

Artificial Intelligence July 2024



Regional Development

Encapsulating initiatives from African countries working increasingly on adopting and utilizing AI for economic growth and development

Convergence

At Convergence, we're dedicated to fostering the adoption of AI in Africa, mainly for economic growth

and transformation through innovation, research and development, advising policies, and collaboration

with key stakeholders. We aim to utilize AI as a catalyst for holistic growth and economic transformation

on the continent.

This report was gathered through desk research of various African initiatives from April to June 2024, the

year's second quarter (Q2).

Website: convergenceai.io

Email: info@convergenceai.io

Address:

Nigeria: 6, Adewale Kuku Gbagada, Lagos.

United Kingdom: Parsonage Rd, Manchester, England. M28 3SD

This work is licensed under a Creative Commons Attribution 4.0 (CC-BY 4.0): 2024 Q2 AI IN AFRICA

SUMMARY REPORT © 2024 by ConvergenceAI Ltd is licensed under CC BY-SA 4.0

ACRONYMS

AI - Artificial Intelligence	AI -	 Artificia 	l Intel	ligence
------------------------------	------	-------------------------------	---------	---------

AU - African Union

4IR - Fourth Industrial Revolution

ACAIF - Africa Cybersecurity and AI Foundation

IRCAI - International Research Centre On Artificial Intelligence

ITIDA - Information Technology Industry Development Agency

ELM - E-Learning Mentor

LLM - large language model

KNUST - Kwame Nkrumah University of Science and Technology

CAC - Cyberspace Administration of China

STU - Sunyani Technical University

KoTDA - Konza Technopolis Development Authority

EAli - Ethiopian Artificial Intelligence Institute

EFPA - Ethiopian Federal Police App

PC4IR - Presidential Commission on the Fourth Industrial Revolution

TABLE OF CONTENTS

Executive Summary	4
Key Trends in Africa's Al Development	6
Regional Developments	9
North Africa	9
Egypt	10
Morocco	11
Tunisia	
West Africa	
Nigeria	13
Ghana	14
Mali	15
East Africa	
Kenya	17
Tanzania	18
Ethiopia	
Southern Africa	21
South Africa	21
Botswana	22
Zambia	23
Other African Countries	24
Congo	24
Libya	24
Uganda	24
Zimbabwe	25
Q3 Outlook	26
Challenges and Risks	27
Conclusion	29

EXECUTIVE SUMMARY

Africa continued its impressive trajectory in AI adoption and development in the second quarter of 2024. This report highlights the key trends and initiatives shaping the continent's AI landscape.

African countries are rapidly integrating AI into their day-to-day operations. Nations such as Kenya, Nigeria, South Africa, Zambia, and Egypt are at the forefront, with governments leveraging AI for a variety of tasks. These range from tax return verification and crime prevention to managing educational resources, demonstrating AI's versatility and growing importance in public administration.

A significant focus has emerged on educating and training Africans in AI skills, recognizing the critical need for a skilled workforce. Notable initiatives include Google's AI training program for journalists in Nigeria,¹ and the launch of the first-ever AI training program offered in the Hausa language, also in Nigeria.² Perhaps most ambitious is the large-scale partnership between the African Development Bank (AfDB) and Intel, which aims to train millions of Africans in AI technologies.³

Research and innovation in AI are expanding into crucial areas that address pressing continental challenges. Scientists are exploring AI applications for water sustainability.⁴ Researchers are propelling innovations within healthcare, with a particular focus on combating diseases such as malaria.⁵ These efforts showcase how AI can be harnessed to tackle some of Africa's most persistent problems.

¹ MetaNews. (2024, April 22). Google Nigeria launches Al training for female journalists in Lagos. MetaNews. https://metanews.com/google-nigeria-launches-ai-training-for-female-journalists-in-lagos/

² Nigeria CommunicationsWeek. (2024, May 2). Kaduna, Google launch first AI training in Hausa language. Nigeria CommunicationsWeek. https://www.nigeriacommunicationsweek.com.ng/kaduna-google-launch-first-ai-training-in-hausa-language/

³ African Development Bank. (2024, June 7). Digital future for Africa: African Development Bank and Intel to train millions in AI. African Development Bank Group. https://www.afdb.org/en/news-and-events/press-releases/digital-future-african-development-bank-and-intel-train-millions-ai-71649

⁴ IRCAI. (2024, May 8). IRCAI partners with AI in Africa for the AI 4 Water Sustainability Challenge. IRCAI. https://ircai.org/inircai-partners-with-ai-in-africa/

⁵ News-Medical. (2024, June 8). Using AI to revolutionize mosquito surveillance to help combat malaria in Africa. News-Medical. https://www.news-medical.net/news/20240608/Using-AI-to-revolutionize-mosquito-surveillance-to-help-combat-malaria-in-Africa.aspx

International collaboration in AI development is rising, reflecting Africa's growing importance in the global AI ecosystem. The G7 event on AI for sustainable development, held in Addis Ababa,⁶ and ongoing China-Africa cooperation in AI technologies are prime examples of this trend.⁷ These partnerships are facilitating knowledge transfer and accelerating AI adoption across the continent.

As AI becomes more prevalent, discussions about its regulation and ethical development are gaining momentum. The African Union is conducting multi-stakeholder consultations on a Continental Strategy for AI. These initiatives demonstrate a proactive approach to ensuring AI benefits all Africans while mitigating potential risks.

This report delves into specific AI initiatives across 16 African countries, including Botswana, Congo, Egypt, Ethiopia, Ghana, Kenya, Libya, Mali, Morocco, Nigeria, South Africa, Tanzania, Tunisia, Uganda, Zambia, and Zimbabwe. The diversity and scope of these projects underscore the continent-wide embrace of AI technologies.

⁶ United Nations Development Programme. (2024, April 15). The G7 Presidency partners with UNDP Africa to advance AI for sustainable development. United Nations Development Programme. https://www.undp.org/africa/press-releases/g7-presidency-partners-undp-africa-advance-ai-sustainable-development

⁷ Cyberspace Administration of China. (2024, April 3). China: CAC releases statement on China-Africa AI Cooperation. DataGuidance. Retrieved from https://www.dataguidance.com/news/china-cac-releases-statement-china-africa-ai

KEY TRENDS IN AFRICA'S AI DEVELOPMENT

Africa is making powerful strides towards becoming a major player in the global AI landscape. The following key trends are shaping the continent's AI development in Q2 2024:

A Continental AI Strategy

A significant breakthrough has been achieved with African Ministers adopting a landmark Continental Artificial Intelligence Strategy and African Digital Compact.⁸ This vital development underscores the continent's commitment to driving development and inclusive growth through AI and digital technologies. The strategy and compact provide a unified framework for AI adoption and digital transformation across Africa, setting the stage for accelerated progress in the coming years.

Building on this milestone, the African Union Development Agency (AUDA-NEPAD) continues to make progress on implementing its Continental Strategy on AI, ensuring responsible and inclusive AI adoption across all member states. This strategy emphasizes collaboration among African nations, addresses ethical considerations in AI development and deployment, and aims to ensure AI benefits all citizens, not just a select few. It also promotes a unified African voice in global AI discussions. Recent developments include establishing working groups focused on critical areas such as data governance, AI ethics, and cross-border AI initiatives.

Building a Skilled Workforce

Recognizing that a skilled workforce is crucial for harnessing Al's potential, several initiatives are underway to bridge the skills gap. The African Development Bank and Intel's training program aims to create a critical mass of Africans proficient in Al and other Fourth Industrial Revolution (4IR) skills. The Africa Cybersecurity and Al Foundation (ACAIF) is on track to train 1000 entrepreneurs across Africa in Al by the end of 2024. Partnerships like Zindi and Microsoft equip individuals with skills to participate in the digital economy and create unbiased Al applications.⁹

⁸ African Union. (2024, June 17). African ministers adopt landmark continental artificial intelligence strategy. African Union. https://au.int/en/pressreleases/20240617/african-ministers-adopt-landmark-continental-artificial-intelligence-strategy

⁹ Capital FM Kenya. (2024, May). Zindi, Microsoft team up to equip Africans with AI skills. Capital FM Kenya. https://www.capitalfm.co.ke/business/2024/05/zindi-microsoft-team-up-to-equip-africans-with-ai-skills/

Al for Social Good and Being Explored in More Sectors

Al is being leveraged to address some of Africa's most pressing challenges. The "Al 4 Water Sustainability Challenge" by IRCAI and AI in Africa continues to develop innovative solutions for water sustainability issues. The African Center for Economic Transformation's research project is making strides in utilizing AI for economic policymaking, which is a first of its kind on the continent. New AI applications are emerging in agriculture, focusing on crop yield prediction and pest control, while healthcare initiatives using AI for early disease detection and personalized medicine are gaining traction. These efforts ensure that AI development directly addresses the needs and priorities of African nations.

Increased Partnerships for Knowledge Sharing

Collaborations between international organizations and African institutions are fostering knowledge transfer and capacity building. The G7's ongoing support for AI development in Africa has led to new joint research projects and exchange programs. The AfDB-funded data center in Congo is nearing completion and is set to provide crucial infrastructure for AI advancements. New partnerships between African tech hubs and global tech giants facilitate access to cutting-edge AI technologies and expertise. In Q2 2024, we've seen an increase in south-south cooperation, with more intra-African AI partnerships forming to address shared challenges and opportunities.

These trends and the adoption of the Continental AI Strategy and the African Digital Compact demonstrate Africa's commitment to becoming a significant player in the global AI landscape. The focus remains on inclusive, ethical, and practical applications of AI technology to drive development and foster inclusive growth across the continent.

¹⁰ African Center for Economic Transformation (ACET). Exploring AI solutions for economic policymaking and transformation in Africa. ACET. Retrieved June 25, 2024, from https://acetforafrica.org/research-and-analysis/insights-ideas/commentary/exploring-ai-solutions-for-economic-policymaking-and-transformation-in-africa/

¹¹ Digitalisation World. Congo data centre funded by African Development Bank will cement national and subregional digital sovereignty. Digitalisation World. Retrieved June 25, 2024, from https://m.digitalisationworld.com/news/67737/congo-data-centre-funded-by-african-development-bank-will-cement-national-and-subregional-digital-sovereignty

International Actors

The development of AI in Africa is not happening in isolation. International actors are actively involved, collaborating with and supporting African nations in their AI endeavors. This collaboration takes several vital forms:

Knowledge sharing and capacity building are primary focus areas. Partnerships such as Google's AI training initiatives, which aim to create a workforce well-versed in AI, further strengthen this effort.

Financial investment is another significant area of international involvement. Microsoft's investment in supporting black-owned businesses in South Africa's tech sector,¹² and the establishment of an AI Hub in Morocco funded by a US startup are prime examples.¹³ These investments provide crucial resources for African AI initiatives, fueling innovation and creating opportunities in the sector.

Finally, international collaboration contributes to technology transfer and infrastructure development. Initiatives like Oracle's establishment of a development center in Morocco play a vital role.¹⁴ These international collaborations are instrumental in strengthening Africa's position in the global Al landscape. By providing resources, expertise, and infrastructure support, they are helping to accelerate Al adoption and innovation across the continent.

¹² Bitcoin.com. (2023, October 18). Microsoft invests \$70 million in South Africa for AI advancement. Bitcoin.com. https://news.bitcoin.com/microsoft-invests-70-million-in-south-africa-for-ai-advancement/

¹³ Morocco World News. (2024, May 2). Morocco partners with US startup lozera to establish groundbreaking Al hub in Tetouan. Morocco World News. https://www.moroccoworldnews.com/2024/05/362479/morocco-partners-with-us-startup-iozera-to-establish-groundbreaking-ai-hub-in-tetouan

¹⁴ Oracle. (2024, May 9). Oracle increases research and development investments in Morocco. Oracle News. https://www.oracle.com/news/announcement/oracle-increases-research-and-development-investments-in-morocco-2024-05-09/

REGIONAL DEVELOPMENTS

NORTH AFRICA

North African countries are actively developing and adopting AI technologies, focusing on building a strong foundation for the future.

This is evident in several key areas;

- ✓ Infrastructure Development Countries are establishing data centers and specialized AI centers to support research and development.
- ✓ Legislative Frameworks Governments are working on legal frameworks to ensure ethical and responsible AI implementation.
- ✓ Government Adoption Al is being integrated into various government functions, potentially improving efficiency and streamlining processes.

TUNISIA Investment in Research and Education MOROCCO Covernment functions National Strategy Research and Innovation

EGYPT

Infrastructure Development

Egypt has launched its first government data and cloud computing center, which will be crucial for integrating AI across government operations and providing data analysis tools for informed decision-making.¹⁵ Additionally, Huawei has established a cloud region in Egypt, making it the first public cloud in the region.¹⁶ This infrastructure will support AI development and act as a hub for neighboring countries.

Fostering Innovation

Egypt and Italy have partnered to establish a center for AI in Cairo.¹⁷ This center will benefit Egypt and serve as a launchpad for AI development across Africa. It will focus on fostering collaboration between research institutions and businesses, accelerating innovation in the field. Furthermore, Egypt's Information Technology Industry Development Agency (ITIDA) has signed a memorandum of understanding with Techne Summit to launch a three-year AI Development program.¹⁸ This program aims to integrate AI into the country's economic and social fabric, supporting the growth of AI startups and established corporations.

Legislation and Collaboration

Recognizing the importance of responsible AI use, Egypt is preparing its first legislative framework for AI.¹⁹ This framework will ensure ethical implementation and address potential risks associated with the technology. Additionally, Egypt is actively seeking collaboration with other countries. Discussions with

¹⁵ Egypt launches its first government data and cloud computing center. Retrieved June 25, 2024, from https://www.egypttoday.com/Article/3/131903/Egypt-launches-its-first-government-data-and-cloud-computing-center

¹⁶ Huawei Cloud goes live in Egypt. Huawei News. Retrieved June 25, 2024, from https://www.huawei.com/en/news/2024/5/huawei-cloud-goes-live-in-egypt

¹⁷ Egypt, Italy to partner on AI centre in Cairo serving Africa. Daily News Egypt. https://www.dailynewsegypt.com/2024/04/22/egypt-italy-to-partner-on-ai-centre-in-cairo-serving-africa/

¹⁸ ITIDA and Techne Summit sign MoU to launch three-year AI development programme in Egypt. Retrieved June 25, 2024, from https://innovation-village.com/itida-and-techne-summit-sign-mou-to-launch-three-year-ai-development-programme-in-egypt/

¹⁹ Egypt prepares for the AI revolution with upcoming legislation. El Blog. Retrieved June 25, 2024, from https://elblog.pl/2024/06/10/egypt-prepares-for-the-ai-revolution-with-upcoming-legislation/

the Czech Republic and Hungary highlight Egypt's commitment to knowledge-sharing and joint ventures in Al development.²⁰

MOROCCO

National Strategy, Governance, and Responsible Development

Morocco has proposed establishing a National Agency for AI Governance to oversee developing and implementing a national AI strategy. ²¹ This agency will facilitate collaboration with international organizations and specialized companies, fostering innovation and knowledge sharing. Morocco has collaborated with UNESCO to present an AI Readiness Assessment, demonstrating a commitment to responsible AI use and providing recommendations for human-centered AI development. ²² The Moroccan labor union has also proposed a bill for AI regulation, showcasing a proactive approach to ethical AI implementation. ²³

Collaboration, Research, and Innovation

Morocco has partnered with a US startup to establish an AI Hub focused on sustainable energy, providing access to advanced AI computing resources while promoting environmentally friendly practices.²⁴ A tripartite agreement with UNESCO establishes the Moroccan research center Ai Movement as a UNESCO Category 2 Center, positioning it as a regional hub for AI research,

²⁰ State Information Service (SIS). (n.d.). Egypt, Hungary mulls stepping up cooperation on AI, modern technologies. Retrieved June 25, 2024, from https://www.sis.gov.eg/Story/193105/Egypt%2C-Hungary-mulls-stepping-up-cooperation-on-AI%2C-modern-technologies?lang=en-us

²¹ Morocco World News. (2024, April 26). Morocco proposes establishment of national agency for Al governance. Morocco World News. Retrieved June 25, 2024, from https://www.moroccoworldnews.com/2024/04/362295/morocco-proposes-establishment-of-national-agency-for-ai-governance

²² UNESCO presents Morocco's AI readiness assessment report. Radarr Africa. Retrieved June 25, 2024, from https://radarr.africa/unesco-presents-moroccos-ai-readiness-assessment-report/

²³ IT Brew. (2024, May 7). Moroccan labor union proposes bill for AI regulation. IT Brew. Retrieved June 25, 2024, from https://www.itbrew.com/stories/2024/05/07/moroccan-labor-union-proposes-bill-for-ai-regulation

²⁴ Morocco World News. (2024, May 2). Morocco partners with US startup lozera to establish groundbreaking Al hub in Tetouan. Morocco World News. Retrieved June 25, 2024, from https://www.moroccoworldnews.com/2024/05/362479/morocco-partners-with-us-startup-iozera-to-establish-groundbreaking-ai-hub-in-tetouan

development, and collaboration across Africa.²⁵ These initiatives highlight Morocco's commitment to international collaboration and knowledge sharing in AI.

Integration into Government Functions

Morocco has already begun utilizing AI within its court system, automating tasks like transcribing verdicts.²⁶ This application streamlines the judicial process and frees up valuable time for judges, demonstrating the practical integration of AI into government functions.

TUNISIA

Investing in Research and Education

Tunisia's first public AI institute is set to open in September, serving as a hub for research and development in AI.²⁷ This institute will promote innovation and contribute to the growth of the country's AI expertise, demonstrating Tunisia's commitment to developing a solid foundation for future advancements in AI. In parallel, Tunisia has launched an AI-powered library platform called ELM (E-Learning Mentor).²⁸ This platform provides free access to educational resources for students and researchers in higher education. By offering a vast pool of knowledge at no cost, ELM aims to accelerate the development of a skilled AI workforce in Tunisia. These initiatives collectively showcase Tunisia's comprehensive approach to AI development, balancing research investment with efforts to make AI education more accessible to its population.

²⁵ Morocco World News. (2024, May 8). UM6P to host high-level forum on artificial intelligence development in Africa. Morocco World News. Retrieved June 25, 2024, from https://www.moroccoworldnews.com/2024/05/362815/um6p-to-host-high-level-forum-on-artificial-intelligence-development-in-africa

²⁶ Morocco uses AI in its courts. Anadolu Agency. Retrieved June 25, 2024, from https://www.aa.com.tr/en/africa/morocco-uses-ai-in-its-courts/3246947

²⁷ New Egyptian university to specialize in AI, digital technology. University World News. Retrieved June 25, 2024, from https://www.universityworldnews.com/post.php?story=20240423064239372

²⁸ Ministry of Higher Education and Scientific Research of Tunisia (MES). (n.d.). École Nationale Supérieure des Mines de Tunis (Mines-Télécom Institute) event detail. Retrieved June 25, 2024, from http://www.mes.tn/detail evennement.php?code menu=548&code evennement=4037

WEST AFRICA

NIGERIA

National Strategy and Government Initiatives

Nigeria is accelerating the adoption of its National AI Strategy, with workshops and discussions underway to define a roadmap for AI development.²⁹ This strategy will guide future investments and ensure a coordinated approach to AI adoption. The government is also embracing AI to improve efficiency, as demonstrated by the Corporate Affairs Commission's (CAC) adoption of an AI platform for business registration, streamlining processes, and reducing administrative burdens.³⁰ Furthermore, Nigeria advocates establishing an African AI council to ensure uniform regulations and market prospects for AI deployment across the continent.³¹

Education, Skills Development, and Innovation

Recognizing the importance of a skilled workforce, Nigeria is bridging the AI talent gap with initiatives like the free AI course for 5,000 youths in Enugu State.³² Also, Google's AI training for female journalists highlights the nation's commitment to education and inclusivity.³³ Regarding innovation, the launch of Nigeria's first multilingual large language model (LLM) is a significant development that supports research and development efforts and paved the way for further innovation in natural language processing applications.³⁴

²⁹ Nigeria accelerates adoption of national Al strategy. CAJ News Africa. Retrieved June 25, 2024, from https://www.cajnewsafrica.com/2024/04/04/nigeria-accelerates-adoption-of-national-ai-strategy/

³⁰ Nigeria's CAC embraces AI for faster business registration. Innovation Village. Retrieved June 25, 2024, from https://innovation-village.com/nigerias-cac-embraces-ai-for-faster-business-registration/

³¹ FG advocates establishment of African AI council, receives funding. TVC News. Retrieved June 25, 2024, from https://www.tvcnews.tv/2024/04/fg-advocates-establishment-of-african-ai-council-receives-funding/

³² Enugu State partners with ALX Nigeria. Cryptopolitan. Retrieved June 25, 2024, from https://www.cryptopolitan.com/enugu-state-partners-with-alx-nigeria/?utm source=ground.news&utm medium=referral

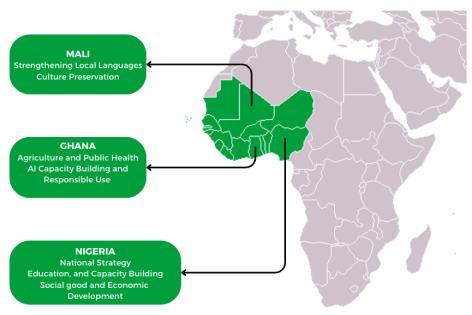
³³ Google Nigeria launches AI training for female journalists in Lagos. MetaNews. Retrieved June 25, 2024, from https://metanews.com/google-nigeria-launches-ai-training-for-female-journalists-in-lagos/

³⁴ Nigeria launches first multilingual large language model in Africa. Cointelegraph. Retrieved June 25, 2024, from https://cointelegraph.com/news/nigeria-launches-first-multilingual-large-language-model-in-africa

AI for Social Good and Economic Development

Nigeria is exploring the use of AI for positive societal impact. Launching "MyAIFactChecker," a fact-checking platform, demonstrates a proactive approach to tackling misinformation.³⁵ The partnership with Cisco to focus on AI and smart agriculture highlights Nigeria's commitment to using AI for agricultural development.³⁶ These initiatives showcase Nigeria's efforts to leverage AI technology for both social good and economic advancement.

WEST AFRICA



GHANA

AI for Agriculture and Public Health

Ghana is leveraging AI to tackle critical issues in agriculture and public health. Researchers from Aston

³⁵ Group launches fact-checking platform to counter fake news. Tribune Online Nigeria. Retrieved June 25, 2024, from https://tribuneonlineng.com/group-launches-fact-checking-platform-to-counter-fake-news/

³⁶ Nigeria's NITDA partners Cisco to boost to AI, agritech. ITWeb Africa. https://itweb.africa/content/LPwQ5MlbELnvNgkj

University are partnering with Ghanaian institutions to develop an AI system for real-time crop monitoring.³⁷ This system will utilize cameras, humidity monitors, and weather stations to provide valuable data to farmers. It has the potential to improve yields and optimize resource use in agriculture.

In the public health sector, Ghana's Kwame Nkrumah University of Science and Technology (KNUST) is leading the development of an Al-powered public health surveillance system.³⁸ This initiative aims to detect potential disease outbreaks early, enabling faster and more effective responses to health crises.

Building AI Capacity and Promoting Responsible Use

Ghana is also focusing on building its AI capacity for the future. The Sunyani Technical University's (STU) partnership with the Vanuatu Trade Commission aims to train students in AI, equipping future generations with the skills needed to contribute to Ghana's AI development and address national challenges.³⁹

Additionally, Ghana has established a national AI organization, AI Ghana, which promotes the responsible use of AI for solving problems in Ghana and Africa.⁴⁰ This organization's presence indicates a broader national effort to harness the power of AI for social and economic development. These initiatives demonstrate Ghana's multifaceted approach to AI adoption, focusing on practical applications in key sectors while building capacity and promoting responsible AI use.

MALI

Mali's approach to AI is unique and driven by a specific national need. With the French language under fire due to political tensions, the government has shifted its focus towards promoting local languages

³⁷ Aston University researchers to use AI to help Ghanaian farmers monitor crops in real time. https://www.eurekalert.org/news-releases/1041711

³⁸ Debrah, E. K. (2024, May 23). KNUST project is using Al for early detection of vector-borne diseases in Ghana. MyJoyOnline. https://www.myjoyonline.com/knust-project-is-using-ai-for-early-detection-of-vector-borne-diseases-in-ghana

³⁹ Modern Ghana. STU, Vanuatu Trade Commission sign MoU to train. Retrieved June 25, 2024, from https://www.modernghana.com/news/1317134/stu-vanuatu-trade-commission-sign-mou-to-train.html

⁴⁰ Al Ghana. (n.d.). Al Ghana. Retrieved July 2, 2024, from https://aighana.org/

like Bambara. Mali uses AI to create children's books in Bambara and other local languages. ⁴¹ Unlike traditional translation methods, AI can generate culturally relevant stories and infuse local customs and experiences into the narratives. This ensures a more engaging learning experience for students unfamiliar with French. Since most students had never encountered written Bambara before, these AI-powered books are a significant step towards promoting literacy in local languages. This initiative fosters education and strengthens cultural identity by allowing students to connect with their heritage through their native tongue.

⁴¹ Mali books and artificial intelligence. The Washington Post. https://www.washingtonpost.com/world/2024/04/13/mali-books-artificial-intelligence-ai/

EAST AFRICA

KENYA

Kenya is rapidly emerging as a leader in East Africa's AI development. The country takes a multifaceted approach, prioritizing responsible adoption, inclusivity, and collaboration. Several initiatives highlight Kenya's commitment to building a solid foundation for AI adoption. The Kenyan National Commission for UNESCO convened a forum to evaluate the country's preparedness for ethical AI use. 42 Additionally, the Kenyan parliament is exploring AI applications for parliamentary reporting, demonstrating a proactive approach towards integrating AI into government functions. 43

Recognizing the importance of a skilled workforce, Kenya has unveiled major AI upskilling initiatives. The Konza Technopolis Development Authority's (KoTDA) partnership with Acyberschool aims to train one million Kenyans in AI and cybersecurity. ⁴⁴ This commitment to large-scale training programs positions Kenya to meet the future demands of the AI economy. The collaboration with the U.S. on capacity building further strengthens Kenya's focus on empowering its citizens with the necessary skills. ⁴⁵

Additionally, Kenya's ICT Committee Chair's call for equitable data representation underscores the country's commitment to addressing potential biases in AI systems.⁴⁶ Moreover, Kenya co-hosted a

⁴² Kenya's AI readiness evaluated in multi-stakeholder forum. UNESCO. https://www.unesco.org/en/articles/kenyas-ai-readiness-evaluated-multi-stakeholder-forum

⁴³ Parliament introduces AI technology in reporting for efficiency. Kenya Broadcasting Corporation. https://www.kbc.co.ke/parliament-introduces-ai-technology-in-reporting-for-efficiency/

⁴⁴ Kaberia, J. (2024, April 29). Konza Technopolis partners with Acyberschool to train 1M Kenyans in AI & cyber security. CIO Africa. https://cioafrica.co/konza-technopolis-partners-with-acyberschool-to-train-1m-kenyans-in-ai-cyber-security/

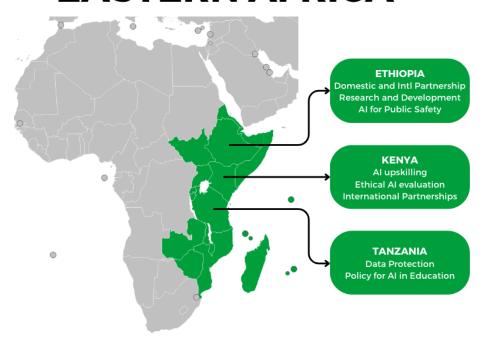
⁴⁵ U.S. Department of Commerce. (2024, April 24). Joint statement on harnessing artificial intelligence, facilitating data flows and empowering digital upskilling between the United States Department of Commerce and the Kenyan Ministry of Information, Communication and the Digital Economy. U.S. Department of Commerce. https://www.commerce.gov/news/press-releases/2024/04/joint-statement-harnessing-artificial-intelligence-facilitating-data

⁴⁶ Kenya News Agency. (2024, May 15). ICT committee chair calls for an equitable and inclusive data representation in Al. Kenya News Agency. https://www.kenyanews.go.ke/ict-committee-chair-calls-for-an-equitable-and-inclusive-data-representation-in-ai/

workshop on the responsible use of AI in the military, demonstrating a thoughtful approach to managing the ethical implications of AI.⁴⁷

Lastly, Kenya is actively seeking partnerships to accelerate its AI development. Collaborations with the G7 Presidency, Estonia, G42, and Microsoft are prime examples. These partnerships provide access to expertise, resources, and investment opportunities, propelling Kenya's AI journey forward. The focus on fostering local-language AI model development through the G42 and Microsoft partnership further highlights Kenya's commitment to inclusivity within the AI landscape.⁴⁸

EASTERN AFRICA



TANZANIA

Data Protection First

Tanzania is taking a measured approach to AI development, focusing on establishing a robust foundation

⁴⁷ defenceWeb. (2024, June 14). Nairobi hosts workshop on AI in the military. defenceWeb. https://www.defenceweb.co.za/joint/science-a-defence-technology/nairobi-hosts-workshop-on-ai-in-the-military/

⁴⁸ GCC Business News. (2024, June 22). Microsoft & G42 to make digital investment in Kenya. GCC Business News. https://www.gccbusinessnews.com/microsoft-g42-digital-investment-in-kenya/

for responsible use. The recent establishment of a Data Protection Commission highlights the country's proactive effort to safeguard personal data.⁴⁹ This initiative is vital for building public trust and ensuring responsible AI development, especially as Tanzania prepares to implement a Digital ID system. By setting clear guidelines for data handling, Tanzania is creating a more secure environment for AI applications.

Policy Development for AI in Education

Tanzanian scholars advocate for collaboration with the government to establish policies for AI use in higher education. ⁵⁰ This initiative reflects a forward-thinking approach to leveraging AI's potential in education while ensuring its application aligns with national priorities and ethical standards. Although Tanzania is not fully engaged in large-scale AI projects, these foundational steps are essential for developing a sustainable and responsible AI ecosystem. By prioritizing data protection and encouraging dialogue on responsible AI integration in education, Tanzania is laying the groundwork for future advancements in the field.

ETHIOPIA

Ethiopia's AI development strategy emphasizes responsible use, collaboration, and addressing societal needs. Ethiopia actively seeks partnerships to advance its AI development. The MOU between the Ethiopian Artificial Intelligence Institute (EAII) and the Federal Civil Service Commission highlights domestic collaboration.⁵¹ Additionally, Ethiopia's participation in the G7 event on AI for sustainable development demonstrates a commitment to international collaboration for responsible AI use across Africa.⁵²

⁴⁹ RegTech Africa. (2024, April 7). Tanzania launches Data Protection Commission ahead of digital ID implementation. RegTech Africa. https://regtechafrica.com/tanzania-launches-data-protection-commission-ahead-of-digital-id-implementation/

⁵⁰ Scholars request policies to coordinate artificial intelligence in higher learning. Sokoine University of Agriculture. Retrieved June 26, 2024, from https://www.sua.ac.tz/news/scholars-request-policies-coordinate-artificial-intelligence-higher-learning

⁵¹ Ethiopian Artificial Intelligence Institute and Federal Civil Service Commission Sign MoU. (2024, April 03). AAI.ET. https://www.aii.et/an-mou-memorandum-of-understanding-has-been-signed-between-the-ethiopian-artificial-intelligence-institute-and-the-federal-civil-service-commission

⁵² United Nations Development Programme. (2024, April 15). The G7 Presidency partners with UNDP Africa to advance AI for sustainable development. https://www.undp.org/africa/press-releases/g7-presidency-partners-undp-africa-advance-ai-sustainable-development

The recent launch of the robot "Desta" showcases Ethiopia's investment in AI research and development.⁵³ The collaboration between EAIi and STEM Power Ethiopia on joint research and training programs points towards a long-term commitment to building responsible AI expertise within the country.⁵⁴

Ethiopia's initiatives during the Q2 period also highlight a focus on using AI for societal benefit. The launch of the "Ethiopian Federal Police App" (EFPA) demonstrates a practical application of AI for improving public safety.⁵⁵ This app allows citizens to report crimes and access information, empowering them to participate in maintaining security.

⁵³ Ethiopian News Agency. Gov't gives high priority for dev't of AI technology transfer - Deputy PM Temesgen. MSN. Retrieved June 26, 2024, from https://www.msn.com/en-xl/africa/top-stories/gov-t-gives-high-priority-for-dev-t-of-ai-technology-transfer-deputy-pm-temesgen/ar-BB1lu1RL

⁵⁴ The Ethiopian Artificial Intelligence Institute. (2024, May 30). The Ethiopian Artificial Intelligence Institute and STEM Power Ethiopia have agreed to collaborate on joint efforts. https://www.aii.et/the-ethiopian-artificial-intelligence-institute-and-stem-power-ethiopia-have-agreed-to-collaborate-on-joint-efforts/

⁵⁵ The Ethiopian Artificial Intelligence Institute. (2024, May 24). The Crime Recommendation Mobile Application developed by the Ethiopian Artificial Intelligence Institute was inaugurated in the presence of Prime Minister Abiy Ahmed (Dr.). https://www.aii.et/the-crime-recommendation-mobile-application-developed-by-the-ethiopian-artificial-intelligence-institute-was-inaugurated-in-the-presence-of-prime-minister-abiy-ahmed-dr/

SOUTHERN AFRICA

SOUTH AFRICA

Investing in AI Infrastructure and Public Good

A key recommendation from the Presidential Commission on the Fourth Industrial Revolution (PC4IR) is scaling up AI hubs nationwide. This expansion strengthens South Africa's national AI research and development ecosystem. Practical applications of AI, such as the South African Revenue Service's (SARS) use of AI for tax return verification, demonstrate its potential to improve government efficiency. Additionally, establishing a military-focused AI hub, the Defence Artificial Intelligence Research Unit (DAIRU), underscores the country's commitment to exploring AI applications for national defense.

Promoting Responsible AI Development and Inclusivity

The government's plan to establish an AI Expert Advisory Council signifies a commitment to responsible AI development. This council will guide policy and regulations, ensuring ethical considerations are integral to AI development. Furthermore, Microsoft's \$70.5 million investment in AI advancement for black-owned businesses highlights a significant focus on inclusivity within the AI landscape. This initiative aims to bridge the digital divide and empower historically disadvantaged groups, enabling their participation in the AI revolution.

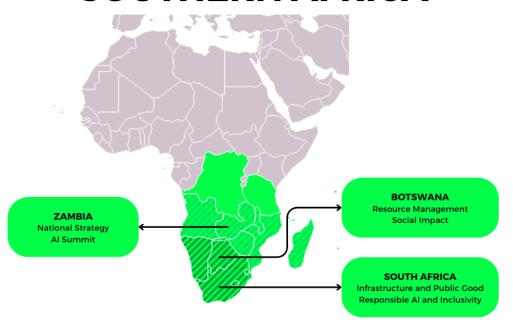
⁵⁶ van Wyk, N. (2023, April 11). SARS employs Al for tax return verifications: A new era of compliance for South African taxpayers. Accounting Weekly. https://www.accountingweekly.com/trending-news/sars-employs-ai-for-tax-return-verifications-a-new-era-of-compliance-for-south-african-taxpayers

⁵⁷ Empower Africa. (2024, May 9). South Africa launches first military-focused AI hub in Africa. https://empowerafrica.com/south-africa-launches-first-military-focused-ai-hub-in-africa/

⁵⁸ Illidge, M. (2024, May 4). South Africa's plan to regulate artificial intelligence. MyBroadband. Retrieved from https://mybroadband.co.za/news/ai/535047-south-africas-plan-to-regulate-artificial-intelligence.html

⁵⁹ Bitcoin News. (2024, June 12). Microsoft invests \$70 million in South Africa for AI advancement. https://news.bitcoin.com/microsoft-invests-70-million-in-south-africa-for-ai-advancement/

SOUTHERN AFRICA



BOTSWANA

AI in Resource Management and Social Impact

Botswana is leveraging AI to address economic and social challenges, with significant initiatives in key sectors. The diamond industry, vital to Botswana's economy, is set to benefit from AI advancements. Botswana Diamonds plans to utilize AI to analyze its geophysical database, demonstrating the potential of AI to optimize resource exploration and management. The company aims to enhance efficiency and accuracy in locating diamond deposits by harnessing AI technology, thereby boosting the industry's productivity and sustainability.

In addition to economic applications, Botswana is keen on using AI to tackle pressing social issues.

Discussions at the Data and AI Summit in Gaborone underscored the country's interest in employing AI to address challenges such as poverty, inequality, and climate change. The Director of Economic

⁶⁰ Penty, S. (2024, April 9). In brief: Botswana Diamonds plans to use AI for geophysical database. Morningstar. https://www.morningstar.co.uk/uk/news/AN 1712669333245291800/in-brief-botswana-diamonds-plans-to-use-ai-for-geophysical-database.aspx

⁶¹ Wren, B. (2024, May 16). Use data and AI to address challenges. Botswana Daily News. https://dailynews.gov.bw/news-detail/79563

Empowerment highlighted the importance of a strategic approach integrating AI with data analysis and promoting cross-sectoral collaboration. This strategy aims to create a comprehensive framework for AI deployment that enhances economic growth and drives social progress.

The summit also showcased various initiatives and pilot projects illustrating Al's potential to improve public services and community well-being. For example, Al-driven projects focusing on climate resilience can help predict and mitigate the impacts of environmental changes, while Al applications in healthcare can improve access to quality medical services in remote areas. By fostering an ecosystem that supports innovation and ethical Al practices, Botswana is positioning itself to harness the transformative power of Al for the greater good.

ZAMBIA

In June, Zambia hosted the 2nd Future of AI in Africa Global Summit in Lusaka.⁶² The theme, "Leveraging AI to unlock Opportunities," suggests a national interest in exploring AI's potential across various sectors like banking, healthcare, and agriculture. This summit was a launchpad for Zambia's AI journey, bringing together stakeholders and fostering discussions on AI applications.

The Zambian government has also finalized a draft of the AI strategy, which signifies a commitment to developing a clear roadmap for AI adoption in the country. ⁶³ Seeking industry assistance on implementation highlights a practical approach to ensuring the strategy is effective and addresses real-world needs.

⁶² TechTrends. (2024, June 5). Lusaka set to host the 2nd Future of AI in Africa Global Summit. https://www.techtrends.co.zm/lusaka-set-to-host-the-2nd-future-of-ai-in-africa-global-summit/

⁶³ Extensia. (2024, May 30). Zambia confirms completion of AI strategy. https://extensia.tech/zambia-confirms-completion-of-ai-strategy/

OTHER AFRICAN COUNTRIES

CONGO

The AfDB-funded data center in the Republic of Congo is a game-changer for the country's digital landscape and paves the way for future AI advancements.⁶⁴ By storing and processing Congolese data domestically, the center strengthens national digital sovereignty and lays the groundwork for cloudbased applications. This data storage capacity is essential for training and running AI models, but to fully unlock its potential, Congo will need to invest in building expertise in AI and data science. A national AI strategy that prioritizes responsible development and ethical considerations will be crucial for Congo to harness the power of AI effectively.

LIBYA

While less extensively developed than its North African neighbors, Libya is also taking its first steps towards AI integration. Libyan telecom company Almadar Aljadid has partnered with WideBot to deploy an AI chatbot on its customer service platform. ⁶⁵ This chatbot will be able to communicate with customers in Arabic, English, and the Libyan dialect, improving customer experience and streamlining service delivery. This project demonstrates Libya's interest in exploring the potential of AI technologies.

UGANDA

The Ugandan judiciary has expressed interest in AI mechanisms for justice administration, pointing out its willingness to explore technological advancements to improve efficiency.⁶⁶

⁶⁴ Digitalisation World. (2024, May 21). Congo data centre funded by African Development Bank will cement national and subregional digital sovereignty. Digitalisation World. https://m.digitalisationworld.com/news/67737/congo-data-centre-funded-by-african-development-bank-will-cement-national-and-subregional-digital-sovereignty

⁶⁵ Extensia. (2024, May 26). Libya's Almadar teams with WideBot to deploy AI chatbot. https://extensia.tech/libyas-almadar-teams-with-widebot-to-deploy-ai-chatbot/

⁶⁶ Kasule, F. (2024, June 14). Uganda's judiciary eyes artificial intelligence (AI) in administration of justice. New Vision. https://www.newvision.co.ug/category/news/ugandas-judiciary-eyes-artificial-intelligenc-NV 190136

ZIMBABWE

The Zimbabwean government is developing a national AI policy.⁶⁷ This policy will likely address data privacy, security, and ethical considerations in AI development and deployment. By creating a clear regulatory framework, Zimbabwe aims to ensure responsible AI adoption that benefits the country.

⁶⁷ Staff Writer. (2024, April 7). Zimbabwe developing artificial intelligence policy. DailyNews. https://dailynews.co.zw/zimbabwe-developing-artificial-intelligence-policy/

Q3 OUTLOOK

Looking ahead, the third quarter of 2024 promises to be a period of significant progress for Al development across Africa.

Key Trends for Q3 Outlook

Continental Strategy and AI Governance

African ministers are expected to finalize the continental strategy on AI in July. This strategy should provide a roadmap for responsible and inclusive AI adoption across member states. The focus on collaboration and ethical considerations positions Africa as a leader in shaping the global conversation around AI governance.

Skilling Up for the Future

Training initiatives like the African Development Bank, Intel's program, and ACAIF's entrepreneur training will continue to ramp up in Q3. These efforts will equip Africans with the skills needed to participate in the AI revolution, fostering innovation and ensuring the continent benefits from AI advancements.

• Knowledge Sharing Through Partnerships

The G7's support for African AI development and projects like the AfDB-funded data center in Congo will likely see further progress in Q3. These collaborations will give Africa access to critical resources and expertise, accelerating its AI development journey.

Ethical Considerations Remain Paramount

The "Rabat Consensus" looks promising and should continue to guide AI development throughout Q3. This commitment to ethical AI ensures that African nations prioritize human rights and inclusion as they embrace this powerful technology.

CHALLENGES AND RISKS

Digital Divide and Infrastructure Gaps

Limited access to reliable internet and computing power hinders widespread AI adoption. While urban centers may have adequate connectivity, rural areas often lag. Bridging this digital divide and investing in robust infrastructure is crucial for ensuring equitable access to AI's benefits across all regions and socioeconomic groups.

Data Privacy and Security Concerns

Some African countries still need help establishing robust data protection frameworks to safeguard personal information. With increasing data collection and AI applications, comprehensive legislation and enforcement mechanisms are urgently needed. Mitigating data privacy risks and building trust among citizens will be essential for widespread AI acceptance.

Workforce Skills Gap

While training initiatives are underway, a significant skills gap exists in AI development, data science, and related fields. The rapid pace of technological advancement often outstrips educational systems' ability to adapt. Upskilling the workforce through targeted programs and reforming educational curricula will be crucial for Africa to fully harness the potential of AI and avoid over-reliance on foreign expertise.

Ethical Considerations and Bias

Ensuring fairness and transparency in AI development is paramount. African nations must be vigilant in mitigating potential biases in AI algorithms that could exacerbate existing inequalities. This includes addressing issues of representation in datasets and promoting diverse teams in AI development to ensure AI systems reflect the continent's rich diversity.

Resource Constraints

Developing and deploying AI solutions can be expensive. African nations might face challenges securing funding and resources to support large-scale AI projects. Innovative financing models and public-private partnerships may be necessary to overcome these constraints and drive AI innovation.

Regulatory Uncertainty

The legal and regulatory frameworks around AI are still evolving globally. African nations must develop clear, adaptable regulations that promote innovation while mitigating risks. This includes addressing issues of AI accountability, liability, and intellectual property rights unique to Africa's socio-economic needs

Over-reliance on Foreign Expertise

Overdependence on foreign partnerships and expertise could limit Africa's agency in shaping its AI future. While international collaboration is valuable, it risks perpetuating technological dependence. Striking a balance between leveraging global knowledge and fostering domestic innovation will be essential for sustainable AI development in Africa.

CONCLUSION

Africa stands at a pivotal moment in its Al journey, poised for transformative growth in Q3 2024 and beyond. The continent's approach to Al development, characterized by collaboration, responsible innovation, and a focus on addressing unique regional challenges, sets a promising foundation for the future. The imminent finalization of the Continental Strategy on Al marks a significant milestone, offering a unified vision and roadmap for member states. Coupled with tangible infrastructure developments like the AfDB-funded data center in Congo, Africa is rapidly building the necessary ecosystem for Al innovation.

International partnerships and knowledge-sharing initiatives are accelerating the continent's progress, but more importantly, they're empowering Africa to chart its course in the global AI landscape. The emphasis on developing a skilled local workforce through various training programs is particularly crucial, as it ensures that Africa's AI future will be shaped by its talent and perspectives.

However, the path forward has obstacles. The digital divide, ethical concerns, potential algorithmic biases, and the need for robust AI governance frameworks present significant challenges. Yet, it is in addressing these very challenges that Africa has the opportunity to lead globally in responsible and inclusive AI development. Africa's focus on leveraging AI for social good - from water management to economic policymaking - demonstrates a commitment to technology that serves humanity. This approach, combined with the continent's rich diversity and unique insights, positions Africa to adopt AI and reshape it fundamentally. As we look to the future, Africa's AI journey promises more than technological advancement; it offers a vision of innovation driven by social impact and inclusivity.

By staying true to these principles and continuing to invest in its people and infrastructure, Africa is not just participating in the AI revolution - it's poised to lead it, creating solutions that could benefit the entire world.