The Journey of the ACTS Artificial Intelligence Institute

Charting the Path Towards an African-Centered Artificial Intelligence Future

July 2025

The Pivotal Launch

The African Centre for Technology Studies (ACTS) virtually launched the ACTS AI Institute on July 15, 2025, marking a bold step towards shaping an African-centered future for responsible Artificial Intelligence (AI). The Institute, formerly the Digital Economy Programme at ACTS, aims to position Africa at the forefront of responsible AI innovation, development, and adoption.

The Institute serves as a nexus for research, policy development, capacity building, and strategic partnerships in the AI domain across Africa. Its mission is to ensure AI serves African development priorities through excellence in research, policy formulation, capacity building, and stakeholder engagement, with a commitment to ethically sound, contextually appropriate, and responsive AI solutions.

The virtual launch, titled **"Charting the Path Towards an African-Centered AI Future,"** took place on **July 15, 2025**, from 2:00 – 5:00 PM EAT via Zoom. The event was officiated by thought leaders in the AI and digital innovations ecosystem, brought together **over 700 participants,** including policymakers, researchers, development partners from Africa and Europe, the media and AI developers.

Participants represented countries across the globe, including Australia, Belgium, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Canada, Chad, Côte d'Ivoire, Democratic Republic of Congo, Ethiopia, France, Germany, Ghana, Guinea, India, Italy, Kenya, Malawi, Mali, Mauritius, Morocco, Mozambique, Namibia, Netherlands, Niger, Nigeria, Senegal, Sierra Leone, South Africa, South Sudan, Eswatini, Tanzania, Togo, Uganda, United Kingdom, United States, Yemen, Zambia and Zimbabwe.

Distinguished Speakers

Dr. Laurent Bochereau
Minister-Counsellor, European Union Delegation to the African Union

Amb. Prof Bitange Ndemo
Kenya's Ambassador to the Kingdom of Belgium

Gillian Dowie
Senior Program Specialist, Education And Science, International Development Research Centre (IDRC)

Dr Winston Ojenge
Principal Research Fellow, African Centre for Technology Studies (ACTS)

Prof. Berhanu M. Abegaz
Emeritus Professor, Department of Chemistry, AAU, FAAS, FTWAS, FEAS

Prof Brando Okolo
Head of Science, Technology, and Innovation (STI), AUDA-NEPAD

Dr. Kathryn Toure
IDRC Director, Regional Office of Sub-Saharan Africa

Prof. Tom Peter Migun Ogada
Executive Director, African Centre for Technology Studies (ACTS)

Dr. Devotha Nyambo
Senior Lecturer and Researcher Nelson Mandela African Institution of Science and Technology

Prof. Divine Fuh
Director, HUMA - Institute for Humanities in Africa

Moderators and ACTS Governing Council Representatives

Prof. Alfred Oteng-Yeboah
Chair, ACTS Governing Council

Dr. Michael Ståhl
Former Director of the International Foundation for Science (IFS)

Prof. Shem Wandiga
Former Director, Institute of Climate Change and Adaptation (ICCA), University of Nairobi (Dean)

Prof. Mammo Muchie
Research Professor, Tshwane University of Technology, South Africa.

Prof. John Ouma Mugabe
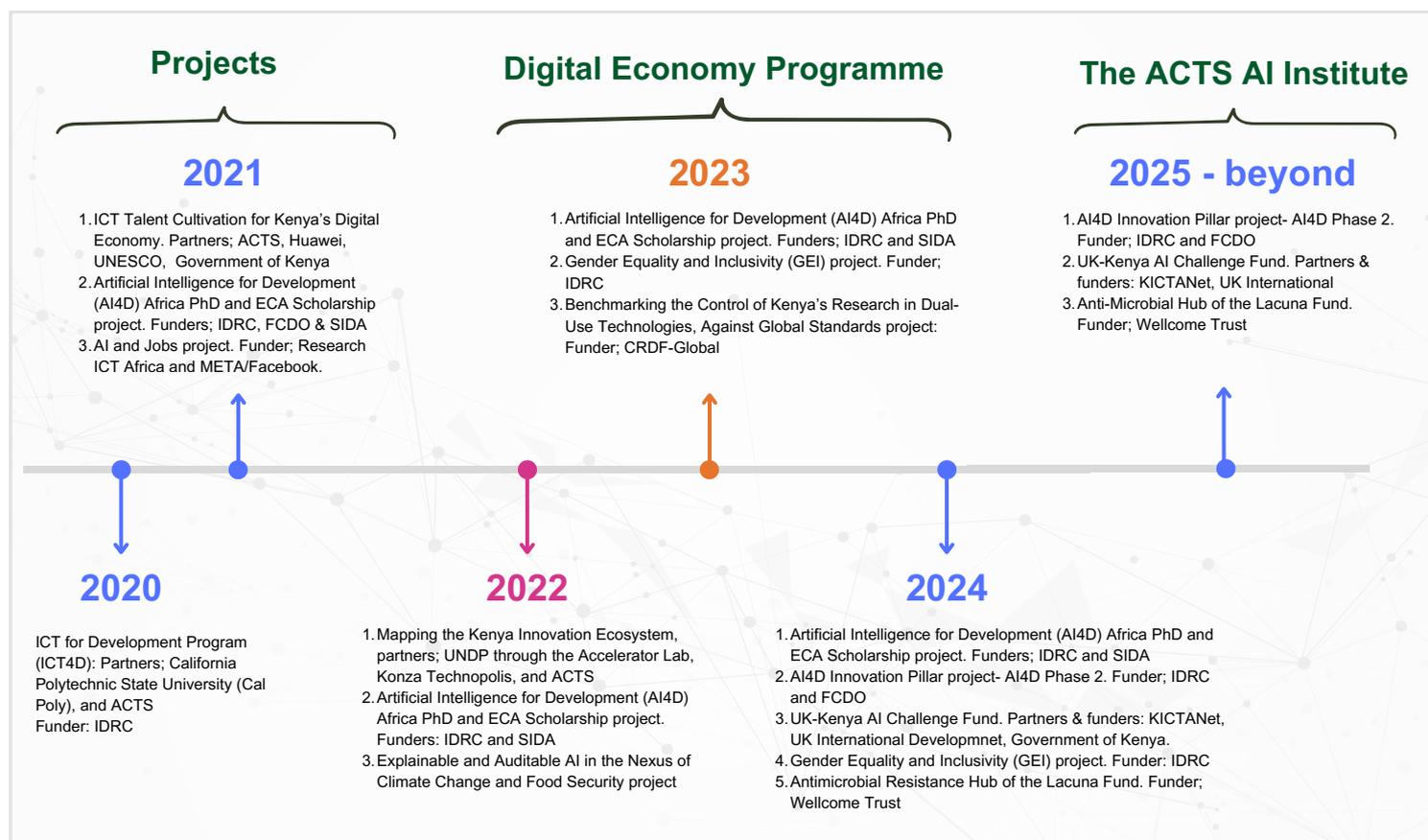Professor of Science and Innovation Policy, University of Pretoria

History

The ACTS AI Institute evolved from a single project within ACTS in 2020, to multiple projects in 2021, which necessitated the formation of the Digital Economy Programme in 2022. In January 2025, the ACTS Governing Council approved the transition of the Digital economy programme to a dedicated institute focusing on responsible AI development and deployment, the ACTS AI Institute.

The evolution of the Digital Economy Programme into the ACTS AI Institute reflects the growing significance of AI as a transformative force across these domains. The decision to establish a dedicated institute was informed by several key factors:

- The rapid advancement of AI technologies globally and the need for institutions capable of navigating this complex landscape with contextual understanding and foresight.
- The demonstrated potential of impactful AI applications through initiatives like the UK-Kenya AI Challenge Fund, AI4D Scholarship Project, Lacuna Fund AMR Project, and Facebook AI for Jobs project, which created momentum for a dedicated institute.
- A critical gap in Africa-centered research, policy frameworks, and implementation guidance for responsible AI development.
- Alignment with continental priorities such as the African Union's Digital Transformation Strategy (2020-2030), Science, Technology and Innovation Strategy for Africa 2024 and national development plans.

Below is the evolution timeline and the projects implemented in each period:

Projects

2021

1. ICT Talent Cultivation for Kenya's Digital Economy. Partners; ACTS, Huawei, UNESCO, Government of Kenya
2. Artificial Intelligence for Development (AI4D) Africa PhD and ECA Scholarship project. Funders; IDRC, FCDO & SIDA
3. AI and Jobs project. Funder; Research ICT Africa and META/Facebook.

Digital Economy Programme

2023

1. Artificial Intelligence for Development (AI4D) Africa PhD and ECA Scholarship project. Funders; IDRC and SIDA
2. Gender Equality and Inclusivity (GEI) project. Funder; IDRC
3. Benchmarking the Control of Kenya's Research in Dual-Use Technologies, Against Global Standards project: Funder; CRDF-Global

The ACTS AI Institute

2025 - beyond

1. AI4D Innovation Pillar project- AI4D Phase 2. Funder; IDRC and FCDO
2. UK-Kenya AI Challenge Fund. Partners & funders: KICTANet, UK International
3. Anti-Microbial Hub of the Lacuna Fund. Funder; Wellcome Trust

2020

ICT for Development Program (ICT4D): Partners; California Polytechnic State University (Cal Poly), and ACTS
Funder: IDRC

2022

1. Mapping the Kenya Innovation Ecosystem, partners; UNDP through the Accelerator Lab, Konza Technopolis, and ACTS
2. Artificial Intelligence for Development (AI4D) Africa PhD and ECA Scholarship project. Funders: IDRC and SIDA
3. Explainable and Auditable AI in the Nexus of Climate Change and Food Security project

2024

1. Artificial Intelligence for Development (AI4D) Africa PhD and ECA Scholarship project. Funders; IDRC and SIDA
2. AI4D Innovation Pillar project- AI4D Phase 2. Funder; IDRC and FCDO
3. UK-Kenya AI Challenge Fund. Partners & funders: KICTANet, UK International Developmnet, Government of Kenya.
4. Gender Equality and Inclusivity (GEI) project. Funder: IDRC
5. Antimicrobial Resistance Hub of the Lacuna Fund. Funder; Wellcome Trust

Pillar 1: AI and Governance

The challenge

- Concerns, fears, and perceptions of negative implications of large-scale deployment of AI in Africa such as economic impacts, labor shifts, inequality, accountability, surveillance, privacy, fairness, ethics, and human rights, diversity and gender equality, and data capacity, protection, and governance.
- These fears and perceptions, if not addressed, can derail the progress of AI development and deployment in Africa.

Our approach

- This pillar builds upon the Institute's existing work on AI governance, expanding into comprehensive policy frameworks that balance innovation with appropriate safeguards.
- In doing that, the Institute works to promote research and development of policy, standards, regulations, ethics of AI, which are contextual to the African values.
- The institute is also undertaking research and development of Africanised Responsible AI toolbox guide responsible AI development and scaling.

Looking ahead (2025-2028)

The institute is working towards;

- At least **12 African countries, institutions** and business organisations supported to develop responsible AI solutions.
- At least **2500 AI professionals trained** in responsible AI.
- Research and development of **Africanised scaling of responsible AI toolbox.**

Current and past work

The Institute's work on this pillar *(also cuts across pillar 3)* falls under the Artificial Intelligence for Development (AI4D) Innovation Pillar programme (2024 - 2028), funded by FCDO and IDRC and co-implemented by ACTS, CEMIA, Ladysmith Collective and Gender at Work. The project uses the GIZ Ethics of AI tool to mentor innovators across African hubs implementing these ethical frameworks in real-world contexts. The team is also working to develop an Africanized toolbox that will provide context-specific frameworks, as a result of gaps already realized in the current tool.

The work package focuses on:
1. **Scaling Responsible AI and Solutions (SRAIS) mentorship** for AI innovators in five (5) hubs across Africa, focusing on agriculture, health, education, climate, and gender. The Institute works with a network of academics across Africa comprising 14 Responsible AI mentors 14, and 10 mentors on Gender, Equity, Diversity and Inclusion (GEDI).
2. Developing **curricula for PhD and Master's in ethical and responsible scaling of AI.**

2. AI and Jobs (Economics of AI)

The challenge

- Loss of jobs remains the biggest fear of deployment of Artificial intelligence (AI) tools and techniques in Africa.
- Africa's working age population (15-64) will be over 1 billion in 2030 up from 0.74 billion in 2017, and on average only about 40 % of the workforce are engaged in productive employment and the unemployment rate is slightly above 8%.
- Whereas in developed countries the motivations to invest in AI include solving the workforce challenge due to an aging population, in Africa youth unemployment is considered a time bomb and a major concern by many policy makers.

Our approach

- The Institute focuses on exploring the adoption of AI technologies to address priority development challenges across Africa, with particular focus on agriculture, healthcare, climate resilience, and education, while strengthening the capacity of African countries to harness the potential of AI for job creation.
- This pillar explores how AI transformation will impact sector wide economic efficiency, market competition, pricing mechanisms, labour market shifts and broader economic structures.
- The pillar also explores AI's impact on economic efficiency, market competition, labor market shifts, and broader economic structures.

Looking ahead (2025-2028)

The institute is working towards;

- At least **six (6) African countries** and institutions supported to develop policies and strategies for harnessing AI to create jobs for youths and women.
- At least **1500 youth and women upskilled** and reskilled and at least **2000 youth, women trained** on digital skills.
- **Strengthening the capacity of the public (youth, women, workers) to harness AI** for their job activities, including providing access to AI to all members of the public through vernacular-based interfaces.

Our current and past work

Between April - December 2021, the Institute was commissioned by META to establish the benefits, risks, fears and facts about AI in the workplace. The project, funded by Research ICT Africa and META (then Facebook) developed three (3) high-level reports, including: **The Application of Artificial Intelligence in Education Africa**, the **Application of Artificial Intelligence in informal sector in Africa** and the Application of Artificial Intelligence in Health in Africa.

Our recent work under the **UK-AI Challenge Fund**, funded by the UK International Development supported **16 organisations from Kenya and UK** organised, in 2 Cohorts focused on addressing policy, healthcare, AI governance and public services with standards-based AI solutions. The work emphasised on ethical AI practices and inclusivity for marginalised communities.

3. AI Capacity Building and Skills Development

The challenge

- Africa has a huge potential to support a generation of highly skilled scholars and practitioners who can contribute to the local economy, develop new startups and industries, and drive innovation.
- The industry has projected demand for up to 500 PhDs per year in the next five years.
- To increase pipelines of AI solutions for commercialisation, Africa requires academics and graduates who can work across disciplines to design, develop, test, adapt, and eventually scale responsible AI solutions.

Our approach

The Institute focuses on strengthening Africa's human capital for AI development and governance.

We do this through targeted training programs, curriculum development, and knowledge transfer initiatives for African AI policymakers, researchers, entrepreneurs, and civil society.

Looking ahead (2025-2028)

The institute is working towards;

- At least **40 African PhD** students and **20 early career** academics supported to undertake research in AI through scholarships.
- At least **150 MSc students** supported to undertake research in AI through scholarships.
- At least **400 new AI innovations** developed and commercialised.

Our current and past work

The Institute implemented the Antimicrobial Resistance (AMR) Hub of the Lacuna Fund in 2024-2025, established to manage the call for proposals to identify qualified, multidisciplinary teams to develop open and accessible datasets for machine learning applications related to understanding Antimicrobial Resistance (AMR) in Africa. The project **mentored 48 innovators** with the aim of increasing the quality of proposal applications to the Lacuna fund call. The project selected four **(4) AMR projects** across three geographic regions; Africa (1), Asia (2), and Latin America (1) for funding.

Current work addressing this fall under the **Artificial Intelligence for Development (AI4D) innovation pillar** project program (2024- 2028), funded by FCDO and IDRC and co-implemented by ACTS, CEMIA, Ladysmith Collective and Gender at Work.

The programme comprises of the following pillars:

1. **Scaling Responsible AI and Solutions (SRAIS) mentorship** for AI innovators in **five (5) hubs** across Africa, focusing on agriculture, health, education, climate, and gender. The Institute works with a network of academics across Africa comprising 14 Responsible AI mentors 14, and 10 mentors on Gender, Equity, Diversity and Inclusion (GEDI).
2. Developing **curricula for PhD and Master's in ethical and responsible scaling of AI**
3. Providing **AI Scholarships to Women and PWD** to strengthen capacity of researchers and innovators from vulnerable communities to assess, develop and scale responsible AI solutions. So far, the Institute has supported **20 PhD scholars and 10 early career academics from 22 universities across Africa**. We also aim to onboard 5 PhDs and 3 Early Career Academics in the second Phase of the programme.
4. **Innovation scaling challenge**, intended to support deployed and in-use AI innovations that promise significant social impact and demonstrate readiness to scale.

4. Data Science

The challenge

Processes in industry, government and communities generate huge amounts of data that often implicitly host significant amounts of intelligence and insights that relate outputs to inputs. Data science is essential in industry for driving informed decision-making, optimising operations, and gaining competitive advantage. As industries face increasing complexity and data volumes, data science offers the tools and methods needed to stay agile, innovative, and customer-centric in a rapidly evolving market.

Our approach

The Institute intends to comprehend the knowledge needs and operational optimization opportunities within the processes of its clients in industry, government and community across the continent to determine what data, on analysis, would illuminate these knowledge needs.

Looking ahead (2025-2028)

The institute is working towards providing data science services to at least **six (6) clients every year** across the continent

5. Developing, Brokering and Scaling AI Solutions

The challenge

The following are the top four challenges facing startups, innovators and researchers in their paths to commercialisation:

- ·Most AI innovators struggle to access funding due to a lack of collateral or inadequate financial records and may require alternative financing models..
- Many AI innovators and researchers lack access to facilities for developing, piloting, testing, and demonstration of their technologies and solutions.
- Many innovators and researchers face challenges accessing markets for their digital products and services.

Our approach

The Institute works to develop and vend/ broker AI solutions to industries and businesses.

Looking ahead (2025-2028)

The institute is working towards;
- At least **200 researchers and innovators** supported to access piloting, testing and facilities in the university and research organisation as well as incubation and acceleration services.
- At least **US$ 10 million brokered and accessed by innovators** as investment for their businesses, supported through strategic events that link potential funders, and through developing business plans for scaling their innovations.
- At least **1000 innovators trained** on commercialisation

Endorsements for the Institute

"Congratulations to ACTS and everyone behind the ACTS AI Institute. From the European side, we want to engage with African colleagues on deepening the cooperation, particularly in the field of AI in science. Through the Africa Initiative III, we hope that we will help develop solutions which are addressing African priorities, but also using knowledge and languages which are indigenous in Africa."

Dr. Laurent Bochereau,
Minister-Counsellor, EU Delegation to the AU

"The Institute builds on the support from the AI for Development (AI4D) program, founded by the International Development Research Centre (IDRC), Foreign, Commonwealth Development Office (FCDO), and the Swedish International Development Cooperation Agency (SIDA). We are proud of the work that the institute has done through the AI4D Scholarship Program, which is bridging the AI divide by supporting researchers and innovators from historically disadvantaged communities to develop and scale AI solutions and to shape the African AI innovation system."

Dr Kathryn Toure,
IDRC Director, Regional office of sub-Saharan Africa

"It is good that we are now talking about African centered AI future. We, thus, have an opportunity to prioritise bridging that gap that has existed for many years. We need local infrastructure. We need appropriate capacity building, which must be centered on people understanding what they need to do in order to transition from poverty to prosperity. To do this, we need to begin to think from the policy side."

Amb. Prof Bitange Ndemo
Kenya's Ambassador to the Kingdom of Belgium

"I want to congratulate the ACTS team in launching this new institute. It comes at a critical time when the functions it intends to play are more in demand than ever. Many young people are looking for training and opportunities, and we have seen how important it is to support institutions across the region to guide that burst of activity towards responsible and inclusive AI, and to ensure that we are thinking about not only opportunity, but also about risks. The ACTS team has been evolving to address these challenges, alongside the evolution of AI in the region, the growth of the AI4D initiative, and the rapid rise of people trying to build AI tools and solutions. I look forward to your continued collaboration."

Gillian Dowie,
Senior Program Specialist, IDRC

> I believe that this institute is quite timely as we are beginning to see an upsurge in digital numbers around the continent where the young people are using data centers to provide AI solutions to people within the continent. At AUDA-NEPAD level, we help support not just those working at the foundational level of AI, but those that have already leveraged AI to be able to commercialize it. I am happy that there is an opportunity for us to also look deeply at how African languages can begin to feature within this Institute.

Prof Brando Okolo
Head of Science,
Technology, and
Innovation (STI)
AUDA-NEPAD

> The limitation in (Africa's) infrastructure comes from the entire architecture and processes around data acquisition, the ability to process data, the ability to critically develop strong and robust models. But we also have a challenge in data. Our data is still disaggregated. The Institute has the opportunity to make sure that we are closing that gap and make sure we have disaggregated data more real time, but also localize the data that can represent our local context.

Dr Devotha Nyambo,
Senior Lecturer
Nelson Mandela African
Institution of Science and
Technology

> The launch of ACTS AI Institute is a key moment for Africa as it will be instrumental in harnessing the transformative power of AI for our continent's development across vital sectors like agriculture, health, and education, while diligently addressing its ethical implications and ensuring safety and security for all, in line with the African Union Continental AI strategy.

Prof. Emeritus Berhanu M. Abegaz,
former Executive Director, African
Academy of Sciences

> The Institute builds on the experience and network consolidated over a period of five years, since ACTS started implementing projects related to development and deployment of responsible AI solutions and related policies, this launch is therefore meant to enable us to do what we have been doing better, with a wider mandate across the continent.

**Professor Tom Peter
Migun Ogada,**
Executive Director
African Centre for
Technology Studies

Endorsements for the Institute

> We have to get to a point where we begin to ask, what is it that we want? Because without having to ask those questions it means that we continue to practice AI research which do not reflect the everyday lives that people are associated with. The ACTS AI Institute, therefore, is a key platform to ask these very important questions.

Prof Divine Fuh
Director, HUMA – Institute for Humanities in Africa

> I am extremely excited to officiate the launch of the ACTS AI Institute. The Institute will be the beacon for Africa's intellectuals who have knowledge on IT and AI as well as those from other areas, to drive the vision of the AU. On behalf of the governing Council, we trust and belief that AI is going to actually be the game changer for Africa's development. We call for support from all those organizations that are represented here to realise the Institute's vision.

Professor Alfred Oteng-Yeboah
Chair, ACTS Governing Council

> This is an excellent initiative setting a powerful precedent for Africa's engagement with Artificial Intelligence. The Institute is poised to become a cornerstone for African-led innovation, ensuring that the development of AI technologies are not only advanced and transformative across key sectors, but also ethically sound and secure, truly benefiting all African societies.

Prof Mammo Muchie
Research Professor
Tshwane University of Technology, South Africa

> I want to congratulate the Institute for the very interesting work on AI you are already doing in Africa, in collaboration with partners. We need partnerships and collaborations to effectively deliver on the Institute's mandate, and the more global the collaboration, the better.

Prof. Shem Wandiga, Former Director, ICCA
University of Nairobi (Dean)

> I would like to congratulate Professor Tom Ogada, Dr. Winston Ojenge and his entire team, who has made sure that AI grew from a tiny part in the program to now becoming a full-fledged institute. We wish you all the best as you work towards AI by Africa, not for Africa.

Dr. Michael Ståhl
Former Director of the International Foundation for Science (IFS)