AUDA-NEPAD AI CONTINENTAL ROADMAP

A complementary resource to the African Union Continental AI Strategy

AUDA - NEPAD
AFRICAN UNION DEVELOPMENT AGENCY

APET
African Union Panel on Emerging Technologies

About the AU and AUDA-NEPAD

The African Union (AU)

The African Union (AU) is a continental body consisting of all 55 countries on the African continent. It was established on 26th May 2001 in Addis Ababa, Ethiopia, and launched on 9th July 2002 in South Africa to replace the Organisation of African Unity (OAU). The AU was established following the 9th September 1999 Sirte Declaration of the Heads of State and Governments of the Organisation of the African Unity (OAU). The Assembly of the African Union makes the most important decisions of the AU, a semi-annual meeting of the Heads of State and Governments of its member states. The AU's secretariat, the African Union Commission, is based in Addis Ababa, Ethiopia. The AU is based on a common vision of a united and strong Africa and on the need to build a partnership between governments and all segments of civil society, in particular women, youth, and the private sector, to strengthen solidarity and cohesion amongst the peoples of Africa. As a continental organisation, it focuses on the promotion of peace, security and stability. The development work of the AU is guided by the AU Agenda 2063, which is a 50-year plan to harness Africa's comparative advantage to deliver on the vision of "The Africa We Want".

The African Union Development Agency (AUDA-NEPAD)

The African Union Development Agency (AUDA-NEPAD) is a strategic framework for pan-African socio-economic development. AUDA-NEPAD is spearheaded by African leaders to address critical challenges facing the continent, including poverty, development, and Africa's international marginalisation. AUDA-NEPAD provides unique opportunities for AU Member States to take full control of their development agendas, work more closely together and cooperate more effectively with international partners.

AUDA-NEPAD was preceded by the NEPAD Planning and Coordinating Agency (AUDA-NEPAD), which was established in February 2010 as an outcome of the integration of NEPAD into the AU's structures and processes. AUDA-NEPAD manages several programmes and projects in four main investment portfolios, namely Natural Resources Governance; Youth and Skills Development; Regional Integration; Infrastructure and Trade; and Industrialization, Science, Technology, and Innovation.

The African Union High-Level Panel on Emerging Technologies (APET)

The initial Specialized Technical Committee on Education, Science, and Technology (STC-ESTI) called upon the AU Commission and AUDA-NEPAD to guide Member States and RECs regarding technology prospecting, including the necessary regulatory and ethical requirements for Africa to benefit from emerging technologies. The committee mandated the NEPAD Agency to establish a system that would facilitate expert input on technology development, acquisition, and deployment to drive socio-economic growth.

In December 2016, the Chairperson of the African Union Commission, H.E. Dr Nkosazana Dlamini Zuma, appointed a group of ten experts from diverse backgrounds to serve on the African Union High-Level Panel on Emerging Technologies (APET). This panel's primary objective was to harness existing and emerging technologies for Africa's economic advancement. The panel members, who represent a variety of professional fields, provide evidence-based analyses and recommendations to guide policy decisions at continental, regional, and national levels about the utilisation of existing and emerging technologies.

Currently chaired by Prof Yaye Kène Gassama, the High-Level Panel comprises nine leading experts who represent gender and geographical diversity. The panel includes esteemed individuals such as Prof Roseanne Diab, Prof Berhanu Abegaz, Prof Francine Ntoumi, Prof Abdallah Daar, Dr Rachel Chikwamba, Prof Dr Shireen Assem, Prof Karim Maredia, Prof Abubakar Sani Sambo, and Dr William Wasswa. Apart from advising the African Union and its Member States on harnessing innovations and emerging technologies for economic development, the panel also develops strategies, policies, and institutional arrangements to promote and sustain common regulatory approaches for the application of emerging technologies in Africa.

AU High-Level Panel on Emerging Technologies (APET)

Roadmap: Regulation and Responsible Adoption of AI for Africa Towards Achievement of AU Agenda 2063

This Continental Strategy is the product of the African Union High-Level Panel on Emerging Technologies (APET). It is part of a larger effort by the African Union Development Agency (AUDA-NEPAD) to promote knowledge and learning, share ideas and experiences, provide open access to its research, and contribute to development policy and programme interventions. The knowledge featured in the Continental Strategy is considered to have a bearing on the mission of AUDA-NEPAD and its strategic objectives, as aligned to the AU Agenda 2063, which is a Pan-African Vision of an integrated, prosperous, and peaceful Africa, driven by its citizens, representing a dynamic force in the international arena.

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Executive Summary

Artificial Intelligence (AI) is poised to play a transformative role in Africa's economic and social development, shaping industries, governance, and public services. The AI Roadmap for Africa 2025-2030, developed by the African Union Development Agency (AUDA-NEPAD) under the guidance of the AU High-Level Panel on Emerging Technologies (APET), provides a structured framework for the responsible adoption, regulation, and scaling of AI across AU Member States. As a complementary resource to the AU Continental AI Strategy, this roadmap translates high-level policy into actionable steps, ensuring that AI deployment aligns with Agenda 2063, STISA-2034, and the AfCFTA Digital Trade Protocol.

At the heart of this roadmap is a commitment to harnessing AI as a driver of economic growth, digital industrialization, and inclusive innovation. Recognizing AI's potential to accelerate Africa's digital transformation, the roadmap provides a strategic vision for AI implementation, emphasizing economic sovereignty, job creation, digital trade, and ethical governance. Africa's AI adoption must be contextually relevant, addressing pressing socio-economic challenges while remaining competitive in the global AI landscape.

The roadmap is structured around five key pillars that serve as foundational areas for AI adoption. The first pillar focuses on developing human capital, ensuring that AI education is integrated across primary, secondary, and tertiary levels, and that Africa's workforce is equipped with AI, machine learning, and robotics skills. Entrepreneurship and digital literacy are prioritized, with special emphasis on youth and women's participation in AI-driven innovation.

Infrastructure and data form the second pillar, recognizing that AI development requires robust digital infrastructure, data governance models, and sustainable computing ecosystems. The roadmap outlines strategies for expanding high-performance computing (HPC) capacity, strengthening cross-border data-sharing agreements, and developing AI-powered cybersecurity frameworks. Given Africa's energy challenges, the roadmap promotes green-energy-powered AI data centers, ensuring that AI adoption is both scalable and environmentally sustainable.

The third pillar focuses on enabling AI development and deployment by creating harmonized regulatory frameworks, AI governance mechanisms, and self-regulatory compliance models. This includes AI certification standards, regulatory sandboxes, and national AI policies that balance innovation with ethical safeguards. Public awareness campaigns and AI-driven digital public services are also key priorities, ensuring that AI adoption is inclusive and accessible.

Sustainable partnerships and investment mobilization form the fourth pillar, emphasizing the need for continental and international AI collaborations. The roadmap outlines strategies for public-private partnerships (PPPs), venture capital investments, and AI research collaborations between African institutions and global technology leaders. Recognizing that Africa's AI sector remains underfunded, the roadmap calls for the establishment of an AU AI Investment Fund, which will support AI research, infrastructure, and entrepreneurship.

The final pillar focuses on governance and monitoring, ensuring that AI implementation is data-driven, accountable, and aligned with Africa's strategic goals. A continental AI monitoring dashboard will be established to track AI progress across AU Member States, enabling real-time policy adjustments and ensuring compliance with ethical AI frameworks. The roadmap also proposes the creation of an AI Governance Advisory Council, which will provide expert guidance on AI ethics, risk mitigation, and regulatory alignment.

Implementation of the roadmap will follow a phased approach, beginning with short-term milestones (2025-2027), which include establishing AI regulatory structures, launching pilot projects, and expanding AI education programs. The medium-term phase (2028-2030) will focus on scaling AI adoption across key sectors, strengthening AI innovation hubs, and deepening cross-border AI collaborations. Looking beyond 2030, the roadmap envisions Africa as a global leader in AI governance, digital industrialization, and inclusive technological transformation.

Ultimately, the AI Roadmap for Africa 2025-2030 serves as a blueprint for the continent's AI-driven future, ensuring that AI adoption is responsible, ethical, and strategically aligned with Africa's development priorities. Through multi-stakeholder engagement and sustained investment, AUDA-NEPAD and its partners can unlock AI's full potential, positioning Africa as a leader in AI-powered economic transformation and digital innovation.

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1 Introduction

Background & Context

Artificial Intelligence (AI) has emerged as a transformative force capable of accelerating economic growth, enhancing public service delivery, and expanding Africa's role in the global digital economy. The African Union (AU) recognises AI as a crucial driver of industrialisation and development under the Fourth Industrial Revolution (4IR). By leveraging AI, Africa can boost productivity, enhance innovation, and improve access to essential services across multiple sectors, including health, education, agriculture, trade, and governance.

However, despite AI's immense potential, Africa faces significant barriers to widespread AI adoption, including:

- Limited AI infrastructure (e.g., data centres, computing power, and broadband access).
- Inadequate regulatory frameworks for AI governance, ethics, and data protection.
- Skills and capacity gaps, with insufficient AI-trained professionals and limited research investments.
- Funding constraints for AI innovation and digital transformation.

To address these challenges, the African Union Development Agency – NEPAD (AUDA-NEPAD) is spearheading AI implementation across the continent through a structured, multistakeholder approach that ensures AI adoption aligns with Africa's development priorities while fostering an inclusive, ethical, and sustainable AI ecosystem.

Positioning AI within AUDA-NEPAD's Innovation Strategy

AUDA-NEPAD serves as the technical implementation arm of the AU, driving policy coherence and program implementation in line with Agenda 2063. As part of its innovation mandate, AUDA-NEPAD recognises AI as a critical enabler of Africa's digital transformation, economic competitiveness, and industrial growth.

AUDA-NEPAD's AI strategy focuses on:

1. Policy and Governance Supporting the development of national and regional AI policies and regulations to create an enabling environment for AI adoption.
2. AI Infrastructure Investing in AI computing power, national data centres, and broadband connectivity to enhance Africa's AI capabilities.
3. AI Skills and Capacity Development Strengthening AI education, vocational training, and digital skills development to equip Africa's workforce for AI-driven jobs.
4. Investment and Funding Mobilising financial resources through public-private partnerships, AI innovation grants, and venture capital funding.
5. Cross-Sector AI Applications Deploying AI solutions in healthcare, education, agriculture, climate resilience, and governance.

By integrating AI into its broader digital transformation and industrialisation strategy, AUDA-NEPAD aims to accelerate Africa's economic modernisation and position AI as a key driver of socio-economic development.

How the Roadmap Complements the AU Continental AI Strategy

The AU Continental AI Strategy provides a high-level policy framework to guide AI adoption across Member States. This AUDA-NEPAD AI Roadmap (2025-2030) serves as a complementary resource by:

Implementation Focus

Translating policy into action by defining clear steps for implementing AI initiatives across Africa, while providing structured timelines and milestones for AI deployment.

Strategic Alignment

Ensuring AI integration with Agenda 2063, STISA-2034, the AfCFTA Digital Trade Protocol, and the AU Data Governance Framework while defining roles across stakeholders.

Resource Coordination

Mobilising local and international funding for AI research, infrastructure, and capacity building, while establishing AI implementation dashboards and performance indicators.

This roadmap serves as a practical guide for AU Member States to implement AI solutions tailored to their national priorities while ensuring coherence with continental AI governance structures.

Learning from Global AI Strategies While Tailoring Solutions for Africa

AI adoption is advancing rapidly across the world, with many countries investing in national AI strategies, research institutions, and regulatory frameworks. Africa can learn from global best practices while ensuring its AI roadmap is contextually relevant and aligned with African needs.

Key Global AI Lessons for Africa

1

Infrastructure Investment

Countries like China, the U.S., and regions like the EU have built high-performance computing centres, AI research labs, and national data platforms. African countries need to prioritise infrastructure development to support AI innovation.

2

Regulatory Framework

The EU AI Act, OECD AI Principles, and UNESCO AI Ethics Framework emphasise accountability, fairness, and transparency in AI governance. African countries need to establish similar AI governance structures tailored to its socio-economic realities.

3

Inclusive Development

Countries like India and Brazil have used AI for education, digital identity programs, and economic empowerment. African countries need to ensure AI solutions benefit local communities and drive socio-economic inclusion.

4

Collaborative Ecosystem

AI ecosystems thrive where governments, private sector actors, and academia collaborate. African countries need to foster AI hubs, incubators, and research partnerships to accelerate AI adoption.

Purpose & Objectives of the Roadmap

The AUDA-NEPAD AI Roadmap (2025-2030) provides a structured framework for implementing AI policies, infrastructure, and capacity-building efforts across Africa, ensuring ethical, inclusive, and strategic deployment to drive Africa's socio-economic transformation.

1

Short-Term (2025-2027)

- Establish AI governance structures
- Build AI capacity
- Launch AI test projects

2

Medium-Term (2028-2030)

- Expand AI applications across key economic sectors
- Scale AI solutions
- Strengthen AI regulatory mechanisms

3

Long-Term Vision (Post-2030)

- Position Africa as a leading AI innovation hub
- Focus on ethically guided AI deployment
- Advance indigenous AI research

OBJECTIVE 1:Strategic Alignment with Continental Frameworks

Agenda 2063: The Africa We Want

AI positioned as strategic enabler of economic transformation, industrialisation, and digital sovereignty

STISA-2034

AI integrated into Africa's research, innovation, and knowledge ecosystems to accelerate transition to digital knowledge-based economy

AfCFTA Digital Trade Protocol

AI strengthens cross-border digital transactions, ecommerce, and fintech solutions, expanding Africa's role in global trade

This roadmap balances global AI best practices with Africa's specific needs, ensuring AI catalyses development rather than reinforcing digital inequalities. By embedding AI into Africa's digital and industrialisation strategies, this roadmap supports a harmonised, policy-driven approach to AI adoption.

OBJECTIVE 2: Ensure AI Deployment Addresses Africa's Socio-Economic Needs

AI technologies need to contribute directly to Africa's development priorities.

- AI for Agriculture & Food Security Deploying AI-driven precision agriculture, climate monitoring, and automated supply chains to ensure food security.
- AI for Healthcare Leveraging AI for predictive diagnostics, telemedicine, and epidemic tracking to enhance public health systems.
- AI for Education & Digital Literacy Utilising AI-driven adaptive learning platforms, teacher training tools, and automated grading systems to enhance education access.
- AI for Public Services & Governance Implementing AI-powered e-governance platforms, smart city technologies, and public administration automation.
- AI for Climate Resilience Using AI for disaster risk management, energy efficiency optimisation, and climate monitoring.

By ensuring AI solutions are applied in high-impact areas, this roadmap positions AI as a tool for economic empowerment, inclusive growth, and sustainable development.

OBJECTIVE 3: Strengthen AI Governance, Ethics, Infrastructure, and Investment in Africa

AI adoption needs to be accompanied by robust governance mechanisms, ethical safeguards, and strategic investments to ensure responsible AI deployment:

- AI Governance & Policy Frameworks Establishing continental and national AI regulatory frameworks, ensuring data privacy, cybersecurity, and AI ethics compliance.
- AI Infrastructure Development Investing in AI supercomputing centres, national AI datasets, broadband expansion, and cloud computing hubs.
- AI Investment & Funding Mechanisms Mobilising AI investments through publicprivate partnerships, innovation grants, and venture capital networks.
- AI Skills & Capacity Development Strengthening AI education, promoting AI STEM training, and establishing AI research institutes across Africa.

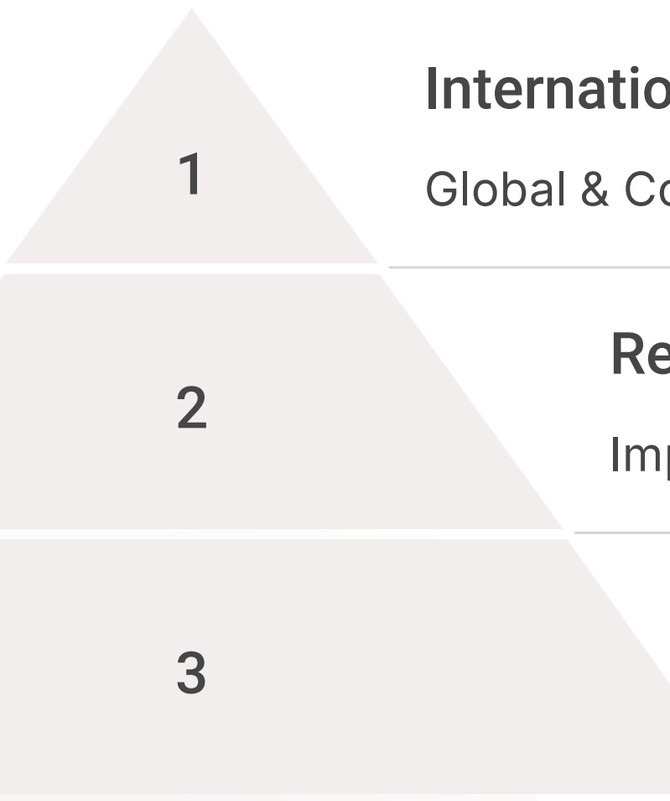
By prioritising AI governance, ethics, and investment, this roadmap ensures that AI adoption is secure, sustainable, and aligned with Africa's digital transformation agenda.

Methodology & Stakeholder Engagement

The AUDA-NEPAD AI Roadmap (2025-2030) is the result of an ongoing multi-stakeholder, evidence-based process designed to ensure comprehensive AI adoption, governance, and monitoring across Africa.

AUDA-NEPAD's Multi-Stakeholder Engagement Approach

AI adoption in Africa requires a collaborative ecosystem, bringing together diverse stakeholders from public, private, academic, and civil society sectors to ensure AI solutions are ethically deployed, economically beneficial, and socially transformative.



International Stakeholders

- African Union organs, including AUDA-NEPAD, Regional Economic Communities (RECs)
- Global technology firms
- International financial institutions
- Media organisations

Regional & National Stakeholders

- National governments & ministries
- Non-Governmental Organisations (NGOs)
- Financial institutions & fintech startups
- Tech hubs, incubators, and AI startups
- Diaspora networks & angel investors

Community-Level Stakeholders

- AI innovators, developers, and entrepreneurs
- Education institutions
- Social media influencers & digital content creators
- End-users (healthcare workers, farmers, students, policymakers)

By mapping and integrating these stakeholders, AUDA-NEPAD seeks to ensure a holistic, inclusive AI governance structure that fosters cross-sector collaboration, policy coherence, and sustainable AI adoption.

Consultation Process and Integration of Best Practices from Global AI Policies

The development of this roadmap was informed by ongoing stakeholder consultations, drawing insights from international AI strategies, global policy frameworks, and lessons from Africa's own AI initiatives. The methodology included:

1. Stakeholder Consultations & Multi-Level Engagements
   - AUDA-NEPAD organised AI policy dialogues, workshops, and expert roundtables across AU Member States and RECs.
   - Hybrid consultation approaches (in-person & virtual) allowed for participation from global AI experts, regional AI innovators, and national policymakers.
   - Key stakeholders included governments, private sector leaders, academia, civil society groups, and partners.
2. Comparative Review of Global AI Strategies & Regulatory Models
   - The roadmap incorporates global AI governance frameworks, including:
     - EU AI Act (AI safety, accountability, risk assessment).
     - OECD AI Principles (human-centred AI, fairness, and transparency).
     - Canada AI Strategy (AI research funding, public-private AI partnerships).
     - China's AI Development Plan (national AI innovation hubs, investment in AI infrastructure).
   - These best practices were adapted to Africa's regulatory landscape to ensure AI adoption is contextually relevant while remaining globally competitive.
3. Data-Driven Policy Formulation & AI Readiness Assessments
   - The AU AI Readiness Index is to be developed, building on existing frameworks to assess AI infrastructure, digital literacy, policy frameworks, and research capabilities across the AU Member States.
   - AI adoption data was collected via national AI audits, stakeholder surveys, and impact assessments to identify key challenges and opportunities.

AUDA-NEPAD's Role in Monitoring and Evaluating AI Adoption

As part of the monitoring of the second ten-year implementation of Agenda 2063, AUDA-NEPAD will establish a structured AI monitoring and evaluation (M&E) framework, ensuring continuous tracking of AI implementation, impact measurement, and policy adaptation. The roadmap outlines:

1. Establishment of AI Implementation Monitoring Mechanisms, building on existing mechanisms like the UNESCO Readiness Assessment Methodology (RAM) and the African Science Technology and Innovation Indicators (ASTII) framework
   - Track AI progress through periodic AI implementation reports, data dashboards, and policy reviews.
   - AU Member States would be encouraged to develop national AI progress tracking systems, reporting AI developments to the AU STYIP Secretariat.
2. AI Performance Indicators & Risk Assessment
   - Key performance indicators (KPIs) include:
     - AI policy adoption rates (number of AU Member States with AI strategies).
     - Investment in AI R&D (percentage of GDP allocated to AI research).
     - AI-driven socio-economic impacts (AI contributions to GDP, AIgenerated employment).
   - Risk assessments focus on:
     - Regulatory gaps (lack of AI laws, weak enforcement of AI ethics).
     - Infrastructure bottlenecks (limited AI computing power, data storage challenges).
     - AI skills shortages (low AI education rates, lack of AI specialists).
3. Adaptive AI Policy Refinement & Continuous Improvement
   - AI policy adjustments will be made based on annual M&E reports, stakeholder feedback, and global AI trends.
   - AUDA-NEPAD will support Member States in refining AI policies to address emerging challenges and leverage new AI opportunities.

By ensuring robust stakeholder engagement, evidence-based policymaking, and real-time monitoring, this roadmap lays the foundation for Africa's AI-driven future, ensuring AI adoption remains inclusive, ethical, and impactful.

2 Strategic Vision for AI Implementation in Africa

2.1 Vision Statement

Africa's adoption of Artificial Intelligence is not merely about technology acquisition; it is about reshaping the continent's economic future, fostering inclusive growth, and positioning Africa as a leader in ethical and responsible AI governance. This roadmap envisions a continent where AI serves as a cornerstone of economic sovereignty, innovation leadership, and sustainable development.

Harnessing AI for Africa's Economic Sovereignty & Innovation Leadership

AI presents a strategic opportunity for Africa to break technological dependency, develop homegrown AI solutions, and lead in AI-driven economic transformation. By investing in AI research, data infrastructure, and digital skills, Africa can leverage its youthful population, dynamic markets, and emerging digital industries to foster an AI-powered economy that is self-sufficient and globally competitive.

Key aspects of Africa's AI-driven economic sovereignty:

These include:

- Developing an African AI ecosystem that prioritises local innovation, indigenous AI solutions, and homegrown data governance frameworks.
- Reducing dependency on foreign AI technologies by investing in local AI research institutions, AI startups, and AI-driven industries.
- Enhancing Africa's AI infrastructure, including data centres, supercomputing facilities, and digital trade platforms to support AI growth across multiple sectors.
- Integrating AI with the AfCFTA Digital Trade Protocol, enabling Africa to compete in global digital markets, enhance e-commerce, and streamline AI-driven cross-border trade.

AI needs to be a tool for Africa's strategic autonomy, ensuring that data sovereignty, ethical AI policies, and digital self-reliance remain central to AI development across the continent.

AI as a Tool for Inclusive Growth, Job Creation, and Industrial Transformation

Africa's demographic advantage—a rapidly growing, youthful workforce—presents an unprecedented opportunity for AI to drive job creation, skills development, and industrial transformation. However, this requires deliberate investment in AI literacy, vocational training, and AI-powered industrialisation initiatives. AI can foster inclusive economic growth by:

- Enhancing productivity and industrial competitiveness through AI-powered automation, smart manufacturing, and supply chain optimisation.
- Creating new job opportunities in AI-related fields, including AI engineering, data science, AI ethics, and AI-driven entrepreneurship.
- Empowering small and medium enterprises (SMEs) by providing AI-driven business intelligence, financial analytics, and digital marketing tools.
- Expanding access to education and training by leveraging AI-powered learning platforms, adaptive education tools, and remote AI-based skill development programs.

To ensure inclusive growth, AI needs to be deployed in a manner that reduces inequality, bridges the digital divide, and enhances opportunities for historically marginalised communities.

Ensuring Africa's Leadership in Ethical & Responsible AI Deployment

As AI adoption accelerates, Africa has the opportunity to set global standards for ethical, human-centred AI development. AI systems need to be designed to:

- Protect human rights, privacy, and data security, ensuring that AI applications adhere to strong ethical frameworks and legal protections.
- Mitigate algorithmic bias and discrimination, ensuring that AI systems do not reinforce inequalities but promote fairness and inclusivity.
- Foster public trust and transparency, ensuring that AI adoption in governance, finance, and public services is accountable, explainable, and ethically grounded.
- Establish Africa as a leader in AI governance, ensuring African voices are influential in global AI policy dialogues on ethics, regulations, and responsible AI deployment.

Africa's AI vision is people-centred, development-focused, and innovation-driven. By integrating AI ethics, policy safeguards, and governance structures, the continent can ensure AI benefits all Africans rather than a select few.

2.2 Strategic Objectives

The AUDA-NEPAD AI Roadmap (2025-2030) sets forth strategic objectives to guide AI implementation across the AU Member States, ensuring AI adoption is responsible, inclusive, and aligned with Africa's socioeconomic priorities. These objectives aim to position Africa as a leader in AI innovation and governance while fostering AI's role in economic growth, digital trade, and public service transformation.

Developing AI-Friendly Policies & Regulations Across AU Member States

Africa's AI ecosystem requires clear, harmonised policies and regulatory frameworks to ensure AI is deployed ethically, safely, and equitably. Currently, AI regulation is fragmented, with varying levels of policy readiness across AU Member States.

Key policy actions:

- Drafting and implementing national AI strategies aligned with the AU Continental AI Strategy and global best practices.
- Establishing legal frameworks for AI ethics, data privacy, intellectual property, and liability laws to safeguard consumer rights and AI accountability.
- Enhancing AI governance through national AI councils to oversee AI development, compliance, and risk mitigation.
- Harmonising AI regulations across AU Member States, ensuring interoperability and cross-border cooperation in AI governance.

These efforts will create a stable, pro-innovation AI policy environment that fosters investment, protects citizens, and accelerates AI deployment across key sectors.

Strengthening AI Infrastructure, Data Governance, and Computing Capacity

AI success depends on strong digital infrastructure, including supercomputers, cloud computing facilities, broadband access, and data governance frameworks. However, Africa faces critical gaps in computing power and data accessibility, limiting AI's full potential.

Key priorities include:

- Expanding AI data centres and supercomputing hubs, ensuring Africa can host and process AI data locally.
- Improving broadband penetration to support AI-driven applications in rural and underserved areas.
- Strengthening data governance policies, ensuring AI operates on high-quality, ethical, and locally relevant datasets.
- Promoting open data initiatives, ensuring AI developers can access non-personal datasets for AI model training.

By addressing Africa's AI infrastructure gaps, this roadmap ensures AI is built on a foundation of high-speed computing, secure data management, and widespread digital access.

Embedding AI in Africa's Education, Health, and Industrial Sectors

AI has the potential to revolutionise key socio-economic sectors, enhancing productivity, efficiency, and service delivery. However, AI adoption remains low in critical sectors such as education, healthcare, and industry.

AI in Education

- Integrating AI into curricula at all levels, from primary education to higher learning.
- Deploying AI-powered EdTech platforms to improve access to education, particularly in underserved regions.
- Upskilling educators and students with AI literacy programs, preparing Africa's workforce for the AI economy.

AI in Healthcare

- Using AI for disease diagnosis, drug discovery, and predictive health analytics to improve healthcare delivery.
- Expanding AI-enabled telemedicine to bridge healthcare gaps in remote areas.
- Enhancing pandemic preparedness with AI-driven epidemiological modelling and data analytics.

AI in Industry & Manufacturing

- Leveraging AI for smart manufacturing, predictive maintenance, and automation to boost Africa's industrial output.
- Expanding AI applications in agriculture, including precision farming, soil analysis, and supply chain optimisation.
- Developing AI-powered financial inclusion tools, enabling SMEs to access AI-driven credit scoring and fintech solutions.

By embedding AI into Africa's high-impact sectors, this roadmap ensures AI adoption translates into real-world socio-economic benefits.

Positioning AI as a Key Driver of AfCFTA & Digital Trade Expansion

AI will play a pivotal role in transforming Africa's digital trade landscape, enabling crossborder e-commerce, fintech growth, and AI-driven supply chains.

Key interventions include:

- Integrating AI into AfCFTA's Digital Trade Protocol, facilitating seamless crossborder digital transactions and e-commerce automation.
- Expanding AI-driven fintech solutions, improving financial inclusion and enabling AIpowered payment systems.
- Leveraging AI for customs automation and trade logistics, enhancing efficiency in Africa's trade ecosystem.
- Strengthening Africa's AI-powered cybersecurity frameworks, ensuring safe and secure digital transactions.

By aligning AI with AfCFTA's digital economy goals, Africa can establish itself as a leader in AI-driven trade innovation and fintech growth.

Establishing Investment Mechanisms for AI Research, Startups, and Capacity Building

AI development requires sustained investment, yet funding for AI research and startups remains limited across Africa. This roadmap outlines strategic investment mechanisms to ensure Africa's AI ecosystem receives the capital and resources needed to thrive.

Key investment priorities include:

- Launching an AU AI Investment Fund, providing grants and seed funding for AI research and innovation hubs.
- Incentivising private sector investment in AI startups, encouraging venture capital, impact funds, and AI incubators.
- Expanding AI capacity-building programs, offering AI research fellowships, training initiatives, and industry partnerships.
- Creating AI public-private partnerships, ensuring sustained funding for AI research, ethics governance, and skills development.

By mobilising investments in AI research, startups, and talent development, this roadmap ensures Africa builds a globally competitive AI economy.

3 Alignment with AU Frameworks & Continental Strategies

3.1 Policy Linkages & Synergies

Africa's AI strategy needs to be embedded within existing continental policy frameworks to ensure coherence, sustainability, and practical implementation. The AUDA-NEPAD AI Roadmap (2025-2030) aligns with major AU frameworks that drive digital transformation, industrialisation, trade integration, and cybersecurity. This section highlights the strategic linkages between AI development and key AU policies, reinforcing AI's role in Africa's long-term socio-economic progress.

Agenda 2063 – Digital Transformation & Industrialisation Roadmap

Agenda 2063: The Africa We Want serves as the continental master plan for socioeconomic transformation over 50 years (2013–2063). It prioritises digital innovation, infrastructure development, and industrialisation, recognising AI as a key driver of Africa's economic competitiveness and knowledge-based economy.

Key AI Policy Linkages under Agenda 2063:

- AI for Economic Growth & Job Creation AI contributes to industrial automation, smart manufacturing, and workforce development, aligning with Agenda 2063's aspirations for economic diversification and job creation.
- Digital Transformation & AI-Enabled Governance AI supports e-governance, digital public services, and smart cities, promoting transparency and efficiency in government operations.
- Innovation-Led Industrialisation AI fosters technology-driven industries, agritech advancements, and sustainable energy solutions, supporting Africa's ambition for selfreliance and global competitiveness.

By integrating AI into Agenda 2063's flagship programs, Africa can leverage digital technologies for sustainable growth, infrastructure modernisation, and socio-economic development.

STISA-2034 – AI's Role in Research, Innovation, and Knowledge Economies

The Science, Technology, and Innovation Strategy for Africa (STISA-2034) serves as Africa's roadmap for research-driven industrialisation and technology-driven economic transformation. It recognises AI as a transformative tool for fostering a knowledge-based economy and strengthening Africa's global position in science, technology, and innovation (STI).

AI Policy Linkages under STISA-2034:

- AI for Research & Development (R&D) Promoting AI-powered scientific discoveries, data analytics, and automation in STI sectors.
- AI & Higher Education Expanding AI education, research institutions, and capacitybuilding programs to foster a competitive AI workforce.
- AI in Healthcare & Agriculture Supporting AI-driven disease modelling, medical diagnostics, and climate-smart agriculture for food security and public health innovation.
- AI-Powered Infrastructure & Digital Economy AI enhances smart grids, automated logistics, and intelligent urban planning, reinforcing STISA-2034's goal of industrial expansion through digital technologies.

Through STISA-2034, AI will accelerate Africa's digital knowledge economy, promote entrepreneurship, and drive scientific innovations that position the continent as a global leader in AI research and industrial development.

AfCFTA Digital Trade Protocol – AI for Cross-Border Trade & E-Commerce

The African Continental Free Trade Area (AfCFTA) is the world's most significant free trade agreement, designed to enhance intra-African commerce, drive industrialisation, and create a unified digital economy. The AfCFTA Digital Trade Protocol provides the regulatory framework for AI-driven trade automation, cross-border data flows, and digital finance integration.

AI Policy Linkages under AfCFTA:

- AI for Trade Efficiency AI-powered customs automation, trade analytics, and supply chain optimisation enhance Africa's trade competitiveness.
- E-commerce & AI-driven Marketplaces AI enables real-time pricing, automated customer service, and fraud detection in digital trade platforms.
- AI for Financial Inclusion AI-driven fintech solutions, blockchain applications, and smart contracts expand digital payment ecosystems.
- Cross-Border AI Governance AI-driven compliance systems streamline regulatory harmonisation across AfCFTA's trade zones.

By aligning AI adoption with AfCFTA's digital trade framework, Africa can leverage AI for increased market efficiency, trade expansion, and digital financial growth.

AU Data Governance & Cybersecurity Frameworks – Ethical AI & Data Protection

Data governance and cybersecurity are critical pillars of AI development, ensuring data privacy, security, and ethical AI deployment. The AU Data Policy Framework and the Malabo Convention on Cybersecurity establish Africa's regulatory foundation for data protection, digital identity systems, and responsible AI governance.

AI Policy Linkages under AU Data & Cybersecurity Frameworks:

- AI & Data Sovereignty Strengthening local data centres, cloud computing regulations, and AI data-sharing policies to promote African digital independence.
- AI Ethics & Bias Mitigation Implementing AI fairness, algorithmic accountability, and bias detection models to ensure equitable AI systems.
- AI & Cybersecurity AI enhances threat detection, cybersecurity intelligence, and digital forensics to counter cyber threats across Africa's digital economy.
- Cross-Border Data Governance AI-powered regulatory systems support secure crossborder data flows, trade compliance, and digital identity verification.

By embedding AI into AU's data governance frameworks, Africa can ensure ethical AI use, protect personal data, and strengthen cybersecurity infrastructure for AI-powered economies.

3.2 AI's Role in Existing Sectoral Strategies

AI is a cross-cutting enabler that can accelerate the implementation of key AU sectoral strategies by fostering digital transformation, industrial innovation, and skills development. The AUDA-NEPAD AI Roadmap (2025-2030) aligns with existing sectoral policies to ensure AI adoption enhances education, workforce development, research, and digital economy expansion.

Continental Education Strategy for Africa (CESA 2026-2035)

CESA envisions an inclusive, technology-driven education system to equip African students with 21st-century skills. AI plays a transformative role in achieving CESA's objectives by expanding digital learning, personalising education, and strengthening education systems.

AI-Powered Digital Learning

AI-driven adaptive learning platforms, intelligent tutoring systems, and automated grading improve learning outcomes.

STEM & AI Skills Development

AI is integrated into primary, secondary, and higher education curricula to ensure students acquire coding, data science, and AI competencies.

AI for Teacher Training

AI-based teacher support tools, professional development platforms, and virtual training programs enhance teaching quality.

AI in Educational Governance

AI-powered data analytics and predictive modelling help governments improve education planning, resource allocation, and dropout prevention.

African Continental TVET Strategy (2025-2034)

The African Continental TVET Strategy emphasises AI-driven workforce training and technical skills development to align with Africa's industrial and digital transformation goals.

AI-Integrated TVET Training

AI-powered vocational training tools, augmented reality (AR), and virtual reality (VR) simulations provide hands-on technical skills development.

AI for Workforce Upskilling

AI-based learning platforms, career forecasting tools, and competency mapping systems help workers acquire job-relevant skills.

Smart TVET Institutions

AI enhances TVET school management, student tracking, and job placement systems.

AI for Informal & Rural Workforce

AI-enabled mobile learning and digital training programs ensure skills development reaches remote and underserved populations.

Strategic AI Initiatives & Partnerships

AU-EU Innovation Agenda

The AU-EU Innovation Agenda fosters Africa-Europe collaboration on AI research, industrial applications, and digital skills development.

Joint AI Research Programs

Africa-EU partnerships on AI-powered health, agriculture, climate resilience, and manufacturing solutions.

AI Startups & Entrepreneurship

Promoting AI startup incubation, cross-border AI funding, and technology transfer between African and European AI hubs.

Skills Mobility

Collaborative AI training, fellowships, and AI PhD programs strengthen Africa's AI talent pool.

Infrastructure Investment

Africa-EU partnerships facilitate AI data centres, computing clusters, and AI innovation hubs across Africa.

AU Digital Transformation Strategy

The AU Digital Transformation Strategy (2020-2030) envisions Africa as a single digital market, with AI technology hubs driving innovation.

Digital Public Services

AI facilitates e-governance, innovative infrastructure, and automated administrative systems.

Smart Africa Initiatives

AI accelerates the Smart Africa initiative, fostering AI research labs, digital innovation hubs, and pan-African AI policy coordination.

Fintech & Digital Trade

AI enhances digital financial services, mobile banking, and blockchain-based trade platforms.

Cross-Border Collaboration

AI promotes harmonised digital regulations, datasharing agreements, and cybersecurity frameworks across AU Member States.

By aligning these strategies, Africa ensures a unified, AI-driven digital economy while leveraging international partnerships to reinforce its position as a global leader in digital innovation.

4 AI Implementation Pillars

Strategic Pillar 1: Developing Human Capital for AI

The successful adoption and deployment of AI in Africa depend on a robust human capital base with the necessary skills, knowledge, and innovation capacity. The AUDA-NEPAD AI Roadmap (2025-2030) underscores the urgent need to equip Africa's current and future workforce with AI education, technical expertise, and digital entrepreneurship capabilities. This strategic pillar lays the foundation for Africa's full participation in the global AI revolution while ensuring inclusive, equitable, and sustainable development.

Strengthening AI Education & Training from Primary to Tertiary Levels

AI education needs to be integrated into Africa's formal and informal learning ecosystems to create a steady pipeline of AI-skilled professionals. The roadmap recommends:

- Incorporating AI into school curricula from primary to tertiary levels, ensuring students develop AI literacy, computational thinking, and data analytics skills.
- Investing in STEM education with an AI focus, particularly in robotics, coding, machine learning, and data science.
- Establishing AI-focused research institutions and university programs, offering degrees in AI ethics, machine learning, and intelligent systems.
- Encouraging interdisciplinary AI education, integrating AI concepts into healthcare, agriculture, business, and public policy programs.
- Providing AI learning opportunities for informal sector workers, ensuring broader workforce participation in AI-powered economies.

AI education needs to be accessible, inclusive, and tailored to Africa's diverse linguistic and socio-economic landscape, ensuring no one is left behind in AI transformation.

Upskilling Africa's Workforce in AI, Machine Learning & Robotics

To future-proof Africa's workforce, AI upskilling programs need to equip workers with industry-relevant AI skills. The roadmap recommends:

- Developing large-scale AI training programs targeting public and private sector employees, entrepreneurs, and researchers.
- Encouraging AI certifications and specialised training, ensuring professionals gain hands-on experience in AI application domains.
- Supporting continuous AI learning through online courses, AI boot camps, and selfpaced AI training initiatives.
- Fostering AI apprenticeships and industry collaborations, enabling graduates to transition seamlessly into AI careers.

AI upskilling is crucial for ensuring Africa's workers, policymakers, and innovators can fully leverage AI for economic growth and societal benefits.

Fostering AI Entrepreneurship & Digital Skills Development

AI entrepreneurship is essential for Africa's digital industrialisation. This roadmap calls for:

- Establishing AI innovation hubs and incubators, supporting startups developing AIdriven solutions for local challenges.
- Facilitating access to AI funding and investment, ensuring AI entrepreneurs can scale their innovations regionally and globally.
- Creating AI public-private partnerships, linking research institutions, businesses, and governments to accelerate AI commercialisation.
- Expanding AI digital entrepreneurship programs, equipping youth and women-led businesses with AI-driven digital transformation strategies.

These efforts will ensure Africa harnesses AI to build competitive, innovative digital economies while empowering local AI talent and enterprises.

Encouraging Diasporic Engagement & Partnerships in AI Research

Africa's global AI leadership depends on leveraging expertise from its diaspora. The roadmap recommends:

- Strengthening AI collaboration with African researchers abroad, ensuring knowledge transfer and AI innovation flows into Africa.
- Creating incentives for AI experts in the diaspora to invest in Africa, including AI venture capital networks and AI-focused research grants.
- Building/Strengthening Africa-based AI Centres of Excellence, attracting diaspora researchers and AI professionals to contribute to local AI ecosystems.
- Fostering global AI knowledge exchange programs, connecting Africa's AI talent with leading AI institutions worldwide.

By tapping into the African AI diaspora, the continent can accelerate innovation and strengthen its AI research capacity.

Increasing Women & Youth Participation in AI-Driven Innovation

AI needs to be inclusive and gender-responsive to ensure women and youth play a central role in Africa's AI transformation. The roadmap calls for:

- Expanding AI education programs for women and girls, addressing gender gaps in AI literacy, coding, and machine learning.
- Launching AI mentorship and leadership initiatives for young African innovators, fostering a new generation of AI-driven entrepreneurs.
- Supporting AI research grants for women-led projects, ensuring gender inclusion in AI research, policymaking, and industry leadership.
- Developing AI networks for African youth, providing access to AI hackathons, innovation labs, and startup accelerators.

Strategic Pillar 2: Infrastructure & Data as Foundations for AI

The AUDA-NEPAD AI Roadmap (2025-2030) recognises that robust AI infrastructure and data ecosystems are foundational to AI development, deployment, and scalability. AI systems require high-performance computing power, cloud infrastructure, broadband connectivity, and extensive data repositories to function optimally. However, Africa faces significant gaps in digital infrastructure, data governance, and cross-border data exchange, limiting AI's full potential.

This strategic pillar focuses on expanding AI computing infrastructure, strengthening data governance, and ensuring Africa's AI ecosystems are resilient, secure, and sustainable.

Expanding Africa's AI Computing Infrastructure & Cloud Ecosystems

AI's computational demands require specialised high-performance computing (HPC), cloud services, and scalable data centres. However, most African nations lack sufficient computing resources and access to cloud-based AI services is limited.

Key Interventions:

- Developing high-performance computing (HPC) centres to support AI research, training, and innovation across the continent.
- Expanding cloud computing ecosystems, enabling universities, startups, and enterprises to leverage AI computing power without high infrastructure costs.
- Improving broadband and fibre optic networks to ensure fast, low-latency AI processing for government services, businesses, and research institutions.
- Building AI-dedicated data centres to reduce reliance on foreign-owned AI infrastructure, ensuring data sovereignty.

A strong AI computing backbone is necessary for advancing AI research, supporting innovation, and enabling AI-driven public and private sector services.

Investing in National AI Datasets & Open Data Governance Models

AI's effectiveness depends on high-quality, diverse, and accessible datasets. However, many African countries lack structured national AI datasets, and data availability remains fragmented due to regulatory constraints, lack of interoperability, and private-sector data monopolisation.

Create National AI Datasets

Establishing high-quality, inclusive, and ethically sourced datasets aligned with the AU Data Policy Framework

Enable Open Government Data

Promoting AI-driven transparency, accountability, and evidence-based policymaking through open data initiatives

Develop Data-Sharing Frameworks

Facilitating collaboration between governments, research institutions, and private-sector AI developers

Standardize Data Systems

Ensuring AI systems can efficiently integrate data across borders through standardisation and interoperability

An open and well-governed data ecosystem is essential to fuel AI innovations in agriculture, healthcare, education, and trade while protecting privacy and national digital assets.

Establishing Green-Energy-Powered Data Centres for AI Development

AI infrastructure requires significant energy consumption, and most African nations experience frequent power outages, affecting AI system reliability. Traditional data centres contribute to high carbon emissions, making green AI infrastructure critical.

Key Interventions:

- Developing green-energy-powered AI data centres that rely on solar, wind, and hydro energy, reducing AI's carbon footprint.
- Incentivising AI investments in renewable-powered computing facilities, making AI infrastructure cost-effective and sustainable.
- Ensuring reliable energy supply for AI computing systems, using off-grid renewable energy storage and micro-grid solutions.
- Promoting AI for climate change mitigation, using AI to optimise energy efficiency in AI infrastructure and data processing.

By integrating green AI infrastructure, Africa can ensure sustainable AI development without exacerbating energy challenges and environmental concerns.

Strengthening Cross-Border Data-Sharing Agreements & AI Data Security Frameworks

As AI adoption expands, data-sharing agreements and cybersecurity frameworks are crucial for ensuring data security, privacy, and compliance with continental and global AI regulations.

Key Interventions:

- Developing cross-border AI data-sharing policies that align with AfCFTA's Digital Trade Protocol, facilitating secure AI-driven trade and e-commerce.
- Enhancing AI data security frameworks, ensuring AI datasets comply with data protection laws, encryption standards, and cybersecurity protocols.
- Creating Africa-wide AI data governance frameworks, enabling harmonised AI data flows between governments, businesses, and research institutions.
- Promoting AI-driven cybersecurity solutions, using machine learning for real-time AI threat detection, fraud prevention, and digital identity verification.

Strong cross-border AI data policies will enable seamless AI integration into trade, finance, healthcare, and governance, enhancing Africa's global AI competitiveness.

Strategic Pillar 3: Enabling AI Development & Deployment

The AUDA-NEPAD AI Roadmap (2025-2030) underscores the necessity of a comprehensive AI development and deployment ecosystem that includes strong regulatory frameworks, AI entrepreneurship support, inclusive access to AI technology, and public awareness initiatives. This pillar is crucial for ensuring that AI systems are not only developed but also effectively implemented in ways that drive sustainable economic and social progress.

Establishing National AI Policies & Regulations in AU Member States

AI governance requires clear national policies, legal frameworks, and ethical guidelines to regulate AI deployment while ensuring innovation is not stifled. Currently, most AU Member States lack dedicated AI policies, creating regulatory uncertainty.

Key Policy Recommendations:

- Developing national AI strategies aligned with the AU Continental AI Strategy, ensuring consistency in AI governance across Africa.
- Amending existing laws (e.g., data protection, consumer rights, IP laws) to incorporate AI-specific considerations.
- Encouraging AI risk-based regulatory models, classifying AI applications into highrisk, medium-risk, and low-risk categories for tailored regulatory oversight.
- Establishing National AI Councils to oversee AI policy implementation and provide technical advice to governments.

By strengthening AI policy frameworks, AU Member States can foster responsible AI innovation while mitigating risks such as bias, data misuse, and algorithmic discrimination.

Creating Self-Regulatory AI Certification & Compliance Mechanisms

AI systems need to be accountable, transparent, and ethically aligned with African values. To achieve this, Africa needs to develop self-regulatory AI compliance models that complement statutory regulations.

Proposed AI Compliance Measures:

- Developing AI certification standards, requiring AI developers and companies to adhere to ethical AI principles before deployment.
- Encouraging AI self-regulation, allowing industries to develop sector-specific AI governance models while adhering to overarching AI regulations.
- Establishing AI Regulatory Sandboxes, providing AI startups and enterprises with a controlled environment to test and validate AI models under regulatory supervision.
- Promoting AI transparency audits, ensuring that AI decision-making systems are fair, unbiased, and explainable.

AI certification will enhance public trust and ensure AI applications are safe, ethical, and aligned with Africa's development goals.

Encouraging Local AI Startups & Innovation Hubs

Africa's AI entrepreneurship ecosystem needs to be nurtured through funding, incubation programs, and innovation clusters. Currently, African AI startups face funding gaps, limited access to computing infrastructure, and regulatory hurdles.

Key Recommendations for AI Startups & Innovation Hubs:

- Establishing AI-focused Digital Innovation Hubs (DIHs) to provide AI entrepreneurs with mentorship, funding opportunities, and business development support.
- Providing tax incentives for AI startups, ensuring financial sustainability for AI-driven businesses.
- Supporting AI accelerators and incubators, linking AI startups with research institutions, venture capitalists, and international investors.
- Developing national AI investment funds, ensuring African AI entrepreneurs have access to seed funding, R&D grants, and venture capital.

By scaling AI startup ecosystems, Africa can position itself as a global hub for AI innovation and digital entrepreneurship.

Democratising Access to AI Technology & Digital Public Goods

AI needs to be accessible to all Africans, not just governments, corporations, or elite institutions. This requires intentional policies to democratise AI knowledge, infrastructure, and digital tools.

Key Interventions:

- Providing Open AI Infrastructure, ensuring public institutions, universities, and small enterprises have affordable access to AI computing power and datasets.
- Promoting Open-Source AI Models & Algorithms, reducing Africa's reliance on foreign AI technologies while fostering indigenous AI innovation.
- Developing AI-driven public services, integrating AI into healthcare, education, agriculture, and governance to benefit all citizens.
- Expanding AI literacy programs, ensuring the general public, SMEs, and civil servants are equipped with foundational AI knowledge.

By democratising AI technologies, Africa can ensure AI adoption drives inclusive development and reduces technological inequalities.

Enhancing Public Awareness of AI's Socio-Economic Potential

AI's impact extends beyond technology—it is an economic, social, and cultural phenomenon. However, many African communities remain unaware of AI's transformative potential.

Public Awareness Strategies:

- Launching AI public awareness campaigns, educating citizens on AI's role in governance, healthcare, and education.
- Engaging the media and influencers to popularise AI literacy through storytelling, documentaries, and digital content.
- Developing AI community learning hubs, ensuring marginalised populations gain access to AI literacy programs.
- Integrating AI discussions into national policy dialogues, ensuring governments prioritise AI in development strategies.

A well-informed society is more likely to embrace AI, advocate for responsible AI governance, and participate in AI-driven economies.

Strategic Pillar 4: Creating a Conducive Economic Climate for AI

A thriving AI ecosystem requires a strong economic environment, with sustained investments, regulatory incentives, and trade integration mechanisms. The AUDA-NEPAD AI Roadmap (2025-2030) prioritises the development of AI-friendly investment models, venture capital ecosystems, and trade facilitation strategies, ensuring that AI becomes a major driver of Africa's digital economy and industrialisation efforts.

Establishing AI Investment Funds & Venture Capital Mechanisms

Despite AI's potential to transform Africa's economy, funding remains a major barrier. African AI startups often struggle to secure early-stage funding, limiting their ability to scale and commercialise AI innovations. The roadmap emphasises the need for structured investment frameworks to stimulate AI entrepreneurship and attract global investors.

Key Investment Strategies:

- African Union AI Investment Fund A proposed $200 million fund to support AI research, startups, and AI-driven industrial solutions.
- Public-Private AI Investment Partnerships, leveraging government-backed AI grants, venture capital funds, and private equity firms.
- Regulatory sandboxes to create controlled environments for AI startups to test solutions, reducing investment risks for venture capitalists.
- Tax incentives and subsidies for AI startups, ensuring financial sustainability and encouraging long-term AI research investments.

By expanding AI investment mechanisms, Africa can bridge the funding gap, create a vibrant AI startup ecosystem, and accelerate AI adoption across key sectors.

Incentivising AI Adoption Across Key Sectors Like Trade & Industrialisation

AI is a key enabler of economic growth, with the potential to revolutionise trade, industrial manufacturing, and logistics. However, many African businesses lack the incentives to integrate AI into their operations.

Key Policy Interventions:

- AI-driven industrialisation incentives, including tax breaks for companies integrating AI in smart manufacturing, supply chains, and automated logistics.
- AI in trade facilitation, leveraging AI-powered customs automation, predictive analytics, and supply chain optimisation.
- AI integration into public procurement, ensuring government contracts favor AI-driven solutions for digital governance and infrastructure projects.
- Corporate AI investment credits, encouraging multinational companies to invest in AI startups and digital talent development.

By aligning AI incentives with Africa's industrial and trade policies, this roadmap ensures AI becomes a catalyst for economic expansion, job creation, and digital competitiveness.

Promoting AI-Driven Economic Transformation Through AfCFTA Integration

The African Continental Free Trade Area (AfCFTA) provides a unique opportunity to integrate AI into Africa's digital trade and economic policies. However, AI adoption across AfCFTA remains limited, with fragmented AI regulations and lack of interoperability between digital trade systems.

Key AfCFTA AI Integration Strategies:

- Standardising AI trade policies across AU Member States, ensuring harmonised AI regulations, data governance laws, and AI-driven trade facilitation mechanisms.
- Developing AI-powered digital marketplaces, enabling cross-border e-commerce and AI-driven fintech solutions.
- AI in trade logistics, deploying predictive analytics for demand forecasting, automated customs processing, and real-time trade monitoring.
- Facilitating AI-driven fintech growth, using AI to enhance digital payments, fraud detection, and credit risk assessment for businesses operating under AfCFTA.

By integrating AI into AfCFTA's economic framework, Africa can leverage AI to unlock intra-African trade, boost industrial productivity, and enhance market efficiency.

Hosting AI Trade Shows & Investment Summits

To increase AI visibility, attract investors, and foster AI collaboration, Africa needs dedicated AI trade exhibitions and investment summits. Currently, there is no centralised AI trade platform for African startups, researchers, and policymakers.

Proposed AI Trade Show Model:

- Annual African Union AI Trade Show, showcasing AI-driven innovations, emerging startups, and research breakthroughs.
- Investment matchmaking through AI deal rooms, connecting investors with AI entrepreneurs and fostering startup financing opportunities.
- AI-driven industry panels and policy dialogues, discussing emerging AI trends, funding models, and regulatory developments.
- AI investor roadshows, bringing venture capital firms, policymakers, and AI entrepreneurs together to drive AI commercialisation.
- Establish an African Union AI Challenge for Start-Up Companies to Leapfrog AI Innovation and Commercialisation

By hosting AI investment forums, trade shows, and networking summits, Africa can elevate its AI sector, attract global investors, and accelerate AI commercialisation across industries.

Strategic Pillar 5: Building Sustainable AI Partnerships

AI partnerships are fundamental to Africa's long-term AI growth, providing financial, technological, and policy support necessary for AI ecosystem development. The AUDA-NEPAD AI Roadmap (2025-2030) emphasises that continental and international partnerships can accelerate AI adoption, drive innovation, and ensure sustainable AI governance across Africa. This pillar prioritises collaboration between governments, industry, academia, and global institutions to position Africa as a leader in AI research, development, and deployment.

Developing Continental & International AI Collaborations

AI development requires cross-border cooperation to maximise Africa's regional innovation potential, ensure data sovereignty, and enhance AI trade opportunities. Currently, Africa lags in international AI partnerships, with only a few AI-focused agreements in place.

Key Strategies for AI Collaborations:

- Strengthening Africa-wide AI cooperation, aligning national AI policies with the AU Continental AI Strategy to promote AI research and innovation across the continent.
- Enhancing AI partnerships between AU Member States, enabling AI policy harmonisation and the free flow of AI talent, research, and investments.
- Engaging international AI research institutions, fostering joint research on AI ethics, machine learning, and AI-driven solutions for African challenges.
- Participating in global AI governance frameworks, ensuring Africa's interests are represented in United Nations, OECD, and ITU AI regulatory discussions.

By developing robust AI partnerships, Africa can leverage global AI expertise, secure funding for AI infrastructure, and promote responsible AI innovation.

Strengthening Public-Private Partnerships in AI Research & Development

Public-private partnerships (PPPs) play a crucial role in AI growth, ensuring that African governments, universities, and businesses work together to advance AI solutions. However, many African governments lack the expertise and funding needed to support AI research independently.

Key AI PPP Strategies:

- Developing AI innovation hubs, encouraging private-sector investment in AI research, incubation, and commercialisation.
- Co-funding AI R&D initiatives, leveraging resources from government agencies, private corporations, and AI research institutions to create African-led AI solutions.
- Establishing and/or strengthening existing AI Centres of Excellence, linking universities and tech companies to train Africa's next generation of AI researchers.
- Encouraging corporate AI funding programs, requiring multinational corporations to invest in AI capacity-building initiatives in Africa.

By strengthening AI PPPs, Africa can build a self-sustaining AI ecosystem that balances government support with private-sector expertise.

Encouraging AI Investment from Global Tech Companies

Africa's AI sector needs large-scale investment from both local and global AI stakeholders. While international AI companies like Google, Microsoft, and IBM have AI R&D centres in Africa, investment levels remain low, and local AI startups struggle to attract funding.

Key Strategies to Attract AI Investment:

- Creating AI investment incentives, offering tax breaks, co-funding opportunities, and regulatory support for foreign AI investors.
- Developing AI venture capital funds, mobilising global tech companies to co-invest in African AI startups and innovation hubs.
- Encouraging multinational AI R&D expansion, ensuring tech companies establish AI research partnerships with local universities and businesses.
- Linking Africa's AI sector with global AI investment networks, positioning African AI firms as high-potential investment opportunities.

Attracting global AI investment is crucial to scaling AI development in Africa, funding AIdriven solutions, and ensuring Africa becomes a competitive AI hub.

Facilitating AI Knowledge-Sharing Across Africa & the Diaspora

Africa's AI progress depends on knowledge transfer, particularly between African AI experts, the African diaspora, and international AI research institutions. However, Africa currently lacks AI knowledge-sharing platforms, preventing efficient AI collaboration.

Key Knowledge-Sharing Strategies:

- Creating African AI Knowledge Hubs, connecting AI researchers, developers, and policymakers to exchange expertise.
- Expanding AI education exchange programs, facilitating African AI researchers' participation in global AI fellowships and PhD programs.
- Hosting AI knowledge-sharing conferences, ensuring African AI experts contribute to international AI policy discussions.
- Engaging the African AI diaspora, leveraging diaspora networks to bring AI expertise, funding, and mentorship to Africa's AI sector.

By facilitating AI knowledge-sharing, Africa can strengthen its AI research ecosystem, attract diaspora talent, and accelerate AI-driven innovation.

Strategic Pillar 6: Monitoring & Evaluation of AI Strategies

To ensure the successful implementation and continuous improvement of AI strategies across Africa, the AUDA-NEPAD AI Roadmap (2025-2030) prioritises the development of comprehensive monitoring and evaluation (M&E) mechanisms. Effective M&E frameworks enable AU Member States to track AI progress, assess risks, and refine AI policies to maximise socio-economic benefits.

Establishing AI Readiness Indexes for AU Member States

AI readiness assessments provide critical insights into a country's ability to adopt, regulate, and benefit from AI technologies. Africa lags behind global AI leaders, making it essential to establish AI readiness indexes that assess AI adoption, infrastructure, and policy frameworks

Key AI Readiness Actions:

- Developing the AU AI Readiness Index, evaluating AI infrastructure, governance, research output, and workforce preparedness across AU Member States.
- Benchmarking against global AI readiness rankings, comparing Africa's AI development with leading AI economies such as the United States, China, and the European Union
- Assessing digital infrastructure for AI adoption, including access to computing power, cloud storage, broadband connectivity, and AI-driven public services.
- Tracking AI investment trends, analysing public and private sector AI funding allocations across Africa By establishing AI readiness indexes, Africa can identify policy gaps, prioritise AI investments, and support Member States in building AI capacity

Developing AI Impact Assessment Frameworks

AI impact assessments ensure that AI delivers economic, social, and governance benefits while minimising risks. The AUDA-NEPAD AI Roadmap calls for evidence-based AI impact evaluation models that measure AI's contributions to development goals

Key AI Impact Assessment Strategies:

- Creating national AI impact measurement frameworks, aligning with Agenda 2063, STISA-2034, and AfCFTA goals with partners like UNESCO
- Assessing AI-driven job creation and economic growth, evaluating AI's role in automation, digital trade, and industrial innovation with partners like the ILO
- Measuring AI's effect on public service delivery, ensuring AI improves education, healthcare, agriculture, and governance.
- Identifying AI-related risks, including bias, cybersecurity vulnerabilities, and ethical concerns that could impact Africa's digital economy

A standardised AI impact assessment framework will enable AU Member States to optimise AI policies, allocate resources effectively, and ensure AI investments yield tangible benefits

Enhancing Real-Time AI Policy Adaptation & Progress Tracking

AI is a rapidly evolving field requiring continuous policy adaptation to address emerging challenges. Africa needs to implement real-time AI policy monitoring mechanisms to ensure AI governance remains relevant and effective

Key AI Policy Adaptation Measures:

- Developing AI policy dashboards, enabling governments to track AI adoption rates, regulatory updates, and compliance metrics
- Implementing AI regulatory sandboxes, allowing AU Member States to test AI policies and regulations in controlled environments before full-scale deployment
- Leveraging AI for governance monitoring, using AI tools to analyse AI policy effectiveness, identify gaps, and recommend improvements
- Conducting annual AI policy reviews, ensuring AI regulations adapt to technological advancements and emerging ethical considerations

By enhancing real-time AI policy tracking, AU Member States can stay ahead of AI trends, mitigate risks proactively, and foster a resilient AI ecosystem.

Creating an AI Governance Advisory Council for Africa

To ensure strong AI oversight, policy coordination, and ethical compliance, AUDA-NEPAD proposes the establishment of an AI Governance Advisory Council that provides expert guidance on AI-related policies.

Key Functions of the AI Governance Advisory Council:

- Providing policy recommendations on AI strategy implementation, regulatory alignment, and international AI cooperation
- Ensuring AI ethics and compliance, offering guidance on bias mitigation, algorithmic transparency, and AI safety
- Facilitating AI stakeholder engagement, bringing together governments, private sector actors, researchers, and civil society organisations
- Overseeing AI workforce development, ensuring AI capacity-building initiatives align with Africa's long-term economic transformation goals

By creating a dedicated AI Governance Advisory Council, Africa can strengthen AI policymaking, enhance regulatory compliance, and build trust in AI adoption

5 Roadmap for Implementation (2025-2030)

The AUDA-NEPAD AI Roadmap (2025-2030) recommends a structured approach to advancing AI adoption across Africa, aligning with Agenda 2063, the AU Continental AI Strategy, STISA-2034, and the AU Digital Transformation Strategy. The first phase of implementation (2025-2027) focuses on laying the regulatory, educational, and financial foundations needed to drive AI-driven economic and social transformation.

5.1 Short-Term Milestones (2025-2027)

The short-term milestones (2025-2027) will establish the necessary frameworks, policies, and programs to enable AI deployment across AU Member States, ensuring inclusive, ethical, and sustainable AI adoption.

Develop & Implement AI Regulatory Frameworks Across AU Member States

To ensure safe, ethical, and responsible AI adoption, AU Member States will develop and enforce AI-specific policies that support innovation while protecting citizens' rights. These regulations will align with the AU Data Policy Framework and associated frameworks.

Key Actions:

- Establish/strengthen national AI regulatory frameworks ensuring data privacy, cybersecurity, and ethical AI governance.
- Develop continental sectoral AI guidelines aligned with the AU Continental AI Strategy to create harmonised policies across Member States.
- Launch AI regulatory sandboxes for safe experimentation with AI technologies in healthcare, education, finance, and agriculture.
- Strengthen government regulatory capacity to ensure compliance with data protection, intellectual property, and algorithmic transparency.
- Promote cross-border AI cooperation, ensuring interoperability of AI policies under the AfCFTA Digital Trade Protocol.

Establish AI Training Programs in Higher Education Institutions

AI skills development is critical for building Africa's digital workforce. This milestone will focus on mainstreaming AI education across universities, technical training institutes, and research centres, ensuring alignment with the Continental Education Strategy for Africa (CESA 2026-2035) and the African Continental TVET Strategy (2025-2034).

Key Actions:

- Integrate AI and data science curricula into higher education and vocational training programs.
- Develop AI research and innovation centres within universities linked to regional AI hubs and private sector partnerships.
- Provide AI-focused scholarships and fellowships, particularly for women, youth, and marginalised communities.
- Launch online AI learning platforms in collaboration with key institutions and global technology partners.
- Establish AI educator training programs to enhance teacher capacity in AI-related disciplines.

Launch AI-Powered Agriculture, Education, and Healthcare Pilots

Piloting AI applications in agriculture, education, and healthcare will demonstrate AI's transformative impact and provide data for scaling solutions continent-wide. These pilots will align with STISA-2034, the AU-EU Innovation Agenda, and the AU Digital Transformation Strategy.

Key Actions:

- Agriculture: Deploy AI-driven precision farming, smart irrigation, and climate resilience tools to boost food security and productivity.
- Education: Implement AI-powered personalised learning and digital tutoring platforms to enhance foundational literacy and numeracy.
- Healthcare: Introduce AI-assisted diagnostics, predictive analytics for disease outbreaks, and telemedicine platforms to expand healthcare access.
- Cross-sectoral integration: Establish AI-driven data-sharing platforms to ensure AI solutions are locally relevant and inclusive.
- Evaluation and scaling: Develop performance metrics to assess pilot projects and determine scalability for national deployment.

Initiate Africa-Wide AI Investment Funds & Innovation Grants

Ensuring sustainable AI adoption requires investment in AI startups, research, and digital infrastructure. This milestone will focus on establishing dedicated AI investment funds that align with the AU AI Investment Framework and the AfCFTA Digital Trade Protocol.

Key Actions:

- Launch an AU AI Investment Fund to support AI research, startups, and infrastructure projects.
- Develop public-private partnerships to attract venture capital and technology investors.
- Provide AI innovation grants and seed funding to support African-led AI solutions addressing local challenges.
- Establish AI incubators and accelerators, ensuring startups access resources, mentorship, and commercialisation opportunities.
- Create incentives for AI investment, such as tax breaks, subsidies, and innovation funding mechanisms.

By prioritising these short-term milestones, AU Member States will establish a strong foundation for AI governance, skills development, sectoral innovation, and investment mobilisation, driving Africa's AI transformation.

5.2 Medium-Term Milestones (2028-2030)

Building upon the foundations established in the short-term milestones (2025-2027), the medium-term phase (2028-2030) will focus on scaling AI adoption across public services, expanding AI research hubs, and strengthening cross-border AI collaborations. This phase aligns with Agenda 2063, the AU Continental AI Strategy, the Digital Transformation Strategy for Africa, and the AfCFTA Digital Trade Protocol to ensure AI contributes to Africa's digital sovereignty, economic growth, and governance transformation.

Scale Up AI-Driven Public Service Delivery & Governance Solutions

By 2028, AI will be integrated into public administration, e-governance, and digital identity systems to enhance efficiency, transparency, and accessibility across AU Member States. The expansion of AI-powered governance tools will align with the AU Data Policy Framework and the Personal Data Protection Guidelines for Africa to ensure secure, ethical, and citizen-centric AI adoption.

Key Actions:

- Deploy AI-driven public administration tools for automated service delivery, document processing, and predictive governance in key sectors such as justice, taxation, and procurement.
- Expand AI-powered digital identity systems, integrating biometric authentication, blockchain-based citizen records, and AI-assisted fraud detection to strengthen national registries and streamline government services.
- Implement AI in smart city management, leveraging real-time data analytics, IoT connectivity, and predictive urban planning tools to enhance infrastructure efficiency and resource allocation.
- Enhance AI-driven public health systems for real-time disease monitoring, telemedicine expansion, and AI-assisted diagnostics.
- Develop AI-driven citizen engagement platforms using natural language processing (NLP) and chatbots to increase public access to government services, legal aid, and policy feedback mechanisms.
- Promote ethical AI governance, establishing AI compliance frameworks to monitor algorithmic fairness, bias prevention, and transparency in decision-making.

Expand AI Research & Investment Hubs Across African Regions

To position Africa as a global AI leader, there will be an expansion of AI research hubs, innovation ecosystems, and funding mechanisms. This aligns with the AU-EU Innovation Agenda, STISA-2034, and the African Continental TVET Strategy (2025-2034), ensuring AI research commercialisation, capacity building, and job creation.

Key Actions:

- Scale up regional AI centres of excellence, expanding existing research hubs and establishing new AI-focused institutions to drive innovation in machine learning, robotics, and indigenous AI applications.
- Increase AI funding mechanisms, leveraging public-private partnerships (PPPs), venture capital, and AU-led innovation funds to accelerate AI startup ecosystems and tech entrepreneurship.
- Strengthen AI academic-industry partnerships, fostering collaborations between universities, research institutions, and private sector investors to commercialise AIdriven innovations.
- Develop AI research fellowships and exchange programs, supporting African AI talent mobility and diaspora engagement to enhance knowledge transfer and cross-border collaboration.
- Promote localised AI research, ensuring AI applications align with Africa's linguistic, cultural, and socio-economic realities through indigenous language processing, NLP models, and culturally sensitive AI frameworks.
- Expand access to AI supercomputing infrastructure, ensuring universities, research institutions, and startups have access to high-performance computing (HPC) clusters for AI model training and experimentation.

Strengthen Cross-Border AI Collaborations & Trade Applications

AI will play a pivotal role in enhancing intra-African trade and digital economic integration, aligning with the AfCFTA Digital Trade Protocol, the AU Digital Transformation Strategy, and the AU Data Policy Framework.

Key Actions:

- Facilitate AI-enabled trade and customs automation, deploying AI-driven logistics optimisation, smart supply chains, and automated customs clearance systems to enhance cross-border trade efficiency.
- Develop AI-powered financial services, including blockchain-based smart contracts, digital lending platforms, and AI-driven risk assessment tools to support fintech innovation and financial inclusion.
- Establish regional AI governance frameworks, ensuring harmonised AI standards, regulatory interoperability, and data-sharing agreements to enable seamless AI adoption across Member States.
- Promote AI-powered e-commerce platforms, enhancing digital trade, online marketplaces, and cross-border digital transactions with AI-driven personalisation, fraud detection, and automated supply chain management.
- Integrate AI into agricultural trade and food security initiatives, leveraging predictive analytics for market forecasting, AI-powered crop monitoring, and blockchain-based food traceability systems to strengthen regional agribusiness networks.
- Support AI-driven multilingual translation tools, ensuring cross-border trade, legal agreements, and regional commerce are accessible in multiple African languages through advanced NLP models.

5.3 Long-Term Vision Beyond 2030

The long-term vision beyond 2030 envisions Africa as a global AI leader, leveraging ethical and responsible AI innovation to drive economic growth, digital industrialisation, and sustainable development. By building on the short-term (2025-2027) and medium-term (2028- 2030) milestones, Africa will establish itself as a hub for AI-driven economic transformation, inclusive technological progress, and global AI governance leadership.

Africa as a Global AI Leader in Ethical & Responsible Innovation

Africa has the potential to lead the world in ethical and responsible AI governance, ensuring AI systems respect human rights, data sovereignty, and cultural diversity. The AU Continental AI Strategy and AU Data Policy Framework provide a foundation for AI governance models that emphasise transparency, accountability, and equity.

Key Actions:

- Establish Africa as a key player in global AI governance, ensuring African voices shape AI regulatory frameworks at the UN, G20, WTO, and other international forums.
- Lead in AI fairness and inclusivity, developing globally recognised standards for ethical AI that prioritise diversity, non-discrimination, and equity in AI design and deployment.
- Promote AI for social good, ensuring AI is applied in public service, education, healthcare, agriculture, and climate adaptation to address development challenges.
- Expand Africa's AI research ecosystem, strengthening collaborations between African AI institutions and global research centres to advance AI in sectors like climate science, health, and education.
- Leverage Indigenous knowledge in AI development, ensuring AI models reflect African languages, cultural contexts, and problem-solving approaches to foster homegrown innovation.
- Ensure AI accountability and compliance, establishing regional AI governance councils to monitor AI risks, bias mitigation, and responsible AI deployment across the continent.

AI as a Key Driver of Africa's Digital Industrialisation & Economic Growth

AI will be a core enabler of Africa's digital economy, fostering industrial transformation, smart manufacturing, digital trade, and job creation. By 2030 and beyond, AI will power Africa's transition into an innovation-driven, knowledge-based economy, supporting the objectives of the AfCFTA Digital Trade Protocol, the AU Digital Transformation Strategy, and STISA-2034.

Key Actions:

- Accelerate AI-driven industrialisation, leveraging AI-powered automation, robotics, and smart manufacturing to enhance productivity in key industries such as agriculture, mining, energy, and healthcare.
- Expand AI-based digital economies, creating a continent-wide AI innovation ecosystem that drives startups, digital entrepreneurship, and AI-powered financial services.
- Develop AI-powered smart cities, integrating AI in urban planning, infrastructure management, and sustainable energy solutions to enhance livability and efficiency.
- Strengthen AI in financial inclusion, using AI-powered credit scoring, blockchainbased trade finance, and digital payment systems to boost economic participation and SME growth.
- Ensure AI contributes to job creation, supporting reskilling initiatives, AI-powered gig economy platforms, and digital skills development to prepare Africa's workforce for the AI era.
- Facilitate AI-driven cross-border trade, utilising AI for trade logistics optimisation, smart customs processing, and digital trade agreements under the AfCFTA framework.
- Attract global AI investment, positioning Africa as a preferred destination for AI innovation hubs, data centres, and R&D facilities, ensuring AI technologies are developed for local and global markets.

6. Investment & Resource Mobilisation Strategy

AI adoption and scaling across Africa require sustained investment and strategic resource mobilisation to ensure the continent builds AI capabilities, infrastructure, and talent pipelines while fostering an innovation-driven economy. The AUDA-NEPAD AI Investment & Resource Mobilisation Strategy aligns with the AU Continental AI Strategy, the Digital Transformation Strategy for Africa, and the Science Technology and Innovation Strategy for Africa to unlock funding for AI startups, research, and public-private partnerships.

6.1 AU AI Investment Fund & Financing Mechanisms

AI-driven economic transformation requires structured financing mechanisms that will support AI research, infrastructure, and entrepreneurship across Africa. Establishing an AU AI Investment Fund will create a sustainable funding pipeline for AI initiatives and ensure Africa competes globally in AI-driven innovation.

AUDA-NEPAD's Role in Mobilising AI Funding Across Africa

As the continental development agency, AUDA-NEPAD will play a lead role in AI resource mobilisation, ensuring financial sustainability, policy coordination, and investment facilitation. This aligns with its mandate to accelerate innovation, technology adoption, and economic transformation.

Key Actions:

- Establish the AU AI Investment Fund within the African Education Science Technology and Innovation Fund, dedicated to financing AI research, digital infrastructure, and AI-driven enterprises.
- Mobilise funding from AU Member States, securing government commitments to finance AI initiatives through national technology budgets and sovereign wealth funds.
- Engage regional economic communities (RECs) to align AI funding with regional innovation strategies and development priorities.
- Facilitate AI funding for digital public infrastructure, supporting AI-driven egovernance, smart cities, and digital identity solutions.
- Create AI financing models to support AI startups, research centres, and industryacademic partnerships.
- Develop AI financing blueprints for national AI strategies, ensuring member states allocate funds for AI infrastructure and talent development.

Encouraging Private Sector & Venture Capital Investment in AI

Sustained AI development in Africa will require strong engagement from the private sector and venture capitalists, as well as impact investors to finance AI startups, scale innovations, and drive commercialisation.

Key Actions:

- Create AI-friendly investment policies, including tax incentives, reduced import duties for AI hardware, and regulatory support for AI businesses.
- Establish AI startup incubators and accelerators, fostering entrepreneurial ecosystems that connect AI researchers with industry leaders and investors.
- Attract global venture capital investment, positioning Africa as an emerging hub for AI innovation in fintech, healthcare, agriculture, and digital trade.
- Encourage corporate partnerships, leveraging multinational tech companies to invest in African AI infrastructure, data centres, and computing resources.
- Develop AI investment forums and summits, bringing together African governments, investors, and AI innovators to promote AI-driven economic growth.
- Support AI-driven SME financing mechanisms, ensuring that small businesses and entrepreneurs have access to AI funding, loans, and micro-financing tools.

Linking AI Financing to AfDB, African Education Science Technology and Innovation Fund & Development Partners

Africa's AI investment landscape will be strengthened through strategic partnerships with multilateral financial institutions, ensuring that AI projects receive blended financing and longterm sustainability.

Key Actions:

- Strengthen links with the African Education Science Technology and Innovation Fund, ensuring AI initiatives receive seed funding, research grants, and commercialisation support.
- Engage development partners and donors, mobilising financial to fund AI-driven projects.
- Create public-private co-investment funds, where governments, private investors, and international partners collaborate on AI infrastructure and innovation hubs.
- Develop AI financing mechanisms for women and youth, ensuring inclusive access to AI funding for underrepresented groups in the AI ecosystem.

6.2 Ensuring AI Affordability & Accessibility

The successful integration of AI across Africa requires affordable, scalable, and inclusive AI solutions that benefit startups, small and medium-sized enterprises (SMEs), and governments. Given Africa's unique digital landscape, infrastructure constraints, and funding limitations, ensuring AI affordability and accessibility is essential to fostering innovation, enhancing digital transformation, and driving economic growth. This aligns with the AU Digital Transformation Strategy, the AfCFTA Digital Trade Protocol, and the AU Continental AI Strategy, which emphasises equitable access to AI technologies, digital platforms, and cloud infrastructure.

Making AI Adoption Cost-Effective for Startups, SMEs, and Governments

AI affordability is critical for enabling entrepreneurs, SMEs, and public institutions to integrate AI-driven solutions into their operations. High costs associated with AI research, computing power, and skilled talent can create barriers to entry for early-stage innovators, businesses, and government agencies.

Key Actions:

- Create AI subsidy programs and incentives, ensuring startups, SMEs, and public institutions can access AI technologies at reduced costs through tax incentives, grants, and AI-focused innovation funds.
- Develop open-source AI tools, fostering low-cost AI solutions tailored to Africa's economic and social needs, including AI-driven chatbots, automated customer service platforms, and financial inclusion applications.
- Launch AI-as-a-Service (AIaaS) platforms, enabling startups and SMEs to use cloudbased AI solutions without requiring expensive on-premise computing infrastructure.
- Support AI skills development and workforce training, ensuring SMEs and governments can build local AI expertise without relying on costly foreign consultants.
- Promote AI research funding partnerships, allowing universities, startups, and SMEs to collaborate on AI projects with shared infrastructure and pooled resources.
- Facilitate access to affordable AI hardware, ensuring low-cost AI computing devices, GPUs, and edge computing solutions are available to African innovators.
- Expand AI procurement frameworks for public institutions, streamlining government adoption of AI-powered e-governance, healthcare, and education solutions at competitive costs.

Strengthening Africa's AI Cloud Infrastructure & Digital Platforms

AI adoption depends on robust digital infrastructure, including cloud computing services, data centres, and AI-enabled digital platforms that support machine learning, real-time analytics, and automation. Expanding Africa's AI cloud capabilities will reduce computing costs, enhance data security, and improve scalability for AI-driven applications.

Key Actions:

- Expand AI cloud infrastructure, supporting the development of regional AI data centres to reduce dependency on foreign cloud services while improving data storage and computational efficiency.
- Promote public-private partnerships (PPPs) for AI cloud investment, encouraging collaborations between governments, tech companies, and development partners to build affordable, high-performance cloud computing services.
- Establish AI supercomputing hubs, enabling universities, research institutions, and startups to access shared high-performance computing (HPC) resources for AI model training and experimentation.
- Strengthen AI data-sharing frameworks, ensuring seamless interoperability of AI platforms across industries, research institutions, and government agencies while complying with Africa's data protection regulations.
- Support AI-powered digital trade platforms, integrating AI into AfCFTA-aligned ecommerce ecosystems to enhance cross-border trade, logistics optimisation, and AIdriven financial services.
- Leverage AI to optimise connectivity infrastructure, using machine learning for predictive network maintenance, dynamic spectrum management, and 5G deployment planning to enhance digital accessibility.
- Encourage localised AI cloud solutions, developing African-language AI models, NLPpowered customer service platforms, and culturally adaptive AI tools to enhance digital inclusion.

By ensuring cost-effective AI adoption and strengthening Africa's digital infrastructure, AI technologies will become widely accessible, fostering inclusive economic growth, digital innovation, and sustainable AI deployment across the continent.

7 AI Implementation Governance & Monitoring

Effective governance and monitoring are essential for ensuring AI adoption, regulatory alignment, and strategic execution across Africa. The AUDA-NEPAD AI Implementation Framework aligns with the AU Continental AI Strategy, the Digital Transformation Strategy for Africa, and the AfCFTA Digital Trade Protocol to ensure coordinated oversight, accountability, and policy harmonisation across all key stakeholders.

7.1 Institutional Coordination & Oversight

AI implementation in Africa requires multi-level institutional coordination, ensuring alignment between continental, regional, and national entities, as well as active collaboration with the private sector and academia.

AUDA-NEPAD: Lead Agency for AI Implementation

AUDA-NEPAD will serve as the primary coordinating agency responsible for driving AI strategy execution, policy integration, and stakeholder engagement across AU Member States.

Key Responsibilities:

- Oversee the implementation of the AU AI Roadmap (2025-2030), ensuring alignment with Agenda 2063, STISA-2034, and AfCFTA policies.
- Mobilise AI funding, coordinating investments through the AU AI Investment Fund, venture capital initiatives, and development financing mechanisms.
- Monitor AI adoption across Africa, developing continental AI progress indicators and performance metrics for real-time tracking.
- Facilitate AI capacity-building programs, ensuring AI education, digital skills development, and workforce upskilling across government institutions, universities, and SMEs.
- Support AI regulatory frameworks, ensuring harmonised AI governance models across AU Member States while aligning with the AU Data Policy Framework.
- Foster cross-border AI collaborations, strengthening regional AI innovation hubs, cloud infrastructure, and digital platforms.

AUC & RECs: Facilitators of Policy Harmonisation

The African Union Commission (AUC) and Regional Economic Communities (RECs) will play a critical role in policy harmonisation, ensuring that AI frameworks are aligned across national, regional, and continental levels.

Key Responsibilities:

- Develop standardised AI policies, ensuring regulatory consistency across AU Member States to facilitate AI adoption and digital trade.
- Support AI regulatory convergence, aligning AI governance with AfCFTA's Digital Trade Protocol and AU cybersecurity and data protection policies.
- Facilitate AI knowledge-sharing platforms, enabling policy dialogues, AI best practice exchanges, and capacity-building programs among Member States.
- Monitor AI policy adoption, ensuring that national AI strategies are effectively integrated into regional and continental development frameworks.
- Promote regional AI centres of excellence, strengthening AI education, research, and industry-academia collaboration across RECs.

National Governments: AI Adoption & Regulatory Alignment

AU Member States will play a pivotal role in local AI implementation, ensuring AI integration into public services, governance structures, and economic sectors.

Key Responsibilities:

- Develop and enforce national AI policies, ensuring alignment with AU's AI regulatory frameworks and global best practices.
- Invest in AI-driven public services, leveraging AI for e-governance, smart cities, digital healthcare, and education solutions.
- Support AI infrastructure development, investing in data centres, cloud computing services, and digital connectivity.
- Implement AI ethics and accountability measures, ensuring transparent and inclusive AI governance.
- Facilitate AI adoption across industries, supporting SMEs, startups, and corporate enterprises in integrating AI solutions into their operations.
- Monitor AI workforce readiness, ensuring AI education and training programs align with labor market needs.

Private Sector & Academia: AI Research & Innovation Ecosystem

The private sector and academic institutions will be at the forefront of AI research, development, and commercialisation, driving AI innovation and industry growth.

Key Responsibilities:

- Advance AI research and development (R&D), establishing AI innovation hubs, technology parks, and academic partnerships.
- Expand AI entrepreneurship ecosystems, supporting AI startups through venture capital investment, incubators, and accelerators.
- Develop industry-driven AI applications, ensuring AI solutions address key sectors such as healthcare, agriculture, digital finance, and e-commerce.
- Strengthen AI talent development, providing training programs, AI fellowships, and industry-academia collaboration to enhance digital skills.
- Ensure ethical AI deployment, adhering to AU's guidelines on AI fairness, bias mitigation, and responsible AI use.
- Partner with governments on AI infrastructure, co-investing in data centres, AI cloud platforms, and AI-driven cybersecurity frameworks.

By ensuring strong institutional coordination, regulatory oversight, and cross-sector collaboration, Africa will establish a sustainable, inclusive, and globally competitive AI ecosystem.

7.2 AI Monitoring & Evaluation Framework

A robust Monitoring & Evaluation (M&E) framework is essential for tracking AI adoption, measuring impact, and ensuring alignment with continental AI strategies, regulatory frameworks, and economic transformation goals. The AI M&E framework will provide real-time insights into AI implementation across AU Member States, facilitating evidence-based policymaking, investment planning, and regulatory adjustments. This framework aligns with the AU Digital Transformation Strategy, the AU Continental AI Strategy, and the AU Data Policy Framework.

Establishing an AI Implementation Dashboard

A continental AI Implementation Dashboard will serve as a centralised digital platform for tracking AI progress, policy implementation, and technology adoption across AU Member States. The dashboard will be developed and managed by AUDA-NEPAD, in collaboration with the AUC, RECs, and national AI governance bodies.

Key Actions:

- Design an interactive AI Implementation Dashboard, integrating data visualisation tools, AI progress tracking, and performance analytics.
- Collect real-time AI adoption data, leveraging AI-powered data aggregation systems to analyse AI penetration across sectors.
- Monitor AI-related investments, tracking funding inflows, public-private partnerships, and AI R&D expenditures at national and regional levels.
- Assess AI regulatory compliance, ensuring alignment with AU policies on ethical AI, data privacy, and cybersecurity.
- Provide AI performance insights, offering benchmarking reports for policymakers, investors, and AI researchers.
- Enable stakeholder access, ensuring governments, businesses, and academic institutions can utilise dashboard data for decision-making.

Developing AI Progress Indicators & Continental AI Reporting Mechanisms

To ensure consistent and transparent AI monitoring, a set of standardised AI progress indicators will be developed, allowing AU Member States to report on AI advancements, challenges, and policy effectiveness.

Key Actions:

- Define key AI performance indicators (KPIs), including metrics on AI policy implementation, AI workforce development, AI-driven economic growth, and AI ethical compliance.
- Align AI indicators with global benchmarks, ensuring comparability with UN, OECD, and global AI governance frameworks.
- Develop an annual AI Continental Report, summarising AI adoption trends, policy effectiveness, and investment impacts across Africa.
- Facilitate AI reporting by Member States, ensuring standardised data collection and submission to the AU AI Secretariat.
- Enable regional AI data hubs, integrating AI progress reports from RECs, universities, and private sector innovation labs.
- Strengthen AI governance accountability, ensuring national governments regularly update their AI policy implementation status.

Continuous Policy Adaptation Based on AI Adoption Trends

Given the fast-evolving nature of AI, continuous policy adaptation mechanisms will ensure African AI governance remains agile, relevant, and responsive to technological shifts.

Key Actions:

- Develop a dynamic AI policy review process, ensuring AU AI governance frameworks are updated based on new developments in AI technology, ethics, and global AI regulation.
- Monitor AI-driven market disruptions, tracking emerging AI applications in finance, healthcare, education, and public service delivery.
- Engage multi-stakeholder AI dialogues, bringing together policymakers, private sector leaders, AI researchers, and civil society to assess AI's societal impact.
- Adjust AI funding priorities, ensuring AI investment strategies align with new economic opportunities, emerging AI industries, and cross-border AI collaborations.
- Enhance AI policy foresight capabilities, leveraging machine learning-driven trend analysis to anticipate future AI regulatory needs.
- Integrate AI in national development plans, ensuring African governments align AI innovation with economic and industrialisation goals.

Through real-time monitoring, standardised reporting, and adaptive policymaking, Africa will ensure AI governance remains effective, inclusive, and future-ready, fostering a globally competitive AI ecosystem.

8. Annex

Table 1: Proposed Funding Mechanism for Enhancing AI Development in Africa

Funding Mechanism	African Union AI Grant Fund	African Union AI Investment Fund
Goal	Support early-stage and scale-up AI start-ups, AI research	Support equity and debt investment for AI companies, support growth stages
Funding Amount	US$100 million	US$200 million
Duration	5 years	5 years
Allocation	70% to start-ups, 30% to research	Equity and debt investment across funding rounds
Impact	Lower risk for private investors support start-up maturity. Support product-market fit, deployment, scale-up, and growth stages	Facilitates the emergence of African AI unicorns.

Table 2: Examples of Global Governments' Investments in AI Strategies and Their Impact

Case Study	Funding Amount	Impact	Challenges
Pan-Canadian AI Strategy	US$125 million	Increased investment in AI R&D. Increased talent pool. Increased collaboration.	Lack of diversity. Limited data privacy. Misuse of AI
European Union's Digital Europe Programme	€7.59 billion (for 2021-2027)	Increased investment in AI R&D. Increased talent pool. Increased collaboration.	Lack of diversity. Limited data privacy. Misuse of AI.
French Government's €1.5 Billion Investment in AI	€1.5 billion over 5 years	Increased investment in AI R&D. Vibrant and competitive AI ecosystem.	Lack of diversity. Limited data privacy. Misuse of AI.
China Next Generation AI Development Plan	US$2.1 billion government fund	Become a global leader in AI R&D. Strong AI talent pool. Vibrant AI ecosystem.	Young and inexperienced talent pool. Limited data privacy. Misuse of AI.
South Korea's Investment in Advanced AI Chips	US$642.5 million	Creation of new AI chip start-up companies. Development of new AI chip technologies. The attraction of foreign investment.	Industry competitiveness. Capital-intensive. Time-consuming

Table 3: African Union AI Challenge and Its Potential Impact

Initiatives	African Union AI Challenge	Outcomes	Impact
Description	An annual challenge that poses major challenges in Africa across various sectors (e.g., health, agriculture, education, and government services) to spur innovation and find solutions.	Spur innovation and solutions to tough challenges in Africa.	Government support and collaboration with African governments to create supportive policy frameworks.
Winning Prise	Ranges from US$100,000 to US$2 million.	The annual challenge across sectors with a significant prise range of US$100,000 to US$2 million.	Encourage governments to allocate funds to AI initiatives
Participants	Start-up companies and academic institutions can submit their solutions.	Submissions are accepted from start-up companies and academic institutions.	Contributions to AI funds for supporting local start ups.
Objectives	To spur innovation and find solutions to tough challenges in Africa. To advance Artificial Intelligence. To increase the number of actors in the ecosystem.	Advancement in Artificial Intelligence. Increase the number of actors in the AI ecosystem.	Potential support from bilateral and multilateral partners. Corporate social responsibility. Leverage corporate social responsibility initiatives of large corporations in Africa.
Support	Bilateral and multilateral partners can provide support.	Seek partnerships from international multilateral organisations and private organisations. Venture capital firms.	Funding support from bilateral organisations. Partner with venture capital firms specialised in AI investments. Contribution to the AI fund as venture partners.
Model Inspiration	Modelled after the Defence Advanced Research Projects Agency (DARPA) under the US government.	Internet revolutionised communication and access to information. GPS impacted transportation and national security. Stealth technology improved national security.	The internet revolutionised communication and access to information. GPS transformed transportation and national security. Stealth technology enhanced national security.
DARPA Successes	Development of the Internet. Development of GPS. Development of stealth technology.	The Internet facilitates instant communication, provides access to vast information resources, and drives the growth of industries and technologies. GPS enables precise and reliable global positioning, navigation, and timing information, transforming sectors such as aviation, shipping, logistics, and personal navigation to enhance efficiency, safety, and productivity in these industries. Stealth technology minimises radar detection of military assets such as aircraft and ships to offer strategic advantages in military operations, enables more effective and covert missions, bolsters defence capabilities, and influences the balance of power among nations.	DARPA Grand Challenge (2004-2007): Development of autonomous vehicles. DARPA Robotics Challenge (2012-2015): Development of semi-autonomous robots for disaster scenarios. DARPA Lifelong Learning Machines (L2M) Challenge (2021-present): Development of adaptable AI systems.
DARPA Challenges	Controversy over potential misuse. High cost of research and development. Time-consuming development process.	Controversial technologies and potential misuse. High cost of technology development. Time-consuming development process.	DARPA challenges have faced controversy and concerns regarding the potential misuse of the technologies being developed. The research and development process for DARPA challenges involves high costs, which can be a significant barrier to innovation. The development process for DARPA challenges is often time-consuming, requiring extensive resources and expertise.

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