



National ICT
Innovation Hub

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NEWSLETTER

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Editorial

Welcome to this edition of the NIIH Post. We're excited to share the incredible progress being made in Uganda's digital space, stories of innovation, inclusion, and collaboration that are shaping the future of our country.

In this issue, we explore milestones that reflect Uganda's growing digital influence, from the global stage at GITEX Africa 2025 to local impact through initiatives like WaGiTECH Connect and UICT's digital skilling for the visually impaired. These efforts demonstrate that digital inclusion is not a distant goal, but a reality unfolding in communities across the country.

The global recognition of SafeBangle is proof that homegrown solutions, born out of purpose and innovation, can resonate far beyond our borders. We applaud the contributions of government institutions, academia, startups, and civil society who continue to challenge the status quo and champion meaningful progress.

Looking ahead, programs like the National Free AI Skilling Initiative (NFASI) reflect our collective determination to ensure no one is left behind. As we continue this journey, we take a moment to celebrate the people and ideas driving change, from the local communities embracing digital skills to the innovators putting Uganda on the global map.

Winfred Nankanja

Communications and PR Associate, National ICT Innovation Hub





Message From the **National ICT Innovation Hub Team Lead Innovations**

Flavia Opio

I am pleased to share this month's update, celebrating bold strides in Uganda's digital transformation journey. April 2025 has been an inspiring month filled with national, regional, and global milestones that demonstrate our commitment to innovation, inclusion, and impact.

A key highlight was Uganda's strong representation at GITEX Africa 2025, the Ministry of ICT and National Guidance in partnership with Science, Technology, and Innovation (STI) Secretariat. Uganda was able to showcase its strength as "Africa's Innovation Powerhouse" The following founders Future Labs, Refactory Academy, Kacyber, Microfuse, Sumic IT Solutions, Credify Africa, Afriqloud Uganda and GovNet showcased Uganda's tech potential, secured international partnerships, and attracted investor interest, reinforcing our mission to build practical solutions for Africa, by Africans.

We proudly celebrated SafeBangle Technologies, a one of our startups, for winning the prestigious World Summit Award 2024 in Inclusion & Empowerment in India. Their emergency alert wearable is saving lives and positioning Uganda as a hub for socially responsible innovation.

In advancing inclusive digital empowerment, we implemented several impactful initiatives targeting underserved groups. The Girls in ICT Regional Engagements equipped hundreds of girls across five regions with

hands-on digital skills, the WaGiTECH Connect 2025 initiative by Edutech Club was launched to provide over 1,500 girls and young women with practical skills in web development, blogging, digital safety, and emerging technologies. Simultaneously, in collaboration with the International Telecommunication Union (ITU), UICT concluded a landmark introduction to Computer Basics for the Visually Impaired (ICBVI) training. This program empowered 30 visually impaired individuals and their sight assistants with essential digital literacy, reinforcing our belief that true innovation must be inclusive by design.

We also witnessed the launch of the National Free AI Skilling Initiative (NFASI) in partnership with the OTIC Foundation. This program has to date trained over 350 Ugandans in foundational AI skills—a vital step in preparing citizens for the Fourth Industrial Revolution.

Finally, our Professional Talk Series featured Mr. Mugume Collins on Business Model Development, where participants explored key themes such as MVPs, revenue models, unit economics, and profitable scaling. It was a valuable session for innovators building sustainable enterprises.

These milestones reflect our shared vision of a digitally skilled, inclusive, and innovation-driven Uganda. We pledge to maintain the momentum!!

Uganda Showcases Innovation Excellence at GITEX Africa 2025



Uganda recently marked a historic milestone at GITEX Africa 2025, held in Marrakech, Morocco—Africa’s largest technology and startup exhibition. The country’s vibrant delegation, led by the Ministry of ICT & National Guidance in partnership with the Science, Technology and Innovation (STI) Secretariat, made a powerful statement: Uganda is not just participating in Africa’s digital revolution—it is helping to lead it.

With an electrifying presence, the National ICT Innovation Hub (NIIH) and its ecosystem partners showcased a wide array of home-grown innovations in Artificial Intelligence (AI), Business Process Outsourcing (BPO), Deep-Tech, and digital public infrastructure. Uganda’s participation affirmed its emerging status as Africa’s Innovation Powerhouse.

A Strong National Delegation

The Ugandan pavilion at GITEX drew considerable interest from international investors, policymakers, development partners, and fellow innovators. The delegation highlighted the country’s tech capabilities, government-backed digital policies, and the strong pipeline of youth-led startups making tangible impact across sectors.

The National ICT Innovation Hub, based in Nakawa, played a central role in mobilizing and supporting innovators for the event. More than 8 companies and institutions represented Uganda, attracting collaboration and funding interest from across the continent.

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Spotlight on Uganda's Innovators

Uganda's innovators wowed the audience with practical, scalable, and inclusive digital solutions. The delegation featured:

Future Lab – Catalyzing innovation across climate, health, agriculture, and education through venture building and deep research-to-industry support.

Refractory Academy – Leading Uganda's skill-ing movement with a hands-on software development curriculum aligned with industry demand.

KaCyber Technologies – Providing digital ticketing and payment systems currently used by Uganda Railways and major bus operators.

Sumic IT Solutions – Empowering MSMEs with mobile apps, digital marketing, web development, and IT training.

Microfuse Technologies – Innovating in affordable electronics manufacturing for the East African market.

GovNet Services – Delivering e-Government and workflow automation tools tailored to the 4th Industrial Revolution.

These innovators demonstrated Uganda's capacity to deliver context-driven digital solutions that address real-world challenges across sectors.

DeepTech in the Spotlight



The DeepTech Centre of Excellence, another anchor institution under the STI Secretariat, also received international recognition at GITEX. The Centre showcased its work in Artificial Intelligence, robotics, biotechnology,

IoT, and quantum computing—positioning Uganda as a regional hub for cutting-edge R&D.

Key highlights included:

- AI-powered solutions for BPO and public service efficiency
- The launch of the Local Electronics Manufacturing Facility
- Commercialization of academic innovations
- DeepTech venture building and data infrastructure initiatives

What We Achieved

Uganda's GITEX Africa 2025 participation yielded significant outcomes:

- Dozens of partnership leads from international investors and technology firms
- Exposure for over 20 local startups to new markets
- Policy dialogues on digital public infrastructure and cross-border collaboration
- Strengthened brand recognition of Uganda as a viable outsourcing and innovation destination

Hon. Dr. Monica Musenero, Minister for Science, Technology & Innovation, noted, "GITEX Africa was a turning point for Uganda's DeepTech journey and innovation diplomacy. We are now seen as serious contributors to Africa's Fourth Industrial Revolution."

Looking Ahead

The momentum gained at GITEX Africa 2025 is only the beginning. The Ministry of ICT and STI Secretariat are committed to supporting the scale-up of showcased innovations, strengthening tech policy frameworks, and expanding investment in skilling and digital infrastructure. The National ICT Innovation Hub continues to nurture these innovators and support community-based digital transformation efforts across Uganda.

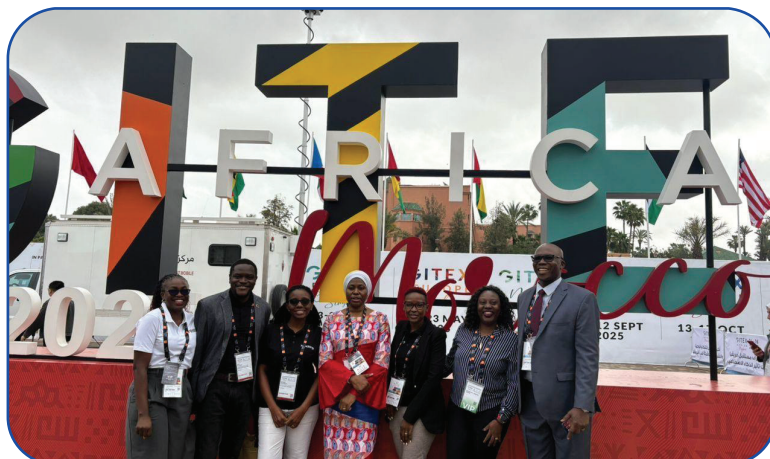
For updates on Uganda's innovation programs or to join our growing ecosystem, visit www.innovationhub.ug or contact us at innovationhub@ict.go.ug

National ICT Innovation Hub, From Nakawa to the world—empowering Uganda's digital future

PICTORIAL



Dr. Monica Musenero Masanza, Minister of Science, Technology and Innovation, delivering a keynote address at GITEX Africa 2024 in Marrakesh, Morocco.



Team Uganda poses for a group photo while representing the country at GITEX Africa 2024 in Marrakesh, Morocco.



George William Nyombi Thembo, Executive Director of the Uganda Communications Commission (UCC), delivering his remarks at the National Event for Girls in ICT Day 2025, held at the National ICT Innovation Hub.



Dr. Aminah Zawedde, Permanent Secretary of the Ministry of ICT and National Guidance, appreciating Professor Christian Bernareggi and Ms. Roobi Roobi, facilitators of the training for visually impaired persons.



Dr. Fredrick Kitoogo, Principal of the Uganda Institute of Information and Communications Technology (UICT), delivering his closing remarks at the end of the training for visually impaired participants.



The National ICT Innovation Hub lit up with energy as young coders from across Uganda showcased their creativity at the National Scratch Competition, implemented by Code Academy Uganda.



Some of the young women from tertiary institution attend the first WaGiTECH Connect 2025 planning meeting at the National ICT Innovation Hub



Ms. Janet Christine Nabaloga from SafeBangle Technologies - one of the startups hosted at the National ICT Innovation Hub, presenting at the 2024 World Summit Awards (WSA) in India where their company earned global recognition after being named a winner of the Inclusion & Empowerment category



Students from the CEDAT Department at Makerere University during a study tour at the National ICT Innovation Hub, exploring innovations and opportunities in Uganda's tech ecosystem.



Dr. Agnes Lumala, Academic Registrar of UICT, delivering opening remarks at the launch of the National Free AI Skilling Initiative by Otic Foundation at the National ICT Innovation Hub.



The National Free AI Skilling Initiative, implemented by Otic Foundation, underway at the regional ICT innovation hub at Soroti University.

PROFESSIONAL TALK

Business Model Development

We had an insightful session diving deep into the building blocks of a sustainable business, and it was packed with golden nuggets for any entrepreneur or innovator.

The areas of focus included the following:

1. Why MVP isn't a Business Model
2. Revenue Model Spectrum
3. Unit Economics Deep Dive
4. Scaling Profitably

"MVP is the first version of what you're building – not the business model" – Collins Mugume (the session facilitator)



SafeBangle Technologies Wins Global Award, Elevates Uganda's Innovation on World Stage

"When I press my SafeBangle, I know someone is coming for me," shared Grace N., a 26-year-old Kampala resident.



The team's culturally rooted design drew attention at the Congress, particularly during the "Equity by Design" panel, where they engaged with global experts including UNESCO and India's Ministry of Electronics. Women from India expressed interest in adopting the solution—underscoring its global relevance.

SafeBangle Technologies – one of the startups hosted at the National ICT Innovation Hub, has earned global recognition after being named a winner of the 2024 World Summit Awards (WSA) in India, in the Inclusion & Empowerment category. This win celebrates SafeBangle's innovative emergency alert bracelet designed to improve personal safety, particularly for women, using GSM-based technology that functions in low-connectivity areas.

Founded in Kampala, SafeBangle evolved from a small local initiative

into a globally acknowledged innovation showcased at the WSA Global Congress in Hyderabad, India. The discreet wearable, which resembles traditional jewelry, allows users to silently send an alert with precise location data to trusted contacts during emergencies—empowering users in areas where internet access is unreliable.

Piloted among over 1,000 users, SafeBangle has already led to a 63% reduction in emergency response times.

SafeBangle's co-founders, Saul Kabali and Messach Luminsa, emphasized the need for inclusive tech that respects local contexts while solving urgent challenges. The company is currently seeking partners to scale manufacturing and expand across East Africa.

The WSA award coincides with SafeBangle's participation in Makerere University's Safe-guarding Policy launch, as they explore campus-wide deployments of their life-saving technology.

UICT Empowers Visually Impaired Persons With Computer Skills

The Uganda Institute of Information and Communications Technology (UICT), in partnership with the International Telecommunication Union (ITU) have concluded an eight-day specialized training program dubbed, 'Introduction to Computer Basics for the Visually Impaired (ICBVI).'

The program's goal was to empower 32 visually impaired, partially sighted and sighted youth and adults with practical digital skills—from using screen readers to handling word processing tools - helping them build confidence, pursue employment opportunities and thrive in today's digital economy.

Led by Prof. Cristian Bernareggi from the University of Turin; Ms. Roobi Roobi, and Sada Kaane, an experienced instructor from Senegal, the training combined personal experience with technical expertise, creating an engaging and accessible learning environment. Trainees undertook comprehensive modules in basic computer navigation using keyboard shortcuts; document creation and management in Microsoft Word and email setup and management, among others.

According to Prof. Bernareggi, digital capacity remains low for people living with disabilities putting them at a disadvantage of accessing digital services and finding meaningful employment.

"There's a scarcity of educators trained in both ICT and inclusive teaching methods for learners with visual impairments and limited access to assistive technologies such as screen readers and braille displays, especially in rural areas," Prof. Bernareggi remarked.

The 2023 Rapid Assessment of Avoidable Blindness (RAAB) survey notes that visual impairment remains a significant public health concern in Uganda. Approximately 6% of Uganda's population (about 2.8 million people) are visually impaired. Moreover, an estimated 30,000 new cases of bilateral visual impairment occur each year, primarily due to cataracts and refractive errors.

"Visual impairment significantly affects individuals' ability to perform daily activities, pursue education, and maintain employment. This challenge underscores the need for extending digital literacy to the visually impaired for their inclusion in the digital economy," said Francis Bwire, head of the Business Development Center at UICT.

UICT is one of the 14 Digital Training Centres (DTCs) under ITU delivering ICBVI train-the-trainer programme as part of the DTC's activities. The programme aims to train and certify 20 trainers with foundational knowledge and practical skills to effectively teach the ICBVI course; help trainers acquire inclusive teaching methodologies that promote accessibility and adaptive learning strategies tailored to the needs of visually impaired individuals and create a pool of certified trainers for sustainability.

To sustain the gains reaped from this training, Bwire says that plans are underway for UICT to roll out the ICBVI course in Uganda.

By Ms. **Ninsiima Racheal** - Public Relations Manager, UICT



Celebrating Girls in ICT: Advancing Inclusion Through Regional Engagements

The Uganda Communications Commission (UCC) in its ongoing commitment to foster ICT development and bridge the gender digital divide, the Commission is proud to have participated in the International Girls in ICT Day 2025, under the global theme "Girls in ICT for an Inclusive Digital Transformation." This annual event, held in April, aims to inspire and empower girls and young women to explore careers in STEM and technology.

This year, UCC adopted a regional approach by hosting hands-on ICT engagements across five regions: Arua, Gulu, Mbale, Mbarara, and Kampala. These two-day sessions brought together girls from various secondary schools to engage in skills-based learning, mentorship, and innovation challenges.

Each region hosted events at local institutions such as Muni National Teachers' College in Arua and Kololo Secondary School in Kampala. Activities focused on practical ICT applications, creative problem

-solving, and critical thinking, with schools competing to develop innovative digital solutions. Winners included Arua S.S and Gulu S.S, among others.

Greenbridge School of Technologies facilitated the sessions, offering expert mentorship and guiding participants through engaging, hands-on learning. A highlight of the program was the participation of two students with disabilities from Gulu High School—made possible through assistive technologies provided by UCUSAF—demonstrating the Commission's firm dedication to inclusivity.

All participating students received certificates, giveaways, and the winning teams were awarded plaques in recognition of their excellence and innovation.

These regional efforts concluded with a National Celebration on Thursday, April 24, 2025, at the National ICT Innovation Hub

(Inside the Uganda Institute of Information and Communications Technology (UICT), Nakawa. The event brought together stakeholders from government, education, development agencies, and the private sector. Dr. Aminah Zawedde, Permanent Secretary at the Ministry of ICT and National Guidance, was the Guest of Honour.

A key feature of the event was a panel discussion featuring leading women in ICT, including Ms. Vivian Ddambya, Ms. Gorretti Byomire, Marcela Karekye, and Sherifah Tumusiime—each representing impactful work in digital transformation, inclusive education, civic tech, and women's entrepreneurship. By spotlighting success stories, fostering mentorship, and promoting access to digital tools, the UCC continues to pave the way for young Ugandan girls to become future leaders in technology.



WaGiTECH Connect 2025: Empowering Girls and Young Women to Shape Uganda's Digital Future

As the world marked International Girls in ICT Day in April 2025, Edutech Club proudly launched WaGiTECH Connect—an inclusivity-driven digital skilling and techpreneurship initiative focused on empowering over 1,500 young women and girls with essential 21st-century digital competencies. Participants receive hands-on training in digital collaboration tools, website development and design (including blogging with WordPress), digital safety and online privacy, and awareness of emerging technologies—with tailored sessions covering the fundamentals of Artificial Intelligence (AI) and its applications.

A core element of the program is the integration of Design Thinking, a user-centered, problem-solving methodology that fosters creativity, empathy, and innovation. Through Design Thinking, participants learn to deeply understand community needs, define real-world problems, brainstorm impactful ideas, prototype digital solutions, and iteratively test them.

WaGiTECH Connect is a bold response to a sobering reality: only 19% of participants in Edutech Club's programs over the last two years have been female. This initiative sets out to change that by engaging 1,000+ high school girls, 500+ tertiary students, and 100+ boys and young men, with a 60% female participation target. The project's ultimate aim is to close the gender digital divide and create inclusive pathways to tech careers.

The launch took place with two impactful sessions. One at the National ICT Innovation Hub (NIIH), Nakawa on Saturday, April 26th and another at Trinity College Nabbingo (TRICONA) - on Wednesday, April 30th. These events featured hands-on training in digital collaboration tools, website creation using the best content management system-WordPress (powering 43.6% websites globally). And in addition, motivational talks, and mentorship from female tech professionals among others and a female ICT teacher from TRICONA (Ms. Dorothy Tulina).



One of the facilitators supporting Girls during a practical session to mark the WaGiTECH Connect 2025 launch and Celebrating of International Girls in ICT Day at Trinity College Nabbingo (TRICONA)

Inspired by successful models like MTN's regional "Next Gen" and "Women in Digital Business" programs, WaGiTECH Connect is rooted in the belief that technology only works when it includes everyone. Just as MTN has equipped hundreds of girls in Cameroon and South Africa with tech skills for entrepreneurship, WaGiTECH Connect is helping Ugandan girls unlock their creative and economic potential.

The initiative also aligns with Uganda's broader ICT development efforts. Much like the Uganda Communications Commission's regional Girls in ICT engagements earlier in April—hosted in Arua, Gulu, Mbale, Mbarara, and Kampala—WaGiTECH Connect focuses on mentorship, inclusion, and community transformation. It carries forward the spirit of inclusion seen in the participation of girls with disabilities during Gulu's events and builds on the global momentum around gender equity in tech.

Registration remains open for upcoming sessions at: www.wagitechconnect.org

As we look ahead, WaGiTECH Connect is more than a program—it is a movement for inclusive digital empowerment, ensuring that the future of tech is built by all and benefits all.

National Free AI Skilling Initiative (NFASI) launched to Empower Citizens for the 4IR

By Cassius Itabaniza and Agnes Kembabazi

OTIC Foundation officially launched the National Free AI Skilling Initiative (NFASI) on Saturday, April 5, 2025, at the National ICT Innovation Hub, UICT Nakawa Campus. The initiative aims to prepare Ugandans for the Fourth Industrial Revolution (4IR) by offering free and accessible training in cutting-edge technologies such as Artificial Intelligence (AI), Machine Learning, Data Science, Generative AI, and Cybersecurity.

Spearheaded by the Otic Foundation in partnership with W3Schools, the Ministry of ICT & National Guidance, the American Centre Kampala, and UICT, the program is designed to bridge Uganda's digital skills gap and enhance employability across sectors.

So far, over 350 learners have completed examinations in the ongoing three-month foundational course. Open to all Ugandans—regardless of their ICT background—the program has drawn participation from students, professionals, and entrepreneurs. Generative AI, which enables machines to create new content such as text, images, and code, has been a major focus this month, highlighting AI's role in unlocking creativity and new economic opportunities.

“Our mission is to skill 3 million AI talents and create 1 million AI-centric jobs by 2030,” - Bill Dan Arnold Borodi, Head of Public Relations at Otic Foundation. “This initiative equips Ugandans with tools to thrive in an AI-powered world.”

Training is being delivered through regional ICT innovation hubs, including those in Nakawa, Kabale University, Muni University (Arua), and Soroti University, ensuring nationwide accessibility.

NFASI builds on last year's “AI in Every City” program and signals continued commitment to inclusive digital transformation. Beneficiaries like Davis Nsobya (Kyambogo University) and Sandrah Ayebare (Nina Interiors) attest to the impact. “This training gave me the tools to kick-start my innovation,” said Nsobya. Ayebare added, “This opportunity is for everyone—not just techies.”

With NFASI, Uganda is taking bold steps toward future-proofing its workforce and building a resilient, innovation-driven economy.

