



THE KENYA INTERNET GOVERNANCE FORUM

Report of the 11th Kenyan IGF held
on 19th July 2018 at Panafric hotel,
Nairobi, Kenya.

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Acronyms

AI	Artificial Intelligence
BVR	Biometric Voter Registration
CA	Communications Authority of Kenya
EVID	Electronic Voter Identification System
FinTech	Financial Technology
IEBC	Independent Electoral and Boundaries Commission
IOT	Internet of Things
IGF	Internet Governance Forum
KEIGF	Kenyan Internet Governance Forum
MAG	Multi Advisory – Stakeholder Group
MOICT	Ministry of ICT
National KE – CIRT	Kenya Computer Incidences Response Team
NCIC	National Cohesion and Integration Commission

Acknowledgement

The KIGF steering committee greatly appreciates all participants who shared their insights during online discussions prior to the KIGF and at the forum on 19th July 2018 at Panafric Hotel, Nairobi. Special mention to two groups of participants- the graduating class of the 3rd Kenya School of Internet Governance (KeSIG) which was held from 16-18th July; and the cohort from the Kenya Youth IGF that was held on 5th July 2018. These and other participants represented different organisations and stakeholder groups, bringing to fore varied views on all issues that were discussed. Our gratitude goes to the moderators and panellists who generously gave their time and thoughts on issues they were requested to discuss. Thank you also for making yourselves available to network with KeSIG graduating class and participants of the forum.

We would also like to thank the KICTANet steering team- Grace Githaiga, Barrack Otieno, Mwendwa Kivuva, Mwara Gichanga, Liz Orembo, Grace Mutung'u, Ali Hussein and John Walubengo-that dedicated time to develop this year's KIGF concept. Heartfelt thanks to June Okal who authored this report. She was assisted by Philbert Aganyo and Mary Onyango. The report was edited by Grace Mutung'u.

We are greatly indebted to our partners who provided resources for the event. These include the Communications Authority, CIO Magazine, Deutsche Welle Akademie, Facebook, Internet Governance Forum Support Association (IGFSA), HIVOS East Africa, Telecommunications Service Providers Association of Kenya (TESPOK) and the many individuals who offered their professional time in realisation of this event.

Executive Summary



ICT contributes significantly to Kenya's economy. According to the Kenya National Bureau of Statistics (KNBS) 2018 Economic Survey, ICT has transformed society and has spurred the economy by offering services through online platforms in the provision of government services, business and e-commerce, research and transfer of knowledge, and so on. As evidenced from the above statistics, these developments, according to KNBS, led to the value of ICT output in the economy increasing by 10.9% to KShs 345.1 billion in 2017.

The importance of the internet to the development of the country cannot be gainsaid. Modelled on the global IGF structure and principles, the Kenya IGF (KIGF) is a unique platform for all stakeholders to openly share perspectives and concerns on the key issues that may affect the future of the internet users.

The 11th Kenya IGF was held on 19th July 2018 in Nairobi with the theme: ICTs for Kenya's Development: Getting Everyone on Board. Sub themes, which also formed panel discussion topics were crowdsourced from subscribers on

the KICTANet list. They included cybersecurity, data protection, content regulation, fintech and e-commerce as well as new emerging technologies.

As with previous years, there was a fireside session dedicated to future issues. The session discussed new technologies such as artificial intelligence, robotics, distributed ledgers and blockchain technology amongst others. This discussion was in line with the current government plan for use of ICTs to support its priority programmes in manufacturing, universal health care, food security and affordable housing, popularly known as the 'Big Four Agenda'.

Feeding into the KIGF was the second edition of the Kenya Youth IGF convened by Watoto Watch Network. Youth from this meeting actively participated in the forum and shared outcomes from their meetings.

The forum benefited from participation of over 200 people from different stakeholder groups. Discussions were also amplified on social media with in situ and remote participants taking advantage of social media to contribute and ask questions to panellists.

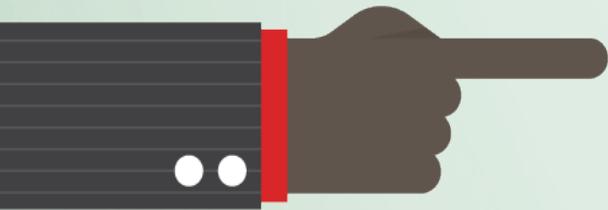
Participation



DIRECT, REMOTE PARTICIPATION, SOCIAL MEDIA, MEDIA COVERAGE

The forum convened by the Kenya ICT Action Network (KICTANet) had over 200 participants in person of different genders, age and stakeholder groups. The forum brought together government, the private sector, academia, the media, civil society, technical community and individual users to deliberate on existing and emerging internet-related matters. The forum was also streamed live and was available on Facebook live with support of Joly Macfie of the Internet Society's New York Chapter. It was also followed remotely through among others, online conversation on Twitter under the hashtag #KIGF2018. The hashtag was the country's top trending topic for two consecutive days and generated more than 2,000 tweets with an estimated economic value of \$18,321.1. The programme and social media report are annexed.

Key outcomes from the meeting



1. High Level Panel: ICTs for Kenya's development: getting everyone on board



- There are several key initiatives being taken by the government of Kenya for development of ICTs development to enhance access, accessibility, affordability of telecommunications devices and encourage foreign investment and capacity building.
- There need for increased public participation and stakeholder engagement in the law-making process in the ICT industry to ensure implementation success was underscored.
- The meeting heard about the success of eGovernment in Estonia. The country is world leader in use of people-centered ICT solutions for development and public service delivery.
- The youth called for their involvement in decision making. They asked policy makers to consider the recommendations and outcomes from the youth IGF. Among these were: counter cyber bullying among the youth; creation on awareness on digital rights; age protection measures as part of children's online protection with youth proposing that around age 16; and orientation of youth on use of social media.

2. Developments in fintech and e-commerce



- Some key developments in the Kenyan financial markets included suspension of 0.05% excise duty on banking transactions exceeding Kshs. 500,000
- The challenge of lack of affordable housing in Kenya was being addressed through: enhanced access to credit for innovators and cheaper credit, as well as adoption of use of technology and emerging technology - based solutions in provision of financial services.
- Discussions on 'Know Your Customer' regulatory compliance featured the challenge on balancing collection and processing of personal data with obligations to financial services providers

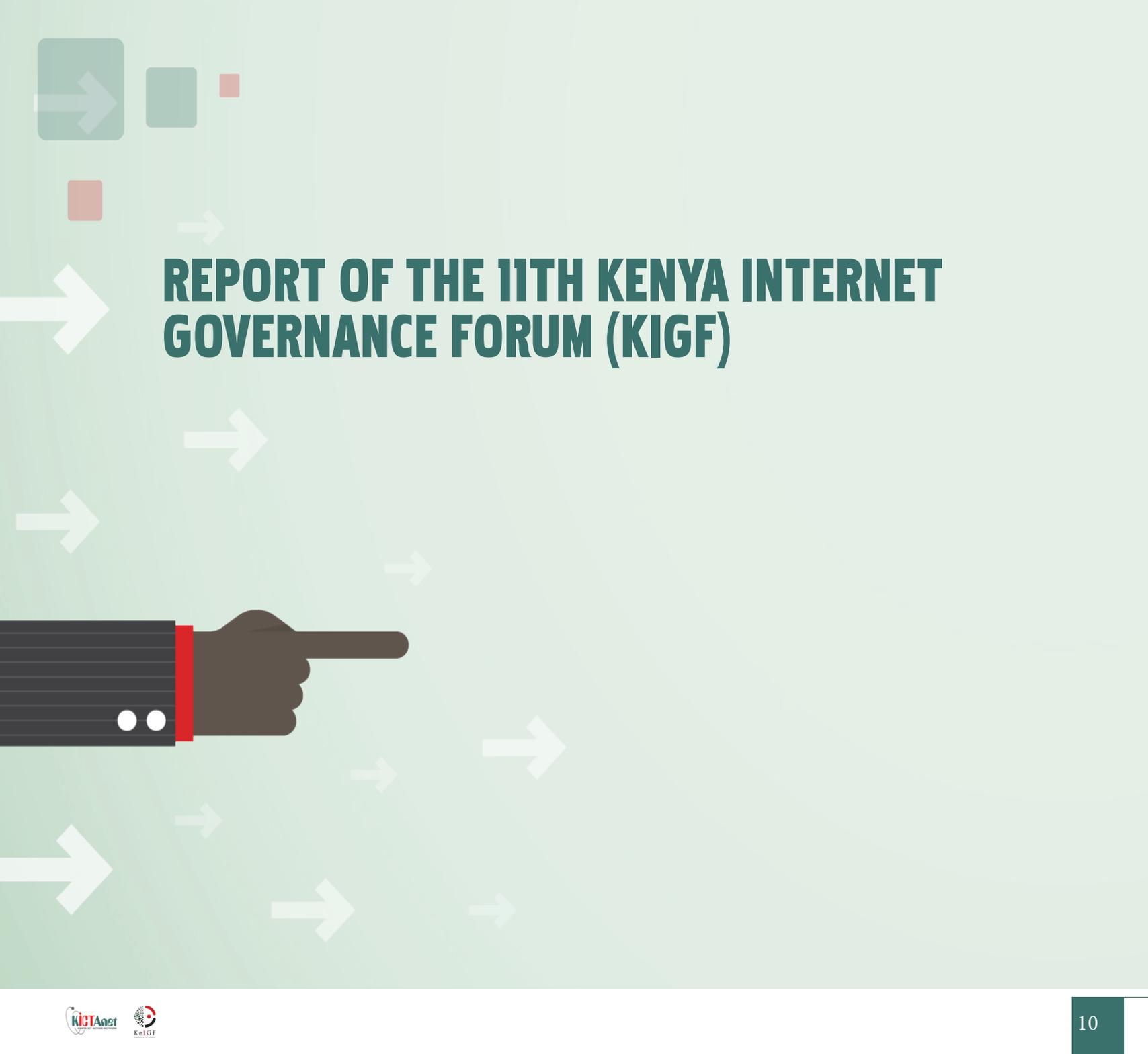
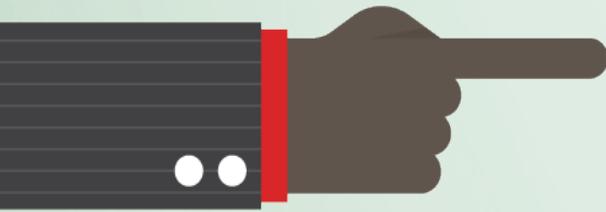
5. Emerging technologies trends (artificial intelligence, distributed ledger, robotics etc.)



- The uptake of emerging technology would occur if there was development of the requisite skills and the devices which comprise of the technology - based systems. Increased presence of Kenyans and Africans at large, in the decision-making tables of the world's advanced technologies will determine the levels of literacy in emerging technologies and adoption to the continent's advantage.
- A more vibrant legal and regulatory environment to respond to emerging trends was needed. This could be achieved through supportive policies for innovation.
- Emergence of sophisticated and advanced technology, calls for for more dialogue and collaboration among stakeholders in the technology for collective understanding of these advancements and to mitigate the risks brought by the technologies.
- Without development of supporting infrastructural pathways upon which these emerging trends can thrive to add value to lives, they might remain a perennial obstacle to lives.
- Kenya has a need for advanced skills trainings and customised higher learning programs in blockchain and other emerging technologies. These will see a growth of minds to adopt and fully utilise the trends.
- There is need to develop supporting infrastructural channels and pathways upon which these emerging trends can thrive to add value to lives, otherwise they might remain a perennial obstacle to lives.
- There is a need to critically analyse proposed technology - based solutions for Kenya's as not every emerging trend will necessarily work in Kenya's context.



REPORT OF THE 11TH KENYA INTERNET GOVERNANCE FORUM (KIGF)



INTRODUCTION

The Internet Governance Forum (IGF) is an annual global open and inclusive multi-stakeholder forum where public policy issues on the internet are discussed. These include internet sustainability, robustness, security, stability and development. The forum is held in a setting, free from binding negotiations and brings together stakeholders from government, private sector, technical community, academia and civil society to discuss internet governance issues on an equal footing .

The purpose of the IGF is to maximize the opportunity for open and inclusive dialogue and the exchange of ideas on internet governance (IG) related issues; create opportunities to share best practices and experiences; identify emerging issues and bring them to the attention of the relevant bodies and the general public; and contribute to capacity building for internet governance.

The IGF has been held annually since 2006 and Kenya hosted the global IGF in 2011. Locally, Kenyans in the ICT sector have come together since 2008 at the Kenya IGF (KIGF) . The Kenya ICT Action Network (KICTANet) convenes the meeting in with the support of local and international stakeholders.

KIGF is recognised as a National and Regional Initiative (NRIs) under the IGF. Its outcome feeds into the global level IGF. Objectives of KIGF include: to bring together local stakeholders in open and inclusive dialogue; create opportunities to share best practices and experiences; identify emerging issues and bringing them to the attention of the relevant bodies and the general public; and, contribute to capacity building for internet governance.

The forum is held in an informal setting, free from binding negotiations and brings together stakeholders from government, private sector, technical community, academia and civil society to discuss internet governance issues on an equal footing through an open and inclusive process.

KIGF was held on the 19th of July 2018 at the Panafric Hotel in Nairobi with the theme: ICTs for Kenya's Development: Getting Everyone on Board. The sub themes highlighted hereunder were suggested by subscribers on the KICTANet list based on topics that are of interest to Kenya.





OPENING CEREMONY AND REMARKS

The meeting began with a round introductions from all attendees showcasing the gender, age and stakeholder diversity of the attendees. **Barrack Otieno, KICTANet Associate**, welcomed all, explained the purpose of KIGF and gave a brief history of the Internet Governance Forum (IGF). It was noted that this was the 11th year of country – level forum in Kenya. Kenya has been a leading country in Africa advocating for multistakeholder approaches to address internet concerns on internet governance and ICT reforms in Kenya.

The past issues discussed included infrastructure development, enhanced access to the internet, legal issues and the immense contribution of stakeholders to effect laws, economic issues e-commerce, as well as human rights in the digital sphere.

SESSION 1

High level panel: ICTs for Kenya's development: getting everyone on board



The session was moderated by **Grace Githaiga, Co -Convenor KICTANet**, who invited the panellists and audience to discuss the current ICT landscape in Kenya in comparison to other parts of the world, and the role ICTs can play in enhancing an all- inclusive development.

According to the Communications Authority, Kenya has 42 million mobile subscribers; 30 million mobile money subscribers who made 308 million transactions valued at 1.7 trillion between October – December 2017. During the same period the internet data subscriptions stood at 33.3 million while the number of broadband subscriptions stood at 18 million. Kenya's current international internet bandwidth available in the country (Lit/equip capacity) stands at to 3,182.592 Gbps

Hon. William Kisang', Chair National Assembly ICT Committee, explained that the National Assembly had a 19 member committee on ICT with a mission to move enhance use of ICT for service delivery and development. Currently, Kenya is 4th in Africa and 78th in the world in ICT development and it has 5 undersea cables which had enabled the permeation of fibre optic in all counties. The committee was advocating for all county hospitals to have fibre optic.

Other projects highlighted by the Member of Parliament included the creation of constituency innovation hubs; Ajira Digital project which aims to introduce young people to 500,000 online jobs annually; and that the Kenya Advanced Institute of Technology University at Konza complex was expected to be complete early 2019. On legislation, Chair Kisang’ highlighted the Computer and Cyber Crimes Act (parts of it are contested in court) and the Data Protection Bill in the Senate. He commended KICTANet for engaging in law – making process.

Matano Ndaro, Head Development Management of Communication Department at Communications Authority of Kenya shared insights on how shifts in service provider’s models could enhance connectivity in underserved areas. He explained that 580 sub-locations had 50 percent connectivity for mobile and digital terrestrial services, while 166 had zero connectivity. He gave the example of digital learning where 880 public schools had been connected to high speed internet, enabling new learning experiences in different parts of Kenya.

Kadri Humal Ayal, Honorary Consul in Kenya for the Republic of Estonia related the Estonian experience where internet is considered a basic human right. Every home, in a population of 1.3 million people, has broadband connectivity. All schools are online and 97 percent use internet banking, enabling students to have bank accounts where parents deposit pocket money. This had enabled a digitalised society where for example, with a digital ID, students could check and complete assignments online. Furthermore, 98 percent tax returns are online and the government refunds to individuals all the excess tax paid within 4 days of filing. She also explained the role of data protection in Estonia’s digital economy, highlighting how use of distributed ledgers and encryption was used to assure privacy in digital transactions.

Students from Strathmore, Loreto Msongari and Sunshine secondary schools raised concerns about development of ICT policies and laws without inclusion of young people’s views. At over 60 percent of the population, the youth represent the largest number of internet users and are more likely to be affected by cyber bullying or be the perpetrators. The concern of the young people therefore, was to have their voices added to the enactment of laws as a way of creating high level awareness among them

“IGF is preparing
the next
generation for
policy making”

Lilian Kariuki
Executive Director, Watoto Watch
Network

SESSION 2

Developments in fintech and e-commerce



Fintech is the use of technology to improve financial activities. It has disrupted traditional financial service providers such as banks for example by allowing people to borrow without collateral. Kenya has the highest rate of financial inclusion in Africa at 65% of the population. There are 38 fintech companies in the country with Mpesa being the most widely used mobile money service.

The moderator **Ali Hussein, Principal AKH Associates**, invited the panellists and the audience to discuss the evolution of fintech, key challenges and opportunities and the roles the various stakeholders (business, academia, government, public and civil society) in addressing policy challenges.

Rosemary Koech, Policy Expert – Oxygene Marketing and Communications Limited discussed the challenges of the latest Finance Bill, which imposed a 0.05% tax on financial transactions. It had also done away with capping of interest rates. The law had sent shivers in the fintech space as players were concerned that regulation and taxation would stifle innovation.

The same sentiments were echoed by **Rose Muturi, Regional Manager, Tala** who was of the view that too much taxation was more likely to push people away from financial services. She described how Tala used data science to determine creditworthiness and loan limits for individuals. She raised concern that taxation of financial services could be extended to lower amounts and mobile money lending services, yet this was still a nascent model.

Steve Njenga, CIO Barclays Bank described the effects of globalisation on regulatory compliance for banks, stating that Kenya's 42 plus banks were also subject to international regulations such as GDPR. He made a case against further taxation of the industry . He also explained how traditional banks were innovating through development of tech products using the example of Barclay's mobile application Timiza. Some of the challenges faced by banks with technology included cybercrimes such as ATM jackpotting and SIM card swaps. Banks were working collaboratively to address these problems for instance through seeking more robust methods of customer identification.

George Njuguna, CIO Housing Finance Group narrated developments in the housing finance space. These include use of digital technology in processing of mortgages as well as development of mobile loan applications for individuals, micro, small and medium enterprises. He briefly explained policy interventions for affordable housing, which is a government priority. These include lowering tax on land and mortgage models that allow flexibility in repayment. Financial technology would be key in these proposals.

SESSION 3

Strengthening data security in the context of emerging trends



The moderator, **Rachael Nakitare, Ag. head of programmes at Kenya Broadcasting Corporation**, introduced the session that would broach on themes such as ICTs for government service delivery, place for national critical infrastructure, the management practices on government data in the hands of private sector and other third parties as well as the impact of the European Union's General Data Protection Regulation (GDPR).

Grace Mutung'u, an associate at KICTAnet explored key gaps in terms of data protection was noted to be the exclusion of human rights which protect the user. Hence there were many data collection and processing activities that did not protect and promote user privacy. This was the case even with public digitalisation services such as digital ID. She called on Parliament to push for development of a digitalisation policy to define government digitalisation processes and provide safeguards for human rights.

Karimi Ruria Public Policy Manager, Safaricom PLC explained that telecommunication service providers have data protection obligations under the existing law and regulatory framework but other entities do not. She therefore made a case for a progressive law that protects data across all entities and in its entire life cycle.

Joseph Mathenge from Serianu shared best practices to enhance privacy and cybersecurity including: international standards on information management, introduction of penalties on breach of the standards and user awareness.

John Walubengo, lecturer at Multimedia University addressed the skills gap in implementation of data protection as there were few experts on data protection and cybersecurity. He noted that academia had a critical role to play in skills development and recommended a more dynamic curriculum development process.

During interaction with the audience, some of the issues raised include:

- The need for enhancement of security in business practices such as remote access and recruitment of well so as to protect data. The role of stakeholders in data protection and cybersecurity was highlighted to include: capacity building and skills training to ensure data is collected in safe and secure manner and creation of awareness and informed engagement as well as knowledge increment.
- Users were advised to be proactive on information management practices and encouraged to patronise businesses that value user privacy. Businesses were urged to manage own information well to avoid security breaches and attacks.
- There was discussion on blockchain as a data security enhancement. Some ideas included use of distributed ledgers where users could trace processing of data about themselves and be able to delete decryption key to enforce the right to be forgotten.
- A concern raised from the floor was the possibility of the development of African GDPR. In responding, panellists highlighted the positives of the GDPR, a major one being that it is user-centric thereby creating a good opportunity to agitate for rights.

SESSION 4

Content regulation on the internet



The moderator, **Dr. Lucy Gichinga, lecturer at United States International University** commenced the discussion by highlighting the importance of expression from a societal aspect.

It was noted, that governmental institutions have not fully digitised, a the reason why they have a challenge with content currently being developed. Other gaps that were cited included the lack of adequate support from the State, inadequate local content, lack of appreciation of the art of literary criticism.

Dr Wandia Njoya, Head of Communications Department at Daystar University spoke about the role of institutions in a thriving society. She defined these institutions to include the state and non state actors such as the church, academia and local communities and pointed out that expression should happen at many levels- from playgrounds to pulpits. She challenged the government to support the literary art and encourage good arts development if Kenya aspired for a flourishing society.

Gbenga Sessan, Executive Director of Paradigm Initiative observed that most government regimes were scared of public debate and sought to use economic barriers as a hindrance to public participation. He cited the introduction of social media tax in Uganda. He also noted the counter effect of content regulation. For instance, in Nigeria, musicians had discovered that once their music was banned, it became an instant sell. His hypothesis was that content that was labelled as controlled or banned

was perceived as more valuable. On a broader note, he reminded government that the nature of internet is that no single entity can regulate content and therefore called for more inclusive approaches.

Mercy Mutemi of Mutemi Sumbi Advocates noted that expression spanned across several spheres of life including politics. However, state agencies were quick to rationalise religion or terrorism when regulating expression. She warned against subjective standards for regulation and recommended sticking to the constitutional standard that sets the scope for freedom of expression.

During plenary discussions, the audience pointed out that citizens seem to have accepted arbitrary content controls without questioning the rationale for such regulation.

Development of relevant content for consumption was emphasised. In order to bring more people online, there was need to encourage promotion of local content, create conducive environment for independence of creatives and identification of ways to grow the creatives' economy to contribute to the GDP of the economy.

In conclusion, it was noted that there is a need to move away from the morality discussion and focus on consumer choice as there is a need to give people choice and not preselection of content for them. Further, all stakeholders need to proactively engage in the conversation of content regulation as a form of limitation of the constitutional right to freedom of expression.



“The whole village needs to take care of the child ... the problem is that the village is broken. We, as a people need to reconstruct it.”

~Dr Wandia Njoya

SESSION 5

Emerging technologies trends (AI, distributed ledger, robotics etc.)



Panellists - Mr. Timothy Oriedo, data scientist, and lecturer at the Strathmore Business School, Mr. Ben Mann, the Chief Operating Officer at IBM, Eng. Mwendu Njiraini from the Communications Authority of Kenya (CA) and Prof. Bitange Ndemo, a Technology enthusiast and Lecturer at the University of Nairobi.

The moderator, **Harry Hare, Chairman and Editor of CIO Magazine**, provoked discussion with questions on how African countries should respond to new technologies. He invited panellists and the audience to identify gaps as well as the role of various stakeholders in ensuring progressive development for all through new technologies. It was an interactive t.v. style panel where conversation rotated between the audience and panellists.

The panel observed that new technologies were already in pilot and adoption phase. There was therefore need to deliberate on how best to apply some of the technologies. In addition, there was need to have continuous discussion on new technologies in order to acquire knowledge for decision making. There was a call for multistakeholder approaches in addressing policy issues on these technologies.

While it is always depicted that Kenya is an innovation hub, there exists a huge skills gap. We therefore need capacity development in technical

knowledge and tertiary institutions were challenged to review their course offerings to address the knowledge gap. This would help to build a smarter workforce that could respond to the disruptive effects of technology.

General public awareness on the new technologies was also cited as an key point in change management to a digitalised society. It was suggested that education begin at an early age in order to address the trust deficit that exists with new technologies and also assist future generations to understand technology.

The question of policy gaps raised debate. Some felt that policy interventions were needed while others were of the view that lack of policy should not deter innovation. Panellists suggested guidelines to support a vibrant regulatory environment, a sustainable environment for the selected technologies trends. Power was also singled out as a key challenge in realising digital technologies. If there was reliable electricity in rural areas, technologies such as blockchain could be exploited outside big cities. The example of Kenya's mobile money revolution that led to construction of more network booster masts across the country was shared.

The audience also heard about the Blockchain and Distributed Ledgers Taskforce. The taskforce was considering ideas received from the public on application of blockchain and new technologies. Applications featured public sector service delivery in lands and health. There was also a suggestion for a local cryptocurrency.





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