



Change Before You Have To!

RENU's Journey of Collaboration and Continuous Evolution

Presented to SABEN Connects 2026

Cape Town – 30th September 2026

By

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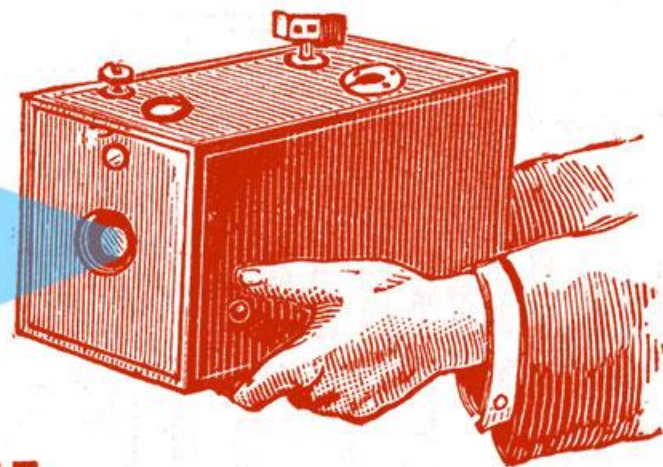


Outline

- Preamble
- Context
- Who we Are
- Collaboration
- **eduroam**
- New RENU
- Coming soon
- Appreciation



**The Camera
that takes
the World !**



**THE
KODAK**

Nokia vs. Apple

The 10-Year Market Cap Crossover Story(2001–2011)

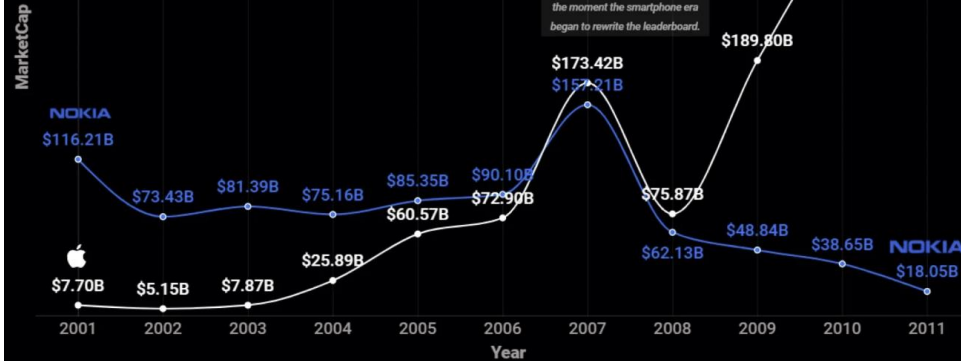
— Nokia — Apple

Company	Growth Multiple	CAGR (2001–2011)
Nokia	0.16x	-16.93%
Apple	48.87x	44.04%

*CAGR (Compound Annual Growth Rate)

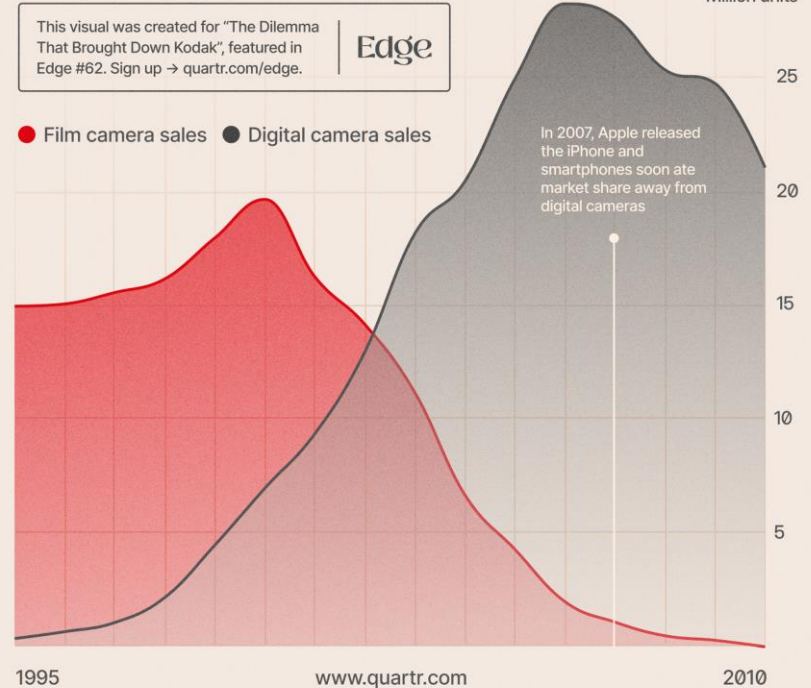
Updated Sep 04, 2025

Source:  MarketCapWatch.com



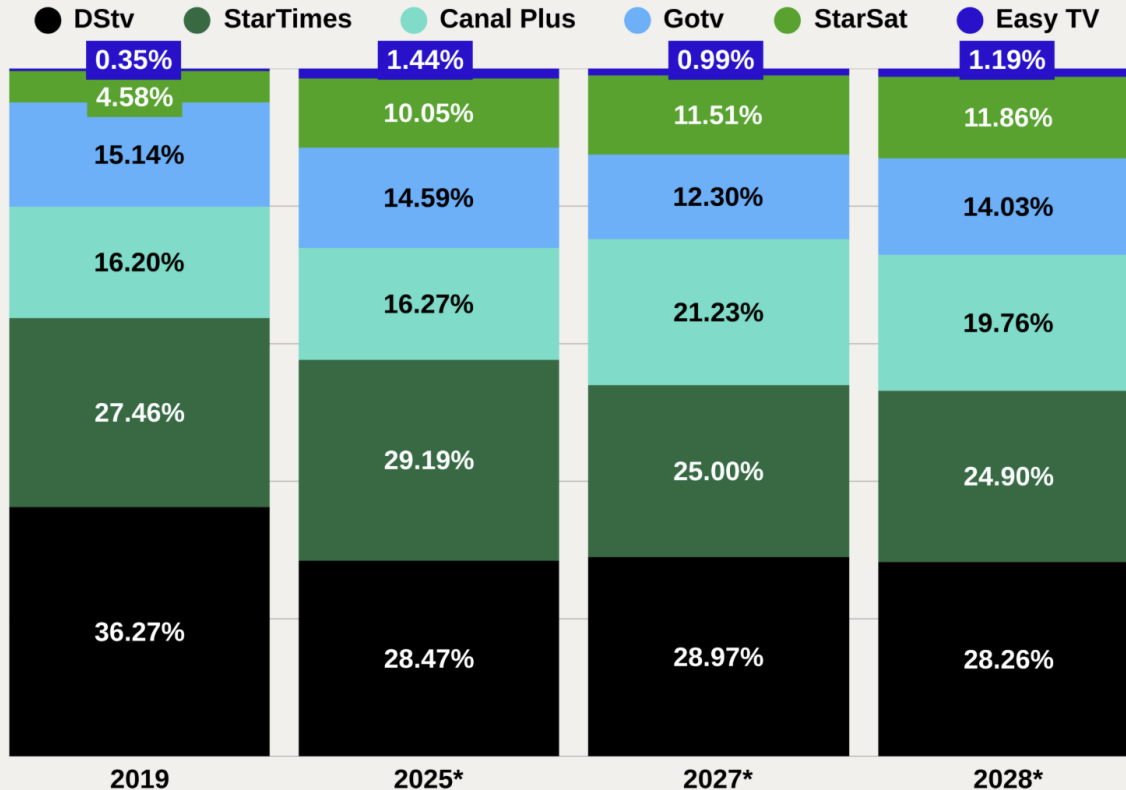
Waves of disruption

Film vs. digital camera sales comparison, 1995-2010.



Africa's pay TV subscribers

DStv is projected to remain Africa's leading pay TV platform by 2028, holding 28.26% of the market share, despite a decline from 36.27% in 2019



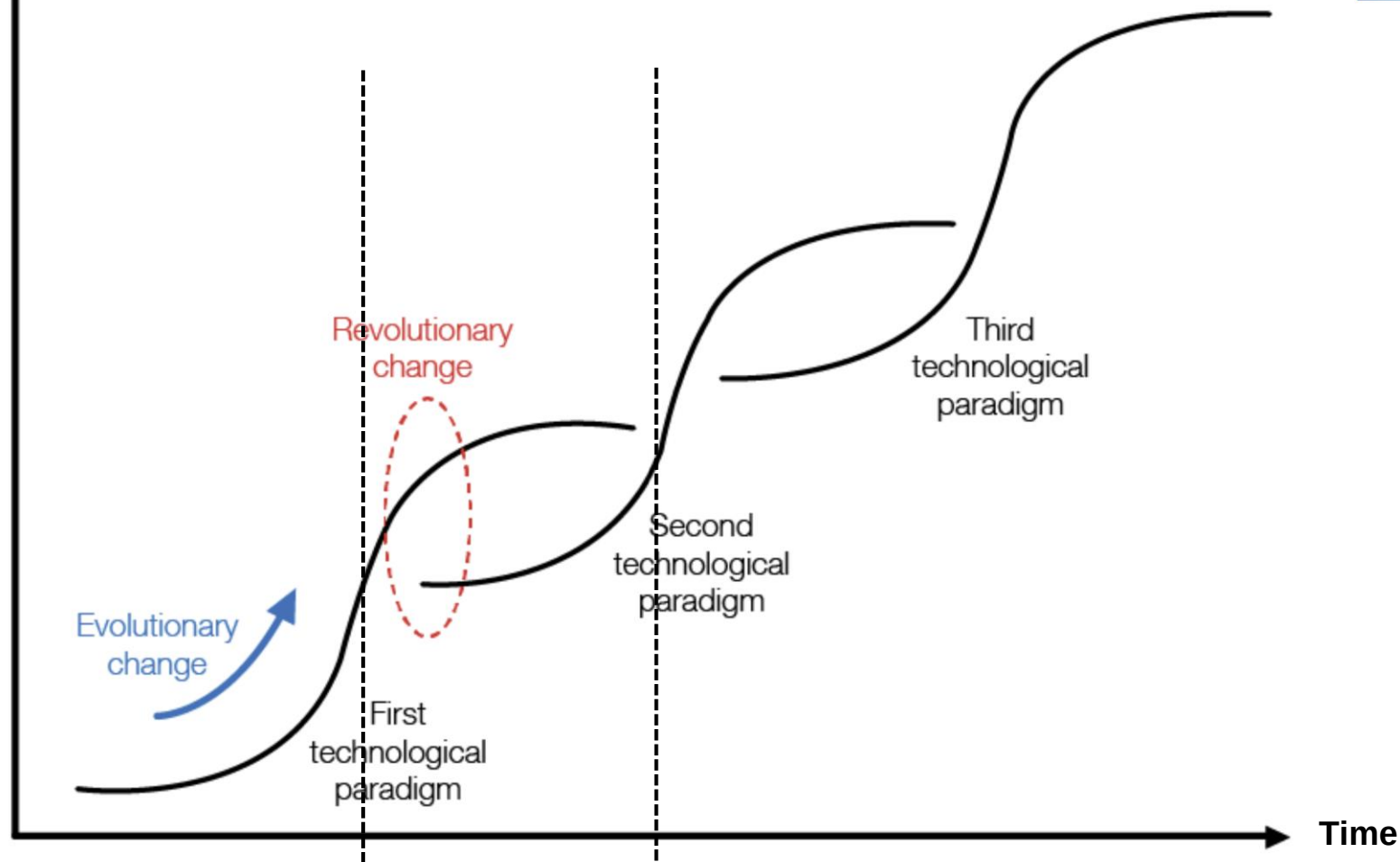
Number of pay TV subscribers in Africa by platforms (2019 - 2028)

NOTE: Figures for 2025*, 2027* and 2028* are forecasted.
Figures do not include other smaller pay TV operators.

Source: Digital TV Research

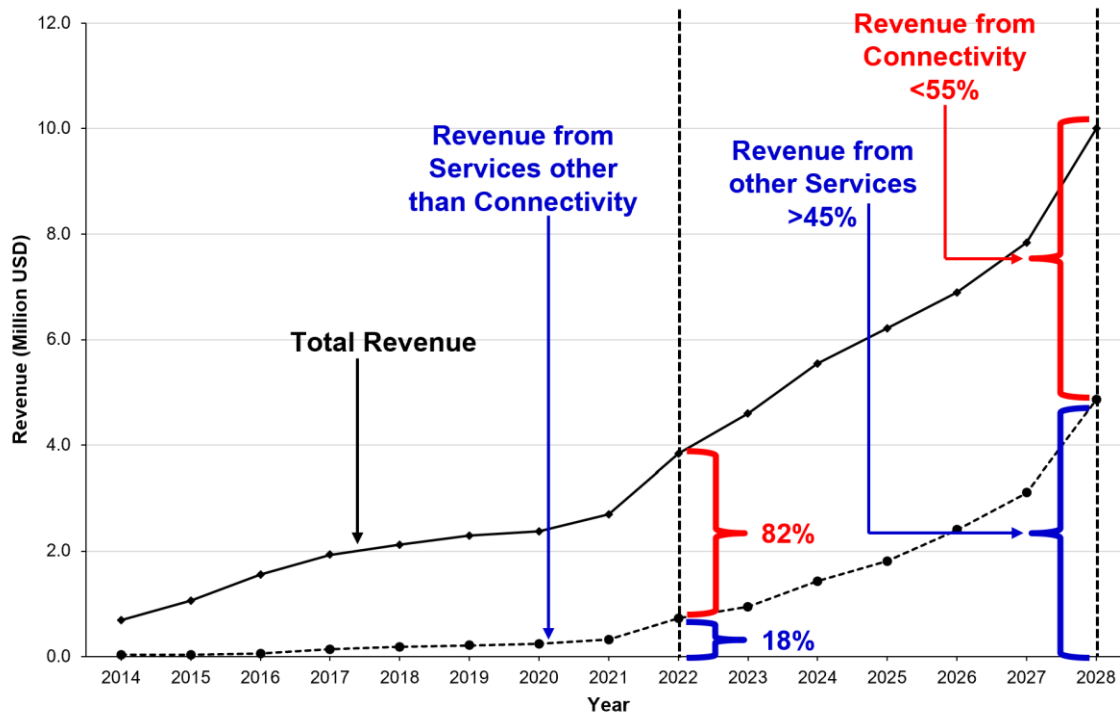
Growth

Business Growth Over Time



Strategic Plan (2026 to 2030)

RENU Revenue Past + Projections



Biggest Risk!

Revenue concentration ☺

“A single product rarely made a successful company” ~ HP Way

“

*“Change before you
have to.”*

JACK WELCH

FORMER CEO OF GENERAL ELECTRIC

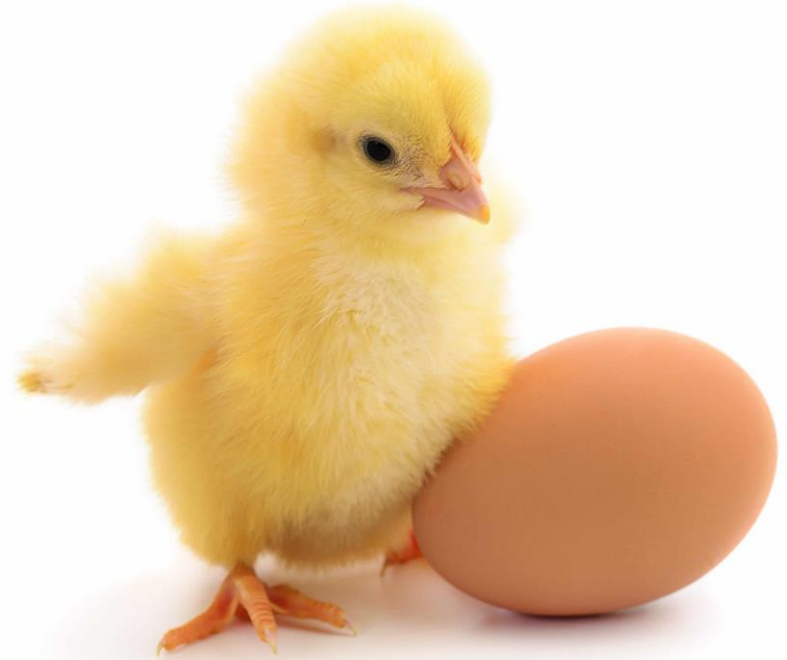
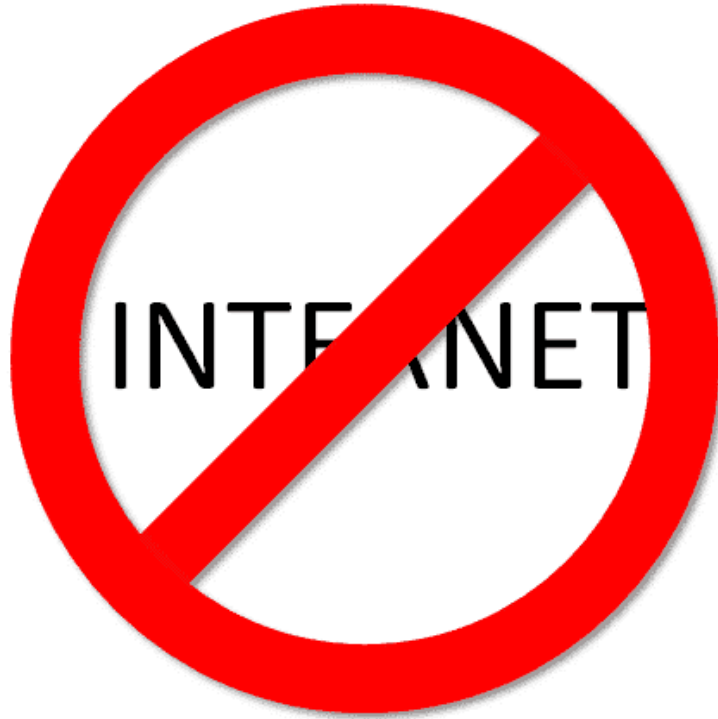


Context!

- **Uganda GDP per Capita – USD 1,300**
 - Total population – **50+** million
 - 70% below the age of 20 😊
- **South Africa GDP per Capita – USD 8,000**
 - Total population – **65+** million
- **EU country with highest GDP per Capita – USD 175,000**
- **EU country with lowest GDP per Capita – USD 3,900**
 - Total population – **2.4** million



**Reduce
inequality
within and
among countries**



Who we Are - The Beginning

2006, Entebbe

- VCs of Universities
- CEOs and EDs of Research Institutions

Not-for-profit organization
Owned by members 😊



Why we Exist!

Initial challenge

- Reliable & affordable connectivity

BUT

- Connectivity just a means to an end

What's the end?

- Access to resources
- Improved methods
- Improved collaboration

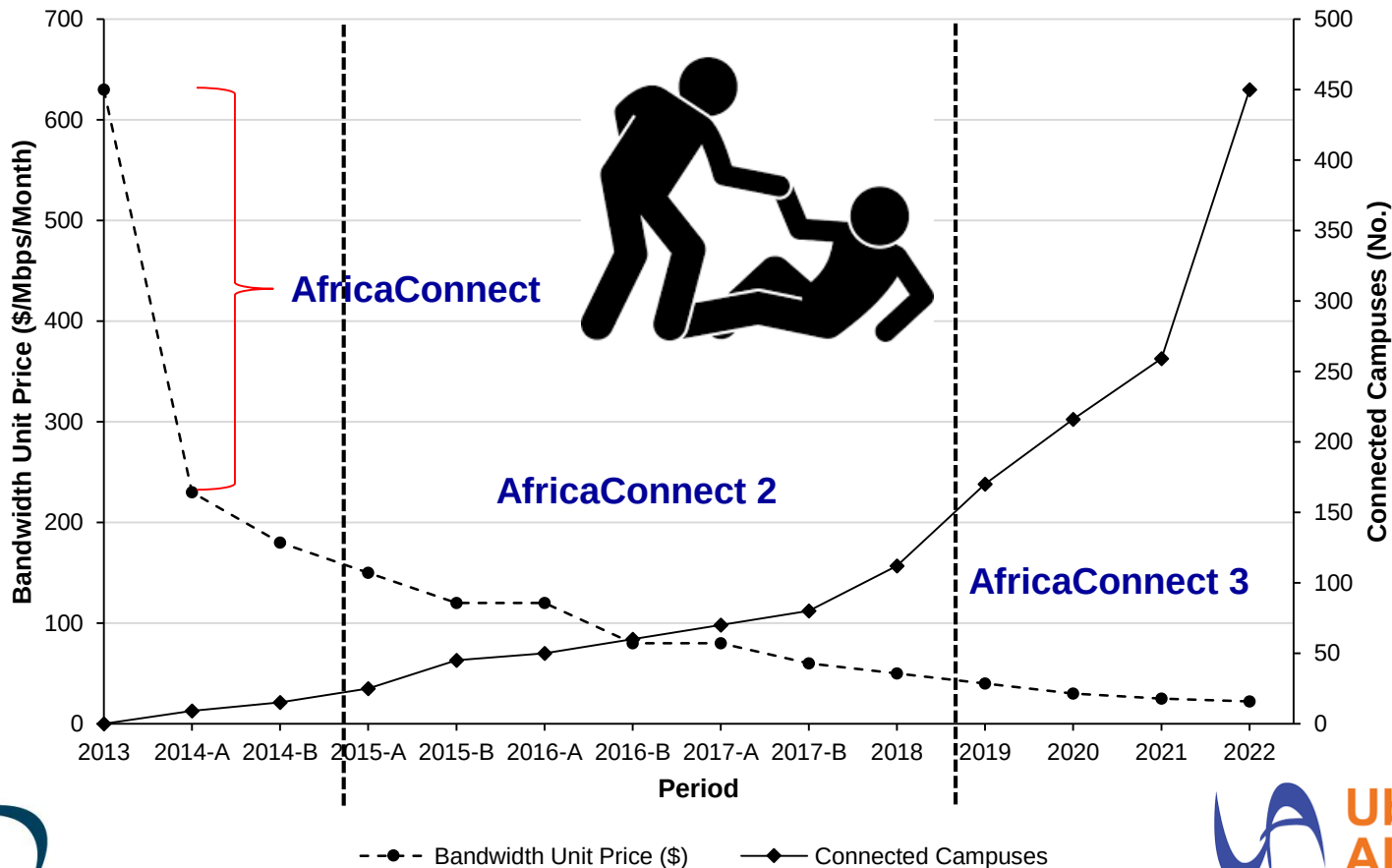
Hence

- High quality education and research





RENU Connected Campuses vs Bandwidth Unit Price



AfricaConnect

AfricaConnect 2

AfricaConnect 3

--●-- Bandwidth Unit Price (\$)

—◆— Connected Campuses

“Once an idea is successful, it is rendered obsolete”

“I remember in early 2013, the Board of RENU approached UCC for support. The organisation wanted to be part of the AfricaConnect Project, where each NREN within Africa was required to pay £280,000. RENU’s member institutions had managed to collect £40,000. The Board was hopeful that they could raise a total of £80,000. They thus needed a contribution of £200,000 urgently, as institutional payments were coming in at a very slow pace, yet the project had a deadline. If they missed the opportunity, they would be locked out for four years. In recognition of the objective of the AfricaConnect Project, UCC offered the needed £200,000,” Eng. Irene Kaggwa Sewankambo, UCC.

One Condition – Bandwidth unit price should be 120\$ per Mbps per Month by June 2016 ☺

Digitising Schools with High-speed Internet Under the RENU-UCC Partnership



Hon. George William Thembo Nyombi together with the RENU team after the signing ceremony at the UCC Secretariat in Bugolobi.

connection of these schools by the end of March 2025. With this addition, the total number of schools connected through our collaboration with UCC will rise to 229. However, this is a tiny fraction of the schools across the country still struggling with Internet connectivity and digital services. There is much more work still to be done, and RENU remains committed to delivering quality and impactful solutions."

For the past four years, UCC has partnered with RENU to provide schools with fast and reliable Internet access. This collaboration continues to play a vital role in bridging the digital divide within Uganda's education sector, ensuring that students and teachers can leverage the power of the Internet for enhanced educational experiences.

This partnership is crucial in advancing the integration of ICT in Uganda's education system through the UCUSAF initiative. The integration of ICT has the potential to significantly improve performance in STEM (Science, Technology, Engineering, and Mathematics) subjects by enabling easy access to interactive learning tools, access to diverse content, and the inclusion of digital resources within the secondary school curriculum. RENU's role in this partnership is to deliver high-quality, reliable, and affordable Internet connectivity to schools while also building the technical capacity of IT officers in these schools to manage and maintain clean Local Area Networks (LANs). This ensures that schools can derive maximum benefit from the RENU backbone network, supporting their digital transformation journey.

New Regulator Challenges 😊

- **Serve the underserved**
- Sustainable connectivity to schools
- Child online protection
- ICT skilling for teachers



CLOSED
DUE TO COVID-19



What about Connectivity Off-campus?

Struggling with off-campus Connectivity?
A SOLUTION IS COMING!



www.renu.ac.ug



AFRICA'S FIRST METRO DEPLOYMENT
FREE, SECURE, TRUSTED.
IT'S COMING HOME!



www.renu.ac.ug



1st September 2020

eduroam

1. Off-campus eduroam Wi-Fi locations



2. Successful eduroam authentications at new off-campus locations in the last 12 months

500,000

www.eduroam.ie

3. Disadvantaged students - coverage

Based on 2020 Undergraduate data from HEA



4. eduroam is now available in locations such as:

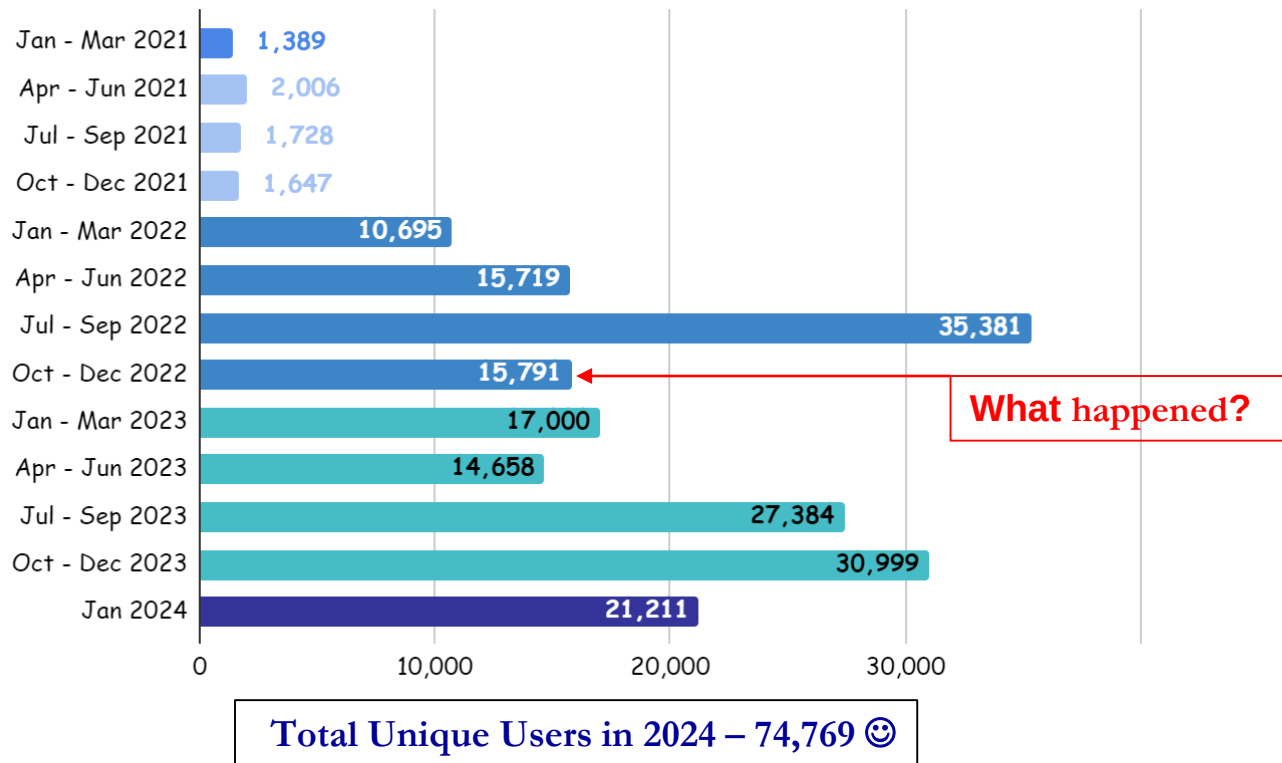


HEAnet
Ireland's National Education & Research Network

Metro eduroam Stats

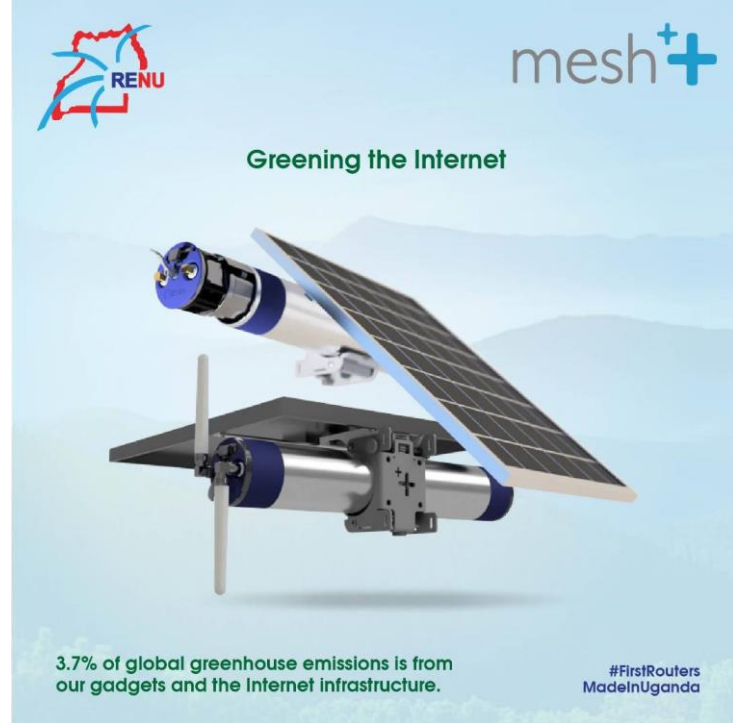


- Unique Users – From January 2021 to January 2024



1. How do we scale up Metro eduroam?
2. How do we deliver Metro eduroam at scale, and sustainably?

- Environment
- Financial
- Ecosystem
- Social, political
- etc



mesh++

RENU Partners with Mesh++ to Manufacture Solar-powered Internet Routers in Uganda

The Message, The Stakeholder

Digitizing Uganda's Education

Ministry of Education and Sports Joins eduroam



Mr. Ronald Ddungu, Principal Education Officer (MoES) and Ms. Ketty Lamaro, the Permanent Secretary pose with an eduroam on the Go device.

Speaking at an interview with the RENU team, the Permanent Secretary to the Ministry of Education and Sports, Ms. Ketty Lamaro spoke highly of eduroam by revealing her experience with the solution so far, and her excitement about the many benefits the solution would bring to the Ministry, and how the solution was already impacting schools.

"Before the deployment of eduroam at the Ministry, I had the opportunity to witness firsthand the impact of the eduroam service provided by RENU during the Conference on Mathematics, Science and Technology Education in Africa (COMSTEDA) exhibition two years ago, and since then, our experience with the service has been exceptionally positive. In addition to enhancing Internet connectivity in schools, eduroam has also made a significant impact on our internal operations, especially during meetings and collaborations. The seamless Internet connectivity provided by eduroam in our boardrooms has reduced interruptions and enhanced communication, ultimately leading to more productive engagements", said Ms. Lamaro.

■ In a similar interview with the Under Secretary

digital agenda because one of the biggest challenges as we did a needs assessment, was access to affordable Internet connectivity and without it, it would become difficult for us to implement what we have on the agenda."

About eduroam

eduroam was first launched in Uganda in January 2016 with RENU as the National Roaming Operator (NRO), and at that time, it could only be accessed at institutional campuses. Now, RENU's eduroam service has been revolutionised to offer diverse Internet connectivity options tailored to the needs of research and educational institutions. The solutions include Metro eduroam and eduroam on the Go.

Metro eduroam

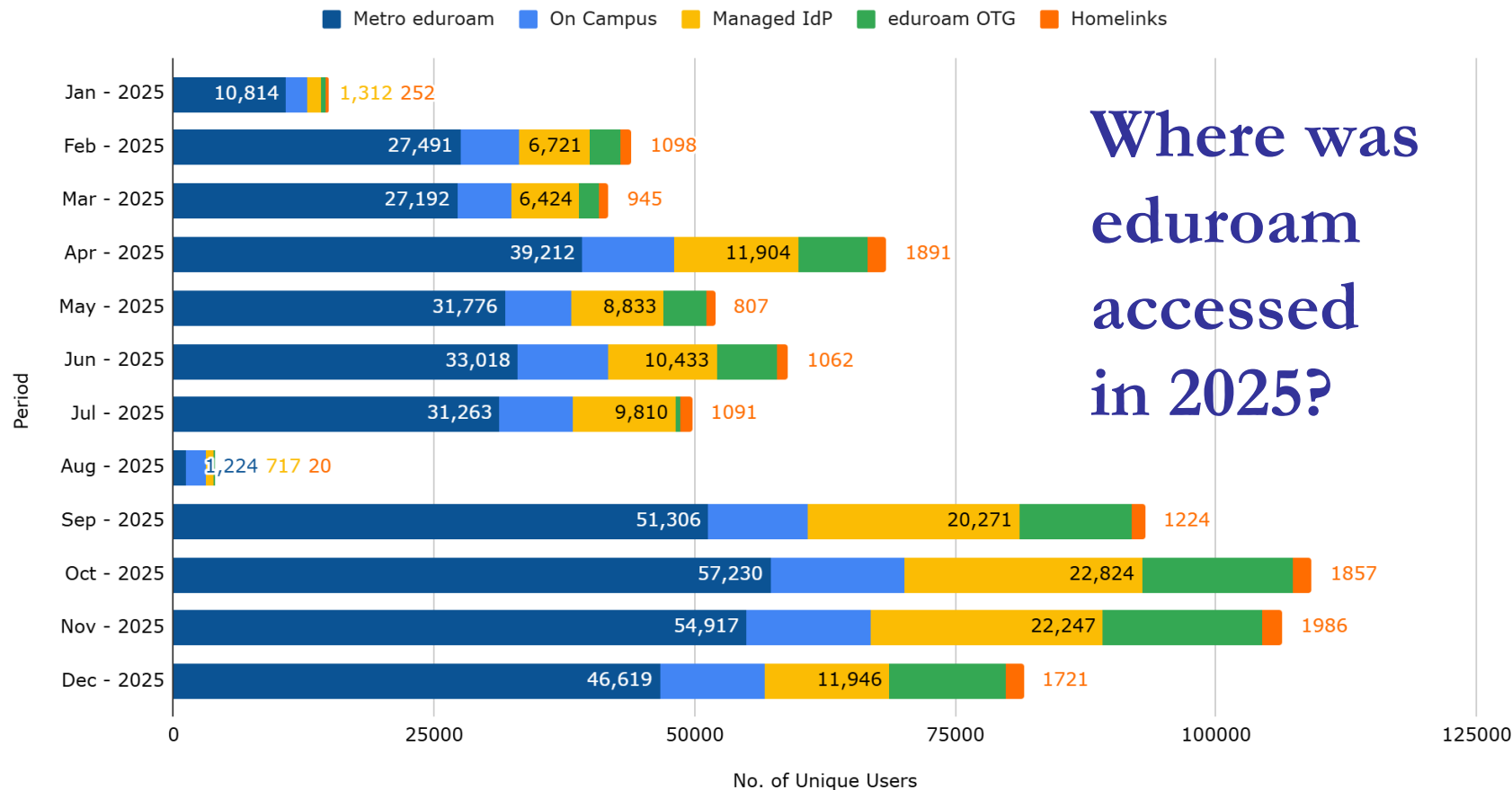
In addition to the conventional on-campus eduroam, RENU provides Metro eduroam, extending seamless Wi-Fi access in metropolitan areas across the



Dr. Jane Egau, Under Secretary, Ministry of Education and Sports receives an eduroam on the Go device from a RENU representative.

COVID-19 pandemic. By the end of March 2024, there were 51,314 RENU launched individuals using RENU's eduroam service, and by

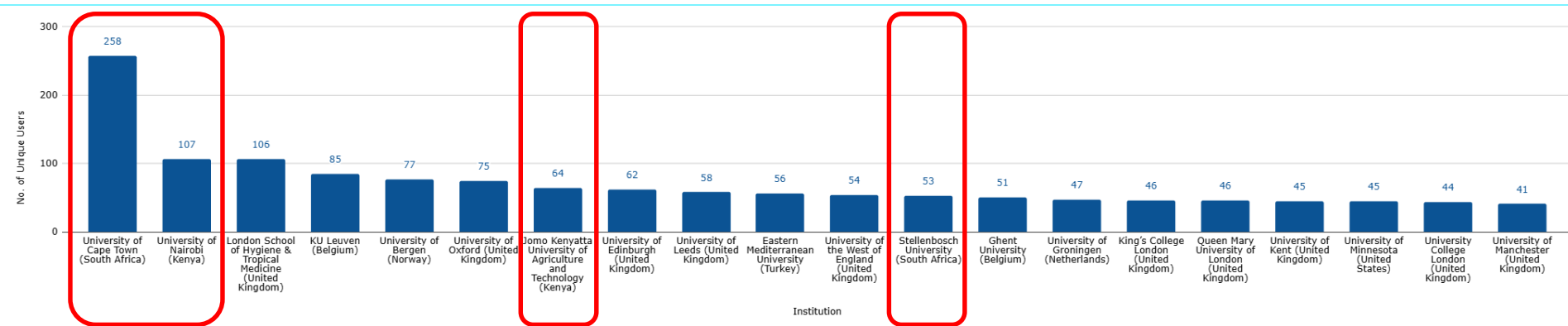
eduroam on the Go – “The proof of the pudding is in the eating”



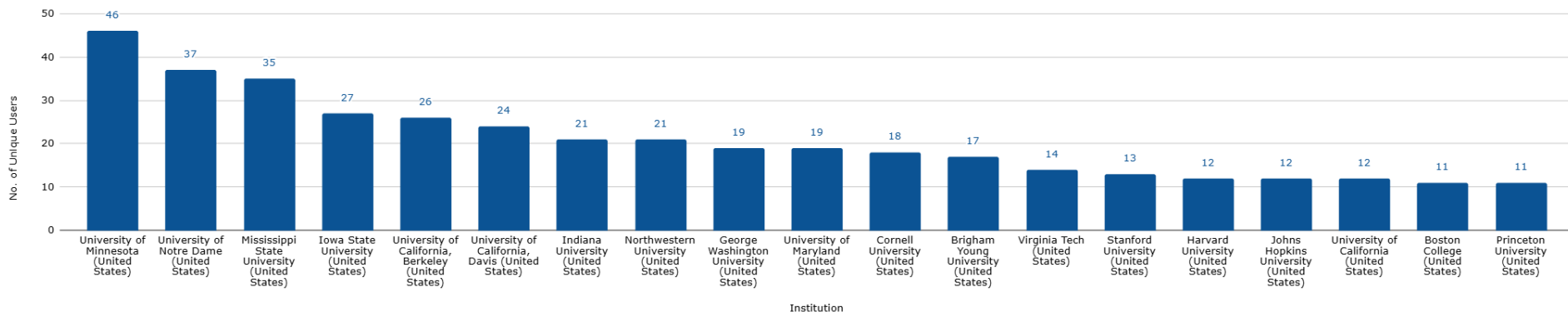
Where was
eduroam
accessed
in 2025?

A total of 100,998 students and staff used eduroam in 2025
Accounting for 68,284,210 authentications

Top Non-Ugandan Institutions Using eduroam in Uganda in 2025 by Unique Users



American Institutions Using eduroam in Uganda in 2025 by Unique Users



RENU eduroam Deployments



eduroam on the Go (OTG)



Metro eduroam
Grid + solar-powered



On-campus eduroam

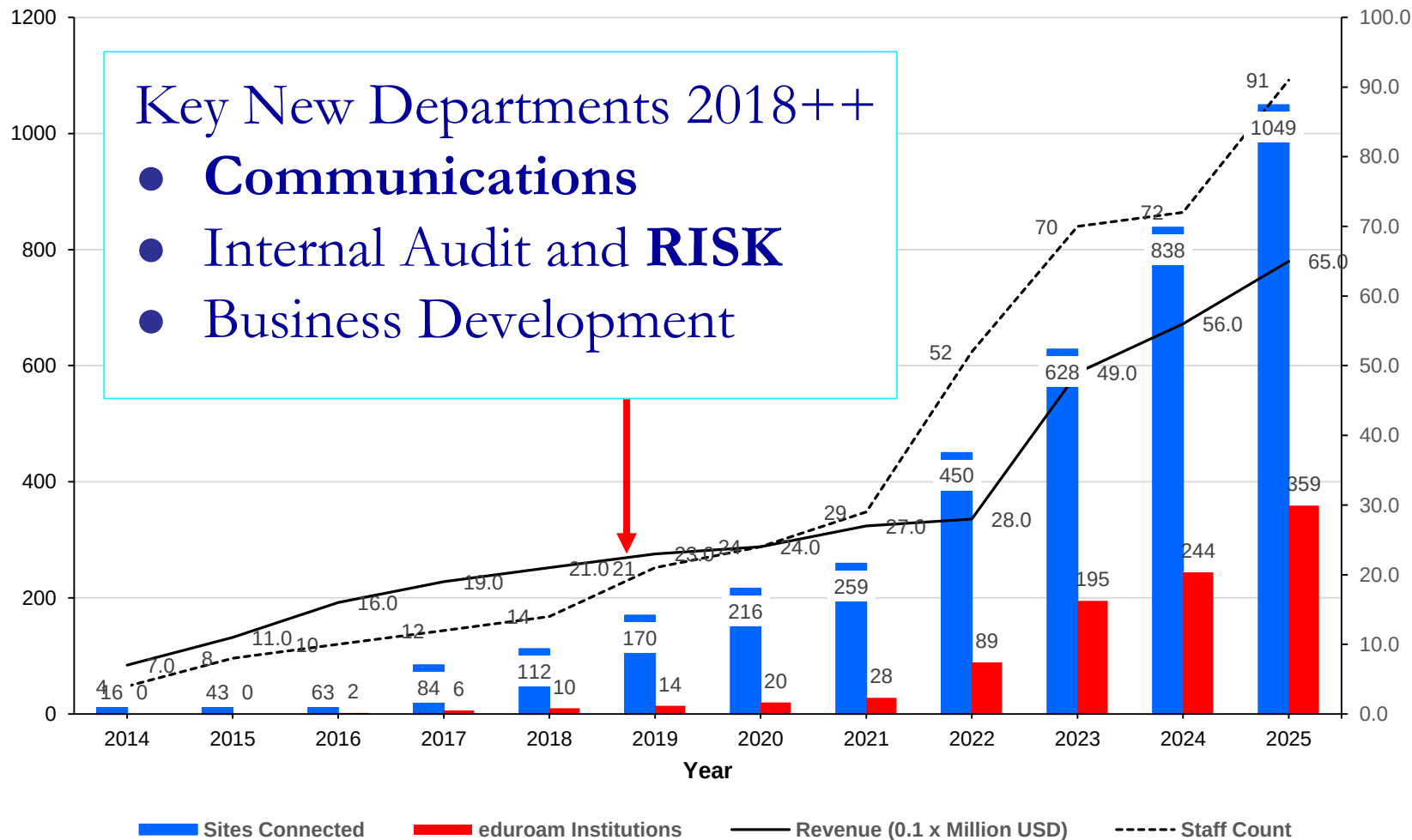
Home links

eduroam OTG alone in 2025

A total of **39,037** unique users

Accounting for **1,254,410** authentications

Sites Connected – eduroam – Revenue – Staff Count



A photograph of a paved road with double yellow lines curving through a desert landscape with sand dunes and sparse vegetation under a clear sky.

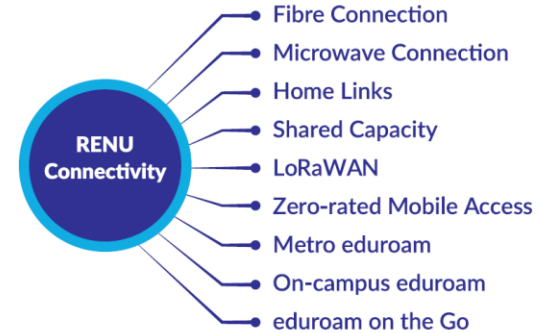
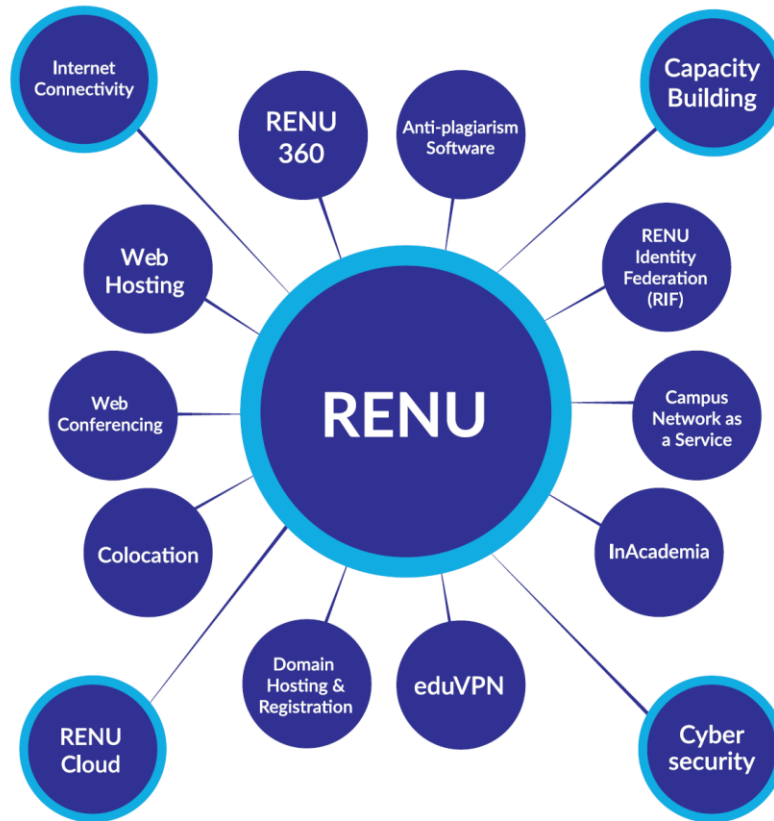
Change before you have to.

Jack Welch





RENU SERVICES AND PRODUCTS



Coming Soon 😊

The Ministry of Education and Sports (MoES) in Uganda has **directed all higher education institutions to fully adopt the Competence-Based Education and Training (CBET) framework by the 2027/2028 academic year.**  Facebook

Key Details of the Directive

- **Deadline:** By the **2027/2028 academic year**, no higher education institution will be permitted to admit first-year students or run programs that do not comply with the CBET standards.  YouTube · NTVUganda
- **NCHE Standards:** The National Council for Higher Education (NCHE) approved and released the official Minimum Standards for CBET implementation during its 83rd Sitting in February 2026.  Metropolitan International...
- **Assessment Shift:** Formative assessments (coursework, practical tests, and projects) must constitute at least **50%** of the overall student assessment.  YouTube · NTVUganda



Coming in 2026 ☺ ☺ ☺

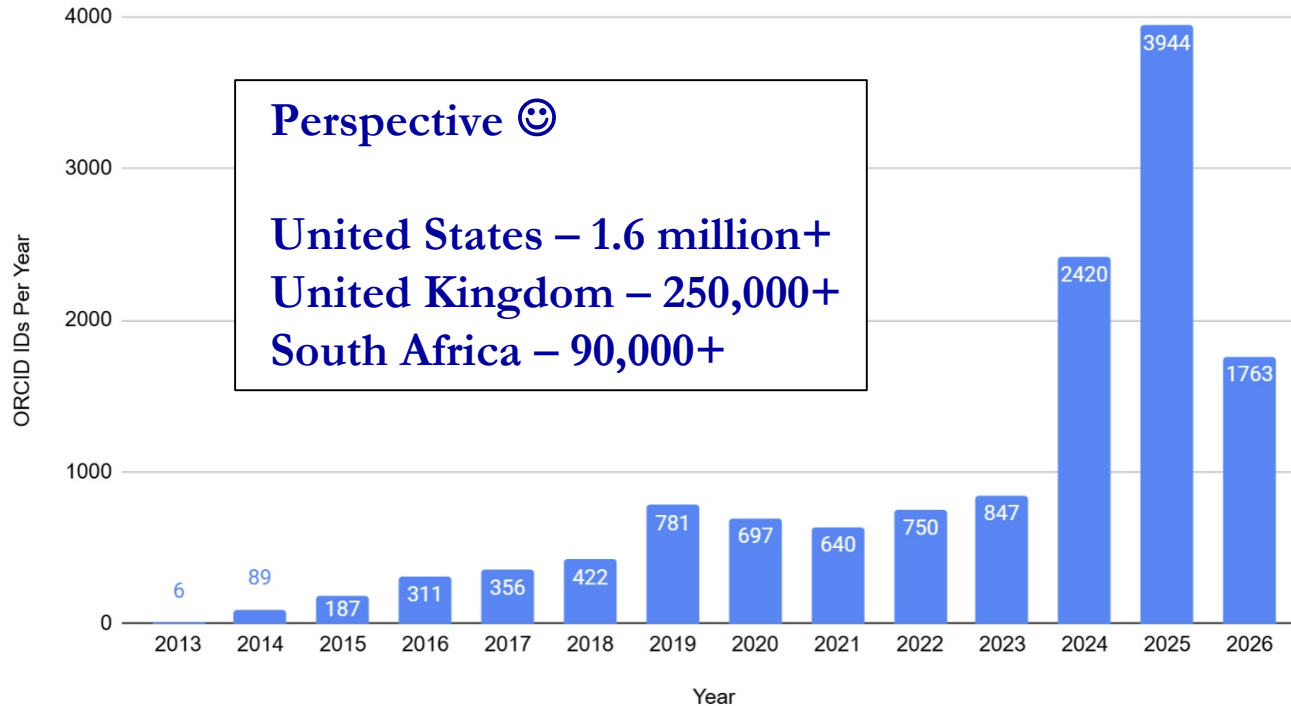


- **Visibility of Uganda's universities**
 - Researchers (ORCID) + research output (DOIs)
 - Digital repositories
- **Open RAN (Special appreciation to RNP, Brazil) ☺**
- **National AI Research Cloud**
- **Submarine fibre to the islands in Lake Victoria**
- **National Competence-based Curriculum**
 - Higher education (2027) + Secondary Schools (Already)
 - Virtual Labs
 - AI integrated LMS
- **Information Management Systems or ERP**
- **RENU Financial Services (RFS)**
 - Regulated by the Central Bank of Uganda (BoU)

Ranking	World Rank	University	Country	Impact Rank	Openness Rank	Excellence Rank
1	925	Makerere University		1602	1221	1082
2	2041	Kampala International University		1498	1533	3673
3	3329	Mbarara University of Science and Technology		7134	3280	3036
4	4532	Uganda Management Institute		2331	6872	6501
5	4688	Kyambogo University		8913	3688	4495
6	5174	Uganda Martyrs University		6731	6640	5378
7	5351	Gulu University		11169	4532	4054
8	5924	Busitema University		12810	3874	4032
9	7210	Kabale University		13339	3329	4885
10	7722	Makerere University Business School		8185	4093	23715
11	8282	Islamic University in Uganda		11187	6518	5751
12	9262	Uganda Christian University		8674	6926	12054
13	10700	Ndejje University		11178	11340	6592

ORCID Affiliations

Annual ORCID Uptake Trend in Uganda



Chris Shillum · 2nd
Executive Director at ORCID
3d · 🌐

+ Follow ...

Congrats **RENU**! We are very much looking forward to working with you to build the **ORCID** community in Uganda, increase the visibility of Ugandan researchers, and advance open science and research integrity.



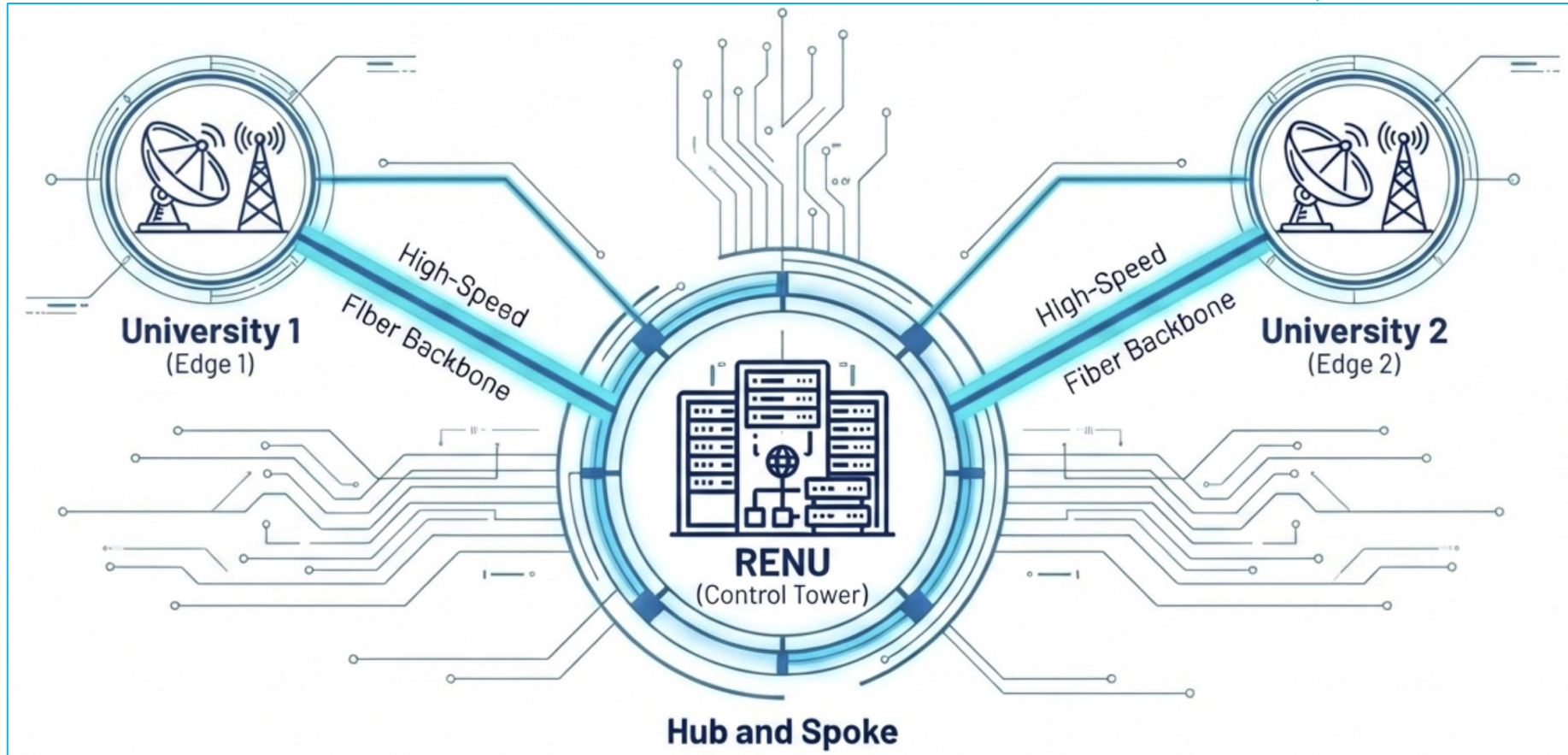
RENU
5,672 followers
1w · 🌐

Launch of the **ORCID** Consortium of Uganda! 🎉

We are proud to announce the launch of the **ORCID** ...more



Proposed Open RAN Architecture





Free Access to Premium Journals

Powered by the RENU
Identity Federation (RIF)



11,500
Registered
Institutions



125
Countries



41,000
Journals



160
Databases





**MAKING
UGANDA
THE BEST**



NATIONAL AI RESEARCH CLOUD



Connection | Collaboration | Community

Infrastructure, YES! How about skilling?



RENU and Otic Group Partner to Develop 3 Million AI Talents by 2030

🕒 August 12, 2026

Kampala, Uganda – Wednesday 12th August 2026 Artificial Intelligence (AI) is rapidly changing how people...



UNESCO Partners with UNITE, MoES and RENU for Digital Skilling of Teachers Nationwide

🕒 August 17, 2026

Kampala, Uganda – Thursday 17th August 2026 As Uganda advances its digital transformation agenda, strengthening...

Special Appreciation



RENU NETWORK
BACKBONE IS
NOW AT

200
Gbps!

Thanks to you, our growing
community, we've unlocked a
new era of speed and reliability.



Connection | Collaboration | Community



SPIDER. Other invitees were the commercial Internet Service Providers, MTN and UTL. Uganda Communications Commission (UCC) was also invited in its capacity as a regulator.

Four resource persons were selected to give presentations that would guide the forum. These were Dr Duncan Martin CEO of **TENET**, Eng. Victor Kyalo CEO of Kenya Education Network Trust (**KENET**), Steve Huter from Network Startup Resource Centre (**NSRC**), USA, and Eng. Dr F. F Tusubira from DICTS, Makerere University.

For financial support, the Committee reached out to development partners such as **TENET**, which had the Andrew W. Mellon Foundation Grant through Fostering Research and Education Networking in Africa (FRENIA). They applied and were awarded a grant of \$100,000 for a two-year period. They also received a \$9,000 contribution from Connectivity Africa.

January 2006: The Birth of RENU

The workshop was indeed held at Windsor Lake Victoria Hotel in Entebbe on 13th to 14th January 2006. It was titled “Collaborating on sustainable ICT-enabled research, education, and outreach activities to lift Uganda out of underdevelopment.” It later became known as the **RENU Inaugural Workshop**.

23 @RENU_256 · Apr 25
SABEN Visits RENU 🇿🇦🇷🇪🇸

20 years of collaboration between the South African NREN and RENU 🇿🇦🇷🇪🇸

Last week, the South African Broadband Education Networks (SABEN) recently visited RENU, providing a valuable opportunity for knowledge exchange and collaboration. SABEN, a subsidiary of @tenetnews, supports the research and education community through broadband network solutions, infrastructure development, capacity building, and the delivery of shared digital services.

The Tertiary Education and Research Network (TENET) is the National Research and Education Network (NREN) of South Africa, responsible for providing high-speed connectivity and advanced networking services to universities and research institutions across the country.

The visit focused on sharing best practices, exploring operational models, and strengthening regional partnerships to advance connectivity and digital services for research and education institutions across Africa.

TENET has supported RENU from inception.

Thank you for visiting the Pearl of Africa.







Thank You!

www.renu.ac.ug