Digital Transformation Center Rwanda

QUARTERLY REPORT

JULY - SEPTEMBER 2024

QUARTERLY
REPORT

1. INTRODUCTION

Welcome to the latest edition of our quarterly report, where we present a comprehensive overview of the Digital Transformation Center Rwanda's recent endeavors and achievements. This report showcases our initiatives focused on driving innovation, empowerment, and progress within Rwanda's digital landscape.

In this edition, we highlight impactful projects spanning various focus areas, designed to address critical challenges and foster positive change in our communities. From empowering women through digital literacy and capacity-building initiatives to harnessing Artificial Intelligence (AI) for climate action, our commitment to leveraging technology for social good and sustainable development is clear.

Inside, you'll find insights into our work across key areas, including ecosystem-building activities, public sector innovation, and efforts to foster digital inclusion. From the National Robotics Program to the Innovate Africa Challenge on AI for Climate Action, each initiative marks a step forward on our collective journey toward a digitally empowered and inclusive Rwanda.

We extend our gratitude to our partners, stakeholders, and collaborators, whose support and dedication have been crucial to our success. Together, we are committed to advancing Rwanda's digital transformation agenda and shaping a brighter, more inclusive future for all.

2. SOLUTIONS & INNOVATION

2.1. Natural Hazards Monitoring for Disaster Risk Reduction Management

This project focuses on developing AI and data-driven solutions to support government responses to natural hazards such as landslides and floods. Key partners include the Ministry in charge of Emergency Management (MINEMA) and the Rwanda Space Agency (RSA). MINEMA is currently developing a roadmap for using AI in disaster risk reduction management, expected to provide initial insights in Q4. RSA is facing challenges in developing its AI-based monitoring system for landslides and floods, particularly due to the limited accuracy of meteorological data.

GIZ has contributed in three ways: 1) conducting a needs assessment with RSA, identifying meteorological nowcast and forecast data as critical, 2) supporting applied research to improve the available meteorological data in Rwanda, and 3) facilitating collaboration between the AI Hub and the Rwanda Meteorological Agency on AI-optimized weather forecasts, training for public sector developers, and potential involvement in a solar irradiation estimation project for photovoltaic system planning.

2.2. Mobility Lab

The Smart Mobility Lab fosters innovation in Rwanda's mobility sector through collaboration between private sector partners, academia, and public institutions. Building on ecosystem experiences in other regions, the lab joins a global network dedicated to mobility innovation. Its mission is to enhance access to mobility services and support clean energy transitions in the transport sector, focusing on two main areas: Smart Mobility and E-Mobility.

Under Smart Mobility, the lab seeks to improve access to transportation services, including public transit, taxis, and on-demand mobility options like ride-hailing and bike-sharing. Currently, preparations are underway for the Mobility Lab Hackathon, scheduled for October 23-25, 2024, which will generate solutions that drive the future of Smart Mobility in Kigali by engaging industry experts and student innovators.

2.3 Data and Artificial Intelligence for Crop-type Mapping and Crop Yield Prediction

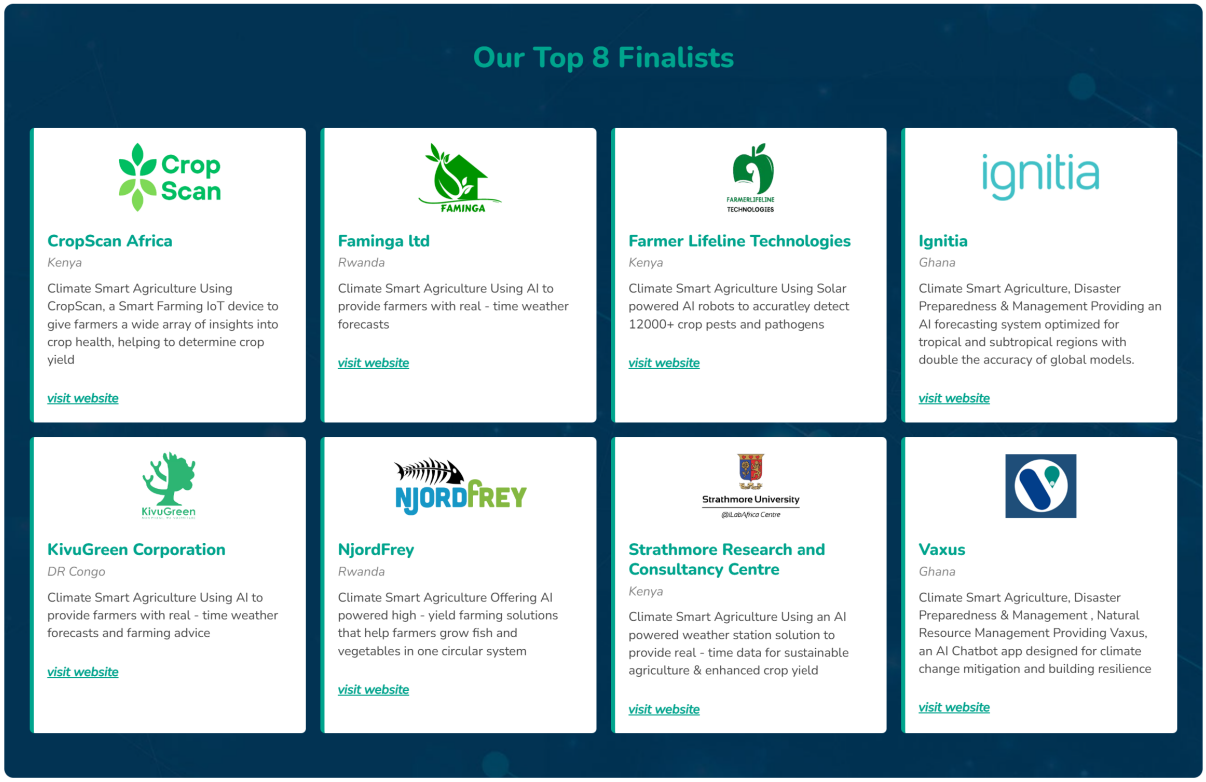
This project aims to develop and pilot an AI-based crop-type mapping tool to identify agricultural areas and classify crop types across Rwanda, a crucial element in crop yield prediction. The tool will support governmental policy and response for agricultural planning and food security.

GIZ, in collaboration with the Rwanda Space Agency (RSA) and the Ministry of Agriculture (MINAGRI), has co-designed this project, conducted market research, and published an open tender for service providers. Bid evaluations by GIZ, RSA, and MINAGRI are ongoing, with implementation anticipated to begin in Q4 2024.

2.4. Innovate Africa Challenge on AI for Climate Action

The Innovate Africa Challenge on AI for Climate Action aims to foster AI-based climate change mitigation and adaptation solutions across Africa while strengthening AI ecosystems, particularly in Ghana, Rwanda, and Kenya. GIZ, in partnership with Smart Africa and Climate Change AI, implements this challenge.

In the past quarter, the top 8 teams participated in an incubation phase, receiving AI and business support to refine their solutions, which range from crop disease identification to improved weather forecasting. A pitch event at the Digital Transformation Center Rwanda in October will determine the winner, who will exhibit at the Mobile World Congress Kigali.



For more info: Innovate Africa Challenge

3. DIGITAL LITERACY & CAPACITY-BUILDING

3.1. National Robotics program

This initiative supports MINICT and MINEDUC in integrating a national robotics curriculum into the educational system. Key stakeholders include MINICT, MINEDUC, REB, RTB, and five solution providers. Achievements include:

- Conducting a second round of training for trainers to ensure mastery of kits in alignment with curriculum content.
- Providing over 450 kits to 26 pilot schools.
- Hosting a BMZ delegation at GS Munyinya, demonstrating the impact on teaching and learning.
- Ongoing monitoring and planning for program scale-up.

3.2. Digital Literacy for People with Disabilities

The project aims to enhance basic digital literacy skills for people with disabilities through training and provision of assistive technologies. We are collaborating with MINICT, NCPD, and OPDs to support those people with disabilities on basic digital literacy.

The first round was concluded last year where participants from 10 organizations that support people with disabilities benefited from the program. 400 people with disabilities were trained, 30 trainers were trained for ToT, and the curriculum in both Kinyarwanda and English was developed.

The team is currently working with all stakeholders involved to map the needs of beneficiaries and identify the best approach to address those needs before starting the next round of training that is expected to start early next year.

3.3. Apple Labs

This is a project to support the establishment of Apple Accredited Training Centers for Education (AATCE) in 5 institutions in Rwanda (AUCA, Ines, Kepler, RCA, and AIMS).

Apple devices designated for schools will arrive in Rwanda in October 2024. An onboarding session is scheduled with Apple representatives and school officials to discuss the project framework, timelines, and next steps. Trainers at participating institutions are expected to complete their training by the end of October. Additionally, MINICT and GIZ will visit these institutions during the week of October 14th to assess their readiness to host Apple labs.

The official launch of the program is anticipated later in October or early November 2024, with the exact date yet to be confirmed.

3.4. Digital Marketing training for women in business

Together with Rwanda Internet Community and Technology Alliance (RICTA) and PSF Specialized Cluster, GIZ is organising a training for 80 women entrepreneurs in digital marketing (scheduled for October 2024). Some of the topics to be covered include online branding, social media strategies and other digital tools to elevate their businesses.

The women will be trained in 2 cohorts: 40 women in each. By the end of the training, the participants are expected to have been equipped with digital marketing skills as well as free websites for their businesses for the length of a year.

3.5. Digital Inclusion Council

In collaboration with MINICT, we will support to set up the digital inclusion council (DIC), which will become a one stop center (platform) for Rwandans seeking to acquire digital skills.

After UMUZI developed the implementation plan for the DIC, we assisted MINICT by engaging a consultant to create one of the landing pages for the DIC portal, which is the one million coders platform. The consultant is currently drafting the initial version of the DIC portal, which is expected to be completed by the end of November 2024. This will precede the launches of both the One Million Coders platform and the DIC portal.

3.6. Cyberhub

We will be supporting the National Cyber Security Authority to set up the Cyberhub. The Cyberhub is a cyber security academy that will have the necessary infrastructure to train cyber professionals that will meet Rwanda's cyber skills job requirements and help create a local cyber industry.

We are collaborating with NCSA on various aspects of the Cyberhub, including assisting with architectural design, renovations as well as cyber security pilot trainings. The hub's architectural designs have been approved by NCSA and a tender has been published to select a contractor for the renovations. We have received expressions of interest from a diverse range of companies, which we are currently evaluating to determine their eligibility. This process will continue as we seek a contractor to renovate the space.

Additionally, we are in the process of preparing the necessary documentation to issue a tender soon for hiring a consultant to lead the cybersecurity pilot training sessions.

3.7. 250 podcast 1st Cohort Graduation

The 250 Podcast Lab was launched to empower aspiring Rwandan podcasters by equipping them with essential skills, resources, and mentorship to create high-quality, impactful content. This pioneering initiative, developed collaboratively by the Ministry of ICT and Innovation and GIZ Rwanda through the Digital Transformation Center, attracted over 280 applicants. From this pool, we selected a dynamic and diverse group of individuals who showed remarkable passion and potential in podcasting.

Through a rigorous, hands-on program, participants received both theoretical and practical training in storytelling, audio production, editing, and content distribution, preparing them to make their mark in Rwanda's growing digital media landscape.

4. EVENTS & ECOSYSTEM

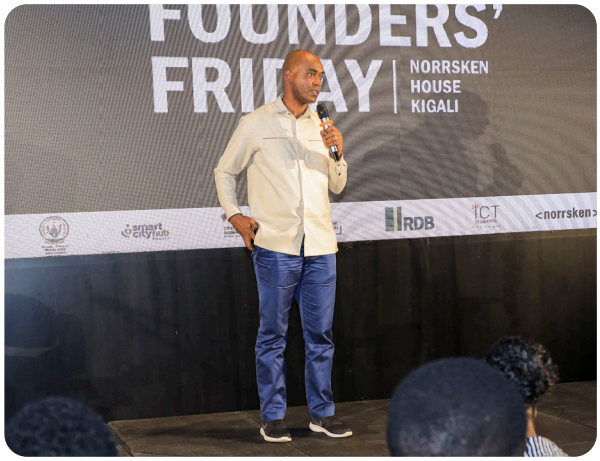
4.1. Founder's Friday: Smart City Hub

In pursuit of supporting innovations across various topics in Rwanda, the Smart City Hub partnered with the Rwanda ICT Chamber and Norrsken East Africa to create a platform for smart city innovators to showcase their innovations to the ecosystem and other stakeholders through the Founders Friday Hanga Pitch Series – the Smart Cities Editions. Each edition has drawn substantial interest, reflecting the dynamic and rapidly growing focus on Smart Cities Innovations in Rwanda.

In total, four Smart Cities Editions, offering opportunities to more than 16 startups operating in this vertical have been held at Norrsken Kigali House. The partnership has also brought about change and raised public awareness of the smart cities agenda, available opportunities for founders focusing on smart cities, and other meaningful partnerships.

During these editions, we have partnered with key players in the Smart City agenda, including the City of Kigali, the Ministry of Infrastructure, secondary cities such as Musanze, Bugesera, and Kayonza, and ESOs with support programs in this vertical (such as Westerwelle Startup Haus), along with other strategic partners.

The last event was held in August 2024.



4.2. Responsible AI Office

RAIO (Responsible AI Office) coordinates the implementation of Rwanda's National AI Policy and oversees international partnerships on AI governance.

In the past quarter, RAIO contributed to the drafting of the AI Playbook for small states and also participated at the UN General Assembly, witnessing the launch of the playbook in partnership with Singapore. The playbook was authored in a focal point approach, bringing together experiences of small states on how they have addressed crucial challenges in AI adoption and governance, such as capacity building, access to open data, computing infrastructures, and public-private partnerships, among others.

RAIO also coordinated activities for the policy work group that Rwanda chairs for the Commonwealth AI Consortium. Among the key results was the launch of the AI toolkit, a generative model that can draft AI and digital policies within countries' local contexts. The AI toolkit has already been in demand as some commonwealth partner states have started requesting the opportunity to participate in the piloting stage.

Link to the AI Playbook

4.3. AI Connect Hackathon

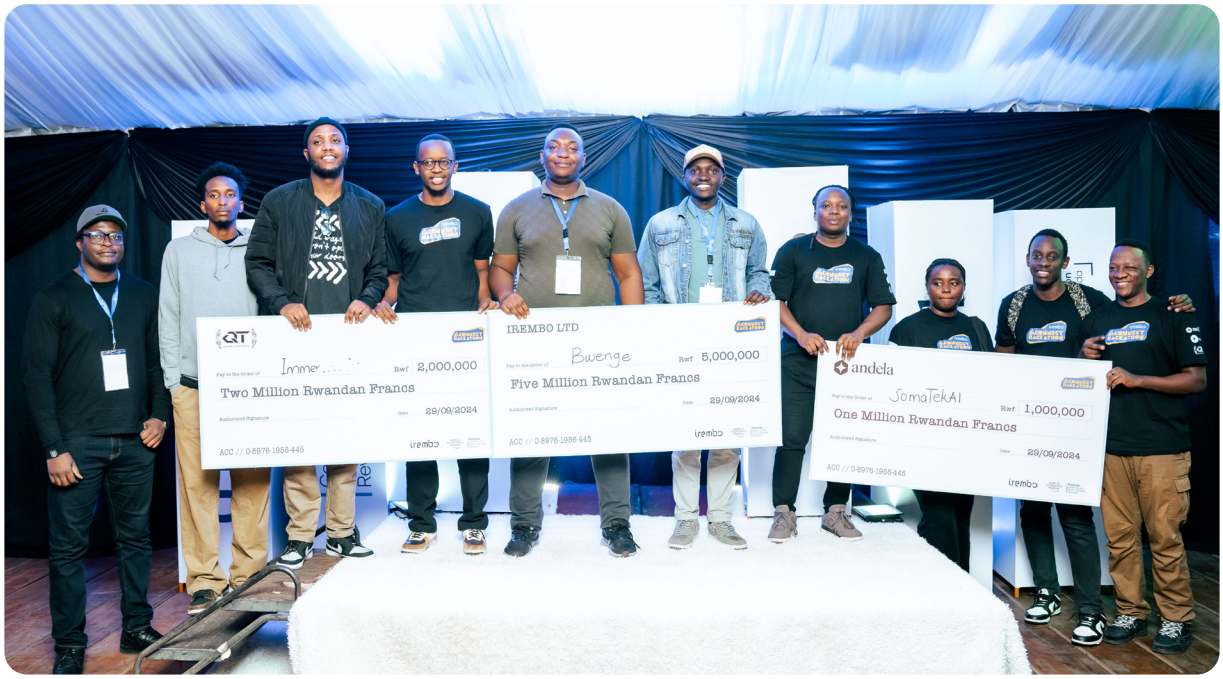
This is an initiative we supported where Irembo and the Centre for the Fourth Industrial Revolution (C4IR) hosted the inaugural AI Connect Hackathon, which gathered tech experts to develop solutions for significant challenges in Rwanda, such as healthcare, education, and financial inclusion.

During the 48-hour event, 20 teams collaborated to create functional applications using AI technologies, including large language models and locally developed tools, aimed at addressing these pressing issues.

A huge congratulations to the top three winners:

🏆 1st Place: Team Bwenge
🥈 2nd Place: Team ImmersiveAI
🥉 3rd Place: Team SomaTekAI

Congratulations to all participants for your incredible efforts.



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