REPORT

OF THE

NIGERIA INTERNET GOVERNANCE FORUM (NIGF 2023)

EVENTS.



NIGERIA INTERNET GOVERNANCE FORUM NIGENIGEFORUM NIGEFORUM

HELD ON

SEPTEMBER 13 – 14, 2023.

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1.0 BACKGROUND

The Nigeria Internet Governance Forum (NIGF) is an annual gathering of domestic stakeholders, which provides a platform to express common national interests in preparation for the annual global Internet Governance Forum (IGF). The 2023 edition of the NIGF held as a hybrid event, with the physical venue in FCT, Abuja at the Nigerian Communications Commission Annex Complex, Mbora and many participants attending online. The event was tagged Nigeria Internet Governance Forum (NIGF) 2023 with the theme **"Towards a Secure and Inclusive Digital Future for Nigeria: Balancing Regulation, Cybersecurity and Emerging Technologies"**, with support from the following organizations:

- 1) Federal Ministry of Communications, Innovation and Digital Economy (FMCDE).
- 2) Nigerian Communications Commission (NCC).
- 3) Nigeria Internet Registration Association (NiRA).
- 4) National Information Technology Development Agency (NITDA).
- 5) Internet Society (ISOC) Nigeria.
- 6) Centre for Information Technology and Development (CITAD).
- 7) The Nigerian Internet Governance Forum Multistakeholder Advisory Group (NIGF-MAG).

2.0 PRE-EVENTS – 13TH SEPTEMBER 2023

2.1 NIGERIA YOUTH INTERNET GOVERNANCE FORUM (NYIGF) 2.1.1 OVERVIEW OF NYIGF

(I) Overview

The 2023 virtual edition of the Nigerian Youth Internet Governance Forum (NYIGF) is convened by the Nigerian youth Internet stakeholders as part of the 2023 Nigerian Internet Governance Forum in line with the principles of the United Nations Secretariat of the Internet Governance Forum (IGF).

(II) Objectives

- To provide a platform for Nigerian youth to assess the state of Internet technology in Nigeria and communicate challenges and opportunities to the appropriate stakeholders.
- To enable Nigerian youth to learn about the principles of Internet governance and how they can contribute to developing infrastructure, policy, and standards for telecommunications in Nigeria.
- 3. To encourage the integration and inclusion of Nigerian youth in national Internetrelated public policy meetings and events.

(III) Why NYIGF?

The theme for the 2023 NYIGF event "Shaping Nigeria's Digital Landscape: Internet Universality" addresses the need to encourage the integration and inclusion of Nigerian youths in national Internet-related public policy meetings and events, as well as to maximize Internet opportunities and manage risks and challenges that arise. It also addresses the need to learn about Internet governance principles and contribute to developing infrastructure, policies, and standards in Nigeria.

(IV) What Does The Virtual NYIGF Event Offer?

The Virtual NYIGF 2023 offered the following:

- ENGAGE with pathways to influence policy-making and contribute to priority setting in the public and private sectors.
- CONNECT with youth from across Nigeria working to map solutions to complex ICT and digital economy problems and find partners to help put them into action.
- LEARN through workshops and skill-building seminars with industry youth experts and take advantage of recorded content to learn at your own pace.

2.1.2 OPENING CEREMONY

The session started with a warm welcome address from Morisola Alaba, NYIGF Coordinator, who assured all participants and guest panelists of a fruitful deliberation on the emerging

issues of the Nigerian Internet ecosystem. She further stated that all submissions from the various sessions of our event for the year will serve as a communiqué that will be useful for further engagement for the advancement of the digital ecosystem across all sectors.

Keynote Speech:

The keynote speech was given by Emmanuel C. Ogu, founder and president of #DearGovernments Organization (DearGovs). He expressed his gratitude for being part of the Nigerian Youth Internet Governance Forum 2023 in a timely discussion titled "Shaping Nigeria's Digital Landscape: Internet Universality".

In the words of Emmanuel, the concept of Internet universality was developed recently by UNESCO (United Nations Education and Cultural Organization) to encapsulate an ideal that was expected or anticipated of the Internet or such a digital ecosystem that would be able to contribute relevantly to the pursuit and attainment of Sustainable Development Goals.

There were five pillars, as proposed in the context of Internet universality for the purpose of achieving this sustainable ideal for a digital ecosystem. The five pillars were captured under the acronym ROAM-X.

The first acronym, 'R', stands for rights-based initiatives. A rights-based Internet is considered crucial and contingent on the sustainable pursuit or attainment of the Sustainable Development Goals as captured by the United Nations. When we say the internet is rights-based, we are basically referring to a digital environment that prioritizes the civil rights and liberties of citizens over other interests.

The 'O' acronym stands for "open, so the internet is believed to remain borderless. This refers to the fact that the Internet should be free of boundaries, free of barriers, and free of every form of restriction.

The 'A' acronym stands for the accessibility principle. This principle basically boils down to the fact that anyone who is willing and able to have access to the internet should ordinarily have access to the internet. Such willingness should be such that it is proximally searchable and is free to make sense to the person involved. It will not make sense for someone who is willing to use the internet or has a need to use the internet to have to travel from Abuja down to Lagos before he can find a cyber cafe or an Internet service provider to connect to before he will be able to make such an act. That willingness has to be such that we can proximally meet that need without having to travel very far. But then beyond this willingness, there's also the ability, so the ability must stem from the fact that it must look economically reasonable to whoever is involved, and it must look economically reasonable for such a person to participate within such a digital ecosystem.

The "M" acronym, which is the multi-stakeholder involved principle, Now, this principle basically states that within the Internet ecosystem, decisions around governance, decisions around utility, and decisions around participation and principles of engagement—the rules of engagement, generally speaking—should be defined by all stakeholders who have benefited in one way or another from the utilities that the internet affords.

Now, in a situation where one party tries to exert unilateral control or influence over the digital ecosystem in a way that excludes the interests and priorities of other stakeholders either through the force of regulations or through exclusionary business practices that we have seen in the case of some big tech organizations that have the anti-competitive behaviors of acquiring or hedging out smaller, smaller players in certain industries. When this becomes the case, we can no longer be referred to as a digital ecosystem at best; we'll be able to refer to it as a digital hegemonic. And when we come to that point, we will see that the stakeholders within this ecosystem will begin to feel left out; their voices are unheard, and their interests are unattended within this ecosystem.

The final principle has to do with cross-cutting issues. Basically, when we refer to crosscutting issues, that is the "X" cross-cutting issues that relate to the ROAM principle. We come to terms with the fact that there are certain principles or issues that, on a broad scale, are able to affect one or more of these other principles. So that's the right-based principle, the openness principle, the accessibility principle, and then the multi-stakeholder involvement.

There are some issues that could cross over and begin to impact some of the sustainable principles or ideals that are expected of this environment. And so, one of these issues centers around privacy and trust. One of the founding principles that has ensured that the internet has remained growing and developing at the rate that it has been seen to develop since the

early days is the fact that people have been able to build some trust in the capabilities of the internet. We can trust that we can pick up our mobile devices or our digital devices and then try to connect to a particular network and then have access to that resource.

And so, in shaping Nigeria's digital landscape or Nigeria's digital ecosystem, it is important that we understand the roles that rights play. We understand the fact that the internet needs to be regulated in order to ensure that the utility of stakeholders is preserved, but we always want to tilt towards a model that includes the voices of every stakeholder because it is more beneficial to the ecosystem, not just the ecosystem in general online, but also to the interests of governance and responsible participation within this landscape even offline. And so as we discuss these issues in the coming hours and into the Nigeria Internet Governance Forum that will follow in the coming days, it is important that we keep these thoughts as front-burner issues.

For an internet that is going to be considered universal and one that we must continue to synthesize our efforts towards shaping with regards to the digital landscape in Nigeria, such an ecosystem would be one that is right-based, open, accessible to all, and one that provides meaningful connectivity in terms of the accessibility that it provides. It must also be one that takes into consideration the multi-stakeholder perspectives and interests of all stakeholders that will play in this domain.

2.1.3 HGH PANEL DISCUSSION

Moderator: Taiwo Peter Akinremi.

Speakers: Adedolapo Adegoroye - Technology Policy Analyst, Tech Hive Advisory.

Daisi Omokungbe - Founder & Executive Director, PROMAD Foundation.

Mmanti Umoh - Senior Partner, The Purple Patch.

Session Summary

This session focused on the theme of the forum - "Shaping Nigeria Digital Landscape: Internet Universality" under the following considerations:

Key Considerations

What roles does the Internet play when talking about innovation and Entrepreneurship?

From the subject of the internet, as well as its impact on entrepreneurship, innovation, and development at this age, it is shaping businesses and is already shaping how we innovate. It's shaping how we develop new products, and it also shapes how development is achieved. By virtue of the importance of the internet today, many of us can exist in a day without having to use the internet. For one thing or another, even if it is to just check your WhatsApp, that speaks to the fact that the internet is very important in the kind of society that we have today. And most importantly, in Nigeria. But if you want to use the Internet to facilitate innovation, entrepreneurship, and development, then the Internet must be universal and accessible to everyone. When you look at the UNESCO definition of internet universality, it is encapsulated in an acronym called ROAM, that is, it is right-based, it is open, and as well as being accessible to all, the shaping of the internet in terms of evolution, functionality, and access must have a multi-stakeholder approach or participation. So the Internet, as it is today in Nigeria, is evolving. But then we still have challenges with assets, and we still have challenges with functionality. So it is because we still lack these opportunities for multistakeholder participation in the shaping of the internet. Then, in the aspect of innovation, we have a lot of companies today running on the internet, using the internet to drive the product from development to deployment to servicing their customers. So when you look at all of these, we have a lot to achieve when we deploy the internet. But then what are the policies that are on the ground to ensure that the Internet facilitates innovation, entrepreneurial activities, and development? There is a lot to discuss when it comes to this area. It is good that we have a technology expert who has been appointed Minister of Communication and the Digital Economy. We should hope for great achievements as we all decide to support his efforts. And I hope that in the next four years, we'll be able to expand our current Internet penetration.

How can we actually drive local content in terms of policy?

The approach towards gearing education, whether it's not formal education but also imbibing digital literacy, digital awareness, and digital rights into secondary school curriculums, and primary school because rights are things that are important for everyone to know, So in terms of local content, agencies are focusing on to curb and suppress rather than promote, whether it's enabling people to build or develop local content. I think it is an opportunity for EdTech to come in and actually provide innovative solutions. So I think in terms of policy and awareness, our regulators need to wake up to this gap and these needs. In terms of building innovative solutions, youth also need to begin to think of what to build and what to create that can solve the issue of local content.

Recommendations

- **Development of Digital Literacy Initiatives:** We must build on digital literacy, skill development, and gap assessment. Our policies need to be actually reviewed to cater to the needs of our growing population as well as increase the digital demands of the people.
- **Expansion of Connectivity:** The government should invest more in the expansion of broadband infrastructure to ensure the availability of high-speed Internet across the country, including rural and underserved areas. The government should also encourage private sector participation in infrastructure development through public-private partnerships.
- **Digital Inclusion:** The government has to develop and implement policies and programs that bridge the digital divide. By providing access to affordable Internet to marginalized communities. They need to support digital literacy initiatives to ensure that citizens have the skills to use digital technologies effectively.
- Data Protection and Privacy: They can enact comprehensive data protection and privacy legislation that regulates the collection, storage, and use of personal data while processing individuals' privacy rights. The government can establish a data protection authority to oversee compliance and enforce data protection laws.

- Cybersecurity: We should have a national cybersecurity strategy to protect critical infrastructure and data from cyber threats. Also, invest in cybersecurity education and training programs so that we can have a skilled workforce capable of defending against cyber attacks
- **Digitization of Government Agencies:** Key government agencies need to be digitized to improve their efficiency, transparency, and accessibility for citizens. And implement strong cybersecurity measures to safeguard citizen data in the e-governance system
- Advancement of the Digital Economy: Create an enabling environment for the advancement of the digital economy by implementing policies that foster innovation and entrepreneurship. Offer incentives for tech start-ups.
- Clear Regulatory Frameworks: our digital sector has to promote competition, protect consumers, and encourage investments. We have to engage in multi-stakeholder processes for Internet governance. Involving diverse stakeholders in policy development. Investment in research and developments in emerging technologies to ensure that our country remains competitive in the global landscape. We need international collaborations to foster the development of smart cities, the Internet of Things, and the improvement of urban services.

2.1.4 BREAKOUT SESSIONS (I) Session 1: Universal Acceptance & Meaningful Connectivity

Moderator: Moriam Sulaimon - Digital Grassroots

Speakers: Dr Aliyu Musa Bada – Lecturer, Yobe State University, Damaturu.

Dr Abdulkarim Oloyede - Associate Professor and Director Center for Research Development and In-House Training, University of Ilorin

Rapporteur: Loveday Onyeanula

Session Summary:

The session started with a warm welcome and introduction of speakers and participants, followed by a short overview of expectations by the moderator, Moriam Sulaimon.

The Concept of Universal Acceptance and Meaningful Connectivity

Universal acceptance is a concept that has to do with the domain name and email address. In this context, we refer to it as localizing the domain name resources to our various local dialects and languages. So that people or users can freely access digital resources and also take part in the digital space seamlessly without having difficulty of understanding or language barriers.

In further discussion, universal acceptance was highlighted as a global agenda to ensure that all domain names and email addresses are acceptable in all software applications and are also treated equally. Universal acceptance is becoming very important in the growing age of our digital era. This is because more people from diverse cultural and language backgrounds are embracing the Internet as a basic necessity of life. So, universal acceptance should empower people from diverse ethnic backgrounds with the opportunity for equal participation in the growing digital ecosystem. By enabling them to communicate, learn, and share resources on the Internet using their local languages.

Meaningful connectivity, according to the ITU definitions, is a level of connectivity that allows users to have a safe, satisfying, enriching, and productive online experience at an affordable cost. In this concept, the Internet should be accessible and affordable. There should be meaningful connectivity to the Internet, irrespective of your service providers, locations, and digital toolkits. This enables access to educational resources, health care, and government services and to an extent even job opportunities. Therefore, meaningful connectivity is having the ability to connect daily on an appropriate device on broadband Internet connectivity with over 4G speed. And this empowers individuals to be digitally competitive and digitally enabled.

Key Considerations

The highlight of key barriers that are hindering the universal acceptance and meaningful connectivity in the case of Nigeria.

Some of these key barriers to universal acceptance and meaningful connectivity in Nigeria include:

• The government-imposed tax on the installation of key Internet infrastructures (fiberlinks).

- Government support for Internet connectivity is very poor despite the growing efforts of NCC as a government agency which is sometimes posed with political interference in the disbursement of funds from the government to stakeholders in the deployment of Internet infrastructures.
- Inappropriate structure for the management of meaningful connectivity that is to ensure that everyone has meaningful connection irrespective of current locations.
- The complex and unclear regulatory framework of government. This can create uncertainty and discourage investment in new technologies. Intellectual property rights issues and regulations related to data privacy can also impact technology adoption.
- Inadequate and Unstable power supply, especially in rural areas, makes it difficult for individuals and businesses to utilize technology consistently. Infrastructure issues also extend to road networks and transportation, affecting the delivery of products and services.

Recommendations.

Partnerships and collaborations to drive universal acceptance and meaningful connectivity in Nigeria.

To drive universal acceptance and meaningful connectivity in Nigeria, responsible partnerships and collaborations among various stakeholders are very important. These can help address the challenges of infrastructural development, digital divides, and affordable access to technology. Here are some key partnerships and collaboration concepts:

- 1. Partnership between government agencies and private telecommunications companies to expand network infrastructure and improve internet access in underserved areas.
- 2. Partnerships between major tech companies and local startups or innovators to support technology development.
- 3. Partnerships with local content creators to develop and promote culturally relevant content for digital platforms.

4. Partnerships between major tech companies and local startups or innovators to support technology development.

(II) Session 2: AI and emerging technologies.

Moderator: Lily Ugochukwu – Tech enthusiast

Speakers: Akin Ifeanyi Agunbiade – Associate, AELEX

Kingsley Owadara - Research Fellow, Lawyers Hub

Rapporteur: Rotimi Owolabi

Key Considerations.

What are the ethical considerations that guide the use of AI and emerging technologies that ensure fairness, transparency, and accountability?

The reason we have the concept of responsible AI is because there have been instances of irresponsible AI development, which occurs when certain private companies or governments put out AI products and services that have harmful effects on users. This could be in the form of using your data without a lawful basis or the AI deployment not being fair and transparent enough for the user.

As much as AI is called artificial intelligence, it is not really intelligent, going by the fact that it cannot exceed the quality of the data on which it was trained. Responsible AI therefore seeks to ensure that AI systems are built in a way that is fair, transparent, and built on data that is representative of the people it is to be deployed for in a way that does not create bias and discrimination.

We do not have an AI law in Nigeria, but we have some laws relevant to AI regulation, like the recently enacted Nigeria Data Protection Act, the Federal Competition and Consumer Protection Act, and the newly enacted Copyright Act. We currently do not have a specific AI Act; what we

have now are sector-specific regulations that may apply depending on the nature of that AI product or service.

What measures can be used to ensure and bridge the digital divide and ensure equitable access to AI and emerging tech?

When we talk about bridging the digital divide in AI, one of the things we emphasize is that AI deployment should not have the effect of making people more disadvantaged. Whenever any form of new technology is deployed, its essence is to make people better. One of the things that must be put in place is that when it comes to the modeling of AI, we should keep in mind that the people with whom the AI product or service is being developed must be at the core.

The protected attributes of people, such as personally identifiable information or sensitive information like gender, location, race, health data, etc., should be kept out of the scene. These are things that inject bias into modeling, and this bias is reflected after deployment. When we look at it from a societal perspective, bridging the digital divide is a collaborative effort that requires collaboration from the government, private sector, and civil society.

What are the implications of AI and automation for the future of work, and how can we ensure a smooth transition and the reskilling of the workforce that we have here in Nigeria?

The world is evolving, and this calls for upskilling. AI can only take up tasks that are automatable, not every task. We must be forward-thinking by asking what aspects of our jobs are unique to us alone. It is your responsibility, in whatever job you are in, to look for ways to upskill. AI is as intelligent as the data used to model it and cannot take the place of human intelligence, emotional intelligence, or cognitive thinking. These are the things to invest in; leave things that are automatable for machines and focus on how you can build and develop yourself.

My perspective on this is that AI will not take the jobs of everyone, but it will require that everyone upskill and invest in skills that are not automatable.

How can AI and emerging technologies be leveraged for social inclusion and diversity and address bias and discrimination?

As much as we leverage AI, it is important to know that machines must be treated as machines and humans must be treated as humans. Machines should not make us captives; rather, we should leverage the machines to become better. Concerning bias, it is good that whenever an algorithm is deployed, there must be a third-party audit to ensure that the data used for the modeling does not have bias reflected.

There must be a mandatory requirement for all AI tools within the Nigerian tech space to be audited, not just self-auditing or that done by the government, but by an independent third party that has no vested interests to protect. The independent third party will give an independent review of the auditing process and reflect on the potential effects of AI on the society in which it is to be deployed and on how some of the issues can be resolved.

How can we promote public understanding and awareness of AI and emerging technologies to ensure informed decision-making and public engagement?

There are already efforts along that line; two or three years ago, the National Information Technology Development Agency (NITDA) set up the National Centre for AI and Robotics (NCAIR), and they have been working on training people on AI in collaboration with some other agencies. Forums like this are also a good way for people to gain awareness about AI. One way to work on this is to look at things from a fundamental perspective.

AI is essentially built on data and internet accessibility, so a wider awareness of AI cannot go ahead of internet accessibility. A wider awareness of AI is tied to wider access to the internet. The more internet accessibility is improved across the country, the more AI will be accessible.

Recommendations

1. Collaboration from the government, private sector, and civil society is important for ensuring access to AI and other emerging technologies.

- 2. People should be at the core of the deployment of any AI product or service. The protected attributes of individuals must be left out during modeling to prevent bias that could occur after deployment.
- 3. The future of work will require that everyone upskill and invest in skills that are nonautomatable.
- 4. It is recommended that there be a mandatory third-party AI audit to mitigate and eliminate biases and discrimination that may be posed by the deployment of an AI product.
- 5. Internet accessibility remains at the core of the development of AI in Nigeria; there should be increased efforts geared towards improving meaningful and affordable internet access.

(III) Session 3: Cybersecurity and online safety Moderator: Peace Ewor. Speakers: David Odefunso - Cybersecurity Engineer, DeepHow Abimbola Timothy Idowu - Head, IT Risk, and Security, EED Plc. Rapporteur: Raheemah Olawuyi

Session Summary

The concepts of cyber security and online safety are inseparable. The rules of online security provide a guide, and individuals need to play their part by being aware of significant cyber threats, and the best practices to employ to avoid being a victim to them.

Some of the threats individuals need to be aware of are phishing attacks, ransomware, spear phishing, and malware. Users should be vigilant with the emails they receive and avoid clicking links from unknown sources. Individuals and corporations can stay safe in this age of remote work by implementing some strategies such as updating devices, having files protected and duplicated, using strong passwords, implementing 2-factor authentication, having regular backups, and installing anti-virus & anti-malware. Embracing key strategies for home internet security as well

as emphasizing the importance of training and awareness for remote workers, technical and otherwise, is of good impact.

Key Considerations.

- Phishing attacks: Despite how widely spread they are, people still don't understand their intricacies. It isn't just by email; it can also be by text messages or phone calls, which is called phishing. It basically involves any way an attacker solicits information you are not supposed to divulge. This is why it is important to check the email addresses of the sender and scrutinize any links sent.
- Ransomware is a very violent and malicious virus that comes through a link. Once clicked, it corrupts the file or data, and the attacker requires the victim to pay some money.
- Spear phishing: This form of attack is targeted at a particular audience, e.g., top officials at an organization. The purpose is the same as that of phishing, which is to steal information to use against you
- Malware: This sends a virus to your device that can corrupt your computer or files. In the rising age of AI, the rate at which malware can be created has improved and increased.

Recommendations.

- Taking proactive measures of updating all devices, having files duplicated, using 2-factor authentication, installing anti-virus and anti-malware, backing up all devices, and physically protecting devices.
- For home internet security, it is best to change the default passwords of routers, have at least WPA2 security on all Wi-Fi, isolate all smart devices, and hide network names as they increase the barriers to your network. It is also best to have a separate network for guests to avoid easy access for hackers due to password sharing.
- All workers should be trained and aware of the best practices regardless of their roles in the organizations.
- Cybersecurity is not something to do and forget about. It is important to check up on security measures put in place constantly, to ensure they are up to date and working well.

- To combat the usage of AI to create malware and other malicious attacks, researchers can use AI to develop AI tools that can recognize and prevent these malicious inventions.
- Organizations should be sure to employ trust architecture for all employees regardless of their positions. Each employee should be continuously monitored and access should be limited to only who is necessary.
- Choosing strong passwords seems like a basic strategy but there are tips to employ to ensure you choose the best. These include; using a minimum of 12 characters, including upper and lower case, and including numbers & symbols. These will make it difficult for password harvesters to easily guess passwords.

A lot of the current forms of attack that threaten cybersecurity can easily be combated if internet users adopt a proactive approach to protection. An attacker will be prevented from easily gaining access if protective approaches are adopted. You can't have 100% security all the time; even the most experts have security issues, which is why it is important to add as many stumbling blocks as possible to prevent attackers.

Wrap-up Session/Way Forward.

This session captured report presentation from rapporteurs of the different breakout sessions and a few comments from participants who raised concerns about more engagement with relevant stakeholders from government, law enforcement agencies, private sectors, and several other community networks for a broader discussion and deliberations on Internet-related issues in the country.

Closing Remarks

In the remarks of the co-coordinator, Ekemini Wiliams, he appreciated everyone's active participation in the discussion and deliberations and further apologized for technical hinges with an assurance of best performance in the future engagements. He also invited all participants to join the main NIGF session and the African IGF session via the onsite and virtual participation. And called for the support of all youth towards building a better ecosystem.

2.2 WOMEN NIGERIA INTERNET GOVERNANCE FORUM.

The Centre for Information Technology and Development (CITAD) in collaboration with Nigeria Internet Governance Forum had on the 13th of September, 2023 organized the 5th Women Internet Governance Forum (WIGF) as part of the 2023 Internet Governance Forum activities with the theme "*Bridging the Gender Gap in Digital Decision-Making Processes and Institutions*". The event which held online was attended by over 60 people, including three participants from Malawi, India and Southern Sudan.

The objective of the forum was to articulate responses to the challenges of women exclusion on the governance of the internet; identify policy suggestions to address the problems of women exclusion in the internet decision making; and develop campaign framework for the inclusion of women in the digital space decision making brought personalities from government, civil society, development sector, and private sector to deliberate on the key issues that are affecting the women participation on the internet especially on the issues of being part of those taking decision on what affects their lives.

The forum was divided into two with three speakers and one moderator each. The first session which focused on: "Are Women Invisible in Digital Policy Making or are they Absent" had Angela Uwandu Uzoma-Iwuchukwu, Country Director, ASF France, Mrs. Martha Alade, Executive Director, Women in Technology in Nigeria (WITIN), Mojirayo Ogunlana-Nkanga, Executive Director, Digicivic Initiative, and Madam Mary Uduma, Chair, West Africa IGF as the moderator of the session.

The second session was on: **"Tackling the Non-Presence of Women in Digital Policy Making Process and Institutions in Nigeria"** with the Princess Hamman-Obels, Director, IRIAD The Electoral Hub, Victoria Ibezim-Ohaeri, Executive Director, Spaces for Change, and Aminu Hayyatu, Independent Researcher with Saudatu Mahdi MFR, Secretary General, Women's Rights Advancement and Protection Alternative (WRAPA) as the chair. Dr. Jummai Umar Ajijola, Managing Director, Trade Modernization Project Limited served as the Keynote Speaker and spoke on the theme of this year.

2.2.1 Opening Session

Dr. Jummai Umar Ajijola, Managing Director, Trade Modernization Project Limited, the keynote speaker, focused her discussion on the importance and the need for women to be involved and be participating on the digital space activities. She stressed that women have a greater role to play in the development of the internet and in shaping of its future. While on the issue of the non-participation of women in most of the digital space activities, the tech expert said it was mostly due to tradition and how women are being sidelined in most of the societies, especially in Nigeria.

Moreover, Mrs. Ajijola emphasized that if government and other institutions can be able to harness the potentials of women in the area of technology, a lot could be achieved in the near future. However, she advised that women themselves must rise up and fight for their rights and ensure that a greater percentage of them are being involved both in usage and in decision making in order to close the existing gaps between them and the dominating men in the digital space.

2.2.2 First Technical Session: Are Women Invisible in Digital Policy Making or are they Absent? Chair: Mrs. Mary Uduma

Panelists: Angela Uwandu Uzoma-Iwuchukwu, Martha Alade, Mojirayo Ogunlana-Nkanga.

The first session tried to answer the question of whether women were absent or not. The speakers though with different perspectives on the issue but all agreed that it was indeed, women, though not totally absent but only a small number of them were participating in the digital space in the country, and especially in the decision making processes.

Speaking on the panel, Mrs. Angela Uwandu Uzoma-Iwuchukwu mentioned that in every event one attends he/she would notice that only few women are either allowed to be part of it or systematically excluded. She further stated that most of the times the marginalization of women starts even from homes where male children are given more priority than their female counterpart.

On her part, Mrs. Alade was of the view that the lack of the ample space for women to participate in the digital space was the major contributing factor of women digital exclusion. She however emphasized that their exclusion should not be a determining factor that would discourage them from participating. She advised that even if the space was not being provided for them, they should provide their own space.

The third panelist, Mojirayo Ogunlana emphasized on the need to have legal backing that would ensure more women were given adequate space in the digital decision making table. According to her, the systematic exclusion of women in the digital space has resulted in their backwardness, economically and educationally, because they cannot be able to access many of the digital platforms to either do their businesses or study due to the fear of being harassed, bully or abused. The panelists unanimously agreed that the exclusion of women in the digital platforms has great impact in their development and the development of the country in general.

2.2.3 Second Technical Session: Tackling the Non-Presence of Women in Digital Policy Making Process and Institutions in Nigeria. Chair: Mrs. Saudatu Mahdi.

Panelists: Princess Hamman-Obels, Victoria Ibezim-Ohaeri, Aminu Havyatu. The second panel tried to find solutions and answers on how to ensure more women were in the forefront both in terms of using the digital spaces and in the decision-making processes.

In their discussion, the speakers provided many ways which could be used to ensure more women are on board both in terms of the internet usage and in the decision-making processes. Some of the issues raised at the panel were:

- Policies reform and implementation in the area of women involvement in the internet decision making processes; development of more policies that will protect vulnerable groups on the internet from cyber bullying, harassment etc.
- Development of policies that will ensure robust women participation and inclusion in the internet decision making process; mounting sustained public awareness by government and CSOs on the digital ecosystem to ensure women are making effective use of the internet in the country.
- Provision of access to educational materials and ability to use the internet without being harassed or intimidated.

- Development and implementation of programs that will amplify voices of the marginalized women and girls especially in the area of the internet decision making, media involvement in the efforts to bridge the gender digital divide and women participation in the internet decision making and in the area of creating awareness and pushing for it actualization.
- Development of framework and advocacy on the area of bridging gender digital divide and exclusion of women in the internet decision making.
- Involvement of pastors and imams in the discussion of women exclusion in the internet decision making and in bridging the gender digital divide in the country.

2.2.4 Observations made at the forum:

- 1. Women are being marginalized in the digital space decision making processes.
- 2. Economic and disability factors are some of the issues eroding women participation in the internet decision making processes in the country.
- 3. Technology is a moving trend that gives ample opportunities to its users, so the need to ensure women are carry along and given adequate opportunities to participate.
- 4. Women suffered more with regard to cyber bullying and online harassment than men which led to many of them to avoid the internet.
- 5. There is economic disparity between women and men which hinders women access to internet and by extension their participation in decision making.
- 6. Women have the potential and capacity to lead in the technology industry if the spaces are equitable and favorable.
- 7. The online space is being dominated by men, and it is unfavorable for women to participate and take part in decision making.
- 8. It was also observed that with all the efforts being made, women are still not growing in the internet space as they ought to be.
- It was observed that if men are not included in the discussion around the exclusion of women in decision-making, they will not understand the challenges women are facing in the online space.

- 10. Imposter syndrome was identified as one of the challenges that hinders the women participation in the internet decision-making.
- 11. It was also observed that many women are at the helm of the affairs of the internet but their voice are not being heard.
- 12. Having women at the helm of the affairs is not always the case of women representation; it requires capacity and passion to ensure women get the benefits they deserved.
- Participation is not decision making; many women are participating but are not allowed to make decision.
- 14. Women are not absent but inadequately represented in the internet decision making in the country.

Recommendations:

The participants after the forum recommended that:

- 1. There is need for policies reform and implementation in the area of women involvement in the internet decision making processes.
- 2. There is need for the development of more policies that will protect vulnerable groups on the internet from cyber bullying, harassment etc.
- 3. There is need for the development of policies that will ensure robust women participation and inclusion in the internet decision making process.
- 4. Government in conjunction with CSOs should mount a sustained public awareness on the digital ecosystem so that women in particular can be able to make an effective use of the internet in the country, have access to educational materials and ability to use the internet without being harassed or intimidated.
- 5. CSO should develop and implement programs that will amplify voices of the marginalized women and girls especially in the area of decision making.
- 6. Men need to be put at forefront when discussing about the women exclusion on the internet decision making and participation.

- 7. The keynote speakers for the subsequent Women Internet Governance Forum should be men.
- 8. More men should be included in the speakers of the subsequent WIGF.
- 9. It was recommended that men should be put at forefront in every discussion on women exclusion participation and decision making on the internet.
- 10. Media should be involved in the efforts to bridge the gender digital divide and women participation in the internet decision making in the area of creating awareness and pushing for the actualization of it.
- 11. There is need to develop framework and intensify advocacy on the area of bridging gender digital divide and exclusion of women in the internet decision making.
- 12. Pastors and Imams need to be involved in the discussion of women exclusion in the internet decision making and in bridging the gender digital divide in the country.
- 13. There is need to ensure there is at least 50% of women in the internet decision making platforms.
- 14. CITAD need to collaborate with other CSOs to create a school or fellowship where young girls will be trained on internet policy decision making, and how to be involved on the internet decision making from the early stage.
- 15. It was also recommended that summer boot camp should not only be for men, but young girls also need to be taking part in it.
- 16. There is need to continue building the capacity of women and increase advocacy to ensure for an inclusive digital ecosystem that ensures the voices of women are being heard in the digital space.
- 17. There is need for local NGOs to ensure equitable sharing of roles in programming and activities in all of their affairs.
- There is need for government to be at the forefront in championing for the women inclusion in the internet decision making.

- 19. Women should be given special consideration in every legislative position, executive and on the civil society space.
- 20. There is need for the multi stakeholder approach in addressing women exclusion in the internet decision making from the grassroots, to national, and to the global arena.
- 21. Create platforms such as "Girls for Digital Governance".
- 22. Women agencies, like the ministry of women affairs both at states and national level should be at the forefront in advocating for women inclusion in the internet decision making.

2.2.5 Closing session.

Following the presentations, participants asked questions and made comments as well offered specific recommendations that would help in making women a part of digital decision making. This segment also allowed the presenters to clarify on some of the issues they raised and positions advanced as well as further interrogating some of the proposed solutions to the challenges that hinder the presence of women in decision making. Participants agreed that there is a need to carry both the discussion and the proposed solutions offline to reach more people and especially engage government and other stakeholders to respond to these challenges so that the gender gap in digital policy decision-making can be bridged.

3.0 MAIN EVENT – 15TH SEPTEMBER 2022 3.1 Opening Ceremony 3.1.1 Welcome Remarks

The Chairperson of the Nigeria Internet Governance Forum Multistakeholder Advisory Group (NIGF-MAG) and President, of Nigeria Internet Registration Association (NiRA) **Mr. Adesola Akinsanya** gave the welcome remarks.

He started by recognizing the presence of all distinguished guests at the venue which include the Honorable Minister of Communications, Innovation and Digital Economy, The Permanent Secretary, Federal Ministry of Communications, Innovation and Digital Economy, the Director General of the National Information Technology Development Agency (NITDA), the Executive Vice Chairman of the Nigerian Communications Commission (NCC), the Chief Operating Officer of the Nigeria Internet Registration Association (NiRA), the President of the Internet Society, Nigeria (ISOC-NG), leaders from the Private Sector, Civil Society, Academia, Youth Organisations and all guests.

He stated that the 12th edition of the Nigeria Internet Governance Forum (NIGF) is a celebration of NIGF's dedication to promote the Internet as a tool of development for all Nigerians and its activities to make the Internet better with its bottom-up approach of pertinent Internet issues currently being faced in the country. He continued to praise all stakeholders for seizing the opportunity to make contributions and actively participate in the development and governance of the Internet in Nigeria.

Mr. Adesola shared that the NIGF 2023 high level panel session will discuss the theme "Towards a Secure and Inclusive Digital Future for Nigeria: Balancing Regulation, Cybersecurity, and Emerging Technologies" and sub-themes in the areas of "Building a Trusted Internet: A focus on Cybersecurity and Child Online Safety", "Strengthening Digital Infrastructure for Inclusive Services in Nigeria", "Emerging Technologies: Insights for Nigeria" and "Navigating Data Governance and Privacy in the Digital Economy of Nigeria".

He highlighted that the emergence of new technologies has brought unprecedented opportunities but has also exposed vulnerabilities that demand attention. It is the balance between regulations and the prudent adoption of these technologies that bring about the digital future of Nigeria. He added that no single entity can tackle these challenges in isolation and this calls for a collaboration between the government, enterprises, civil society and technical community. A collective effort and expertise will chart the course toward a framework that guarantees digital security, fosters innovation and ensure that no one is left behind.

He further added the Nigeria Internet Governance Forum (NIGF) serves as a crucible for dialogue, comprehension, and collaboration. It is a platform where these three pillars; regulation, cybersecurity and emerging technologies, is collectively scrutinized and interplayed by uniting stakeholders from the internet and digital ecosystem with the aim of constructing bridges of understanding and cooperation.

He stated that the NIGF 2023 would leverage the multi-stakeholder nature of the Forum to consolidate and harness innovative concepts aimed at fostering a more efficient strategy for constructing a secure, inclusive, and digitally progressive future for Nigeria. In doing so, it will judiciously address the intricate considerations surrounding regulatory frameworks, cybersecurity, and the burgeoning realm of emerging technologies. He assured that the outcome of the forum will be shared with academia, civil society, and all stakeholders for adoption and implementation as applicable.

Finally, he welcomed all participants to the Forum and encouraged them to participate in the discussions and deliberations.

3.1.2 Goodwill messages.

(i) Mrs. Mary Uduma, West Africa IGF Coordinator commended the country for consistently ensuring that Nigeria organizes her annual NIGF since 2012, stating the country is a good example for national IGF process to other West African countries.

She expressed her interest to always see Africa, West Africa and Nigeria be a part of the discussions wherever internet governance forum debate is done hence her active involvement which spans to the global internet governance forum.

She stated that the West Africa IGF looks forward to receiving reports from the deliberation of the day's event, including the actionable recommendations to Nigerian Internet stakeholders, and stated that West African IGF will report the recommendations at the forthcoming African Internet Governance Forum (AfIGF).

She finally took the opportunity to invite participants to the forthcoming Global IGF scheduled to hold in October 2023 at Kyoto, Japan and thanked the NIGF for its efforts in organizing the event.

(ii) Mr. Bernard Ewah delivered the goodwill message on behalf of Mr. Kashifu Inuwa Abdullahi (CCIE)- the Director General of the National Information Technology Development Agency (NITDA) who was unavoidably absent. He highlighted that the multistakeholder nature of the NIGF makes it very objective as it gives different players in Nigeria the opportunity to address Internet Issues in a way that recognizes the broad role that different stakeholders play in the digital development of the country.

(iii) Prof. Umar Garba Danbatta(FNSE, FRAES, FAEng, FNIEEE) - Executive Vice-Chairman, Nigerian Communications Commission (N.C.C) ably represented by Dr. Ibiso A. Kingsley-George (D.P.A, GFCA, GRCP, IPMP), Head of Internet Governance Unit, New Media & Information Security Department, in his remarks, stated that the theme of the 12th edition of the NIGF is timely in Nigeria as digital technologies continue to play an increasing role in shaping our socio-economic lives.

He stated that though the country has attained remarkable milestones in recent years, we must not fail to recognize the challenges that have emerged including cybersecurity threats, data privacy concerns, and bridging the digital divide. Against this backdrop, he was delighted that this forum presents a milestone for the Nigerian Communications Commission, where through strategic regulations have facilitated an environment that encourages innovation.

He further shared that innovation stands a pivotal force in paving a way for a secure and inclusive digital future for Nigeria. New cutting-edge solutions can bridge the digital divide by making affordable, accessible and reliable internet connectivity available to all, even in remote areas. Moreover, innovation can bolster cybersecurity efforts to safeguard Nigeria's digital infrastructure against emerging threats.

He highlighted the need to define new policies to protect the country from emerging digital threats while enjoying the digital dividends. Embracing innovation both in policy making and entrepreneurial endeavours can empower Nigeria to unlock the vast potential of the developing communications sector and foster a more inclusive, secure and digitally connected future for her people.

Finally, he stated that The NIGF has the power to encourage opinions, suggest best practices, and shape discussions that can influence Nigeria's Internet policies and decisions of those that have the power to drive the required policies.

(iv) Dr. William Alo - Permanent Secretary, Federal Ministry of Communications, Innovation and Digital Economy (FMCDE). Dr. Alo expressed his delight at the forum's initiative to gather various stakeholders to deliberate on issues pertaining to the Internet in Nigeria to harness and aggregate ideas and best practices towards a secure and inclusive digital future.

He affirmed belief in the forum's ability to generate new ideas, innovations, and strategies to address the setbacks faced by the country. He assured the forum that the government is willing to partner with the private sector to develop and promote meaningful connectivity and digital inclusion. He further stated that the outcome of the forum will facilitate and build consensus on actionable recommendations for the nation's internet ecosystem.

3.1.3 Keynote address

DR. BOSUN TIJANI – Hon. Minister, Federal Ministry of Communication, Innovation and Digital Economy (FMCDE) ably represented by Dr. William Alo, Dr. William Alo, the permanent secretary of the Federal Ministry of Communication, Innovation and Digital Economy (FMCDE).

He gave the keynote address highlighting his willingness to collaborate with the private sectors in the country to bring about digital transformation much needed in the country.

He appreciated the Nigeria Internet Governance forum for her initiative in bringing together relevant stakeholders under one roof with the theme "Towards a secure and Inclusive Digital Future for Nigeria: Balancing regulation, cybersecurity and emerging technologies".

He stated that the Honourable Minister is ready to partner with the private sector and that he is committed to ensuring that Nigeria comes first not just in Africa but in the world as far digital transformation and inclusiveness is concerned.

He highlighted the Honourable Ministers's achievement in the digital ecosystem not only in Nigeria but in Africa.

On this note the Minister closed by thanking all participants for being on attendance, stating that his office was looking forward to implementable recommendations from the forum. He commended the efforts of the organisers and prayed that the Almighty reward them immensely. May the Almighty bless the Federal Republic of Nigeria.

3.1.4 Vote of Thanks

Engr. Kunle Olorundare – Ag. President, Internet Society, Nigeria Chapter gave the vote of thanks to round off the Opening Ceremony of the NIGF 2023. He appreciated all the speakers and various internet stakeholders for their presence and constant support to the Nigeria Internet Governance Forum over the years. He also commended all participants for their presence and contributions to the Nigerian Internet Space.

3.2 High-level Panel session.

Moderated by: Mrs. Eyitayo Iyortim (Chief Operating Officer, Nigeria Internet Registration Association).

Lead Paper: Mr. Abdul-Hakeem Ajijola- Chair, African Union Cyber Security Expert Group (AUCSEG).

Speakers:

- Ms. Elena Scaramuzzi (Cullen International, Belgium)
- Barrister Morisola Alaba (Coordinator, Nigeria Youth Internet Governance Forum)
- Mrs. Sade Dada (Policy Manager, Connectivity and Innovation, Africa, Meta).

Summary of the session.

The moderator welcomed all panelists to the session and thanked them for being available amidst other responsibilities.

• Mrs Eyitayo Iyortum informed the public that the Keynote Speaker, Mr. AbdulHakeem Ajijola, Chair, African Union Cybersecurity Expert Group, could not physically make it but rather sent a presentation of his keynote speech.

Highlights from the Keynote Speech by Abdul-Hakeem Ajijola:

- He urged everyone to channel their expertise, conviction, and collaboration to start the nation towards becoming a champion in the digital age irrespective of its intricacies.
- He reminded Nigerians of the necessity to fortify our digital future from cyber threats by prioritizing cyber literacy for individuals and children for trust to flourish.
- The dialogue being initiated can be facilitated to develop emerging frameworks for cybersecurity.
- There are obstacles such as inadequate investment, security concerns and infrastructure neglect, that hinder the inclusivity of digital technologies.
- We have a commitment as stakeholders to dismantle these barriers, paving a path towards accessible and secure digital infrastructure.
- As emerging technologies continue its path to disrupting the way humans live work, Nigeria has a strategic position to place themselves and it could be "Leading" or "Following".
- The potential for economic growth, social progress, and enhanced governance can be harnessed by applying emerging technologies to solve current issues. Unfortunately, with great potential comes with a great deal of responsibility, as the collective wisdom of stakeholders will be tested while navigating the challenges of technology adoption, data privacy, security, regulation and governance.
- The era of data proliferation has brought us the challenge of harmonizing data, utility and the sanctity of individual privacy. There is a delicate balancing act that we are expected to strike like how we leverage data for growth while safe guarding the rights of our citizens.
- A multistakeholder discourse approach must be taken to illuminate pathways to responsible data management and monetization, cultivating a digital landscape founded on integrity and accountability.

CALL TO COLLECTIVE ACTION:

- **1.** Collaboration: There must be synergetic unification of government bodies, private enterprises, civil societies, academia and citizens, to amplify our collective impact.
- **2. Education:** In order to empower our citizens towards responsible digital navigation, cybersecurity education must be prioritized.
- **3. Inclusive Infrastructure:** Policies that bridge digital divides must be championed, enabling equitable digital progress.
- 4. Innovation with Integrity: By harnessing emerging technologies while implementing agile regulatory frameworks that safeguard against risks, it becomes highly feasible to mitigate risks of adopting these technologies. A strategic framework would include the creation of safe reporting spaces by our regulators.
- 5. Multistakeholder Governments: Data privacy partnerships must be forged with the goal of upholding the balance between data utilization and rights data owners.
- 6. Empowerment: We must nurture our youths, entrepreneurs, and innovators, thereby catalyzing Nigeria's digital economy.
- 7. ACTION: This discourse must be translated to action, with each voice representing a spark of change and shaping out digital future.

Mr. Ajijola concluded by saying, "As we embark on this transformative journey, let us carry forth our spirit of determination and collaboration. Let us champion a secure, inclusive and prosperous digital future for Nigeria where every citizen thrives in the digital age. The obstacles may be formidable yet our resilience intellect and unity will propel us beyond limitations. As Nigerian leaders, we must ask ourselves "Will Nigeria suffer from technological disruption or do we make Nigeria the technological disruptor?"

The time for action is now. Let us rise together, shaping a collective digital destiny that resonates through generations."

Panel Discussion.

Mrs Eyitayo Iyortim begun moderation of the session by introducing her affiliation with NIRA and sharing her thoughts on the keynote speech. She affirmed that the internet might be one of the greatest tools that bridges the divides between developed and developing world. She urged every participant to think about the possibilities of the internet in our society as they listen to each panelist. She alluded to the realness of and damages caused by cybersecurity threats. She emphasized that education of internet users is critical towards empowering citizens across the board while practicing safe digital navigation.

She stated that "Innovation is only truly innovation only when it can solve the issues specific to that region or geographical area. But if the policies aren't flexible to accommodate change, be driven locally and accessible remotely, then more effort must be made to provide the enabling environment for innovation".

The high-level session kicked into full swing with the first panelist Mrs. Dada introducing some of her work in the digital space. Mrs. Sade Dada works for Meta Platforms Inc. (formerly Facebook). She manages public policy for anglophone west Africa and leads connectivity and innovation policy work across the continent. Meta is engaged deeply in AI work and has been for quite some time. They are champions of the metaverse which is Virtual and Augmented reality. She is a member of the Multistakeholder Advisory Group of the Nigeria Internet Governance Forum. Her expertise was brought in to contribute what she and Meta are the key driving factors towards having inclusive digital transformation in Nigeria. Some of the topics to be covered include:

• Open Innovation

- Responsible Innovation
- Participating in policy making process

The next panelist was given the floor to introduce her own work in the space. Mrs. Elena connected remotely from Brussels and she is part of a team of experts who perform regulatory monitoring activities across the globe. She is the head of global research. She expressed the meaningfulness of the invitation to serve as a panelist in the event because it will help her learn more about Nigeria

and understand the global challenges and how Nigeria uses its regulatory capacities to overcome these challenges. She added that she has done some work in comparing countries with similar developmental and demographic indicators like Brazil, Egypt, India, South Africa and she is excited to share her findings.

The Third Panelist who also connected remotely introduced herself as the coordinator of the Nigerian Youth Internet Governance Forum, a legal Practitioner and program coordinator for digital grassroots, an organization that takes young people on digital literacy courses to educate them on digital literacy and more. (Ms. Morisola Alaba)

Highlights from the Discussions with Panelists:

The conversations begun with the moderator asking the panelists to contribute on the concept of Infrastructure and how government can improve infrastructure through policy frameworks.

Mrs. Sade Dada:

Infrastructure according to her usually comes with a 2 faceted challenge. Infrastructure coverage issues, and infrastructure usage issues.

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- Meta researches these issues and connectivity gaps, with strategic partnerships, the inclusive internet index looks at the physical infrastructure such as fibre, cables, submarine, masts and so on. Over the last 5 years, though coverage access has increased at about 75%. Actual usage has not kept up.
- Investment should transcend beyond just infrastructure deployment and policies that enable that, towards internet affordability, internet inclusivity.
- Meta has partnered with local operators and service providers in Nigeria to build fibre networks to improve the National broadband capacity.
- Policies such as reducing right of way access fees and more effort should be placed on policies to facilitate infrastructure usage.

The moderator, summarizing the points made by the first panelist, directed a question to Miss Morisola to comment on why there seems to be lag behind in the growth of internet usage especially with respect to the increased coverage.

Ms. Morisola Alaba:

- Mrs. Alaba emphasized on the idea of capacity building, or the lack thereof, as a key factor to the slower rate of internet usage.
- Sensitive issues are not raised in the discourse amongst the youth in Nigeria
- Capacity building cannot be over flogged. Sensitization needs to be enhanced, with content created and developed to cater for specific demographics.
- This capacity building can also be integrated into the educational sector, where institutions partner with academia to put such sensitive material into their curriculum.

The Moderator proceeded to inquire from the third Panelist who connected from Brussels. The question posed to her was "From observations seen in other countries similar to Nigeria, where are the low hanging fruits to build capacity for the Nigerian demographic?

Ms. Elena:

- Typically, sufficiently competitive markets have evolved to a level to address challenges such as coverage, customer reach and affordability to a certain extent are quite close to non-existent. Competition is therefore essential to improve accessibility.
- She commends the work of the Nigerian Communications Commission on its regulatory duties, updating regulatory documents and researching into improving the terrestrial telecoms landscape, Satellite communications and so on.
- She also commented on the effort of NITDA in building a policy for cloud computing as datacenters are quite essential for digital economies.
- Brazil is only just building their cloud infrastructure policies.

- She reported about some challenges faced by telecoms stakeholders in South Africa where energy load shedding is having impact on the infrastructure of network providers.
- She spoke to finding the right regulatory balance that will facilitate digital adoption. Inclusive regulation in areas like the EU has aided in keeping up with rapid infrastructure evolution and the challenges it brings.

The Moderator spoke of the Nigerian Data Protection Regulation before asking a question towards Ms. Elena. The question was "How has the EU managed to implement GDPR effectively with regards to cybersecurity and data integrity?"

Ms. Elena:

- The GDPR addresses different concerns. Collaborations between National data protection agencies across the EU has been key to enforce the important rules in the GDPR.
- Transferring data outside the EU, data sovereignty, and control of data were challenges the EU faced and mechanisms have been put in place to mitigate these issues in the GDPR.
- There are data protection laws that exist in other parts of the globe with a less complicated and complex structure that the EU GDPR laws state.
- It's not just about data protection and data control, but also data safety in the value chain and data products and their possibilities. The regulatory instruments used in EU are very broad, addressing different angles but is consistent from a global standpoint with focus on EU requirements.

The moderator directed the next question towards Ms. Morisola. Concepts such as data sharing, data sovereignty and data protection, how is it possible to strike a balance between benefits of data sharing and rights of individual rights/ security and safety.

Miss Morisola:

- She believes that in terms of the laws and regulations, we are making substantial progress but in terms of the practicality of implementing and enforcing them, there is still a long way to go.
- The Data protection act and the NDPR must be put into immediate implementation. Accountability is key amongst data storage providers and other data handlers and policies must be put into place to enforce this.
- Laws typically play catch up to the issues within the country. Futuristic and flexible laws need to be looked into to safeguard against potential threats not yet seen.
- She also reiterated about capacity building and its functionality in striking the balance.

The moderator shifted the direction of the discussion towards child online safety and protection of minors online. Her first question with regards to this was directed towards Mrs Dada. She asked if there are additional actions being taken by Meta to protect minors as they use the internet and are there policies that she can recommend to increase minor protection online.

Mrs Dada:

- The NDPR has provisions to capture online child safety policies. Numerous organisations such as the NCC, are working tirelessly on policy framework focused on Child online safety.
- She believes that it is not necessary to change the NDPR but rather support and empower those agencies and organizations that are focused on Minor protection online.
- She spoke about platforms that give training modules on online safety. An example she mentioned was mydigitalworld.sp.com.
- She also spoke about the use of AI to detect harmful behaviours online.

The moderator proceeded to open the floor to 3 individuals that are active in the industry, doing things that are directly related to what is being discussed, especially the child online protection policies.

Mr. Titus Ngamariju (Head of CyberResponse team, NAPTIP)

- Works closely with Meta on child online protection.
- They perform a lot of trend analysis with regards of child online protection, in collaboration with several organization.
- According to statistics, over 260,000 cases involved in child online protection.
- Facebook has a lot of compromised accounts that are being used to target minors.

Moses Joshua (Programs Manager, Cyber Security Education Initiative)

- Promote Cybersecurity awareness and educate cyber safety in young people
- A survey was performed earlier this year that revealed kids who are learned in junior secondary and primary schools, help internet scam artists to construct social engineering scenarios, scripts and narratives.
- They try to organize sensitization events and essay writing competitions for young people.
- The solution should be geared towards identifying the root cause and providing the necessary solutions.

Dr. Hassan (CEO of High Tech Centre for Nigerian Women and Youth)

- Empowerment of youth and women
- She raised a question about demographic separations.
- There is no deliberate identification of age gaps in tech inclusion issues.

• She brought to everyone's notice that young people need to be paid a lot of attention to, in the same way as child online protection. Her emphasis is young women who will be conducting business online.

Engr. Daniel (University of Port Harcourt)

- Head of IT and networking at the University.
- Trying to build capacity of young men to see the positive side of networking and digital usage.
- There is an innovation and research centre which seeks to replicate what is seen outside the countries. This includes organization of hackathons and IT challenges for young people within the state

Questions from Oyo Tech Hub:

- 1. What will government do to improve internet penetration in underserved communities?
- 2. Can there be data tariffs for less privileged individuals in these communities?

Mr Ogunbile suggested that clusters of schools should be added to next year's forum.

The rep from the young people development initiative identified that he did not observe any representatives from the Uniquely abled bodied community (people with body and mental disabilities). He suggests inclusion of them for next year and inclusion of young people in the decision-making process.

The Moderator brought the session to a close by assuring the previous speaker that representation at the decision-making level is highly inclusive and confirms that it is necessary to possibly add a representative from the disable community at that level. She then gave each panelist a minute to make a final statement.

Mrs. Dada says that including the youth among the decision making is very necessary and whenever the youth get the opportunity to be part of that, there is usually progress for the most

influential users of the internet. She implores participants to engage with more people so that there is more awareness of the sensitive issues such as internet governance.

Ms. Elena believes that transparency and openness in decision making is key for inclusivity in the digital space. Youth engagement will go a long way to develop policies that will encourage young people to use internet properly and develop modalities to protect minors online.

Ms. Morisola concluded from the perspective of the youth. She reiterated of knowledge impacting and capacity building to be able to get a sit at the decision-making table. She spoke of trainings Nigerian School of Internet Governance and Internet Society (ISOC).

Key Points Raised

- Obstacles such as inadequate investment, security concerns, and infrastructure neglect, hinder the inclusivity of digital technologies.
 - Stakeholders have a responsibility to dismantle these barriers, paving a path towards accessible and secure digital infrastructure.
- As emerging technologies continue their path to disrupting the way humans live work, Nigeria has a strategic position to place themselves and it could be either "Leading" or "Following".
- The potential for economic growth, social progress, and enhanced governance can be harnessed by applying emerging technologies to solve current issues.
- The collective wisdom of stakeholders will be tested while navigating the challenges of technology adoption, data privacy, security, regulation and governance.
- The era of data proliferation has brought the challenge of harmonizing data utilization and the sanctity of individual privacy.
- There is a delicate balancing act that Nigeria is expected to strike like how we leverage data for growth while safeguarding the rights of our citizens.

- The National Data Protection Regulation (NDPR) has provisions to capture online child safety policies. Numerous organisations such as the NCC, are working tirelessly on policy framework focused on Child online safety.
- It's not just about data protection and data control, but also data safety in the value chain and data products and their possibilities. The regulatory instruments used in EU are very broad, addressing different angles but is consistent from a global standpoint with focus on EU requirements.
- Infrastructure usually comes with a two faceted challenge. Infrastructure coverage issues, and infrastructure usage issues.
- The idea of capacity building, or the lack thereof, is a key factor to the slower rate of internet usage.
- Sensitive issues are not raised in the discourse amongst the youth in Nigeria.

Finding the right regulatory balance will greatly facilitate digital adoption.

- Transparency and openness in decision making is key for inclusivity in the digital space.
- Youth engagement will go a long way to develop policies that will encourage young people to use internet properly and develop modalities to protect minors online.
- Inclusive regulation in areas like the EU has aided in keeping up with rapid infrastructure evolution and the challenges it brings.
- Competitive markets that have evolved to a level to address challenges such as coverage, customer reach and affordability to a certain extent are quite close to non-existent. Competition is therefore essential to improve accessibility.

- It's not just about data protection and data control, but also data safety in the value chain and data products and their possibilities. The regulatory instruments used in EU are very broad, addressing different angles but is consistent from a global standpoint with focus on EU requirements.
- Promoting a safe internet space for Nigerian children requires a multi-faceted approach that involves education, technology, and collaboration between various stakeholders.
- Striking a balance between the benefits of data sharing and the protection of individual privacy rights in the digital economy is essential for Nigeria's sustainable development.

Ensuring an inclusive, accessible, and secure digital infrastructure in Nigeria requires a holistic approach that involves government policies, private sector participation, and collaboration with various multi stakeholders.

Recommendations from the High-level Panel Session:

- A multistakeholder discourse approach must be taken to illuminate pathways to responsible data management and monetization, cultivating a digital landscape founded on integrity and accountability.
- Investment should transcend beyond just infrastructure deployment and policies that enable that, towards internet affordability, internet inclusivity.
- There must be synergetic unification of government bodies, private enterprises, civil societies, academia and citizens, to amplify a collective impact.
- In order to empower Nigerian citizens towards responsible digital navigation, cybersecurity education must be prioritized.

- Policies that bridge digital divides must be championed, enabling equitable digital progress.
- Policies such as reducing right of way access fees and more should be placed on policies to facilitate infrastructure usage.
- By harnessing emerging technologies while implementing agile regulatory frameworks that safeguard against risks, it becomes highly feasible to mitigate risks of adopting these technologies. A strategic framework would include the creation of safe reporting spaces by regulators.
- Data privacy partnerships must be forged with the goal of upholding the balance between data utilization and rights data owners.
 - Youths, entrepreneurs, and innovators must be nurtured to catalyze Nigeria's digital economy.

This discourse must be translated to action, with each voice representing a spark of change and shaping out digital future.

- Sensitization needs to be enhanced, with content created and developed to cater for specific demographics.
- Capacity building should be integrated into the educational sector, where institutions partner with academia to put sensitive material on internet awareness into their curriculum.
- The Data protection act by the National Data Protection Regulation must be put into immediate implementation. Accountability is key amongst data storage providers and other data handlers and policies must be put into place to enforce this.

3.3 Breakout sessions

3.3.1 Session 1: Building a Trusted Internet: A focus on Cybersecurity and Child Online Safety.

Moderated by: Mr. Adewunmi Akinbo. (Secretary-General, Internet Society Nigeria Chapter).

Speakers:

- Mr. Segun Olugbile- (Director Global Network for Cybersolution) (Private Sector).
- Mr Ngamariju Titus Mangzha- (Assistant Director and Head, National Monitoring Centre, National Agency for the Prohibition of Trafficking in Persons).
- Dr. Uche Mbanaso (Executive Director, Center for Cyberspace Studies (CCS), Nasarawa State University).
- Mr. Abdulrazaq Iman (Ndukwe Kalu Foundation, Civil Society focused on Child Online Safety.
- Mrs. Martha Alade (Executive Director, Women in Technology in Nigeria (WITIN)).

Rapporteurs:

- Mr. Effiong Victor
- Mr. Martha Negedu

Summary of the session.

The moderator started by introducing the various panelists and welcoming them to the session. All panelists except Mrs. Martha were physically present. The Chair of the Ndukwe Kalu Foundation, Mrs. Mary Uduma was ably represented by the Program Manager of the foundation, Mr. Abdulrazaq Iman.

He gave a brief of the session's synopsis. He read that as Nigeria continues to transform its digital sphere with initiatives such as the digitized National Identity program with NIMC and investments in broadband and data infrastructure, it is critical that stakeholders prioritize building trust in digital services. Despite these efforts, cybersecurity threats are increasing, particularly for small and medium-sized enterprises (SMEs).

The country's internet development is still plagued with a high rate of cyberattacks, with SMEs and even Government servers facing more threats. Trust is crucial for digital transformation, but

frameworks have not kept pace with emerging technologies and their adoption, introducing new risks that demand new responses.

To advance digital transformation and achieve a sustainable, secure internet in Nigeria, it is essential to explore the role of trust in digital services, with a focus on user-level cyber awareness, SME cyber awareness, Government cyber awareness, child online safety, and the resilience of the Nigerian digital economy to cyber threats.

This discussion will examine the challenges and opportunities for building trust in Nigerian digital services, particularly in the context of cybersecurity and child online safety. The responsibilities of internet stakeholders in supporting a secure and sustainable internet in Nigeria, as well as the role of regulatory and legal frameworks in building trust will also be considered.

Mr. Titus answered to the question as to what the state of existing Child Online Protection Policies in Nigeria, and how effective they have been in promoting a safe and secure online space for Nigerian children. He stated the NAPTIP's commitment to fighting trafficking and violence against persons in Nigeria. He shared that there is a long list of policies that is currently being implemented by various agencies. Some of them are the ICT policy of NITDA which deals with child online protection, the NAPTIP act which contains sections on COP, the Evidence act of 2011, the Child Rights Act, Violence against persons act of 2015 among many others. More recently is the National Child Online Policy and Strategy by the Federal Executive Council in 2023 which looks at 11 strategic points all aimed to protect the child. This has not yet been launched though.

He shed more light on the "reporting aspect" of this policy which encourages the reporting of cases pertaining to child violation and violence online. Most of the previous data used by the country was pulled from foreign countries as Nigeria does not have enough cases on its official database. He stated that reporting of cases will go a long way to help NAPTIP and other various bodies make informed decisions that will aid enforce Child Online Protection in the country.

The next question on what steps the Nigerian government and other stakeholders can take to address the increasing cybersecurity threats faced by small and medium-sized enterprises (SMEs) and government servers was directed to Mr. Olugbile. He answered that cybersecurity in Nigeria should be at the level of implementation by government and various stakeholders. There is National Cybersecurity program and within the component of this strategy is a part that seeks to

address cybersecurity in the industry by raising more awareness. SMEs are becoming more aware of cybercrime. He stated a case where links to the e-naira adoption program of the CBN was sent to the SMEs and were flagged because they have information to stop, think before you act.

He shared that capacity building is also ongoing and moving towards advocacy and empowering SMEs to not just address issues of cybersecurity but also empower themselves.

Lastly, he stated that measures of cybersecurity toolkits that have been designed for SMEs. Two kits containing manuals and guides that business can use, useful tips and software tools to protect yourself; and information within your devices that can be used to safeguard you.

The next panelist, Mrs. Martha focused on vulnerable population being the easiest targets of cyber criminals, non-literate, the elderly, those in rural and underserved communities as well as women and girls. She shared a project done by the NCC titled, "Shine your Eyes". The project was geared towards cybersecurity interventions in vulnerable populations and was implemented by her organization, Women in Technology in Nigeria in Ibadan.

More awareness was also carried out among community leaders who then influenced the population to participate in the project. She cited that more impact can be achieved through this bottom-up approach of going though community leaders than through the government itself.

Dr. Mbanaso addressed the key factors that contribute to the resilience of the Nigerian digital economy to cyber threats, and how these factors be strengthened to build a sustainable and secure internet in Nigeria. He stated that trust is the driver of the digital society. Trust can be dimensioned in two ways, technological trust and behavioural trust.

The uncertain nature of the digital domain requires a lot of capacity building. A holistic approach is needed, and trust is the foundation. An SLA (Service Level Agreement) signed between a software developer and a client company has to be built on trust. A contractor can breach this agreement without the knowledge of his client and that is why trust is essential.

He shared that foreign countries are tackling this challenge by building capacity and increasing awareness. Cybersecurity education is very important encompassing all fields and not just the field of ICT. Everyone must join hands together to curb the menace of cyber threats.

He concluded by stating that a greater education is needed and a clear definition of the roles of government, industry and academia is needed to advance the country's position on cybersecurity. Research centers solely based on cybersecurity should be developed to further improve the system.

Mr. Iman shared the highlights of the work being done by the Ndukwe Kalu Foundation, the CSR arm of the Nigeria Internet Registration Association (NiRA). Some of these include;

- Bringing together stakeholders from various sectors to discuss issues on cybersecurity, child online protection and many others via an annual forum known as the "Child Online Safety and Reporting of Abuse Summit".
- A program called the "Train the Trainee" focused on empowering teachers of secondary schools causing them to include cybersecurity education in their curriculums and club activities.
- Giving feedback to agencies like the NCC and NITDA to provide data to help them in their policies and procedures.
- Partnering with tertiary institutions to continue capacity building to students. Sponsoring research, bootcamps, competitions to enable students replicate foreign software in Nigeria in order to promote local content.

Mr. Olugbile went on to reiterate on the enforcement of policies and regulations rather than creating more of them. Emphasis was also placed on encouraging organizations that adhere to these policies.

Key Points Raised:

- Awareness and capacity building are crucial in addressing issues of cybersecurity.
- There is a lack of enforcement of regulations regarding child online protection in Nigeria.
- Enforcement of regulations set up by government is key to making sure policies are adhered to.
- There are lots of policies being made on cybersecurity and child online protection but very low adherence.
- Trust is crucial and it must be built from the bottom-up. The grassroots and vulnerable communities must be informed in matters of cybersecurity. Emphasis should be placed on underserved communities.

- Trust can be viewed from three perspectives: digital trust, technical trust and behavioral trust. All three must be considered in making any kind of intervention.
- Child pornography and its spread is a major cause of concern in the use of the internet in Nigeria.
- Enforcing cybersecurity education, policies and digital literacy is crucial in seeing real change.
- There is a large knowledge gap on citizens' rights on the internet and the laws put in place to protect them hence the need for awareness and sensitization.
- Toolkits providing guidelines on how business owners can protect themselves online are available for SMEs.
- Rural and underserved communities are being left out of the awareness and sensitization on cybersecurity.
- The "Shine your Eyes" project by the Nigeria Communication Commission projects awareness to vulnerable communities.
- Empowering local community leaders will drive home this awareness better due to since people at the grassroots have more trust in their leaders than even the government.

Recommendations from Session 1:

- More constructive content should be created to push out the harmful content online.
- Advocacy for implementation should be focused on rather than on creating more policies.
- Cybersecurity should be implemented as a compulsory education in schools.
- Community leaders should be trained in cybersecurity. The grassroots must not be left out in the awareness.
- Incentives can be given to business owners who adhere to COP policies.

3.3.2 - Session 2: Strengthening Digital Infrastructure for Inclusive Services in Nigeria. Moderated by: Mr. Ben Ewah – Director, e-Government Development and Regulation, National Information Technology Development Agency (NITDA).

Speakers:

• Mr. Osondu Nwokoro – Coordinator, Initiative for Digital Inclusion.

- Mr. Muhammed Rudman (CEO/MD, Internet Exchange Points Nigeria).
- Mrs. Busayo Balogun (Head, Corporate Services, Nigeria Internet Registration Association).
- Rev. Oluwasegun Folayan (eGovernment Development and Regulation, National Information Technology Development Agency (NITDA)).
- Mrs. Zainab Aminu Gender Officer, Centre for Information Technology and Development (CITAD).

Rapporteurs

- Ms. Bimbo Aderibigbe
- Mr. Mujaheed Ibrahim
- Mr. Raphael Chiahema

Summary of the session:

The moderator began by introducing the panelists for the session and welcoming all the participants. Mr. Nwokoro and Mr. Rudman participated online. All other panelists were physically present.

Synopsis

Digital infrastructure is the backbone of any modern economy, and Nigeria is no exception. To achieve inclusive and sustainable development, it is crucial to have a strong and reliable digital infrastructure that can support innovation, improve access to digital services, and promote digital inclusiveness. However, Nigeria is facing several challenges in this regard, including inadequate investment in internet infrastructure, insecurity in the country, and neglect of existing infrastructure.

This session will explore the key policy questions related to strengthening digital infrastructure for inclusive services in Nigeria. We will discuss the importance of managing critical internet resources and digital infrastructure to support innovation and penetration in Nigeria, including the impact of current infrastructure on public services. We will also emphasize the need for digital

accessibility and inclusiveness to ensure that everyone, regardless of their abilities or socioeconomic status, can benefit from these services.

The session will delve into the challenges and opportunities that Nigeria faces in achieving this goal, including the impact of inadequate investment in internet infrastructure and the security challenges that Nigeria faces, and explore recommendations for addressing these issues.

Overall, this session will provide a platform for stakeholders to exchange ideas, best practices, and recommendations for improving digital infrastructure in Nigeria and promoting inclusive digital services. We will explore ways to leverage public-private partnerships, international cooperation, and multi-stakeholder collaboration to improve internet infrastructure and promote digital inclusiveness in Nigeria.

Panel Discussion

Mr. Rudman answered to the question on where these issues will be better addressed from the perspective of enhanced deployment, availability and usage in a way that connects with all sectors of the Nigeria society. He focused on affordable access and he suggested that regulators ensure developmental regulations like infrastructure sharing which the NCC has implemented.

He cited an example of the ISM (Industrial Scientific Medical) band implemented by foreign countries where people use it to transmit information from one place to another. The cost of frequencies can be reducing by infrastructure sharing. He also encouraged operators in Nigeria to work on collaborating thereby duplicating infrastructure. He stated that NCC has started working on creating policies to enable this.

In addressing the multifaceted challenges surrounding internet accessibility in our country, Mrs. Aminu emphasized the critical need for cybersecurity awareness among citizens. Ensuring the safety of individuals while navigating digital infrastructures was paramount, and fostering a sense of security was integral to the widespread acceptance and usage of online platforms. Simultaneously, she underscored the urgency of tackling physical infrastructure challenges, particularly vandalism. Mrs. Aminu highlighted the importance of safeguarding the tangible components that support our digital connectivity, advocating for concerted efforts to mitigate the risks associated with vandalism to maintain a resilient and reliable internet infrastructure.

Moreover, Mrs. Aminu drew attention to the significant impediment posed by the irregular power supply affecting internet accessibility. Acknowledging that consistent power was fundamental to a seamless online experience, she emphasized the necessity of addressing power challenges to enhance the reliability of digital connectivity nationwide.

Mrs. Balogun advocated for the promotion of Nigeria's identity on the internet through the .ng domain, emphasizing its critical role in fostering better adoption. She recognized a significant challenge marked by the reluctance among Nigerians to embrace the .ng domain, attributing this hesitancy to concerns surrounding imaging and the apprehension that other countries are hesitant to engage with Nigerian-owned organizations. Mrs. Balogun highlighted the necessity of addressing these perceptions to encourage wider acceptance and utilization of the national domain, stressing its importance as a symbol of Nigeria's online presence.

In her comprehensive assessment of Nigeria's digital landscape, Mrs. Balogun pointed out the underutilization of digital infrastructure, encompassing issues from internet bandwidth to physical infrastructure. She underscored the need for strategic initiatives to optimize the efficiency and effectiveness of both aspects of the digital realm.

Furthermore, she shed light on the proactive measures taken by the National Information Technology Development Agency. She explained that the agency has devised a targeted strategy to promote the use of the .ng domain, prioritizing organizations that choose this national identifier over those that do not. This strategic approach reflects a deliberate effort to incentivize and accelerate the adoption of the .ng domain among entities operating within the digital sphere.

Mr. Nwokoro underscored the imperative for improved right-of-way regulations to facilitate enhanced collaboration among operators within Nigeria's digital landscape. He emphasized the need for regulatory advancements that would foster better synergy and cooperation among stakeholders in the industry. Additionally, Mr. Nwokoro drew attention to the prevalent issue of underutilized digital infrastructure in the country, encompassing challenges spanning from internet bandwidth to physical infrastructure. He highlighted the urgency for strategic interventions to optimize the efficiency and utilization of Nigeria's digital resources, thereby contributing to a more robust and effective digital ecosystem.

Rev. Folayan highlighted the strategic efforts undertaken by the National Information Technology Development Agency (NITDA) to promote the utilization of the .ng domain, emphasizing a priority system that favors organizations using the domain. He recognized the importance of such a strategy in fostering a stronger digital identity for Nigeria and encouraging widespread adoption of the national domain.

In his assessment of Nigeria's internet landscape, Rev. Folayan pointed out the paradox of the country being the 7th largest user of the internet globally and the foremost in Africa. Despite this significant user base, he underscored the limited benefit derived from the vast amounts of data generated within the country. This observation implies a need for strategies to maximize the value of the data generated by Nigerian internet users.

Moreover, Rev. Folayan drew attention to the joint efforts of the Federal Ministry of Communication, Innovation, and Digital Economy, along with NITDA, in implementing strategies to boost the use of the .ng domain. The objective is to facilitate local hosting of data, thereby adding value to the country. He highlighted the current practice of fetching internet from other countries, leading to increased costs. This underscores the importance of shifting towards more localized data hosting to not only reduce costs but also enhance the overall value derived from the country's internet usage.

Concluding, Mr. Rudman emphasized the critical concept of domesticating data, advocating for the establishment of more data centers in Nigeria distributed across different states. He urged regulatory bodies to factor this into policymaking, recognizing that a proliferation of data centers holds the potential for reduced costs and improved accessibility. By spreading data infrastructure geographically, the country could harness the benefits of increased efficiency and affordability, aligning with the goal of making data more accessible for various stakeholders.

In considering the effectiveness of data protection laws, Mr. Rudman highlighted the pivotal role played by data domestication. He argued that for data protection laws to truly serve their purpose, it is essential that data is hosted within the country. This emphasizes the interconnectedness of data localization and effective data protection regulations. Mr. Rudman's statements underscore the importance of aligning policies and infrastructure development to create an environment where both the accessibility and security of data are maximized through strategic domestication initiatives.

Questions

- Sani Yakubu from Main One Technologies: He asked for an enabling environment for ISPs to thrive including the monitoring of the regulations like the Right of Way by FG. He cited states like Oyo where the fee charged is way above the stipulated amount set by the government. He further requested for subsidies by the government for struggling communities.
- Is it possible for NiRA to do an enlightenment campaign to all 400+ MDAs to promote the use of the .ng domain? She stated that these MDAs adopting the domain will serve as a good example to the public.
 - Mr. Ewah answered that webinars have been organized to MDAs to educate and enlighten them on this issue.
- 3. Is there a way to ensure that when we adopt AI, that these things are explained rudimentary to all Nigerians regardless of their cadre and level?
 - Mr. Ewah answered also on this saying, education is being carried out on different levels to ensure that people are knowledgeable about the technologies.
- 4. Nigeria has a wealth of resources at its disposal. How can Nigeria use this to not only keep up with technological advances but also pave the way for creative inclusive digital solutions that promote all facets of society?

Mrs. Aminu answered to this by saying that the government can consider performancebased financing of projects to ensure that resources like human capital are well utilized. Private Public partnership will also help to improve such infrastructures.

In conclusion, Mr. Ewah encouraged participants to go on to NITDA's website to download the National Second Level Domain Policy document to educate them on issues surrounding the topic of discuss.

Key Points Raised:

- Cybersecurity is a challenge surrounding internet accessibility. Citizens need to know that they are safe while using these digital infrastructures.
- Concerning physical infrastructure, vandalism is a challenge that must be addressed.
- Power supply is a major challenge for internet accessibility in the country.
- Content localization is another challenge that must be tackled. Nigerian organizations should utilize the .ng domain.
- Stable connectivity especially in rural areas must also be looked at.
- The .ng domain, Nigeria's identity on the internet needs to be promoted to enable better adoption.
- There is a reluctance among Nigerians to use the .ng domain due to imaging and how other countries are hesitant to interact with Nigerian owned organizations.
- Digital infrastructure in Nigeria is poorly utilized from internet bandwidth to physical infrastructure.
- The National Information Technology Development Agency has devised a strategy to promote use of the .ng domain by placing priority on organizations that use the domain over organizations that don't.
- Nigeria has one of the largest numbers of users of the internet considering that it is the 7th biggest user in the world and the 1st in Africa. This shows the amount of data being generated by the country with very little benefit to the country.
- The Federal Ministry of Communication, Innovation and Digital Economy and the National Information Technology Development Agency have been implementing strategies to increase the use of the .ng domain name so that data can be hosted within the country to add value. Presently, the internet is fetched from other countries and brought to Nigeria hence, its increased cost.
- Domesticating data means more data centers in Nigeria spread across different states and regulatory bodies should take this into consideration when making policies. More data centers mean reduced cost and better accessibility.
- Data protection laws can also only be effective if data is domesticated.

Recommendations from Session 2:

- Regulators should ensure developmental regulation like infrastructure sharing between organizations to make these infrastructures more affordable.
- Internet Service Providers and telecommunication providers should also collaborate to reduce duplication of infrastructure then the regulatory bodies can come in to ensure a seamless and affordable usage. This practice has been implemented in other countries and it has worked for them.
- Enforcement of regulations by the country on operators must also be looked at in strengthening digital infrastructure.
- Models should be put in place to improve digital infrastructure in rural and underserved areas.
- There are about 46 taxes that telcos pay to the government. Government should reduce the price of some of these fees to enable these telcos able to move their operations to more areas. The process of setting up is also cumbersome and this is disadvantageous to the citizens. The internet is crucial to the nation and the government must realize that they need to work to aid these companies make internet more accessible and affordable.
- Capacity building for the citizens, especially the older generation, is also a right step towards strengthening the nation's digital infrastructure.
- Right of way regulations need to be improved to enable better synergy between operators.
- Investor-friendly policies are highly needed for strengthening digital infrastructure in the country.

3.3.3 - Session 3: Emerging Technologies: Insights for Nigeria. Moderated by: Mr. Lawrence Olawale-Roberts

Speakers:

- Prof. Gloria Chukwudebe
- Mr. Yusuf Olaniyi Chairperson, Nigeria Economic Summit Group.
- Dr. Collins Agu Director, Research and Development, National Information Technology Development Agency (NITDA).

Rapporteur:

- Mr. Husseini Abubakar Umar
- Mr. Abdulhamid Ibrahim
- Ms. Comfort Kazeem

Summary of the session

The moderator began by welcoming all participants and introducing the session's topic and the panelists, who all participated online.

Synopsis

As the world becomes more technologically advanced, it is important for Nigeria to keep up with the latest emerging technologies in order to benefit from the advancements and compete on a global scale especially with our teeming youthful population. The adoption of new technologies such as AI, Blockchain, Cryptocurrencies, Internet of Things (IoT), Robotics, and Drone technology and the Metaverse is crucial to building a thriving digital economy. However, there are also concerns around the regulatory and legal frameworks needed to manage the risks associated with these technologies. This session will explore the opportunities and risks presented by these emerging technologies, and how Nigeria can best position itself to take advantage of them.

The impact of emerging technologies on various sectors of the Nigerian economy, from healthcare to finance to agriculture, cannot be overemphasized. But how prepared is Nigeria to leverage the opportunities these technologies present to advance its economic, social, and political objectives, while also addressing issues related to current realities, challenges, adoption, data privacy, security, regulation, and governance?

The session will also consider the current state of emerging technologies in Nigeria and provide insights on how to maximize their benefits. The potential impact of emerging technologies on different sectors of the Nigerian economy, including agriculture, healthcare, education, transportation, etc. Final goal is to exchange ideas and practical strategies to produce recommendations that may influence policy making to properly manage the risks and seize the opportunities emerging technologies present Nigeria.

Panel Discussion

Professor Chukwudebe highlighted the significant impact of emerging technologies on Nigeria. These included Artificial Intelligence (AI), blockchain/cryptocurrency, robotics, 4D Printing, Internet of Things (IoT), and cloud computing (Augmented Reality, Virtual Reality, Mixed Reality). While these technologies offered great benefits, they also came with substantial risks. The key recommendation was for Nigeria to not only embrace these innovations but also to actively identify and develop strategies to manage the associated risks.

In essence, she emphasized the importance of a balanced approach. Nigeria needs to leverage the advantages of emerging technologies while implementing robust risk management measures. This approach ensures that the nation will maximize the transformative potential of these technologies for sustainable growth, all the while safeguarding against potential pitfalls.

Mr. Olaniyi emphasized the enhanced value derived from combining two or more emerging technologies, stressing that they should not be viewed in isolation. Notable examples illustrate this synergy, such as the integration of Artificial Intelligence (AI) with the Internet of Things (IoT) to create smart systems, or the fusion of blockchain technology with AI for secure and transparent data management.

Additionally, Mr. Olaniyi underscored the paramount importance of considering user security in the adoption of these emerging technologies. The rapid evolution of technologies like AI, blockchain, and IoT necessitates robust security measures to safeguard user data and privacy.

Despite acknowledging potential negative aspects, Mr. Olaniyi placed greater emphasis on the substantial benefits offered by these technologies. This stance aligns with the perspective that the positive impacts, such as increased efficiency, innovation, and connectivity, outweigh the challenges associated with their implementation.

He highlighted a significant risk associated with Artificial Intelligence (AI) focusing on ethical concerns. Specifically, the emphasis was on the imperative of ensuring that AI systems respect

fundamental human rights, remain neutral, and avoid bias. This underscores the critical importance of ethical considerations in the development and deployment of AI technologies, emphasizing the need for frameworks and standards that prioritize fairness and human rights.

Additionally, Mr. Olaniyi addressed the issue of access as a major concern in the context of AI. Unequal and unreliable internet access in different geographical areas creates a digital divide, exacerbating disparities in technology adoption and usage. This observation underscores the need for concerted efforts to bridge the digital gap, ensuring that the benefits of AI are accessible to a broader and more diverse population.

Dr. Agu provided a comprehensive roadmap for Nigeria's engagement with emerging technologies. Firstly, he emphasized the importance of studying strategies employed by global organizations, urging Nigeria to adopt successful global practices. This proactive approach is crucial for enhancing the nation's technological advancements and ensuring alignment with global standards.

Also, He advocated for a transformative shift in tertiary education through the incorporation of project-based learning methodologies. The emphasis on practical, field applications of academic concepts aim to bridge the gap between theory and real-world implementation, fostering a hands-on learning environment within educational institutions.

Furthermore, Dr. Agu underscored the need for Nigeria to actively adopt and adapt technology for sustainability. This forward-looking perspective encourages the country to embrace technological advancements while tailoring them to meet local needs, ensuring their long-term relevance and impact.

Dr. Agu presented crucial aspects for Nigeria's effective engagement with emerging technologies. He emphasized NITDA's "Produce what you consume and consume what you produce" approach to encourage indigenous content patronage, fostering self-sufficiency in the IT sector. He underscored the significance of data privacy, pointing to the National Data Protection Regulation's data protection act as a crucial legal framework for safeguarding individuals' privacy in the adoption of emerging technologies. Together, these insights provide a strategic foundation for Nigeria's responsible and successful integration of emerging technologies.

The moderator ended by thanking the panelists and participants for a wonderful and engaging discussion.

Questions

1) **Babatunde Tijani:** What could be the cause and factor of not having enough standards guiding some emerging technologies?

Ans (**Prof. Chukwudebe**): The standards have to be first created by global bodies before various nations can adopt them into their own policies and regulations. The rate also at which innovative technologies are coming up also make it quite difficult to make standards at such pace.

2) Babatunde Tijani: What is government doing to avoid brain-drain in the country seeing as talents are leaving the country?

Ans (Prof. Chukwudebe): Anybody in any part of the world can contribute to the global bodies that make these standards. There are also government representatives among these global bodies like the IEEE.

3) Engr. Alice Lawrence: How can we ensure the confidentiality, integrity and availability of date generated or used by AI? Also, who should be held responsible in the case of a data breach?

Ans (Dr. Agu): The NPDR has a data protection act in respect to this issue which can be downloaded from NITDA's website. A subsidiary or NITDA known as the NCAIR also deals with ensuring the integrity of data used and generated by AI.

Key Points Raised

- Emerging technologies has great benefits, but they also involve huge risks. Nigeria must identify and develop ways to manage risks in the adoption of these technologies.
- Emerging technologies in this discuss include Artificial intelligence (AI), blockchain/cryptocurrency, robotics, 4D Printing, Internet of Things (IoT) and cloud computing (Augmented Reality, Virtual Reality, Mixed Reality).
- A lot of Nigerian data is not digitized causing a bias in the data fed into AI technologies since AI only works on the exact dataset that is fed into it.
- A major risk with AI is ethics. Ensuring that AI will respect certain human rights, is neutral and unbiased is very important.

- Access is also a major issue. Some areas have better and more reliable internet access than others causing a digital divide.
- Policies and regulations should be made to ensure equitable spread and availability across the country.
- Emerging technologies like AI and Robotics could lead to labour loss and on the other hand, it will lead to more opportunities for people with the needed capacity.
- Consumer protection such as child online protection and data privacy are concerns that must be looked into as we embrace emerging technologies.
- Issues around mental health must also be addressed as more people become attached to these technologies.
- Culture preservation is needed as citizens become more exposed to foreign cultures in the use of emerging technologies.
- The lack of centralization especially in blockchain makes regulation difficult in that aspect.
- There should be a synergy between academia and industry.
- Education platforms like the Unity board and STEAM education kits developed in Nigeria
 have been used in some tertiary institutions to train tutors.
- The National University Commission (NUC) has given a 30% liberty to tertiary institutions to introduce customized curriculums. With this development, the academia can integrate the study of emerging technologies into their education.
- Upskilling and reskilling of the workforce is essential.
- Multisectoral partnerships could also aid the easy adoption of emerging technologies.
- Academic research should be geared towards meeting valid industry needs.
- NITDA's Strategic Roadmap and Action Points (STRAP) document for Nigeria's IT sector encourages the "Produce what you consume and consume what you produce" approach to encourage indigenous content patronage.
- ISO, ITU and IEEE have developed standards for blockchain technologies and other emerging technologies.
- Data privacy is a crucial aspect to be considered in the adoption of emerging technologies. The NPDR has a data protection act in respect to this issue.

Recommendations from Session 3:

- Combining two or more of these technologies together is able to give more value. They should not be looked at in isolation.
- Security of users must be considered also in the use of these emerging technologies.
- Nigeria must look to how it can be a global player.
- There should be more patronage of local content and more collaboration between the academia and industries.
- Nigeria should also look into global organizations to understand their strategies and to adopt it.
- Project-based learning methodology should be employed in tertiary institutions where there should be a lot of field application of what is being taught.
- Nigeria should take on adoption and subsequent adaptation of technology for sustainability.
- Besides the Academia, talents in informal spaces in the country should be identified and harnessed.
- Capacity building at different levels from the private to the public sector must be done if Nigeria is to be become a global player in emerging technologies.
- The use of emerging technologies should be encouraged and not shunned. Monitoring and regulation of this use is important.

3.3.4 - Session 4: Navigating Data Governance and Privacy in the Digital Economy of Nigeria.

Moderated by: Engr. Kunle Olorundare (President, Internet Society, Nigeria.

Chapter).

Speakers:

- Mrs. Mojirayo Ogunlana-Ikanga- Executive Director, DigiCivic Initiative.
- Mr. Ridwan Oloyede- Co-Founder, Tech Hive Advisory.

Rapporteurs:

- Mrs. Modupe Utake.
- Ms. Moradeyo Iyiade
- Mr. Adejumo Habib Tunde.

Summary of the session Synopsis

As the world becomes more technologically advanced, it is important for Nigeria to keep up with the latest emerging technologies in order to benefit from the advancements and compete on a global scale especially with our teeming youthful population. The adoption of new technologies such as AI, Blockchain, Cryptocurrencies, Internet of Things (IoT), Robotics, and Drone technology and the Metaverse is crucial to building a thriving digital economy. However, there are also concerns around the regulatory and legal frameworks needed to manage the risks associated with these technologies. This session will explore the opportunities and risks presented by these emerging technologies, and how Nigeria can best position itself to take advantage of them.

The impact of emerging technologies on various sectors of the Nigerian economy, from healthcare to finance to agriculture, cannot be overemphasized. But how prepared is Nigeria to leverage the opportunities these technologies present to advance its economic, social, and political objectives, while also addressing issues related to current realities, challenges, adoption, data privacy, security, regulation, and governance?

The session will also consider the current state of emerging technologies in Nigeria and provide insights on how to maximize their benefits. The potential impact of emerging technologies on different sectors of the Nigerian economy, including agriculture, healthcare, education, transportation, etc. Final goal is to exchange ideas and practical strategies to produce recommendations that may influence policy making to properly manage the risks and seize the opportunities emerging technologies provide Nigeria.

Panel Discussion

The moderator began by introducing the panelists and reading out the session's synopsis. Only two panelists were present for the session.

Barr. Ogunlana underscored several advantages of emerging technologies in Nigeria, particularly emphasizing their economic and social benefits. She highlighted that the integration of artificial intelligence (AI) and robotics stands out as a pivotal emerging technology capable of significantly enhancing the digital economy. By encouraging the active participation of diverse age groups and genders in leveraging technology across various fields, the country could experience a substantial boost in its digital economic landscape.

Addressing potential concerns, Barr. Ogunlana recognized that one of the predominant risks associated with both current and future emerging technologies is the issue of privacy. In reflecting on the trajectory of technological advancement, she emphasized the critical importance of sensitizing citizens about responsible internet usage. This entails imparting knowledge on the dos and don'ts of the internet, ensuring that individuals are well-informed and equipped to navigate the digital realm while safeguarding their privacy.

Mr. Oloyede addressed the inherent risks associated with artificial intelligence (AI), delving into concerns that encompassed various dimensions. Foremost among these risks were issues of bias within AI systems, where algorithms could inadvertently perpetuate or even exacerbate existing biases present in the data used for training. Additionally, he highlighted the potential pitfalls of employing facial recognition technology, pointing out the risks of profiling individuals based on facial features. This raised considerable concerns about the ethical implications and the need for stringent regulations to prevent misuse.

Privacy emerged as a recurring theme in Mr. Oloyede's discourse on the risks associated with present and future emerging technologies. He underscored that as technology advances, ensuring the protection of individuals' private information becomes increasingly challenging. The growing prevalence of data-driven systems and the potential for unauthorized access were identified as key elements contributing to the privacy risk.

Beyond these technological challenges, Mr. Oloyede shifted the focus to capacity building as a paramount concern. He asserted that discussions surrounding emerging technologies should

centralize around capacity building initiatives, as this is perceived as the most effective means to bridge the existing technology gap. Recognizing the importance of equipping individuals and communities with the necessary skills and knowledge, he emphasized the imperative of investing in education and training programs to empower people to adapt to and harness emerging technologies.

Furthermore, Mr. Oloyede advocated for a role-based regulation approach in crafting regulations for emerging technologies. This approach implies tailoring regulations to specific roles and responsibilities within the technological ecosystem, acknowledging that different entities play distinct roles in the development, deployment, and use of emerging technologies. Such an approach, he argued, would foster a regulatory framework that is nuanced, adaptive, and effective in addressing the diverse challenges associated with the rapid evolution of technology.

A participant, Hajia Sani, a director at VON (Voice of Nigeria) spoke on affordable and accessible internet for everyone. She stated that electricity is an issue that must be dealt with as it is a major hindrance to internet accessibility. She also emphasized on the sensitization of citizens on the many benefits of technological advancement and why they should welcome it.

Continuing the conversation, Barr. Ogunlana offered insights into how the risks associated with emerging technologies could be effectively mitigated through regulatory and legal frameworks. She stressed the necessity of amendments to the Data Protection Act, advocating for measures that would ensure individuals' data is not shared with third parties without explicit consent. This underscored the importance of legislative adjustments to align with evolving technological landscapes, aiming to bolster privacy protections.

Furthermore, Barr. Ogunlana emphasized the pivotal role of the Nigeria Internet Governance Forum (NIGF) in raising awareness about data rights and privacy. Proposing a proactive approach, she highlighted the forum's potential to serve as a platform for disseminating crucial information and fostering a broader understanding of the rights and risks associated with personal data in the digital age.

Addressing the end-users directly, Barr. Ogunlana emphasized the need for individuals to exercise caution in their interactions with technology. She recommended that users meticulously review the

Terms and Conditions of any app before sharing personal information, recognizing the critical role of user awareness and responsibility in safeguarding privacy.

In the realm of governmental responsibility, Barr. Ogunlana asserted that the government should demonstrate a high level of commitment to protecting the privacy of Nigerian citizens' data. This advocacy for government involvement underscored the notion that regulatory oversight and enforcement are pivotal elements in ensuring the security and privacy of personal data.

Concluding her recommendations, Barr. Ogunlana highlighted the significance of stable and articulated government regulations. She argued that such regulations are essential to creating a reliable and flexible environment for the economy to thrive amidst the dynamic landscape of emerging technologies. This call for regulatory stability reinforced the idea that a well-defined and adaptive legal framework is crucial for fostering a secure and conducive environment for technological advancements in Nigeria.

Questions

NIGERIA INTERNET

- 1) Mayowa Okoye: The NDPC should bring in state and local governments and using the polling unit as a pattern to carry out sensitization on data privacy and data governance.
- 2) Mayowa Okoye: Big tech firms that have a presence in Nigeria should also be mandated to have offices in order to monitor their use of the nation's data.

Key Points Raised

- AI and robotics are emerging technologies that can be used to greatly improve the digital economy. The involvement of all age groups and gender in the use of technology for various fields will boost the digital economy of the country.
- The greatest risk in the present and future emerging technology is privacy.
- Citizens should be sensitized on the use of the internet and the dos and don'ts of the internet.
- Capacity building is also a key subject in emerging technology. It keeps people informed of what is happening and how to adopt the positive aspects while avoiding the negative aspects of emerging technology.

- Artificial Intelligence and robotics is a major driver of technological transformation and digital economy.
- Privacy is the greatest threat emerging technology is facing and will face in the future.
- Capacity building is the main point of discussion because this is the only concept that can bridge the technology gap.
- More sensitization and awareness should be carried out on all levels on the risks of sharing personal data online.
- Multistakeholderism is the way to go to bring everyone into decision making for the growth of entrepreneur and innovative ideas in the country.

Recommendations:

- Amendments must be made to the Data Protection Act such that the data of individuals will not be shared with third parties without the consent of the individual.
- The Nigeria Internet Governance Forum (NIGF) must raise more awareness about Data rights and privacy.
- Users of apps must take their time to thoroughly read through the Terms and Conditions of any app before keying in personal information.
- The government should be charged with a high level of commitment to protecting the privacy of the data of Nigerians.
- Government regulations must be stable and articulated so as to create a reliable and flexible environment for the economy to thrive.
- Continuous capacity building must be embraced by all relevant authorities so as to stay in consonance with emerging trends.

3.4 Wrap Up Session

The wrap up session was moderated by Mrs. Chinyere Ifezue from the Federal Ministry of Communications, Innovation and Digital Economy. She highlighted key points and recommendations from the various sessions.

3.5 Closing Remarks

Mr. Adesola Akinsanya, the Chairperson of the Nigeria Internet Governance Forum Multistakeholder Advisory Group thanked all the guests, speakers, moderators, rapporteurs, participants as well as organizations that participated and supported the NIGF 2023. He reiterated the Multistakeholder nature of the NIGF brings all stakeholders together to discuss how to work together for a secure and inclusive digital future for Nigeria. He proceeded to invite all participants to the Africa IGF 2023 holding in Abuja, Nigeria from the 19th-21st September and the UN-IGF 2023 holding from the 08th of October – 12th of October 2023 in Kyoto, Japan. He highlighted that the communique will be developed and shared with all stakeholders, as well as uploaded on the NIGF's website.

Session	Participants	
·	Physical E D L A	Online
Main Session	194 ISEKIA	275
Session 1		34_E FOKUM
Session 2	22	26
Sesssion 3	25	19
Session 4	18	17
NYIGF		170
Women IGF		60

3.6 Zoom Participation Statistics