

**NIGERIA ICT INNOVATION AND ENTREPRENEURSHIP
VISION (NIIEV)**



NATIONAL INFORMATION TECHNOLOGY DEVELOPMENT AGENCY (NITDA)

August, 2019

Nigeria ICT Innovation and Entrepreneurship Vision

Foreword

Technological advancement is accelerating and the global economy is transforming in response. The majority of Nigerians are at serious risk of being left behind unless there is an urgent technological revolution that can transform agriculture, education, and all other spheres of public life. The Nigerian technology entrepreneurship ecosystem is gaining increasing international attention and attracting Foreign Direct Investment. To further unlock our national potential in technology innovation and entrepreneurship, National Information Technology Development Agency (NITDA) created its Special Purpose Vehicle, Office for ICT Innovation and Entrepreneurship (OIIE) to build a sustainable and thriving technology startup ecosystem in Nigeria. OIIE drives this through policies, initiatives and programs that will support innovation and technology entrepreneurship.

The agency has been engaging with stakeholders (such as investors, hubs, entrepreneurs, innovators, academia, government) to collectively identify challenges encountered in the ecosystem and determine ways to address the challenges. A key challenge identified by entrepreneurs is lack of clarity and access to existing government incentives. Others includes limited access to business support, limited access to market and capital for entrepreneurs. It became apparent that there needs to be specific policies and incentives for the different sectors of the ecosystem to encourage entrepreneurship, increase access to digital infrastructure, increase research and development, bridging the digital gender divide, increase affordable internet access for all and soon.

Indeed, Technology has the ability to unite all and remove barriers to economic transformation. Thus, this document is a national unifying policy vision that proposes a number of measures to connect, educate and enable digital innovation in Nigeria. We believe that if implemented in a collaborative and engaging approach, it will result in an increase in employment, innovation in the delivery of government services and an increase in the contribution of ICT to GDP. The ministry of Communication through NITDA will lead to the implementation of the policy vision.

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Nigeria ICT Innovation and Entrepreneurship Vision

Abstract

Technological advancement is accelerating and the global economy is transforming in response. The majority of Nigerians are at serious risk of being left behind unless there is an urgent technological revolution that can transform agriculture, education, and all other spheres of public life.

Technology has the ability to unite all and remove barriers to economic transformation. To unlock our national potential, National Information Technology Development Agency (NITDA) proposes a number of measures to connect, educate and enable digital innovation.

This document provides the unifying policy vision for ICT Innovation and Entrepreneurship in Nigeria.

Nigeria ICT Innovation and Entrepreneurship Vision

Introduction

The National Information Technology Development Agency (NITDA) was established in 2001 to regulate the IT sector in general. Section 6 (i & l) of the NITDA act empowers it to make policy recommendations to develop technology in Nigeria. To foster the growth of the technology ecosystem, NITDA created its subsidiary, Office for ICT Innovation and Entrepreneurship (OIIE) to drive the innovation and entrepreneurship mandate of the agency.

The mandates for the establishment of OIIE include: develop, establish, support and incentivise ICT innovation hubs, information technology parks and community enterprise hubs across Nigeria; and, collaborate with the private sector, development partners and MDAs at both federal and state levels on policies and programs that support ICT entrepreneurship and commercialisation.

NITDA through OIIE has been listening to stakeholders and as a result, there is a need to reposition as agile facilitators to create an enabling environment for technology entrepreneurship to thrive. In this regard, NITDA plans to influence government policies by sharing findings from stakeholder engagements and research findings from similar markets to Nigeria.

This document, the Nigeria ICT Innovation and Entrepreneurship Vision (NIIEV), comprises of policy recommendations and incentives designed to strengthen the Nigerian technology entrepreneurship ecosystem. It consists of the following sections: Digital Infrastructure; Education Reform, Skills Development and R&D; and, Support the Ecosystem for Innovation and Entrepreneurship. The document is also accompanied with an information note that provides additional background information on each vision statement.

Section 1

DIGITAL INFRASTRUCTURE

Nigeria will significantly increase access to ICT and provide universal and affordable access to the Internet. By 2025, 95% of the population will have access to broadband Internet.

- 1. Incentivise telecommunication infrastructure sharing** to achieve the economies of scale necessary for universal affordable access. Government will support private sector providers to merge their infrastructure.
- 2. Drop Right of Way charges for fibre distribution and simplify administrative requirements** to reduce capital requirements for expanding digital infrastructure, thereby reducing the costs passed on to consumers.
- 3. Adopt a “dig once” policy**, so that any traditional infrastructure investment--roads, electricity, water and so on--must be accompanied by fibre optic cables, where none already exist.
- 4. Build a national data framework and harmonise e-Governance** to enable innovation, improve efficiency, transparency, accountability and citizen participation in government;
 - a. Build a single digital platform that aligns access to government datasets and to electronically process Freedom of Information (FOI) requests for every MDA;
 - b. Amend the FOI Act to strengthen enforcement and compliance; and
 - c. Harmonise e-Governance by using a Whole of Government (WoG) approach to rationalise and simplify access to government services.
- 5. Support renewable energy** through easily accessible tax incentives for local production of renewable energy technology.

Section 2

EDUCATION REFORM, SKILLS DEVELOPMENT AND R&D

Nigeria will have a globally competitive workforce. By 2025, achieve digital literacy rates of 75% of the total population. Public and privately funded R&D will surpass 1% of GDP.

- 6. Reform the national education system and curricula** to prepare the youth for a knowledge-based economy.
 - a. Incorporate problem solving, critical thinking, ICT and digital literacy skills in education curriculum from Early Childhood Development to Tertiary Institution;
 - b. Transform all libraries from information repositories into information hubs with free internet access, e-learning tools, Massive Online Open Courses (MOOCs), and space for students and others to meet;
 - c. Provide training and retraining for teachers that emphasises technological change and new e-learning tools; and
 - d. Create a single portal to access all government research grants, scholarships and loans for national and international education.
- 7. Improve digital literacy, entrepreneurship and technical skills** amongst youth to encourage digital job creation and empowerment:
 - a. Train undergraduates and interested corps members in digital literacy to support digital literacy education. Create subsidised schemes for computer acquisition;
 - b. Upgrade Technical and Vocational Education and Training (TVET) programs to include software and hardware development and maintenance. Ensure that all TVET programs are digitally enabled;
 - c. Encourage MDAs to share digital capacity building infrastructure with other government and non-government organisations;
 - d. Build a culture of innovation and entrepreneurship at academic institutions; and
 - e. Bridge the digital gender divide by creating initiatives and incentives to encourage women entrepreneurs and innovators.
- 8. Support youth employment and participation in the private sector** through tax incentives.
- 9. Simplify immigration requirements** for investors, foreign companies and other skilled professionals to start businesses (or invest) in Nigeria to facilitate exchange programs and collaborations.
- 10. Establish inclusive public procurement policies for startups**, this way the Government can directly seed fund pre-commercial private sector R&D.
- 11. Expand Research and Development** with adequate funding, adequate infrastructure, adequate institutional capacity, simplified tax incentives and alignment with national development plans.

Section 3

SUPPORT THE ECOSYSTEM FOR INNOVATION AND ENTREPRENEURSHIP

By 2025, Nigeria will become a digital economy and ICT will contribute 25% to the national GDP.

12. Facilitate startup growth by easing the business environment and simplifying access to opportunities for indigenous innovators:

- a. Simplify procedures for opening and closing a business;
- b. Ease cross-border trade by simplifying procedures and reviewing restrictions on both imports and exports;
- c. Facilitate funding for innovation and simplify access to subsidised credit facilities for startups;
- d. Raise awareness about opportunities for digital entrepreneurship and skills acquisition: and
- e. Provide incentives for technology entrepreneurs, such as pioneer tax status and vouchers for access to technology infrastructure.

13. Provide support for hubs and linkages for nationwide collaborations.

- a. Provide trainings to build the capabilities of hubs to support entrepreneurs;
- b. Facilitate regional, National and international collaborations and partnerships;
- c. Support innovation hubs and workspaces through tax incentives and tax rebates for payments for electricity, internet and telephone; and
- d. Partner with independent innovation hubs to support technology entrepreneurs.

14. Incentivise venture capital and angel investment funds to invest in innovative entrepreneurship through simplified tax incentives.

15. Position Nigeria as a global hotspot for innovation through policy reform, messaging, and participation at global technology events.

Section 1

Digital Infrastructure

Vision 1: Incentivise telecommunication infrastructure sharing to achieve the economies of scale necessary for universal affordable access. Government will support private sector providers to merge their infrastructure.

Agencies: Nigerian Communications Commission (NCC).

Rationale: This will bring down the cost of services and ensure affordable access.

Status: NCC published guidelines on collocation and infrastructure sharing on Rights of Way, Masts, Poles, Antenna and tower-structures, Ducts, Trenches, Electric power¹. In the guidelines, each operator (licensee) is expected to publish standard price list, this is not regulated by NCC which could be exploited by the operators. NCC publishes a list of telecoms licensees with valid license documents on its website, this includes the name of the company, address, start and expiry dates². This list may not be conclusive as there are operators that are not therein listed but in previously published lists. The issue with the guidelines is that it is only for passive sharing, there are no guidelines on active sharing. However, NCC is working on a framework on active sharing³ but this is yet to be published.

The Nigerian National Broadband Plan 2013 - 2018⁴ is aimed at “connecting communities with high speed internet and broadband access to facilitate faster socioeconomic advancement of the nation and its people”. To achieve this, the government, through NCC require Infrastructure Companies (Infracos) to bid for a license to provide broadband infrastructure on an open access, non-discriminatory, price regulated basis to the six geopolitical zones and Lagos. Licenses have been awarded to six out of the seven proposed Infracos⁵. The network and services infrastructure is divided into three (3) layers⁶; Passive Infrastructure Layer, Wholesale layer, Retail Service Providers (RSP). The main challenge telecommunication companies face is security, to this end, NCC and Nigerian Security and Civil Defence Corps (NSCDC) signed an MOU⁷ to protect the infrastructure. This will go a long way in alleviating this challenge which will in turn increase access to affordable broadband. Furthermore, the government plans to lay 18,000KM of fibre optic in the country in its effort to achieve and surpass the 30% broadband

¹ <https://www.ncc.gov.ng/docman-main/legal-regulatory/guidelines/54-guidelines-on-collocation-and-infrastructure-sharing/file>

² <https://www.ncc.gov.ng/licensing-regulatory/licensing/licensees-list#infrastructure-sharing-amp-collocation-services>

³ <http://dailypost.ng/2018/05/09/ncc-introduce-new-framework-infrastructure-sharing-co-location-operators/>

⁴ http://www.commtech.gov.ng/Doc/The%20Nigerian%20National%20Broadband%20Plan%202013_19May2013%20FINAL.pdf

⁵ NCC Feedback on NIIEV.

⁶ <https://www.ncc.gov.ng/documents/470-eoi-invitation-for-comments-on-open-access-model-for-next-generation-optic-fibre-broadband-network/file>

⁷ <https://www.ncc.gov.ng/stakeholder/media-public/news-headlines/293-ncc-and-nscdc-sign-mou-on-critical-telecommunication-infrastructure-protection>

penetration target of 2018⁸. As at December 2018, the broadband penetration is 30.9%⁹ surpassing the 30% target..

The Nigeria Satellite Policy would be presented to the NCC Board for approval by the Spectrum Administration Department¹⁰.

Vision 2: Drop Right of Way charges for fibre distribution and simplify administrative requirements to reduce capital requirements for expanding digital infrastructure, thereby reducing the costs passed on to consumers.

Agencies: Federal Ministry of Communication Technology (FMCT), Federal Inland Revenue Services (FIRS), Federal Ministry of Power, Works and Housing, State Inland Revenue Board, Local Government Authority, Nigerian Communications Commission (NCC).

Rationale: Lack of harmonised Right of Way (RoW) across Federal, State and LGA and multiple taxation increases the cost of service delivery which is passed on to the consumers. Elimination of such charges will encourage investments and reduce the cost of service delivery.

Status: Harmonisation and reduction of RoW charges is already under review.

Currently, there is a guideline for the grant and access RoW to ICT services on Federal roads by the Federal Ministry of Power, Works and Housing¹¹. The charges are N145 per linear meter for ducts and cables and N20 per linear metre annual maintenance fees subject to change every 5 years. States and Local Governments have different charges and this varies from state to state. The lack of uniform charges is one of the challenges telcos face which affects the supply of services. To address this challenge, the National Economic Council (NEC) approved a policy on harmonisation of right of way charges across LG, States and Federal highways¹². The NEC RoW guideline still maintains the amount of N145 per meter for laying fibre for all parts of the country¹³. Also, NCC made a case to the Governors Forum to ensure on the need to adhere to the NEC's resolutions¹⁴. RoW is included in the NCC's Guidelines on Collocation and Infrastructure Sharing¹⁵, this provides a means of bringing down the cost of broadband as shown in Vision 1¹⁶.

The Industrial Council is working with NEC on addressing Multiple Taxation. NEC approved the adoption of the 2015 Approved List of Taxes by all states.

⁸ <https://guardian.ng/technology/fg-tackles-row-challenges-to-lay-18000km-fibre-optic-cable-across-regions/>

⁹ <https://leadership.ng/2018/12/14/nigeria-hits-2018-30-broadband-penetration-target/> ¹⁰ NCC Feedback on NIIEV.

¹¹ http://www.pwh.gov.ng/management/uploads_images/151170250773609.pdf

¹² <http://nigeriacommunicationsweek.com.ng/nec-approves-harmonization-of-telecomm-right-of-way-charges/>

¹³ <https://www.vanguardngr.com/2018/03/broadband-harmonising-right-way-levies/>

¹⁴ <https://www.ncc.gov.ng/stakeholder/media-public/news-headlines/361-evc-ncc-professor-umar-garba-danbatta-receives-the-newly-elected-atcon-council-members>

¹⁵ <https://www.ncc.gov.ng/docman-main/legal-regulatory/guidelines/54-guidelines-on-collocation-and-infrastructure-sharing/file>

¹⁶ Vision 1: Mandate infrastructure sharing

Vision 3: Adopt a “dig once” policy, so that any traditional infrastructure investment--roads, electricity, water and so on--must be accompanied by fibre optic cables, where none already exist.

Agencies: Federal Ministry of Power, Works and Housing, Federal Ministry of Environment, Nigerian Communications Commission (NCC).

Rationale: Implementing “dig once” policy will ensure the protection of the environment, increase broadband penetration and affordable access.

Status: Anambra State included the implementation of Dig Once policy as part of its smart city initiative¹⁷.

Vision 4: Build a national data framework and harmonise e-Governance to enable innovation, improve efficiency, transparency, accountability and citizen participation in government:

Agencies: National Information Technology Development Agency (NITDA), Federal Ministry of Communications, Federal Ministry of Justice, National Bureau of Statistics (NBS), National eGovernment Strategies (NeGSt), National Identity Management Commission (NIMC) and all MDAs.

Rationale: Data is vital for any economy to progress, its availability to policy makers, businesses and citizens has direct impact on how government delivers services. Simplified access to government services will improve transparency of common processes, data integrity and reduce the time and cost associated with accessing information.

Status: The enactment of the FOI Act in 2011 has made public records and information more freely available and accessible to Nigerians. Several government agencies have set up compliance structures that now enable them to respond to requests for information within the ambit of the law. However, there are several issues such as:

- a. Low awareness, skills and knowledge of the FOI Act provisions and processes by citizens and public/civil servants;
- b. Lack of designated officers responsible for Freedom of Information in most public Institutions;
- c. Lack of sanctions against public institutions and FOI responsible officers who do not respond to FOI requests or/and report to FMOJ annually;
- d. Lack of Infrastructure to support digital collection and management of information, to facilitate timely retrieval of requested information.

This policy vision seeks to expand upon best-practice and ensure compliance.

- a. Build a single digital platform that aligns access to government datasets and to electronically process Freedom of Information (FOI) requests for every MDA;

¹⁷ <http://technologytimes.ng/deal-anambra-joins-nigeria-smart-city-train/>

Nigeria ICT Innovation and Entrepreneurship Vision

National Identity Management Commission (NIMC) is working on harmonising biometric data across several agencies in a single database¹⁸¹⁹. This is expected to be completed by 2020.

- b. Amend the FOI Act to strengthen enforcement and compliance; and

The Bureau of Public Service Reform (BPSR) has adopted a unique electronic FOI platform on its website that gives real-time information to citizens and also encourages voluntary disclosure. This policy seeks to expand this best-practice and provide a single electronic portal for FOI requests that can be forwarded to each MDA and tracked. This will not only increase awareness but improve information sharing.

- c. Harmonise e-Governance by using a Whole of Government (WoG) approach to rationalise and simplify access to government services.

National eGovernment Strategies (NeGSt) was created to “facilitate, drive and implement” eGovernment programmes using a Public Private Partnership (PPP) model. They provide MDAs with support in terms of deployment of eGovernment services and solutions. NITDA recently published the Nigerian e-Government Interoperability Framework (Ne-GIF) which adopts a Whole-of-Government approach which will lead to Government Digital Transformation²⁰. The purpose of this framework is to ease data collection and sharing among MDAs and promote interactions between government, businesses and citizens.

Vision 5: Support renewable energy through easily accessible tax incentives for local production of renewable energy technology.

Agencies: Federal Ministry of Environment (Renewable Energy Programme), Federal Ministry of Finance, Federal Ministry of Power, Works and Housing, Rural Electrification Agency (REA), Energy Commission of Nigeria (ECN), National Electricity Regulatory Agency (NERC), Electricity Distribution Companies (DisCos), Power Generating Companies (GenCos), Federal Inland Revenue Services (FIRS), Nigeria Investment Promotion Commission (NIPC).

Rationale: One of the barriers to entry for business in Nigeria is the lack of stable electricity. Providing support for renewable energy can alleviate this problem and promote investments in the sector which in turn will lead to job creation and economic growth.

Status: The Nigerian Renewable Energy and Energy Efficiency Policy (NREEEP) commits 20% of power supply to be generated from renewable sources by 2030 which translates to 23,000MW²¹. The policy projected 12,500MW of self-generation including off-grid generation in 2030. Proposed incentives in the policy include:

- a. Power Production Tax Credit (PTC)
- b. Generation Disclosure Requirement (GDR)

¹⁸ <https://www.nimc.gov.ng/nimc-and-inec-comply-with-presidential-directive-on-harmonisation-of-biometric-data-set-up-jointtechnical-committee/>

¹⁹ <https://www.nimc.gov.ng/harmonization-integration/>

²⁰ <http://nitda.gov.ng/wp-content/uploads/2018/05/Ne-GIF-Draft-Final..pdf>

²¹ <http://www.power.gov.ng/download/NREEE%20POLICY%202015-%20FEC%20APPROVED%20COPY.pdf>

Nigeria ICT Innovation and Entrepreneurship Vision

- c. Tax incentives to manufacturers of renewable energy and energy efficient equipment and their accessories
 - i. Five year tax holiday for manufacturers from date of commencement of manufacturing
 - ii. Five year tax holiday on dividend incomes from investments on domestic renewable energy sources
- d. Incentives for importers of energy efficient appliances and lighting
 - i. Exemption from excise duty and sales tax
 - ii. Free custom duty for two years on the importation of equipment and materials used in renewable energy and energy efficiency projects
 - iii. Soft loans and special low interest loans from power sector development fund for renewable energy supply and energy efficiency projects
- e. Tax credits for homeowners who install energy efficient appliances and lighting
- f. Tax credits to companies who produce energy efficient appliances and fixtures

NREEEP is under the Federal Ministry of Finance not FIRS, but renewable energy production may benefit from accelerated capital allowance on plant, machinery and equipment.²²

²²FIRS Feedback on NIIEV.

Section 2

Education Reform, Skills Development and R&D

Vision 6: Reform the national education system and curricula to prepare the youth for a knowledge-based economy.

Agencies: Federal Ministry of Education (FME), Universal Basic Education Commission (UBEC), National University Commission (NUC), National Educational Research and Development Council (NERDC), National Commission for Colleges of Education (NCCE), National Board for Technical Education (NBTE), National Teachers' Institute (NTI).

Rationale: Although the Law already supports the integration of Information Technology into the educational sector, it is not being implemented fully.

Status:

- a. Incorporate problem solving, critical thinking, ICT and digital literacy skills in education curriculum from Early Childhood Development to tertiary institution;

Section 4 (19b) (ix) of the National Policy on Education states that the “curriculum for primary education shall include computer education” and Section 5 (30) (f) says “Government shall provide necessary infrastructure and training for the integration of ICT in the school system in recognition of the role of ICT in advancing knowledge and skills in the modern world”²³. The above Law has been truncated over the years as a result of the following reasons; lack of required telecommunications infrastructure capable of transporting multimedia messaging and absence of electric power grids in most parts of the country even in cases where there is adequate telecommunications coverage amongst others. Nigerian government is considering a new policy of graduates studying extra one year before NYSC to make them fit for employment²⁴.

According to NUC, ICT training will be made mandatory for undergraduates in order to produce graduates who can drive a new digital economy in Nigeria²⁵.

- b. Transform all libraries from information repositories into information hubs with free internet access, e-learning tools, massive online open courses (MOOCs), and space for student groups to meet;

Currently, there are over 300 public libraries in Nigeria, some of which have ICT facilities²⁶. Out of these, 24 have Internet connectivity while only 3 are fully automated. Apart from these, there are libraries in higher education institutions, public and private and privately owned libraries.

²³

http://wbgfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/AFR/Nigeria/TCH/National%20Policy%20on%20Education.pdf

²⁴ <http://dailypost.ng/2018/05/09/nigerian-govt-considering-new-policy-graduates-studying-extra-one-year-nysc/>

²⁵ <http://itedgenews.ng/2018/10/08/ict-training-become-mandatory-nigerian-university-undergraduates-says-nuc/>

²⁶ <https://www.lrcn.gov.ng/Report%20On%20The%20State%20Of%20Public%20Lib%20In%20Nig.pdf>

Nigeria ICT Innovation and Entrepreneurship Vision

There are some MOOC providers in Nigeria, these include University of Lagos MOOC²⁷ and National Open University of Nigeria MOOC²⁸.

- c. Provide continuing trainings for teachers that emphasises technological change and new e-learning tools; and

In 2017, Korea in partnership with UBEC, trained 225 FCT Teachers On ICT-Based Skill ICT²⁹. National Teachers Institute (NTI) plans to train primary school and JSS teachers ICT and MOOCS as part of transition from MDG to SDG³⁰. NTI as part of its mandate, is focused on actualising one of the pillars of the FME Ministerial Strategic Plan (2016-2019) which is e-learning³¹. NTI also has a specialised centre on e-learning.

- d. Create a single portal to access all government scholarships and loans for national and international education.

The Office for ICT Innovation and Entrepreneurship (OIIE) publishes list of scholarships available for Nigerians³² on its website.

Vision 7: Improve digital literacy, entrepreneurship and technical skills amongst youth to encourage digital job creation and empowerment:

Agencies: Federal Ministry of Youths, Sports and Development (FMYSD), National Youth Service Corp (NYSC), Ministry of Education (FME), National Board for Technical Education (NBTE), National Business and Technical Examinations Board (NABTEB).

Rationale: This will reduce unemployment and increase the GDP.

Status:

- a. Train undergraduates and interested corps members in digital literacy during NYSC to support digital literacy education. Create subsidised schemes for computer acquisition for corp members and other individuals;

The NYSC was established by decree No. 24 of May 22, 1973 after the civil war “with a view to the proper encouragement and development of common ties among the youths of Nigeria and the promotion of national unity”. It is a one year program, established for university graduates under 30 which involve a 3-week orientation camp before deployment to places where they will work for the duration of 11 months. NYSC places special emphasis on rural postings in Agriculture, Health, Education and Infrastructure³³. NYSC, via its Skill Acquisition and Entrepreneurship Development (SAED) program provides skills acquisition and entrepreneurship training to corp members at orientation camps³⁴.

²⁷ <http://unilag.xuetangx.com/>

²⁸ <https://www.nounmooc.org/>

²⁹ <https://www.tribuneonlineng.com/103583/>

³⁰ <http://www.nti.edu.ng/our-achievements/>

³¹ <http://www.nti.edu.ng/our-achievements/>

³² <http://ictinnovation.gov.ng/opportunities/list-of-scholarships/>

³³ <http://punchng.com/dg-urges-corps-members-to-teach-in-secondary-schools/>

³⁴ <http://www.nysc.gov.ng/saed.html>

Nigeria ICT Innovation and Entrepreneurship Vision

- b. Upgrade Technical and Vocational Education and Training (TVET) programs to include software and hardware development and maintenance. Ensure that all TVET programs are digitally enabled;

Technical and Vocational Education and Training (TVET) in Nigeria is under the National Board for Technical Education (NBTE). The institutions under it consist of Polytechnics, Monotechnics, Innovation Enterprise Institutions (IEIs), Vocational Enterprise Institutions (VEIs) and Technical Colleges. Research has shown that TVET is facing a lot of challenges ranging from lack of funding, poor infrastructure, lack of qualified teachers etc³⁵. NBTE sought support from telecom companies to upgrade and expand ICT infrastructure for campus-wide connectivity in TVET sector³⁶. Also, recently, NBTE gave assurance of addressing falling standards in polytechnics³⁷.

- c. Encourage MDAs to share digital capacity building infrastructure with other government and non-government organisations; and

Several MDAs have innovation centres, incubators and other capacity building infrastructures which are not being fully utilised. These can be used as centres of excellence for the delivery and acquisition of skills.

- d. Build the culture of innovation and entrepreneurship at academic institutions.

Vision 8: Support youth employment and participation in the private sector through tax incentives.

Agencies: Federal Inland Revenue Services (FIRS), Federal Ministry of Youth, Sports and Development (FMYS), Federal Ministry of Labour and Employment (FMLE), National Directorate of Employment (NDE).

Rationale: This will encourage employment which in turn will reduce the unemployment rate of the country.

Status: Currently, the tax incentives for employment of youth are Employment Tax Relief (ETR) and Work Experience Acquisition Programme Relief (WEARP), these are under the Companies Income Tax (Exemption of Profits) Order 2012³⁸. For the ETR, companies with a minimum net employment 10 employees whose workforce consists of 60% of graduates without prior work experience and within 3 years of graduation are exempted from income tax on 5% of their assessable profit. This exemption is on gross salaries of the employees who must be Nigerians in first time employment of the companies. For the WEARP, the same is applicable but the minimum net employment is 5 new employees and they must be retained for a minimum of 2 years. Note that both ETR and WEARP are incentives proposed by previous administration but not gazetted therefore cannot be implemented³⁹.

³⁵ <http://www.eajournals.org/wp-content/uploads/Prospects-Issues-and-Challenges-of-Technical-and-Vocational-Education-and-Training-TVET-In-Revamping-Nigeria-Depressed-Economy.pdf>

³⁶ <https://net.nbte.gov.ng/NBTE%20visits%20Globacom%20and%20Airtel%20Headquarters>

³⁷ <https://www.vanguardngr.com/2018/09/nbte-to-address-falling-standards-in-polytechnics/>

³⁸ http://www.pedabo.com/pedabo_console/kcfinder/upload/files/TAX%20NEWS%20BULLETIN_12-10-12.pdf

³⁹ FIRS Feedback on NIIEV.

Vision 9: Simplify immigration requirements for investors, foreign companies and other skilled professionals to start businesses (or invest) in Nigeria to facilitate exchange programs and collaborations.

Agencies: Nigerian Immigration Service (NIS), Federal Ministry of Interior (FMI), Ministry of Foreign Affairs (MoFA), Corporate Affairs Commission (CAC).

Rationale: There is considerable merit in reducing the current visa system in Nigeria as such, the targeted investors/ tourist will be interested in coming down to the country which will facilitate knowledge transfer by getting the best, also it will have great impact on our GDP.

Status: Executive Order 001 mandates the processing of tourist and business visas within 48 hours and the publishing of requirements for visa on arrival on websites of Nigerian embassies, high commissions and other immigration related agencies⁴⁰. In the same Executive Order, MDAs are mandated to publish the list and requirements with timeline, fees and mode of communication for these services.

This should be further broken down to include criteria for investors, foreign companies as well as exchange programs⁴¹.

Vision 10: Establish inclusive public procurement policies for startups, this way the Government can directly seed fund pre-commercial private sector R&D.

Agencies: Bureau for Public Procurement (BPP).

Rationale: This not only benefits citizens, but also enhances the overall functioning of government, by creating new opportunities to partner with other agencies, non-profit organisations and businesses. It will also incentivise local talent and be a strategy for implementing Executive Orders 003⁴² and 005⁴³.

Status: BPP has introduced electronic Public Procurement, e-PP, into Nigeria's public procurement system. Companies including startups can register with BPP as contractors via <http://www.federalcontractors.bpp.gov.ng> to partake in public procurement. In addition to this, startups have the following exemptions:

1. Companies with less than 15 staff do not require a Pencom compliance certificate to register with BPP and to bid for Government projects. This is due to intervention of the Presidential Enabling Business Environment Council (PEBEC) and Honourable Attorney General of the Federation (HAGF).
2. Companies with less than 5 staff or less than N50 million annual turnover do not require an ITF compliance certificate to register with BPP and bid.

⁴⁰ <http://pebec.gov.ng/wp-content/uploads/2017/07/EXECUTIVE-ORDER-ON-EASE-OF-DOING-BUSINESS-2017.pdf>

⁴¹ Suggestion from SUF Abuja Entreop

⁴²

<https://osgf.gov.ng/storage/app/media/pdf/FGN%20Executive%20Order%20on%20Public%20Procurement%20of%20local%20products.pdf>

⁴³

<http://statehouse.gov.ng/wp-content/uploads/2018/02/PRESIDENTIAL-EXECUTIVE-ORDER-5.compressed.pdf>

3. Nigeria Social Insurance Trust Fund (NSITF) and FIRS requirements still need to be met. But for startup companies nil entry Tax Clearance is acceptable by BPP⁴⁴.

BPP has made available, on its website the Procurement Procedures Manual for public procurement describing how public procurement should be planned and implemented, the policies on public procurement are defined in the relevant laws and regulations governing procurement in Nigeria. Executive Order 003 mandated MDAs to give preference to local content in procurement, which includes ICT, while Executive Order 005 promotes support for SMEs in procurement.

BPP partners with CAC on company validation in procurement.⁴⁵

Vision 11: Expand Research and Development with adequate funding, adequate infrastructure, adequate institutional capacity, simplified tax incentives and alignment with national development plans.

Agencies: Federal Ministry of Science and Technology (FMST) Tertiary Education Trust Fund (tetfund), National Information Technology Development Agency (NITDA), Petroleum Technology Development Fund (PTDF), National Automotive Design and Development Council (NADDC) Fund, Universal Service Provision Fund (USPF), Ecological Fund, Federal Inland Revenue Service (FIRS), National Agency for Science and Engineering Infrastructure (NASENI), Federal Institute of Industrial Research Oshodi (FIIRO), Raw Materials Research and Development Council (RMRDC).

Rationale: R&D is essentially the first step in developing a country's local content product or service, as such, it is the R&D function that provides a platform for creativity and innovation to flourish.

Status: Section 26 of Companies Income Tax Act allows 20% investment tax credit, the same section provides for the deduction of amount expended on research and development, not exceeding an amount equal to 10% of the total profits⁴⁶.

On the 20th March, 2018 Minister of Science & Technology commissioned Technology Orientation Center (TOC) at Idu Abuja built by the National Agency for Science and Engineering Infrastructure, (NASENI). The centre is a strategy to stimulate research and development and drive the new National Science, Technology and Innovation Roadmap (2017-2030) vital to the diversification of the Nigerian economy for sustainable growth⁴⁷.

The Nigerian Communication Commission (NCC) inaugurated the development of a blueprint for ICT Innovation/ Research Programmes⁴⁸. NCC's Digital Bridge Institute (DBI) would be utilised for these programmes. The DBI would be run as ICT innovation and research hub⁴⁹.

⁴⁴ BPP

⁴⁵ CAC Feedback on NIIEV.

⁴⁶ http://pwc-nigeria.typepad.com/files/nipcfirs_compendium-of-investment-incentives-in-nigeria_nov2017.pdf

⁴⁷ <http://scienceandtech.gov.ng/2018/03/22/fg-inaugurates-technology-center-to-fast-track-innovations/>

⁴⁸ <https://techeconomy.ng/2018/11/29/ncc-receives-report-on-development-of-curriculum-for-ict-innovation-research-in-nigeria-12122/>

⁴⁹ <https://www.vanguardngr.com/2018/11/ncc-to-run-dbi-as-ict-innovation-research-hub-2/>

Nigeria ICT Innovation and Entrepreneurship Vision

In 2017, a bill was passed by National Assembly on establishment of National Research and Innovation Council. Part of the governing board's responsibilities is the establishment of the National Research and Innovation Fund. The fund is to support national research, innovation and development bodies and other functions of the council⁵⁰. The president is yet to give his assent on the National Research and Innovation Council Bill⁵¹.

⁵⁰ <https://nass.gov.ng/document/download/8317>

⁵¹ <https://allafrica.com/stories/201810100265.html>

Section 3

Supporting the Ecosystem for Innovation and Entrepreneurship

Vision 12: Facilitate startup growth by easing the business environment and simplifying access to opportunities for indigenous innovators:

Agencies: Federal Inland Revenue Services (FIRS), National Insurance Commission (NIC), Corporate Affairs Commission (CAC), Nigerian Investment Promotion Commission (NIPC), Nigerian Port Authority (NPA), Nigeria Export Promotion Council (NEPC), Standard Organisation of Nigeria (SON) and Nigeria Custom Service (NCS), Central Bank of Nigeria (CBN), National Environmental Standards and Regulations Enforcement Agency (NESERA), Federal Ministry of Finance, Nigerian Financial Intelligence Unit (NFIU), National Bureau of Statistics (NBS), Nigeria Agricultural Quarantine Services (NAQS), National Agency for Food and Drug Administration and Control (NAFDAC), Raw Materials Research and Development Council (RMRDC), Bank of Industry (BOI), Development Bank of Nigeria (DBN), National Information Technology Development Agency (NITDA).

Rationale: Encourage Techpreneurs to create more enterprises which will create more jobs for Nigeria youth and to attract both local and international investors.

Status:

- a. Simplify procedures for opening and closing a business.

Lowering the cost of business failure, encourages more enterprise and entrepreneurship.

There are three ways of winding up companies; by the court, voluntarily or subject to the supervision of the court⁵². A company can only be dissolved in Federal High Court within the area of jurisdiction where the registered office of the company is situated. For example if a company was registered with Abuja address, the company cannot be closed in a Lagos court it must be a court in Abuja. Therefore, the Lagos court has no power to hear the petition.

CAC has partnership with FIRS on new company registration where payment of stamp duty results in the company being registered with FIRS with Tax Identification Number (TIN) assigned. It also has partnerships with Economic and Financial Crimes Commission (EFCC), the Nigerian Financial Intelligence Unit (NFIU) and embassies for company validation. For foreign companies, if they are using Nigerian address, they must attach valid Resident Permit and if the company is an Expatriate Company, then the minimum Share Capital must be 10 million⁵³

- b. Ease cross-border trade by simplifying procedures and reviewing restrictions on both imports and exports;

According to World Bank rating report (2018)⁵⁴, Nigeria is one of the economies that showed significant improvement in doing business. NCS, through Nigeria Trade Hub provides a portal

⁵² <http://www.nigeria-law.org/CompaniesAndAlliedMattersActPartXV-XVII.htm#Winding%20up%20of%20Companies>

⁵³ CAC Feedback on NIIEV.

⁵⁴ <http://www.doingbusiness.org/-/media/WBG/DoingBusiness/Documents/Annual-Reports/English/DB2018-Full-Report.pdf>

Nigeria ICT Innovation and Entrepreneurship Vision

for accessing accurate information on imports and exports aimed at helping investors make informed decisions about doing business in Nigeria. NCS has also introduced the Authorized Economic Operator (AEO) scheme to fast track cargo clearance for trusted traders and give incentives for traders to increase compliance with clearance procedures.

Nigeria has a Single Window Portal to facilitate trade project of 12 Nigerian Government agencies involved in the customs clearance process. This portal allows traders to access customs regulations online, submit customs documents electronically, track transaction status online, and submit electronic payments.

- c. Provide funding for innovation and simplify access to subsidised credit facilities for startups.

BOI is the largest government body that provides business facilities. ICT is one of the sub-sectors given high priority for accessing BOI loan⁵⁵. Other SME and startup related loans includes SME Credit Guarantee Scheme (SMECGS)⁵⁶, Agricultural/Small and Medium Enterprises Investment Scheme (AGSMEIS)⁵⁷ and loan facilities from Development Bank of Nigeria (DBN)⁵⁸. Most of the funds are complicated to access.

The Federal Government is working with Africa Development Bank (AfDB) to establish a \$500m fund for innovation to make the ICT sector more competitive^{59,60}.

Funds should be accessible to everyone including people with disabilities⁶¹.

- d. Raise awareness about opportunities for digital entrepreneurship and skills acquisition.

NITDA through Office for ICT Innovation and Entrepreneurship (OIIE) is working on developing guidelines for startups to raise awareness on the opportunities available and how to access them. Creating awareness will ensure that Nigerians are enlightened and benefit from the ICT ecosystem. This will in turn reduce the unemployment rate of the country.

- e. Provide incentives for technology entrepreneurs, such as pioneer tax status and vouchers for access to technology infrastructure.

Recently, the Federal Government made a declaration to include technology startups and businesses in the pioneer list⁶². Pioneer Status Incentives (PSI) allows companies to benefit from a tax holiday for three years renewable for additional two years, tax free dividends during the tax holiday, capital allowances and tax losses⁶³. The fees for PSI new application is

⁵⁵ <https://www.boi.ng/lendingcriteria/>

⁵⁶

<https://www.cbn.gov.ng/Out/2010/publications/guidelines/dfd/GUIDELINES%20ON%20N200%20BILLION%20SME%20CREDIT%20GUARANTEE.pdf>

⁵⁷ <https://www.cbn.gov.ng/Out/2017/DFD/Guidelines%20on%20AGSMEIS.pdf>

⁵⁸ <http://devbankng.com/get-a-Loan>

⁵⁹ <https://www.nipc.gov.ng/federal-government-afdb-to-create-500m-innovation-fund-for-tech-creative-sector/>

⁶⁰ <https://dailynigerian.com/nigerian-govt-considers-establishing-500m-ict-innovation-fund-osinbajo/>

⁶¹ Suggestion from SUF Abuja Entreop

⁶² <https://nigeriacommunicationsweek.com.ng/fq-to-grant-technology-start-ups-tax-holidays/>

⁶³ <https://www.nipc.gov.ng/mdocs-posts/compendium-of-investment-incentives-in-nigeria-final/>

N3,200,000 plus 1% of annual profit while for PSI extension it is N100,000 plus 1% annual profit⁶⁴.

Vision 13: Provide support for hubs and linkages for nationwide collaborations.

Agencies: National Information Technology Development Agency (NITDA), Federal Ministry of Science and Technology (FMST), Federal Ministry of Education (FME), Federal Inland Revenue Services (FIRS), Federal Ministry of Industry, Trade and Investment (FMITI), State and Local Government.

Rationale: Innovation hubs are the engines of innovation and entrepreneurship through skills development, ideation and experimentation, technology transfer, and investor matchmaking. While Nigeria has over 50 hubs, it does not match the population and its not geographically well spread.

Status:

- a. Provide trainings to build the capabilities of hubs to support entrepreneurs;

NITDA has 2 hubs, one in Oyo and the other in Katsina. The federal government in partnership with World Bank and Department for International Development (DFID) initiated the Growth and Employment (GEM) Project aimed at job creation and increased non-oil growth⁶⁵. The project was targeted at five sectors one of which is Information and Communication Technology (ICT). Part of the ICT sector is provision of support to established innovation hubs⁶⁶ or establishment of new hubs in the six geo-political zones of the country⁶⁷. The Office of the Vice President published a report on Catalysing Growth through Regional Innovation which highlighted the opportunities and challenges for developing ICT innovation hubs⁶⁸.

Federal Ministry of Science and Technology proposed a Framework for the Nigerian National System of Innovation for the purpose of “promoting successful innovation, and its implementation and diffusion in the country”⁶⁹. In addition, FMST

1. May consider accommodating new hubs into existing Technology Incubation Centres spread nationwide to further support the hub development initiatives
2. In order to encourage Nigerian youths taking up profession in Science and Technology, the 774 Young Nigerian Scientists Presidential Award is an initiative of the Federal Ministry of Science and Technology, aimed at effectively encouraging and developing the interest of Nigerian youths in Science, Technology and Innovation (STI). The specifics of the programme include:
 - a. Produce a pool of dedicated Scientists and Technologists, with the capacity to compete internationally;
 - b. Attract young Nigerians to develop interest in Science and Technology;

⁶⁴ <https://www.nipc.gov.ng/mdocs-posts/pioneer-status-incentive-fee-schedule/>

⁶⁵ <https://bigportal.org.ng/bigwebsite/gemproject>

⁶⁶ <https://bigportal.org.ng/bigwebsite/communicationstechnology>

⁶⁷ <https://olc.worldbank.org/content/supporting-regional-innovation-hubs-nigeria-0>

⁶⁸ <https://www.pdfnigeria.org/wp-content/uploads/2017/05/Catalysing-Growth-in-Nigeria-FINAL-REPORT.pdf>

⁶⁹ http://scienceandtech.gov.ng/wp-content/uploads/2018/03/NSI_DRAFT.pdf

Nigeria ICT Innovation and Entrepreneurship Vision

- c. Prepare Nigerians, particularly the youths to embrace STI as an alternative source of job and wealth creation;
 - d. Offer States and LGAs the opportunity to make contributions toward capacity building of young Nigerians in Science and Technology; and
 - e. Eventually re-orientate the citizenry towards accepting Science and Technology as a way of life.
3. FMST collaborates with FME to celebrate the Junior Engineers, Technicians and Scientists (JETS) yearly.
- b. Facilitate international collaborations and partnerships;

There are initiatives in partnerships with international organisations aimed at promoting digital inclusion and tech entrepreneurship, such as Go Global Africa 2019⁷⁰, NG_Hub by Facebook⁷¹, the GEM Project⁷². Toshiba is plans to open a tech hub in West Africa and is considering Nigeria as the location⁷³.

- c. Support innovation hubs and workspaces through tax incentives and tax rebates for payments for electricity, internet and telephone;

Hubs may benefit from tax incentives such as⁷⁴

- i. Pioneer Status Incentives,
- ii. Exemption of Interest on Loan,
- iii. Exemption on Proceeds Re-invested
- iv. Exemption of Bonds and Short Term Government Securities
- v. Exemption on Profits,
- vi. Reconstruction Investment Allowance
- vii. Rural Investment Allowance
- viii. Investment Tax Relief

- d. Partner with independent innovation hubs to support technology entrepreneurs.

National Social Investment Programme (N-SIP) plans to partner with existing hubs in the six-geopolitical regions to incubate ideas and innovation⁷⁵. N-SIP in partnership with Ventures Platform and Genesys Tech-Hub provided training, mentorship and funding to startups in South-East⁷⁶.

Vision 14: Incentivise venture capital and angel investment funds to invest in innovative entrepreneurship through simplified tax incentives.

Agencies: Federal Inland Revenue Services (FIRS).

⁷⁰ <https://dcmsblog.uk/2019/01/go-global-africa-2019/>

⁷¹ <https://nghub.fb.com/>

⁷² <https://bigportal.org.ng/bigwebsite/gemproject>

⁷³ <https://www.vanguardngr.com/2018/12/toshiba-plans-west-african-tech-hub-in-nigeria/>

⁷⁴ <https://www.proshareng.com/admin/upload/reports/10906-Compedium-proshare.pdf>

⁷⁵ https://twitter.com/npower_ng/status/989391092205400065?lang=en

⁷⁶ <https://businessstrumpet.com/nsip-ventures-platform-hub-and-genesys-tech-hub-empowers-10-smart-startups-in-the-south-east/>

Nigeria ICT Innovation and Entrepreneurship Vision

Rationale: Angel investors are not supported by incentives like those in other markets. This will encourage venture capitalist and Angel investors to invest more in startups.

Status: The Venture Capital Incentives Act is to provide for the grant of tax relief and other incentives on personal investments in the National Risk Fund, venture capital companies and venture capital projects and other matters related thereto⁷⁷.

A venture capital company shall qualify as an investor under the National Risk Fund. FIRS shall certify that a venture capital project fulfils or is capable of fulfilling one or more of the objectives. Investment in the venture project shall not be less than 25 percent of the total capital required for the venture project some of the incentives are:-

- a. Capital Allowances Incentives
 - i. 1st and 2nd year deduct 30%
 - ii. 3rd year, 20%
 - iii. 4th and 5th year, 10%
- b. Capital Gain Incentives
 - i. for the disposal of capital within five years of investment, 100%
 - ii. for the disposal of capital between six and ten years or investment, 75%
 - iii. for the disposal of capital between eleven and fifteen years of investment, 25%
 - iv. for the disposal of capital after fifteen years of investment, 0%
- c. Withholding tax payable reduced by 50%
- d. Pioneer Status Incentives
- e. Export incentives

All accreditation is done by FIRS.

Vision 15: Position Nigeria as a global hotspot for innovation through policy reform, messaging, and participation at global technology events.

Agencies: National Information Technology Development Agency (NITDA).

Rationale: This will promote investments in Nigeria which will boost the GDP, reduce unemployment and poverty.

Status: Nigeria ranks 118 out of 126 economies in the Global Innovation Index 2018⁷⁸

Various agencies promote Nigeria's participation at global events in order to showcase Nigeria's potential and attract Foreign Direct Investment (FDI). NITDA has been participating in the Gulf Information Technology Exhibition (GITEX) where it organises an African Investment Forum (AIF) with the view of promoting local techpreneurs and drawing the international body to invest in Nigeria⁷⁹.

BOI suggested the following⁸⁰:

⁷⁷ <http://lawnigeria.com/LawsoftheFederation/VENTURE-CAPITAL-%28INCENTIVES%29-ACT.html>

⁷⁸ <https://independent.ng/nigeria-ranks-118th-economy-in-global-innovation-index-2018/>

⁷⁹ <https://itpulse.com.ng/2017/09/21/gitex-2017-our-focus-is-investment-and-promotion-of-local-techpreneurs-nitda/>

⁸⁰ BOI Feedback on NIIEV

Nigeria ICT Innovation and Entrepreneurship Vision

- a. Organising regular regional and national workshop for stakeholders in the industry;
- b. Engagement of secondary and tertiary institutions by way of seminars on ICT themes on a quarterly basis;
- c. Intensive social/mass media campaigns on the importance of ICT in today's world;
- d. Creation of contests and reality TV content for ICT enthusiast;
- e. Encouraging ICT related organisations to sponsor major events as means of publicity;
- f. Commissioning of ICT digital boards and murals in strategic locations;
- g. Creation of ICT related newsletters, podcasts, webinars, memes and gamification; and
- h. Organising annual urban and rural stakeholder enlightenment by way of training and conferences.

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BY THE NATIONAL INFORMATION TECHNOLOGY

DEVELOPMENT AGENCY (NITDA)

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