AN ANALYSIS OF THE CHALLENGES OF REGULATING LEGAL FRAMEWORKS FOR ICT CONVERGENCE IN NIGERIA

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Abstract

The rapid growth of Information and Communication Technology (ICT) has transformed global industries by integrating telecommunication, broadcasting, and information services into a unified ecosystem, a phenomenon known as ICT convergence. This paper commenced with an introduction to ICT convergence, particularly how it has brought about various opportunities in different aspects of life and how it has enabled seamless interaction between diverse technologies, fostering innovation, economic growth, and improved service delivery. However, the integration of sectors in Nigeria has outpaced outdated legal frameworks, necessitating a comprehensive and adaptive regulatory approach to address the complex challenges of convergence effectively the benefits of regulating ICT convergence in Nigeria which is fraught with significant challenges like overlapping laws and jurisdictional conflicts among key regulatory agencies create inefficiencies and legal uncertainties. For instance, disputes over the regulation of digital platforms and emerging technologies like streaming

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services often highlight gaps in the existing frameworks. Additionally, inadequate infrastructure for monitoring and enforcement further hampers effective regulation. Regulators lack the capacity to address violations effectively. This paper evaluates the challenges in Nigeria's legal frameworks for ICT and emphasizes the need for reforms, including harmonizing regulatory mandates, updating outdated laws, and investing in infrastructure and capacity building.

Keywords: ICT Convergence, Information Technology, Legal Frameworks, Regulation

1.0 Introduction

The convergence of Information and Communication Technology (ICT) is one of the most significant technological developments of the 21st century. By integrating telecommunications, broadcasting, and information services into a unified system, ICT convergence has transformed how individuals, businesses, and governments interact and operate.[1] This phenomenon has enabled a wide range of services, from voice communication and video streaming to data sharing and cloud computing, to coexist seamlessly on shared platforms. The result is not only increased efficiency but also significant cost savings, improved service delivery, and the creation of new economic opportunities.[2]

In Nigeria, ICT convergence is playing a pivotal role in shaping the country's digital transformation journey. The integration of previously distinct technologies has fostered innovation and entrepreneurship,

[1] Chinenye Mgbeokwere., 'Convergence in the Nigerian Communication Sector: A Case for Legal and Regulatory Reforms' [2018] 2(1) *ABUAD Private and Business Law Journal* 103-109; Ochaa I., *The Making of Nigerian Telecom Industry* (Interrversal Publication 2012) 301-345.
[2] Ibid.

contributing to the growth of Nigeria's digital economy.[3] According to recent reports, the ICT sector accounts for a substantial portion of Nigeria's GDP, demonstrating its importance as a driver of economic development.[4] The proliferation of smartphones, affordable internet access, and innovative platforms has bridged communication gaps, improved access to education and healthcare, and enhanced service delivery in both public and private sectors.[5]

Moreover, ICT convergence has been instrumental in addressing the country's digital divide by providing opportunities for inclusion. Rural areas, which were traditionally underserved, now benefit from telecommunication services that integrate broadcasting and internet access, enabling connectivity for millions of people.[6] This has enhanced access to information and opened doors for e-commerce, online learning, and telemedicine, contributing to the nation's socio-economic growth.

Despite its importance, ICT convergence also introduces significant complexities that require a robust regulatory framework to ensure sustainable development. Unlike traditional ICT systems, which operated in silos, convergence has blurred the boundaries between telecommunications, broadcasting, and data services, challenging traditional regulatory structures.[7] [7] The dynamic nature of converged technologies means that they evolve faster than the laws and regulations governing them, leaving gaps in governance that could

[3] Hassan O., 'Evaluation of Nigeria's Telecommunications Policy'[2009] 3(1) *Journal of Mobile Communication*1-7
[4] Ibid.
[5] Mohammed A.M., 'Liberalization of the Nigerian Telecommunication Sector: A Critical Review' [2009] 7(2) *Journal of Research in National Development*, 1-10
[6] ibid
[7] Gillwald A., 'National Convergence Policy in a Globalized World: Preparing South Africa for Next Generation Networks, Services and Regulation' (2019) <http://link.wits.ac.za>accessed 18th November 2024.

hinder innovation and create inefficiencies.[8]

In Nigeria, the regulatory landscape has struggled to adapt to these rapid technological changes. Existing laws, such as the Nigerian Communications Act 2003 and the National Broadcasting Code, were primarily designed for standalone sectors and fail to adequately address the unique challenges of ICT convergence.[9] This misalignment has led to inefficiencies, such as overlapping mandates between key regulatory agencies like the Nigerian Communications Commission (NCC), the National Broadcasting Commission (NBC), and the National Information Technology Development Agency (NITDA). As a result, there is often conflict of interest regarding which agency has authority over certain converged technologies, creating legal uncertainties for industry stakeholders.[10]

The lack of a unified and comprehensive legal framework for ICT convergence regulation in Nigeria also limits the country's ability to maximize the potential of emerging technologies such as artificial intelligence, the Internet of Things (IOT), and cloud computing.[11] Furthermore, issues such as inadequate infrastructure, insufficient capacity within regulatory agencies, and political interference exacerbate the challenges of regulating this dynamic sector.

2.0 Literature Review

The telecommunications industry is regulated globally by the International Telecommunications Union (ITU) and at the continental

[8] Ibid.
[9] Chinenye Mgbeokwere, 'Convergence in the Nigerian Communication Sector: A Case for Legal and Regulatory Reforms' [2018] 2(1) *ABUAD Private and Business Law Journal* 103-109
[10] Ibid.
[11] Papadakis S., Technological Convergence: Opportunities and Challenges'(2007) <https://www.itu.int/osg/spu/youngminds/2007/essays/PapadakisSteliosYM2007.pdf. >accessed 18th November 2024.

level by the African Telecommunications Union. Significant reforms have taken place within this sector worldwide, driven by liberalization, deregulation, and privatization policies promoted by the World Trade Organization (WTO) during the late 20th century.[12] These reforms have spurred technological advancements and the integration of digital technologies across various communication subsectors, introducing a transformative phenomenon known as "Convergence." Convergence has eliminated traditional boundaries between distinct sectors, effectively merging them into a unified system.[13] This evolution has presented regulators worldwide with significant challenges, prompting diverse strategies and models to adapt to the shifting landscape.

Convergence, in general terms, refers to the integration or merging of previously distinct entities into a single system. The International Telecommunications Union (ITU) defines convergence as the capacity, whether technological, market-based, legal, or regulatory, to integrate previously separate technologies, markets, or industry structures.[14] Similarly, the Australian Convergence Review characterizes it as the reorganization of the services sector enabled by digitization.[15] According to Newton's Telecom Directory, convergence signifies a trend where media distinctions blur due to digitization, leading industries such as consumer electronics, computing, and telecommunications to form partnerships, alliances, or even compete within each other's markets.[16] The European Union further describes convergence as the capability of diverse network

[12] Ibid.
[13] Convergence what does it mean to the consumers (2013) <www.jayantrana.com/2013/08/global- convergence-of-consumer-tastes.html> accessed 18th November 2024.
[14] Ibid.
[15] Ibid.
[16] Newton H., *Newton's Telecom Dictionary* (18th edn, Miller Treeman Inc 2002) 300

platforms to provide similar or overlapping services.[17]

Convergence integrates information technology, telecommunications, broadcasting, media, and related industries, dismantling traditional boundaries and creating a unified "Communications" sector. Driven by digitization and economic liberalization, this global trend has transformed the communications landscape, enabling multiple services, such as voice calls, data, and video, to be delivered via a single medium like smartphones.[18] While convergence fosters global economic integration and innovation, it also poses regulatory challenges. Overlapping jurisdictions among regulators can lead to excessive or inconsistent governance. These complexities highlight the need for comprehensive regulatory reforms to address the implications of convergence and adapt to ongoing technological advancements.[19]

Information and Communication Technology (ICT) has become a cornerstone of modern innovation and economic development. Its ability to bridge communication gaps, enhance efficiency, and create new industries has made it indispensable for governments, businesses, and individuals worldwide.[20] In Nigeria, ICT serves as a[21]critical driver of growth by enabling access to markets, improving service delivery, and fostering the creation of digital platforms that

[17] European Union, <https://www.itu.int/.../Session1-1_Scott_Mine>accessed 18th November 2024.
[18] Ernest Ndukwe, 'Furthering the Digital Revolution in Nigeria in the Era of Technology Convergence' (A Paper Presented at the occasion of the induction into the Technology Hall of Fame of Obafemi Awolowo University Ile-Ife. 2005) 1- 14. <www.ncc.gov.ng/.../OAU%20SPEECH.pdf> accessed 19th November 2024.
[19] Chinenye Mgbeokwere, 'Convergence in the Nigerian Communication Sector: A Case for Legal and Regulatory Reforms' [2018] 2(1) *ABUAD Private and Business Law Journal* 103-109.
[20] Mohammed A.M, 'Liberalisation of the Nigerian Telecommunication Sector: Review'[2009] 7(2) *Journal of Research In National Development* 9
[21]

stimulate entrepreneurship.[22]

The Nigerian ICT sector has significantly contributed to the country's Gross Domestic Product (GDP), with mobile telephony, internet services, and fintech leading the way. For instance, mobile financial services have empowered millions of unbanked Nigerians by providing accessible and affordable banking solutions. Similarly, the integration of ICT in sectors such as agriculture, healthcare, and education has enhanced productivity and reduced inefficiencies. Examples include platforms that provide real-time weather updates to farmers and telemedicine services that connect patients in remote areas with medical professionals.[23]

ICT convergence has driven innovation by integrating telecommunications, broadcasting, and data services, fostering opportunities for startups like Flutterwave and Paystack to address local challenges and compete globally. However, its transformative potential depends on a balanced regulatory environment that promotes innovation while maintaining compliance.[24] Overregulation or weak oversight risks hindering growth and investment. Historically, communication laws were technology-specific, requiring separate licenses for each service. Convergence disrupted this by enabling multi-service networks. Government monopolies, once dominant in telecommunications, proved inefficient for innovation and customer-centric services.[25] Liberalization in the 1990s, driven by

[22] Chinenye Mgbeokwere, 'Convergence in the Nigerian Communication Sector: A Case for Legal and Regulatory Reforms' [2018] 2(1) *ABUAD Private and Business Law Journal* 103-109.
[23] ibid
[24] Ochaa I., *The Making of Nigerian Telecom Industry* (Interrversal Publication 2012). 301-345.
[25] Anene C.C.,'Enhancing Investment in Nigeria: Assessing the Role of GSM and Fixed Wireless Operators in the Telecommunications Industry'[2006] 1 *Journal on Communications Law and Policy* 32 – 44; Ochaa I., *The Making of Nigerian Telecom Industry* (Interrversal Publication 2012). 301-345

global trends and technological advancements, replaced monopolies with competitive, growth-oriented frameworks.

In alignment with global trends in liberalization and deregulation, the Nigerian government initiated significant reforms to fully open the sector. While the Nigerian Communications Commission (NCC) Act of 1992 had partially liberalized telecommunications, the adoption of the Nigerian Telecommunications Policy (NTP) marked a decisive step forward.**[226]** The National Telecommunications Policy (NTP) aimed to quickly modernize Nigeria's telecommunications, with short- and medium-term objectives. It mandated full sector liberalization to meet Nigeria's WTO and GATS commitments, formalized by the Nigerian Communications Act (NCA) in 2003, which fully liberalized the telecommunications sector.[26]

Despite these advancements, the Nigerian Communications Act of 2003 remains narrowly focused, addressing only telecommunications and establishing the NCC as the sector-specific regulator. This legislation fails to account for the broader convergence of telecommunications, broadcasting, and information technology, which was already emerging at the time of the Act's enactment.[27] Each of these sectors continues to operate under separate laws and regulatory frameworks, adhering to the outdated, service-specific, and technology-specific approach. This lack of integration highlights a critical gap in Nigeria's regulatory framework, which has yet to align with the realities of convergence in the communications sector.[28]

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[26] jayi G.O.,'Towards New Strategy for the Utilization of Emerging Skills in the Telecommunications Industry in Nigeria'In U. Ayanwu, and E. Ukpong, (eds), *Human Capital Development and Global Opportunities in Information Technology in Nigeria* (Sibson Books Limited 2002) , 70-80

[27] Ibid.

[28] [28] Anene C.C.,'Enhancing Investment in Nigeria: Assessing the Role of GSM and Fixed Wireless Operators in the Telecommunications Industry'[2006] 1 *Journal on Communications Law and Policy* 45.

Globally, the regulation of ICT convergence has evolved to accommodate the dynamic nature of technology and the need for a cohesive framework. Many countries have adopted forward-looking regulatory approaches to address the challenges posed by the integration of telecommunications, broadcasting, and data services. These international strategies provide valuable insights for Nigeria as it seeks to develop its ICT convergence legal frameworks.[29] One prominent approach is the establishment of unified regulatory bodies. For instance, the United Kingdom's Office of Communications (Ofcom) oversees telecommunications, broadcasting, and spectrum management under a single entity.[30] This model reduces jurisdictional conflicts, streamlines decision-making, and ensures that regulations are cohesive and responsive to emerging technologies.

Another approach is the adoption of technology-neutral laws that focus on outcomes rather than specific technologies. The European Union (EU), for example, emphasizes interoperability, consumer protection, and data security without prescribing particular technologies. This ensures that laws remain relevant despite rapid advancements.[31] The General Data Protection Regulation (GDPR) is a notable example, as it provides a comprehensive framework for data protection applicable across industries. Some countries also encourage public-private partnerships (PPPs) to foster innovation while ensuring regulatory compliance. In South Korea, collaboration between government and industry has led to the development of 5G infrastructure, enhancing connectivity and enabling the growth of IoT applications.[32]

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[29] Ibid.
[30] Ian Walden and John Angel, *Telecommunications Law and Regulation* (2nd Edn, Oxford Press 2005)13
[31] Ibid.
[32] Peter Chukwumma and Chinenye Mgbeokwere, 'Reforms in the Nigeria

3.0 Legal Framework

3.1 The Nigerian Communications Act, 2003

The Nigerian Communications Act, 2003, was signed into law on July 8th, 2003, under President Olusegun Obasanjo's administration, as a legislative response to the dynamic challenges and reforms in the telecommunications sector.[33] The focus of the Act is on

"Communications" rather than just "Telecommunications." It fully liberalized Nigeria's communications sector, granting the Nigerian Communications Commission (NCC) substantial regulatory powers to oversee the newly liberalized industry in accordance with sectoral reforms.[34]

In the Act's Objectives, Application, and Scope, Section 1 outlines the primary aim of the Act as creating and providing a regulatory framework for the Nigerian communications industry and related matters. Section 2 specifies that the Act applies to the provision and use of all communications services and networks, whether in part or whole, within Nigeria or on Nigerian-registered ships or aircraft.[35] Section 3 establishes the NCC as the corporate body responsible for regulating the communications sector.[36] Furthermore, Section 4, particularly Section 4(1)(w), grants the NCC authority to regulate the industry, making it the primary regulator, as confirmed by the court in *Lagos State Government & 4 Ors v Registered Trustees of ALTON*

Telecommunications Sector: Locating the Role of the Universal Service Provision Fund'[2012] 1(1) *Igbinedion University, Journal of Business and Contemporary Issues*, 76 - 107

[33] Ibid.

[34] S 3 and 4 of the Nigerian Communications Act, 2003.

[35] Ibid. s. 1 and 2

[36] Ibid. s 3

& 6 ors.[37] In this case, the court ruled that the Lagos State Infrastructure Maintenance Law (IMRA) of 2004, which sought to regulate telecommunications, encroached on the NCC's powers and was unconstitutional, declaring the relevant sections of the law null and void.[38]

The explanatory memorandum of the Act indicates that it repealed a previous law that had established the NCC. The regulatory duties of the NCC include protecting public and consumer interests, managing radio frequencies, overseeing competition, incentivizing investment in the communications industry, resolving disputes, gathering data, advising the government on policies, and approving communications standards and equipment.[39] The NCC is also empowered to create rules, guidelines, and regulations for the sector, and it holds primary oversight over the Universal Service Provision Board.[40]
The Act sets specific time limits for filing lawsuits against the commission—within three months after the act, neglect, or default complained about, or within six months in the case of continuous damage.[41] Furthermore, no suit can be filed against a commissioner, the secretary, or any NCC employee without giving at least one month's written notice to the commission. Transitional provisions in the Act ensure the protection of existing rights and the modification of licenses to align with the new legislation.[42] The primary regulatory body for the telecommunications sector in Nigeria is the NCC, with additional oversight from institutions such as the Federal Ministry of

[37] *Lagos State Government & 4 Ors v Registered Trustees of ALTON & 6 Ors* Appeal No. CA/A/M/2004.
[38] Ibid.
[39] Chinenye Mgbeokwere, 'Convergence in the Nigerian Communication Sector: A Case for Legal and Regulatory Reforms' [2018] 2(1) *ABUAD Private and Business Law Journal* 111
[40] Ibid.
[41] Ibid. s 142 (2) (a) (b) of the Nigerian Communications Act, 2003
[42] Ibid. s 143 (3)

Communications, the National Frequency Management Council, the National Assembly, and the courts. The court has affirmed the NCC's independence from the Ministry of Communications, as seen in the *Mobitel Ltd v The Honourable Minister of Information and Communications.*[43]

3.2 The National Broadcasting Commission (NBC) Act

The Nigerian Broadcasting Commission (NBC) Act of 1992 governs broadcasting in Nigeria, including radio, television, and some online media. However, the increasing convergence of information and communication technologies (ICT) and the rise of digital platforms, such as streaming services, social media, and internet television, have made the NBC's role more complex.[44] The Act primarily addresses traditional broadcasting, leaving its application to emerging platforms unclear. This creates regulatory gaps, as platforms like YouTube and Netflix often operate outside the NBC's jurisdiction, making content regulation challenging and raising concerns about access to harmful content.[45]

The NBC controls spectrum allocation for broadcasting but faces challenges due to the growing overlap with the Nigerian Communications Commission (NCC), which oversees telecommunications.[46] This overlap has led to regulatory fragmentation and coordination issues in spectrum management. The NBC's existing tools are insufficient to manage the complexities introduced by ICT convergence, as the lines between

[43] *Mobitel Ltd v The Honourable Minister of Information and Communications* Unreported Suit No: FHC/ABJ/M/312/09
[44] ibid. (n 41) s 2
[45] s 6(a-g) of the NITDA Act
[46] Udotai B 'The Growth and Challenges of Information Technology in Law Practice in Nigeria' in Nwosu NK (ed) *Legal Practice Skills and Ethics in Nigeria: Essays in honour of Chief Babatunde Ibironke* (DCON Consulting Lagos 2004) 231-234

telecommunications and broadcasting increasingly blur.[47]

To effectively address the rise of digital media and online content platforms, a comprehensive regulatory framework is needed. Such a framework must tackle licensing, spectrum allocation, and content regulation to ensure the NBC can adapt to the evolving media environment and uphold broadcasting standards in Nigeria.

3.3 The National Information Technology Development Agency (NITDA) Act

The National Information Technology Development Agency (NITDA), established under the NITDA Act of 2007, is responsible for promoting and regulating IT development in Nigeria. Its mandate includes policy formulation, infrastructure development for internet services and e-governance, and fostering ICT convergence, where telecommunications, broadcasting, and IT intersect.[48] However, rapid technological advancements have outpaced NITDA's policies, leaving emerging technologies like 5G, Artificial Intelligence (AI), and the Internet of Things (IoT)

inadequately addressed.[49]

A critical aspect of NITDA's role is data protection, highlighted by the Nigeria Data Protection Regulation (NDPR) of 2019. While the NDPR outlines data privacy standards, enforcement remains a major

[47] Section 6(d) of the NITDA Act.
[48] Ibid.
[49] Ajayi GO "NITDA and ICT I in Nigeria'' Unpublished contribution delivered at the *Round Table on*
Developing Countries Access to Scientific Knowledge (2003 Italy); Buckingham A and Williams M "Designing Regulatory Frameworks for Developing Countries" in Walden I (ed) *Telecommunications Law and Regulation* (3rd ed. Oxford University Press London 2009) 829-88

challenge as ICT convergence complicates data security and consent management.[50] Similarly, NITDA's involvement in cyber security policy, including the National Cyber security Policy and Strategy (2021), aims to protect Nigeria's cyberspace amid escalating cyber threats. However, fragmented regulatory oversight and coordination difficulties hinder its effectiveness.[51] NITDA's challenges include insufficient enforcement mechanisms for compliance, outdated policies for emerging technologies, and jurisdictional overlaps in converged ICT sectors. To fulfill its mandate effectively, NITDA requires enhanced powers, updated frameworks, and unified strategies to manage data protection, cyber security, and the evolving ICT landscape.[52]

4.0 Benefits of Regulating Legal Frameworks of ICT Convergence

Regulating legal frameworks for ICT convergence offers several benefits including:

4.1 Consumer Protection

Legal regulations ensure the protection of user data, privacy and security in the face of increasing integration of ICT systems, these regulations also promote fair practices preventing exploitation or misuse of technology.

[50] Obayelu AE and Ogunlade I 'Analysis of the uses of Information and Communication Technology for Gender Empowerment and Sustainable Poverty Alleviation in Nigeria' [2006] *IJEDICT* 45-69

[51] Osuagwu P "Fresh Trouble in Telecom Sector" *The Vanguard* (27 August 2012) available at <http://www.vanguardngr.com/2012/08/fresh-trouble-in-telecom-sector-senate-frowns-at-non-resolutio n-of-indiscriminate-telecom-facility-closure/> accessed 27 November 2024.

[52] ibid

4.2 Bridging the Digital Divide

Regulations can promote equitable access to technology, ensuring that all regions and demographics benefit from ICT advancements. Such developed regulations and policies may also support infrastructure development in underserved areas.

4.3 Risk Mitigation

Regulations and policies provide mechanisms for identifying, addressing and mitigating risks associated with cyber-attacks, data breaches and technical misuse.

4.4 Support for emerging technologies.

Effective regulations and policies ensure the responsible deployment of emerging technologies like 5G, AI and block chain by maximizing their societal and economic benefits, and also addressing potential disruptions to traditional industries caused by convergence.

4.5 Enhanced innovation and economic growth

clear legal frameworks encourage innovation by providing businesses with a predictable and secure environment for investment in new technologies, and fostering competition and collaboration, promoting the growth for ICT industry.

5.0 Challenges in Regulating ICT Convergence Legal Frameworks in Nigeria

Technological convergence has introduced significant challenges that demand adjustments from telecom operators, service providers, policymakers, regulators, and users. Regulatory bodies, in particular, face immense hurdles in managing convergence, as the internet—a core component of convergence—resists traditional rules and enforcement mechanisms. The integration of various services on a single platform disrupts conventional licensing and regulatory

approaches, rendering many established

standards obsolete.[53] This rapidly evolving environment compels policymakers and regulators to rethink their strategies, particularly in fostering competition in a drastically transformed market.

Danbatta[54] has noted that convergence poses unique difficulties for regulators, requiring them to adopt approaches that accommodate diverse interests. Historically, regulatory frameworks were designed to address clear distinctions between services and infrastructure, but these traditional regulations are increasingly inadequate in the current era.[55] Key challenges include ensuring interoperability, managing interconnection, protecting consumers, and achieving universal access. Existing interconnection systems, primarily designed for circuit-switched telecom networks, are not suited for packet-switched networks that underpin convergence. Broadcasting networks, for instance, often remain unregulated or subject to different regulatory regimes.[56] Moreover, packet-switched networks eliminate the traditional reliance on physical circuits, reducing the relevance of distance and time as cost factors. This decoupling of services from specific infrastructures complicates regulatory efforts to identify the nature of services and apply suitable frameworks.[57]

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[53] Papadakis S., 'Technological Convergence: Opportunities and Challenges' (2007) <https://www.itu.int/osg/spu/youngminds/2007/essays/PapadakisSteliosYM2007.pdf. > accessed 19th November 2024.

[54] Umar Danbatta, 'Regulation, Technology Neutrality and New Telecom Services in the Era of Convergence (A Paper Presented at the 8th West Africa Convergence Conference (WACC) that held in Lagos 2016).

[55] Convergence what does it mean to the consumers (2013) <www.jayantrana.com/2013/08/global- convergence-of-consumer-tastes.html> accessed 19th November 2024.

[56] Ibid.

[57] Ibid.

Content-level convergence adds another layer of complexity, driven by shifting consumer preferences and demands. Convergence generates new, bandwidth-intensive services and applications, which necessitate robust broadband infrastructure. While developed nations may have the resources to address bandwidth demands, many developing countries, including Nigeria, continue to depend on narrowband technologies.[58] This reliance forces these nations to upgrade their telecommunications infrastructure or risk missing out on the benefits of convergence. However, financial constraints often hinder such upgrades, creating further obstacles for regulators and service providers.[59]

Established operators and service providers must adapt their business models to compete with emerging players while upgrading their networks to integrate new services. Convincing consumers to recognize and pay for the added value of these new offerings is another significant challenge.[60] Furthermore, addressing the sector's human capital needs has become increasingly critical in this era of rapid technological evolution. Technological convergence requires substantial changes in regulatory frameworks, infrastructure, business models, and workforce development. While convergence offers significant opportunities, it also demands that stakeholders embrace innovation and collaboration to overcome these challenges effectively.[61]

Technological advancements, such as Over-the-Top (OTT) services

[58] Chinenye Mgbeokwere, 'Convergence in the Nigerian Communication Sector: A Case for Legal and Regulatory Reforms' [2018] 2(1) *ABUAD Private and Business Law Journal* 117.
[59] ibid
[60] Ikechukwu Nnamani,"Imperatives of Convergence in ICT Regulation". (Paper delivered at the 7th West Africa Convergence Conference organised by Knowhow Media & Market Intelligence International Limited 2015 Lagos).
[61] Ibid.

or platforms (e.g., WhatsApp and Skype) have introduced new competitive pressures on traditional communication services. For instance, voice calls, previously routed through structured numbering plans designed for billing and routing, now occur on technically distinct platforms.[62] These calls utilize applications hosted on servers accessed via internet-connected devices, bypassing conventional telecommunication systems. However, the inability to keep pace with these changes creates gaps in governance, leaving certain areas unregulated and others over-regulated. This shift exemplifies how convergence challenges established norms and systems in the communications sector.[63]

Convergence has also introduced significant concerns around privacy, security, and reliability. As societies become increasingly interconnected through ICT networks, cybercriminals devise sophisticated methods to exploit vulnerabilities in both humans and technology.[64] This necessitates operators, service providers, and users to adopt proactive measures against network intrusions, cyberattack, and malware. Regulators, in turn, face the complex task of balancing individual privacy rights with law enforcement and surveillance objectives. The goal is to protect citizens' privacy while addressing potential security threats. Consequently, many existing rules and standards have become outdated, requiring constant technological upgrades to remain relevant. This evolving landscape forces

[62] S Papadakis, Technological Convergence: Opportunities and Challenges (2007) <https://www.itu.int/osg/spu/youngminds/2007/essays/PapadakisSteliosYM2007.pdf.> accessed 19th November 2024

[63] Ibid.

[64] Briton R., 'Challenges and Opportunities of Meeting Infrastructural Requirements of the Telecommunications Industry in Nigeria: A Review of Backbone Infrastructure Initiatives' [2006] 1 *Journal on Communications Laws and Policy*, 62-71

policymakers and regulators to reassess their approaches continually.[65]

The delivery of converged content further complicates regulatory frameworks. Content that was once restricted to specific networks can now be distributed across various infrastructures and platforms. This convergence creates regulatory conflicts, as governments historically applied different standards to telephony, broadcasting, print media, and the internet.[66] With these distinctions blurring, policies must adapt to establish consistent regulations across platforms. Moreover, the ongoing convergence process raises challenges in reconciling the regulatory approaches of the telecommunications and broadcasting sectors. The merging of firms, sub-sectors, and facilities has implications for both carriers and regulatory bodies.[67] Broadcasting,

[65] Ibid.

[66] Ekpo E.O.,'Telecommunications Financing: Some Key Issues' [1998] 3(2) *Modus International Law & Business Quarterly*, 62-72

[67] Blackman C.R., 'Convergence Between Telecommunications and Other Media: How Would Regulation Adapt'? (1998) <www.econpapers.repec.org/RePEc:eee:telpol:v:22:y:1998:i:3:p:163- 170>accessed 19th November 2024

traditionally more heavily regulated and less competitive, often integrates content and carriage, whereas telecommunications places minimal emphasis on content regulation, focusing instead on carriage with an open market approach. The challenge lies in harmonizing these disparate regulatory philosophies to address the realities of convergence effectively.[152]

Technological convergence has also erased distinctions between communication methods, blending text, audio, and video services. This has led to overlapping regulatory functions and, in some cases, conflicting regulatory responsibilities among agencies. Such overlaps risk excessive or inconsistent regulations, rendering existing regulatory frameworks ineffective.[153] Additionally, certain provisions in current laws have become obsolete in light of these changes. The legal sector faces similar hurdles as communication services have converged in practice but remain largely "unconverged" in legislation. For instance, Nigeria's Communications Act of 2003 primarily addresses telecommunications and does not fully reflect the integrated nature of modern communication technologies.[154] This disconnect highlights the need for a unified legal framework to regulate a converged ICT environment effectively.

Emphasizing this challenge, former Director-General of the Nigerian Broadcasting Corporation, Emeka Mba, acknowledged the regulatory dilemmas posed by convergence.[155] He noted the difficulty of

[152] Ibid.
[153] Jibril M.,'Meeting the Challenges of Providing Nigeria's Human Capital Needs for Information and Communication Technology' In U. Ayanwu, and E. Ukpong, (eds) *Human Capital Development and Global Opportunities in Information Technology in Nigeria* (Sibson Books Limited 2002) 83-90.
[154] Ibid.
[155] Emeka Mba, 'Imperatives of Convergence in ICT Regulation' (Paper delivered at the 7th West Africa Convergence Conference organize by Knowhow Media & Market Intelligence International Limited, Lagos, 2015) 45-55

balancing regulations that foster competition and protect consumers with the need to promote investment and innovation in the sector.

Mba[72] urged regulators to avoid impeding convergence unless it results in excessive market concentration. He further recommended reducing regulations as competition increases, reevaluating the need for regulation when new services emerge, and addressing substitutes for regulated services equitably.

A key challenge for regulators is establishing a technology-neutral framework that ensures a level playing field for all market participants. The Executive Vice Chairman of the Nigerian Communications Commission (NCC), Umar Garba Danbatta, highlighted Nigeria's approach to this issue.[156] Danbatta explained that the NCC has adopted a policy of technology neutrality, recognizing that while technology itself cannot be regulated, operators can be guided to align with national policy objectives. Danbatta emphasized the need to develop flexible regulations that accommodate the rapid pace of technological change and ensure fairness across the telecom sector.[157]

Nigeria's ICT sector operates under the oversight of multiple regulatory bodies, including the Nigerian Communications Commission (NCC) for telecommunications, the National Broadcasting Commission (NBC) for broadcasting, and the National Information Technology Development Agency (NITDA) for IT-related matters.[158] However, the advent of technological convergence has significantly blurred the traditional boundaries that once separated

[156] ibid

[157] Maikori Y.,'Policy and Regulatory Challenges Posed by Convergence in the Broadcasting Industry' (Being a Paper delivered at the Commonwealth Broadcasting Summit 2016 held in Lagos 2016) 66

[158] Peter Chukwumma Obutte, 'ICT Laws in Nigeria: Planning and Regulating a Societal Journey into the Future'. [2014]17 (1) *Potchefstroom Electronic Law Journal*, 419-612.

these sectors. For instance, content delivery mechanisms, which were previously unique to their respective domains, can now utilize the same infrastructure, leading to overlapping regulatory functions and jurisdictional conflicts.[159] This lack of clear delineation results in inefficiencies, delays in critical decision-making, and the increased likelihood of inconsistent or excessive regulation, which ultimately hampers the overall effectiveness of governance in the sector.

Adding to the complexities, Nigeria's primary legislative instrument for telecommunications, the Nigerian Communications Act (2003), remains outdated and inadequately equipped to address the challenges of ICT convergence. When this law was enacted, the widespread unification of various communication technologies was not yet a pressing reality.[160] Consequently, the legislation is technology-specific rather than service-neutral or converged, failing to reflect the integrated nature of today's communication systems. Similarly, broadcasting and IT regulations remain firmly rooted in sector-specific frameworks, unable to adequately manage the interconnectedness of converged services.[161] The absence of a comprehensive and unified legal framework has not only hindered the efficient regulation of the sector but also stifled opportunities for innovation and growth.

In addition to outdated legislation, policy gaps further exacerbate the regulatory challenges posed by convergence. While Nigeria has made notable progress in liberalizing its telecommunications sector, it lacks a coherent policy framework tailored to the realities of converged ICT

[159] Ibid
[160] Ibid.
[161] Peter Chukwumma and Chinenye Mgbeokwere, 'Reforms in the Nigeria Telecommunications Sector: Locating the Role of the Universal Service Provision Fund'[2012] 1(1) *Igbinedion University, Journal of Business and Contemporary Issues,*100.

services.[162] For instance; there are no well-defined policies for licensing and regulating services that span multiple sectors, which leads to inefficiencies such as prolonged licensing processes, jurisdictional disputes among service providers, and inconsistent consumer protection measures. Moreover, policies on critical areas like content regulation, privacy, and cybersecurity remain underdeveloped and fail to meet global standards.[163] This lag leaves both consumers and businesses vulnerable to risks, such as data breaches and inadequate protections against harmful content, thereby undermining trust in the ICT ecosystem.[164]

The challenges of harmonization further complicate the regulatory landscape in Nigeria. The merging of telecommunications, broadcasting, and IT necessitates a unified approach to regulation that considers the diverse characteristics and requirements of these sub-sectors.[165] However, Nigeria continues to grapple with reconciling the differing regulatory philosophies that govern each domain. Broadcasting, for instance, is subject to heavy regulation with strict controls over content, whereas telecommunications emphasizes competition and carriage regulation while exerting minimal oversight on content.[166] These conflicting approaches create inconsistencies and inefficiencies that hinder the development of a fair and effective regulatory environment. Achieving harmonization is essential to streamline operations, reduce overlaps, and ensure that all stakeholders benefit from a coherent and equitable system.

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[162] Ibid.
[163] Ibid.
[164] The National Information Technology Development Agency regulates this sub sector. It is established by the National Information Technology Development Agency Act 2007. Available at <http://www.placng.org/lawsofnigeria/node/342>accessed on 5th July, 2019
[165] Ibid
[166] Gillies D., and Marshall R., *Telecommunications Law* (Butterworth 1997)

The economic implications of these regulatory challenges are significant, directly impacting investments, market competition, and sectoral growth. The absence of a converged regulatory framework serves as a deterrent to private investments in critical infrastructure, particularly broadband networks that are essential for delivering bandwidth-intensive services.[167] Without adequate investment in broadband infrastructure, Nigeria risks missing out on the numerous economic benefits associated with convergence, including enhanced service delivery, innovation, job creation, and overall economic growth. Furthermore, financial constraints faced by operators make it difficult to upgrade their networks to meet the demands of converged services, further eroding the competitiveness of the sector in both regional and global markets.[168]

6.0 Conclusion

The challenges on regulating ICT Convergence in Nigeria's legal frameworks reflects

Multifaceted issues that demands urgent attention. The rapid pace of

[167] Stephen A. Bello, 'The Impact of ICT Infrastructure on Economic Development-An Appraisal of Existing Infrastructure' In "ICT Infrastructure As a key Role Driver for Economic Development: What Role for the Legislature?"(A Paper Presented at a workshop organized by the NCC in Lagos 17th March 2014)<http://www.nigeriancommunicationsweek.com.ng/telecom/blame-e-banking-other-services-fordeterio rating-qos-bello#sthashNWP9NFuz.dpuf > accessed 19th November 2024.

[168] Lanre Ajayi 'BroadBand Development Key to Convergence' (Paper presented at the 7th West Africa Convergence Conference (WACC) in Lagos orgenised by knowhow media and market intelligence international limited onJuly 2015: Umar Danbata 'Imperative of Convergence in ICT regulation (Paper presented at the West Africa Convergence Confereence organized by know how media and market intelligence and International limited held in Lagos 2015)

technological convergence has outstripped the country's outdated legal instruments, such as the Nigerian Communications Act of 2003, which was designed for a less integrated technological era. These legal gaps are compounded by jurisdictional overlaps between regulatory agencies, including the Nigerian Communications Commission (NCC), the National Broadcasting Commission (NBC), and the National Information Technology Development Agency (NITDA), leading to inefficiencies, inconsistencies, and delays in decision-making.[169]

The integration of telecommunications, broadcasting, and IT services has blurred traditional boundaries, requiring a harmonized, technology-neutral regulatory framework. However, the current fragmented approach fails to accommodate the demands of convergence, particularly in areas like licensing, interconnection, content regulation, and consumer protection.[170] Inadequate infrastructure further complicates enforcement, leaving regulatory bodies ill-equipped to monitor compliance or address emerging challenges such as cyber security, privacy, and the proliferation of over-the-top (OTT) services while political interference undermines their independence.[171] This has stifled innovation, discouraged investment, and weakened public confidence in the regulatory system.

To address these issues, Nigeria must prioritize the development of a unified legal framework that accommodates the realities of ICT

[169] Ajayi G O 'Towards new strategy for the utilization of emerging skills in the telecommunications industry in Nigeria' U. Ayanwu and E. Ukpong(eds) Human Capital Development and global opportunities in information technology in Nigeria (Sibson Books Limited 2002) 70-80

[170] Peter Chukwuma and Chinenye Mgbe Okwere 'Reforms in the Nigeria Telecommunications' locating the role of Universal Service Provision to fund (2012) (1)1 Igbinedon University journal of business and contemporary issues, 76 to 107

[171] Ibid

convergence. Flexible, technology-neutral policies and greater collaboration among regulatory agencies are essential. Furthermore, investing in robust infrastructure and capacity building will enhance enforcement and ensure a level playing field for stakeholders. By adopting these measures, Nigeria can overcome the regulatory challenges of ICT convergence and position itself to fully harness the socio-economic benefits of this technological evolution.

7.0 Recommendations

To address ICT convergence challenges, Nigeria should implement a unified legal framework that harmonizes telecommunications, broadcasting, and IT regulations. Regulatory bodies like NCC, NBC, and NITDA must collaborate to avoid overlapping functions. Investment in broadband infrastructure, flexible policies, and strengthened consumer protection laws are vital. Additionally, building regulatory capacity, supporting innovation, and ensuring fair competition will foster growth. Encouraging new market players and addressing anti-competitive behaviors are essential for a dynamic and sustainable ICT sector. Enhanced technical expertise and enforcement mechanisms will further improve governance and adaptability in this evolving landscape.