



United Nations
Economic Commission for Africa

ECA WORK ON DIGITAL TECHNOLOGY

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BACKGROUND - Digital Divide

2.6
billion people
offline in the
world

- **2.6 billion** people remain offline, including **63% of Africans**, which amounts to **900 million** people missing out on digital opportunities.
- The African region has the lowest connectivity rates. Among the **25 countries** with the lowest levels of connectivity globally, **21 are situated in Africa**.
- The region's Mobile **coverage gap is more than 3 times the global average**.
- Though fiber optics networks have expanded greatly across the continent, **over 300 million Africans** remain more than **50 kilometers** away from a fiber or cable broadband connection.
- Over **500 million Africans** lack formal identities.
- **80% of the 733 million people** world without access to the electricity are Africans
- **80% of African students** have learning deficits in foundational skills in STEAM.

CURRENT CHALLENGES

Addressing these challenges requires a **holistic approach** that combines **investment in infrastructure, education, policy reform, and cooperation & collaboration ...**

INFRASTRUCTURE

- Insufficient access to reliable internet infrastructure.

INEQUALITY

- Socioeconomic disparities.

AFFORDABILITY

- High cost of internet services and digital technologies

DIGITAL LITERACY

- **12 of the 20 countries** with the most significant digital skills shortfalls are in Africa.

CONTENT RELEVANCE

- Limited availability of relevant digital content and services, particularly in local content.

POLICY AND REGULATION

- Inadequate or outdated policies and regulations

COOPERATION & COLLABORATION

- Multistakeholder engagement - Bridging the global digital divide requires collaboration and coordination among countries, organizations, and stakeholders at every level.



Programme Pillars

Closing the digital divide and accelerating progress on the SDGs

- Development of digital transformation policies and strategies in **35 Member States** for attainment of SDGs
- Cross-border connectivity & Digital public infrastructure (DPI), including e-government and mobile network expansions
- STEAM Center of Excellence, Rwanda
- Connected African Girls Coding Camps: **+40,000 online across (8)** countries
- World Robots Olympiad (WRO) in partnership with Google: **+9,000 students in STEAM**, Computer Science and AI across 14 countries.
- Giga initiative
- ECA's ICT Sector Taxation modeling and report.

Expanding inclusion and benefits from the digital economy for all

- Support for Digital ID Projects: Enhancing governance, financial inclusion, and public services in **Ethiopia (7,2 million registers in 2023)**, Gambia, Togo, Malawi, Senegal, Niger and Kaduna State (Nigeria) in implementing and scaling Digital ID systems
- Mauritius National Fintech Strategy
- Botswana Smartbots Lab: support local Startups and AI innovation
- Mount Kenya Innovation Week showcasing startups and Innovations.

Fostering an inclusive, open, safe and secure digital space

- Development of Cyber model Law Guideline for cybersecurity and cybercrime
- African Cybersecurity Research Center, Lome, Togo
- Cybersecurity capacity building training for Judicial Corps and Law Enforcement Corps on Cybercrime in Congo Brazzaville
- Google-ECA Cybersecurity capacity building for Member States
- Origin Research and Innovation Labs Regional 4IR digital hubs

Advancing responsible, equitable & interoperable data governance

- AU Data governance Framework in (4) member states Burundi, Mozambique, DRC, Tanzania), implementation in partnership with GIZ
- UN/GDC Data Governance working Group
- Au Digital Single Market Framework
- Launch of the 2024 UN E-Government Survey in collaboration with UNDESA: assessment of the digital governance landscape across all Member States.

Enhancing international governance of Artificial Intelligence

- AI Centre in Congo Brazzaville
- AU AI Strategy
- AU Working Group on AI
- ECA-AI Africa Innovations Database, an online platform showcasing promising AI-driven and AI-integrated startups across Africa.
- The World Summit on the Information Society (Africa WSIS+20 Review); Internet Governance Forum (Africa IGF); The Africa Science, Technology, & Innovation (STI) Forum

SUPPORT FOR THE IMPLEMENTATION OF THE AU DIGITAL TRANSFORMATION STRATEGY AND AFCFTA

KEY ACHIEVEMENTS

TECHNICAL AND POLICY SUPPORT

INTERGOVERNMENTAL PROCEDURES

ADVOCACY

CAPACITY BUILDING THROUGH WORKSHOPS, WORKING GROUPS AND CONSULTATIONS

ESTABLISHMENT OF CENTRE OF EXCELLENCE

KNOWLEDGE PRODUCTS POLICY BRIEFS

PARTNERSHIPS & COLLABORATION

- Providing Technical and Policy Advice to member states on the development of digital transformation policies and strategies in for attainment of SDGs and integration of AI solutions, Digital ID, sandboxes for data, etc.
- Notable initiatives at the national level, such as support for Ethiopia's National ID Program, Ethiopia's Inclusive Identity Projects, Nigeria's Digital ID Use cases, and the Gambia National Digital ID System & services (DIDs).
- Work in DPI universal safeguard framework.
- Convening regional consultations/dialogue with African Member States in areas including Cybersecurity, Privacy, GDC, WSIS, IGF, and Data & Digital governance, among others.
- Advocacy and contribution to the UN Secretary-General's AI Advisory Body Interim Report: Governing AI for Humanity guidelines and principles.
- Support for the African Union Working Group on Artificial Intelligence, including the formulation of the AI strategy for the African continent to build inclusive AI ecosystems, enlightened for policy making.

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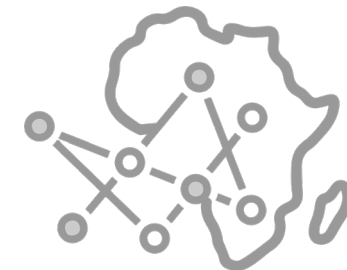
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PARTNERSHIPS & COLLABORATION

- Google - ECA Partnership (2024) - Policy and capacity building support for African Countries. Advance digital skills, carry out AI policy research, and support entrepreneurship .
- Connected African Girls Coding Camps: +40,000 online across (8) countries
- World Robots Olympiad (WRO) in partnership with Google: +9,000 students in STEAM, Computer Science and AI across 14 countries
- GIGA Project (2024) | initiative to connect every African school to the internet via the GIGA Project.
- STI Forums
- Google-ECA Cybersecurity capacity building for Member States
- AI Capacity building
- Fintech Programm
- ADLI (Data Governance)



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COLLABORATION

- African Research Centre on Artificial Intelligence, Congo Brazzaville (2022) - Establishment of the first AI research center of excellence devoted exclusively to advancing research through artificial intelligence to advance digital technology in Africa in areas of digital policy, infrastructure, finance, skills, digital platforms and entrepreneurship.
- African STEAM center of excellence (STEAM CoE) in Kigali: strengthen Science, Technology, Arts and Mathematics education by introducing hands-on enrichment programs in STEAM.
- Establishment of the Lobe Centre of Excellence for development of the smallstock industry leveraging on the latest smart agricultural technologies through AI, in Botswana .
- Establishment of the African Centre for Coordination and Research in Cybersecurity, in Lome, Togo
- Botswana Smartbots Lab: support local Startups and AI innovation

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SIDE EVENT
organized by the Technology, Climate Change and Natural Resources Management Division

Fostering prosperity through policies on artificial intelligence in Africa

BACKGROUND

Artificial intelligence is a pivotal force in the socio-economic growth of Africa, with the potential to contribute up to \$15.7 trillion to the global economy by 2030, of which \$1.2 trillion could be generated in Africa. This would represent a 5.6 per cent increase in the continent's gross domestic product by 2030.¹ To lead the continent's digital future, the African Union, the Economic Commission for Africa and strategic partners developed a continental strategy on artificial intelligence, aiming to position Africa at the forefront of efforts to adopt artificial intelligence for ethical and inclusive socioeconomic development. Despite such challenges as incomplete data sets and data standardization issues, collaborative efforts present an opportunity for transformative financial growth. The digital economy could contribute up to 5.2 per cent of the continent's gross domestic product by 2025 and 8.5 per cent by 2050.² Various strategic initiatives, including the Digital Transformation Strategy for Africa and the continental strategy on artificial intelligence, and such frameworks as the protocol on digital trade that is to form part of the Agreement Establishing the African Continental Free Trade Area, are aimed at accelerating digital transformation and fostering prosperity through the integration of artificial intelligence.

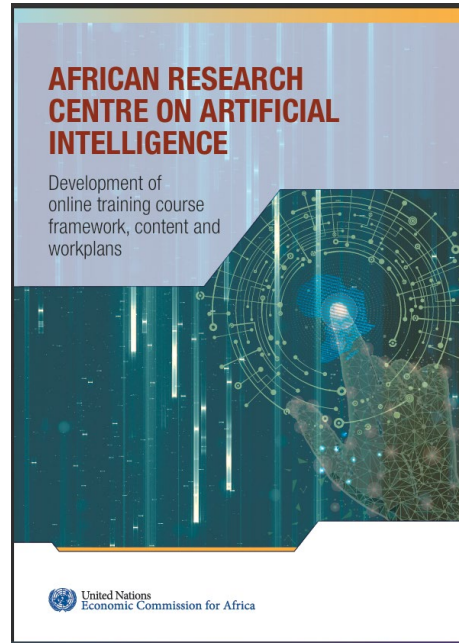
OBJECTIVES

The aim of the hybrid event is to stimulate diverse discussions on the potential of artificial intelligence to foster African prosperity and on its potential risks. The session will include analysis of case studies on applications of artificial intelligence in both the financial sector and broader industries that contribute to the responsible and collaborative advancement of artificial intelligence in Africa. The main objectives of the session include enhancing precision in financial applications, establishing responsible frameworks, centralizing artificial intelligence standards, fostering collaboration and supporting continental and subregional data infrastructure.

EXPECTED OUTCOMES

- The expected outcomes of the session include:
- Deepened understanding of the importance of artificial intelligence for African prosperity
 - Increased motivation to bridge financial and digital infrastructure gaps
 - Boosted targeted investment in digital public infrastructure and increased efforts to foster knowledge exchange on best practices in artificial intelligence
 - Validation of challenges and prospects through a curated survey

¹ PricewaterhouseCoopers, "Sizing the prize: what's the real value of AI for your business and how can you capitalise?", 2017.
² Sorina Telesau and Jovan Kurtulbas, Stronger Digital Voices from Africa: Building African Digital Foreign Policy and Diplomacy (Diplo Foundation, November 2022).



PARTNERSHIPS

ECA has established partnerships with key multi-stakeholder institutions including AU institutes, UN agencies, Regional Economic Communities (RECs), Private Sectors, and Academia/research centres.



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AI in agriculture value chain



Lobu Centre of Excellence Project.

The initiative aims to transform the [Lobu Small Stock Farm \(LSF\) in Botswana](#) into a [center of excellence for small stock development](#), utilizing smart agriculture technologies to adapt to climate change. This involves upgrading infrastructure across the [10,300 hectares](#) farm to provide sustainable water and energy solutions, improved access roads, and modern kraal infrastructure. Additionally, digital infrastructure will be implemented to facilitate the adoption of smart agriculture technologies, enhancing efficiencies and competitiveness in the small-stock sector. Notably, a [smart classroom is established for training purposes](#), and IoT and microcontroller technologies will be prototyped to assist farmers in monitoring small-stock health and water intake.

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CAPACITY BUILDING

Capacity building for Public Officials on Emerging Technologies, Digital Governance and DPI Safeguards Frameworks.

This initiative aims to equip public officials with the necessary knowledge and skills to effectively navigate and harness the potential of emerging technologies, implement digital governance strategies, and uphold data protection and information security through DPI safeguards frameworks.

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Envoy on Technology

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HEALTH SECTOR



Harnessing the Power of AI in Health

The AI-Enhanced Primary Healthcare Digitalization initiative leverages AI technologies to revolutionize primary healthcare. Through AI-powered diagnostic tools, telemedicine platforms, and training programs, it aims to improve diagnosis accuracy, expand access to healthcare, and empower healthcare professionals, ultimately advancing universal health coverage in Africa and sustainable development goals 3.

HARNESSING THE POWER OF AI IN BRIDGING DIGITAL DIVIDE

Contribute to the ongoing work of Giga Initiative
ECA and the Giga Initiative could forge a strong partnership by leveraging AI-driven solutions and expertise to address key challenges in bridging the digital divide. Through collaboration, ECA can contribute its capabilities in data analysis, predictive modeling, network optimization, content customization, and resource allocation to support the Giga Initiative's objectives.

Target: Connecting 100 schools in Africa by 2024.



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DIGITAL ID FOR REFUGEES



Approximately 30 million individuals who are internally displaced, refugees, or asylum-seekers reside in Africa, accounting for nearly a third of the global refugee population. ECA is open to partner with UN agencies (UNHCR and ITU) and private sector to boost the innovation of AI technologies to support refugees such as identifications and ensure their access to social services in the African continent.



CLIMATE ACTION : CARBON MARKET

The ECA is supporting Member Countries of the Congo Basin Climate Commission to develop a high integrity carbon market in the region which could significantly contribute toward closing the financing gap for climate resilience and SDG implementation

DIGITAL SKILLS

African STEAM center of excellence (STEAM CoE) in Kigali: strengthen Science, Technology, Arts and Mathematics education by introducing hands-on enrichment programs in Science,

WAY FORWARD

Having highlighted UNECA's work in Africa. What are the factors that reinforce the realization of SDGs in a continent that is behoved by the digital divide? The following opportunities exist for Africa;



Building and enabling required infrastructure and connectivity,

including from a regulatory perspective is critical (e.g. limiting discriminatory Internet traffic, reducing restrictions on digital transactions); Therefore, as relates to infrastructure, further efforts can also be channelled towards investment of capital into digital based infrastructure, such as through the distribution of technologies like cell towers, mobile phones, computers, and adequate internet connections.



Private Sector involvement in digital development

specifically infrastructure in the African continent will leapfrog socio-economic development. A multi-stakeholder approach to tackling the aforementioned issues will suffice.



Harmonizing regulations continentally to remove barriers to connectivity and create trust,

including the areas of taxation, consumer protection and data standards, is paramount. This latter recommendation is aligned with the Continental Harmonization Plan to create a single digital market in Africa being developed by the African Union (AU) in the framework of the AU Digital Transformation Strategy. However, it must also be embedded within the to be negotiated Protocol on digital trade and e-commerce under the AfCFTA Agreement.



Formulation of global frameworks such as the digital commons

that lays the foundation for Formulating national connectivity and infrastructure related policies, legislation, and regulatory frameworks



Contextual interventions;

Other nations have benefited from developing country-specific initiatives, Creating an eco-system that enables public-private interconnectivity and Setting national infrastructure that enables uptake of emerging technology on research and development programs. The implementation of digital technologies in Africa should progressively and continually mirror key principles of inclusion and representation and accessibility



Digital Cooperation:

There are significant gaps in global digital cooperation and while it has been noted that digital technology issues are often too low on political agendas; the same has not been prioritized. The internet Governance Forum being hosted in Ethiopia this year is a great start towards strengthening digital cooperation that works for Africa.



THANK YOU!

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Ideas
to
Action