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# Digital Economy Taxation and Sustainable Revenue Mobilisation in Kenya: A Systematic Review of Policy Design, Compliance Constraints and Global Tax Reforms

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**Abstract**
This study examined the role of digital economy taxation in supporting sustainable revenue mobilisation in Kenya amid evolving global tax reforms. It evaluated the evolution from Digital Service Tax to Significant Economic Presence Tax and the influence of institutional capacity and compliance on digital economy taxation outcomes. The study employed a PRISMA-informed systematic literature review of publications from 2019 to 2026, identified through Google Scholar, SSRN, RePEc and relevant institutional sources. Using SPIDER model-informed eligibility criteria, 50 sources were retained from approximately 90 initially identified records and data were extracted using a standardised extraction matrix and subjected to thematic synthesis. The findings reveal fluctuations in standalone DST collections, which declined from Kshs 501 million in FY 2020/21 to Kshs 312 million in FY 2021/22 before increasing to Kshs 652 million in FY 2023/24. In contrast, aggregate revenue collections from broader digital economy taxation measures, including DST/SEP and VAT on digital marketplace supplies, increased from Kshs 5.328 billion in FY 2022/23 to Kshs 14.3 billion in FY 2024/25. The study concludes that taxpayer identification challenges, cross-border transaction monitoring & enforcement and institutional capacity constraints continue to undermine revenue potential. The study recommends that sustainable revenue mobilisation requires integrated digital tax instruments supported by robust compliance systems, technological capability, and aligned tax frameworks. Its originality lies in showing that sustainable revenue mobilisation depends on more than the mere existence of a tax instrument.

**Key words**: Digital economy taxation, digital service tax, Kenya, revenue mobilisation, significant economic presence, tax compliance.

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## INTRODUCTION

This study examined the role of digital economy taxation in supporting sustainable revenue mobilisation in Kenya amid evolving global tax reforms. The fast growth of digitalisation has fundamentally changed the structure of global commerce in terms of the way value is produced, shared and taxed by jurisdictions. According to the IMF, digital firms, including social media platforms, search engines, and e-commerce marketplaces, have large customer bases in jurisdictions where they have no physical presence and can generate substantial revenues from these users (Dabla-Norris et al., 2021). As a result, they can derive value and report profits in jurisdictions where they are headquartered or where tax regimes are more favourable, bypassing contributions from the jurisdictions where their consumers are located and limiting market jurisdictions' ability to tax them effectively. The heavy reliance on intangible assets, cross-border service delivery, user-generated value, and scalable digital platforms has made it harder to identify taxable activities and enforce compliance, resulting in revenue losses. (Latif, 2021). Most developing countries face institutional and structural limitations that constrain their ability to tax digital activities effectively, further compounding the challenges. In response, countries have adopted various taxation regimes, including turnover-based DSTs, SEP, Digital Permanent Establishment (Digital PE and VAT-based models, as broader comprehensive multilateral reforms continue under the OECD/G20 BEPS framework with the hope of achieving a global consensus on digital taxation (OECD, 2025).

Globally, most countries have unilaterally adopted the DST framework, leading to fragmentation in tax rates, revenue thresholds, enforcement mechanisms, nexus rules, and the scope of taxable services. This fragmentation reflects a complex and inconsistent global digital tax environment, increasing compliance costs for multinational enterprises, overlapping tax obligations, heightened concerns about double taxation, and opportunities for regulatory arbitrage. India introduced its equalisation levy in 2016, making it one of the earliest countries to tax the digital economy, while France became an early European adopter of a DST in 2019. According to a report by KPMG, nearly half of all European OECD countries have either announced, proposed or implemented a DST. (KPMG International, 2026).

Digital taxation has also gained momentum across Africa, and like Europe, African countries have adopted diverse approaches that reflect differences in policy priorities and administrative capacity. Nigeria, the earliest adopter of digital taxation in Africa, introduced a SEP framework that taxes non-resident digital firms based on economic engagement rather than physical presence (Nwankwo, 2026). South Africa, by contrast, has relied primarily on VAT on electronic services supplied by non-resident firms to capture cross-border digital transactions while avoiding the introduction of a standalone DST framework (Kabwe & van Zyl, 2021).

Other countries such as Uganda, Rwanda, Tanzania and Tunisia have adopted digital taxation measures through different policy instruments and administrative frameworks. The coexistence of different digital taxation approaches across Africa reflects the absence of a harmonised continental framework. It highlights the different policy choices available to countries seeking to tax digital economic activities. While these approaches seek to expand taxing rights and mobilise revenue, their effectiveness also depends on the administrative and compliance systems supporting implementation. These experiences are particularly relevant to Kenya, which has similarly undertaken successive digital taxation reforms while confronting challenges associated with taxing non-resident digital firms. (KPMG International, 2026).

The Finance Act 2019 recognised income accruing through digital marketplaces as taxable income, while the Finance Act 2020 introduced DST at 1.5 per cent of gross transaction value, effective January 2021. Subsequent amendments refined the scope of DST before the Tax Laws (Amendment) Act, 2024 replaced it with the Significant Economic Presence Tax. Kenya has also adopted complementary instruments, including VAT on digital marketplace supplies and withholding taxes, as part of its broader digital economy taxation framework (Finance Act, 2019; Finance Act, 2020; Finance Act, 2021; Tax Laws (Amendment) Act, 2024).

Despite these policy reforms, Kenya's digital taxation revenue performance presents an important question regarding the sustainability of standalone and broader digital tax instruments. According to Kenya Revenue Authority reports, standalone DST collections amounted to Kshs 501 million in FY 2020/21, declining to Kshs 312 million in FY 2021/22 before fluctuating to Kshs 371 million and Kshs 652 million in the subsequent two

financial years(Kenya Revenue Authority, 2023, 2025). In contrast, reported collections from the broader digital economy taxation framework, including DST and VAT on digital marketplace supplies, increased from approximately Kshs 5.328 billion in FY 2022/23 to Kshs 10.8 billion in FY 2023/24 and Kshs 14.3 billion in FY 2024/25 (Kenya Revenue Authority, 2025). Although these figures relate to different tax instruments and revenue bases, they highlight the need to examine the contribution of individual digital taxation measures within Kenya's broader domestic revenue mobilisation framework (Kenya Revenue Authority, 2025).

Beyond policy design, the effectiveness of digital taxation in Kenya is constrained by difficulties in identifying non-resident taxpayers, monitoring cross-border digital transactions and enforcing tax obligations where firms lack physical presence. A policy brief by KICTANet (2025) further provides Kenya-specific evidence of the compliance challenges associated with digital taxation, including difficulties in accessing user data, establishing taxable nexus, managing regulatory uncertainty and enforcing tax obligations. Similarly, Kenya's National Tax Policy and Medium-Term Revenue Strategy recognise the importance of strengthening taxpayer compliance, integrating digital systems and improving data-driven tax administration to support domestic revenue mobilisation (The National Treasury and Economic Planning, 2023b). These challenges suggest that the effectiveness of digital tax reforms must be examined alongside the compliance systems and institutional capabilities supporting their implementation.

Existing literature provides important insights into digital economy taxation, although the evidence addresses different dimensions of the problem. Legal and policy analyses have examined the limits of traditional taxing rights and the design of alternative frameworks, including DST and SEP, while studies on tax administration have highlighted challenges related to taxpayer identification, compliance, and cross-border enforcement. Revenue reports, by contrast, provide evidence of collections from digital taxation instruments but offer limited explanation of how policy design and administrative conditions jointly influence revenue outcomes.

These different perspectives are complementary, yet they do not necessarily establish whether increases in digital tax collections translate into sustainable revenue mobilisation. In Kenya, this distinction matters given fluctuations in standalone DST collections, rising revenues reported under the broader digital taxation framework, and the persistent challenges of taxing non-resident digital firms. However, the available evidence has not sufficiently established the extent to which these revenue outcomes reflect the design of digital taxation instruments, differences in taxpayer compliance, or the institutional capacity supporting their implementation. This study therefore synthesises existing legal, policy, empirical, and institutional evidence to establish what is known about these relationships, identify areas of agreement and disagreement, and highlight evidence gaps relevant to sustainable revenue mobilisation in Kenya.

To address this gap, the study employed a PRISMA-informed systematic literature review and thematic synthesis to examine the evolution of digital economy taxation globally and in Kenya, particularly the transition from DST to SEP frameworks. It also examined compliance and institutional constraints affecting digital tax implementation, evaluated available evidence on revenue mobilisation, and assessed the implications of OECD-led global tax reforms. By bringing together these dimensions, the study seeks to provide an integrated understanding of the factors influencing sustainable revenue mobilisation from digital economy taxation in Kenya.

This study therefore addressed the following research questions: How have digital economy taxation frameworks evolved globally and in Kenya, particularly from DST to SEP-based approaches? What compliance and institutional constraints affect the effectiveness of digital economy taxation? What evidence exists regarding the contribution of digital economy taxation to sustainable revenue mobilisation? How do OECD-led global tax reforms influence the future sustainability of digital economy taxation?

## LITERATURE REVIEW

### Digital Taxation Policy Design and the Evolution of Taxing Rights

The taxation of the digital economy has attracted considerable scholarly attention because traditional international tax rules struggle to address economic activities conducted without physical presence. Dabla-Norris et al. (2021) and Latif (2021) identify the growing importance of intangible assets, cross-border transactions

and user participation in digital value creation, which complicates the application of conventional tax nexus rules (Latif, 2021; Dabla-Norris et al., 2021). Similarly, in their examination of the African context, Mpofu and Moloi (2022) highlight the difficulties that digital business models present for taxpayer identification, assessment and enforcement (Mpofu & Moloi, 2022). While these studies establish the structural challenges associated with digitalisation, they also provide limited evidence on the comparative effectiveness of alternative digital taxation instruments in achieving sustainable revenue mobilisation.

The literature identifies frameworks such as the Digital Services Tax (DST), Significant Economic Presence (SEP), VAT on electronically supplied services, and OECD-led multilateral reforms as alternative responses. In their review of global digital tax reforms, Igbinenikaro and Adewusi (2024) examined the limitations of traditional international tax arrangements in addressing profit shifting and cross-border digital activities. They highlighted the emergence of divergent unilateral taxation measures, the associated risks of double taxation and the challenges of achieving international consensus on the allocation of taxing rights (Igbinenikaro & Adewus, 2024).

Building on these discussions, ATAF (2025) proposed SEP-based legislative approaches to strengthen African jurisdictions' taxing rights over income derived from digital economic activities by enterprises operating without a physical presence. However, SEP implementation remains subject to domestic legislative provisions and applicable international tax treaty obligations, despite its recognition of significant economic participation as a basis for establishing taxing rights.

These perspectives from the literature are relevant to Kenya's transition from DST to SEP. While DST and SEP seek to address limitations in taxing non-resident digital businesses, they differ in their legal design, tax base and administrative requirements. The literature therefore suggests that the effectiveness of Kenya's reforms cannot be assessed solely through legislative changes but must also consider the compliance and administrative conditions under which the instruments operate.

**Taxpayer Compliance and Institutional Capacity**

Although existing studies approach digital taxation from different perspectives, they increasingly recognise compliance and institutional capacity as important factors in its effectiveness. Kiondo (2022) examined the determinants of digital services tax awareness among corporations in Kenya and found that tax knowledge, perceived fairness, and digitalisation influence taxpayer awareness. Similarly, KICTANet (2025) identified several challenges associated with digital taxation in Kenya, including regulatory uncertainty, compliance costs, and administrative challenges, particularly in determining tax liabilities and enforcing obligations involving cross-border digital transactions (Kenya ICT Action Network [KICTANet], 2025).

Mwencha et al. (2024) reviewed digital taxation in Kenya. They identified challenges related to access to user data, determining taxable nexus, limited technical expertise, and enforcing tax obligations (Mwencha et al., 2024). Erimwinorosee and Abe-David (2025) examined Nigeria's digital taxation framework using doctrinal legal analysis, which was complemented by a comparative review of international tax frameworks. They found that despite introducing SEP rules, Nigeria still faced jurisdictional constraints, inadequate technological capacity, and low compliance among non-resident companies (Erimwinorosee & Abe-David, 2025). Brondolo and Konza (2021) examined administrative approaches to collecting VAT from non-resident suppliers of digital services, highlighting the importance of registration, filing, payment and enforcement mechanisms (Brondolo & Konza, 2021). Banga and Beyleveld (2024) examined how digital trade rules governing cross-border data flows, data localisation and source-code sharing may affect tax authorities' ability to collect information, monitor taxable activities and administer digital taxes (Banga & Beyleveld, 2024).

Kenya's National Tax Policy and Medium-Term Revenue Strategy similarly recognise improvements in taxpayer compliance, technological integration, and tax administration as priorities for domestic revenue mobilisation (The National Treasury and Economic Planning, 2023a). Taken together, the literature suggests that taxpayer compliance and institutional capacity are related but distinct dimensions of digital taxation effectiveness. Nevertheless, empirical evidence on how these conditions influence revenue mobilisation under Kenya's digital taxation framework remains limited.

**Digital Taxation and Sustainable Revenue Mobilisation**

The empirical literature provides evidence of the revenue potential of digital taxation, although findings vary by geographical coverage, research methods, and the instruments examined. Starkov and Jin (2024) compared the potential revenue implications of OECD Amount A and a stylised DST for developing countries, demonstrating that projected revenue outcomes depend on tax rates, the scope of taxable activities, market characteristics and the treatment of double taxation (Starkov & Jin, 2024). Their findings underscore the significance of tax policy design in determining the relative revenue-generating potential of alternative digital taxation frameworks.

Kayongo et al. (2026) used a difference-in-differences-in-differences framework and an unbalanced panel of 47 sub-Saharan African countries covering 2017–2022 to examine the revenue effects associated with digital tax adoption. The study reported positive effects on goods-and-services tax revenue relative to payroll taxes, with variations associated with governance quality, digital readiness, and policy design (Kayongo et al., 2026). Fadipe et al. (2025) conducted a study in Nigeria using annual time-series data from 2014 to 2024. They found statistically significant positive associations between the introduction of digital taxation measures and digital VAT and company income tax revenues (Fadipe et al., 2025). Kenya-specific revenue evidence adds another dimension. Kenya Revenue Authority reports indicate growth in revenue collected from digital economy taxation, although the reported figures encompass different tax instruments, including DST, SEP and VAT on digital supplies (Kenya Revenue Authority, 2023). Despite the empirical evidence provided by these studies on the revenue potential of digital taxation, their findings are not directly comparable because of differences in geographical coverage, tax instruments, revenue measures and analytical approaches.

**Conceptual Framework**

The study adopted an integrative conceptual framework linking digital taxation policy design, taxpayer compliance, institutional capacity and sustainable revenue mobilisation. Digital taxation policy design encompasses the choice of tax instruments, taxable activities, nexus provisions, tax bases and applicable obligations. Taxpayer compliance concerns meeting registration, reporting, filing, and payment requirements, while institutional capacity encompasses technological infrastructure, administrative expertise, access to information, monitoring systems, and enforcement capabilities. Institutional capacity may also facilitate compliance through simplified procedures, accessible registration systems and effective information exchange. Sustainable revenue mobilisation is considered in terms of revenue contribution, consistency of collections, administrative feasibility and longer-term viability rather than revenue growth in a single period. The framework guided the thematic synthesis by examining how the reviewed literature explains the relationships among these dimensions and identifying areas where the available evidence remains inconclusive.

## METHODOLOGY

The study was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) framework. This was preferred because it ensured a systematic approach to literature identification, screening, and selection. The search strategy was further structured around the Sample, Phenomenon of Interest, Design, Evaluation, and Research Type (SPIDER) model (Cooke et al., 2012). This approach was considered suitable for the study given its multidisciplinary scope, encompassing empirical research, comparative tax policy analyses, legal and regulatory assessments and institutional studies relating to digital economy taxation. The SPIDER components were aligned with the study objectives and informed the organisation of search terms and literature extraction, as presented in Table 1.

**Table 1: Application of the SPIDER Framework to the Systematic Review**

| Component | Definition | Application to the present study |
|---|---|---|
| S – Sample | Population, actors and geographical context | Kenya and comparable developing economies; digital businesses, taxpayers and revenue authorities |
| PI – Phenomenon of Interest | Tax policy or phenomenon under investigation | Digital Services Tax (DST), Significant Economic Presence (SEP), digital economy taxation and international digital tax reforms |
| D – Design | Research approaches and evidence sources | Empirical studies, comparative tax policy analyses, legal and regulatory reviews, economic assessments and institutional policy evaluations |
| E – Evaluation | Outcomes and implications assessed | Tax revenue mobilisation, taxpayer compliance, administrative effectiveness, institutional capacity and implementation challenges |
| R – Research Type | Types of research considered | Quantitative, qualitative, mixed-methods and documentary research |

*Source: Authors' adaptation of Cooke et al. (2012).*

The search focused primarily on studies published between 2019 and 2026 to capture recent developments in digital taxation, and it comprised peer-reviewed journal articles, policy papers, working papers, legal and regulatory documents, international organisation reports, and institutional publications. The literature was identified through scholarly literature-search platforms and bibliographic databases, including Research Papers in Economics (RePEc), Google Scholar, and the Social Science Research Network (SSRN), and supplemented by institutional repositories and publications issued by the OECD, IMF, ATAF, KPMG, national governments, and tax authorities.

A comprehensive search strategy was employed using combinations of keywords including "digital services tax," "digital economy taxation," "significant economic presence," "digital tax compliance," "revenue mobilisation," "digital tax administration," "OECD Pillar One," "OECD Pillar Two," "base erosion and profit shifting," "digital tax reforms," and "international taxation of the digital economy." Studies were included if they directly addressed digital economy taxation, DST, SEP frameworks, tax compliance, revenue mobilisation, tax administration, digital tax governance or OECD-led reforms. Both empirical and conceptual studies were considered, provided they contributed relevant evidence, policy analysis or legal perspectives related to the taxation of digital activities. Documents were excluded if they were unrelated to digital taxation, duplicated existing evidence, lacked substantive relevance to the study objectives or contained insufficient analytical content.

To minimise potential selection and analytical bias, the literature was screened using predefined eligibility criteria informed by the SPIDER framework, with emphasis on relevance to digital economy taxation, methodological quality and substantive contribution to the review objectives. A standardised data extraction matrix was used to ensure consistency in documenting the authors, study titles, tax instruments examined, geographical scope, study design, research methods, key findings, revenue implications, compliance burdens, research gaps and relevance to Kenya.

## FINDINGS AND DISCUSSION

The bibliographic database, scholarly literature-search platforms, institutional repositories and publications drew upon approximately 90 sources. The preliminary screening stage removed 5 duplicate records. To further evaluate the eligibility of the identified sources, full-text assessments were undertaken, and filters were subsequently applied to identify literature that addressed digital economy taxation, DST, SEP frameworks, tax compliance, revenue mobilisation, tax administration, digital tax governance or OECD-led reforms. As a result, 35 articles were identified as not relevant. Following the screening and eligibility assessment stages, approximately 50 sources were retained for inclusion in the final review and the flow is illustrated in Figure 1.

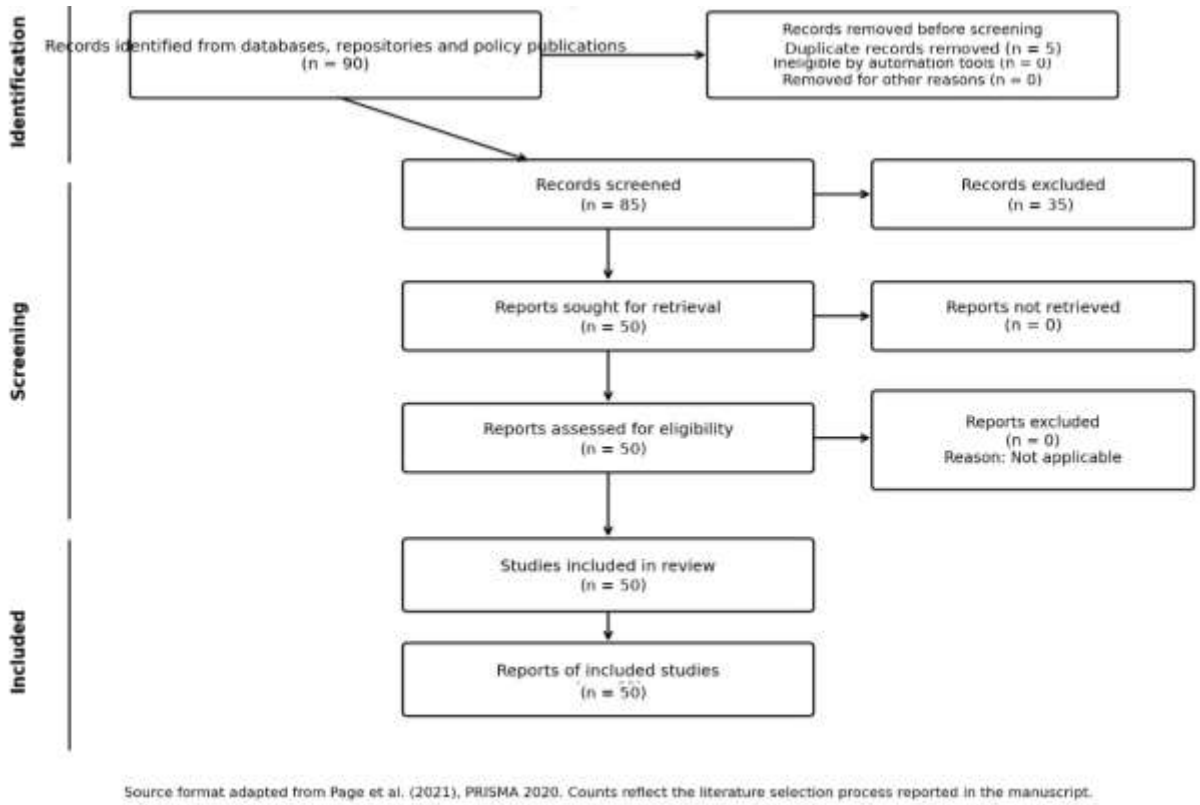



**Figure 1: PRISMA 2020 Flow Diagram Illustrating the Literature Search and Selection Process for the Systematic Review**

**Design of Digital Service Tax and the Evolution toward Sep Frameworks**

The reviewed literature identifies Digital Services Tax (DST) as a pragmatic response to the limitations of traditional tax systems in capturing income generated through digital economic activities without physical presence. DST is generally characterised as a turnover-based tax applied to gross revenues from specified digital services, making its design relatively straightforward compared with conventional profit-based taxation, which may involve complex transfer pricing arrangements. This has made DST an attractive policy instrument for jurisdictions seeking to broaden their tax bases and mobilise revenue from digital activities.

However, the unilateral adoption of DST has created fragmented tax frameworks across jurisdictions, with differences in tax rates, revenue thresholds, nexus requirements, enforcement mechanisms, and the scope of taxable services. This fragmentation has increased compliance costs for multinational enterprises, created overlapping tax obligations, raised concerns about double taxation, and created opportunities for regulatory arbitrage. Consequently, although DST offers a mechanism for taxing digital activities, its design and implementation raise important questions regarding administrative effectiveness, international coordination and the sustainability of revenue mobilisation.

Kenya has progressively reformed its digital taxation framework in response to the rapid expansion of the digital economy, the challenges of traditional tax systems that are based on physical presence and evolving international tax developments. The Finance Act (2019) formally introduced digital economy taxation into Kenya's tax framework by recognising 'income accruing through the digital marketplace' as income chargeable to tax under the Income Tax Act and VAT Act. This Act created a legal foundation for the taxation of digital activities in Kenya. It also defined a digital marketplace as a platform enabling direct interaction between buyers and sellers of goods and services through electronic means (Finance Act, 2019).

A major milestone came with the Finance Act 2020, which introduced DST at 1.5 per cent of the gross transaction value received as consideration for providing the digital service. This introduction marked Kenya's first explicit instrument targeting revenues generated through digital activities by resident and non-resident digital service providers (Finance Act, 2020a). To operationalise the tax and guide its implementation, the Cabinet Secretary, National Treasury issued the DST Regulations 2020. The tax applies to a broad range of digital services, including downloadable digital content, online advertising, data monetisation, cloud storage, electronic booking services, streaming platforms, e-learning, subscription-based media, and digital marketplaces (Income Tax (Digital Service Tax) Regulations, 2020).

Finance Act (2021) made further changes by refining the definition of income chargeable to DST to include income accruing from a business carried out over the internet or an electronic network, including through a digital marketplace. The changes further limited DST to non-resident persons, but exempted non-resident businesses that provide telecommunication transmission services and income already subjected to withholding tax. It also refined the definition of digital marketplace to mean an online or electronic platform that enables users to sell or provide services, goods, or other property to other users (Finance Act, 2021). The Finance Act 2022 introduced a DST exemption for non-residents with a permanent establishment in Kenya (Finance Act, 2022).

To expand and strengthen Kenya's digital economy taxation framework, the Finance Act 2023 introduced a 15 per cent withholding income tax on income earned by digital content creators. These changes showed a focus beyond multinational digital platforms to include resident digital content creators and online influencers generating income through digital platforms such as websites and social media advertising, paid sponsorships, affiliate marketing, subscriptions offering use of a logo, brand or catchphrase associated with the content creator, merchandise sales, eBooks, courses or software, membership programmes for exclusive content, commission or fees from crowdfunding, licensing the content, including photographs, music or other businesses and other monetised online activities (Finance Act, 2023).

The implementation of Digital Services Tax (DST) raised concerns about its ability to adequately capture the economic participation of highly digitalised multinational enterprises, as well as potential double taxation, equity, and efficiency challenges. Against this background, Kenya transitioned to the SEP framework in 2024 through the Tax Laws (Amendment) Act 2024, replacing DST with effect from January 2025 (Tax Procedures (Amendment) Act, 2024). This marked an important development in Kenya's digital taxation framework by introducing an income tax mechanism based on the economic presence of qualifying non-resident service providers within the Kenyan market. However, while SEP introduces a different nexus and tax computation framework, Kenya's SEP tax remains linked to gross turnover through a deemed taxable profit mechanism.

The transition also forms part of Kenya's broader approach to digital economy taxation, which incorporates VAT on qualifying digital supplies and withholding tax provisions alongside income taxation of non-resident digital service providers. These instruments address different taxable activities and obligations, reflecting an effort to extend taxation across various forms of digital economic participation. This has placed Kenya among the leading African countries to adopt a broader nexus-based approach consistent with emerging global debates on digital economy taxation and OECD-inspired reforms (KPMG International, 2026).

ATAF (2025) has advocated adopting SEP-based approaches to strengthen African jurisdictions' taxing rights over non-resident digital businesses operating without a conventional physical presence. Through its suggested legislative approach to SEP, ATAF seeks to help countries develop appropriate nexus provisions while considering administrative feasibility and international tax developments. This reflects broader efforts by African countries to strengthen domestic revenue mobilisation and participate in international discussions on allocating taxing rights. However, differences in domestic legislation, administrative capacity and international tax arrangements mean that the potential benefits of SEP may vary across jurisdictions. (ATAF, 2025).

The reviewed literature therefore identifies an evolving policy approach to digital economy taxation, with DST and SEP representing different mechanisms for extending taxation to digital activities. While DST offers a

relatively straightforward gross-revenue-based instrument, SEP introduces an economic-presence framework whose practical application depends on the specific provisions each jurisdiction adopts. In Kenya, the distinction between these instruments is particularly important in evaluating their tax bases, nexus requirements, taxpayer scope, rate structures, administrative arrangements and potential revenue implications, as summarised in Table 2.

**Table 2: Comparison of Kenya's Digital Services Tax and Significant Economic Presence Tax**

| Dimension | Digital Services Tax (DST) | Significant Economic Presence (SEP) tax |
|---|---|---|
| Legal framework | Finance Act, 2020, and subsequent amendments | Tax Laws (Amendment) Act, 2024, and subsequent amendments |
| Tax base | Gross transaction value from qualifying digital services | Deemed taxable profit equivalent to 10% of gross turnover from qualifying services |
| Nexus | Income derived or accrued in Kenya through qualifying digital activities | Significant economic presence linked to the location of the service user in Kenya |
| Taxpayer scope | Initially qualifying resident and non-resident providers; subsequently principally non-residents | Qualifying non-resident service providers, subject to statutory exclusions |
| Rate structure | 1.5% of gross transaction value | 30% of deemed taxable profit, equivalent to 3% of gross turnover |
| Administration | Registration, monthly filing and payment obligations | Registration, monthly filing and payment obligations, with deemed-profit computation |

*Source: Finance Acts and Tax Laws (Amendment) Act, 2024; Income Tax Act, Cap. 470.*

Although these policy developments have expanded the legal framework for taxing digital activities, their effectiveness also depends on taxpayers' ability and willingness to comply with their obligations and the capacity of tax administrations to identify taxable transactions and enforce compliance. These issues are examined in the subsequent sections.

**Compliance Constraints in Digital Taxation**

Taxpayer compliance remains a significant consideration in assessing the effectiveness of Digital Services Tax (DST) and Significant Economic Presence (SEP) frameworks. The reviewed literature shows that extending tax obligations to digital economic activities does not necessarily ensure affected taxpayers register, report transactions accurately, file returns, and remit taxes due. These challenges are particularly pronounced for non-resident digital service providers operating across multiple jurisdictions without conventional physical presence. The evidence identifies interconnected constraints relating to taxpayer identification, registration, transaction reporting, compliance costs, regulatory uncertainty and cross-border enforcement.

**Taxpayer Identification and Registration**

Identifying and registering non-resident digital service providers poses significant challenges in implementing digital taxation frameworks. Unlike conventional businesses operating through physical establishments, digital enterprises may generate income from users within a jurisdiction without maintaining offices, employees or other visible business infrastructure. Latif (2025) observes that digital business models increasingly rely on data flows, user participation and cross-border transactions, complicating the application of traditional taxation rules (Latif, 2025). Similarly, Quiñones et al. (2025) highlight the difficulties of identifying taxable economic activities and establishing the relationship

between digital value creation and market jurisdictions (Quiñones et al., 2025).

In Kenya, the Income Tax (Digital Service Tax) Regulations, 2020 established registration, filing and payment obligations for qualifying digital service providers, digital marketplace providers and appointed tax representatives. The regulations also provided indicators for determining users' location, including payment facilities, internet protocol addresses, mobile country codes, and billing or residential addresses. These provisions sought to bring qualifying digital transactions within Kenya's tax framework. However, identifying taxable activities does not necessarily translate into registration and compliance by all affected non-resident providers, particularly where they operate entirely outside Kenya.

**Transaction Monitoring, Reporting and Filing Obligations**

The nature of digital transactions presents additional difficulties in determining the completeness and accuracy of taxpayers' declarations. Digital businesses may derive revenue from online advertising, subscriptions, streaming services, cloud-based activities and platform-mediated transactions involving users across different jurisdictions. Such arrangements create challenges in determining which transactions fall within a particular country's tax jurisdiction and how the corresponding income should be reported. The Kenyan DST framework required qualifying taxpayers to file returns and remit tax periodically. Compliance therefore depended on taxpayers identifying taxable transactions, determining the applicable tax base and reporting the relevant income within the prescribed period. The transition to SEP introduced a different tax computation framework, but it did not eliminate the need for accurate transaction identification and reporting.

Mwencha et al. (2024) identify access to user information, uncertainty around taxable nexus, and enforcement of obligations on digital enterprises as significant challenges in Kenya's digital taxation environment. These concerns indicate that reporting compliance is closely connected to the availability and reliability of information on digital transactions (Mwencha et al., 2024)

**Regulatory Complexity and Compliance Costs**

The literature also identifies regulatory complexity as a key constraint on digital tax compliance. Differences in national tax rates, thresholds, taxable services, registration procedures and reporting requirements create additional obligations for digital enterprises operating across multiple jurisdictions. Consequently, compliance may involve substantial expenditure on accounting systems, professional advice, transaction classification and tax reporting.

Kiondo (2022), examining Kenya's DST framework, found that corporate taxpayers perceived the regulations as complex and associated them with increased compliance costs, filing difficulties and regulatory uncertainty. The study further identified concerns that unfavourable tax conditions could influence business location decisions. Although these findings reflect taxpayer perceptions rather than direct evidence of widespread non-compliance, they demonstrate the potential relationship between regulatory design and taxpayers' willingness or ability to fulfil their obligations (Kiondo, 2022).

Similarly, KICTANet (2025) raises concerns regarding the interaction of multiple digital taxation instruments in Kenya, including DST or SEP, VAT on digital services and withholding tax obligations (Kenya ICT Action Network [KICTANet], 2025). Although these instruments apply to different taxable activities and circumstances, their coexistence may increase the complexity of determining applicable obligations. The literature therefore highlights the importance of legal clarity and administrative simplicity in facilitating compliance without imposing disproportionate costs on digital businesses. At the international level, Daxenberger et al. (2026) examine compliance burdens associated with OECD Pillar Two requirements, including investment in data systems, reporting infrastructure and specialised expertise. Although Pillar Two is distinct from DST and SEP, the study provides comparative evidence that increasingly complex international tax rules can generate substantial compliance costs (Daxenberger et al., 2026).

**Cross-Border Compliance and Enforcement Challenges**

The cross-border nature of digital economic activities further complicates compliance with domestic tax obligations because of uncertainty about applicable tax

obligations or overlapping claims to taxing rights. (Erimwinorosee & Abe-David, 2025) identifies jurisdictional limitations, low compliance among non-resident digital businesses and enforcement difficulties in Nigeria's SEP framework. These findings reinforce concerns raised in the wider literature regarding the challenges of applying domestic tax obligations to businesses operating beyond national borders.

Differences in digital taxation frameworks across countries may also increase uncertainty for multinational enterprises. When the same digital activity falls within multiple national tax regimes, taxpayers may face overlapping obligations, differing definitions of taxable services, and concerns about double taxation. Such complexities may affect compliance costs and the predictability of tax obligations.

**Synthesis of Compliance Findings**

The reviewed evidence shows that compliance challenges in digital taxation extend beyond taxpayers' willingness to remit taxes. They include identifying and registering liable persons, accurately reporting digital transactions, fulfilling filing and payment obligations, ensuring regulatory clarity, and managing cross-border tax requirements. Kenya-specific studies particularly emphasise regulatory complexity, compliance costs and uncertainty. Beyond compliance, the revenue outcomes of digital economy taxation may also be influenced by the design of tax instruments, the size of the taxable digital economy, and the effectiveness of tax administration. While this section has examined the obligations and challenges confronting taxpayers, tax authorities' ability to identify non-compliant persons, access transaction information, verify declarations, and enforce payment depends on their technological, legal, and administrative capabilities. These institutional dimensions are examined in the following section.

**Institutional Capacity and Administrative Effectiveness**

Institutional capacity plays a critical role in the effective administration of digital taxation, because it relates to the technological, legal, human and administrative resources available to tax authorities to identify taxable activities, verify declarations and enforce compliance. The reviewed literature shows that the effectiveness of digital economy taxation frameworks depends not only on their legislative design but also on tax administrations' ability to operationalise the relevant provisions.

This relationship between institutional capacity and revenue mobilisation operates through several interconnected administrative mechanisms. First, effective taxpayer identification and registration systems may increase the proportion of liable digital service providers brought into the tax system. Second, access to reliable transaction data and integrated reporting systems may improve the accuracy of tax declarations and help detect underreporting. Third, administrative expertise and effective enforcement mechanisms may strengthen filing and payment compliance while reducing opportunities for non-compliance. Finally, information exchange and cross-border cooperation may improve tax authorities' ability to administer tax obligations involving non-resident enterprises.

Beyond facilitating revenue collection, these mechanisms also affect the sustainability of digital tax revenues. Sustainable revenue mobilisation requires not only expanding the tax base and increasing collections but also maintaining a reasonably consistent and reliable flow of revenue over time. Where tax administrations can identify liable taxpayers, monitor taxable transactions and address non-compliance, revenue collections may become more predictable and less dependent on isolated enforcement interventions. Conversely, weaknesses in information access, technological infrastructure and enforcement may result in persistent revenue leakage and fluctuations in collections, even where the statutory tax base has been expanded.

Banga and Beyleveld (2024) argue that emerging digital trade rules relating to cross-border data flows, data localisation, source code protection, and algorithms may constrain tax authorities' ability to access the information needed to identify digital economic activities and monitor taxable transactions (Banga, K & Beyleveld, A, 2024). Similarly, the OECD (2020) emphasises the importance of reliable digital infrastructure, access to transaction information, legal clarity, and inter-agency cooperation in administering taxes on cross-border digital activities (OECD, 2020). Brondolo and Konza (2021) further highlight the importance of administrative readiness in implementing VAT collection mechanisms for non-resident digital service providers, particularly in developing economies (Brondolo & Konza, 2021). Although these studies examine different aspects of digital taxation, they collectively demonstrate that legislative provisions alone may be insufficient where the administrative systems required for implementation are

inadequate. In the Kenyan context, the National Tax Policy provides a strong policy basis for this argument, as it identifies challenges affecting domestic revenue mobilisation as low compliance, the growth of informal economic activity, and increased use of technology in contemporary business models. The policy further emphasises the need to broaden the tax base, enhance fairness and equity, improve voluntary compliance and modernise tax administration systems (The National Treasury and Economic Planning, 2023a)

Similarly, Mwencha et al. (2024) identify key challenges in administering digital taxes: insufficient technical expertise, inadequate digital infrastructure, and limited enforcement resources. These findings suggest that implementing digital taxation requires specialised administrative capabilities to address the complexity and cross-border nature of digital transactions. Kenya's Medium-Term Revenue Strategy (MTRS) 2024–2027 further recognises digitalisation and technological advancement as important elements of revenue administration. The strategy identifies data-driven compliance management, digital system integration, taxpayer segmentation, and strengthened enforcement as measures intended to improve the identification of taxable activities and the administration of emerging business models (The National Treasury and Economic Planning, 2023b). These priorities demonstrate the recognition that effective digital taxation requires administrative systems capable of processing and analysing information beyond traditional taxpayer records.

The reviewed evidence also highlights the relevance of technological investment to Kenya's digital taxation performance. KRA's revenue performance reports identify initiatives to recruit non-resident taxpayers and increase technology use to support compliance management. The Authority has also indicated its intention to strengthen the use of data analytics, artificial intelligence, machine learning, and application programming interface integration in revenue administration. These initiatives reflect a growing emphasis on technology-supported taxpayer identification, transaction monitoring, and compliance enforcement. However, improvements in reported digital tax collections cannot be attributed exclusively to technological developments without further evidence separating their effects from changes in tax policy, the taxable base and economic activity.

Comparative evidence from Nigeria reinforces the importance of administrative capacity. According to Erimwinorosee and Abe-David (2025), successful implementation of the SEP in Nigeria requires strengthened administrative capacity, specialised expertise, digital infrastructure, and effective dispute resolution (Erimwinorosee & Abe-David, 2025). Nwankwo (2026) similarly argue that the effectiveness of Nigeria's SEP framework depends on regulatory clarity and the administrative capacity to enforce obligations on non-resident digital enterprises (Nwankwo, 2026). These findings indicate that expanding domestic taxing rights through SEP provisions does not automatically result in effective revenue collection where administrative and enforcement mechanisms remain inadequate.

The reviewed literature therefore establishes institutional capacity as an important condition supporting the effective implementation of digital taxation and the potential sustainability of revenue mobilisation. However, the extent to which particular technological and administrative initiatives have contributed to the stability of Kenya's digital tax revenue remains an empirical question. The subsequent section examines the available revenue evidence and considers what it reveals about the contribution of digital taxation to sustainable revenue mobilisation.

**Digital Economy Taxation and Revenue Mobilisation**

The main motivation for countries adopting digital economy taxation is revenue mobilisation. Digital firms' ability to generate substantial revenue from jurisdictions where they have no physical presence has led countries to adopt DST to strengthen revenue mobilisation. The relationship between DST and revenue mobilisation in Kenya is evidenced in the annual financial performance reports.

Examining Kenya’s revenue performance from digital economy taxation provides important insights. According to the annual performance report for the period 2020/2021, the country collected Kshs 501 million from DST as a stand-alone measure before declining to Kshs 312 million in financial year 2021/22 (Kenya Revenue Authority, 2021). Collections subsequently increased to Kshs 371 million and Kshs 652 million in the financial years 2022/23 and 2023/24, respectively, indicating variability in annual revenue performance. Following the transition from DST to the Significant Economic Presence Tax (SEP), KRA reported combined DST/SEP

collections of Kshs 807 million in the financial year 2024/25 (Kenya Revenue Authority, 2025).

However, a broader examination of Kenya's performance on digital economy taxation, including DST and other digital tax instruments such as VAT on Digital Market Supply and Digital Asset Tax, reveals growth in aggregate revenue collections. In the financial year 2022/2023, Kenya collected approximately Kshs 5.328 billion from digital economy taxation, specifically from DST and VAT on Digital Market Supply(Kenya Revenue Authority, 2023). Collections increased to approximately KShs 10.8 and 14.3 billion in the financial years 2023/2024 and 2024/2025, respectively (Kenya Revenue Authority, 2025). This suggests that revenue gains from the digital economy may reflect contributions from multiple digital tax instruments rather than DST or SEP alone.

The upward trend in aggregate digital tax collections suggests that integrating multiple digital tax instruments, supported by compliance mechanisms and administrative capacity, may contribute to sustainable revenue mobilisation. The Kenyan experience suggests that comprehensive and coordinated digital taxation frameworks may offer greater potential for sustainable revenue mobilisation than reliance on standalone digital services taxes.

However, variation in the performance of standalone DSTs should not be interpreted as a failure of digital taxation, but rather as evidence that sustainable revenue mobilisation depends on the broader tax ecosystem in which digital taxes operate. This perspective is further reinforced by IMF evidence which argues that sustainable taxation of the digital economy requires broader and more integrated tax instruments beyond standalone DST regimes. Hanappi et al. (2024) note that as digital trade increasingly replaces traditional cross-border trade in physical goods, governments must modernise domestic tax systems by strengthening VAT frameworks and expanding the taxation of digital transactions to preserve long-term revenue capacity (Hanappi et al., 2024).

The Kenyan experience also supports a growing body of literature which argues that the effectiveness of DST depends on factors beyond tax policy design. Existing digital taxation literature on developing countries shows that outcomes from adopting digital taxes varied significantly across countries because of differences in governance quality, digital readiness, and implementation capacity, further suggesting that the effectiveness of digital taxation is heavily influenced by compliance and enforcement capacity (Kayongo et al., 2026).

Similar evidence from Nigeria indicates that expanding taxing rights through digital tax reforms does not automatically translate into improved revenue performance where compliance systems and administrative capacity remain weak(Erimwinorosee & Abe-David, 2025). Further evidence from developed countries such as the UK, France, Italy, and Spain shows increased tax revenue collections, demonstrating the revenue-generating potential of DST when supported by strong institutional frameworks. In 2024/2025, the UK collected approximately GBP 808 million in Digital Services Tax revenue (HM Treasury, 2025), while France collected EUR 756 million, Italy EUR 455 million, and Spain EUR 375 million in 2024 (Thomadakis, 2026).

These experiences suggest that digital taxation can contribute to tax revenue where digital markets are well developed and supported by effective tax administration and compliance systems. Therefore, the magnitude and sustainability of revenue gains continue to vary across jurisdictions depending on factors such as market size, institutional capacity and taxpayer compliance. Differences in revenue performance across jurisdictions suggest that the effectiveness of digital taxation reforms may depend not only on the tax instruments adopted but also on the institutional environment supporting their implementation.

Overall, the literature demonstrates that DST can broaden the tax base and generate short-term revenue gains by capturing previously untaxed digital economic activities. However, evidence from both developed and developing countries indicates that revenue performance varies significantly across jurisdictions and is influenced by factors such as compliance levels, institutional capacity, digital market size and administrative effectiveness. The Kenyan experience is particularly instructive: while standalone DST collections declined over time, revenues from the broader digital taxation framework continued to grow. These findings suggest that sustainable revenue mobilisation in the digital economy depends less on the existence of a DST regime and more on integrating

multiple tax instruments supported by effective compliance systems, strong institutional capacity, and technology-enabled tax administration.

**Global Digital Tax Landscape and OECD Reforms**

The introduction of digital economy taxation rules must be understood within the broader global struggle to reform international taxation. Unilateral digital taxation frameworks have been adopted by several countries such as the UK, Spain, Austria, Turkey, Tunisia, Uganda, Tanzania and Kenya as a targeted response to large multinational digital firms. Evidence shows that countries have adopted diverse approaches, ranging from turnover-based DSTs and SEPs to VAT-based models, withholding taxes, and digital permanent establishments, further fragmenting the design of unilateral digital tax regimes. Table 3 presents selected digital taxation frameworks adopted by different countries, reflecting variations in policy objectives, administrative capacities, legal systems and domestic revenue mobilisation priorities. These frameworks also reflect differing approaches to allocating taxing rights over income generated through digital economic activities. The diversity of these measures highlights the continued fragmentation of international digital taxation and the absence of a universally accepted framework.

**Table 3: Comparative Overview of Digital Taxation Frameworks across Selected Countries**

| Country | Digital tax instrument | Year effective | Rate / tax basis | Tax base, scope and policy evolution | Source |
|---|---|---|---|---|---|
| Kenya | Digital Services Tax (DST) | 2021 | 1.5% of gross qualifying revenue | Applied to qualifying digital services supplied through digital marketplaces; subsequently replaced by SEP tax. | (Finance Act, 2020a) |
| Kenya | Significant Economic Presence (SEP) tax | Jan 2025 | 3% effective on qualifying turnover | Applies to qualifying non-resident digital services; 10% of gross turnover deemed taxable profit, taxed at 30%. Enacted in December 2024 and effective from January 2025, replacing DST. | (Tax Laws (Amendment) Act, 2024) |
| United Kingdom | Digital Services Tax | 2020 | 2% | Revenue attributable to UK users of search engines, social media platforms and online marketplaces, subject to thresholds. Rate unchanged. | (HM Treasury, 2025) |
| France | Digital Services Tax | 2019 | 3% | Digital intermediation and targeted advertising based on user data. | (Enache, 2026) |
| Italy | Digital Services Tax | 2020 | 3% | Digital advertising, intermediation and | (Enache, 2026) |

| | | | | | |
|---|---|---|---|---|---|
| | | | | transmission of user-generated data; revenue-threshold rules amended in 2025. | |
| Spain | Digital Services Tax | 2021 | 3% | Online advertising, digital intermediation and transmission of user-generated data. | (Enache, 2026) |
| Austria | Digital Advertising Tax | 2020 | 5% | Online advertising revenue of businesses exceeding prescribed domestic and worldwide turnover thresholds. | (Federal Ministry of Finance, n.d.) |
| Turkey | Digital Services Tax | 2020 | 7.5% initially; 5% from 2026 | Specified online advertising, digital content and social media services. Further reduction to 2.5% scheduled for 2027. | (Law No. 7194, 2019; Presidential Decision No. 10767, 2025) |
| India | Equalisation Levy — online advertising | 2016 | 6% | Specified online advertising payments to non-residents; abolished from April 2025. | (Income Tax Department, n.d.) |
| India | Equalisation Levy — e-commerce | 2020 | 2% | Specified transactions involving non-resident e-commerce operators; abolished from August 2024. | (Income Tax Department, n.d.) |
| India | Significant Economic Presence provisions | 2022 | Income-tax nexus; no standalone flat rate | Income-tax nexus through transaction-value or user-engagement thresholds without physical presence; provisions subsequently amended in 2026. | (Finance Act, 2020b) |
| Canada | Digital-economy GST/HST rules | 2021 | Applicable GST/HST rates | Qualifying non-resident suppliers and digital platforms collect GST/HST on specified supplies to Canadian consumers. | (Canada Revenue Agency, n.d.) |
| Canada | Digital Services Tax | 2024 | 3% (historical) | Applied to specified Canadian user-related digital revenue of large | (Canada Revenue Agency, 2026) |

| | | | | | |
|---|---|---|---|---|---|
| | | | | businesses; repealed in March 2026 with retroactive effect. | |
| Nigeria | Significant Economic Presence rules | 2020 | Corporate income tax on attributable profits | Extended income-tax nexus to qualifying non-resident enterprises deriving income from specified digital activities involving Nigeria. | (Companies Income Tax (Significant Economic Presence) Order, 2020) |
| Nigeria | Revised non-resident income-tax framework | 2026 | Profit-based income tax under statutory rules | Nigeria Tax Act, 2025 introduced a revised framework for taxing qualifying non-resident digital activities, effective January 2026. | (Nigeria Tax Act, 2025) |
| South Africa | VAT on electronic services | 2014 | 14% initially; 15% from 2018 | VAT on qualifying electronic services supplied by foreign providers; scope expanded in 2019 and revised in April 2025. | (South African Revenue Service, 2025) |

Note. *Effective years indicate initial implementation; subsequent amendments, replacements and repeals are identified separately:* Sources are provided for each country.

A comparative study by Ponomareva (2023) notes that digital taxes in OECD countries range from as low as the UK's 2 per cent to Turkey's 7.5 per cent, and that they can be grouped into income taxes, VAT-based consumption taxes, and hybrid taxes. The study further noted that the United States has viewed unilateral digital taxation frameworks as discriminatory because the largely affected multinational entities are based in the USA, creating geopolitical tension (Ponomareva, 2023).

On the other hand, unilateral digital frameworks have been adopted in developing countries more as a measure for protecting domestic revenue and asserting source country taxing rights and less as a temporary policy experiment. According to developing countries, the traditional international tax system currently in place tends to favour resident countries where multinational enterprises are structurally headquartered. Therefore, their adoption of unilateral digital taxation frameworks is driven by more than concern that digital firms are undertaxed.

Harpaz (2025) argues that developing countries have not participated on equal terms with developed countries in shaping global taxation rules and that the OECD-led international tax framework remains historically biased toward the Global North. This disparity in participation explains why countries continue to adopt unilateral digital tax frameworks despite ongoing OECD negotiations (Harpaz, 2025).

Existing literature on the African perspective shows mixed and evolving approaches. A study by Latif (2025) on African countries found that early digital tax adoption in some African countries placed the burden on consumers through communication levies, online content licence fees, and social media taxes, which may weaken equity and sustainability instead of placing the burden on multinational firms. Among the countries that placed the burden on consumers, per Latif's study, are Uganda, Tanzania, Benin, Zambia, and Mozambique, which contrasts with countries such as Italy, France, and Hungary, among others, that focused on taxing the digital value created, user participation, data, and platform-based income.

Nigeria adopted the SEP framework to broaden the tax base by targeting digital firms that provide activities such as e-commerce, high-frequency trading, electronic data storage, and online adverts and payments, and that have a significant economic presence in Nigeria. Nwankwo (2026), however, notes the need to align with global standards such as the OECD's Two-Pillar Solution to optimise revenue effectiveness (Nwankwo, 2026).

South Africa, by contrast, has not adopted a direct digital service tax framework; however, it subjects foreign electronic services to VAT. A comparative study conducted by Mbhele (2022) on DST frameworks adopted in the UK, Kenya, France and Italy established that these frameworks enable these countries to tax digital firms that have no physical presence in their jurisdictions, despite challenges such as compliance costs, administrative complexity, double taxation risks and potential conflicts with ongoing international tax reform efforts. The study further concludes that South Africa should not introduce a unilateral DST but instead wait for a coordinated global solution (Mbhele, 2022).

The taxation of the digital economy in Egypt and Zimbabwe further demonstrates Africa's diversity. It shows that it extends beyond DST frameworks and increasingly incorporates a mix of VAT mechanisms, transaction levies, digital advertising taxes, and platform-based compliance obligations. Zimbabwe has relied on transaction-based taxes on electronic and mobile payments. Meanwhile, Egypt has focused on integrating digital activities into existing tax frameworks through VAT and other measures targeting digital platforms and online services.

Kenya, on the other hand, sits at the centre of digital economy taxation because its evolution from DST to the current SEP reflects the global shift from transaction-based digital taxation to economic presence-based taxation. Like other African countries that have adopted various digital taxation frameworks, Kenya's experience also highlights institutional and compliance challenges. However, the shift to SEP demonstrates Kenya's efforts to balance domestic revenue needs, OECD pressure and risks of unilateralism.

The fragmentation and growing tension surrounding unilateral DSTs have led to renewed efforts to establish a coordinated international framework for taxing the digital economy. This has led the OECD to develop Pillar One and Pillar Two reforms to reduce disputes arising from fragmented national tax regimes, address growing concerns about base erosion and profit shifting, and provide certainty in the allocation of taxing rights across jurisdictions.

The OECD/G20 Inclusive Framework developed Pillar One to address the limitations of traditional international tax rules that allocate taxing rights based on physical presence. The pillar aims to reallocate a portion of multinational enterprises' residual profits from where they are headquartered to where they derive significant value and economic participation. Recognising market participation aligns with a broader understanding of the importance of users and digital markets in value creation, marking a major deviation from traditional international tax principles. This recognition aims to improve the fairness of the international tax system, provide certainty in taxing the digital economy, and reduce disputes arising from unilateral DSTs. The Pillar Two framework complements Pillar One by addressing broader concerns about base erosion and profit shifting through the Global Anti-Base Erosion (GloBE) rules, which establish a global minimum corporate tax framework for multinational enterprises.

The reform recognises that profit shifting erodes tax bases and intensifies harmful tax competition among countries. It seeks to ensure that multinational enterprises pay a minimum tax rate regardless of where they report profits, through mechanisms such as the Income Inclusion Rule (IIR) and the Undertaxed Profits Rule (UTPR). This strengthens the integrity of the international tax system and creates a more level playing field among jurisdictions.

However, these OECD reforms have attracted criticism from both developing and developed countries, despite their attempts to modernise international taxation. Evidence from the literature suggests that Pillar One faces limitations such as high revenue thresholds and restricted profit-reallocation mechanisms, which reduce developing countries' potential. Regarding Pillar Two, Countries with limited institutional capacity may face implementation challenges, as it requires sophisticated reporting systems, extensive administrative coordination, and significant technical expertise.

From an African perspective, concerns have also been raised regarding the extent to which OECD reforms

adequately address the fiscal interests of developing economies (Harpaz, 2025). Banga and Beyleveld (2024) argue that the effectiveness of digital taxation reforms extends beyond tax policy and is increasingly influenced by international trade rules relating to digital trade, cross-border data flows, data localisation and electronic transmissions, all of which may affect the policy space available to countries seeking to implement and enforce digital tax measures (Banga, K & Beyleveld, A, 2024) Kenya's transition from DST to SEP reflects this broader global trend, illustrating the ongoing effort to balance domestic revenue mobilisation objectives, international tax developments, and the challenges of taxing an increasingly digitalised economy.

Overall, the global digital tax landscape shows a gradual shift from fragmented unilateral digital taxation measures toward a coordinated international solution. However, implementation challenges, concerns about the allocation of taxing rights, and differences in national revenue priorities suggest that many countries will continue to pursue unilateral digital taxation frameworks alongside participation in OECD reforms. Consequently, the effectiveness of digital taxation will continue to depend not only on international coordination but also on domestic compliance systems, institutional capacity and the ability of tax administrations to adapt to evolving digital business models.

**Discussion**

The review demonstrates that the traditional tax systems that were developed around the concepts of physical presence and permanent establishments have been challenged by the rapid expansion of the digital economy where digital models are capable of generating substantial value without maintaining a physical presence. As a result, countries have sought alternative mechanisms, such as adopting unilateral DSTs, to protect tax bases and mobilise revenue from digital activities. The review has established that DSTs have been adopted largely as transitional policy instruments rather than permanent solutions to the challenges of digital taxation. Although DSTs enable governments to generate revenue from highly digitised firms, they have also raised concerns about trade tensions, administrative complexity, and double taxation risks.

To establish taxing rights based on sustained economic engagement and align domestic tax policy with evolving international tax principles, Kenya has since transitioned from DST to the SEP framework. However, further findings show that the effectiveness of digital taxation extends beyond the design of the tax instrument itself because of compliance challenges such as difficulties with taxpayer identification, cross-border transactions, platform-based business models, data limitations, and enforcement capacity. Institutional capacity is another determinant of the effectiveness of digital economy taxation; hence, countries need to invest in digital infrastructure, data analytics, taxpayer registration systems and international cooperation.

Kenya’s experience with digital economy taxation demonstrates the opportunities and challenges developing countries face and further shows that effectiveness depends on more than legislative reforms. The Kenyan evidence further illustrates the difference between the revenue performance of standalone digital taxes and broader digital economy taxation frameworks. While variations were exhibited in the revenue performance of standalone DST since its introduction, continued revenue increases were exhibited by the broader taxation framework. This continued increase was supported by integrating multiple digital tax instruments such as DST, VAT on Digital Market Supply, Digital Asset Tax, and SEP, alongside strengthened compliance initiatives, taxpayer recruitment, and technology-driven tax administration. The Kenyan experience therefore suggests that sustainable revenue mobilisation in the digital economy depends less on any single tax instrument and more on the interaction among policy design, compliance systems, and institutional capacity.

Despite these observations, taxing the digital economy plays an important strategic role in improving tax fairness, expanding the tax base, and strengthening long-term domestic revenue mobilisation. The paper also highlights the growing influence of OECD reforms on digital economy taxation that has resulted in the Two-Pillar framework that aims to reallocate taxing rights to allow market jurisdictions where customers are located to tax a portion of the profits of multinational enterprises and introduce a global minimum corporate tax rate designed to prevent companies from shifting profits to low-tax jurisdictions. These reforms, however, raise concerns about the extent to which developing countries will benefit, administrative complexity, and implementation timelines. As a result, many countries may continue to pursue unilateral digital taxation frameworks alongside participation in OECD reforms to

balance domestic revenue needs with evolving international tax obligations.

A broad consensus emerging from the literature reviewed is that the traditional international tax rules remain inadequate in addressing the realities of digital economy taxation. However, scholars diverge on the most appropriate policy response: some view unilateral measures such as DSTs and SEPs as necessary tools to protect the domestic tax base, while others advocate globally coordinated solutions under the OECD Two-Pillar framework to reduce fragmentation and minimise double taxation. A third perspective increasingly supports the SEP framework as a compromise between unilateral and multilateral approaches because it allows countries to tax digital companies that derive significant value from their markets, even without a physical presence, while avoiding some of the problems associated with standalone DSTs and fully centralised OECD solutions. These differing scholarly perspectives highlight the ongoing evolution of global digital taxation and the lack of a universally accepted solution.

While a growing body of literature exists on digital economy taxation, several important knowledge gaps remain. First, empirical evidence on the long-term revenue effects of digital taxation measures remains limited, especially in developing countries. Second, despite the emergence of compliance as a fundamental determinant of revenue performance, few studies, particularly within African contexts, examine taxpayer compliance behaviour under digital tax regimes. Third, although countries like Kenya have transitioned from DST to the SEP framework, the practical implications of this shift remain underexplored. Finally, much of the existing literature on OECD Pillar One and Pillar Two reforms remains prospective rather than evaluative because the reforms are still in the implementation phase. These gaps suggest important directions for future research and underscore the need to continue assessing emerging digital tax frameworks.

Finally, the research suggests that the future and effectiveness of digital economy taxation lie not just in policy instruments but also in the interaction of effective administration, compliance mechanisms, domestic legal frameworks, and international collaboration. Therefore, countries that successfully integrate these elements are likely to achieve more sustainable and equitable digital economy taxation.

## CONCLUSION AND RECOMMENDATIONS

**Conclusion:** The study concludes that the digital economy has reshaped how value is generated, with implications for traditional tax systems and a call for new government policy strategies. The introduction of DST, the evolution of SEP frameworks, and the adoption of OECD-recommended reforms highlight ongoing efforts to modernise international taxation. While digital taxes have generated additional revenue and expanded taxing rights in several jurisdictions, their effectiveness remains closely linked to compliance levels, administrative capacity and international cooperation. Kenya's experience shows that sustainable revenue mobilisation is not achieved through standalone digital taxes but through integrating multiple tax instruments supported by effective compliance systems, technological innovation, and institutional capacity. The review thus concludes that to achieve sustainable taxation of the digital economy, countries need a combination of domestic reforms, institutional capacity building, and international collaboration that can evolve and adjust to the ever-changing digital business model.

**Recommendations:** The study recommends that: the Kenya Revenue Authority should focus on building strong taxpayer registration and reporting systems for digital tax administration that can detect, track and ensure compliance for digital taxpayers. Digital infrastructure, data analytics, information-sharing systems, and taxpayer education investments that strengthen registration processes and improve access to third-party data are crucial, since digital transactions are borderless and will ultimately increase compliance and revenue collection. Enforcement and exchange of information may be further assisted by regional cooperation between KRA and other tax administrations.

Second, the Kenyan National Treasury and Parliament should continue exploring SEP frameworks as a tool for taxing contemporary digital business models. The SEP rules offer a more sustainable approach to taxing activity than physical presence rules and can potentially capture value in domestic markets more flexibly. Third, Kenya should be proactively engaged in global tax negotiations under the ATAF, OECD Inclusive Framework and new UN processes. Greater involvement may help ensure that the country's interests are properly taken into account in shaping and implementing future international tax rules. Finally, digital taxation should be seen not as a standalone solution to raise revenues but as one of the

many instruments for mobilising domestic resources. Digital taxes are effective only if they are accompanied by other tax administrative, compliance management and institutional reforms.

**REFERENCES**


African Tax Administration Forum. (2025, July). *Suggested approach to drafting significant economic presence legislation.* https://ataftax.org/library/suggested-approach-to-drafting-significant-economic-presence-legislation/

Banga, K., & Beyleveld, A. (2024). *Are trade rules undermining taxation of the digital economy in Africa?* (ICTD Working Paper No. 181). Institute of Development Studies. https://doi.org/10.19088/ICTD.2024.007

Brondolo, J., & Konza, M. (2021). *Administering the value-added tax on imported digital services and low-value imported goods* (Technical Notes and Manuals No. 2021/004). International Monetary Fund. https://www.imf.org/-/media/files/publications/tnm/2021/english/tnmea2021004.pdf

Canada Revenue Agency. (2026). *Digital services tax repealed.* Canada.ca. https://www.canada.ca/en/services/taxes/excise-taxes-duties-and-levies/digital-services-tax.html

Canada Revenue Agency. (n.d.). *GST/HST for digital-economy businesses: Overview*. Canada.ca. Retrieved October 30, 2026, from https://www.canada.ca/en/revenue-agency/services/tax/businesses/topics/gst-hst-businesses/digital-economy.html

Companies Income Tax (Significant Economic Presence) Order, S.I. No. 9 of 2020 (Nigeria). (2020). *Federal Republic of Nigeria Official Gazette, 21*. https://archive.gazettes.africa/archive/ng/2020/ng-government-gazette-dated-2020-02-10-no-21.pdf

Cooke, A., Smith, D., & Booth, A. (2012). Beyond PICO: The SPIDER tool for qualitative evidence synthesis. *Qualitative Health Research, 22*(10), 1435–1443. https://doi.org/10.1177/1049732312452938

Dabla-Norris, E., de Mooij, R., Hodge, A., Loeprick, J., Prihardini, D., Shah, A., Beer, S., Davidovic, S., Modi, A. M., & Qi, F. (2021). *Digitalization and taxation in Asia* (Vol. 2021, Issue 017). International Monetary Fund. https://doi.org/10.5089/9781513577425.087

Daxenberger, S., Hechtner, F., & Weiß, M. (2026). *Tax compliance costs of Pillar Two: A qualitative study* [Working paper]. SSRN. https://doi.org/10.2139/ssrn.6379058

Enache, C. (2025, October). *New proposal would double France's harmful digital services tax.* Tax Foundation Europe. https://taxfoundation.org/blog/france-digital-services-tax-dst/

Enache, C. (2026, May). *Digital services taxes in Europe, 2026.* Tax Foundation Europe. https://taxfoundation.org/data/all/eu/digital-services-taxes-europe/

Erimwinorosee, O. A., & Abe-David, P. (2025). Regulatory framework for taxing the digital economy in Nigeria: Challenges, compliance strategies, and reform prospects. *Law and Social Justice Review, 6*(1), 36–41. https://shorturl.at/PoUYq

Fadipe, A. O., Adedokun, L. B., Bassey, G. P., & Ganiyu, A. B. (2025). Effect of digital service tax on tax revenue and foreign direct investment in Nigeria. *International Journal of Management Science and Business Analysis Research, 9*(7). https://doi.org/10.70382/caijmsbar.v9i7.042

Federal Ministry of Finance. (n.d.). *Digital Tax Act 2020*. Retrieved October 30, 2026, from https://www.bmf.gv.at/en/topics/taxation/digital-tax-act.html

Finance Act, No. 12 of 2020 (India). (2020). https://incometaxindia.gov.in/news/finance-act-2020.pdf

Finance Act, No. 22 of 2022 (Kenya). (2022). https://www.kra.go.ke/images/publications/Finance--Act-2022.pdf

Finance Act, No. 23 of 2019 (Kenya). (2019). https://kenyalaw.org/akn/ke/act/2019/23/eng@2019-11-15

Finance Act, No. 4 of 2023 (Kenya). (2023). https://kenyalaw.org/akn/ke/act/2023/4/eng@2023-08-18

Finance Act, No. 8 of 2020 (Kenya). (2020). https://new.kenyalaw.org/akn/ke/act/2020/8

Finance Act, No. 8 of 2021 (Kenya). (2021). https://new.kenyalaw.org/akn/ke/act/2021/8

Hanappi, T., Jakubik, A., & Ruta, M. (2024). Fiscal revenue mobilization and digitally traded products: Taxing at the border or behind it? *Journal of Policy Modeling, 46*(4), 779–801. https://doi.org/10.1016/j.jpolmod.2024.04.001

Harpaż, A. (2025). *Global tax wars in the digital era* (SSRN Working Paper No. 2025-5). SSRN. https://doi.org/10.2139/ssrn.5160671

HM Treasury. (2025). *Digital services tax review report* [Government report]. https://www.gov.uk/government/publications/digital-services-tax-review/digital-services-tax-review-report

Igbinenikaro, E., & Adewusi, A. O. (2024). Tax havens re-examined: The impact of global digital tax reforms on international taxation. *World Journal of Advanced Science and Technology, 5*, 1–012. https://doi.org/10.53346/wjast.2024.5.2.0031

Income Tax (Digital Service Tax) Regulations, Legal Notice No. 207 of 2020 (Kenya). (2020).

Income Tax Department. (n.d.). *Equalisation levy*. Retrieved October 30, 2026, from https://www.incometaxindia.gov.in/equalisation-levy3

Kabwe, R., & van Zyl, S. P. (2021). Value-added tax in the digital economy: A fresh look at the South African dispensation. *Obiter, 42*(3), 499–528. https://doi.org/10.17159/obiter.v42i3.12899

Kayongo, P. S., Tusubira, F. N., & Bakundana, M. (2026). *From bitter lemons to lemonade: The fiscal promise of digital service taxes in Sub-Saharan Africa* [Working paper]. SSRN. https://doi.org/10.2139/ssrn.6771379

Kenya ICT Action Network. (2025). *Is taxation pushing international digital service providers out of Kenya?* KICTANet. https://www.kictanet.or.ke/is-taxation-pushing-international-digital-service-providers-out-of-kenya/

Kenya Revenue Authority. (2021). *Annual revenue report 2020/21*. Kenya Revenue Authority.

Kenya Revenue Authority. (2023). *Annual revenue performance FY 2022/2023.* https://www.kra.go.ke/images/publications/Annual-Revenue-Performance-FY-2022-2023-1372023-Final-Version.pdf

Kenya Revenue Authority. (2024). *Taxation of the digital economy.* https://www.kra.go.ke/helping-tax-payers/facts-about-kra/category/10

Kenya Revenue Authority. (2025). *Annual revenue performance FY 2024/2025.* Kenya Revenue Authority. https://www.kra.go.ke/images/publications/Annual-Revenue-Performance-Fy-2024-25-KRA-Corporate-Colours.pdf

Kiondo, J. K. (2022). *Determinants of digital service tax awareness among corporates in Kenya* [Master's thesis, Moi University]. Moi University Institutional Repository. https://ikesra.kra.go.ke/bitstreams/099c7941-3604-4d67-b51e-ee323478ef80/download

KPMG International. (2026). *Taxation of the digitalized economy: Developments summary 2026.* KPMG International. https://kpmg.com/kpmg-us/content/dam/kpmg/pdf/2023/digitalized-economy-taxation-developments-summary

Latif, L. (2021). The evolving 'Thunder': The challenges around imposing the digital tax in developing African countries. *International Journal of Digital Technology & Economy, 4*(1), 34–50. https://doi.org/10.31785/ijdte.4.1.4

Latif, L. (2025). *Specific taxation points in the digital economy: First the issues, then the solutions* [Working paper]. SSRN. https://doi.org/10.2139/ssrn.5212036

Mbhele, S. N. (2022). *An international comparison of digital service tax* [Master's dissertation, University of Johannesburg]. University of Johannesburg Institutional Repository. https://hdl.handle.net/10210/504171

Mpofu, F. Y., & Moloi, T. (2022). Direct digital services taxes in Africa and the canons of taxation. *Laws, 11*(4), 57. https://doi.org/10.3390/laws11040057

Mwencha, P., Githaiga, G., Kivuva, M., & Kapiyo, V. (2024). *Digital taxation in Kenya: Charting pathways towards fair, inclusive and sustainable policy reforms* (KICTANet Policy Paper No. 20). Kenya ICT Action Network. https://doi.org/10.13140/RG.2.2.11668.82563

Nigeria Tax Act, No. 7 of 2025 (Nigeria). (2025). *Federal Republic of Nigeria Official Gazette*. https://nass.gov.ng/documents/download/11249

Nwankwo, C. B. (2026). Taxing the digital workforce: Rethinking the significant economic presence rule under Nigeria's Tax Act 2025. *International Journal of Innovative Inventions in Social Science and Humanities, 3*(3), 295–301. https://doi.org/10.58806/ijiissh.2026.v3i3n04

Organisation for Economic Co-operation and Development. (2020). *Tax administration 3.0: The digital transformation of tax administration.* OECD Publishing. https://doi.org/10.1787/ca274cc5-en

Organisation for Economic Co-operation and Development. (2025). *A decade of the BEPS initiative: An inclusive framework stocktake report to G20 finance ministers and central bank governors* (OECD/G20 Base Erosion and Profit Shifting Project). OECD Publishing. https://doi.org/10.1787/32096fd3-en

Ponomareva, K. A. (2023). Digital services tax: A comparative analysis of individual OECD countries and potential risks of introducing digital tax in Russia. *Legal Issues in the Digital Age, 4*(4), 23–47. https://doi.org/10.17323/2713-2749.2023.4.23.47

Quiñones, N., Khandelwal, A., Oni, O. O., Maiyaki, M., Malgwi, D., Swema, E., Omondi, N., Watti, I., Thapa, D., Maina, A. W., & Omole, K. (2025). *The taxation of the digital economy in practice: Digital services taxes and other measures* (Issue No. 226). South Centre. https://www.southcentre.int/wp-content/uploads/2025/11/RP226_The-Taxation-of-the-Digital-Economy-in-Practice_EN-1.pdf

South African Revenue Service. (2025, June). *VAT connect issue 19.* https://www.sars.gov.za/businesses-and-employers/my-business-and-tax/vat-connect-issue-19-june-2025/

Starkov, V., & Jin, A. (2024). *A toss up? Comparing tax revenues from the Amount A and digital service tax regimes for developing countries.* South Centre, African Tax Administration Forum, & West African Tax Administration Forum. https://www.econstor.eu/handle/10419/301175

Tax Procedures (Amendment) Act, No. 21 of 2024 (Kenya). (2024). https://www.dentonshhm.com/en/insights/alerts/2025/january/10/the-tax-procedures-amendment-act-2024

The National Treasury and Economic Planning. (2023a). *National tax policy.* https://www.treasury.go.ke/sites/default/files/Notices/7.05.-2024-National-Tax-Policy.pdf

The National Treasury and Economic Planning. (2023b). *The medium-term revenue strategy (An approach for enhancing domestic revenue) FY 2024/25–2026/27* [Medium-term revenue strategy]. https://www.treasury.go.ke/sites/default/files/Notices/Draft-MTRS-Final.pdf

Thomadakis, A. (2026, June). Could a digital services tax become an EU own resource? Revenue potential, policy trade-offs and strategic options. European Parliament, Directorate-General for Budgetary Affairs. https://www.europarl.europa.eu/RegData/etudes/BRIE/2026/785788/BUDG_BRI(2026)785788_EN.pdf