





big data LITTLE DATA & everything between









introduction

DataFest Africa is an annual event that seeks to celebrate data use in the region by bringing together a variety of stakeholders of diverse backgrounds such as government, civil society, academics, students and private industry experts under one roof and theme.

Since 2019, Pollicy, with support from partners, has been organising DataFest, an annual celebration of data that has so far transformed from a Kampala edition (DataFest Kampala) to an African regional edition (DataFest Africa). DataFest Africa continues to bring together data enthusiasts, Civil Society Organisations, Government, private sector and more to discuss trends on data across the continent.

The 2022 DataFest Africa edition

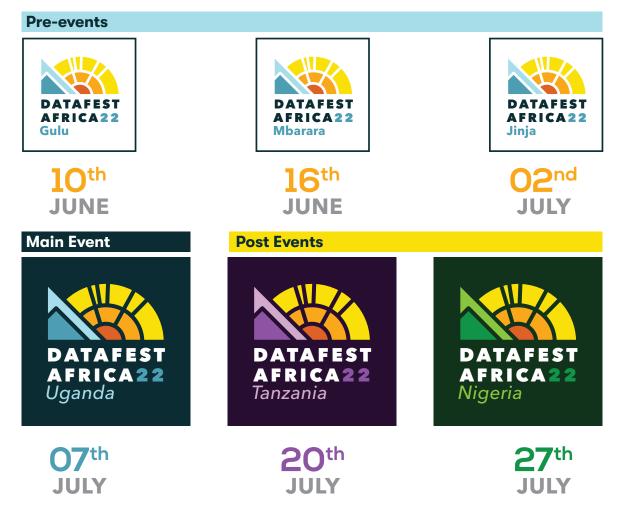
The biggest so far, the 3rd edition of DataFest (now DataFest Africa) held under the theme: "Data Futures: Big Data, Little Data, and Everything in Between" was a hybrid event that attracted a wide range of participants and stakeholders. The month-long edition started on June 10th to July 17th. We welcomed a total of 716 participants from 3 countries, a steady increase in our community, which has more than tripled since our first ever edition in 2019.

This report is a reflection of key outcomes, numbers and impact of the 2022 edition of DataFest Africa.





The 2022 DataFest Africa dates



Breakdown of the 2022 DataFest Africa pre-events

For the first time, as part of the DataFest Africa pre-events, we brought data activities and conversations to communities outside of Kampala, engaging and interacting with citizens, local governments, students, innovators, and other stakeholders working and living outside the city centre. Previously, the edition was only held in Kampala, attracting only participants from the city. We showcased and discussed best practices on how rural based data enthusiasts are changing the data landscape with partners. The following is a synopsis of the three pre-events.

pre-events



10th JUNE **Gulu Pre-event in Numbers**

68 07 05 Participants Speakers Breakaway sessions

y Demo sessions

Our first Gulu pre-event featured different sessions such as:

- ICT for Effective Monitoring of Education led by William Achol, Corruption Brakes Crusade;
- Data Protection in the Post COVID-19 Restriction Era led by Brian Geoffrey Chanwatt, Strategic Response International (SRI);
- Introduction to Robotics (Electronics and Computer Programming) Workshop led by FundiBots
- Intersection between Connectivity and Digital Inclusion in Rural Communities led by Charles Ochan U-Touch Uganda
- Access to ICTs by Persons with Disability in Northern Uganda led by Bonnita Nyamwire, the Research Manager at Pollicy.

These sessions were interactive, consisting of workshops, Q&As, and feedback sessions. The success of the Gulu pre-event was also due to extensive community mobilization by the Pollicy team and sensitization to various community members to gauge their interest in participating in the pre-event.



In many of the rural places in Uganda, there is no Internet. This is deterring many young people from utilising it to provide solutions to some of the most pressing issues they are facing in agriculture, education, livelihoods & more. We need to make the internet easily accessible to young people in the country, especially in rural communities. - Ruth Atim, Executive Director of Gender Tech Initiative Uganda, while delivering the keynote address titled; Smart Data and Digital Technology in Education: Learning Analytics, Al & Beyond.





The Mbarara pre-event was hosted by Pollicy at the Innovations Village. A wide range of practical sessions were held, and many government officials attended. The keynote speaker was Ms. Sylvia Ayebare, a biostatistician with Mbarara District Local Government. She described how the local government, and now the city council, are using data to influence decisions.

This pre event also had a number of sessions:

- Introduction to Open Data and Data Visualisation led by Wilson Lukwago, Pollicy's Design Lead;
- An interactive fiction game dubbed Choose Your Own Fake News by Pollicy to combat mis/dis/mal information led by Bonaventure Saturday, a Research Assistant at Pollicy.
- A session on Perfection in Data Science led by Frank Atwiine, Maisha Meds.
- An interlinkage of Mental Health and the Industrial Revolution led by Mervyn Kasiita West, Klasoftec Inc.



Data, whether big or small, is very important to influence decision making. No decision is made at Mbarara District Local Government and now Mbarara City Council without assessing available data. Be it vaccines, education, name it. - Sylvia Ayebare, Biostatistician at Mbarara District Local Government while delivering her keynote speech





02nd JULY Jinja Pre-event in Numbers

83 Participants

O7 Speakers 06 Breakaway sessions

Both students and leaders from local government structures attended the Jinja pre-event. The day's main event was a fireside chat led by Uganda Prisons Services on data use in crime management and decision making.

The breakaway sessions included:

- Introduction to Data Visualisation led by Wilson Lukwago, the Design Lead at Pollicy;
- Baseline Study on Urban Data Governance in Uganda; led by Christopher Baguma, Open Data Analytics/ToroDev;
- Introduction to Robotics (Electronics and Computer programming) workshop led by Fundi Bots; and
- Choose Your Own Fake News led by Bonaventure Saturday, Research Assistant at Pollicy



Uganda Prisons Services breathes, and lives on data everyday. We have data stored as far [back] as 1962. All our key decisions since our inception are made based on available data which of course, clear safeguarding and protection is always taken into consideration. - CSP Racheal Arinetwe stated while speaking to participants.

spotlight



ANDREW GOLE Digital Security on Wheels

This year's DataFest Africa featured prominent human rights activist and digital security trainer Andrew Gole, who rode his bike, which doubles as a mobile digital security clinic, to all Ugandan DataFest editions. Andrew led workshops on digital security while cycling over 1,000 kilometres from Kampala to Gulu, Mbarara, and Jinja, providing valuable insights into how to promote and practise digital security as well as citing how the pandemic has made individuals and institutions recognize the importance of digital safety and security.

Through his initiative Digital Security On Wheels, Andrew is the Community of Practice Lead for ICT4Advocacy Community of Practice under one of Pollicy movement building programs, the Digital Human Rights Lab. Through this initiative, Andrew and the community of practive he leads continue to support many individuals and institutions, especially those in rural communities, to strengthen their digital safety and security as part of Pollicy and the consortium's broader goal to strengthen and promote human rights in a digitalised world.



main event



7th

JULY

The main event, which drew 139 people, was held at the National ICT Innovation Hub in Nakawa. **Flavia Opio, Team Lead at the National Innovation ICT Hub**, and **Gilbert Beyamba, Director of Programmes, Pollicy**, opened the Kampala event by welcoming attendees to DataFest Africa 2022. Flavia Opio elaborated in her remarks that the Hub is a government facility under the Ministry of ICT and National Guidance that supports innovations in Uganda, with the primary goal of improving coordination within the innovation ecosystem and the development of home-grown solutions.

Gilbert Beyamba, the Director of Programmes at Pollicy, echoed the year's theme: Data Futures: Big Data, Small Data, and Everything in Between, and added that the 2022 event began in Gulu, then moved to Mbarara, Jinja, and now Kampala, with upcountry events hosted by Innovation Village. According to Solomon Opio, the Innovation Village's tech lead, the Innovation Village continues to support communities through events and programs that promote growth.

The Executive Director of DefendDefenders, Hassan Shire joined virtually from Montreal, Canada, and thanked the Pollicy team for organizing DataFest Africa 2022. He also expressed gratitude to Andrew Gole for using data to defend human rights. Hassan stated that data is the new oil and gas, which is why it is so valuable. He claimed that people should understand and be aware of how data functions in society.

Alice Namuli Blazevic, partner at Katende, Ssempebwa and Company Advocates, delivered the day's keynote remarks. Alice stated in her remarks that there has been a significant increase in the use of the internet in various aspects, which has been accelerated by the COVID pandemic



Today, data is used in weather, urban development & management, health & homes. Big data is enabling organisations in decision making, increasing productivity and efficiency among others. - Alice Namuli Blazevic, partner at Katende, Ssempebwa and Company Advocates, while delivering her keynote address.

Lighting Talks



Rhian Mikisa gave the first lightning talk, which was about Open Source For Equality. Rhian mentioned in her presentation that Open Source For Equality is an initiative in which Response Innovation Lab has collaborated with a German international organization called URIDU to promote the use and development of open software in order to contribute to sustainable development goals centered on education, health, and gender. It is critical to encourage innovation and learning in refugee settlements.



Grayson Clapp, the World Bank Group's Energy Data Analytics Hub Project Manager, led a virtual session on Exploring the World Bank Group's Open Energy Data Platform. He shared data tools developed for the energy sector in his presentation. He also demonstrated the energy data database, which contains over 935 data sets sourced from various partners in various sectors around the world.



Allan Mbabani, Executive Director of Open Street Map Uganda, discussed the barriers to technology, inclusivity, and access, as well as how the organization he leads, Open Street Map Uganda, leverages open data creation skills and how their programs benefit teachers and students. Allan stated in his presentation that there is concern about increasing access and exclusivity of data or information to the masses by providing technology access to institutions such as schools for both students and teachers.



Robert Ssewagudde, Program Coordinator at International Deaf Education Advocacy, discussed what inclusive education entails. In his presentation, Robert stated that despite the fact that over two million Ugandan children are disabled, only 5% receive an inclusive education and 10% are supported by national institutions.



FundiBots presented and showcased robots performing various activities, as well as shared its organizational work promoting technology use among school students. Ann Atyang, an IT Assistant at Fundi Bots, gave the presentation.

The Panel Discussion: Data and Technology: Envisioning the Future of Data

The panel brought together practitioners from various industries to discuss their daily experiences with data, the opportunities and challenges for data producers and consumers, and what the future holds for Africans in terms of data collection, processing, analysis, protection, and governance.

Shem Opolot, Uganda Program Manager for Duke University's Division of Global Neurosurgery and Neurology (DGNN), moderated the panel, which included speakers such as Bonnita Nyamwire, Head of Research at Pollicy; Bernard Sabiti, Senior Engagement & Partnerships Manager at Development Initiatives (DI); Jean K. Makki, Director of Design Hub, Kampala; & Vice President, Start Up Uganda; & Dr. Nakatumba Joyce, a lecturer at Makerere University.

Breakaway sessions

The breakaway sessions for the main event in Kampala were;

- Data Protection Protection in the post Covid-19 restriction era led by Brian Geoffrey Chanwat, Team Lead Strategic Response International.
- Baseline Study on Urban Data Governance in Uganda led by **Professor Moses Muhumuza** who introduced the ongoing research on data governance specifically in the urban context that is being carried out by Open Data Analytics, an initiative of TooroDev and UNIRI in Fort Portal and Hoima which have been considered because of their contextual difference, Fort Portal is the only tourism city and may need specific planning.
- Introduction to Robotics (Electronics and Computer programming) workshop by **Fundi Bots** was a free form session where participants engaged with different technology and robotics.
- The Digital Creative Economy: A Mapping of the Current Landscape in Uganda went over the findings of Pollicy's research paper authored by **Bobina Zulfa** that was mapping the digital creative landscape in Kampala.
- Data science in Uganda was led by Hassan Kibirige Technical Lead at A-plus Associates & R Studios Fellow. In his presentation, he defined what data science was while providing a firm understanding of what makes data science important to participants.

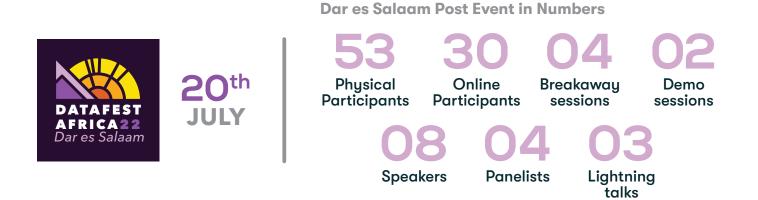
- Introduction to Data Visualisation was led by Lukwago Wilson. In this session, the discussion
 was centred around Introduction to Data Visualisation (Infographics design), in general, and
 information design with an emphasis on design principles in regards to how information is to
 be disseminated.
- Product Technology For Cyber Threat Intelligence, led by Daniel Opio of AddSecurity, explained how the global cyber threat intelligence market has risen to a higher standard, and it is estimated that it will reach a value of \$12.8 billion USD in 2025, according to the EC-Council.
- Data Science for Front-end Engineers was a structured segment where **Alecho Edwin**, **a lawyer and digital solutions** architect with Alaara, guided participants on the theoretical elements of data science and the living coding sessions. The segment focused on JavaScript which is a web tech for developing apps and also used by data scientists for data analysis.
- Trust in Data: **A Citizen's Bird's Eye View in Digital Economy** focused on the use of the word data analysis framework for analysing people's attitudes through the insights gathered from different organisations.
- Location Intelligence and UAV Data Processing and Analysis was led by **Tinah Mutabazi,** Managing Director, Uganda Flying Labs. The session focused on Flying Labs' work on location intelligence for risk mitigation in the coffee industry through the use of UAV tools with the objective to improve livelihoods through developing location intelligence and robotics, striving for partnerships with all stakeholders to improve performance in the sector.

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National ICT Innovation Hub | 8:00 a.m - 5:30 p.m EAT

post events



The post event was held at the Tanzanian Data Lab (dLab) offices in Kijitonyama, and 42 people attended in person and 30 online. Nestory Kennedy, Dlab Monitoring & Evaluation Specialist and Dlab Focal Contact, kicked off the event by emphasizing the importance of collaboration and why he thought Dlab was an important partner in ensuring data, which is a critical component for sustainable development. Adriano Amaral, Open Data Practitioner at Derilinx, gave the first lightning talk on Open Data reshaping the Sustainable Energy Development: Solar Energy sizing tool for Developing Countries. Navina Mutabazi, Pollicy's Program Coordinator-Feminist Movement Building, introduced the Digital Ambassadors program. "...with colleagues from Uganda, we co-designed a youth program to impact more young people with digital skills, which prepares them to cope efficiently with the internet and the trend it brings," Navina said in her remarks. The Digital Ambassadors Program works with students in higher education institutions.

Dorin Mmasi, Alumni Ahsante Africa Foundation, presented her lighting talk on "Transforming worlds through digital learning" by sharing the foundation's work and the scholarship program for young people who are not able to attend school plus the digital program that the organisation is running, which aims at improving content in 32 schools in Tanga, Arusha and Kilimanjaro, targeting topics such as human rights, gender based violence and female genital mutilation

The keynote address was made by **Zahara Tunda**, who is Code for Africa's Community coordinator. In her remarks, she shared her work of coordinating the Wanadata project, a Pan-African network of digital data enthusiasts, whose main aim is to produce data driven stories. The program also gives fellowship to journalists in most countries in Africa.



The panel discussion theme was **"Unheard Stories of Digital Exclusion to Grassroots Women Rights Defenders."** The panellists, Fatma Songoro with Victory Attorneys and Consultants, Sesilia Shirina, Chief Executive Director, Young and Alive Initiative and Jessica Julius Mshama discussed the digital challenges that women rights defenders face at grassroot level, the way forward to ensure that women rights defenders at grassroot level are not excluded on digital spaces and strategic policy recommendations for key decision makers to ensure women are included on digital spaces.

The documentary on the extent of online gender-based violence was led by **Imani Henrick, a journalist with Kings FM Radio**. The documentary addresses the Digital Gender Gap in Tanzania. It covers the reasons why women are less online compared to men as a result of their understanding of digital opportunities.

Innocent Grant, Young and Alive Initiative, led a breakaway session on social media data privacy and digital media for reproductive health promotion platforms. This session was coordinated in an engaging manner by sparking dialogue in the room about a story of a young girl and her challenges in accessing sexual and reproductive health information and friendly services.

Mwampamba Emmanuel, Getcore Group Ltd introduced Microsoft 365 for Business to the participants. In his presentation, he mentioned that Microsoft 365 is a new product that integrates other office products with new products. "Modern business is more than technology, it also focuses on collaboration, productivity and security," Emmanuel highlighted.



The post event took place at the Co-Creation Hub. Pollicy's Director of Programmes, Gilbert Beyemba, gave a virtual presentation on Pollicy speaking on what we represent, what we do, the countries we cover, and our future outlook). Adedolapo, Adewunmi Salami, and Favour Borokini led the panel discussion, which was titled **"Advancing Human Rights Approaches to Design Online."** The panelists emphasized that, depending on the circumstances and people involved, the internet can either advance or impede human rights. It's a two-edged sword with many possibilities given that today's data is obtained daily and used in a manipulative manner when people take advantage of the populace's ignorance.

Physical

Participants

Online

Participants

Lightning

talks

Breakaway

session

In the lightning talks:

JULY

The first session looked at explaining the usefulness of the Zindi Africa platform as an essential tool for African data scientists and was anchored by Israel Odeojo. The second lighting session centred on what it takes to be safe online, led by Adewole Nathaniel (Co-Creation Hub, Nigeria). He explained the causes of threats to online safety and classified the types of threats while proffering possible solutions (both precautionary and reactionary) to cyber threats. This was the third and last session of the lighting talks led virtually by Karen Chukwu (Katwig and Dale). She defined data and explained why data is important to drive our everyday decisions and growth.

The breakaway session was on Data Visualisation: Flourish integration with canva presented by Freda Victor (Code for Africa). The session involved the use of two powerful tools to make data more explanatory and interactive.

datafest hackathon



The hackathon this year was organized in collaboration with **Sunbird AI** and **Zindi Africa**. The DataFest Hackathon 2022 theme was "**Noise Pollution Challenges in Africa**," particularly in large cities.

The hackathon took place between July 7th and July 26th. It was only open to African countries, and over 100 people worked together to figure out how to classify noise categories using machine learning. The top three solutions received \$500, \$300, and \$200 USD, respectively. Sunbird Al's goal is to incorporate components of the winning solution into their autonomous sensors to enable noise classification at the edge. It was eye-opening for the participants to learn that noise, particularly in African capital cities, has the potential to cause serious harm. It was good to see that participants interacted with a fairly new type of data, with the winning solution managing to achieve 88% accuracy on this machine learning task.

The winners of this year's Hackathon were:

Winner: danmaestro - Dan Ofula (Kenya) First runner's up: ASSASSIN - Azer Ksouri (Tunisia) Second runner's up; FADHLOUN - Youssef (Tunisia)

Read more about the hackathon here.

datafest africa 2022 partners

Pollicy would like to extend great thanks to the 2022 DataFest Africa partners. They were instrumental in the success of this year's edition, our biggest so far. They provided technical, financial, moral and communication support. All this would not have been achieved without that.

And therefore, we would like to thank the 2022 DataFest Africa partners in no particular order;





MINISTRY OF ICT & NATIONAL GUIDANCE

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annex one (key outcomes)

Pre-Events

Hold more open dialogues, data conversations, and spaces to support community members, particularly those in remote areas, better understand data agendas and promote digital inclusion in their communities.

Engage young data enthusiasts in events such as DataFest Africa 2022, which can provide them with opportunities to explore gaps in the data ecosystem and become creative problem solvers. For example, the Gulu pre-event drew active young people aged 18 to 25, who actively conversed in various sessions and expressed a strong desire to participate in future events and initiatives.

Main event

Building partnerships and collaboration with African governments is critical when advocating for restructured norms or policies to improve Africa's current data ecosystem. Our collaboration with the Mbarara City Council was a success during the event because it instilled a sense of data ownership in both the government and the attendees.

Practical sessions are required for co-creating solutions and gathering feedback from our many data and digital projects. A compelling example is how participants challenged us with suggestions to improve the Choose Your Fake News game, which Pollicy created to combat the spread of misinformation and disinformation.

Post events

Increase the number of on-the-ground partnerships. This will make event coordination much easier. More partners will be needed for the two inaugural editions in Tanzania and Nigeria to ensure that ownership is realized at those country levels.