

# **KENYA DNS FORUM** REPORT





#### **KENYA DOMAIN NAME SYSTEM FORUM 2023**

The Kenya Domain Name System Forum (KDNS) is an open annual event in the Domain Name Industry, driven by a strong determination to revolutionize Kenya's digital landscape. This gathering brings together over 250 industry stakeholders representing the government, the private sector, civil society, the technical and academic community, and the public to discuss who the domain name industry in Kenya. Their collective effort aims to foster collaboration and build a robust, reliable DNS sector in Kenya, while also expanding internet access for all. By tackling challenges head-on and shedding light on opportunities, the KDNS Forum empowers Kenyans in the domain name industry to thrive and make their mark.

The Forum gives participants opportunities to network with these stakeholders and industry experts, discuss business, technical, and policy aspects of the industry, understand KeNIC's role in shaping the future of the internet and learn new approaches to establish and expand online presence. These participants include; individuals and organization interested in the domain industry and related business, namely: country code top level domain (ccTLD) registries, registrars (local and ICANN accredited), resellers, registrants, DNS experts, government representatives, ICT service providers, financial institutions and academia. Domain name system investors drawn from the African continent and other parts of the world also encouraged to attend.

The 3rd edition of the Kenya DNS was a two-day event held on 1st November 2023 and 2nd November 2023. It was organized and convened by the Kenya Network Information Centre in partnership with various industry stakeholders.

As has been the case in the past, the event received support from and was implemented in collaboration with the Internet Society of Kenya (ISOC), Konza Technopolis Development Authority (KOTDA), Liquid Intelligent Technologies Kenya, Internet Corporation for Assigned Names and Numbers (ICANN), Kenya Education Network (KENET), Technology Service Providers of Kenya (TESPOK), Pan African Internet Exchange data centers (PAIX) among others - serving as a key indication of willingness and commitment to the development and growth of the internet in Kenya.

The Kenya DNS was convened as a hybrid event with both physical and online participation under the theme *"Navigating the Future of Cybersecurity and Unleashing the Power of Domains".* 

The meeting was also active on digital platforms including the dedicated Kenya DNS zoom link, on LinkedIn, Facebook, YouTube and Twitter platforms under #KenyaDNSForum2023. The event zoom link also had more than 350 participants largely from Kenya, the United States of America, Harare, South Sudan, Pectoria and Kigali.

## Kenya DNS Forum Program

DAY	1:	1 <sup>st</sup>	November 2023
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Time	Session
7.30am - 8.30am	Breakfast and Registration
8:30am-8.40am	Welcoming remarks – KeNIC CEO: Mr. Andrew Lewela Mwanyota
8.45am – 9.00am	Welcoming remarks – EX. KeNIC Chairman: Mr. Geoffrey Shimanyula
9:00am – 9.20am	New KeNIC Chairman
	Mr. Paul Kariuki
9:25am – 10:25am	Tea break and Tour of Exhibition Booths
	KOTDA + TESPOK + ISOC + LIQUID + KENET + KENIC + PAIX
10:30am – 11:00am	ICANN presentation on Coalition for Digital Africa by June Okal, Senior
	Manager, Engagement Southern and East Africa
11:00 – 12:00pm	Presentation on DNS/DNSEC
	- Ahmed Landi – KeNIC Senior Advisor and Technical Manager
11:00 – 12:00pm	Panel Discussion 1: Future of Cybersecurity
	- Lucas Omollo - Manager, ICT & Smart City Solutions · KOTDA
	- Nabihah Rishad – Product and Research Lead, Serianu Limited
	Moderator: Patrick Kiniti – CEO of Techmax Solutions
12:00pm –	Panel Discussion 2: Cybersecurity Innovation in Mobile Financial
12:55pm	Services
	- Nyagitari Bosire – Head, Technology Enterprise Services,
	Safaricom PLC
	- Eric Ngei – Head of Cybersecurity at KCB Group
	- Fredrick Wahome: Co-founder of Kenya Cybersecurity and
	Forensics Association
	- Kevin Kanyi - Head of Cyber Threat Intelligence & Threat Hunting, M-
	КОРА.
	Moderator: Rose Kimwatu-Koech – Head of Data Protection, KCB

1:00pm – 2:00pm	Lunch break and Networking + Tour of Exhibition Booths
2:00pm – 2:50pm	KONZA Technopolis Development Authority presentation by:
	- John Paul Okwiri, Chief Executive Officer – Represented by Stella
	Muhoro
3:00pm – 4:00pm	Panel Discussion: Enhancing Collaboration between stakeholders
	- Paul Kariuki – KeNIC Chairman
	- Eng. Alphonce Odhiambo - President, the Internet Society of
	Кепуа
	- <b>Bob Ochieng</b> – Snr. Director: ngTLD Program, ICANN
	- Fiona Asonga – Chief Executive Officer, Technology Service Providers
	of Kenya – TESPOK
	- Joel Karubiu, Country Representation/Export Advisor, ENTERPRISE ESTONIA
	<b>Moderator: Barrack Otieno -</b> Chairman of the Board of Trustees at Dot Africa Foundation
4:00pm – 4:55pm	Panel Discussion 3: Trends in Data Protection and Guidelines for the
	Future
	- Fredrick Wahome – KeNIC Registrar
	- William Kimuhu – Data Protection Officer, Mwalimu Sacco
	- Beth Njau – KeNIC, Data Protection & Privacy Officer
	Moderator: John Walubengo, KeNIC ICT Committee & Lecturer,
	Multimedia University of Kenya
5:00pm	Vote of thanks & Afternoon Tea
	Andrew Lewela Mwanyota, CEO

# DAY 2: 2<sup>nd</sup> November 2023

Time	Session
7.30am – 8.25am	Breakfast and Registration
8:30am – 8:40am	Welcoming remarks & Recap of Day 1 KeNIC CEO:
	Mr. Andrew Lewela Mwanyota
8.45am – 9:00am	Key Note Speaker
	- Andy Chadwick – Future of Cybersecurity
9:00am – 9:25am	Presentation from Africa Top-Level Domain (AFTLD)
	- Barrack Otieno
9:30am – 10:00am	Presentation from ICANN
	- Bob Ochieng
10:00am-10:25am	TEA BREAK
10:30am – 11:30am	Sponsor Presentation
	Liquid Technologies + ICOLO + SEACOM + TESPOK + ISOC
11:40am – 12:50pm	Panel Discussion: Education and Domain
	- Grace Githaiga - CEO/Convenor of the Kenya ICT Action
	Network (KICTANet)
	- Eng. Alphonce Odhiambo - President, the Internet Society of
	Kenya
	- Winnie Rachael – Country Manager, UNICAF
	- Patricia Kimani Nyanjau – Senior System Administer (KENET)
	Moderator – <b>Davis Waithaka,</b> Chief Executive Officer at Elimu Holdings
1:00pm – 2:00pm	Lunch break and Tour of Exhibition Booth
2:05pm – 3:00pm	<ul> <li>Presentation by Thomas Odhiambo – KeNIC Vice-chair &amp; Director,</li> </ul>
	Programmes & Standards (ICT Authority)
3:10pm – 4:00pm	Panel Discussion 4: Unleashing Power of Domains
	- Vionna Wairimu- Marketing Manager <i>Sasahost</i> LTD
	- Freda Kariba, CEO, Aplin Media
	- Juma Khalfan – Ecobiz Limited
	Moderator – James Thuruthi – Chief Operating Officer, Frontier Optical
	Networks (FON)

4:05pm – 4:45pm	Panel Discussion 5: Monetizing your Domain - Moses Kemibaro – CEO, DotSavvy Ltd - Mbugua Njihia
	<b>Moderator</b> – Gitau Muraguri, Marketing Manager, KeNIC
4:50pm – 5:10pm	Vote of thanks & Afternoon Tea + Snacks
	Andrew Lewela Mwanyota
6:00pm – 830pm	Cocktail

#### **Expected Outcomes**

The main outcome of the Kenya DNS is to maximize opportunities for open and inclusive dialogue and the exchange of ideas on the domain name ecosystem with a focus in helping Kenya's Internet governance to grow at a competitive rate and be at par with the rest of the world. Others include:

- a) Creation of opportunities to share best practice and experiences;
- b) Identification of strategic action points key to growth of the domain name ecosystem in Kenya;
- c) Strengthening stakeholder engagement in the Kenya and Africa Domain Name ecosystem;
- d) Greater awareness of the factors impeding growth of the Kenya Domain Name ecosystem and promoting the 3R Model (Registry – Registrar – Registrant) for wider adoption and uptake in the region and Africa-wide.

e)

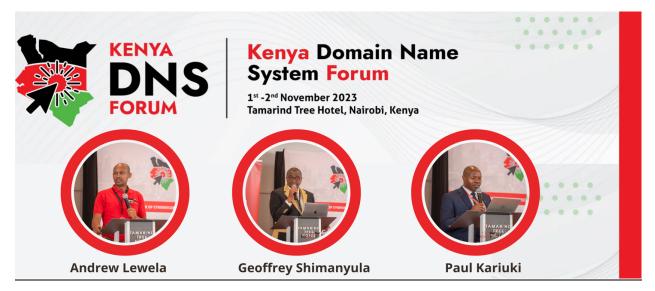
### Methodology

The format of the Forum was a hybrid event that included;

- 1. Thematic moderated panel sessions
- 2. Thematic presentations from stakeholders
- 3. Remote online participation

### THE PROCEEDINGS – DAY 1 (1<sup>st</sup> NOVEMBER 2023)

## Welcoming & Opening Remarks



"Today we are hosting our 3rd annual conference and we want to ensure we hold up the torch in the internet eco-system to expand. This year's conference aims to bring together key stakeholders, including government officials, industry experts, and technology enthusiasts, to discuss the latest trends, challenges, and opportunities in the DNS landscape. Those in-house and online, we welcome you all to this conference", **Andrew Lewela Mwanyota**, the **Chief Executive Officer** at **KeNIC** commenced the forum on Day 1 of November 2023.

"Cybersecurity is an absolute must-have in the vast world of the internet. It's our shield against the lurking dangers that threaten our digital existence. So, let's not shy away from it, but rather embrace it with open arms. After all, cybersecurity has become an inseparable part of our everyday lives. Let's gear up and safeguard our online presence with utmost vigilance and diligence. Remember, we're all in this together! Stay safe and secure in the ever-evolving realm of cyberspace"- **Geoffrey Shimanyula**, **KeNIC Former Chairman** 

"Trust is our currency as we propagate the digital economy through domain names. Our task is to secure our online and offline reputation and lead to influence all our audience to do likewise" - **Paul Kariuki, KeNIC Chairman** 

## Presentation by Internet Corporation for Assigned Names and Numbers (ICANN) on Coalition for Digital Africa



"The Areas of Focus of the Coalition for Digital Africa are;

- 1. A robust DNS infrastructure in Africa: Securing the stability of the Domain Name System (DNS), thereby strengthening the internet infrastructure in Africa and enhancing its security and resiliency.
- 2. Meaningful Connectivity: Fostering multilingualism and encouraging local content development in Africa.
- 3. Capacity Development: Equipping Africa's workforce with the skills and knowledge necessary to participate in the multistakeholder model of internet governance

ICANN launched the 2023 Africa Market DNS Study with the intention of was to highlight what the Africa eco-system looks like, what the numbers are, what the outcomes are, what the learnings are aimed at creating a comprehensive picture of the industry. The final report is due in March 2024.

We invite organizations and individuals from all sectors, including government agencies, non-profit organizations, and private businesses, to walk into our conveniently located Nairobi offices in the Central Business District (CBD). Our team of experts is eager to engage in a productive conversation with you about how we can collectively enhance the digital landscape not only in Kenya but also across Africa." – June Okal, Senior Manager, Engagement Southern and East Africa, ICANN

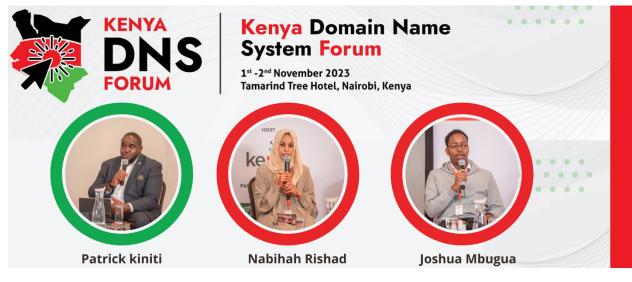
Presentation by Kenya Network Information Centre (KeNIC) on Domain Name System (DNS) and Domain Name System Security Extensions (DNSSEC)



"A domain name, such as (yourname.me.ke), plays a vital role in searching for information. It yields one or more resource records (RRs), each containing different types of information. You have the option to request a specific type or simply ask for 'any' RRs associated with the domain name. Here are some commonly encountered RRs: -

- A (address): It links a hostname to an IP address.
- PTR (pointer): It associates an IP address with a corresponding name.
- MX (mail exchanger): It indicates where to deliver mail for user@domain. -
- CNAME (canonical name): It connects an alternative hostname to the actual hostname.
- TXT (text): It contains any descriptive text.
- NS (name server), SOA (start of authority): These are used for delegation and management of the DNS itself," Ahmed Landi- KeNIC, Senior Systems Administrator and Technical Advisor

# PANEL DISCUSSION 1: Future of Cybersecurity



"For you to know your data asset. Here's the lowdown on what you must be aware of:

1. Data Profile: Understand the ins and outs of your data, its characteristics, and its potential.

2. Data Encryption: Shield your data with the utmost security by encrypting it, ensuring it remains safe from prying eyes.

3. Data in Transit: Safeguard your data during its journey from one point to another, ensuring it remains intact and confidential.

4. Data in Motion: Keep a close eye on your data as it moves within your systems, ensuring it stays protected at all times.

But there is still a lot of training in regards to data protection," Nabihah Rishad, Product and Research Lead at Serianu Limited.

"With the ongoing Digital transformation initiatives within Kenya, are we ready for cloud adoption and migration. Is our cloud infrastructure safe to enable a thriving economy backed up by a fully-fledged e-government?" – **Patrick Kiniti, Chief Executive Officer, Techmax Solutions.** (Moderator)

" Absolutely! Kenyans are more than prepared to embrace the wonders of cloud computing. Our nation, fueled by collaborative efforts between stakeholders such as KONZA and various eco-system players, along with support from the government, stands poised to embark on the journey of cloud adoption and migration. The time has come for us to harness the immense potential of cloud technology and propel our nation to new heights. Kenya is fully equipped to embrace this transformative revolution. Let us join forces and seize this opportunity to revolutionize our digital landscape. The future of cloud computing in Kenya is brighter than ever before!" - Joshua, Technical Engineer, Konza Technopolis Development Authority.

## PANEL DISCUSSION 2: Cybersecurity Innovation in Mobile Financial Services



"Cybersecurity is one thing but cyber resilience we all should have. It's not just about protecting ourselves from online threats; it's about building our ability to bounce back when those threats become a reality. Cyber resilience is all about being prepared, being able to respond effectively, and recovering swiftly from cyber incidents. It's like having a safety net in the digital world. So, let's not just focus on cybersecurity, let's take it a step further and embrace cyber resilience. It's time to level up our game and ensure we're not just protected, but also ready to handle whatever comes our way in the cyber realm" – Rosemary Koech-Kimwatu, Head of Data Protection, KCB Bank Group. (Moderator)

"Organizational policies will not stop hackers from exploiting your systems. It's crucial to equip yourself with the necessary skills to stay one step ahead. The good news is, we're currently running a bunch of capacity-building initiatives designed to tackle this issue head-on. So, why not take advantage of this opportunity and level up your cybersecurity game? With support of experts, you'll be well-prepared to face any potential threats that come your way," **Fredrick Wahome, Co-Founder of Kenya Cybersecurity & Forensics Association.** 

"To enhance internal attractiveness within organizations, we should focus on: leveraging AI, utilizing threat intelligence strategy to align with our mission, vision, and culture, and promoting security discussions with executives." – Kevin Kanyi - Head of Cyber Threat Intelligence & Threat Hunting, M-KOPA.

"Is your company really prepared to tackle the ever-evolving world of cybersecurity? It's about time we ditch the old-fashioned approach of relying solely on boring presentations and start embracing more practical and interactive training methods. Let's take a leap forward and make the training experience truly engaging and hands-on!" – **Eric Ngei, Head of Cybersecurity at KCB Group.** 

"Your home is your physical presence but the domain gives your virtual presence home. It is imperative to develop localized tools and solutions that truly cater to our unique circumstances. Cybersecurity should not be treated as a mere afterthought; it requires a solid foundation integrated from the very beginning," **Nyagitari Bosire, Head, Technology Enterprise Services, Safaricom PLC** 

#### PANEL DISCUSSION 3: Enhancing collaboration between stakeholders



"It is imperative that we acknowledge the significance of the internet and the domain name system. Therefore, it is crucial that we persist in organizing and participating in such forums and practice what we learn from the panelists," - **Barrack Otieno, Chairman of the Board of Trustees at Dot Africa Foundation** 

"Many countries update their ICT /technology curriculum every 3 years. Kenyan universities should follow suit. If our universities rely on pictures instead of actual equipment for teaching, it indicates a curriculum problem that needs to be addressed", Fiona Asonga, Technology Service Providers Association (TESPOK).

"The Internet Society has done a lot of work to grow the Internet since its establishment. One of the main ways they have done that is through a multi stakeholder approach," **Eng. Alphonce Odhiambo**, **President, Internet Society of Kenya (ISOC)**.

"Boosting collaboration requires us to take the initiative and engage in proactive communication long before issues arise. It's high time we acknowledge the significance of these diverse stakeholders and identify their areas of crucial involvement. We rarely do that", **Bob Ochieng – Snr. Director: ngTLD Program, ICANN**  "We must be able to show the value of stakeholders and embrace collaboration. Rather than focusing on competition, our primary goal should be fostering synergy among all parties involved. By nurturing an inclusive environment, we, as representatives of the private sector, can effectively contribute innovative solutions," – **Joel Karubiu, Country Representation/Export Advisor, ENTERPRISE ESTONIA** 

"Kenya Education Network Trust (KENET) is national research organization that serves as a hub for academia and research institutes in Kenya. With a remarkable membership base of 400 esteemed universities and research institutions, we are proud to be at the forefront of fostering collaboration and knowledge exchange in our educational ecosystem. Not only do we cater to the needs of higher education establishments, but we also extend our support to Technical and Vocational Education and Training (TVET) institutions and schools. By bringing together diverse stakeholders, we ensure a comprehensive approach to student and researcher development, including curriculum enhancement. We strongly believe that the input of those who will ultimately benefit from our educational products is invaluable. Therefore, we actively seek the involvement of industry experts to shape the curriculum, ensuring that our graduates are well-prepared and meet the industry's expectations for excellence. "Paul Kariuki – KeNIC Chairman and Director of ICT at University of Nairobi.

#### PANEL DISCUSSION 4: Trends in Data Protection and Guidelines for the Future



"Data protection legislation was established in 2019, overseen by the diligent Data Commissioner, Immaculate Kassait. It's worth noting that the current buzz in the industry revolves around the concerning practice of capturing and sharing individuals' pictures without their consent on social media. However, data protection encompasses a broader scope, encompassing eight vital principles: 1. Fairness: It is crucial to treat users and customers with fairness in terms of their personal data. Transparency is key in explaining how their data will be stored and protected. 2. Restriction: Any usage of personal data beyond what was permitted or anticipated by the customer would be a violation of their rights.

3. Data minimization: Collecting only the necessary amount of personal data is essential. Over collecting data for purposes unrelated to the original intent is considered a violation.

4. Storage: The law in Kenya mandates that any data collected within the country must be stored within its borders.

5. Accuracy: Maintaining accurate personal data is a fundamental requirement.

6. Security: Employing robust measures to safeguard data is imperative and non-negotiable.

7. Accountability is key; reporting to the data commissioner is mandatory. Therefore, if you are collecting personal data without being a designated data processor or collector, you may encounter legal issues." - John Walubengo, KeNIC ICT Committee & Lecturer, Multimedia University of Kenya.

"Has your organization taken the necessary steps to establish protocols for data access? How do you handle requests from individuals regarding their data? It is crucial to include this information in your organizational policy. Let's prioritize the development of data awareness and ensure that it is a deliberate and well-implemented aspect of our operations", - William Kimuhu – Data Protection Officer, Mwalimu Sacco

"As a data subject, it is essential to be aware of your rights regarding the collection and processing of your personal information. When you encounter situations where you are required to provide your ID and phone number, it is crucial to inquire about the purpose behind such requests. Understanding why your personal information is being collected can help you make informed decisions about sharing it." - **Beth Njau - Data Protection Officer, KeNIC** 

"As a registrar responsible for registering the .KE domain for our clients, our utmost priority is to provide exceptional customer service. We go above and beyond to ensure that our customers are not only familiar with the data protection act but also receive the necessary support and guidance to implement cost-effective measures that safeguard their valuable data. Our commitment extends further, as we assist our clients in navigating through the complexities of cyber and data breaches. We offer comprehensive guidance on reporting procedures, ensuring that our clients know exactly where and how to report any incidents. By doing so, we help them avoid potential fines from the Office of the Data Protection Commissioner (ODPC)", – **Fredrick Wahome, KeNIC accredited Registrar.** 

## <u>THE PROCEEDINGS – DAY 2 (2<sup>ND</sup> NOVEMBER 2023)</u>

Recap of Day 1 and Welcoming Remarks



" Today's focus will be on Unleashing the Power of Domains. Domains play a crucial role in the digital landscape, serving as the foundation for websites, email addresses, and online identities. They act as a unique address that allows users to access specific online content and services. With the increasing reliance on the internet for various activities, the security of domains becomes paramount.

There are various steps one can take to enhance domain security. These include using strong and unique passwords, enabling two-factor authentication, regularly updating domain software and plugins, monitoring for suspicious activities, and investing in robust security tools and services.

By prioritizing domain security, individuals and businesses can mitigate the risks associated with cyber threats, ensuring the integrity, availability, and confidentiality of their online assets

Welcome all to Day 2 of <u>#KenyaDNSForum2023</u>", - Andrew Lewela Mwanyota, KeNIC CEO

#### Presentation by the Head of Africa Cyber Network



"The Future of Cybersecurity in Africa is both promising and challenging. As we move forward in this digital age, we must be vigilant in protecting our digital assets, personal information, and critical infrastructure from cyber threats. With the rapid advancement of technology, the risk of cyber-attacks is increasing, and Africa is not immune to these threats. However, there is hope for a more secure cyberspace in Africa.

To achieve this, collaboration among various stakeholders is crucial. Governments, private sector organizations, and individuals must work together to share information, best practices, and resources to effectively combat cyber threats. Education and awareness programs should be prioritized to ensure that individuals and organizations are equipped with the knowledge and skills to protect themselves online.

Innovation is another key aspect of enhancing cybersecurity in Africa. The development of indigenous cybersecurity solutions tailored to the unique challenges of the continent can significantly strengthen the defense against cyber-attacks. This can also foster economic growth by creating job opportunities and attracting investment in the cybersecurity sector.

Building a resilient cybersecurity ecosystem requires a long-term commitment from all stakeholders. It involves continuous monitoring, updating of security measures, and adapting to evolving threats. By investing in cybersecurity infrastructure and fostering a culture of security, Africa can pave the way for a brighter and more secure eco-system", - **Andy Chadwick.** 

## Presentation by Africa Top Level Organization (AFTLD)



"AFTLD acts a focal point for all the African Top-level Domains (TLDs) Managers, to discuss matters of policy that affect country code top-level domains (ccTLDs) globally and then present the group's positions as one voice. Globally we have technical organizations and various organizations that deal with policy issues on the internet. We need to make sure that internet resources are properly used globally and there are various stakeholders that ensure that the internet continues to work as expected such as the Internet Society of Kenya, Kenya Internet Governance Forum and many more.

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#### In Africa, these are the members of Africa Top-Level Domains organizations

Kenya	.Ke	Kenya Network Information Centre	105500
Morocco	.MA	ANRT	114 310
Cote d'Ivoire	.CI	ARTCI (ICT regulator authority of Ivory Coast)	17 000
Botswana	.bw	Botswana Communications Regulatory Authority	10 282
NIC-MG	.mg	Networking Information Centre-Madagascar	5 000
Burkina Faso	.bf	Autorité de Régulation des Communications Electroniques et des Postes (ARCEP)	2 018
Chad	.td	ADETIC	1 025
Egypt	.eg	Egyptian Universities Network (EUN)	10 000
Sudan	.sd	Sudan Internet Society	4 800
Senegal	.SN	Academia	9 000
Nigeria	.ng	Nigeria Internet Registration Association	185 220
South Sudan	.ss	National Communication Authority (NCA)	600
COMOROS	.km	COMORES TELECOM	432
Zambia	.zm	Zambia Information and Communications Technology Authority	7 675
South Africa	.ZA	ZADNA	1 350 377
Lesotho	.LS	Lesotho Communications Authority (LCA)	2 206

What does the future hold? The National DNS Forums, the Internet Governance Forums, and various other meetings organized by ICANN and other stakeholders serve the purpose of ensuring our active participation rather than being passive subjects. The notion that Africa Domain Names are inferior is simply untrue and can be categorized as disinformation or misinformation. The key factor determining the security and stability of a domain name lies in the management of its infrastructure. KeNIC, for instance, is hosted in the same data centers as many of our reputable banks in Kenya, guaranteeing its security, stability, and availability. Occasionally, technical glitches may arise, as is the case in other African countries, but these are resolvable issues. It is crucial to emphasize where your financial support goes. By purchasing a .KE domain name, you are contributing to a local Kenyan business. Conversely, purchasing a .com domain name supports an organization that is not registered in Kenya but pays fees to ICANN. We must rally behind our national country code top-level domain registry, a message we are actively spreading throughout Africa. Another aspect to consider is market regulations" - **Barrack Otieno Chairman of the Board of Trustees at Dot Africa Foundation** 

## Presentation by Konza Technopolis Development Authority by John Okwiri, Chief Executive Officer being represented by Stella Muhuro.



"I am honored to be a part of this forum where we discuss critical matters relating to cybersecurity and the potential of domains. Before I delve into our share interest, allow me to provide some insights into Konza Technopolis which I have the privilege of leading. Konza Technopolis is a flagship of vision 2030, with a mission to create a world class smart city and innovation hub dedicated to science technology and innovation. KOTDA operates under the ministry of information, communication and the digital economy and our vision is to become a global technology and innovation hub. Our objectives and compass position in Kenya as a knowledge – based economy fostering technology industry growth, generating jobs and developing sustainable infostructure. We aim to attract both local and international investment to establish a thriving smart city. At Konza we are focused at building an innovation eco-system in 3 key clusters; ICT and IT enabled services, live sciences and engineering. As of now we have made significant in phase 1 which has over 90% investor uptake. It includes setting up essential infrastructure such as a data center, road networks, power and data cables, and water treatment facilities, among others. Phase 2 of the project, is also underway.

Now coming back to the theme of this. Forum and connecting it to Konza activities, we all agree that the more we enhance accessibility and availability of internet connectivity, the higher the exposure and risks associated with it. But I want to believe that we are all equal to the task and we will not cartel our expansion because of the fear of the unknown. We are here to exchange ideas, learn from each other, learn the best practices and adopt better ways of doing things in order to support the development in the digital space, "writes John Okwiri the CEO of KOTDA, represented by Stella Muhoro, Chief Manager Strategy Policy and Research - KOTDA

#### PANEL DISCUSSION 1: Education and Domain



"Particularly when it comes to the education sector, no region of this nation should be left behind. The infrastructure we have built for our folks in our country should benefit every parent and child. We need to consider our resources as well. Resources are a crucial topic to consider since every community and school should have access to them, but more than anything else, we need to make significant investments in value-driven capacity building within the DNS ecosystem and education technologies. Let's not overlook the difficulties that exist in other industries, such as cybersecurity", - Davis Waithaka, Chief Executive Officer at Elimu Holdings

"Schools play a vital role in fostering strong community bonds. Proximity between schools and households leads to an increased sense of connection within the community. When students from nearby households attend a particular school, it further strengthens this bond, creating a tight-knit community. This interconnectedness can prove advantageous in terms of accessing the network infrastructure."- **Eng. Alphonce Odhiambo - President, the Internet Society of Kenya** 

"Attention, fellow parents! It's high time we advocate for the tremendous potential of the internet and domains in our children's education. Let's take a proactive stance on ensuring that every school in Kenya is equipped with its own domain name. We're not just talking about a simple domain that states the obvious like "Welcome to Waithaka Primary School." No, we're aiming for a dynamic domain where students can actively participate, submit their homework online, and access a wealth of educational resources. It's time to embrace the digital era and revolutionize our children's learning experience! This is a note to Kenic TLD", - Grace Githaiga, CEO/Convenor of the Kenya ICT Action Network (KICTANet)

"It is imperative that we give utmost importance to the integration of digitization into primary, secondary, and university curricula. We must approach this matter with utmost intentionality, as it holds significant

#### significance", - Winnie Rachael, Country Manager, UNICAF

"Our mission has been to revolutionize the field of education and research by providing essential infrastructure support. We have prioritized the development of robust power, connectivity, and visibility, primarily through the provision of domain names. Our primary focus has been on universities, ensuring that they have the necessary resources to excel in their academic endeavors", - **Patricia Kimani Nyanjau** – **Senior System Administer, Kenya Education Network Trust (KENET)** 

#### Presentation by The Information and Communication Technology (ICT) Authority



"ICT Authority is the lead government advisor on ICT matters, we specialize in delivering cutting-edge ICT solutions to empower government agencies, ministries, county departments, and various other organizations. Our primary focus lies in revolutionizing internet connectivity and implementing essential cross-cutting applications that enhance overall efficiency. With our expertise, we strive to equip our clients with the necessary tools to thrive in the ever-evolving digital landscape. The bottom-up transformation agenda (BETA) and it has 5 pillars; Universal healthcare, housing, micro, medium and small enterprises, food security and the digital super highways which one of them has 100,000km of fiber which means the government does 52,000km and the private sector collaboration does the balance of 48,000km. Right now, as a country in the last 10 years, we've done about 12,500km. We have fiber up to subcounty level in 250 sub counties. In Africa we are number four in terms of public sector owned fiber. Algeria is leading with almost 100,000km of fiber. The idea for us is from sub counties we will go to the ward level where we have 1450 wards. Each of those has high connectivity and then we will be able to install in the smart hubs or centers where we can do innovation, trainings, or have a country class. Also, we are working on Education awareness training sensitization on cyber security and data protection. Lastly, the ICT Authority is moving all the government services online, right now we have about 12,000 services available online, about 6,000 of those are being paid for, the others are free. That of course

brings in the issues we are discussing today on cybersecurity and access." – **Thomas Odhiambo**, KeNIC Vicechair & Director, Programmes & Standards (ICT Authority)

#### PANEL DISCUSSION 2: Unleashing the Power of Domains



"We have a fascinating demographic in Africa that is truly passionate about social media. To successfully persuade these influencers to embrace a domain rather than solely relying on platforms like Instagram or Facebook for their brand, it's crucial to highlight the long-term benefits. By understanding the potential of a domain, influencers can unlock endless opportunities by seamlessly linking their social media accounts. A domain serves as a centralized hub for their brand, providing an authentic and professional online presence. Unlike social media, where fake accounts can easily be created, domains offer a higher level of credibility as they often display a physical office or postal address. Embracing a domain not only elevates their brand's professionalism but also ensures a lasting impact in the digital landscape."- James Thuruthi – Chief Operating Officer, Frontier Optical Networks (FON)

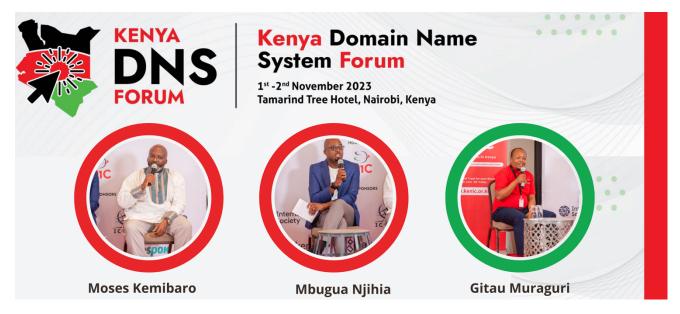
"When it comes to domain registration, it's crucial to think beyond the initial registration and consider the long-term aspects, such as renewal. Our primary concern is understanding our clients' business objectives for going online. Are they seeking to establish an online presence or drive sales? This determination is important because merely acquiring a domain name may not suffice; they might require a website, be it an e-commerce platform or a simple landing page. The specific needs will vary based on the size and nature of the business, as well as their ultimate goals. Additionally, we highly recommend our clients on the .KE domain to register for Google My Business. This strategic move will not only give them a competitive advantage but also enhance their visibility within local markets. By doing so, they will receive prioritized treatment and enjoy increased visibility," - **Freda Kariba, Chief engagement officer at Aplin Media.** 

"Why not give your online presence a boost by considering the idea of having your very own website? It's a fantastic way to promote your products and services in a more centralized manner. And for those of you

in Kenya, what could be more fitting than a .KE domain name? It's the perfect addition to your existing social media platforms without creating unnecessary competition" - Vionna Wairimu- Marketing Manager Sasahost LTD

"The whole domain issue is often misunderstood by many people. Let me provide you with an example. Some individuals open a social media account for their business, thinking that it's sufficient. However, if you register a domain and use it for your trade, it can offer long-term benefits and significant conversion opportunities. Unlike relying solely on social media, where we've witnessed numerous celebrities losing their accounts, having a domain that you own and have built properly provides a level of security. There are certain procedures in place before your domain gets suspended. In terms of strategies, we have effective methods to help our clients enhance their online presence. We emphasize the importance of having a domain/website as a brand-building tool that can drive long-term success. It's illogical to discard it after just a year without renewing it." - Juma Khalfan – Ecobiz Limited

### PANEL DISCUSSION 3: Monetizing your Domain



"In my opinion, domain names will soon become an indispensable part of ones (personal) identity. For business, it can be argued that you may soon be invisible if you do not have an online footprint. The opportunities here are many but the challenge remains how to abstract the complexities of setup, and forward layers that would add value to users. The business models also need to refresh the annual fee for name only high attrition. However, the cost argument quickly disappears with increase in utility. So, as we look forward; we must: -

- 1. Drive the utility of domain names through value addition especially for SMEs and verticals such as academia
- 2. Evaluate and manage the risks facing the Domain Naming Ecosystem such as data privacy, data protection, children's rights, copyrights, trademarks and fraud prevention.
- 3. Explore differentiated models of monetizing an online presence to build domains as an asset class. "- Moses Kemibaro CEO, DotSavvy Ltd

"In the past, I belonged to an era where websites were priced at a whopping 7 million to 10 million shillings. However, the internet has undergone a transformation with the advent of user-friendly tools. Nowadays, anyone can create a website, thanks to platforms like WordPress, which offer ready-made templates for purchase. Even when we discuss the value proposition for small and medium enterprises (SMEs) outside of the blockchain realm, we often overlook the potential of bundling. Bundling allows for a seamless experience where, with just a click of a button, you can have everything set up and ready to go. I would gladly pay for such convenience. By incorporating simple tools like chat GPT and pre-designed blocks, you could have a fully functional service up and running in just one month" - **Mbugua Njihia – Venture Scout in the Technology Space** 

"The internet is supposed to empower two things; communications and commerce, we assume that everyone should have an email address since it powers so many things; that is how you sign up on social media, on to your mobile banking accounts. Maybe the website is not the end all, it's how do you drive more utility," - **Mbugua Njihia – Venture Scout in the Technology Space** 

"There's a lot of opportunities that exist with domain. 80% of the domains in Kenya, that is the .KE domain name, registered have a website, the rest do not have an active website. How can we encourage or drive them towards actually building a website and using it for their business?" – **Gitau Muraguri, Marketing Manager, KeNIC** 

#### **VOTE OF THANKS**

"I would like to extend my heartfelt gratitude to all the individuals present in this room. Your active participation, engagement, and valuable contributions to the discussions have truly made a difference. Throughout the day, I found myself engrossed in conversations with various stakeholders, including entrepreneurs, registrars, investors, and government officials. It has been an incredibly exhilarating experience.

I would also like to express my appreciation to the exceptional speakers and panelists who have orchestrated this event. Your thought-provoking insights have truly challenged our perspectives. As we strive to elevate this event in the upcoming years, we encourage your continued support in shaping the agenda and ensuring the delivery of high-quality content. A special thank you goes to my chairman and the board at KeNIC for their unwavering support since the inception of this project. Your commitment to good governance and unity at the board level has been instrumental.

Last but not least, I would like to acknowledge the hardworking KeNIC team, who work tirelessly behind the scenes to support the Registry, registrars, and registrants. They truly deserve your support, and it would be beneficial for you to get to know them." – **Andrew Lewela Mwanyota, KeNIC CEO** 

#### ABOUT KeNIC

Kenya Network Information Centre (KeNIC) is charged with the management and administration of the .KE domain, Kenya's Country Code Top Level Domain (ccTLD). KeNIC's mandate is to provide corporates, businesses and individuals with an opportunity to have an online presence, professional email addresses and websites on the .KE domain name.

#### www.kenic.or.ke

















