



NATIONAL DIGITAL ECONOMY POLICY AND STRATEGY (2020-2030)

For A DIGITAL NIGERIA



**FEDERAL MINISTRY OF
COMMUNICATIONS AND
DIGITAL ECONOMY**

Leveraging Digital Technology for
National Economic Development





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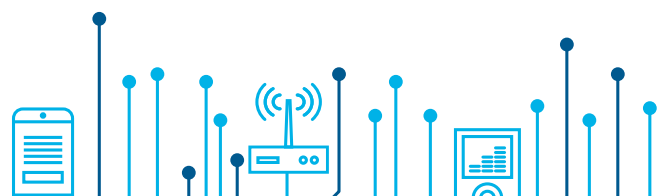
VISION AND MISSION

VISION

“To transform Nigeria into a leading digital economy providing quality life and digital economies for all.”

MISSION

We build a nation where digital innovation and entrepreneurship are used to create value and prosperity for all.



PRESIDENT'S MANDATE



The National Digital Economy Policy and Strategy (NDEPS) has been developed in line with the Presidential directives that were given to the Honourable Minister of Communications and Digital Economy on assumption of office. Digital technologies are transforming every aspect of our lives and the NDEPS will enable Nigeria to take advantage of them in order to become a leading player in the global digital economy.

Our desire to fast-track the development of our digital economy informed the decision to rename the Ministry of Communications to the Federal Ministry of Communications and Digital Economy. This expanded the Ministry's schedule to include the Digital Economy mandate and the development of our digital economy will facilitate the diversification of the economy. We are committed to the diversification of the economy and digital technologies will provide an important catalyst for this.

The pillars of the NDEPS have been carefully selected to include all the key aspects that Nigeria needs to focus on in order to actively participate in the global digital economy. Special consideration has also been given to our areas of strength and comparative advantage as a country. Nigerians are highly innovative and a thriving digital economy will create employment opportunities for our teeming population and support in lifting millions of Nigerians out of poverty. Furthermore, a digital economy will accelerate the attainment of our key objectives of improving security, reducing corruption and expanding the economy.

It is to this end that I have directed the Honourable Minister of Communications and Digital Economy to work with all relevant government agencies to ensure that we rapidly expand our digital economy to take advantage of the immense opportunities on the continent and across the globe.

I commend the Honourable Minister of Communications and Digital Economy, the Expert Review Committee and all stakeholders who participated in the development and review of the NDEPS. I am happy with its level of implementation so far and further urge all Federal Public Institutions and stakeholders to ensure its full and successful implementation.

A handwritten signature in black ink, appearing to read 'Buhari'.

Muhammadu Buhari

FOREWORD

The National Digital Economy Policy and Strategy has been developed to reposition the Nigerian Economy in order to take advantage of the many opportunities that digital technologies provide. This is in line with the vision of President Muhammadu Buhari, GCFR, to diversify the economy of Nigeria away from dependence on the oil and gas sector. The growth of the digital technology sector over the past few years is a good indication that this sector can serve as a catalyst for the rapid development of the economy.

His Excellency, President Muhammadu Buhari, GCFR, approved the redesignation of the Federal Ministry of Communications as the Federal Ministry of Communications and Digital Economy (FMoCDE) on the 17th of October, 2019. This has clearly positioned Nigeria as early adopters of digital technology and it gives us a good opportunity to become major participants in the growing global digital economy.

The redesignation of the Ministry is in line with the priority areas that the Federal Government asked the Ministry to focus on. Among the priorities assigned to the Federal Ministry of Communications and Digital Economy is the Development and Implementation of a Digital Economy Policy and Strategy for Nigeria.

This Digital Economy Policy and Strategy document is based on the FMoCDE's 8-pillars for the acceleration of the National Digital Economy for a Digital Nigeria. The 8 pillars are:

1. Developmental Regulation;
2. Digital Literacy & Skills;
3. Solid Infrastructure;
4. Service Infrastructure;
5. Digital Services Development & Promotion;
6. Soft Infrastructure;
7. Digital Society & Emerging Technologies; and
8. Indigenous Content Development & Adoption.

These pillars align well with the Economic Recovery and Growth Plan of the Federal Government and also address the 3 key focus areas of Mr. President, namely economic development, anticorruption and security.

The task of developing the National Digital Economy is a huge one and we call on all stakeholders to make an input to the process and support in the implementation. As

a National document, we also encourage the States and Local Government areas to cascade these policies and strategies so that we can be on the same page as we achieve the vision of this document which is “To transform Nigeria into a leading global digital economy providing quality life and digital economies for all.”

Dr Isa Ali Ibrahim (Pantami), FNCS, FBCS, FIIM, MCPN
Honourable Minister
Federal Ministry of Communications and Digital Economy
(November 2019)

President Buhari's Full Speech at #eNigeria2019

I am delighted to participate in this Opening Ceremony of the 2019 e-Nigeria Conference, Exhibition and Awards.

Globally, the Digital Economy is expanding at a very fast pace. In just a few years, this platform has transitioned from being a luxury to an absolute necessity. It is in recognition of this fact that we decided to re-designate the Federal Ministry of Communications as the Federal Ministry of Communications and Digital Economy with a mandate to develop and implement a harmonized and well-coordinated digital economy policy and strategy for Nigeria.

The second quarter report by the National Bureau of Statistics for 2019 showed that the Information and Communications Technology sector contributed an impressive 13.85% to the Gross Domestic Product (GDP) of Nigeria. This clearly shows the importance and potential of the ICT sector to our job creation and economic diversification agenda.

Already, Nigerian ICT startups are leaving their mark on the global stage. For example, at the Gulf Information Technology Exhibition (GITEX), a Nigerian Artificial Intelligence solution provider, Chiniki Guards, took first place, beating 750 contestants from 73 countries. We shall continue to encourage and support such digital entrepreneurs to develop innovative solutions for local and global challenges.

In public service, the digitisation of key activities such as the use of the Bank Verification Number (BVN), Treasury Single Account (TSA) and the Integrated Payroll and Personnel Information System (IPPIS) has enabled us to save cost and fight corruption.

Of course, as we celebrate the successes and explore the opportunities in this sector, we must remain mindful of its threats. We all know how the use of unregistered and improperly registered SIM cards by terrorists is a key national security threat.

Today, I am informed that over 9.2 million SIM cards have either been normalized, blocked or deactivated in less than 40 days due to improper registration. We encourage all Nigerians to ensure that their phones are properly registered. As a Government, our priority is to protect the lives and properties of all Nigerians.

Ladies and Gentlemen, you will all recall that at e-Nigeria 2018 conference, we directed that all government funded ICT projects must be reviewed and cleared by National Information Technology Development Agency (NITDA). Our goal was to enhance the efficiency and effectiveness of government procurement processes. Today, I am informed that through this directive, government has saved over 16.8 billion Naira. I want to encourage the Ministry and NITDA to sustain this tempo.

Our recent introduction of the Nigerian E-government Masterplan will further consolidate our successes to date and increase interoperability among the different Ministries, Departments and Agencies of government.

A key requirement of the E-government Masterplan is for all government institutions to create a Digital Transformation Technical Working Group that will work with the Ministry of Communications and Digital Economy to ensure seamless and coordinated implementation of projects, programs and policies.

Furthermore, the Nigerian e-Government Interoperability Framework, the Enterprise Architecture and the Nigeria Data Protection Regulation are in place and all Ministries, Departments and Agencies are expected to comply with these policies.

I have therefore directed the Federal Ministry of Communications and Digital Economy to develop training and sensitization programs that will be rolled out across all key MDAs with immediate effect to ensure seamless implementation of the masterplan. I wish you very fruitful and impactful deliberations as I look forward to receiving a comprehensive report with your recommendations on how we can improve and expand Nigeria's digitization agenda for the betterment of our country.

Thank you very much for your attention. I hereby declare this Conference open.



President Muhammadu Buhari, GCFR, Unveiling the NDEPS on November 28, 2019

PREFACE

On the 12th of June, 2019, His Excellency, Muhammadu Buhari, President of the Federal Republic of Nigeria, pledged to lift 100 million Nigerians out of poverty in the next 10 years.

In line with this goal, and that of diversifying the economy, various sectors will contribute towards achieving the overall poverty reduction goals. Mr President recognized the critical role that digital technologies can play in this process and recently approved the redesignation of the Federal Ministry of Communications as the Federal Ministry of Communications and Digital Economy. In the new appellation, communications refers to the channel, digital refers to the content and economy indicates the central focus of the entire process.

According to a 2016 Report by Oxford Economics, the global digital economy is valued at \$11.5 trillion dollars or about 15.5% of the Global Economy. This value is expected to rise significantly within the next few years. This Digital Economy Policy and Strategy document aims to provide a plan for using digital technology as a platform for stimulating growth in all sectors of the economy through the development of a digital economy for the country.

Nigeria has the largest population in Africa, with an average age of 18 years, the biggest economy on the continent, the largest natural gas reserves and the one

of the youngest populations on earth. In terms of the nation's geographic position, it is located just between the central and western parts of Africa and offers ready access to over half of the African continent, represented by those that reside in Western and Central Africa, as well as the approximately 200 million people living in Nigeria. All these indicators describe potentials that can be harnessed for the benefit of the economy. However, there are a number of things to be put in place before our latent potential can drive the economy.

The first issue that needs to be addressed is the Developmental Regulation pillar. It will provide support for the effective regulation of the digital technology sector in a way that enables development. Citizens are generally regarded to be the greatest assets in any economy and the same applies to the digital economy. To drive the digital economy it is important to develop a large pool of digitally literate and digitally skilled citizens. There is currently no detailed data on the state of digital literacy in Nigeria but data on technology adoption, financial inclusion and broadband penetration in rural areas suggest the level of digital literacy is relatively low. There is a need to support a programme for mass digital literacy and this will be addressed in the Digital Literacy & Skills pillar.

The Solid Infrastructure pillar, for example broadband penetration, is another key

issue to be addressed. A significant improvement in the current broadband penetration of 35.4% is critical for the development of a digital economy in Nigeria. According to a study by ITU, a 10% increase in mobile broadband penetration in low income countries yields an increase of at least 1.6% in the Gross Domestic Product (GDP). The deployment of fibre networks around the country will provide a veritable platform for expanding broadband access but lingering issues like inconsistent Right of Way (RoW) charges, reported cases of vandalism of telecom equipment and inadequate power supply have inhibited the penetration of the broadband.

There is great potential for enhanced broadband penetration due to a number of initiatives such as the 40 Terabits per second (Tbps) broadband (submarine fiber cable) capacity that exists at the landing point in Lagos. However, many of these initiatives are grossly under-utilized due to limited distribution of fibre infrastructure to the underserved areas of the country. The deployment of fibre across the country will appreciably improve broadband penetration and will have the added advantage of crashing the cost of broadband access. The deployments of the 1st and 2nd phases of the National Information and Communication Technology Infrastructure Backbone (NICTIB) will aid this process. Another ray of hope for the solid infrastructure pillar is the Infrastructure Company (Infraco) project which aims to lay 120,000km of fibre across the country to extend broadband networks to every Local Government Area (LGA) of the Federation through an Open Access Model. However, all these options will be evaluated to determine their relevance.

The growth of solid digital infrastructure is no doubt critical to the development of the digital economy, however, it is not sufficient. A digital economy also needs other conditions to be met. The solid infrastructure that broadband access provides will lead to the growth of the Service Infrastructure pillar and a proliferation of digital platforms that enable Government to Citizen (G2C), Citizen to Citizen (C2C) and all other e-commerce models.

The National e-government Masterplan has been adopted and is currently being implemented. It will provide a one-stop-shop for interacting with government. It will also provide an Enterprise Architecture and e-Government Interoperability Framework to support platforms that can enhance interactions between government institutions on the one hand and government and citizens on the other. According to the United Nations Conference on Trade and Development (UNCTAD), Nigeria's e-commerce spending is projected to increase to \$75 billion in 2025 and the platforms created through support for the service infrastructure pillar will play an important role in this projection.

The Digital Services Development and Promotion pillar aims to drive the growth in the number of digital jobs and digital entrepreneurs in the country. With an average age of just over 18 years, Nigeria has a potential critical mass of 'digital natives' that can transform the country into a regional and global digital powerhouse. These creative Nigerians can play a key role in the creation of digital jobs across all sectors of the country; jobs that are either based on ICTs or are dependent on ICTs.

The Soft Infrastructure will focus on ensuring that people can feel safe online and that cyberthreats are quickly identified and contained. The adoption and growing popularity of the national digital identity scheme will make citizens feel safe while interfacing with the digital economy. Data protection will also play an important role in the development of the soft infrastructure.

The Digital Society and Emerging Technologies pillar will ensure that the gains of the digital economy are mapped to indices of well-being in the lives of ordinary citizens. The Indigenous Content Development and Adoption pillar will provide a policy framework that gives preference to digitally skilled Nigerians for government funded projects in line with

the Executive Orders 003 and 005 of the administration of President Muhammadu Buhari, GCFR. This pillar will also provide an enabling environment for indigenous content and the enforcement of the local content policies.

All these pillars align with the 3 key areas of focus of the administration of President Muhammadu Buhari, GCFR, namely the economy, anticorruption and security. The content of this document has been amended to reflect the observations of the participants at the eNigeria 2019 Conference, Exhibition and Awards. A total of 3,991 delegates attended eNigeria 2019.

Digital Nigeria Day

A day has been designated to promote the development of the Digital Economy in Nigeria. The day will be known as “Digital Nigeria Day” and it will be celebrated on the 24th of October every year. The 24th of October has also been recognised by the United Nations as the “World Development Information Day”.

The United Nations Resolution A/RES/65/141 announced this date and noted that “Information and communications technologies have the potential to provide new solutions to development challenges, particularly in the context of globalization, and can foster economic growth, competitiveness, access to information and knowledge, poverty eradication and social inclusion.”

Furthermore, and perhaps more fittingly, it coincides with the period when His Excellency, President Muhammadu Buhari, GCFR redesignated the Ministry as the Federal Ministry of Communications and Digital Economy (17th October 2019) and when the announcement was adopted during the Federal Executive Council meeting on the 23rd October 2019. Furthermore, the implementation

commenced a day after on the 24th of October 2019, which coincides with the “World Development Information Day”.

The Digital Nigeria Day is to be marked in every State and the activities should be coordinated by a State Coordinator, preferably a Commissioner of a relevant Ministry in the State. The Federal Ministry of Communications and Digital Economy will collaborate with the States in the promotion and celebration of the Digital Nigeria Day in a way that emphasizes the strength of the State in the implementation of the Digital Economy Policy and Strategy.

The Digital Nigeria Day will provide an opportunity to identify and promote success stories and leading lights in the expansion of Nigeria’s Digital Economy. It will focus on all strata of society, including young innovators, the elderly, people living with disabilities, internally displaced persons, etc. The activities surrounding the celebration will also incorporate a robust media enlightenment campaign.



INTRODUCTION

The Digital Economy

The Digital Economy (Definition)

The digital economy has been defined in many ways by various individuals and institutions. The European Commission defines the digital economy as an economy that “encompasses businesses that sell goods and services via the internet, and digital platforms that connect spare capacity and demand”.

The World Economic Forum and the Group of Twenty (G20) define the digital economy as “a broad range of economic activities comprising all jobs in the digital sector as well as digital occupations in non-digital sectors”.

In this Policy document, we refer to digital economy as: *Any aspect of the economy that is based on or driven by digital technologies.*

Motivation for the Development of a Digital Economy

The development of a digital economy will create new technological platforms and industries on one hand, while enhancing the efficiency and productivity of existing industries on the other.

The Fourth Industrial Revolution (4IR) is characterized by a fusion of technologies and they have blurred the lines between

the physical, digital, and biological spheres. It is fundamentally changing all aspects of our lives and reshaping economic, social and cultural paradigms across the globe.

The significant developments in the digital technology sector have increased access and lowered the cost of digital devices. Access to the Internet has improved productivity and stimulated creativity and the emergence of emerging technologies have provided a platform for developing countries like Nigeria to use digital technology to drive the economy.

ICT has been the catch phrase for technology for the last few decades. However, in recent years there has been a convergence of the sub-sectors of ICT, including information technology, telecommunications and broadcasting. Furthermore, the term ICT conveys the concept of the use of technology.

Digital Technologies, on the other hand, built upon and extends the concept of ICT to include a focus on the creation, and not just the use of technology. These technologies also encompass emerging technologies and the potential for datafication that they provide.

The digital economy will be built on these

digital technologies. This Policy aims to provide an environment for the innovative use of such technologies to develop the economy of Nigeria.

Global Context of the Digital Economy

The Digital Economy is expanding across the globe, albeit at an uneven pace across different countries. In most countries, however, the digital economy is constantly being developed.

According to a 2016 Report by Oxford Economics, the global digital economy is valued at \$11.5 trillion dollars or approximately 16% of the Global Economy. The global digital economy is also projected to account for a quarter of the global economy in the next 10 years. Nigeria currently does not have a large slice of the global digital economy but effort is being made to position the nation to play a leading role in contributing to this economy.

The World Economic Forum predicts that over 60% of global GDP will be digitized by 2022 and that over the next decade, digital platforms will be used to create close to 70% of new value. Furthermore, according to a Report by Ericsson titled “How Important Are Mobile Broadband Networks for Global Economic Development”, 10% increase in mobile broadband penetration results in approximately 0.6% to 2.8% rise in gross domestic product (GDP).

Given the wide range of adoption of digital technology, it has become clear that every country stands to benefit from it. Countries that have adopted and accepted digitalization tend to have the best rewards. It is important to note, though, that countries need to adapt these digital technologies to their specific context in order to maximize the benefits. The

successful and sustainable adaptation of technology requires that countries play to their strengths and mitigate the associated risks.

Globally, the United States, China and India are examples of populous countries who have thriving digital economies. These countries have the largest populations in their regions and Nigeria also has the largest population in Africa. This strength can be used to an advantage in the development of a sustainable digital economy in Nigeria.

With a Gross Domestic Product (GDP) valued at \$397 Billion, Nigeria has the largest economy in Africa based on this 2017 World Bank estimate. Nigeria is 6th largest producer of oil and has the 10th largest oil reserves in the world and this sector has had a defining role on the economy of Nigeria. However, the volatility of the oil sector can have a negative impact on a mono-economy that is dependent on oil. To address this, deliberate efforts are being made by the administration of President Muhammadu Buhari, GCFR, to change this by diversifying the economy.

The Digital Economy in the Nigerian Context

ICT's Contribution to Nigeria's GDP – An Emerging Prospect

ICT's contribution has been one of the fastest growing components of Nigeria's GDP and is emerging as its most important long-term growth prospect. In the second quarter of 2019, ICT contributed 13.85% to the GDP calculations, as against Oil and Gas putting in 8.82% in comparison.

With the execution of a Digital Economy strategy, the digital technology sector can double its contribution to the economy over the next five years

Nigeria's Digital Edge Advantages

Age Advantage

Youth are the enablers of any digital revolution. Therefore, with a population having an average age of just over 18 years and with 60% of the country represented by youth, it indicates that Nigeria is ready to be the foundation of an African Digital Economy.

Furthermore, seizing the initiative with the youth would make Nigeria the driver of a continent-wide digital economy under the new African Continental Free Trade Agreement (ACFTA).

Nigeria, also possesses an infrastructural advantage over its neighbours, and this should also propel the nation to a position of digital leadership on the continent.

Establishment of a Ministry of Communications and Digital Economy

There was an urgent need to have a Ministry assigned the role of coordinating the activities related to Nigeria's Digital Economy. This need led President Muhammadu Buhari, GCFR, to approve the redesignation of the Ministry of Communications as the Ministry of Communications and Digital Economy on the 17th of October, 2019. The change of name expanded the mandate of the Ministry to include a key aspect of the priority areas set for the Ministry by the Federal Government, which is the "Development and Implementation of a Digital Economy Policy and Strategy".

The name, Ministry of Communications and Digital Economy, gives a more holistic reflection of the mandate of the Ministry; communications addresses the channel, digital addresses the nature of the content and economy reflects the central focus of the activities of the Ministry, which is the development of the economy in line with the Economic Recovery and Growth Plan (ERGP) of President Buhari's administration.

The Ministry's mission statement is We Leverage Digital Technologies for National Economic Development. It encapsulates the rationale for its being the fulcrum for establishing and sustaining a national digital economy.

Pillars and Objectives of the National Digital Economy Policy and Strategy

Pillars of the National Digital Economy Policy and Strategy

The National Digital Economy Policy and Strategy shall be anchored on the 8 pillars of the 'DIGITAL NIGERIA' Roadmap of the Federal Ministry of Communications and Digital Economy (FMoCDE). These pillars are listed below:

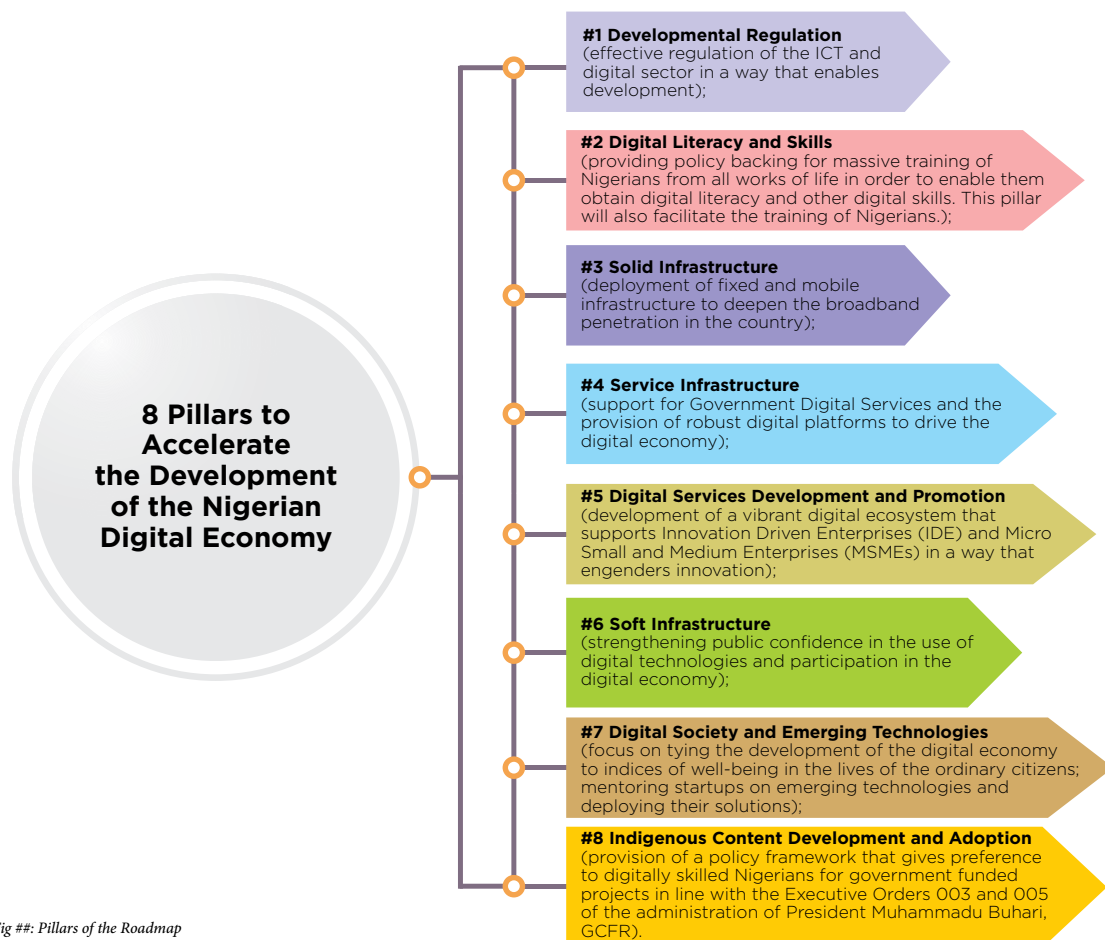


Fig ##: Pillars of the Roadmap of the Federal Ministry of Communications and Digital Economy

NATIONAL DIGITAL ECONOMY COUNCIL

DEVELOPMENTAL REGULATION



- a. Relevant Laws
- b. Digital Economy Development Fund
- c. Converged Regulations

DIGITAL LITERACY & SKILLS



- a. Digital Nigeria Programme
- b. National Committee on Digital Skills, Innovation and Entrepreneurship
- c. Mentorship Programme

SOLID INFRASTRUCTURE



- a. Nigerian National Broadband Plan
- b. Data Centres
- c. Satellite
- d. National Frequency Management

SERVICE INFRASTRUCTURE



- a. E-government Masterplan
- b. Government Digital Services
- c. Nigerian E-government Interoperability Framework (Ne-GIF)
- d. Nigerian Government Enterprise Architecture (NGEA)
- e. E-Commerce Platforms

DIGITAL SERVICES DEVELOPMENT & PROMOTION



- a. Digital Entrepreneurship
- b. Innovation Driven Enterprises (IDE)
- c. Fintechs

DIGITAL SOCIETY & EMERGING TECHNOLOGIES



- a. Digital Inclusion
- b. Financial Inclusion
- c. Emerging Technology Centres

INDIGENOUS CONTENT DEVELOPMENT & ADOPTION



- a. Promotion of Indigenous Content
- b. Support for Original Equipment Manufacturers (OEMS)
- c. Ensure Compliance with Regulatory Guidelines for Nigerian Content



Objectives of the Digital Economy Policy and Strategy

Some of the objectives of this Digital Economy Policy and Strategy document are listed below:

- i. Target 70% broadband penetration in 4 years;
- ii. To accelerate the digitalization of government processes and improve service delivery, transparency and accountability;
- iii. To improve trust, confidence and security around digital processes and activities;
- iv. To attract and grow digital jobs across all sectors of the economy;
- v. To develop the technology start-up ecosystem by actively promoting innovation and entrepreneurship;
- vi. To support the digital literacy of Nigerian Citizens, Business and Government workers and enable them to acquire cutting edge digital skills;
- vii. To achieve a 95% Digital Literacy Level in Nigeria within the next 10 years;
- viii. To develop digital education curriculum to meet the current and future needs of the Digital Economy;
- ix. To ensure that indigenous technology companies are able to participate actively in the government funded technology programmes; and
- x. To ensure that the policy and regulatory instruments are fit-for-purpose and actually support the digital business environment.



Pillar #1: Developmental Regulation

Situation Analysis

Regulation is a key tool for achieving the social, economic and environmental policy objectives of government. In order to develop a vibrant digital economy, there is a need to ensure that the proper regulatory instruments are in place.

Regulation is usually perceived as a negative word, one that stifles development and innovation. The approach of the Federal Ministry of Communications and Digital Economy is one that promotes, rather than stifles development. A preference will be given to the Developmental Regulatory approach, where development will serve as the main motivation for regulation.

Many of the existing regulatory instruments in the digital economy space have been developed in silos. As part of the activities of the developmental regulatory pillar, a preference will be given for converged regulation, where relevant regulatory bodies can co-author regulatory instruments. This will make it easier for investors and stakeholders to support the development of the sector.

Some of the existing regulatory instruments for the development of a Digital Economy include:

1. Guidelines for Nigerian Content Development in Information and Communication Technology (ICT)
2. Universal Access and Universal Service Regulations
3. Cybercrime Act 2015
4. Type Approval Regulations
5. Nigeria e-Government Interoperability Framework (Ne-GIF)
6. Nigeria Cloud Computing Policy
7. Framework and Guidelines for Information and Communication Technology (ICT) Adoption in Tertiary Institutions
8. Nigeria ICT Innovation and Entrepreneurship Vision (NIIEV)
9. Framework and Guidelines for Public Internet Access (PIA) 2019
10. Framework and Guidelines for the Use of Social Media Platforms in Public Institutions
11. Guidelines for Clearance of Information Technology (IT) Project by Public Institutions
12. Nigeria Data Protection Regulation 2019

13. Standards for Data Interoperability
14. Telecommunications Networks Interconnection Regulations
15. Consumer Code of Practice Regulations

Policy Objectives

The objectives of the Developmental Regulation Pillar include the following:

- i. To create a dynamic regulatory environment that fosters, rather than hinders, the development of a digital economy;
- ii. To review existing legislation and facilitate, where necessary, the enactment of laws that would enhance the development of digital technology sector for national growth;
- iii. To facilitate the enactment of appropriate legislation that ensures protection of digital technology infrastructure and enhances national security; and
- iv. To support the issuance of converged regulations, as well as address the issue of multiple taxation in order to create a healthy business environment for the development of the Nigerian Digital Economy.

Implementation Strategies

Some of the implementation strategies for Developmental Regulation Pillar are listed below.

The Government will:

- i. Identify constricting regulations stifling digital economy development and growth;
- ii. Identify gaps in the existing legislations that need to be bridged (or harmonised) to enable a vibrant

digital economy;

- iii. Review and harmonize all frameworks laws, standards, guidelines, frameworks and government circulars in order to create a dynamic environment for the development of a digital economy;
- iv. Enact new requisite laws (digital economy promotion acts and data protection acts), regulations, standards and guidelines necessary to address identified gaps;
- v. Create a framework of appropriate funding to catalyze innovation at all levels for the creation of a digital economy;
- vi. Review multiple taxation by creating a framework for bundling payment of taxes, especially those aspects that can affect the digital economy; and
- vii. Creation of a National Digital Economy Council (NDEC) with membership drawn from public and private stakeholders.

Pillar #2: Digital Literacy and Skills

Situation Analysis

A digital economy can only be as vibrant as the level of digital literacy of its citizens. Today, literacy no longer means just an ability to read and write. A literate person in the fourth industrial revolution must be someone that is digitally literate. According to Common Sense Media, Digital Literacy includes the ability to use technology competently, interpret and understand digital content and assess its credibility, create, research and communicate with appropriate tools. As the importance of digital technology to society grows, so does the importance of digital literacy as a tool for lifelong learning.

According to Doug Belshaw's famous 8-element Digital Literacy Model (shown below), a digitally literate person should have following skill-sets:

1. [Cg]: Cognitive --> "How to Do";
2. [Cu]: Cultural --> "How to Behave";
3. [Cn]: Constructive --> "How to Use"; and
4. [Co]: Communicative --> "How to Communicate".

They should also have the following mindsets:

1. [Cf]: Confident --> "How to Belong";
2. [Cr]: Creative --> "How to Make";
3. [Ct]: Critical --> "How to Evaluate";



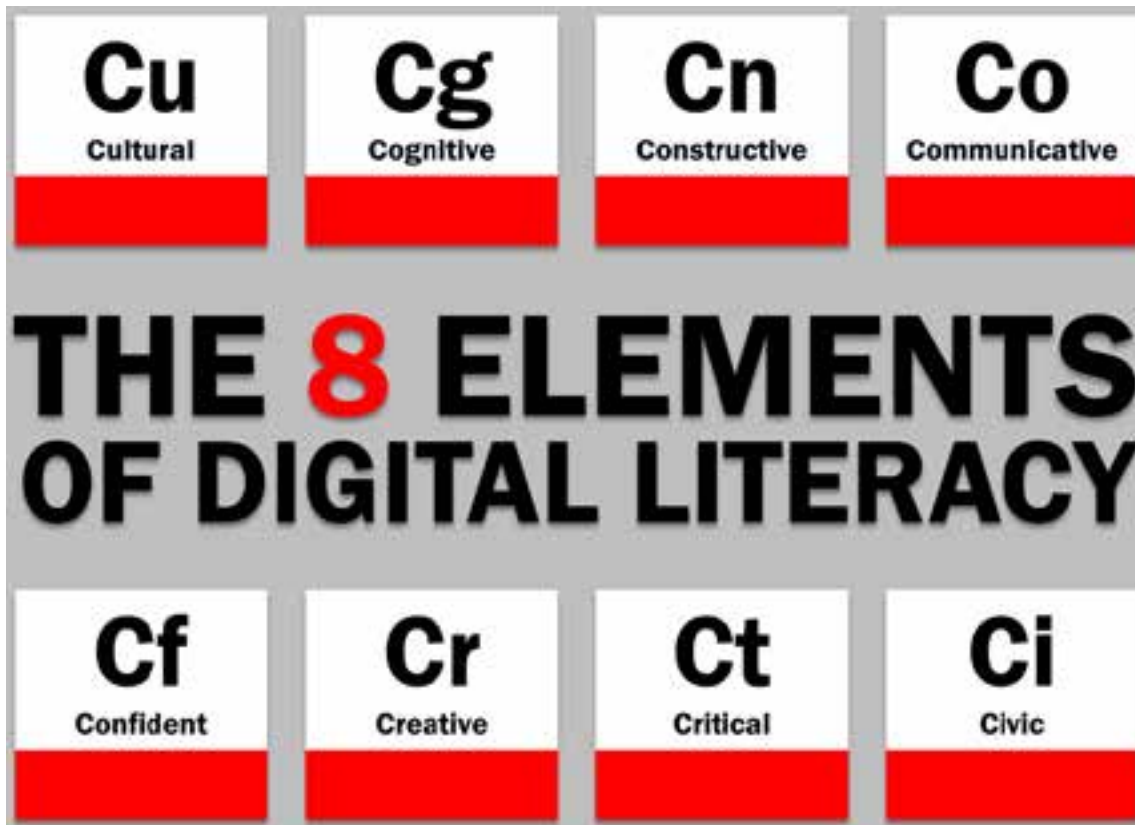


Fig 3: Digital Literacy Elements

and

4. [Ci]: Civic --> "How to Participate".

This pillar will provide policy backing for massive training of Nigerians from all works of life in order to enable them obtain digital literacy skills. The training programmes will be expected to culminate in globally recognized certifications. In addition to the foundational digital literacy skills, the pillar will support the massive training on Nigerians in emerging technologies. The target is to provide an enabling environment for the public sector, private sector, civil society and development partners to support the training of 5 million Nigerians.

The Digital Nigeria programme will also help Nigerians to imbibe the following skills:

- (i) Analytical thinking and innovation;
- (ii) Active learning;

- (iii) Creativity;
- (iv) Tech Design;
- (v) Critical Thinking;
- (vi) Complex Problem Solving;
- (vii) Leadership and Social Influence;
- (viii) Design Thinking;
- (ix) Emotional Intelligence;
- (x) Reasoning; and
- (xi) System Analysis.

A Digital Skills Database will also be created to identify the digitally literate Nigerians and their levels of competence. This would make it easy to match skills to jobs.

The Imperative of Capacity Building

His Excellency, President Muhammadu Buhari, GCFR, reiterated the imperative on capacity building in the implementation of a digital economy. He stated this when he gave the following directive during the official unveiling of the Digital Economy

Policy and Strategy on the 28th of November, 2019:

“I have therefore directed the Federal Ministry of Communications and Digital Economy to develop training and sensitization programs that will be rolled out across all key MDAs with immediate effect to ensure seamless implementation of the masterplan.”

Policy Objectives

The objectives of the Digital Literacy & Skills Pillar include the following:

- i. To integrate digital literacy and skills into the national education curriculum at all levels;
- ii. To support training and capacity building among public sector employees in the development and use of digital tools and applications to improve the delivery of government services;
- iii. To create a pool of Nigerians with digital skills validated by globally recognized certifications;
- iv. To bridge the gap between the academia and industry; and
- v. To lower the access barrier to digital tools for the citizens;

Implementation Strategies

Some of the implementation strategies for Digital Literacy & Skills Pillar are listed below.

The Government will:

- i. Partner with relevant institutions to promote globally competitive trainings that focus on digital technologies
- ii. Integrate digital literacy and skills development into the curriculum of schools at all tiers of education
- iii. Provide support for digital literacy and skills development for Nigerians across the country and in various sectors of the economy

- iv. Develop a digital literacy and skills development framework that will lead to trainees acquiring globally recognized certifications
- v. Ensure that digital literacy becomes a basic requirement for public sector employees
- vi. Leverage the existing network of schools, training institutes, Computer Based Testing (CBT) centres, community resource centres, amongst others, to facilitate digital skills training programmes across the country
- vii. Facilitate the training and retooling of teachers and facilitators at all levels, to enable them serve as trainers in the digital literacy and skills programme
- viii. Ensure that the digital skills training programme incorporates children, women, internally displaced persons and the physically challenged
- ix. Promote the development and distribution of instructional materials in electronic format
- x. Partner with the private sector to make it easier for Nigerians from all walks of life to acquire digital tools
- xi. Support the ‘catch-them-young’ programmes to create an enabling environment for Nigerians to become conversant with digital skills from a young age
- xii. Encourage the states and local governments to support the goal of 95% digital literacy levels over the next 10 years
- xiii. Support relevant mentorship models for experience sharing, skills and confidence building
- xiv. Support the creation of rural coding academies (RCAs) to meet the training needs of rural dwellers
- xv. Increase the synergy between all institutions that have a mandate related to education in the digital literacy and skills programme

Pillar #3: Solid Infrastructure

Situation Analysis

This pillar will address the deployment of fixed and mobile infrastructure to deepen the broadband penetration in the country. The solid infrastructure pillar is pivotal because without broadband access across the country it will be difficult to have an inclusive and vibrant digital economy.

Terrestrial and satellite networks will be harnessed to significantly increase the level of broadband penetration above its current level of about 35%. Nigerians currently have access to 2G, 3G and 4G networks, while trial deployments for the 5G networks are in progress. 2G networks have been deployed across the country but the current reach of the 3G and 4G networks is still at a low level with a spread of 26.03% and 9.07% respectively. This pillar will aim to boost these levels.

There have been some initiatives over the years that have been aimed at developing the infrastructure for a digital economy. One of such initiatives is the focus on deploying broadband across the country, especially with the deployment of a national fiber optic-based network. The aim is to distribute approximately 10 terabytes of capacity already delivered to landing points in Nigeria. As such, there is an urgent need to accelerate the pace of ongoing efforts, and also to introduce new initiatives to address these and other challenges. Nigeria has achieved 61.4% Internet penetration, mainly through

mobile devices

It is estimated that to achieve full broadband penetration, 120,000km of fibre need to be installed, given Nigeria's land mass. The Infrastructure Company (InfraCo) Project is a public private partnership (PPP) model, based on providing counterpart funding to ensure that at least 10 Gbps Point of Access (PoA) fiber optic capacity is accessible in all the 774 local government areas (LGAs) in Nigeria. The project has the potential of delivering about a quarter of the fibre required for full broadband penetration.

The 'Right-of-Way' (RoW) is a major issue that has impeded the deployment of fibre across the country. Many States have not adhered to the agreement by the National Economic Council that the RoW charges be pegged at N145/linear meter. The State Governors are currently being engaged to reverse this trend.

Therefore, to complement broadband use via the mobile networks, and fibre services, especially in rural locations, satellite services via the Nigerian Communications Satellite (NigComSat) shall be utilised. Novel connectivity options such as connectivity via White Space, will be explored.

The 2013 and 2017 access gap report showed that 36.8million and 33.2million people lack access, respectively. The

2019 access gap report is being prepared and there is a plan to provide access to an additional 984,000 people in the next one year.

Policy Objectives

The objectives of the Solid Infrastructure Pillar include the following:

- i. To accelerate the penetration of affordable and quality broadband Internet in the country;
- ii. To foster broadband usage for national development;
- iii. To ensure the rapid development of a broadband policy support and implementation framework;
- iv. To harmonize physical infrastructure planning and deployment to include planning for telecoms services; and
- v. To support the proliferation of Data centres across the country.

Implementation Strategies

Some of the implementation strategies for Solid Infrastructure Pillar are listed below.

The Government will:

- i. Develop a new Broadband Plan
- ii. Deepen Broadband penetration from 35% to 75% in 4 Years
- iii. Support the deployment of optic fibre cable using the infrastructure company (InfraCo) Project under the Open Access Model
- iv. Promote both supply, and demand side policies that create incentives

- v. for broadband backbone and access network deployment
- v. Facilitate broadband development and deployment, leveraging on existing universal service frameworks;
- vi. Deepen broadband penetration through the launch and use of satellite systems
- vii. Promote the development and deployment of robust and scalable data centre infrastructure
- viii. Promote efforts to close access gap, through the use of satellite system, Whitespace and other novel and innovative systems
- ix. Provide special incentives to encourage the increase of investment in broadband rollout
- x. Enhance the capabilities of the Nigerian population to make use of, and contribute to broadband, and in so doing increase its relevance to the socio economic development of the country and its populace;
- xi. Establish methodology for assessing progress of broadband development in a structured way
- xii. Ensure that in all parties adhere to the prevailing Right of Way (RoW) agreement; and
- xiii. Create legislation to classify core digital infrastructure as Critical National Infrastructure.
- xiv. Boost capacity and activities of the Internet Exchange Point of Nigeria (IXPN)



Pillar #4: Service Infrastructure

Situation Analysis

The service infrastructure pillar will address the provision of robust digital platforms to drive the digital economy. These platforms enable transactions and interactions online. They also have the added advantage of enabling a supply of data from which both government and the private sector can gain useful insights with which to develop the digital economy.

This pillar supports the provision of a one-stop online platform for government to interact with citizens and investors. It supports the deployment of government digital services and a paperless system. The rollout of the solid infrastructure is pivotal but without digital platforms to access services, the goal of developing a digital economy will remain elusive.

Digital platforms can be defined as “multisided marketplaces with business models that enable producers and users to create value together by interacting with each other” <! Carlo Rossotto et. al. (2018), “Digital platforms: A literature review and policy implications for development”, CRNI, pages 1-17.> These platforms allow users to carry out day to day business transactions with the help of digital technologies. There are a number of platforms that are currently being used by

the Nigerian government.

They include the Integrated Payroll and Personnel Information (IPPIS), Government Integrated Financial Management Information System (GIFMIS) and REMITA platforms. The first two are focused on government activities while the REMITA platform is used by the government and the public.

It is necessary to create some Digital Only Government to Citizens (G2C) and Citizen to Government (C2G) use cases to popularize the use of digital platforms in the interactions between government and citizens. The www.services.gov.ng portal provides a one-stop portal for accessing government services. As part of efforts to develop the service infrastructure, this portal should be enhanced and promoted.

Policy Objectives

The objectives of the Service Infrastructure Pillar include the following:

- i. Implementation of the approved e-government Masterplan, including the e-Government Interoperability Framework (NeGIF) and Enterprise Architecture;
- ii. Promotion and adoption of digital platforms
- iii. Use of digital platforms for the

- extraction and warehousing of anonymized big data for public good.
- iv. Promote the creation and use of digital platforms in private and non-governmental sector

Implementation Strategies

Some of the implementation strategies for Service Infrastructure Pillar are listed below.

The Government will:

- i. Support the process for the establishment of a Presidential Committee on e-Government
- ii. Ensure the promotion and adoption of a Nigeria e-Government Interoperability Framework
- iii. Ensure the promotion and adoption of the Nigeria Government Enterprise Architecture (NGEA) across Federal Public Institutions (FPIs)
- iv. Create Digital Transformation Technical Working Groups (DT-TWG) across all Federal Public Institutions (FPIs)
- v. Enhance the Nigerian Open Data programme across the Federal and State Governments
- vi. Create/review enabling laws and regulations to enforce eGovernment masterplan
- vii. Support the training of relevant government officials to use data to make better decisions
- viii. Provide funding to network all FPIs and digitize some of their key services
- ix. Increase sensitization on the provisions of the NDPR
- x. Promote the development of creative e-commerce platforms
- xi. Enhance and promote the www.services.gov.ng one-stop online platform and GOVNET for accessing government services
- xii. Support the development special intervention platforms for microbusinesses



Pillar #5: Digital Services Development and Promotion

Situation Analysis

This pillar will focus on the development of a vibrant digital ecosystem that supports Innovative Driven Enterprises (IDEs) and Micro Small and Medium Enterprises (MSMEs) in a way that engenders innovation.

According to a March 2019 Report by the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), Micro Small and Medium Enterprises (MSMEs) constitute 96% of all the business activities in the country. The Report also noted that 90% of all the businesses in the country fall under the micro category. As such, it is necessary to interface with MSMEs in order to develop the economy and use digital technology to drive economic activity in the country.

The concept of Innovation Driven Enterprises (IDEs) has been promoted by leading institutions such as the Massachusetts Institute of Technology (MIT) and these enterprises, no doubt, have great advantages. In contrasting IDEs and MSMEs we find that IDEs tend to have a global outlook while SMEs tend to start small and choose to remain local. IDEs also generally require more capital than SMEs and tend to integrate innovation more into their activities more than SMEs.

However, like most technology driven deployments, it is important to take cognizance of the local peculiarities when pursuing global ideals. With such a large population of SMEs, it is worthwhile to adopt an approach that takes into account the vast numbers of SMEs in Nigeria and the strong desire to encourage them to embrace innovation. This approach will combine SMEs and IDEs to give a local variant for the Nigerian sector called: SMILE= SME + IDE. 'SMILE' is a coined acronym for 'Small Medium Innovation Leaning Enterprises'.

This pillar will lead to SMILEs by taking the extensive MSME structure into account and integrating innovation in order to create a number of digital-driven SMEs as a bridge to creating a pool of IDEs as the nation develops her digital economy. Top-notch entrepreneurs will also be chosen and funded to scale their impact.

Opportunities for job creation are a key outcome for the implementation of the strategies of this pillar. We want to have enabling environment for the creation of jobs, not only in the public sector but mainly in the private sector.

The Nigerians in diaspora can be a key asset in driving the Digital Economy, especially

as it relates to this pillar. Nigerians in the diaspora should be engaged with a view to creating a support network for the IDEs and digitally-enabled MSMEs in the country.

Policy Objectives

The objectives of the Digital Services Development and Promotion Pillar include the following:

- i. Support for the creation of innovation driven enterprises and digitally-enabled MSMEs;
 - ii. Facilitation of mentorship and funding programmes to support innovation driven enterprises and digitally-enabled MSMEs; and
 - iii. Enabling innovation driven enterprises and digitally-enabled MSMEs to participate in the government procurement process, through the introduction of a bimodal procurement system to accommodate them.
 - iv. Facilitate the launch of Digital Innovation and Scale-up Centres (DISC), IT and innovation hubs around the country to target digital innovations and the scale-up of digital startups.
- Implementation Strategies**
- Some of the implementation strategies for Digital Services Development and Promotion Pillar are listed below.
- The Government will:
- i. Identify, promote and celebrate Innovation Driven Enterprises (IDEs);
 - ii. Support for MSMEs to integrate digital technologies into their operations;
 - iii. Create an incentivized mentorship programme that connects to MSMEs to indigenous and foreign technology driven mentors;
 - iv. Incorporate IDEs and digitally-enabled MSMEs into government funded projects and projects of large corporations;
 - v. Facilitate funding for the Innovation and Start-Up Ecosystem;
 - vi. Conduct a technology adoption survey of MSMEs with a view to lowering the barrier to adopting technology;
 - vii. Based on the technology adoption survey in the first year, double the number of digitally-enabled businesses annually;
 - viii. Create an enabling environment for Nigerians in the diaspora to support the IDEs and digitally-enabled MSMEs;
 - ix. Foster collaboration between the stakeholders of the innovation and entrepreneurial ecosystem;
 - x. As key stakeholders, States are expected to support digital entrepreneurs with co-working spaces, incentives and enabling policy environments for success;
 - xi. The Federal and State Ministries of Education should update the curricula of schools at all levels to include training on emerging technologies; and
 - xii. Create an enabling environment for building the capacity of IDEs and MSMEs, mainly through e-learning channels.



Pillar #6: Soft Infrastructure

Situation Analysis

The soft infrastructure pillar focusses on strengthening public confidence in the use of digital technologies and participation in the digital economy. The pillar will address the importance of cybersecurity and other standards, frameworks and guidelines that encourage citizens to go digital. Data privacy and the deployment of technologies like the public key infrastructure are addressed in this pillar.

Many Nigerians do not have confidence in online services, especially when they relate to financial transactions because of the perception that they are unsafe online. They also tend to believe that their privacy is compromised online. The National Information Technology Development Agency (NITDA) and other relevant government institutions are changing this narrative. The Nigeria Data Protection Regulation (NDPR) is one of the instruments that addresses this issue. This is a good starting point but there is a need to further strengthen the regulatory instruments that govern data protection and privacy.

The need for digital identity lies at the root of citizenship and service delivery in a digital economy. With identity being digitized and tied to biometrics, initiatives like the National Identity Number (NIN), Biometric Verification Number (BVN), Voter IDs and SIM-card registration details

can provide channels for identifying citizens in order to facilitate credible transactions.

There are currently ongoing conversations around the harmonization of biometrics and IDs. About 30 government institutions that have access to citizen data are members of the Harmonization Committee. The general idea involves the mapping of the disparate databases to the NIN database. For example, from about 15million financial sector records, around 6million new candidates were identified for NINs. The Committee is embracing an ecosystem approach to the integration that involves partnership with the private sector. The NIN database currently has 38.3 million entries.

Cybersecurity

Cybersecurity speaks about the protection of digital assets similar to how physical security addresses the protection of physical assets. The viability and sustainability of any economy requires that security is guaranteed. A robust cybersecurity plan protects digital assets and allows citizens to have confidence in the digital economy.

A proper cybersecurity approach needs to take the different aspects of cyberspace into account. Cybersecurity is not a local issue and it requires collaboration with relevant institutions around the globe. One of such collaborative approaches

involves the signing of treaties and one key treaty is the Budapest Convention.

The Budapest Convention, also known as the Convention on Cybercrime of the Council of Europe, is an international instrument that serves as a guideline for countries that wish to develop a comprehensive national legislation against Cybercrime. It also provides a framework for international cooperation between countries that are party to the treaty. Nigeria is yet to sign this treaty but efforts are underway to get the country to sign the treaty, considering its great benefits.

It is also important for Nigeria to adopt the African Union Convention on Data Protection and Cybersecurity, also known as the Malabo Convention.

Policy Objectives

The objectives of the Soft Infrastructure Pillar include the following:

- i. Review and strengthen cybersecurity instruments to ensure that Nigerians are secure online;
- ii. Strengthening of the regulatory instruments and institutional framework that governs data protection and privacy; and
- iii. Support for the accelerated implementation of a Digital Identity Programme.

Implementation Strategies

Some of the implementation strategies for Soft Infrastructure Pillar are listed below.

The Government will:

- i. Identify gaps in existing regulatory frameworks, cybersecurity frameworks, standard operational procedures and guidelines.
- ii. Review and harmonize all existing regulations, cybersecurity

frameworks, standards, procedures and guidelines.

- iii. Establish compliance framework to ensure the adherence to standards, procedures and guidelines.
- iv. Register and certify Cybersecurity Service Providers (CSP) who will ensure that standard procedures and guidelines are complied with across sectors.
- v. Establish a framework for sustainable capacity development to boost knowledgeable and skilled cybersecurity workforce across digital economy institutions.
- vi. Support the enhanced coordination of sectoral Computer Emergency Readiness and Response Team (CERRT) across sectors.
- vii. Support Cybersecurity Centres of Excellence (CoE) focused on Research and Development, Innovation and Entrepreneurship.
- viii. Support the ratification and signing of global treaties that can sustain and enhance digital economy.
- ix. Identify and assign responsibilities and roles to specific government institutions for data and privacy protection, intellectual property right enforcement, cybercrime enforcement, research and development, innovation and entrepreneurship in order to foster the coordinated growth of digital economy.
- x. Identify the barriers militating against the full implementation of digital identity scheme and data harmonization in order to accelerate full scale digital identification.
- xi. Design and develop specific cybersecurity training to enhance the capacity and capability of law enforcement agents to tackle cybercrime.

Pillar #7: Digital Society and Emerging Technologies

Situation Analysis

This pillar will focus on tying the development of the digital economy to indices of well-being in the lives of the ordinary citizens. Digital and financial inclusion are some of the issues that this pillar seeks to address.

The Digital Society and Emerging Technology pillar will map the development of the digital economy to the attainment of 7 of the Sustainable Development Goals (SDGs) that are most relevant to the digital economy, namely:

1. Poverty Eradication;
2. Good Health and Well-being;
3. Quality Education;
4. Decent Work and Economic Growth;
5. Industry, Innovation, and Infrastructure;
6. Reducing Inequality; and
7. Sustainable Cities and Communities.

Emerging technologies can enable the nation to attain these goals. As such, an emerging technology programme will be introduced in the country. Options will also be explored on the use of emerging technologies for addressing national challenges.

The Emerging Technology programme will address the following areas, amongst

others:

- i. Coding with relevant tools;
- ii. Internet of Things (IoT);
- iii. Big data analytics;
- iv. Artificial intelligence (AI);
- v. Machine Learning;
- vi. Mobile app development;
- vii. 3D Printing;
- viii. Virtual Reality and Augmented Reality (VR/AR);
- ix. Cyber security;
- x. Wireless Power;
- xi. Quantum Computing;
- xii. Cloud Computing; and
- xiii. Blockchain.

Digital Innovation and Entrepreneurship

Digital Innovation and Entrepreneurship form the bedrock of the Digital Economy. The ecosystem that they create stimulates the creation of innovative new ventures that drive the digital economy. According to the Global Entrepreneurship Monitor, Nigeria is rated the country with the best entrepreneurial activity in Africa as shown in the figure below.

Top ten countries with the highest entrepreneurial activity

% of population aged 18–64 who are either an entrepreneur or owner-manager of a new business, average 2013–18

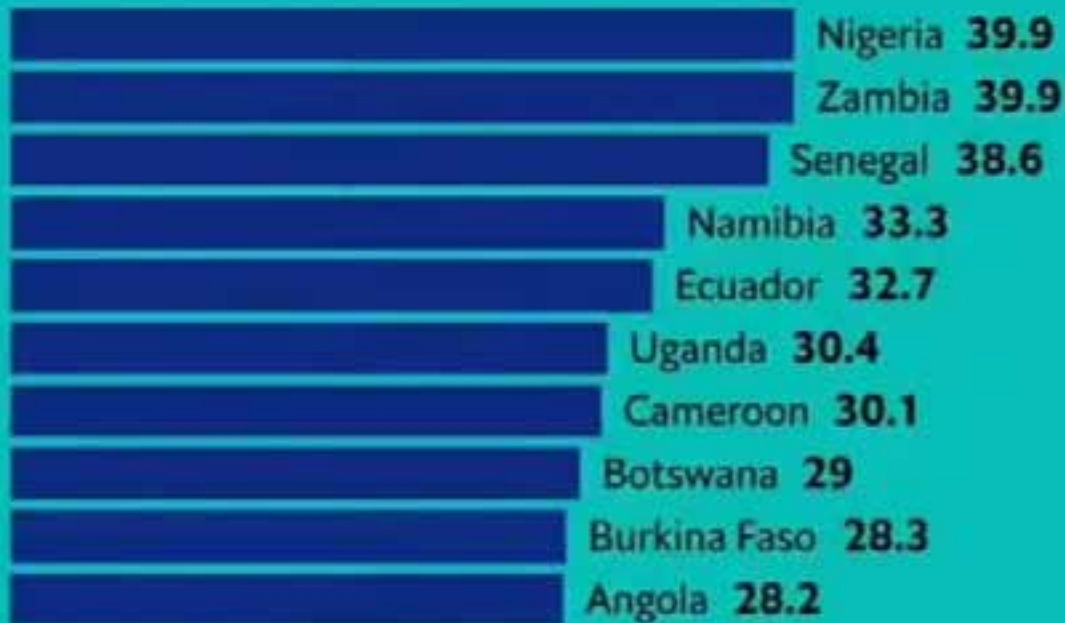


Fig 4: Top 10 African Countries Based on Entrepreneurial Activity

Policy Objectives

The objectives of the Digital Society and Emerging Technology Pillar include the following:

- i. Enable a progressively increase the contribution of digital technologies to the economy;
- ii. Promote research in emerging technologies with a view to getting digital technology to improve the livelihood of Nigerians;
- iii. Active focus on Skills-rather-than-Degrees; and
- iv. Accelerate digital inclusion in the country by taking advantage of the spread of existing infrastructure across the country.

Implementation Strategies

Some of the implementation strategies for Digital Society and Emerging Technology Pillar are listed below.

The Government will:

- i. Support the emergence of new services and industries that are enabled by emerging technologies
- ii. Facilitate services and workforce transformation in the public service using emerging technologies, starting with some pilot Ministries, Departments and Agencies;
- iii. Foster digital inclusion for People Living with Disabilities (PLWDs) and other digitally excluded people;
- iv. Supports the emergence of e-services

- in leading sectors of the economy;
- v. Prioritize financial inclusion with a view to reducing the current percentage of unbanked adults by 50% within the next 4 years;
- vi. Collaborate with the private sector, academia and development partners to create Centres of Excellence in Emerging Technologies;
- vii. Include topics on emerging technologies across the broad spectrum of formal and vocational education in the country;
- viii. Encourage tertiary institutions to introduce/enhance courses on emerging technologies through the relevant regulatory institutions;
- ix. Support Awards of Excellence in Emerging Technologies to celebrate new innovations and innovators;
- x. Create an enabling environment for National Youth Corps members to acquire digital entrepreneurship skills;
- xi. Promote sector specific emerging technology centres through relevant FPIs such as NITDA and NCC;
- xii. Convert campuses of the Digital Bridge Institute around the country to emerging technology, digital literacy and digital skills centres;
- xiii. Enlist the support of Nigerian ICT Professionals in the diaspora;
- xiv. Establish viable Digital Technology institutions to promote the deployment of digital services across the key sectors of the country.



Pillar #8: Indigenous Content Development and Adoption

Situation Analysis

This pillar will provide a policy framework that gives preference to digitally skilled Nigerians for government funded projects in line with the Executive Orders 003 and 005 of the administration of President Muhammadu Buhari, GCFR. It will identify jobs that are currently being outsourced and support the repatriation of these jobs to digitally skilled Nigerians.

Promoting and adopting indigenous content will enable Nigeria to benefit from the increasingly global digital technology market. It will also help to conserve foreign exchange for the country and boost exports. The activities in this pillar will ensure that “Made in Nigeria” digital economy products are of globally accepted quality.

The pillar will also seek to make Nigeria a global outsourcing destination for digital jobs. The implementation of strategies within this pillar will also actively pursue the Impact sourcing business process outsourcing (BPO) model, where digital jobs are deliberately outsourced to economically disadvantaged areas in order to improve their economic conditions.

Policy Objectives

The objectives of the Indigenous Content

Promotion and Adoption Pillar include the following:

- i To develop indigenous businesses to become world class service providers;
- ii To increase public sector patronage of indigenous digital technology businesses; and
- iii To create conditions for iterative problem solving by indigenous digital technology and Innovation service providers.

Implementation Strategies

Some of the implementation strategies for Indigenous Content Promotion and Adoption are listed below.

The Government will:

- i. Increase the patronage of digital startups, enabling them to access a minimum percentage of government funded jobs;
- ii. Support the creation of an impact sourcing business process outsourcing (BPO) model, where digital jobs are deliberately outsourced to economically disadvantaged areas in order to improve their economic conditions;
- iii. Conduct a study on the types of digital jobs that are currently being outsourced in the telecom, banking, oil and other sectors with a view to

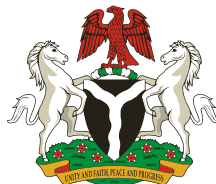
- developing a strategy and a policy environment that supports their repatriation;
- iv. Ensure compliance with Regulatory Guidelines for Nigerian Content;
- v. Highlight and promote indigenous capacities in digital technologies;
- vi. Support the development of funding mechanisms and engagement of funding stakeholders to drive investments for the expansion of indigenous digital technology businesses;
- vii. Provide technical support for Original Equipment Manufacturers (OEMs);
- viii. Properly scrutinize and monitor every government funded ICT project with a view to ensuring compliance with local content guidelines;
- ix. Facilitate partnerships with multinationals operating in Nigeria to create platforms for Indigenous Vendors to serve global markets ; and
- x. Ensure strategic partnerships with relevant regulatory agencies to create joint efforts to promote indigenous content.



Key Institutions Needed for the Success of the Digital Economy

All individuals and institutions that have a role to play in the implementation of the Policy and Strategy. For example:

1. Federal Ministry of Communications and Digital Economy
2. Nigerian Communications Commission
3. National Information Technology Development Agency
4. Galaxy Backbone Plc
5. Nigerian Communications Satellite Ltd
6. Nigerian Postal Service
7. Universal Service Provision Fund
8. Federal Ministry of Finance, Budget and Planning
9. Federal Ministry of Education
10. The 36 States of the Federation and the Federal Capital Territory
11. Central Bank of Nigeria
12. Ministry of Petroleum
13. Federal Ministry of Science and Technology
14. Federal Ministry of Agriculture and Rural Development
15. Federal Ministries of Defence, Interior and Police Affairs
16. Federal Ministry of Humanitarian Affairs, Disaster Management and Social Development
17. Federal Ministry of Youth
18. Federal Ministry of Labour and Productivity
19. Federal Ministry of Women Affairs
20. The National Assembly (Leadership and Applicable Committees)
21. Nigerian Governors Forum
22. Diaspora Commission
23. National Office for Technology Acquisition and Promotion
24. Bureau for Public Procurement
25. Nigeria Financial Intelligence Unit
26. Nigeria Computer Society
27. Computer Professionals (Registration Council of Nigeria)
28. Association of Telecommunications Companies of Nigeria
29. Association of Licensed Telecom Operators of Nigeria
30. National Identity Management Commission
31. Media Houses
32. 774 Local Government Areas of the Federation



**FEDERAL MINISTRY OF
COMMUNICATIONS AND
DIGITAL ECONOMY**

Leveraging Digital Technology for
National Economic Development