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Taxation of the Digital Economy: An Integrated Review and Policy Implications for Nigeria

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Abstract

The rapid expansion of the digital economy has transformed global business models, enabling cross-border trade in goods, services, and data without the need for physical presence. This evolution has exposed the limitations of traditional tax principles based on territorial nexus and physical asset attribution. This study conducts an integrated review of literature from 2014 to 2024 to examine how Nigeria and other economies are addressing the taxation of digital activities. Drawing on theoretical frameworks, empirical evidence, and policy analysis, it evaluates Nigeria's legislative reforms, such as the extension of value-added tax (VAT) to foreign digital services and the adoption of Significant Economic Presence (SEP) rules, alongside administrative innovations and participation in global tax negotiations. Findings reveal that these measures have expanded the tax base and generated measurable revenue gains, yet challenges persist in enforcement, infrastructure readiness, taxpayer awareness, and skills capacity. Comparative experiences from other jurisdictions demonstrate that effective digital taxation requires a combination of robust legal frameworks, technology-driven administration, and regional or global policy coordination. The paper concludes that Nigeria can transform digital taxation into a sustainable driver of revenue and economic growth by strengthening enforcement capacity, upgrading infrastructure, enhancing human capital, promoting taxpayer compliance, refining legal provisions, and leveraging regional and international cooperation.

Keywords: *Digital economy, digital services tax, tax policy, revenue mobilization, value-added tax*

1. Introduction

Digitalization has transformed the architecture of the global economy over the past decade, reshaping how goods, services, and value are created, delivered, and consumed. E-commerce platforms, cloud-based solutions, online advertising networks, and data-driven services now operate seamlessly across borders, often without any physical presence in the markets they serve. This shift has exposed critical weaknesses in traditional tax systems, which were designed for a world where business operations were tied to physical assets and geographic location (OECD, 2020). For developing economies such as Nigeria, the rapid growth of the digital sector presents a dual challenge. On one hand, it opens new avenues for revenue generation by expanding the taxable base to include foreign digital platforms and service providers. On the other hand, it tests the capacity of tax authorities to track, assess, and collect

taxes from entities that may have no tangible footprint within the country. The reliance of multinational technology companies, such as Google, Meta, and Amazon, on profit-shifting strategies further complicates the issue, as significant economic value generated from Nigerian users is often recorded in low-tax jurisdictions.

In response, the international tax community has introduced a series of reforms aimed at modernizing fiscal systems for the digital era. Central among these is the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS), which proposes new nexus rules under Pillar One and a global minimum corporate tax rate under Pillar Two. Across Africa, more than ten countries have implemented some form of digital taxation, either through dedicated DSTs or by extending VAT to digital transactions. Kenya, for instance, generated approximately KES 5.1 billion in DST revenue in 2022, while Nigeria's VAT on foreign digital services, introduced in 2020, has increased monthly VAT revenue by over 8% (Tivde, 2024; Oduor et al., 2023). Nigeria's Federal Inland Revenue Service (FIRS) has complemented these legal measures with digital administration tools, such as the Integrated Tax Administration System (ITAS), to facilitate electronic filing, payment, and compliance monitoring. While these innovations mark significant progress, structural limitations, including patchy internet access, skills shortages among tax officials, and limited enforcement mechanisms for non-resident firms, continue to restrict effectiveness. This paper undertakes an integrated literature review spanning 2014 to 2024 to map the evolution of digital taxation globally and assess its implications for Nigeria. By synthesizing theoretical foundations, empirical results, and policy developments, the study provides a comprehensive understanding of how digital taxation can be designed and implemented to maximize fiscal outcomes while balancing sovereignty concerns and international obligations.

2. Literature Review

2.1 Conceptual Foundations of Digital Economy Taxation

The digital economy refers to economic activities where digital technologies form the backbone of production, distribution, and consumption. Examples include e-commerce, cloud services, mobile applications, online advertising, and data-driven analytics. A defining feature is that significant value can be generated without a physical presence in the user's jurisdiction, making long-standing tax concepts such as permanent establishment and territorial nexus less effective in determining taxing rights (South Centre, 2023). In response, various jurisdictions have adopted concepts like "significant economic presence" (SEP) or virtual permanent establishment to extend tax rights over non-resident firms deriving substantial revenue from their markets. For instance, Nigeria's Finance Act 2019 amended the Companies Income Tax Act (CITA) to cover foreign digital service providers earning at least ₦25 million annually from Nigerian customers (PwC Nigeria, 2021). Such approaches reflect the benefit principle of taxation, which holds that entities benefitting from a jurisdiction's infrastructure and consumer market should help fund its public services (Keen & Tenore, 2021).

The growing reliance on intangible assets, including software, algorithms, and user-generated data, has enabled multinational corporations to consolidate profits in low-tax countries, exploiting gaps in international tax frameworks (OECD, 2021a). This erodes neutrality and places greater tax pressure on domestic enterprises (Zodrow, 2019). Many countries have introduced Digital Services Taxes (DSTs) targeting revenues from online advertising, platforms, and marketplaces. For example, Mexico collected more than US\$300 million in DST revenue during its first year (OECD, 2021), although critics caution that such taxes may cause double taxation or provoke trade disputes (Garg & Sharma, 2021).

Nigeria's current approach combines VAT extensions with SEP-based nexus provisions, bringing foreign suppliers of streaming, cloud computing, and digital advertising services into the tax net (Finance Act, 2020). Yet, reforms will not achieve their potential without stronger compliance monitoring, better administrative capacity, and greater cross-border cooperation (Akinyosoye et al., 2024).

2.1.1 International Approaches and Lessons

The OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) remains the most comprehensive attempt to reform global tax rules for the digital age. Pillar One reallocates a share of taxing rights to market jurisdictions, while Pillar Two establishes a 15% global minimum corporate tax rate. Although over 140 countries have joined the framework, developing economies such as Nigeria have raised concerns over its complexity, possible compliance burdens, and the risk of reduced revenues (United Nations, 2023; Cobham & Janský, 2021). Different national models offer lessons. Chile's VAT on digital services generated US\$194 million in its first year; Kenya's 1.5% DST brought in KES 5.1 billion in 2022; and France's DST yielded €400 million in 2021 (Oduor et al., 2023; French Ministry of Economy, 2022). These cases show that targeted measures can generate significant revenues when supported by effective administration and public awareness. For Nigeria, broadening VAT coverage while considering a carefully designed DST could enhance fiscal performance, particularly if supported by regional cooperation through ATAF and ECOWAS.

2.1.2 Technology and Tax Administration

Technological innovation is increasingly central to digital taxation. In Nigeria, the Integrated Tax Administration System (ITAS), introduced in 2015, has improved electronic filing and compliance rates (Tivde, 2024; Adejuwon & Olasunkanmi, 2023). Blockchain-based VAT reconciliation pilots have cut fraud by 9%, while AI-driven analytics identified over 11,000 high-risk e-commerce accounts in 2022 (FIRS, 2023). Other African experiences reinforce these benefits. Rwanda's e-filing system boosted taxpayer registrations, Ghana's use of geospatial analytics increased audit revenues, and South Africa's AI fraud detection improved enforcement (UNECA, 2022; World Bank, 2021). Nonetheless, Nigeria still contends with patchy infrastructure, limited ICT skills among tax officials, high costs of advanced systems, and taxpayer concerns over data security (Oseni, 2024; ICTD, 2023).

2.1.3 Policy Alignment and Global Cooperation

Nigeria's participation in BEPS signals its commitment to engaging with evolving global tax norms while safeguarding fiscal sovereignty. Domestically, the Finance Acts of 2019 and 2020 expanded SEP provisions and extended VAT to foreign digital service suppliers, enabling early revenue gains (CITA, 2020; Deloitte, 2021). On the regional front, involvement in ATAF and ECOWAS offers opportunities to harmonize digital tax rules, reduce avoidance, and strengthen Nigeria's voice in global negotiations. The challenge remains to balance the flexibility of domestic policymaking with the stability of cooperative frameworks. By coupling targeted domestic reforms with strategic regional alliances, Nigeria can better position itself to secure a sustainable share of revenue from the global digital economy.

2.1.4 Human Capital Development and Capacity Building for Digital Tax Administration

Human capital development has become a critical determinant of success in digital economy taxation. The growing complexity of cross-border digital transactions, platform-based business models, cloud computing services, artificial intelligence applications, and data-driven value creation requires tax administrators to possess advanced technical and analytical competencies. Consequently, the effectiveness of digital taxation depends not only on legislative reforms and technological infrastructure but also on the availability of adequately trained personnel capable of implementing and enforcing tax regulations. International evidence suggests that countries that invest in specialized training and institutional capacity building achieve higher levels of compliance and enforcement effectiveness. The OECD (2021) emphasizes that digital taxation requires expertise in information technology, data analytics, transfer pricing, international taxation, and risk-based auditing. Similarly, UNECA (2022) reports that African countries with stronger technical capacity are better positioned to monitor digital transactions and enforce compliance among multinational digital enterprises.

In Nigeria, the modernization efforts of the Federal Inland Revenue Service (FIRS) have improved tax administration through electronic filing systems and digital compliance platforms. Nevertheless, shortages of specialized personnel, limited ICT competencies, and inadequate continuous professional development programs remain important constraints. These capacity limitations reduce the effectiveness of enforcement activities and may weaken the implementation of complex initiatives such as Significant Economic Presence (SEP) rules and OECD-related reforms.

Therefore, strengthening human capital through continuous training, professional certification, international collaboration, and partnerships with universities and professional accounting bodies should constitute a central component of Nigeria's digital taxation strategy. Investments in human capital will complement technological reforms and improve the capacity of tax authorities to respond effectively to the evolving challenges of the digital economy.

2.2 Empirical Evidence from 2014-2024

2.2.1 Nigeria-Specific Findings

Over the past decade, empirical studies have increasingly documented the fiscal impact of digital taxation in Nigeria. Nnamani and Akintoye (2024) report a strong positive relationship between revenues from digital taxation—particularly corporate income tax (CIT) and VAT on digital services—and improvements in key socioeconomic indicators such as the Human Development Index (HDI) and reductions in unemployment. These findings suggest that digital tax revenues have supported greater public investment in health, education, and infrastructure.

Mustapha et al. (2023) similarly conclude that reforms targeting the digital economy have contributed significantly to Nigeria's tax revenue growth and economic sustainability, although challenges in taxpayer compliance and administrative efficiency remain. Tivde (2024), analyzing Federal Inland Revenue Service (FIRS) data from 2010 to 2021, found a statistically significant 12% increase in total tax revenue following the rollout of electronic filing systems ($t(44) = 3.6, p = .001$). Survey-based evidence reinforces these results. Adejuwon and Olasunkanmi (2023), drawing on responses from 352 tax officials in Lagos and Ogun States, found that a 10% increase in the use of digital tax platforms was associated with a 6.8% rise in revenue collection ($\beta = .45, p < .01$). Olatayo et al. (2024) also report a strong correlation ($r = .62, p < .001$) between the adoption of e-clearance certificates and monthly revenue gains.

Case studies at the subnational level further illustrate the trend. In Enugu State, internally generated revenue (IGR) rose from ₦4.27 billion to ₦13.88 billion after the introduction of electronic tax administration, with the increase confirmed as statistically significant ($p = .023$) (ResearchGate, 2023). Collectively, these findings demonstrate that well-implemented digital taxation and e-administration can substantially enhance Nigeria's fiscal performance.

2.2.2 Comparative Evidence from Other Jurisdictions

Nigeria's experience aligns with patterns observed in other developing and developed economies. Oduor et al. (2023) note that Kenya's DST on mobile money and digital transactions resulted in a consistent 3.5% monthly increase in revenue from the targeted services. In France, the DST introduced in 2019 yielded approximately €400 million in 2021, particularly from advertising and platform fees (French Ministry of Economy, 2022). India's Equalisation Levy improved compliance rates among foreign digital advertisers and doubled collections within two years (Garg & Sharma, 2021).

In sub-Saharan Africa, Tanzania collected US\$12 million from its digital tax in the first year of implementation (IMF, 2023), while Rwanda saw a 28% increase in taxpayer registrations following the rollout of an e-filing system (UNECA, 2022). These results indicate that targeted digital tax measures, supported by robust administrative systems, can reliably expand tax bases and improve compliance, even in resource-constrained environments.

2.2.3 International Evidence and Emerging Debates in Digital Taxation

Beyond Africa, a substantial body of international literature has examined the effectiveness, fairness, and economic implications of digital taxation. The emergence of highly digitalized multinational enterprises has exposed weaknesses in traditional international tax rules that rely heavily on physical presence as a basis for taxation. According to the OECD (2021a), existing nexus and profit allocation rules have become increasingly inadequate in capturing value created through user participation, data generation, and intangible assets. Similarly, Keen and Tenore (2021) argue that the digital economy challenges conventional applications of the benefit principle because firms can derive significant value from jurisdictions where they have little or no physical presence.

Empirical evidence from Europe presents mixed outcomes regarding digital taxation reforms. France's Digital Services Tax generated significant additional revenue following its introduction, contributing approximately €400 million in 2021 (French Ministry of Economy, 2022). However, international studies suggest that portions of digital service taxes may be shifted to consumers and business users through higher prices and service charges. These findings raise concerns regarding the incidence and distributional effects of digital taxation (OECD, 2021a).

Research from OECD member countries also highlights tensions between unilateral Digital Services Taxes (DSTs) and multilateral tax coordination efforts. While unilateral DSTs have enabled governments to generate revenue from digital activities that previously escaped taxation, they have also generated concerns regarding double taxation, administrative complexity, and international trade disputes (OECD, 2020; United Nations, 2023). Consequently, international tax policy discussions have increasingly shifted toward coordinated solutions. The OECD/G20 Inclusive Framework introduced the Two-Pillar Solution as a response to these challenges. Pillar One seeks to reallocate a portion of taxing rights to market jurisdictions where users and consumers are located, while Pillar Two establishes a global minimum effective corporate tax rate of 15 per cent to reduce profit shifting and harmful tax competition (OECD, 2020; OECD, 2021a).

Despite broad international support, the Two-Pillar Solution remains the subject of considerable scholarly debate. Critics argue that Pillar One may provide limited revenue benefits for developing countries because only a relatively small share of multinational profits is subject to reallocation, while implementation procedures remain highly complex (United Nations, 2023; South Centre, 2023). Similarly, concerns have been expressed that Pillar Two may reduce the policy flexibility of developing countries by limiting their ability to use tax incentives as instruments for attracting foreign investment (South Centre, 2023). Recent evidence from developing economies outside the OECD suggests that the expansion of VAT regimes to cover cross-border digital services has generally improved revenue mobilization, particularly where simplified registration and compliance mechanisms have been introduced for non-resident suppliers (PwC, 2023). Nevertheless, implementation challenges relating to technological infrastructure, enforcement capacity, and taxpayer awareness continue to constrain effectiveness in many low-income jurisdictions (ICTD, 2023; United Nations, 2023). Overall, the international literature demonstrates that digital taxation can enhance revenue mobilization and tax fairness. However, successful implementation depends on achieving an appropriate balance between revenue objectives, administrative feasibility, investment competitiveness, and international cooperation.

2.2.4 Key Insights from the Literature

Several important insights emerge from the reviewed literature. First, digital taxation has demonstrated considerable potential for expanding tax bases and improving revenue mobilization in both developed and developing economies. Evidence from Nigeria, Kenya, France, India, and other jurisdictions suggests that properly designed digital tax measures can generate significant fiscal benefits. Second, the effectiveness of digital taxation depends heavily on administrative capacity, technological readiness, taxpayer awareness, and enforcement mechanisms. Countries with stronger digital infrastructure and

more sophisticated tax administrations tend to achieve better compliance outcomes. Third, the literature reveals substantial disagreement regarding the broader economic implications of digital taxation. While proponents emphasize improved tax fairness and reduced profit shifting, critics highlight risks relating to compliance costs, investment disincentives, double taxation, and international trade tensions. Fourth, significant methodological limitations remain within the existing body of research. Many studies rely on short-term datasets, descriptive analyses, or survey-based evidence, limiting the ability to draw definitive conclusions regarding long-term impacts. Finally, the literature reveals an important research gap concerning developing economies. Much of the existing evidence originates from Europe and other advanced economies, while empirical research focusing on Africa remains relatively limited. Consequently, further studies are required to evaluate the long-term effectiveness, administrative feasibility, and developmental implications of digital taxation within the African context.

2.2.5 Critical Evaluation of Existing Evidence and Research Gaps

While the existing literature generally supports the potential of digital taxation to enhance revenue mobilization and improve tax equity, the evidence remains far from conclusive. A critical examination of the literature reveals several inconsistencies, methodological limitations, and unresolved policy debates that warrant further investigation. First, empirical findings concerning the revenue effects of digital taxation are not entirely consistent. Studies conducted in Nigeria, Kenya, France, and India generally report positive revenue outcomes following the introduction of digital tax measures. However, other international studies suggest that digital taxes may increase compliance costs, discourage investment, reduce competitiveness, and create risks of double taxation. These conflicting findings indicate that the effectiveness of digital taxation is highly dependent on institutional quality, administrative capacity, technological readiness, and the broader economic environment.

Second, methodological limitations are evident across much of the existing literature. Many studies employ descriptive or survey-based approaches, relying heavily on perceptions of tax officials and taxpayers. Such approaches may be susceptible to respondent bias and may not accurately capture long-term fiscal effects. Similarly, numerous studies utilize short observation periods, making it difficult to assess whether observed revenue gains are sustainable over time. Cross-country comparative studies also face challenges arising from differences in legal frameworks, economic structures, and levels of digital development. Third, substantial debate surrounds the OECD/G20 Two-Pillar Solution. Proponents argue that Pillar One promotes fairness by reallocating taxing rights to market jurisdictions where economic value is created, while Pillar Two seeks to reduce profit shifting through the introduction of a global minimum corporate tax rate. Nevertheless, critics contend that Pillar One may provide limited benefits to developing countries because a substantial share of reallocated taxing rights may still accrue to larger consumer markets. Concerns have also been raised regarding the complexity of implementation and the administrative burden imposed on countries with limited institutional capacity. Similarly, Pillar Two has attracted criticism from scholars who argue that the global minimum tax may restrict fiscal sovereignty by reducing the ability of developing countries to use tax incentives as tools for attracting investment. Some researchers further contend that implementation costs may outweigh potential revenue gains in countries with weak administrative infrastructures.

The literature also reveals important research gaps. Existing studies focus predominantly on revenue outcomes, while relatively little attention has been devoted to taxpayer behaviour, compliance costs, administrative efficiency, technological readiness, and long-term economic consequences. Furthermore, most evidence originates from developed economies, creating a shortage of robust empirical studies from developing countries, particularly within Sub-Saharan Africa. Future research should therefore employ longitudinal datasets, comparative cross-country analyses, and mixed-method approaches to generate more comprehensive evidence on the effectiveness and sustainability of digital taxation reforms.

2.3 Theoretical Perspectives on Digital Economy Taxation

Revisiting Classical Tax Principles

The design of modern tax systems continues to be informed by Adam Smith's classical principles of taxation, equity, efficiency, certainty, and simplicity, which remain fundamental benchmarks for evaluating the effectiveness of fiscal policy. Although these principles were developed in the context of traditional commerce, contemporary scholarship recognizes their continued relevance in addressing the challenges posed by the digital economy. In particular, the rapid expansion of cross-border digital transactions, data-driven business models, and the growing importance of intangible assets have complicated the application of these classical principles within existing international tax frameworks (Keen & Tenore, 2021).

In the digital economy, the principle of equity requires that multinational digital enterprises contribute fairly to public finances in jurisdictions where they derive significant economic value, regardless of whether they maintain a physical presence. Similarly, the principle of efficiency requires tax policies that mobilize revenue without creating unnecessary distortions to investment, innovation, or international trade. The principles of certainty and simplicity further demand transparent, predictable, and administratively feasible tax rules capable of responding to rapidly evolving digital business models (Keen & Tenore, 2021).

The proliferation of intangible assets, including algorithms, digital platforms, software, user-generated data, and intellectual property, has further complicated the application of these principles. Digital firms can generate substantial revenues from jurisdictions where they have little or no physical presence while shifting taxable profits to low-tax jurisdictions through the strategic location of intellectual property and other intangible assets. Such practices undermine tax neutrality and equity by placing domestically based firms at a competitive disadvantage and eroding national tax bases (Zodrow, 2019).

Neutrality and the Digital Tax Challenge

Neutrality in taxation suggests that similar economic activities should be subject to similar tax treatment, regardless of business model or delivery method. In the digital economy, however, differences in the tax treatment of physical and digital transactions can incentivize firms to restructure operations to reduce tax liabilities. This is particularly evident in cases where physical goods are replaced by digital equivalents, such as downloadable software or streaming services, allowing multinational providers to avoid local taxes without altering the core service offered (Keen & Tenore, 2021). Zodrow (2019) further argues that the global digital economy disrupts tax neutrality by enabling profit shifting to low-tax jurisdictions through the strategic use of intellectual property rights. This not only erodes national tax bases but also places pressure on governments to engage in harmful tax competition.

The Benefit Theory and Fiscal Federalism

The benefit theory of taxation holds that taxpayers should contribute in proportion to the benefits they derive from public goods and infrastructure. Applied to the digital economy, this implies that multinational digital platforms, whose services depend on a jurisdiction's telecommunications infrastructure, skilled labour, and consumer markets, should be taxed in the markets where value is created, even without a physical footprint (Keen & Tenore, 2021). Musgrave's theory of fiscal federalism complements this by recognizing the need for coordinated approaches when economic activities span multiple jurisdictions. In the case of digital taxation, this means developing mechanisms to allocate taxing rights between countries in a manner that reflects both the location of users and the origin of production.

OECD's Two-Pillar Solution in Theory

The OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) introduced a two-pillar solution to address digital taxation challenges.

- Pillar One reallocates taxing rights from the location of corporate headquarters to market jurisdictions where users and consumers are located, applying this to highly profitable multinational enterprises.
- Pillar Two sets a global minimum effective tax rate of 15%, intended to discourage the use of low-tax jurisdictions for profit shifting (OECD, 2020).

From a theoretical perspective, these pillars aim to reconcile equity and neutrality in a globalized economy while preventing a race to the bottom in corporate tax rates. However, implementation requires significant legal and technical capacity, which may be lacking in developing economies such as Nigeria (Akinyosoye et al., 2024).

Implications for Nigeria

Applying these theoretical frameworks to Nigeria reveals both opportunities and constraints. The SEP provisions and VAT on digital services signal Nigeria's willingness to modernize its tax system in line with global trends. Yet, without substantial investment in enforcement infrastructure, skilled human capital, and cross-border cooperation, the country risks losing potential revenue to tax avoidance strategies by multinational digital corporations. Furthermore, Nigeria's participation in regional bodies such as the African Tax Administration Forum (ATAF) and the Economic Community of West African States (ECOWAS) offers platforms to influence international negotiations, but its bargaining power will depend on the credibility and effectiveness of its domestic tax reforms.

3. Methodology

3.1 Research Design

This study adopted a structured Systematic Literature Review (SLR) approach to synthesize theoretical, empirical, and policy evidence relating to the taxation of the digital economy between 2014 and 2024. The systematic review approach was selected because it provides a transparent, rigorous, and replicable framework for identifying, evaluating, and synthesizing evidence from multiple sources. The review adopted a structured systematic literature review approach guided by the principles of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). Rather than conducting a full PRISMA systematic review with quantitative reporting of study selection, the PRISMA framework was used as a methodological guide to ensure transparency, consistency, and rigor in identifying, screening, selecting, and synthesizing relevant literature.

3.2 Literature Search Strategy

A comprehensive search was conducted across major academic databases and institutional repositories. These included Scopus, Web of Science, Google Scholar, JSTOR, ScienceDirect, SSRN, OECD publications, International Monetary Fund (IMF) reports, World Bank publications, United Nations reports, African Tax Administration Forum (ATAF) publications, and official Federal Inland Revenue Service (FIRS) documents. Searches were performed using combinations of keywords such as "digital economy taxation," "digital services tax," "digital taxation in Nigeria," "value-added tax on digital services," "significant economic presence," "OECD Pillar One," "OECD Pillar Two," "electronic taxation," "digital tax administration," and "taxation of multinational digital enterprises." Boolean operators including AND, OR, and NOT were utilized to refine search outcomes and improve relevance.

3.3 Inclusion and Exclusion Criteria

To ensure consistency and relevance, studies were included if they:

- Were published between 2014 and 2024;
- Focused on digital economy taxation;
- Addressed theoretical, empirical, legal, policy, or administrative dimensions of digital taxation;
- Were published in peer-reviewed journals or reputable institutional reports;
- Were written in English.

Studies were excluded if they:

- Focused solely on digital technologies without tax implications;
- Were duplicated across databases;
- Lacked sufficient methodological rigor;
- Were opinion-based articles without scholarly or policy relevance.

3.4 Screening and Selection Process

The initial search identified a substantial number of potentially relevant publications. Following duplicate removal, titles and abstracts were screened against the inclusion criteria. Studies meeting the eligibility requirements proceeded to full-text assessment. The final sample consisted of studies that directly addressed issues relating to digital taxation, tax administration, policy reforms, international tax governance, and revenue implications.

3.5 Data Extraction and Synthesis

Relevant information was extracted from selected studies relating to research objectives, methodologies, geographical coverage, theoretical foundations, key findings, policy implications, and identified limitations. The extracted data were analyzed using thematic synthesis techniques, enabling the identification of recurring themes, conflicting findings, methodological patterns, and emerging policy issues.

3.6 Quality Assessment

To improve reliability, preference was given to peer-reviewed journal articles, OECD reports, IMF publications, World Bank studies, and official government documents. Particular attention was paid to methodological rigour, relevance to digital taxation, and the credibility of data sources used by the original authors. Overall, the structured systematic literature review approach, guided by PRISMA principles, enhanced the transparency, consistency, and methodological rigor of the review. The use of clearly defined search strategies, inclusion and exclusion criteria, thematic synthesis, and quality assessment procedures provided a robust and credible basis for synthesizing existing knowledge on the taxation of the digital economy in Nigeria and other jurisdictions.

4. Discussions

This review of literature from 2014 to 2024 reveals that digital taxation has become an essential tool for revenue mobilization in both developed and developing economies, including Nigeria. The evidence shows that Nigeria's policy measures, particularly the extension of value-added tax (VAT) to foreign digital services and the adoption of Significant Economic Presence (SEP) rules, have expanded the tax base and generated measurable revenue gains. These reforms align with global trends observed in countries such as Kenya, France, and India, where targeted digital levies and VAT extensions have produced substantial fiscal returns. However, the literature consistently emphasizes that the

effectiveness of these measures depends on the strength of enforcement mechanisms, administrative capacity, and taxpayer compliance.

Despite legislative progress, significant enforcement and compliance gaps persist. Nigeria continues to rely heavily on voluntary compliance by non-resident digital platforms, with limited legal and operational capacity to compel payment. Skills shortages among tax officials and low taxpayer awareness further constrain outcomes, as reported in several Nigerian studies. Moreover, infrastructural deficits, especially unreliable electricity supply and uneven broadband access, limit both taxpayer accessibility and the efficiency of digital tax systems. Without addressing these bottlenecks, advanced technologies such as blockchain-based VAT reconciliation and AI-driven audit targeting may yield only partial benefits.

Global and regional policy dynamics also influence Nigeria's approach. While the country participates in the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS), it has expressed concerns about the potential erosion of fiscal sovereignty and the complexity of compliance under Pillar One and Pillar Two rules. At the same time, active engagement with African platforms such as the African Tax Administration Forum (ATAF) and the Economic Community of West African States (ECOWAS) presents opportunities for harmonization and collective bargaining, which could reduce cross-border revenue leakage and strengthen Nigeria's negotiating position in global tax governance.

Technology adoption has emerged as a critical enabler of compliance and enforcement. The deployment of the Integrated Tax Administration System (ITAS), pilot blockchain projects, and AI-based compliance analytics has led to improvements in filing rates, fraud detection, and targeted audits. Nevertheless, scaling these innovations will require sustained investment, capacity building, and measures to build public trust in data security and system reliability.

Overall, the findings indicate that Nigeria's evolving digital tax framework reflects both progress and persistent challenges. Theoretical principles of equity, efficiency, and neutrality underpin the reforms, but their practical realization is hindered by administrative, infrastructural, and geopolitical constraints. The literature points to the need for a balanced strategy that pairs legislative innovation with robust enforcement capacity, infrastructure development, taxpayer education, and active participation in regional and global policy processes. By integrating these elements, Nigeria can transform digital taxation from a reactive policy tool into a strategic pillar of sustainable economic development.

5.0 Conclusion and Recommendations

The rapid expansion of the digital economy over the past decade has fundamentally altered the landscape of global commerce, shifting value creation from tangible, location-based assets to intangible resources such as data, algorithms, and online platforms. For Nigeria, this transformation presents both a revenue opportunity and a governance challenge. Evidence from the literature confirms that targeted reforms, such as the extension of value-added tax (VAT) to foreign digital services and the adoption of Significant Economic Presence (SEP) rules, have broadened the tax base, enhanced fiscal revenues, and contributed to socioeconomic development. However, the review also reveals persistent constraints that limit the full realization of these gains. Weak enforcement mechanisms, infrastructural deficits, low taxpayer awareness, and skills shortages within tax administrations continue to hinder effective implementation. Moreover, Nigeria's cautious engagement with global initiatives like the OECD/G20 Base Erosion and Profit Shifting (BEPS) framework underscores the tension between safeguarding fiscal sovereignty and aligning with evolving international tax norms. Success in digital taxation will depend on a coordinated strategy that integrates legislative innovation, institutional strengthening, technological adoption, and stakeholder engagement. By combining domestic reforms with strategic participation in regional and global platforms, Nigeria can reposition itself to capture a fair share of the value generated in its digital marketplace. This approach can transform the digital economy from a source of fiscal leakage into a sustainable driver of economic resilience and growth.

To strengthen Nigeria's capacity to tax the digital economy effectively, several interlinked policy actions are necessary. First, enforcement capacity must be enhanced through the creation of specialized digital economy tax units within the Federal Inland Revenue Service (FIRS) and state tax agencies. These units should be supported by bilateral and multilateral agreements with jurisdictions hosting major digital service providers, enabling access to transaction data and facilitating compliance by non-resident entities. Equally important is the need to upgrade infrastructure and technology to support efficient administration and compliance. Expanding broadband coverage, improving electricity reliability, and scaling up the use of blockchain and artificial intelligence can significantly enhance the monitoring of VAT flows, fraud detection, and risk-based audits. These technological tools must be integrated into existing systems such as the Integrated Tax Administration System (ITAS) to maximize efficiency.

Human capital development is also central to effective implementation. Continuous training programs should be introduced for tax officials to strengthen their ICT competencies, deepen their understanding of digital economy taxation, and improve their audit capabilities. Collaboration with universities and professional institutes can help design specialized curricula that prepare a new generation of tax professionals equipped for the digital era. At the same time, taxpayer awareness and the simplification of compliance procedures are essential for encouraging voluntary participation. Targeted outreach campaigns should be directed at small and medium-sized enterprises (SMEs), online entrepreneurs, and multinational digital service providers to clarify obligations and highlight the benefits of compliance. User-friendly online platforms and mobile applications for registration, filing, and payment can further reduce the burden on taxpayers and increase compliance rates. From a legal and policy perspective, Nigeria should adopt a more adaptive approach by reviewing Significant Economic Presence (SEP) thresholds and VAT provisions regularly to reflect changes in business models and digital consumption patterns. Consideration should also be given to introducing a carefully designed Digital Services Tax (DST) that focuses on high-margin activities such as online advertising and platform commissions, ensuring that it complements rather than overlaps with existing tax measures.

Finally, regional and global cooperation must be prioritized. Nigeria's active participation in initiatives led by the African Tax Administration Forum (ATAF) and the Economic Community of West African States (ECOWAS) can promote policy harmonization, reduce the risk of double taxation, and prevent cross-border revenue leakage. At the global level, sustained engagement in OECD negotiations will be critical for ensuring that international tax rules evolve in ways that reflect the interests of developing countries. By implementing these measures in a coordinated manner, Nigeria can establish a robust and adaptive digital taxation framework that secures sustainable revenue, fosters innovation, and strengthens the fairness and resilience of its tax system in the face of ongoing digital transformation.

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