to AI.
* Support AI innovation and research in specific areas, such as local languages, creative industries and media on the continent.
* Promote international cooperation on AI research and innovation to ensure that African researchers work jointly with global players while protecting the researchers and innovators on issues around intellectual property,
* Develop incentives and support schemes, as well as policies that aim at a balanced gender participation in AI research in academia, gender representation on digital and AI companies’ top management positions, boards of directors and research teams and ensure that public funds (for innovation, research and technologies) are channelled to inclusive programmes and companies, with clear gender representation, and that private funds are similarly encouraged through affirmative action principles.

**Associated Actions**

* Map AI research gaps in Africa to facilitate research and innovation and address the continent's unique challenges.
* Create mechanisms to facilitate collaboration between regional centres of excellence to increase collaboration and conduct responsible AI research and innovation.
* Raise AU Member States’ awareness and engagement in responsible AI research and innovation.

2.4.3.4 Information Integrity, Media and Information Literacy (MLI)

As Africa is embracing AI as a revolutionary and very disruptive technology, there is a need to ensure the integrity of Information and sustain trust in the use of AI Systems and platforms. The responsible and ethical use of AI should also cover media and information literacy that stimulate critical thinking, lifelong learning, global citizenship, freedom and autonomy and cultural competencies

There is a growing concern regarding risks stemming from the proliferation of illegal and harmful content online that is being exasperated with the emergence of Generative AI systems that contribute to the spread mis-information, dis-information and hate speech that negatively impact people wellbeing, social cohesion within countries, the right to access to accurate information as well as disrupting national economies and democracies.

AI is having significant impact on people’s engagement with information, digital technology, and media. It raises concerns about control - human agency to choose the type of information or content that they want to see, what freedoms are people losing, and whether they are making decisions independently when engaging with AI, knowingly or unknowingly. This reality reinforces the urgency for stakeholders to ensure that all citizens or users have access to media and information literacy - competencies that enable them to access, analyse and evaluate information, as well as critically assess their use of digital technologies.

UNESCO calls this media and information literacy. As noted above, African countries recognize that people require a combination of soft skills for civic engagement, as well as hard digital skills such as programming/coding. In the age of AI-powered digital platforms and technological devices, the need for media and information literacy is becoming increasingly important in equipping people with the necessary knowledge, skills, and attitude to not only mitigate risks but also capitalize on the opportunities that AI presents.

Furthermore, media and information literacy empower people participate in discussions about AI use in their daily lives, influencing AI development. However, there is a lack of wide-scale sustainable media and information literacy training for all. UNESCO has published recommendations in Policy Brief: User empowerment through media and information literacy responses to the evolution of generative artificial intelligence (GAI).

• **Magnifying mis- and disinformation:** One cause for concern is the potential for AI driven platforms and technological devices to spread misinformation. These systems, relying on pre-existing data, may inadvertently or programmed to intentionally produce inaccurate or biased information. Users must be media and information literate to independently verify the information obtained from AI platforms.

• **Source reliability:** While AI-driven digital platforms and technological devices utilize various sources for information, the reliability of those sources must be carefully assessed. The training data may contain both credible and untrustworthy information, and the platform may struggle to differentiate between them. Users should be trained to assess trusted sources for verification using media and information literacy.

• **Deepening of information silos:** AI-driven digital platforms and technological devices have the unintended consequence of reinforcing pre-existing beliefs and biases, potentially creating filter bubbles or echo chambers. This limit exposure to diverse points of view and can sometimes fuels intolerance, discrimination, hatred and gender inequalities. A key aspect of media and information literacy is to provide techniques and empower users to seek alternative viewpoints, consult multiple sources, and to actively see and dialogue from the informational perspective of others.

• **Loss of people’s privacy and data rights**: People frequently, whether knowingly or unknowingly, sacrifice their privacy and data rights online to gain access free products and services. For the first time, the United Nations took an historic step in 2017 by making a direct link between rights to privacy, freedom of expression and the right to free, unhindered development of one’s personality. AI-driven digital platforms and technological devices are making it increasingly difficult to achieve this goal. When done correctly, promoting media and information literacy for all helps people understand how data and information are created, collected, stored and used, as well as the consequences. Creating media and information literate societies in Africa helps people to understand how they come to know and learn. Media and information literacy for all is necessary for a people-centred approach to technological development so that they too, can hold digital platforms and the media accountable for their data and privacy policies while also understanding the needs for sustainable, transparent and viable models.

• **Opportunities for lifelong learning:** People’s participation and critical engagement in sustainable development process is contingent on their having the necessary competencies and tools. AI offers many benefits to individuals in areas including health, security, justice, climate change and other environmental issues, research, crisis management, economic empowerment and so on. When promoting public discourse and training on AI, it is common to focus on the negative aspects. As necessary as it is to address the worry risks of AI, we should also educate people on the benefits of AI, new information flows and digital technologies in general. Media and information literacy for all peoples in Africa is needed to show user how to use technology wisely and the benefits of AI for social and lifelong learning if deployed transparently.

**High-Level Recommendations**

* Support the development of national Media and Information Literacy Policies by Member States of African Union
* Localize, implement and monitor the model resources developed by UNESCO and international partners: Media and Information Literate Citizens: Think Critically, Click Wisely (Curriculum for Educator and Learners) and the Global Standard for Media and Information Literacy Curricula Development Guidelines.
* Raise awareness on AI implications on the integrity of information and stimulate the integration of Media and Information Literacy at the primary, secondary, tertiary education (including teacher education) as well as outside of schools such as in digital spaces

**Proposed Actions**

* Finalize and operationalize the African Union Regional Media and Information Literacy Framework which is being prepared with the support of UNESCO.
* Facilitate Media and Information Literacy training of all government officials and policymakers including through openly access tools like the UNESCO Deep Dive for Policymakers in Media and Information Literacy Online Course.
* Commemorate the annual Global Media and Information Literacy Week, incorporating the African Coding Week to sustain policy dialogue and awareness raising of Media and Information Literacy and AI in African societies.
* Develop multistakeholder Media and Information Literacy programmes and campaigns for their constituencies so individuals are not inadvertently distributing, reacting to, or interacting with harmful generated false content.
  + 1. Minimising the Risk for a Responsible, Safe and Secure AI in Africa

In contemporary African settings, both the benefits and risks of AI are readily apparent. To address the ethical, legal and societal implications of AI, safeguards, awareness raising and agile and comprehensive AI governance systems and regulations are needed.

For Africa to mitigate and manage the risks of AI on its economy and society, and ensure that AI respects human rights and dignity, inclusion, culture and values, safety, security, and environmental and ecosystem sustainability, government institutions, civil society, academia and industry should adopt a collaborative and balanced approach between innovation and security to promote AI for good and social benefits effectively.

2.4.4.1 Gender Equality, Inclusion and Diversity in AI

Current AI systems and practices demonstrate that the technology may pose serious risks to women and girls as well as to marginalised, vulnerable and underrepresented groups in Africa, particularly women, as well as to the Continent’s rich diversity of languages and cultures. The proliferation of generative AI models in the English language, which demonstrate a kind of domination of advanced countries worldviews, threatens African cultural systems and linguistic diversity.

Special efforts are needed from continental, regional and national agencies and governments to ensure that the development and adoption of AI are inclusive and benefit all Africans, empower women and girls , underrepresented groups and respect Africa’s cultural and linguistic diversity. AI must bring about equal benefits to everyone in Africa and bridge the AI divide. In particular, opportunities exist to develop AI solutions to support persons with disabilities in participating in social and economic activities and to encourage the development of AI solutions that can understand and interact in local languages, enhancing accessibility and usability for a wider population.

**High-Level Recommendations**

* Establish an AI observatory and support Member States in establishing an AI governance framework and risk-based regulations.
* Ensure that the adoption and development of AI across Africa is inclusive, benefits everyone, especially women and girls , underserved and marginalised groups, and respects the rich cultural and linguistic diversity of the Continent.
* Develop AI technologies for the benefit of persons with disabilities and vulnerable communities and promote investment in natural language processing capabilities in local African languages.
* Ensure that gender stereotyping and discriminatory biases are not translated into AI systems, and instead identify and proactively redress these. Efforts are necessary to avoid the compounding negative effect of technological divides in achieving gender equality and avoiding violence in the digital environment such as harassment, bullying or trafficking affecting mainly girls and women and under-represented groups.

**Associated Actions**

* Support the development of AI capabilities in local African languages, including supporting digitalisation efforts for low-resourced languages.
* Support the tailoring of AI applications to address the specific challenges of rural and remote areas and their people and communities, such as agriculture and healthcare needs (as outlined under Pillar 1 above).
* Explore the development of AI innovations for vulnerable persons and groups to enable equal access to AI resources and opportunities.
* Ensure that women are empowered by AI development, deployment and use, including incentivising women-led AI innovations and entrepreneurship.
* Develop and implement policies on harassment-free environments, together with the encouragement of the transfer of best practices on how to promote inclusiveness and diversity throughout the AI system life cycle.
* Support AU Member States to prioritise AI R&D and adoption for persons with disabilities to enhance access and participation.
* Launch a regional AI Leadership Academy for Women and youth working in AI across the Continent.
* Adopt governance mechanisms to ensure that AI does not negatively impact marginalised, vulnerable or underserved populations by conducting ex-ante and ex-post impact assessments to identify, measure, mitigate and address any adverse impacts the rollout of an AI system may have or is having on these groups.

2.4.4.2 Addressing AI Safety and Security

It is imperative that AI systems developed and used within Africa are safe and secure. This means that non-authorised and maleficent actors cannot access them, that no data breaches occur, and that security breaches, when and where they do occur, are identified timeously, resolved and isolated to ensure no further incidents occur. Ensuring safe and secure AI systems is essential for building public trust in AI.

The safety and security of AI are important dimensions for Africa due to the unique challenges that it poses to African democracy, economy, day-to-day life and social welfare of the African people. AI can potentially be used to disseminate misinformation, fake news, hate speech and disinformation, multiple forms of technology-facilitated gender-based violence, as well as illegal surveillance, which threatens the credibility of democratic processes and increases violence in the continent. Machine learning and Deep Learning safety and security risks of AI in Africa must be assessed on an ongoing basis to allow AU member states to protect the population and national interests of African countries. Generative AI and Large Language Models (LLM) are advancing at a rapid pace and creating new sets of safety and security challenges and generating and disseminating harmful stereotypes that need to be mitigated through transparent AI systems and well-informed regulations and guidelines. Some of these threats include: [[33]](#footnote-33)

* Risks in the digital sphere (e.g., cyber-attacks, fraud, scams, impersonation, child sexual abuse images, technology-facilitated gender-based violence and illegal surveillance);
* Risks to political systems and societies – e.g., the proliferation of synthetic media eroding democratic engagement and public trust in the institutions of government and
* Physical security risks as Generative AI becomes embedded in more physical systems, including critical infrastructure and military systems.

Mitigating AI security and safety risks requires concerted global efforts, building regional and national capabilities to assess and identify, protect, detect, respond and recover from threats in digital space, political systems and societies and AI integration in physical systems and critical infrastructure. There is also a need for upgrading national cybersecurity capabilities and strategies in line with the impending risks posed by AI solutions and developing toolboxes for analysing, auditing and protecting the information systems.

There are also other risks in the military domain, whether in the context of autonomous weapon systems or the broader weaponisation of AI. There is a risk that complex AI systems could escalate conflicts by incorrectly predicting conflict, thus triggering a feedback loop in which each actor increases its threat posture in response to the increased threat posture of others.

Discussions on AI risks to peace and security are just beginning at the global level, for example, through the United Nations, countries have begun to develop national AI and defence strategies.  However, African countries' participation in multilateral discussions and negotiations on AI and peace and security is limited. The impact of AI on Africa's peace and security requires more research.

**High-Level Recommendations**

* Ensure the highest standard of AI safety and security across the Continent, and coordinate to address AI’s potential impact on and implications for peace and security
* Assess AI's impact on peace and security on the continent, including enhancing Africa's participation in global governance in this area.
* Put in place effective regulatory systems for AI-based surveillance technologies, particularly those that compromise the work of groups that are at the forefront of defending other rights.

**Associated Actions**

* Establish an expert group to assess AI's impact on peace and security on the continent, including promoting and enhancing Africa's participation in global governance in this area.
* Raise awareness and build Member States' capacity on AI and peace and security.
* designate a centre of excellence on AI safety and security that will conduct thorough analyses of risks within the digital space and to the political systems, democratic institutions and critical infrastructure in Africa.
* Review and upgrade national cybersecurity capabilities and strategies in line with the risks posed by AI.
* Establish a knowledge base on AI safety and security to facilitate the sharing of knowledge to enable Member States to use the information to reduce AI risks and maximise its benefits.
* host an Annual Conference on AI Safety and Security in Africa, addressing different emerging themes and discussing solutions.
* support member states to develop data security and privacy measures, and implement robust security and cybersecurity measures and ensure compliance with data protection regulations and AI developments,
  + 1. Public Sector and Private Sector Investment in AI

While global investment is important, AI development in Africa should primarily depend on investment by African governments and the private sector within the continent to ensure sovereign AI capabilities. Some governments have already taken steps in financing AI by creating national AI institutes, establishing centres of excellence in universities and funding innovative startups AI solutions. Financing from the African private sector remains insignificant and, thus, needs to be improved.

Governments can also play a critical role in creating a conducive enabling environment for research and innovation opportunities to attract more AI actors and investment opportunities. A successful AI investment agenda could lead to a boom of African AI start-ups and innovation hubs. The availability of open government data can also fuel innovative solutions. Thus, the government should play a role in establishing policies on open data, taking practical steps in conducting data asset inventories and making a wide range of publicly held data available for innovation.

**High-Level Recommendations**

* Create an enabling policy and regulatory environment to attract Investments in AI
* Develop a toolkit for the government and private sector on their roles and responsibilities in driving AI in the continent.
* Declare AI a national priority and encourage Member States to mobilise domestic resource by engaging their private sector and making AI a part of community social responsibility.

**Associated Actions**

* Create a toolkit on AI investment that can be used by the public and private sectors to increase investment in AI at the national levels.
* Raise public and private sector awareness of AI investment at national and sub- regional levels. RECs can play a key role in encouraging the public and private sectors to increase financing in AI in their respective regions.
  + 1. Regional and International Cooperation on AI

There are important rationales for regional and global cooperation in AI development and regulation. Collaboration and coordination among AU Member States, as well as international dialogues and partnerships, are important for sharing experiences, resources and capabilities in the field of AI.

AI has become a powerful force reshaping the landscape of international cooperation as emerging global crises such as food security, climate change, and Pandemics demand innovative solutions. AI is playing a pivotal role in addressing complex issues that transcend borders and requiring cooperation across various domains and actors.

2.4.6.1 Intra-Africa Coordination on AI

AI has a wide range of cross-border challenges, including the flow of AI-dependent data and applications across borders. AI risks are also shared globally. Countries also benefit from economies of scale in building skills, sharing compute platforms and reaping the benefits of research and innovation. Regional cooperation and coordination are, therefore, important for maximising the benefit of AI for the population in Africa, minimising risks, sharing resources, and innovative applications for development.

There are a wide range of areas for coordination and cooperation between AU Member States:

* **Exchange of experience in the development and implementation of AI Strategies –** AU Member States can benefit from the experience of countries that have already developed AI policies and strategies, such as Benin, Egypt, Mauritius, Rwanda, and Senegal and those that have crafted their national data strategies that underpin AI development. Countries in the process of crafting their AI strategies, like Botswana, Kenya, Ethiopia, Nigeria, South Africa and Tunisia, can benefit from a wide range of approaches to AI development in leading countries. Others can benefit from the experience of existing AI strategies and processes underway in several countries.
* **Data exchange—**Regional cooperation in open data can spur AI development, acknowledging data as a central input to AI solutions and the importance of data systems' interoperability to a flourishing African digital single market.
* **Synergies for innovation and impact:** AU Member States can connect AI capacity enhancement actions with Media and Information Literacy training, digital platform governance and digital transformation capacity initiatives, among others to generate more sustainable impact and fuel innovation and cost effectiveness.
* **Research and Development Collaboration –** Researchers in Africa need easier access to compute platforms, large data sets, and storage that may not readily be available in most countries. Regional cooperation and coordination in research and development are therefore important to share resources and benefit from research outcomes. AI solutions are characterised by collaboration; it is therefore important for countries to collaborate and compete.
* **Knowledge and expertise sharing –** Regional cooperation is essential to facilitating knowledge sharing in AI solutions and safety and security risks that have cross-border implications. Therefore, it is important to facilitate the exchange of knowledge among AU Member States in exchanging AI expertise and best practices within the continent and globally to accelerate innovation and avoid duplication of efforts.

**High-Level Recommendations**

* establish multistakeholder and multidisciplinary policy dialogues on diverse issues of AI in Africa,
* create platforms for the exchange of experience in the development and implementation of AI strategies, ethical guidelines that draw on international norms and standards.

**Associated Actions**

* Facilitate the creation of a virtual platform for the exchange of knowledge on different topics of AI in Africa.
* Integrate AI into the agenda of major AU gatherings including different ministerial meetings and the Summit of Heads of States.
* Establish a regional instrument to guide data sharing and exchange, and cross-border data transfers for AI in line with the Malabo Convention and AU Data Policy Framework.
* Provide visa-free arrangements for persons with AI-related skills, to facilitate the exchange of AI expertise across the Continent.
* Collaborate with UNESCO and build on the sub-regional Forums that gather AU, RECs and other international partners, aiming at facilitating the exchange of ideas, the development of strategic frameworks and encouraging an increased use of AI at the national and regional levels.

2.4.6.2 Fostering Partnership between Africa and Other Regions and Countries

Africa’s partnership with all global actors, including the public and private sectors, is essential to ensure AI serves its people. Africa has over 1.46 billion people, 18% of the global population, half of whom are online and impacted by AI solutions at the global level. Thus, international cooperation and engagement are critical to ensure the safe use of AI solutions.

International cooperation between Africa and the rest of the regions and countries in the north and global south is critical to:

* Address the ethical, safety and security risks of AI.
* Leverage experience and expertise and build multi-stakeholder collaborations in the development and implementation of AI solutions that have a positive impact on humanity.
* Exchange data (e.g. geospatial and satellite data that are critical for training climate change models,
* Increase interaction between research and academic institutions and startups in Africa and other regions to collaborate on the development of joint AI solutions that have positive implications for humanity and address ethical challenges.
* Mobilise international financial and technical assistance not only among government and development institutions but also from private sector players that often leverage data generated by African users of digital solutions.

There is a need to initiate concerted efforts to engage with multilateral, bilateral and private-sector institutions to facilitate the implementation of the Continental AI strategy. It will engage global partners and mobilise funding for the actions outlined in the strategy to facilitate the implementation of its member states' national AI strategies.

**High-Level Recommendations**

* Prepare communication documents and proposals on engaging partners and financing AI for social and economic development in Africa
* Mobilise funding for AI for social and economic development and implementation of the continental AI strategy.

**Associated Actions**

* Engage with multilateral and bilateral institutions and countries on AI issues on an ongoing basis. This may include seeking technical and financial assistance, coordinating AI solutions, and addressing data and governance issues.
* Engage with the global private sector on AI issues in Africa. This may involve r technical and financial assistance, coordinating AI solutions, and addressing data and governance issues
* develop AI Financing Stratefy to accelerate its Implementation and to support Member States’ efforts to implement their national AI strategies.
* Mobilise regional and international development funds, with private and philanthropic funding, to create a regional fund for responsible AI development,
* Organise two forums on financing responsible AI for Africa, the first forum will be held at the beginning of 2025 and the second in 2027.

2.4.6.3 Strengthen African Participation in Global AI Gouvernance

International cooperation and negotiations on AI are taking place in various bilateral, plurilateral and multilateral forums, including the United Nations, UNESCO, Council of Europe, the EU, the Global Partnership on AI (GPAI), the Group of Seven (G7), the Group of Twenty (G20), the Inter-American Development Bank (IDB), ASEAN, the International Telecommunications Union (ITU), the OECD and the World Bank.

However, it is worth noting that AI is being discussed in different forums hosted mainly by developed countries and so far, Africa has a limited representation and presence in global AI governance discussions. A number of challenges limit Africa’s participation in these global forums. Most meetings are held in cities in developed countries, where the cost of travel is high, and access to visas may be another barrier. Other challenges include a lack of information on the events that discuss AI issues that affect the lives of the majority of people on the continent. Some technical discussions are also inaccessible to experts in Africa due to a lack of capacity on AI technical and policy issues. Another challenge is the brain drain, as experts from Africa are found to be at the center of discussions during these international forums.

Initiatives that build the capacity of diplomats, Political leadership of AU organs and decision-makers will also contribute towards increasing Africa’s participation in global governance. The AU will also endeavour that African institutions are represented in all forms of discussion on AI issues affecting the lives of people.

**High-Level Recommendations**

* Facilitate the establishment of an African Alliance on AI as a political block to lead Africa’s multilateral engagement in global debates and decision-making around AI governance and future planetary and existential risks of AI,
* Advocate for more cohesive and inclusive global governance that increases the participation and contribution of African countries to the decisions that might affect millions on the continent.
* Build the capacity of potential participants in international discussions from institutions like the Ministries of ICT, Communication and Innovation, and Digital Economy in Africa, African diplomats, and the Political leadership of AU organs on AI governance issues.
* Disseminate information on major AI events and ensure the participation of African stakeholders namely academia, civil society, the private sector and others who may be affected by AI developments.
* Organise online consultative and multistakeholder workshops prior to major global events. This will allow the private sector, civil society, decision-makers and academia to discuss the issues at stake and build consensus on African voices and common positions.
* Leverage AU Membership in G20 to establish strategic partnerships on AI and work towards bridging the digital and technological gap between Africa and other regions.
* Integrate AI as a tool and a topic in the national and regional foreign policies

**Associated Actions**

* Establish an African Alliance on AI, which will bring together high-level representatives from Member States and RECs and the Political leadership of AU organs to advance Africa participation in Global AI debates and foster regional cooperation and collective action on AI, raise awareness and support knowledge sharing among Member States.
* Ensure AU Member States bid for hosting global AI events to facilitate knowledge sharing and increased participation of African experts.
* Create a portal for upcoming events on AI relevant to Africa.
* Host online discussions prior to major AI events that have implications for Africa. The online discussions will enable Africans to agree on their position and gather input into those events.
* Build the capacities of participants in the global AI discussions, including experts from relevant ministries and diplomats.

# Implementation of AI Strategy

3.1 Building Capacity

The Continental AI Strategy underscores the importance of building capacity at all levels to release the benefits of AI. It places emphasis on the AU and its Implementing Agencies and Specialized Institutions along with RECs, Regional Organizations and Development Partners to play a central role in AI development, deployment and use across Africa. To conduct research and analysis on social, economic and cultural implications of AI as well as safety and security aspects, building a knowledge base on AI solutions for development, organising AI events , developing African AI risk profile and effectively monitoring the implementation of the key recommendations and Actions identified in the AI Strategy, there is a need to build internal capacity at all levels and equip AU , RECs and Regional organisations Staff with the necessary knowledge and tools .

To play their role, the AU, its Implementing agencies and specialised institutions along with regional organisations are expected to be supported via dedicated training on AI and technical assistance that will support the implementation of the different areas of this Continental AI Strategy.,

While AU Member States have the ultimate and critical responsibility in domesticating this Continental AI Strategy and developing and implementing their AI strategies, variations and disparities between AU Member States in key capabilities that underpin AI development, including access to electricity, broadband infrastructure, AI skills, compute platforms, data infrastructure, data legislation, and AI readiness, means that AU's support to its Member States needs to be tailored and adapted to these different contexts.

Further, as part of the implementation, the AU will facilitate coordination between AU Member States and coordinate international engagement with global partners on AI including mobilising e financial and technical resources for priority AI projects.,

**High-level Recommendations:**

* Establish mechanisms and institutions, or empower existing ones, within the African Union to build capacity and render technical assistance to AU Member States for the domestication of this Continental AI Strategy and accelerate its implementation.
* Build capacity within the institutions at the African Union to mainstream AI technologies and solutions in key sectors.

**Associated actions:**

* Develop and implement comprehensive Capacity Building Programs on AI for AU, its Implementing Agencies and Specialized Institutions.
* Develop and implement comprehensive Capacity Building Program on AI for AU Member States

# 3.2 Implementation Plan of AI Strategy

3.2.1 Timeframe for the Implementation of Strategy

The Continental AI Implementation Plan proposes a five-year timeframe between 2025 and 2030 for implementing the actions in the sixteen areas outlined above. The AI strategy will be implemented in two waves.

3.2.2 Summary of Actions and Outcomes

The summary of strategic objectives, actions, primary outcomes, target and indicative KPIs, schedule, and cost are given in Appendix A. The Continental AI Strategy and Implementation Plan proposes a requirement for ZZZ million to enable the AU and its partners to launch and implement regional programmes in coordination with its Member States. The AU and its Member States will invest in and work with all partners to mobilise financing, technical assistance, data and knowledge to promote the harnessing of AI within the context of Agenda 2063. It will mobilise its Member States' efforts through well-articulated national AI strategies. It will accelerate its knowledge management and sharing, which will serve as a basis for engagement and monitoring progress.

3.2.3 Monitoring, Evaluation and Learning

A monitoring and implementation framework based on the tasks identified in this strategy, a portal dedicated to M&E will be set up to accelerate the implementation of the AI strategy. Monitoring and evaluation will also be coordinated with Member States, which will evaluate their progress in implementing their national AI strategies, including information such as budgets, funding, and specific targets. The African Union will also work closely with regional AI observatories that will gather and analyse data based on targets of the continental AI strategy.

Monitoring and evaluation of progress will be assured by:

1. Developing an African AI readiness index with appropriate indicators to monitor the progress of Member States in all priority areas identified in their national AI strategies.
2. Integrating monitoring and evaluating in the implementation of all the actions outlined in this Strategy and Implementation Plan.
3. Conducting a midterm review of the continental AI strategy in 2007 to refine indicators and improve on implementation.

Based on data available from Member States, the African AI observatory, and ongoing studies, the AU will establish a web platform with a dashboard that shows progress in expanding AI benefits for African people, mitigating all its risks and building capabilities in skills, research and innovation, including progress in local development-oriented solutions deployed by start-ups in Africa.

# Annex  :

# AI Definition and Concepts

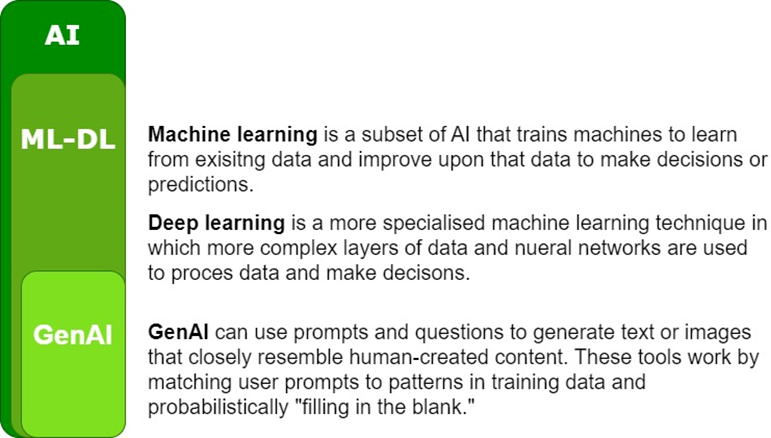
Definition of AI

There is no universal definition of artificial intelligence (AI). Within the framework of this strategy, AI refers to computer systems that can simulate the processes of natural intelligence exhibited by humans where machines use technologies that enable them to learn and adapt, sense and interact, predict and recommend reason and plan, optimise procedures and parameters, operate autonomously, be creative and extract knowledge from large amounts of data to make decisions and recommendations for the purpose of achieving a set of objectives identified by humans .

Developments in AI fall into two main categories: narrow artificial intelligence, or 'weak' AI, and general intelligence, or 'strong' AI.

* Narrow AI systems are designed to perform a specific task. Current AI applications using narrow AI or multiple narrow AIs include speech and image recognition, purchase prediction, targeted advertising, natural language processing, autonomous lethal weapons, and interactive assistants.
* Strong AI refers to a system that can perform the full range of human cognitive tasks. This includes the ability to understand thoughts, motives, intentions and expectations and to interact socially. Such a system does not yet exist.

AI covers a wide range of research approaches and technologies, including Machine Learning, Deep Learning and Generative AI.



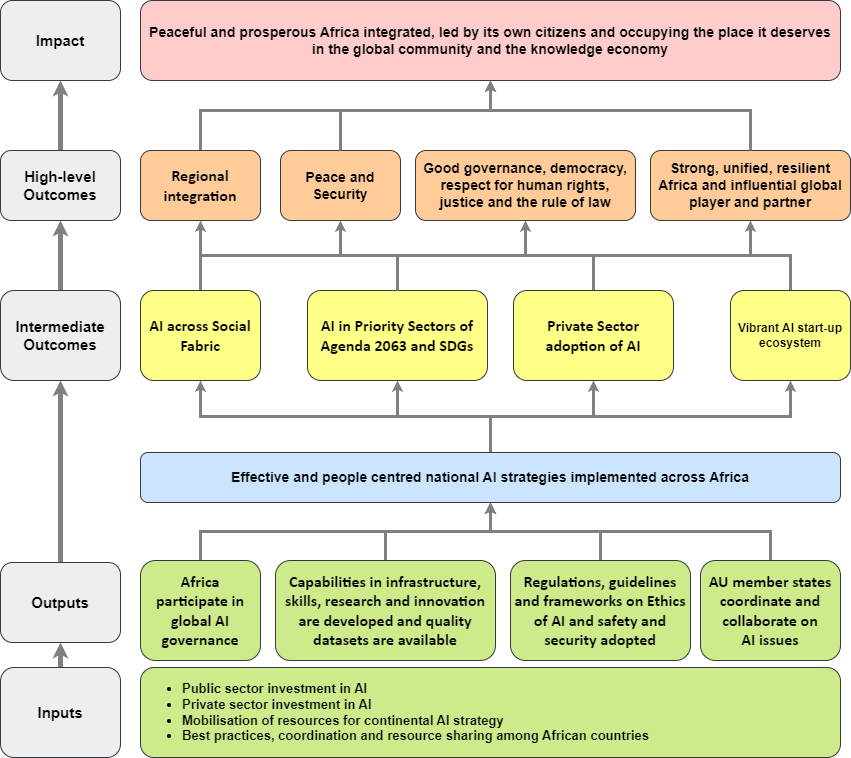
***Figure 7: Subsets of AI***

# Theory of Change

Africa needs to transform its capacity to harness AI for social and economic development. While Africa needs to address the ethical challenges posed by AI globally, it also needs to develop capacities that accelerate the use of AI to address its unique social, economic and climate change challenges.

Figure ***8*** shows a Theory of Change (ToC) for the AI strategy, which outlines the assumptions, inputs, outputs and outcomes. The primary focus of the AI strategy is to use AI technologies to solve African challenges and enable African citizens, including the most disadvantaged, to benefit from increased access to AI solutions and Opportunities to improve their wellbeing, quality of life and access to jobs and opportunities.

The ToC envisages that the AU, in partnership with its development partners, will support coordinated regional efforts to help member states to adopt and effectively benefit from AI systems and tools.



***Figure 8: Theory of Change for AI Development in Africa***

A monitoring and evaluation mechanism will promote the collection of evidence to measure progress in the adoption and use of AI, drawing on the data of the Global Index on Responsible AI, which includes primary data on responsible AI use and development in over 40 African countries.

The ToC assumes that adequate resources are available from public, private and development partners, as well as from the AU itself, to implement regional AI programmes. It also assumes that governments and the private sector within Africa will invest in AI development.

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