

THE ENGINEERS

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Shaping Our
Sustainable **Future**
through **Engineering**

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A Joint Newsletter for the Engineers Registration Board (ERB)
and the Uganda Institution of Professional Engineers (UIPE)

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Uganda Institution of Professional Engineers

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FOREWORD

Eng. Dr. Harrison E. Mutikanga

Chairman, Joint Editorial Committee



Each quarter offers us a chance to pause, reflect and realign. As engineers, we are trained to solve problems; but increasingly, we are also being called to shape the future. This issue of the ERB-UIPE Newsletter captures a profession in motion: dynamic, responsive and driven by purpose.

The recent **World Engineering Day 2025** celebrations reminded us that engineering is not just about what we build, but how and why we build it. From climate-resilient infrastructure to inclusive design, the stories and ideas shared during the event reinforced the importance of sustainable thinking in all we do. Engineers are no longer working behind the scenes; we are at the forefront of addressing Uganda's most pressing challenges.

This newsletter is a product of a partnership between ERB and UIPE, but also between institutions, generations and ideas. It captures not only what we have achieved but also where we are going. In these pages, you will find updates,

reflections and perspectives that speak to the heart of our profession: competence, integrity and leadership.

I invite you not only to read this publication, but to engage with it. Use it as a mirror, a resource and a challenge. Because the future of engineering in Uganda will not be inherited; it will be engineered by all of us.



MESSAGE FROM THE CHAIRPERSON ERB

Prof. Eng. Henry Mwanaki Alinaitwe

Chairman, Engineers Registration Board



As we come to the middle of the year 2025, I am honored to share with you the latest developments and achievements of the Engineers Registration Board of Uganda (ERB). Our mission remains steadfast: to register engineers, to control and regulate the practice of engineering, and to promote and advise the government on the engineering profession in Uganda.

Over the past quarter, we have made significant strides in enhancing our registration processes to make it efficient. We will soon be launching the online registration and licensing system. We are committed to continuous professional development (CPD) of our engineers so that they are equipped with the necessary skills and knowledge to excel in their fields. Renewal of licenses will soon depend on evidence of participation in CPDs.

Collaboration and partnerships are essential to our success. We have been engaging with various stakeholders, including government agencies, industry partners, and international organizations, to strengthen our relationships and explore opportunities for mutual benefit. These partnerships will enable us to leverage resources, expertise, and knowledge to drive engineering excellence in Uganda. The law requires that only qualified registered engineers practice in Uganda. Companies engaging foreign

nationals should ensure that they are registered within four months upon arrival, but better before arrival. We urge all nationals who qualify to get registered.

As we look to the future, we are excited about the prospects for engineering in Uganda. We urge all engineers to continue to uphold the highest standards of professionalism and ethics in their work. Let us work together to promote the engineering profession and contribute to the development of our great nation. I invite you to share your ideas, feedback, and suggestions with us as we strive to improve our services and support to the engineering community.

In conclusion, I would like to express my gratitude to our engineers, government, stakeholders, and partners for their continued support and collaboration. Together, we can achieve great things and drive engineering excellence in Uganda. I wish you all success in your endeavors.





11th UNESCO Africa Engineering Week & 9th African Engineering Conference

Eng. Bosco Lepi

President, Uganda Institution of Professional Engineers (UIPE)



Dear Engineers and Partners,

It is with great pride and anticipation that I announce a significant milestone on our institutional calendar: Uganda will host the 11th UNESCO Africa Engineering Week and the 9th African Engineering Conference (AEW&AEC) 2025, from 14th to 20th September 2025 at the Speke Resort Convention Centre, Munyonyo, Kampala, Uganda.

This prestigious event is expected to bring together over 1,000 delegates, including industry leaders, engineering professionals, policymakers, political figures, influencers, development partners, practitioners, and researchers from across Africa and beyond. The conference will serve as a platform to share knowledge and innovations, showcase

advancements, address pressing engineering challenges, and propose sustainable solutions that support Africa's socio-economic transformation and development.

Organized under the theme: "Leveraging Engineering Innovations and Technology to Accelerate Africa's Socio-Economic Transformation", the conference will be graced by H.E. Gen. Yoweri Kaguta Museveni, President of the Republic of Uganda, as the Chief Guest.

SUB-THEMES

- Innovative Engineering for Industrialization & Economic Growth
- Sustainable Infrastructure, Transport & Urban Development
- Renewable Energy & Climate-Resilient Engineering Solutions
- Engineering Innovations in Agriculture, Water & Food Security
- Engineering Capacity Building & Education for Africa's Future

This theme aligns strongly with several UN Sustainable Development Goals (SDGs), including goals on poverty eradication, clean energy, resilient infrastructure, sustainable cities, water and sanitation, and climate action.

HOW YOU CAN PARTICIPATE

1. Register early to benefit from discounted rates
2. Submit your innovations for presentation or exhibition by 15th July 2025
3. Promote participation within your organizations, institutions, and networks
4. Support the event through sponsorship or by booking exhibition space

Let us come together to make AEW&AEC 2025 a landmark event, one that leaves a lasting impact on our profession, our country, and the African continent at large.

This event is proudly organized by the Uganda Institution of Professional Engineers (UIPE) in partnership with the Federation of African Engineering Organizations (FAEO), in line with our commitment to promoting and advancing engineering across Africa.

For registration, innovation submissions, sponsorship packages, and the full event program, please visit:

<https://uipe-africanengineeringweek.org>

We look forward to welcoming you to Munyonyo this September.



STRENGTHENING OUR REACH: UIPE APPROVES NEW BRANCH DEVOLUTION POLICY

The Uganda Institution of Professional Engineers (UIPE) has taken a significant step toward empowering its branches with the development and approval of the UIPE Branch Devolution Policy, effective 1st June 2025.

The policy was developed by the Public Relations, Practice and Ethics (PRPE) Committee, reviewed by branch executives, UIPE Executive Committee and approved by the current Council (2024–2026) to ensure that the Institution continues to grow as a national body that serves engineers across all regions of Uganda.

Eng. Diana Keesiga

Vice President, Public Relations
Practice and Ethics, UIPE

Why This Policy, and Why Now?

As UIPE continues to expand, the need for strong, vibrant, and well-resourced branches has become more pressing. While the Institution's headquarters in Kampala remains central, branches are the lifeblood of our regional presence. They are our first point of contact with members on the ground and a key mechanism for engaging stakeholders locally.

This policy reflects our commitment to:

1.

Decentralization

Bringing services closer to members.

2.

Professional Development

Enabling branches to organize CPDs and career guidance.

3.

Good Governance

Ensuring transparency and accountability in branch operations.

4.

Growth and Innovation

Allowing branches the space to lead initiatives and mobilize resources in line with UIPE values.

What Does the Policy Change?

The policy gives branches:

- Greater autonomy to organize activities, engage stakeholders, and mobilize members.
- A defined governance structure, with Branch Executive Committees operating under clear rules and aligned with UIPE's Constitution.
- Devolved functions including CPD coordination, member mobilization, student and member mentorship, and regional advocacy.
- Structured financial responsibilities, with branches expected to generate revenue, report transparently, and participate in UIPE's institutional audit process.
- Branches will also receive enhanced support from the UIPE Secretariat in the form of leadership induction, operational templates, and technical guidance.

What Next?

With the policy now in effect, the next steps include:

Dissemination and orientation of branch leaders to ensure smooth implementation.

Monitoring and feedback to assess performance and guide continuous improvement.

This is a critical moment for UIPE. Through the Branch Devolution Policy, we are building a stronger, more responsive Institution that works for every Engineer, whenever they are in Uganda.

We invite all members to engage actively with local branches, offer ideas and participate in shaping the future of engineering in Uganda

Together, let's build a stronger UIPE, One Branch at a time!

UGANDA CELEBRATES WORLD ENGINEERING DAY 2025: ENGINEERING A SUSTAINABLE FUTURE

World Engineering Day (WED) is celebrated annually on 4th March as a global initiative to recognize and honour the critical role of engineers in shaping a better and sustainable world. The day serves to acknowledge engineering contributions to sustainable development, inspire future engineers, and promote collaboration across disciplines.

This year’s global celebration was held at UNESCO Headquarters in Paris, jointly organized by UNESCO and the World Federation of Engineering Organizations (WFEO) under the theme: “Unleashing the Power of Engineers to Advance the Sustainable Development Goals (SDGs).” The global event emphasized engineering’s pivotal role in driving environmental sustainability and accelerating energy transitions.

In Uganda, the 2025 World Engineering Day celebrations were marked through a series of five impactful events: Uganda Engineering Week (24th–28th February 2025), held across eight UIPE branches (Kampala, Jinja, Mbale, Soroti, Lira, Gulu, Arua, and Mbarara) this initiative included pro-bono engineering services, community outreach, and career development activities aimed at engaging communities and inspiring young engineers. The Annual Engineers’ Run (2nd March 2025), hosted at

Kyambogo University Sports Grounds, the run symbolized engineers’ commitment to health, unity, and sustainable development. Next-Gen Engineers’ Webinar (3rd March 2025), this virtual session equipped early-career engineers and engineering students with insights on transitioning from academia to industry, fostering a new generation of solution-oriented professionals. Engineers’ Oath-Taking Ceremony (5th March 2025), where newly registered engineers received their registration certificates, stamps, and licenses marking their formal entry into regulated professional practice.



World Engineering Day Conference (4th March 2025)

The highlight of the celebrations, the conference, was held at Hotel Africana in Kampala. It was organized by the Engineers Registration Board together with the Uganda Institution of Professional Engineers (UIPE) and the Ministry of Works and Transport. The theme for the conference was “Shaping Our Sustainable Future Through Engineering.”

The event drew 505 stakeholders from government ministries, agencies, academia, the private sector, and international delegations. The Prime Minister of Uganda, Rt. Hon. Robinah Nabbanja, delivered the keynote address as the guest of honor, calling for the expedited enactment of the Engineering Professionals Bill, greater enforcement of construction quality standards, and the strategic involvement of engineers in national development while upholding professional ethics as they serve the public.



The conference featured two key sessions. Session 1: Policy, Leadership, and Recognition. Discussions focused on engineering governance, including enforcement of standards, fast-tracked registration of foreign engineers (within four months of arrival in Uganda), gender inclusion, sustainable practice integration, adoption of AI and big data for development, and alignment with the National Development Plans (NDP III and IV) while Session 2 involved presentation of Technical Papers and Innovations. Presentations covered crucial areas such as Water Conservation, Artificial Intelligence for Sustainable Engineering, Solid Waste Management, and Urban Mobility & Transportation.

The celebrations concluded with an awards ceremony recognizing outstanding contributions:

- Student Awards: Presented to the best-performing engineering graduates from leading universities.
- Sponsors Recognition: Honoured sponsors included Uganda Electricity Generation Company Ltd, Uganda Communications Commission, Ministry of Works and Transport, National Enterprise Corporation, Dynaco

Limited, and Chinese Communications Construction Company (CCCC) Ltd.

- Excellence Awards: Presented to the Best Mega Project: CCCC – Kampala-Entebbe Expressway, Best Indigenous Contractor: Dynaco Limited and Long Service Award: Eng. Samson Bagonza

World Engineering Day 2025 in Uganda was not just a celebration but a call to action, a moment to reflect on engineering's role in achieving a sustainable future. Through thought leadership, technical innovation, and strategic partnerships, engineers in Uganda continue to demonstrate their unwavering commitment to transforming communities and driving national development. As the country moves towards Vision 2040 and NDP IV, engineering will remain central to Uganda's progress.



ENGINEERS' RUN 2025: UNITING MINDS, BUILDING BODIES, AND SHAPING A SUSTAINABLE FUTURE

The Engineers Run 2025 was part of the World Engineering Day celebrations. It was a celebration of engineering excellence, unity, and wellness. *It showcased how engineering professionals can lead by example in creating a sustainable future, both through infrastructure and community action.*

In today's fast-paced world, professionals need to step away from their workstations and engage in activities that foster health, wellness, and meaningful connections. For engineers, whose work impacts every facet of society, networking and collaboration are not just valuable, they are vital.

Recognizing this, the Engineers Registration Board (ERB), in partnership with the Uganda Institution of Professional Engineers (UIPE), the Ministry of Works and Transport, Kyambogo University, and KAYS Dental Company, successfully organized the Engineers' Run 2025 under the theme "Shaping Our Sustainable Future Through Engineering." The event took place on Sunday, 2nd March 2025, at Kyambogo University Sports Grounds from 6:40 am – 8:30 am.

The official flag-off ceremony was presided over by

Eng. Ronald Namugera, Registrar of ERB and Prof. Eng. Alinaitwe Henry, Chairman of the Board.

The run brought together over 500 participants, including Eng. Stephen Kitonsa, Engineer-in-Chief, who represented the Chief Guest and Chief Runner, Hon. Musa Ecweru, Eng. Bernard Kavishe, Registrar of the Institution of Engineers Tanzania, representatives from the Institution of Engineers Kenya, the Institution of Engineers Burundi, and delegates from academia, industry, ERB, UIPE, and university engineering students.

The ERB Board was fully represented, with attendance by the Chairperson, Eng. Prof. Henry Alinaitwe Mwanaki, Vice Chairperson, Eng. Patricia Achola Ocan, and Board Members Eng. Harrison Mutikanga, Eng. Kenneth Magembe, and Eng. Joan Kayanga Mutiibwa.



In his keynote remarks, Eng. Stephen Kitonsa emphasized the importance of community and well-being among engineers. He highlighted three key points:

- Encouraged engineers to maintain physical fitness, acknowledging their critical role in the country's infrastructure development and technological advancement.
- Pledged continued support for the Engineers Run from the Ministry of Works and Transport and requested participants to bring along a colleague in the 2026 edition.
- Thanked ERB for initiating a unique, engaging platform that enables engineers to unwind and network outside their routine professional environments.



Participants had the opportunity to choose from three race categories. The 21 km half marathon, flagged off at 6:40 am, the 10 km race that started at 7:00 am, and the 5 km fun run that began at 7:30 am. The day started with energetic aerobics to warm up participants and ended with cool-down and stretching exercises, ensuring a wholesome fitness experience.



Top runners in each race category were awarded Medals. Notable winners included Kenneth Odokonyero and Nalunkuma Farida (21km), among others.



The Engineers Run 2025 was part of the World Engineering Day celebrations. It was a celebration of engineering excellence, unity, and wellness. It showcased how engineering professionals can lead by example in creating a sustainable future, both through infrastructure and community action. As the momentum builds, all eyes are now on the Engineers Run 2026, which promises to be bigger and more impactful. The event ended with a communal meal and networking.



LAUNCH OF THE RESEARCH INNOVATION AND INTELLECTUAL PROPERTY MANAGEMENT POLICY AND INNOVATION PORTAL



On February 7, 2025, the Uganda Institution of Professional Engineers (UIPE) officially launched the Research Innovation and Intellectual Property Management Policy (RIIPMP) and the UIPE Innovation Portal (UIPEIP) at Hotel Africana, Kampala. The event was graced by Hon. Dr. Monica Musenero Masanza, Minister of Science, Technology, and Innovation. The launch attracted 112 attendees, including policymakers, researchers, innovators, and the engineering community.

The RIIPMP aims to promote innovation, ensure compliance with legal and ethical standards, and establish clear intellectual property (IP) ownership, protection, commercialization, and enforcement processes. Meanwhile, the UIPEIP is integrated into UIPE's website and membership database, providing functionalities to enhance innovation and collaboration among UIPE stakeholders.

The event began with welcome remarks from Mrs. Immaculate Akello Makwo, Project Coordinator, followed by Eng. Henry Mpuuga, VP-MET, who represented the Chairperson of the Research Innovation and Grants Committee. Remarks were also delivered by Eng. Prof. Henry Alinaitwe Mwanaki, Chairperson of the Engineers Registration Board (ERB), represented by

Eng. Ezra Gumisiriza, Assistant Registrar Technical Services, keynote address delivered by Mr. Bageya Waiswa, Permanent Secretary Ministry of Works and Transport (MoWT) represented by Eng. Twinamatsiko Emmanuel, Principal Engineer, MoWT and Eng. Bosco Lepi, President of UIPE.



"We firmly believe that this policy will stimulate a dynamic environment where creativity and innovation can thrive" Eng. Bosco Lepi, President UIPE

A presentation on the RIIPMP and UIPEIP was delivered by Mr. Patrick Mugisha of Innovent Labs Africa, followed by inspiring presentations from innovators showcasing their innovative ideas.

In her remarks, Hon. Dr. Musenero emphasized the crucial role of engineering in national development and innovation, urging engineers to apply their knowledge to create marketable products and industries.

"Engineering is essential for national development; you need to create products that people are willing to pay for."
Hon. Dr. Monica Musenero

She further announced an upcoming program in early March, aimed at training engineering graduates (within three years of graduation) to translate theoretical knowledge into practical solutions. The program will accommodate TVET graduates, diploma holders, and university graduates willing to learn.

"If I run this program for three to four years, I will eliminate unemployment among engineers. Even those working in banks will transition back to engineering because I can host up to 1,300 participants at a time."
Hon. Dr. Monica Musenero

The event concluded with the official launch of the RIIPMP and UIPEIP, followed by a group photo session with the Minister and participants, and a networking dinner.

The initiative was supported by the Royal Academy of Engineering (UK), in partnership with Innovent Labs Africa and the University of the West of Scotland.



ENGINEERS VOICE: OPINION AND TECHNICAL ARTICLES

WHY ARE TECHNICAL PEOPLE IN UGANDA SILENT: WHY ARE OUR SCIENTISTS NOT SPEAKING UP

Eng. Andrew Ambazimana

Member, UIPE and Registered Engineer, ERB



Following the fire incident at Kiteezi Land Fill in Kampala in the morning of Saturday 8th February 2025 most likely arising from methane combustion underneath the garbage “mountain”, social media platforms were awash with complaints on why Scientists have been silent on such a pertinent issue that does not only need technical solutions but also engineering interventions. One person who raised the issue was Eng. Dr. Apollo Buregyeya, a Lecturer at Makerere University College of Engineering, Design, Art and Technology (CEDAT), who has been vocal on matters concerning Innovation and Research.

As usual when the incident happened, politicians were the first at the scene led by the Lord Mayor, Erias Lukwago and the KCCA Executive Director, Hajjat Sharifah Buzeki some people questioned the attire politicians and technocrats were putting on as they ascended to the top of the land fill literally “firefighting” as normally said of people who wait for incidents to occur and start giving possible solutions.

When people questioned why scientists were quiet, Ms Namara Naome Baketunga had this to say on X:

“Education has also become another problem. People educated in AC classrooms won’t think about solving problems like garbage in Kiteezi”. They are trained in an environment that does not allow them to manage hardships. They prefer comfort. That is why professors are thriving on teaching alone. We don’t see anything of them beyond desk work”.

Her assertion was, however, challenged by some Engineers on the platform with evidence that several studies had already been done on Kiteezi Landfill and some published in international journals. The question is why this information is always unknown to the public and normally comes out after such incidents have occurred? Does this support the famous racist quote that “If you want to hide something from a black man, write it in a book,” Or are scientists simply not making their works known to the Public?

Mboowa et al wrote a paper in 2015 on the estimation of methane generation based on anaerobic digestion and mass balance at Kiteezi Landfill, Kampala, Uganda, and concluded that solid waste disposed of at Kiteezi landfill mostly comprised biodegradable waste, which has high methane gas production potential. The study noted that given the volume of methane gas estimated, the energy recovery process for electricity production using the methane generated from landfills as a natural resource was highly recommended. What happened on that day, therefore, is something that had been foreseen but either not communicated or not taken seriously by decision makers at KCCA.



Kiteezi landfill was estimated to reach its capacity in 2008, and there were plans to develop by the then KCC a landfill gas extraction and flaring scheme on the existing landfill, which has no form of landfill gas management in place. This was meant to control gas both in terms of the risk of explosion and to reduce harmful emissions of greenhouse gases. The project was part of the investment package planned for the solid waste management component of the World Bank-funded Kampala Institutional and Infrastructure Development Project (KIIDP). This project was, however, never implemented.

Before the collapse of Kiteezi landfill in August 2024, a group of researchers (Denis Kalumba et al) had studied Slope Stability and Settlement Characteristics of Kiteezi Landfill in Mpererwe. The study attempted to determine site-specific factors (geometry and engineering properties) of the waste mass of the landfill that could trigger slope failures resulting in collapse.

In most cases, such works by Scientists get known by the public after incidents have occurred, making the public think Scientists are perhaps not speaking up? How best can scientists make their work known and influence policies that would push for the implementation of their research recommendations? People wonder why most press conferences in Uganda are about disease outbreaks, public holidays, and a few government programmes. Up to now, many Ugandans are not aware that we had our first successful kidney transplant at Mulago Hospital in December 2023, and several transplants have since been performed at the national referral hospital. How did we miss this great milestone?

Tom Stafford, a BBC features correspondent, stated in his July 2014 article why newspapers and TV broadcasts

are filled with disaster, corruption, and incompetence. That perhaps people are drawn to depressing stories without realizing and perhaps journalists are drawn to reporting bad news because sudden disaster is more compelling than slow improvements. Therefore, deliberate efforts ought to be in place to report about positive milestones not only in Engineering and Science but also in other sectors of government.

This brings me to the gist of the article about why scientists are not speaking up. Is it because of a lack of communication skills, which define abilities used to exchange information (ideas, feelings, or updates)? Is it how scientists are trained or perhaps the pressure that comes with education that ultimately makes them focus on strict timelines and results? Most engineering courses at the University have a course unit in Communication skills. How seriously do students take this course unit? How best can this course unit be delivered to address the challenges scientists are facing today? One engineer once wondered why a scientist would do an MBA or LLM instead of Structural Engineering. Are scientists living in their world?

Mr. Kasingye Kyamugambi, Former Project Coordinator for the Standard Gauge Railway (SGR) Project, once challenged us at an Engineers Forum about the need for engineers to always think out of the box. This was after some engineers raised concerns about the viability of SGR. Though some of us didn’t take the comment in good faith, I thought it was a wake-up call, perhaps to interest ourselves in soft skills such as communication, branding, marketing, and financial literacy.

Scientists will continue losing their spaces to other professionals if they don’t learn to market themselves, speak about their achievements, and position themselves as policy influencers.

EFFECTIVE PLANNING FOR URBAN INFRASTRUCTURE IS THE GAME CHANGER

(An Engineer must think of solutions: Turn an opinion into reality)

Eng. Turihohabwe Alex

Fellow, UIPE
Continental Finalist – Business &
Professional Sector, CEO Global 2017
Honorary Secretary, FIDIC Africa



Urban roads do form the backbone of transportation within towns and cities, playing a crucial role in facilitating movement, trade, and access to essential services. As Uganda continues to urbanize rapidly, the demand for well-planned and properly maintained road networks has never been more critical. Many of the roads dating back to independence such as those in Kampala, Jinja, Mbale, Lira, Gulu, Fort Portal, Kabale, Mbarara, Soroti, Bushenyi, Moroto, and Tororo pass through areas with various utilities including water, electricity, sewerage systems, overhead telephone lines, underground mobile telecommunication cables, and even permanent structures within the right of way. This article highlights the significance of proper planning as a cost-effective and sustainable approach to urban road development.

Unfortunately, the pace of infrastructure development has often outstripped the proper planning required to support it. In many instances, project managers commence construction without clearly planning how existing infrastructure will be integrated or realigned. Most of these existing infrastructures often lack clear documentation of their locations. This oversight creates numerous challenges during road construction, including traffic diversion, the relocation of utilities, and the disruption of essential services. These utilities fall under different Ministries, Departments, and Agencies (MDAs): for example, electricity poles and cables are under Uganda Electricity Distribution Company Limited and the Ministry of Energy and Mineral Development; water and sewerage systems are under the National

Water and Sewerage Corporation and the Ministry of Water and Environment; mobile telecommunication infrastructure is managed by MTN, UTel and Airtel under the Ministry of ICT and National Guidance; urban roads are managed by Town, Municipal /City councils under the Ministry of Local Government; and housing structures fall under the Ministry of Housing and Urban Planning.

District, Urban and Community Access roads (DUCAR) are under a department responsible for policies in the Ministry of Works and Transport, however, each of the roads is managed and administered under different entities within the government structures.

Each of these entities operates under distinct terms, regulations, and standards, which can complicate coordination. Over the years, contractors have encountered frequent challenges such as the accidental breakage of power and water lines. When utility relocation becomes necessary, the process can be both lengthy and expensive. While Bills of Quantities may contain a provisional sum to cover such issues, the funds allocated are often inadequate, causing friction and delays during project implementation.



In cases where private properties are affected, the destruction of homes and structures results in emotional and financial distress for project-affected persons. Compensation is sometimes inconsistent, leading to community dissatisfaction. These complications not only delay project timelines but also inflate costs, especially for projects funded through loans, where delays attract additional interest. Such inefficiencies reflect poorly on the government's ability to execute projects, potentially leading to a loss of credibility and future funding opportunities. While technocrats and a few leaders may understand the underlying challenges, affected communities often blame contractors, hence damaging their reputations.

These costly and avoidable issues underscore the urgent need for comprehensive feasibility studies and route surveys before any urban road construction begins. Proper planning must involve the early identification of existing infrastructure, close coordination with utility providers and communities, and the integration of up-to-date utility maps. Engineers and planners should also design alignments that minimize the need for demolitions and relocations, while incorporating utility

corridors within road reserves. Strict adherence to environmental and social impact assessments can significantly improve outcomes.

In conclusion, I call upon the Ministry of Lands, Housing and Urban Development, specifically the Directorate of Physical Planning and Urban Development, to prioritize harmonized comprehensive planning and development of future urban centres. In the long run, a well-planned urban area reduces costs, eases implementation, and supports sustainable development.

THE AV INDUSTRY: A MULTIBILLION-DOLLAR INDUSTRY YET TO BE TAPPED IN UGANDA

Ms. Racheal Aye

Certified Technology Specialist (CTS)
Presales Engineer, Blue Crane Communications



Ever stopped to think about how sound and visuals bring ideas to life? That's AV technology refers to seamlessly merging audio and video to enhance communication, collaboration, and entertainment. From video conferencing and digital signage to live streaming and interactive displays, AV is everywhere, in schools, businesses, hospitals, hotels, residential, and places of worship. It's shaping how we work, learn, and connect daily.

Now, picture this: The global AV industry is booming, with revenues expected to surpass \$400 billion by 2026. The demand for high-quality AV solutions is skyrocketing, making this one of the fastest-growing industries. The question is, are engineers ready to tap into this goldmine?

Think back to the COVID-19 lockdown. Schools shut down, businesses stalled, and churches faced challenges in keeping congregations engaged. That moment changed everything. Schools embraced e-learning, integrating smart boards and video conferencing. Businesses turned to remote collaboration tools. Churches started live streaming and recording services, reaching even larger audiences. AV technology became the bridge that kept the world connected, and there has been no turning back.

So, where does Uganda stand in all of this? We're

catching up, but the potential is enormous. More organizations are investing in digital signage, hybrid learning solutions, and interactive Collaborative conferencing. However, challenges like low awareness and a shortage of AV professionals slow down growth. But here's the exciting part: there's an opportunity to change that. The demand is rising, and those who step up now will lead the industry tomorrow.

How do we thrive in this multibillion-dollar space? First, we need to train more AV specialists, engineers, programmers, and integrators to create a skilled workforce ready for the future.

Second, awareness is key. Many businesses and schools still don't realize how AV can transform their operations. Demos, expos, and trade fairs can help bridge this gap.

The AV industry is shaping the future, and Uganda has a chance to lead the way. The only question is, are you ready to seize the opportunity? Whether you're an entrepreneur, educator, or business leader, now is the time to embrace AV technology, invest in skills, and be part of the transformation.



LEARNING FROM THE PAST: A CALL FOR REFLECTION IN INFRASTRUCTURE PROJECTS

Eng. Ronald Kabuusu, PMP

Member, UIPE and Registered Engineer, ERB



Infrastructure projects are critical to national development, yet in many cases, the same mistakes continue to recur, often with tragic consequences. From poor planning and lack of safety precautions to failure to document and apply project learnings, the result is not only financial waste but also the loss of human lives. A recent incident has brought these realities into sharp focus and reminds us of the urgent need to institutionalize lessons learnt practices across all engineering projects in Uganda.

Recently, the nation was shocked by the tragic death of Mr. Rajiv Ruparelia, son of one of Uganda's most prominent business moguls, in a car accident along a section of the Northern Bypass. That particular stretch was reportedly under slow upgrade. Preliminary media reports attributed the accident to the road contractor's failure to provide adequate signage and the unsafe, unplanned road closures that had become common during the works.

Rajiv's case is not isolated. Every year, Ugandans lose their lives in preventable road construction-related accidents. What's more troubling is that despite the recurrence of such incidents, very little has been done to address the root causes. The key to avoiding these tragedies may lie in how we handle and implement lessons learnt in our infrastructure projects.

Every project should maintain a lessons learnt register,

a dynamic and evolving document that records what was done well, what went wrong, and what should be improved. This process must include structured lessons learnt sessions, led by a neutral facilitator (not the project manager or main personnel) to ensure open, unbiased feedback. These insights should then inform the planning and execution of future projects to avoid repeating past mistakes.

However, for such a system to work, it must be demanded and supported from the top. Project sponsors and key stakeholders must require lessons learnt sessions as part of standard practice and follow up to ensure that outcomes from these sessions are integrated into future planning and decision-making. In doing so, we can reduce risk, improve efficiency, and, most importantly, save lives.

The tragic loss of Mr. Rajiv Ruparelia should not be another statistic or a passing news story. It must be a turning point, a moment that awakens project implementers, sponsors, and regulators to the urgent need for change. By embedding a culture of learning and accountability in project management, we can transform past mistakes into future improvements. This approach will not only improve project outcomes but also enhance public trust and save lives across our growing infrastructure landscape.



ERB NEWLY REGISTERED ENGINEERS



NEWLY ENROLLED UIPE MEMBERS



NB: To access the newly registered Engineers and Enrolled UIPE Members, Please scan the QR Codes

UIPE AND ERB FEES STRUCTURE

UIPE MEMBERSHIP		ERB REGISTRATION	
(A) JOINING UIPE MEMBERSHIP		(B) PERMANENT REGISTRATION – UIPE Corporate Members Under JAC and East African Direct Applicants	
Membership Category	Membership fees		
Corporate	UGX 750,000	Application Fee	Shs. 400,000
Graduate	UGX 350,000	Registration Fee	UGX. 1,040,000
Technologist	UGX 350,000	Registration	UGX. 90,000
Technician	UGX 250,000	Certificate	UGX. 50,000
Student member	UGX 20,000	Annual Subscription	UGX. 350,000
		Stamp	UGX. 200,000
		Annual Licence	UGX. 250,000
		Shirt and Lapel Pin	UGX. 100,000
		(C) TEMPORARY REGISTRATION - For Non-East African Engineers	
		Application Fee	Shs. 400,000
		Registration Fee	USD. \$800
		(C) PERMANENT REGISTRATION – TECHNICIANS & TECHNOLOGISTS East African Direct Applicants Diploma Holders	
		(i) TECHNICIANS – Total UGX 700,000	
		Application Fee	UGX. 100,000
		Registration Fee	UGX. 200,000
		Triennial Fees & Practicing Licence (for 3 Years)	UGX. 300,000
		Shirt and Lapel Pin	UGX. 100,000
		(ii) TECHNOLOGISTS – Total UGX 1,050,000	
		Application Fee	UGX. 200,000
		Registration Fee	UGX. 300,000
		Triennial Fees & Practicing Licence (for 3 Years)	UGX. 450,000
		Shirt and Lapel Pin	UGX. 100,000
		RENEWALS	
		Permanent Registered Engineers	
		Annual Fees	UGX. 600,000
		Temporary Registered Engineers	
		Annual Fees and Licence	USD. \$400
		Annual Stamp Renewal	USD. \$65
		New Stamp	USD. \$120
		Registered Technicians & Technologists	
		Registered Technicians & Technologists	
		Technicians	UGX. 300,000
		Technologists	UGX. 450,000
		OTHERS	
		ERB Shirt	UGX. 80,000
		ERB Lapel Pin	UGX. 20,000
		Engineers Stamp - Replacement	UGX. 200,000

COSTS OF TRAINING COURSES

CPD - Member	
Physical	Virtual
250,000 per day	125,000 per day
CPD - Non - Member	
350,000 per day	150,000 per day
IPD - Member	
175,000 per day	85,000 per day
IPD - Non - Member	
250,000 per day	125,000 per day



THE ENGINEERS

CONNECT WITH US

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