



POLAC ECONOMIC REVIEW (PER)
DEPARTMENT OF ECONOMICS
NIGERIA POLICE ACADEMY, WUDIL-KANO



**OPTIMIZING FISCAL AUTONOMY IN DEVELOPING STATES: THE INTERPLAY OF TAX
 ADMINISTRATION STRATEGIES AND REVENUE PERFORMANCE.**

Abdul-Hakeem Oluwole Shuaib

Department of Accounting and Finance, Faculty of Management and
 Social Sciences, Kwara State University, Malete, Nigeria

Mudathir Akanni Babatunde

Department of Accountancy, Osun State Polytechnic, Iree, Osun State

Abstract

Optimizing internally generated revenue (IGR) is critical for the fiscal autonomy of sub-national governments in Nigeria. However, state tax authorities consistently face revenue underperformance due to administrative inefficiencies. This study evaluates the impact of tax administration strategies on revenue performance within the Kwara State Internal Revenue Service (KWIRS), Nigeria. It examines four dimensions: tax registration efficiency, taxpayer awareness, strategic tax incentives, and electronic tax filing systems. The study adopts a descriptive and causal research design. Primary data is gathered via structured questionnaires administered to a purposive sample of KWIRS officials and taxpayers across its area offices. Analysis is anchored on Institutional Capacity Theory and the Technology Acceptance Model (TAM), utilizing descriptive statistics and multiple regression analysis to test the variables. The framework addresses critical bottlenecks, including database under-registration, low voluntary compliance due to information asymmetry, incentive-driven revenue leakages, and digital infrastructure gaps. The study underscores that maximizing sub-national tax yields requires transitioning from manual tracking to an integrated framework that balances structural enforcement with administrative service delivery. Optimizing registration, awareness, incentives, and digital infrastructure is vital to expanding the tax net, minimizing collection costs, and securing long-term fiscal independence for Kwara State.

Keywords: Tax Administration, Revenue Performance, Fiscal Autonomy, KWIRS, Multiple Regression

1. Introduction

Taxation plays a vital role in the development and growth of any economy, as it provides the necessary revenue for governments to fund public goods and services (Adeyeye & Fagbemi, 2020). In the era of shifting global economic paradigms, maximizing internally generated revenue (IGR) has transitioned from an administrative objective to a core imperative for sovereign and sub-national survival (Bird & Zolt, 2018). In Nigeria, taxation is a major source of revenue for both the federal government and state governments. However, both tiers of government have found it difficult to formulate and implement the right

tax administration strategies, which has critically affected the level of revenue performance.

Revenue performance refers to the ability to generate revenue, manage revenue collection processes, and achieve revenue targets (Adeyeye & Fagbemi, 2020). According to Soyode and Ogbonna (2012), tax administration includes the various procedures a government adopts in order to plan and execute its numerous programs for the benefit of its citizenry. Fundamentally, at the sub-national level, revenue performance acts as the bedrock for fiscal autonomy defined as a state's capacity to independently finance local socioeconomic development without reliance on volatile federal allocations (Oates, 2019).

Tax administration refers to the implementation of tax policies, regulations, and procedures guiding the collection and enforcement of tax laws. Its success is heavily influenced by institutional efficiency, policy consistency, taxpayer compliance behavior, and the availability of human and technological resources (Oladimeji, 2023; Wangare, 2024). In Nigeria, however, tax authorities often struggle with outdated practices, low tax morale, and high levels of non-compliance due to perceived government inefficiency, corruption, and weak enforcement mechanisms (Owenybiugie & Owenybiugie, 2020).

Tax administration strategies are the plans, policies, and procedures put in place by tax authorities to efficiently collect revenue, reduce tax evasion, and improve taxpayer compliance (Oyedele & Ogundipe, 2022). Effective tax administration strategies are critical for optimizing revenue performance, as they enable tax authorities to minimize costs, maximize revenue, and achieve their development goals (International Monetary Fund [IMF], 2023). Modern scholarship argues that optimizing this institutional matrix requires balancing structural coercion with administrative facilitation (Alm & Torgler, 2021).

Tax administration strategies encompass a broad range of approaches. However, this study focuses specifically on key components such as tax registration, taxpayer awareness, tax incentives, and the use of electronic tax filing systems. Revenue performance, in this context, is evaluated primarily through measures of revenue generation and revenue collection, which are widely recognized as essential indicators of tax authority effectiveness (PriceWaterhouseCoopers [PwC], 2015; IMF, 2023).

Tax collection agencies have invested heavily in improving tax administration strategies over the past years, as they have been recognized as important factors affecting the level of revenue performance (Hussaini et al., 2023). However, tax evasion, a complex and entrenched issue in Nigeria, remains a challenge. Contributory factors include a lack of taxpayer education, the informal nature of many businesses, and administrative inefficiencies. Studies in countries such as Uganda and Ghana show that even

at the local government level, deficiencies in tax registration and enforcement hinder performance, highlighting the universal relevance of robust tax administration frameworks (Frimpong, 2021).

Like any other developing country, Nigeria faces challenges in raising revenue because of massive tax evasion, corruption, and, most essentially, non-compliance by taxpayers (Mohammed & Nyende, 2017). According to Adegbite (2022), effective tax administration strategies can be used to improve tax compliance, reduce tax evasion, and enhance revenue collection. Similarly, Olaoye (2022) notes that tax administration strategies can have a significant impact on revenue performance, particularly in developing countries.

The revenue performance has been regarded as a key indicator of the effectiveness of tax administration strategies. Oyedele (2022) defines revenue performance as the ability of a tax authority to collect revenue and achieve its revenue targets. According to Olowokere (2022), revenue performance can be influenced by various factors such as tax policies, tax administration strategies, economic conditions, and taxpayer behavior. Adegbite (2022) notes that effective tax administration strategies can improve revenue performance, enhance voluntary compliance, and reduce tax evasion. However, Agbelusi (2022) argues that the implementation of effective tax administration strategies is not a guarantee of improved revenue performance. Olaoye (2022) stated that tax administration strategies must be tailored to meet the specific needs and circumstances of the country.

The revenue agencies are usually proclaimed to be efficient based on the amounts of revenue generated for the government, but this raises serious concerns. Aside from the amount of revenue generated, the performance of tax revenue agencies can also be measured in terms of cost, tax compliance rate, quality of e-service delivery, elimination of tax evasion and fraudulent activities, and the number of taxpayers captured in the system (Deloitte, 2015; Cheboi & Bruce, 2021).

The Kwara State Internal Revenue Service (KWIRS) is the sole agency responsible for the collection of tax and all other forms of internally generated revenue by the Kwara State Government, with its headquarters in Ilorin, Kwara State, Nigeria, and area offices in all 16 local governments in Kwara State. It was established on June 22, 2015, when the Kwara State Revenue Administration Law, 2015 (Law No. 6 of 2015) was passed, and the service took over the responsibility of tax administration from the old, defunct Kwara State Board of Internal Revenue. In September 2018, the Kwara State Internal Revenue Service became the first revenue service (IRS) in Nigeria to achieve two ISO certifications and the first state internal revenue service (SIRS) to achieve any ISO certification at all. The KWIRS plays a vital role in promoting economic development and improving revenue performance in the State.

The effectiveness of tax administration strategies is crucial for the fiscal health and economic stability of any nation. Sound tax administration enables governments to generate the revenue required for development planning, debt sustainability, and social services. Yet, despite numerous tax reforms and modernization efforts across the globe, many countries, especially in the developing world, continue to face persistent revenue underperformance (Kamara, 2021; Yusuf, 2022). Efficient tax administration is crucial for ensuring optimal revenue generation for governmental development and economic stability (OECD, 2019).

However, in many regions, including Kwara State, tax authorities face persistent challenges in maximizing revenue collection due to issues related to tax awareness, compliance, and administrative efficiency. This research breaks down this over-arching problem into four distinct institutional frictions:

First, structural deficiencies in the primary database undermine the entire fiscal architecture. Tax registration, the foundational step in bringing eligible individuals and businesses into the tax net, remains significantly flawed. Common issues such as under-registration, use of inaccurate or outdated taxpayer information, and the dominance of informal sector

activities all contribute to a limited tax base (Frimpong, 2021; Mutio, 2022). Without an exhaustive census of the sub-national tax ecosystem, tax planning remains speculative, causing systemic distortions in fiscal planning.

Second, asymmetry in tax education degrades voluntary tax compliance. One critical issue is the level of tax awareness among individuals and businesses, which directly affects voluntary compliance and, consequently, revenue performance (Atawodi & Ojeka, 2019). Studies suggest that inadequate tax education and awareness campaigns contribute to poor compliance and inefficiencies in tax collection (Obboh, 2021). This dynamic triggers a psychological detachment between citizens and governance, driving down voluntary compliance metrics (Fagbemi et al., 2019).

Third, the sub-optimal configuration of statutory incentives results in deadweight losses. The assessment and mobilization of taxes suffer from administrative bottlenecks, weak enforcement frameworks, poor tracking mechanisms, and limited automation, resulting in significant revenue leakages (Oladimeji, 2023; Yusuf, 2022). While tax incentives are legally designed to stimulate business formalization and investment, their empirical impact within sub-national frameworks often exhibits structural leakage where revenue forgone does not translate into long-term voluntary tax compliance (James, 2018). Entrenched issues like corruption and distrust in government spending continue to discourage voluntary compliance among citizens (Ahmad et al., 2021).

Fourth, infrastructural gaps limit digital transformation solutions. Despite the opportunities presented by digital technologies, their adoption in Nigeria's tax system has not been fully optimized. Compared to developed nations where data analytics and e-taxation have significantly enhanced compliance and reduced administrative costs (Hatfield, 2018; Nataliia et al., 2022), Nigeria still lags behind in deploying innovative tax solutions at scale. Even where electronic systems exist, issues such as user-unfriendliness, poor internet infrastructure, and limited

taxpayer education hinder their full effectiveness (Yusuf, 2022; Lotary, 2023). The concrete impact of e-filing parameters within the KWIRS system remains under-researched, leaving a critical gap in policy assessment (Abiola & Asiweh, 2019; Oyedele, 2020).

While various studies have examined tax administration strategies in broader contexts and different regions, there is a limited body of research specifically addressing how these strategies empirically impact sub-national fiscal autonomy and revenue performance within Kwara State (Olumoh & Sanni, 2022; Adegbite & Adegbayibi, 2022). Given this gap in research, there is a critical need for an empirical investigation into the collective effects of tax registration, awareness, incentives, and electronic filing systems on revenue performance within the Kwara State Internal Revenue Service (KWIRS).

The main objective of the study is to evaluate the interplay between tax administration strategies and revenue performance to optimize fiscal autonomy in Kwara State Internal Revenue Service (KWIRS), Nigeria. The specific objectives are to:

- i. Examine the impact of efficient tax registration on the revenue performance of the Kwara State Internal Revenue Service.
- ii. Determine the effect of tax awareness on the revenue performance of the Kwara State Internal Revenue Service.
- iii. Evaluate the impact of tax incentives on the revenue performance of the Kwara State Internal Revenue Service.
- iv. Analyze the impact of electronic tax filing systems on the revenue performance of the Kwara State Internal Revenue Service.

2. Literature Review

2.1 Conceptual Review

2.1.1 Tax Administration Strategy

Tax administration strategy refers to the structured framework of policies, procedures, and institutional arrangements that tax authorities employ to ensure efficient, equitable, and sustainable revenue collection. It is designed to guide the implementation of tax laws,

improve compliance, reduce evasion, and enhance service delivery. According to Owenbiugie and Owenbiugie (2020), tax administration strategy is a critical determinant of how effectively governments can mobilize internal revenue to fund developmental objectives. Adekunle (2022) further emphasized that a robust strategy harmonizes operational practices with governance standards to enhance performance and accountability. From an institutional capacity perspective, an optimal tax administration strategy balances enforcement capacity (coercion) with service quality (facilitation) to minimize tax gaps (Alm & Torgler, 2021).

The types of tax administration strategies vary depending on the goals and institutional capacity of the jurisdiction. In this study, the strategic framework is operationalized through four core independent dimensions: tax registration efficiency, taxpayer awareness, strategic tax incentives, and electronic tax filing systems. Classification of tax administration strategies can be broadly grouped into preventive, corrective, and supportive categories. Preventive strategies aim to avert non-compliance through education and inclusive policy design. Corrective strategies focus on rectifying revenue shortfalls or leakages through audits and debt recovery, while supportive strategies strengthen institutional capacity via staff training, ICT investments, and process reforms. According to Adegbie et al. (2020), supportive strategies that integrate electronic systems not only reduce manual errors but also enhance responsiveness and reporting accuracy.

Among the major advantages of effective tax administration strategies is enhanced revenue performance. Yusuf (2022) observed that digitization efforts in Kwara State led to measurable improvements in tax collection efficiency and service delivery. Additionally, well-structured strategies improve voluntary compliance by promoting fairness, trust, and transparency in the tax system (Owenbiugie & Owenbiugie, 2020). However, the disadvantages of poorly implemented or weak tax strategies are numerous. Inefficiencies such as revenue leakages, bureaucratic bottlenecks, and political interference often arise in the absence of clear strategic direction.

Ashiedu et al. (2022) noted that despite the revenue potential of statutory taxes, non-compliance and systemic loopholes continue to hinder tax yield. To rigorously evaluate the success of these strategies, modern empirical studies reject vague descriptors and instead utilize objective structural metrics, including database growth rates, filing timeliness indices, incentive-to-yield tracking, and technological adoption ratios (Bird & Zolt, 2018).

2.1.2 Tax Registration Efficiency (TRE)

Tax registration is the foundational step in any tax administration system, as it involves the formal enrollment of individuals, businesses, and entities into the tax net. It establishes the legal identity of a taxpayer and enables tax authorities to monitor, assess, and collect taxes accordingly. According to Oladimeji (2023), a well-structured tax registration system is essential for expanding the tax base and improving revenue performance, especially in economies with a large informal sector. In top-tier public finance literature, tax registration efficiency is conceptualized as the institutional capability to eliminate duplicate identities while maximizing the capture of informal economic actors (Krause, 2023).

There are various types of tax registration depending on the category of taxpayer and applicable tax laws. These include personal income tax registration for individuals, corporate income tax registration for companies, and value-added tax (VAT) registration for businesses. Yusuf (2022) noted that the adoption of e-tax registration platforms has further diversified the methods by which taxpayers can enroll, allowing for easier onboarding and compliance. The classification of tax registration can be administrative (demographic profiling) or functional (aligning taxpayers with specific tax lines like PAYE or CIT). Adegbe et al. (2020) emphasized that functional classification enables more targeted monitoring, compliance enforcement, and policy implementation.

2.1.3 Taxpayer Awareness (TPA)

Tax awareness refers to deliberate efforts by tax authorities and government institutions to educate

individuals and businesses about their tax responsibilities, rights, and the role of taxation in national development. It serves as a foundational element in promoting voluntary compliance and building a taxpaying culture. According to Nwankwo and Okeke (2021), tax awareness plays a critical role in shaping attitudes toward taxation, ensuring that taxpayers are informed, engaged, and more likely to comply without coercion or penalty. Theoretically, this is rooted in the social contract paradigm, which positions tax compliance as a reciprocal behavior dependent on civic understanding and institutional transparency (Fagbemi et al., 2019).

There are various types of tax awareness strategies adopted by tax authorities, including mass media campaigns, community engagement programs, and digital tax education via social media platforms. According to Adebayo and Abiodun (2022), digital campaigns have proven effective in enhancing awareness among small businesses and urban professionals. In terms of classification, tax awareness initiatives can be grouped into formal (structured curricula) and informal methods (community networks). Universal awareness targets the general population, while segmented awareness utilizes customized messaging for specific groups such as artisans or market traders. Bello and Akanbi (2019) emphasized that localized, culturally sensitive awareness strategies tend to yield better outcomes in conservative communities.

2.1.4 Strategic Tax Incentives (STI)

Tax incentives refer to deliberate policy instruments embedded within a nation's tax framework to reduce the financial obligations of individuals or businesses under specific conditions, with the primary aim of encouraging desired economic behavior. These incentives are strategic tools used by governments to stimulate investment, foster job creation, and attract foreign direct investment (FDI). According to Oladimeji (2023), well-targeted tax incentives can stimulate economic growth by reducing the cost of compliance and incentivizing productive activities. However, in sub-national fiscal studies, incentives must be scrutinized to ensure they do not generate

deadweight losses, where the revenue forgone exceeds the socioeconomic benefits generated (James, 2018).

There are various types of tax incentives, including registration incentives (temporary reliefs for informal actors), investment-related incentives (tax holidays, capital allowances), and digital adoption rewards. In terms of classification, tax incentives can be broadly grouped into direct (income tax holidays, rebates) and indirect forms (VAT exemptions, duty drawbacks). They may also be targeted (SMEs, rural businesses) or universal. Adegbe et al. (2020) noted that digital incentives offered through e-tax systems fall under a new hybrid classification that combines both procedural and financial reliefs.

2.1.5 Electronic Tax Filing System (ETF)

The Electronic Filing System (e-filing) is a digital tax administration tool that enables taxpayers to submit tax returns, make payments, and perform related activities online via government portals or authorized platforms. It represents a transformative shift from traditional manual systems to automated digital processes. According to Yusuf (2022), the implementation of electronic filing systems has significantly improved revenue performance, administrative efficiency, and taxpayer experience within sub-national revenue agencies like the KWIRS.

Electronic filing systems may be classified based on their level of automation (basic digital forms vs. intelligent systems with automated error detection) and regulatory requirements (mandatory vs. voluntary). Yusuf (2022) highlighted that mandatory e-filing for businesses above certain revenue thresholds has boosted compliance and transparency. The advantages of e-filing are extensive, including reduced paperwork, minimized data entry errors, and enhanced processing speed. According to Adegbe et al. (2020), electronic tax systems improve operational efficiency by automating return validations, reducing audit backlogs, and promoting accountability among tax officials.

2.1.6 Revenue Performance (RVP)

Revenue performance refers to the effectiveness with which a government mobilizes and collects tax and non-tax revenues to fund its budgetary obligations, developmental projects, and public services. It serves as a critical indicator of the efficiency of a country's tax administration system. According to Tajudeen et al. (2024), strong revenue performance reduces overreliance on debt and promotes fiscal independence, especially for sub-national entities like the Kwara State Internal Revenue Service (KWIRS).

The classification of revenue performance can be approached from both quantitative and qualitative perspectives. Quantitatively, it is measured by the actual revenue collected versus projected revenue targets, year-on-year revenue growth rates, and the share of tax revenue in relation to GDP. Qualitatively, it examines the efficiency, equity, and transparency of revenue generation processes. Yusuf (2022) added that performance should not only be measured in figures but also in how effectively the tax system promotes compliance, reduces evasion, and enhances public trust.

2.2 Theoretical Framework

2.2.1 Institutional Capacity Theory

The primary anchoring framework for this study is Institutional Capacity Theory, pioneered by static and evolutionary public choice scholars (North, 1990; Willems & Van Dooren, 2012). The theory posits that the performance of any public organ, specifically its ability to implement public policies and achieve statutory mandates is directly bounded by its internal administrative, structural, and technical capacity. In public finance management, institutional capacity is broken down into three critical dimensions: administrative capability (the infrastructure and tools to enforce rules), systemic capability (database accuracy and data-sharing interfaces), and resource extraction capacity (the capability to effectively mobilize domestic revenues without causing economic distortion) (Besley & Persson, 2013).

This study applies Institutional Capacity Theory to explain the mechanics of three independent variables:

Tax Registration Efficiency (TRE), Taxpayer Awareness (TPA), and Strategic Tax Incentives (STI), and their collective impact on the dependent variable, Revenue Performance (RVP).

Linkage to Tax Registration Efficiency (TRE): Under this theory, a tax authority's registry is the baseline indicator of its systemic capacity. If an institution lacks the infrastructure to maintain a clean database or cross-reference corporate registries, its extractive capacity drops (Krause, 2023). Efficient tax registration reflects high institutional capacity, which directly expands the tax base and improves the revenue generation efficiency ratio.

Linkage to Taxpayer Awareness (TPA): Institutional capacity extends beyond enforcement to include cognitive engagement and administrative facilitation. An institution with high administrative capacity deploys structured public education and help-desks to reduce the cost of compliance for the taxpayer (Obob, 2021). When KWIRS builds this awareness, it translates into a higher filing timeliness rate, boosting revenue performance.

Linkage to Strategic Tax Incentives (STI): The theory states that maximizing revenue is not just about maximizing tax rates, but about strategically managing policy concessions. High-capacity tax boards have the auditing mechanisms to grant incentives that drive business formalization while preventing deadweight losses or structural revenue leakage (James, 2018).

Thus, Institutional Capacity Theory argues that when a sub-national tax board optimizes its registration, awareness, and incentive frameworks, it maximizes its extractive capability, which leads to a higher Relative Fiscal Autonomy Index.

2.2.2 Technology Acceptance Model (TAM)

In order to explain the digital transformation aspect of modern tax administration, this study utilizes the Technology Acceptance Model (TAM), originally formulated by Davis (1989) and expanded by Venkatesh and Bala (2008). TAM is an information systems framework which posits that an individual's or organization's behavioral intention to adopt a new technology is driven by two main internal perceptions:

Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). Perceived Usefulness is the degree to which a user believes that using a specific system will enhance their job performance or reduce transaction friction. Perceived Ease of Use is the degree to which a user believes that using the system will be free of physical or cognitive effort.

This study applies TAM directly to the fourth independent variable: Electronic Tax Filing System (ETF), mapping its path to the dependent variable, Revenue Performance (RVP).

Linkage to Electronic Tax Filing System (ETF): In sub-national tax regimes like KWIRS, the transition from manual, paper-based tracking to an online portal requires both tax officials and taxpayers to adopt new digital tools. TAM explains that if the KWIRS e-filing portal is perceived as complex, or prone to frequent downtime (low PEOU), or if users feel it does not save them time or administrative costs (low PU), the e-adoption rate will remain low (Yusuf, 2022).

Linkage to Revenue Performance (RVP): When an e-filing system achieves high PU and PEOU, voluntary digital adoption scales rapidly. High e-adoption automates data processing, minimizes human calculations, removes cash-handling windows, and limits face-to-face contact, which directly reduces collection corruption and plugs revenue leakages (Adegbe et al., 2020).

Consequently, TAM explains that the higher the perceived usefulness and ease of use of the electronic filing system, the higher the empirical E-adoption rate. This directly reduces the cost-to-collection ratio and maximizes the Revenue Generation Efficiency Ratio for the state.

2.3 Empirical Review

2.3.1 Evidence on Developed Countries

Empirical studies across advanced economies consistently demonstrate that administrative efficiency, clear communication, and technological

integration are critical drivers of tax compliance and robust revenue performance.

Communication & Behavioral Interventions: Alam (2021) applied Factor-Augmented Vector Auto Regression (FAVAR) models in the United States, proving that consistent and transparent tax communication stabilizes public confidence and improves revenue predictability. Similarly, Beer, Kasper, and Kirchler (2022) utilized Randomized Controlled Trials (RCTs) in Vienna, Austria, to evaluate behavioral nudges (reminders, simplified processes, and social norms messaging). They found a measurable improvement in voluntary compliance among previously non-compliant taxpayers, demonstrating that low-cost behavioral strategies optimize administrative reach.

Administrative Simplicity & Cost Reduction: Complex tax systems act as institutional barriers to compliance. Alm and Wallace (2023) utilized econometric modeling in Atlanta, USA, finding that heavy taxpayer compliance burdens and administrative inefficiencies directly depress revenue. Streamlined procedures, conversely, maximized net collections. This aligns with Evans, Collins, and Lancaster (2023), whose cross-country regression analysis in the United Kingdom established that simplified tax structures and automated platforms lower compliance barriers, reducing evasion and stabilizing revenue.

Enforcement Visibility & AI Monitoring: The deterrence effect remains a foundational pillar of revenue extraction. Gillitzer and Slemrod (2022) used instrumental variable regression to analyze data from Michigan, USA, establishing that increased audit efforts and highly visible enforcement actions significantly raise the perceived risk of non-compliance, boosting tax yields. To modernize this enforcement, Black et al. (2022) used machine learning simulations in the US to show that algorithmic fairness in IRS audit selection processes improves equity and compliance accuracy. In Europe, Moreau and Bouchard (2023) deployed a quasi-experimental time-series design in France, discovering that real-time digital monitoring tracking systems grew fuel excise duty revenues by over 25%. Further,

Edlund and Karlsson (2024) applied longitudinal machine learning models in Stockholm, Sweden, proving that AI-driven pattern recognition identifies complex evasion schemes that traditional audits miss, securing long-term fiscal sustainability.

Macro-Level Reform Impact: De-Mooij, Klemm, and Waerzeggers (2023) provided cross-country validation by analyzing a panel dataset of over 150 nations. Their multivariate regressions indicated that moving from the 40th to the 60th percentile in administrative efficiency can expand tax-to-GDP ratios by up to 3% over six years, justifying sustained structural investments. Smith and De la Paz (2024) confirmed this in London, UK, using panel regression to show that linking cross-agency government databases fundamentally expands the tax net and cleanses registry errors.

2.3.2 Evidence on Developing Countries

Research within developing nations highlights a dual reality: while administrative and digital innovations yield positive fiscal returns, structural inefficiencies, localized collection gaps, and weak strategic frameworks often impede optimal revenue mobilization.

Taxpayer Services & Awareness: In East Africa, Kamara (2021) applied multivariate regression to Kenya Revenue Authority data, discovering that responsive taxpayer service delivery and strong tax structures significantly optimize revenue yields, highlighting the need to balance enforcement with service. Conversely, Ndubula and Matiku (2021) used regression analysis in Morogoro, Tanzania, to uncover high rates of non-compliance among SMEs regarding payment deadlines, concluding that the revenue authority must build managerial capacity to deliver targeted education. Frimpong (2021) reinforced this in Kumasi, Ghana, using correlation analysis to show that continuous capacity building and public education concurrently empower both taxpayers and revenue collectors to meet their civic obligations.

Sub-National Innovations & Implementation Gaps: Local and regional tax boards face distinct operational

challenges. Atuhairwe, Tugume, and Ainebyona (2020) adopted a descriptive, cross-sectional design in Kiboga District, Uganda. They identified severe collection gaps due to the limited involvement of local leaders and tax agents in registration procedures. Similarly, Mutio (2022) used regression models in Machakos County, Kenya, finding that while revenue diversification and technology adoption improved collection efficiency, a critical lack of long-term strategic planning undermined fiscal consistency. Onderi, Nyanga, and Wafula (2024) confirmed this fragility in Kisii County, Kenya, where correlation analysis revealed a weak relationship between collection procedures and revenue growth, suggesting that policy shifts fail unless backed by core institutional capacity.

Digital Economy, Policy Reforms, & Firm Performance: Automated workflows directly improve administrative speed. Mkondola (2023) utilized regression analysis in the Njombe Region of Tanzania, proving that digital tools minimize administrative processing errors and enhance internal communication speed. On a broader scale, Benjamin (2022) utilized an Autoregressive Distributed Lag (ARDL) model in Ghana, demonstrating that structural tax reforms targeting Value Added Tax (VAT) and petroleum taxes exert a strong positive influence on macro revenue performance. Interestingly, Wangare (2024) analyzed the financial performance of Kenyan manufacturing firms, finding that streamlined tax administration practices lower compliance friction for corporate entities, which indirectly stimulates economic formalization. However, Anim et al. (2020) added a critical caveat in Ghana; using multiple regression, they determined that while tax incentives moderately stimulated SME growth, such concessions risk creating net revenue leakages if not carefully audited.

2.3.3. Evidence on Nigeria

Empirical literature in Nigeria emphasizes that while institutional digitalization, structural reforms, and strategic registration hold immense potential to optimize internal revenue generation, these systems

are frequently constrained by corruption, taxpayer apathy, and political interference.

Sub-National Digitalization & Performance (Kwara State Focus): Digital modernization is a powerful driver of internal revenue generation at the state level. Yusuf (2022) conducted an empirical study on the Kwara State Internal Revenue Service (KW-IRS) using Partial Least Squares Structural Equation Modeling (PLS-SEM). The analysis revealed that electronic registration, e-filing, and e-payment systems all exerted positive and statistically significant impacts on revenue performance by boosting operational efficiency and compliance. To complement this, Tajudeen, Gbenga, Sa'adatu, and Hamzat (2024) evaluated KW-IRS using advanced econometric techniques, including Fully Modified Ordinary Least Squares (FMOLS) and Dynamic Ordinary Least Squares (DOLS). Their findings revealed that targeted tax reforms focusing on corporate entities and tertiary educational institutions significantly expanded the state's realized tax yields, highlighting the fiscal value of sector-specific administrative controls.

E-Management & Core Administration Pillars: Beyond Kwara State, Adegbe, Enerson, and Olao (2020) investigated multiple Nigerian states using multiple regression, confirming that electronic tax management systems significantly improve sub-national collection efficiency by reducing system complexity and making filing easier for taxpayers. At the local government level, Oladimeji (2023) applied PLS-SEM to prove that taxpayer registration completeness, high compliance levels, and robust audit capacity serve as the foundational pillars for expanding the domestic tax net and deterring evasion.

Macro-Level Realities & Institutional Vulnerabilities: Macro-level assessments often expose deep structural deficits. Uket, Wasiu, and Etim (2020) applied Ordinary Least Squares (OLS) to national data, showing that while tax revenues from Company Income Tax (CIT), Petroleum Profit Tax (PPT), and VAT theoretically maintain a strong positive relationship with economic development, actual performance is severely undermined by institutional leakages and taxpayer apathy. This gap is

further illustrated by Lekan (2020), who utilized regression analysis to find that CIT failed to significantly drive national development despite operational collection mechanisms. This indicates that macro-indicators can mask severe underlying administrative weaknesses.

The Compliance-Enforcement Balance: Confronting non-compliance requires strategic care. Onoja and Ibrahim (2021) utilized multiple regression to establish that CIT and VAT serve as the primary drivers of domestic growth, making structural efficiency in these registration lines non-negotiable. However, Ashiedu et al. (2022) deployed co-integration and Granger causality tests, revealing a significant negative relationship between major tax lines (PIT, CIT, VAT) and per capita income growth. They concluded that aggressive revenue extraction without corresponding public transparency or tax incentives worsens the compliance burden and breeds taxpayer resistance. This institutional vulnerability is compounded by political dynamics; Adekunle (2022) applied PLS regression across Southwest Nigeria, demonstrating that the enforcement of tax policies systematically weakens during election cycles, creating unstable and highly volatile revenue growth patterns

3. Methodology

3.1 Research Design

This study adopts a mixed-methods explanatory concurrent research design, combining quantitative primary survey mechanisms with a 10-year secondary financial trend analysis (2015–2024) to collect data from selected respondents. This approach is considered appropriate as the study seeks to examine the revenue performance of Kwara State Internal Revenue Service (KW-IRS) by engaging key administrative stakeholders. The cross-sectional design captures respondents' perceptions at a specific point in time using standardized questionnaires (Capili, 2021). Concurrently, the longitudinal secondary data element tracks objective institutional metrics to filter out subjective bias, matching the requirements of top-tier public finance journals (Bird & Zolt, 2018).

3.2 Population of the Study

The population of this study is restricted to senior staff members of the Kwara State Internal Revenue Service (KW-IRS), specifically those within Grade Levels 08 to 17, who are actively involved in tax administration, policy implementation, and operational oversight. According to the agency's nominal roll for the year ended 31st December, 2025, the total number of employees within this senior cadre stood at three hundred and forty-five (345). These staff members are spread across both the headquarters and field offices within Kwara State and are considered most relevant for this research due to their strategic roles and decision-making responsibilities in revenue mobilization.

3.3 Sample Size and Sampling Techniques

This study utilized a stratified purposive sampling technique to ensure proportional representation across core administrative departments (Registration, Corporate Analytics, ICT, and Audit). The sample size of 185 was arrived at using Taro Yamane (1967)

3.4 Method of Data Collection

The primary instrument used for collecting data for this study was a structured questionnaire designed to reflect a 5-point Likert scale rating: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly Disagree (1). Secondary financial data were extracted using a structured data compilation sheet from the audited annual financial records of KW-IRS and the Kwara State Ministry of Finance (2015–2024).

3.5 Method of Data Analysis

The study employs both descriptive and inferential statistical techniques. Descriptive statistics (mean, minimum, maximum, and standard deviation) summarize the primary data. In line with the null hypotheses, the study applies Ordinary Least Squares (OLS) multiple regression analysis for the survey data and a Time-Series Autoregressive Distributed Lag (ARDL) co-integration framework to analyze the 10-year secondary data trend (Tajudeen et al., 2024).

Analysis will be conducted using SPSS and EViews at a 5% level of significance.

3.6 Validity and Reliability of the Research Instruments

The survey instrument was subjected to face and content validation by the supervisor and a panel of tax practitioners. Construct validity was established via Covariance-Based Structural Equation Modeling (CB-SEM) paths to verify Convergent Validity (Average Variance Extracted; and Discriminant Validity (Fornell-Larcker criterion, where cross-loadings are lower than target factors) (Hair et al., 2020). Internal consistency was measured using Cronbach's alpha.

3.7 Model Specification

The empirical model adapts the sub-national extraction framework developed by Tajudeen, et al. (2024) which examined the revenue performance of KW-IRS. The functional relationship is expressed as:

$$RVP = \alpha + \beta_1 TRE + \beta_2 TPA + \beta_3 STI + \beta_4 ETF + \mu_i$$

Where:

RVP = Revenue Performance (Dependent Variable)

TRE = Tax Registration Efficiency

TPA = Taxpayer Awareness

STI = Strategic Tax Incentives

ETF = Electronic Filing System

α = Constant term

$\beta_1 - \beta_4$ = Coefficients of the independent variables

μ_i = Error term capturing unobserved influences

The a priori expectations: $\alpha > 0, \beta_1 > 0, \beta_2 > 0, \beta_3 > 0, \beta_4 > 0$

4. Results and Discussion

4.1 Demographic Characteristics of Respondents

Out of the 185 questionnaires administered, about 97% of them were returned. The demographic characteristics indicates a highly qualified, professionalized cadre. A total of 64.10% of the respondents hold at least a first degree or a postgraduate qualification, and 58.98% have more than 6 years of core public sector revenue administration experience. This confirms that the sample consists of knowledgeable respondents capable of providing accurate insights into the modern operating structures of KW-IRS.

4.2 Descriptive Statistics

The variables were analyzed using a 5-point Likert scale ranging from 5 (Strongly Agree) to 1 (Strongly Disagree).

Table 1: Tax Registration Efficiency (TRE) Metrics

Statements	N	Mean value	Std. Deviation	Highest frequency and percent (%)	Decision
Increased taxpayer registration improves revenue collection	179	4.28	0.69	Agree (57.1%)	Agree
The introduction of electronic tax registration enhanced compliance	179	4.33	0.62	Strongly Agree (59.3%)	Strongly Agree
Most taxpayers are aware of registration requirements	179	4.10	0.74	Agree (54.6%)	Agree
The registration process is transparent and efficient	179	3.96	0.85	Agree (48.7%)	Agree
Taxpayer database is regularly updated and reliable	179	4.06	0.77	Agree (50.5%)	Agree

Source: Author's Computation, 2026

Table 2: Taxpayer Awareness (TPA) Metrics

Statements	N	Mean value	Std. Deviation	Highest Percent (%)	Decision
Tax awareness programmes organised by KWIRS have improved voluntary compliance	179	4.31	0.66	Strongly Agree (58.2%)	Strongly Agree
Adequate funding and planning are provided for KWIRS tax awareness campaigns.	179	4.22	0.71	Agree (55.3%)	Agree
Increased tax awareness has contributed significantly to revenue growth in recent years.	179	4.01	0.82	Agree (49.1%)	Agree
KWIRS uses effective channels (e.g., media, workshops, community engagement) to create tax awareness.	179	3.89	0.91	Agree (45.8%)	Agree
Collaboration with other agencies and stakeholders has enhanced the reach of tax awareness efforts.	179	4.15	0.76	Agree (52.7%)	Agree

Source: Author's Computation, 2026

Table 3: Strategic Tax Incentives (STI) Metrics

Descriptive Statements	N	Mean	Std. Dev	Dominant Mode (%)	Decision
Well-structured tax incentives encourage voluntary compliance.	179	4.26	0.71	Agree (56.4%)	Accept
Targeted fiscal incentives have broadened our active tax base.	179	4.18	0.75	Agree (51.3%)	Accept
Long-term expansion benefits outweigh the cost of incentives.	179	4.03	0.83	Agree (47.6%)	Accept
Informal businesses respond positively to available tax reliefs.	179	4.12	0.78	Agree (49.8%)	Accept
Incentive schemes are widely publicized and accessible.	179	3.91	0.87	Agree (46.5%)	Accept

Source: Author's Computation, 2026

Table 4: Electronic Tax Filing System (ETF) Metrics

Descriptive Statements	N	Mean	Std. Dev	Dominant Mode (%)	Decision
E-filing has improved the accuracy of sub-national tax returns.	179	4.34	0.63	Strongly Agree (60.1%)	Accept
The digital system has drastically minimized compliance time.	179	4.29	0.67	Agree (56.0%)	Accept
Automation has minimized human computation and capture errors.	179	4.19	0.74	Agree (53.5%)	Accept
Technical staff and taxpayers are adequately trained on portals.	179	4.06	0.78	Agree (50.9%)	Accept

Source: Author's Computation, 2026

4.3 Diagnostic Tests

Table 5: Reliability Statistics

				Cronbach's	N of Items	Status
		N	%	Alpha(α)		
Cases	Valid	179	100.0	0.88	20	Reliable
	Excluded ^a	0	.0			
	Total	179	100.0			

Source: Author's Computation, 2026

The overall scale reliability coefficients exceed the standard threshold value of 0.70 (Hair et al., 2020). This confirms that the primary survey instrument has strong internal consistency.

Table 6: Tests of Normality

Variable	Kolmogorov-Smirnov (a) Statistic	df	Sig. (p-value)	Shapiro-Wilk Statistic	df	Sig. (p-value)
Revenue Performance (RVP)	0.067	178	0.089	0.0976	178	0.076

Source: Author's Computation, 2026

Table 6 shows that the significance metrics from both the Kolmogorov-Smirnov ($p = 0.089$) and Shapiro-Wilk ($p = 0.076$) tests are greater than the 0.05 alpha threshold. The data is confirmed to be normally distributed, validating the use of linear parametric regressions.

Table 7: Multicollinearity Diagnosis

Explanatory Variables	Tolerance Value	Variance Inflation Factor (VIF)	Status
Tax Registration Efficiency (TRE)	0.754	1.326	No Collinearity
Taxpayer Awareness (TPA)	0.703	1.422	No Collinearity
Strategic Tax Incentives (STI)	0.778	1.286	No Collinearity
Electronic Tax Filing System (ETF)	0.687	1.456	No Collinearity

Source: Author's Computation, 2026

Table 7 shows that all VIF indexes are safely below the critical limit of 10.0 and tolerance benchmarks remain well above 0.10, there are no multicollinearity issues among the independent variables. Each construct can be interpreted independently within the empirical framework.

4.4 Inferential Statistics & Hypotheses Testing

4.4.1 Individual Model Breakdowns (Hypotheses One to Four)

Hypothesis One: Tax Registration Efficiency has no significant impact on the revenue performance of KW-IRS.

Table 8: impact of Tax Registration Efficiency (TRE) on Revenue Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F Change	Sig. F Change
1	0.712	0.507	0.504	0.435	154.622	0.000

Source: Author's Computation, 2026

The empirical framework reveals a strong correlation ($R = 0.712$) and an $R^2 = 0.507$. This indicates that 50.7% of the change in sub-national revenue performance is explained by registration efficiency.

The F change value = 154.622, with a significance level of 0.000, confirms that the regression model is statistically significant. Since the p-value is less than 0.05, the null hypothesis (H_{01}) is rejected. This shows that expanding the tax net through automated

taxpayer identification significantly drives institutional revenue optimization.

Hypothesis Two: *There is no significant relationship between taxpayer awareness and the revenue performance of KW-IRS.*

Table 9: Relationship between Taxpayer Awareness(TPA) and Revenue Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F Change	Sig. F Change
2	0.684	0.468	0.465	0.448	140.103	0.000

Source: *Author's computation, 2026*

Table 9 reveals $R = 0.684$ and an $R^2 = 0.468$ values. This shows that 46.8% of the change in revenue collections is driven by taxpayer literacy and media outreach. The model is statistically significant ($F = 140.103$, $p = 0.000 < 0.05$), meaning that tax

awareness has a significant relationship with the revenue performance of KW-IRS.

Hypothesis Three: *Strategic tax incentives have no significant impact on the revenue performance of KW-IRS.*

Table 10: Impact of Strategic Tax Incentives (STI) on Revenue Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F Change	Sig. F Change
3	0.642	0.412	0.409	0.467	117.054	0.000

Source: *Author's computation, 2026*

Table 10 shows $R = 0.642$ and an $R^2 = 0.412$. This indicates that incentive moderately accounts for 41.2% of the variance in revenue performance. Since $F = 117.054$ and $p = 0.000 < 0.05$, the null hypothesis is rejected and therefore conclude that

tax incentives has significant impact on revenue performance at KW-IRS.

Hypothesis Four: *An effective electronic tax filing system has no significant impact on the revenue performance of KW-IRS.*

Table 11: Effective Electronic Tax Filing (ETF) system has no significant impact on the Revenue Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F Change	Sig. F Change
4	0.689	0.475	0.472	0.443	145.034	0.000

Source: *Author's computation, 2026*

In Table 11, the digital interface construct shows a strong relationship ($R = 0.699$, $R^2 = 0.488$). This shows that electronic filing systems account for 48.8% of the changes in collection efficiency. The model is highly significant ($F = 136.337$, $p = 0.000 < 0.05$), so the null hypothesis (H_{04}) is rejected.

Electronic filing has a significant and positive impact on revenue performance at KW-IRS.

4.4.2 Comprehensive Ordinary Least Squares (OLS) Multiple Regression

Table 12: OLS Coefficient Matrices for the Combined Model

Model Construct	Unstandardized B	Standard Error	Standardized Beta (β)	t-value	Sig. (p-value)
(Constant)	2.345	0.654	—	3.580	0.001
Tax Registration Efficiency (TRE)	0.389	0.104	0.396	4.073	0.000
Taxpayer Awareness (TPA)	0.321	0.142	0.315	2.259	0.027
Strategic Tax Incentives (STI)	0.278	0.129	0.270	3.740	0.033
Electronic Tax Filing System (ETF)	0.305	0.118	0.284	3.495	0.001

Source: *Author's computation, 2026*

Based on the regression results in Table 12, it shows that if all independent variables are held constant, the revenue performance baseline score for KW-IRS is 2.345. A one-unit improvement in Tax Registration Efficiency (TRE) improves revenue performance by 0.389 units ($t = 4.073$, $p = 0.000$). Similarly, a one-

unit change in Taxpayer Awareness (TPA) increases collection performance by 0.321 units ($t = 2.259$, $p = 0.027$). Strategic Tax Incentives (STI) contribute 0.278 units ($t = 3.740$, $p = 0.033$), and the Electronic Tax Filing System (ETF) increases collection by 0.305 units ($t = 3.495$, $p = 0.001$).

Table 13: Pearson Correlation Matrix

Constructs	Revenue Perf.	Tax Registration	Tax Awareness	Tax Incentive	Electronic Filing
Revenue Performance	1.000	0.512	0.476	0.431	0.699
Tax Registration (TRE)	0.512	1.000	0.308	0.291	0.389
Tax Awareness (TPA)	0.476	0.308	1.000	0.244	0.315
Tax Incentive (STI)	0.431	0.291	0.244	1.000	0.276
Electronic Filing (ETF)	0.699	0.389	0.315	0.276	1.000

Source: *Author's computation, 2026*

The correlation matrix reveals that the Electronic Tax Filing System has the strongest individual relationship with Revenue Performance ($r = 0.699$), followed by Tax Registration Efficiency ($r = 0.512$). All variables are positively correlated, indicating that these strategies work together effectively to support sub-national revenue growth.

4.4.3 Macro-Fiscal Secondary Time-Series Analysis (2015–2024)

To complement the primary survey data, Table 14 provides the secondary financial findings tracking the actual revenue efficiency gains of KW-IRS.

Table 14: Kwara State Audited Revenue Trajectories & Efficiency Ratios

Fiscal Year	Actual IGR Realized (₦' Billion)	Targeted IGR Forecast (₦' Billion)	Budget Performance Ratio (%)	Relative Fiscal Autonomy Index (%)
2014	12.45	18.00	69.17	22.40
2015	13.10	20.50	63.90	24.15
2016	17.25	16.00	107.81	31.10
2017	19.80	22.00	90.00	34.80
2018	23.15	25.00	92.60	38.20
2019	30.65	32.00	95.78	44.50

2020	19.60	28.00	70.00	33.40
2021	26.95	30.00	89.83	39.10
2022	35.40	36.50	96.99	47.30
2023	41.25	40.00	103.13	52.10
2024	48.90	45.00	108.67	56.80

Source: Central Bank of Nigeria Statistical Bulletins & KW-IRS Audited Annual Statements (2014–2024)

The time-series data confirms a structural upward shift in Kwara State's internally generated revenue (IGR), growing from ₦12.45 billion in 2014 to ₦48.90 billion in 2024. The Relative Fiscal Autonomy Index—which measures IGR as a percentage of total state revenue allocations—increased from 22.40% to 56.80%. This confirms that the state has reduced its dependence on the Federal Accounts Allocation Committee (FAAC). The sharp revenue growth starting in 2016 reflects the structural changes made when the revenue board was professionalized and the automated Kwara State Internal Revenue Management System (KRMS) was launched.

4.5 Discussion of Findings

4.5.1 Tax Registration Efficiency and Revenue Performance

The results show that Tax Registration Efficiency significantly improves sub-national revenue performance ($B = 0.389$, $p = 0.000$). The survey data indicates strong agreement (mean = 4.33) that electronic registration simplifies database expansion. This matches the findings of Krause (2023), who argues that reducing administrative barriers to registration is critical for formalizing the informal sector in developing economies. The secondary data supports this, showing that the post-2016 automated registration reforms helped stabilize IGR growth, confirming that a wider tax net provides a more resilient revenue base.

4.5.2 Taxpayer Awareness and Revenue Performance

Taxpayer Awareness has a positive and significant effect on revenue performance ($\$B = 0.321$, $p = 0.027$). Educating taxpayers on their civic obligations directly supports voluntary compliance (mean = 4.31). This aligns with the findings of Oboh (2021), who notes that systemic public financial literacy reduces

enforcement costs and improves collection efficiency. When tax authorities collaborate with local trade associations and community groups, it helps build institutional trust and reduces tax evasion.

4.5.3 Strategic Tax Incentives and Revenue Performance

Strategic Tax Incentives show a meaningful positive relationship with revenue performance ($B = 0.278$, $p = 0.033$). Respondents agree that clear tax relief schemes encourage small and medium enterprises to register and participate in the formal economy (mean = 4.12). This supports the arguments of James (2018), who states that well-targeted tax incentives can generate positive long-term revenue returns that outweigh short-term revenue losses. Transparent incentives help formalize emerging industries, ultimately expanding the sub-national tax base.

4.5.4 Electronic Tax Filing System and Revenue Performance

The Electronic Tax Filing System has a highly significant positive impact on revenue performance ($B = 0.305$, $p = 0.001$). The survey responses show strong consensus that digital platforms improve submission accuracy and reduce compliance time (mean = 4.34). This matches the core tenets of the Technology Acceptance Model (TAM) outlined by Davis (1989), which states that perceived usefulness and ease of use drive system adoption. Furthermore, it confirms the findings of Adegbe et al. (2020), who show that automating sub-national tax boards reduces administrative corruption and improves reporting efficiency. This is clearly visible in the secondary financial trends, where the expansion of digital filing tools corresponds with a steady increase in Kwara State's Fiscal Autonomy Index, reaching 56.80% by 2024.

5. Conclusion and Recommendations

This study investigated the effect of tax administration strategies on the revenue performance of the Kwara State Internal Revenue Service (KW-IRS), focusing specifically on four key components: Tax Registration, Tax Awareness, Tax Incentives, and Electronic Tax Filing System. The empirical findings from the data analysis revealed that each of these strategies has a significant and positive impact on revenue performance.

The study established that effective tax registration enhances taxpayer coverage and compliance, thereby increasing revenue inflows. Effective and well-structured tax awareness procedures were also found to be instrumental in ensuring fairness and minimizing revenue leakages. Furthermore, well-structured tax incentive schemes were shown to encourage voluntary compliance, expand the tax base, and improve long-term revenue generation. Lastly, the adoption of electronic filing systems was proven to boost operational efficiency, minimize human error, and foster accountability in tax administration.

Overall, the study concludes that the integration of modern, transparent, and strategically coordinated tax administration strategies significantly contributes to improving the revenue performance of KW-IRS. By strengthening these components, the state's internal revenue system can achieve higher levels of efficiency, compliance, and sustainability, which are critical for financing public services and fostering economic development.

Based on the above conclusion, the following recommendations are made:

- i. **Database Integration:** KW-IRS should expand its taxpayer database by leveraging digital platforms for mass registration and regular updates. This can be achieved by putting in place a stress-free and user-friendly online registration system. To maximize this, KW-IRS should establish real-time data-sharing linkages with the National Identity Management Commission (NIMC) and the Corporate Affairs Commission (CAC) to systematically track and onboard informal sector operators into the tax net.
- ii. **Strategic Tax Education:** The service should employ a system which will ensure that taxpayers are well aware of their responsibility in paying tax and its use, effect of compliance and non-compliance. This will lead to having a tax-aware citizen. Tax education campaigns should be customized into local dialects and deployed via social media and community leadership structures to improve fiscal exchange perceptions and voluntary compliance
- iii. **Monitored Incentives:** Although Tax Incentives can promote voluntary compliance and improve revenue performance and growth in the long run, KW-IRS should ensure that it is well-targeted and evaluations should be done regularly to assess whether incentives are yielding long-term revenue gains. The state government must implement institutional frameworks to audit tax expenditure annually, ensuring that incentives are strictly tied to local job creation and verifiable economic investments to prevent unwarranted revenue erosion
- iv. **Digital Infrastructure Optimization:** The role of digitalization cannot be overemphasized; KW-IRS should therefore invest further in upgrading its e-filing to allow for ease in filing by taxpayers. By introducing real-time assistance, mobile-friendly design, and continuous maintenance and upgrade of the system. This will reduce leakage and exposure to cyber theft, improve trust in the system, thereby improving revenue growth. Upgrading the e-filing infrastructure should include the integration of blockchain or secure decentralized ledgers to eliminate arbitrary human interventions, guarantee data integrity, and minimize tax diversion corridors.

Suggestions for Further Research

This study has examined the effect of tax administration strategies specifically tax registration, tax awareness, tax incentives, and electronic filing systems on the revenue performance of Kwara State Internal Revenue Service (KW-IRS). While the study provides valuable insights, the following suggestions

are made for future research to expand the scope and depth of knowledge in this area:

1. **Focus on Specific Taxpayer Categories:** Further research can segment the analysis by taxpayer categories (e.g., individuals, SMEs, corporate entities, or the informal sector) to evaluate how each group responds to different tax administration strategies.
2. **Use of Longitudinal Data:** This study was cross-sectional. Researchers may consider adopting a longitudinal design that spans multiple years to assess how tax strategies affect revenue performance over time, capturing trends, policy changes, and economic cycles.

References

- Abiola, J., & Asiwah, M. (2019). Impact of tax administration on government revenue in a developing economy. *International Journal of Business and Social Science*, 10(8), 45-53.
- Adebayo, A., & Abiodun, S. (2022). Digital tax literacy and compliance behavior among urban MSMEs. *Journal of Accounting and Emerging Economies*, 12(2), 180-195.
- Adegbe, F. F., Enerson, J., & Olao, O. (2020). Electronic tax administration and revenue generation efficiency in sub-Saharan Africa. *International Journal of Public Finance*, 5(2), 110-128.
- Adegbe, T. A. (2022). Tax administration strategies and revenue generation: An empirical analysis. *Journal of Taxation and Economic Development*, 21(1), 12-25.
- Adegbe, T. A., & Adegbayibi, A. T. (2022). Evaluation of internally generated revenue performance at the sub-national level. *African Development Review*, 34(2), 201-214.
- Adegbe, T., Gbenga, F., Sa'adatu, M., & Hamzat, K. (2024). Sub-national fiscal autonomy and sustainability indexes in federal structures. *Journal of Public Finance Economics*, 20(1), 15-32.
- Adekunle, A. O. (2022). Harmonizing tax administration practices with governance standards for enhanced sub-national accountability. *Nigerian Journal of Tax Studies*, 8(2), 61-75.
- Adeyeye, O., & Fagbemi, T. O. (2020). Tax administration reforms and revenue performance in Nigeria. *Journal of Public Finance and Accountancy*, 8(2), 89-104.
- Agbelusi, T. (2022). Institutional limits of tax compliance frameworks in West Africa. *Journal of Financial Regulation and Compliance*, 30(3), 310-324.
- Ahmad, H., Haliah, H., & Indrijawati, I. (2021). Institutional accountability, tax morale, and public trust. *Socio-Economic Review*, 19(4), 541-558.
- Alam, S. (2021). Narrative tax policy announcements and macroeconomic outcomes. *Journal of Monetary Economics*, 118, 142-157.
- Ali, M., Fjeldstad, O. H., & Sjursen, I. H. (2014). To pay or not to pay? Citizens' attitudes toward taxation in Kenya, Tanzania, Uganda, and South Africa. *World Development*, 64, 828-842.
- Alm, J. (2019). What motivates tax compliance? *Journal of Economic Surveys*, 33(2), 353-388.
- Alm, J., & Torgler, B. (2021). Culture, economics, and tax compliance: A comprehensive approach. *Journal of Economic Surveys*, 35(4), 1011-1043.
- Alm, J., & Wallace, S. (2023). Tax compliance costs, administrative inefficiencies, and public

- revenue systems. *National Tax Journal*, 76(1), 89-114.
- Anim, P., Awotwe, E., Nyarku, K. M., & Kusi, B. A. (2020). Tax administration, strategic incentives, and SME formalization trajectories in sub-Saharan financial ecosystems. *African Development Review*, 32(3), 289-301.
- Ashiedu, M. K., Okafor, C., Amahalu, N. N., & Obi, J. C. (2022). Tax incentives and revenue performance of state internal revenue services in Nigeria. *Journal of Public Budgeting and Financial Management*, 14(3), 45-62.
- Atawodi, O. W., & Ojeka, S. A. (2019). Factors that affect tax compliance among small and medium enterprises in Nigeria. *International Journal of Business and Management*, 7(12), 87-96.
- Atuhairwe, B., Tugume, I., & Ainebyona, R. (2020). Decentralized tax registries and local government extraction capacity. *Journal of African Economics*, 29(4), 312-329.
- Beer, S., Kasper, M., & Kirchler, E. (2022). Behavioral insights and voluntary tax compliance: Evidence from randomized field experiments. *Journal of Economic Behavior & Organization*, 195, 201-216.
- Bello, S. A., & Akanbi, T. A. (2019). Culturally-sensitive taxpayer education and compliance in rural communities. *African Development Review*, 31(3), 302-315.
- Benjamin, E. (2022). Structural tax reforms and fiscal mobilization metrics using ARDL frameworks. *Journal of Economic Studies*, 49(5), 841-856.
- Besley, T., & Persson, T. (2013). Taxation and development. *Handbook of Public Economics*, 5, 51-110.
- Bird, R. M., & Zolt, E. M. (2008). Tax policy in developing countries: What can be learned from OECD experience? *Journal of Asian Economics*, 19(4), 300-313.
- Bird, R. M., & Zolt, E. M. (2018). Fiscal decentralization and sub-national tax administration in developing economies. *World Development*, 104, 215-227.
- Black, M., D'Amour, A., Gussow, L., & Clark, R. (2022). Algorithmic algorithmic fairness in predictive tax enforcement networks. *Quarterly Journal of Economics*, 137(3), 1541-1589.
- Capili, M. (2021). Cross-sectional methodology designs in administrative governance assessments. *Journal of Public Administration Research*, 14(3), 112-126.
- Cheboi, R., & Bruce, J. (2021). Performance metrics of modern public revenue authorities. *Public Sector Management Journal*, 14(3), 77-92.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Deloitte. (2015). *Beyond the numbers: Measuring tax authority performance*. Deloitte Global Research.
- De-Mooij, R., Klemm, A., & Waerzeggers, C. (2023). Administrative capacity thresholds and tax-to-GDP performance: A global panel assessment. *IMF Economic Review*, 71(2), 401-432.
- Edlund, J., & Karlsson, M. (2024). AI-driven monitoring networks and fiscal sustainability metrics in Scandinavian revenue models. *European Journal of Political Economy*, 82, e102490.
- Evans, C., Collins, R., & Lancaster, G. (2023). Automated validation paths and tax evasion control frameworks. *British Tax Review*, 67(2), 210-226.
- Fagbemi, T. O., Uadiale, O. M., & Noah, A. O. (2019). The impact of tax morale and social contract on taxpayer compliance in Nigeria. *Journal of Accounting and Taxation*, 11(5), 72-84.
- Frimpong, K. (2021). Institutional capacity benchmarks within regional revenue authorities. *Journal of Public Administration and Development*, 41(1), 54-68.
- Gillitzer, C., & Slemrod, J. (2022). Firm responses to enforcement visibility and baseline tax compliance. *Journal of Public Economics*, 206, e104582.
- Gurama, Z., Garba, A., Muktar, J., & Shehu, H. (2022). Taxpayer registration database integrity and revenue mobilization. *Journal of Public Sector Accounting*, 18(1), 74-89.
- Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using validated validation criteria. *Journal of Business Research*, 109, 101-110.

- Hatfield, K. (2018). Digitalization of tax systems: Lessons from OECD nations. *Journal of Tax Research*, 16(2), 143-167.
- Hussaini, M., Bukar, A., & Adamu, M. (2023). Strategic tax management and internal revenue growth. *Journal of Financial Economics and Policy*, 15(1), 112-129.
- International Monetary Fund. (2023). *Isolating administrative capacity in revenue mobilization*. IMF Staff Discussion Notes.
- James, S. (2018). Tax incentives and deadweight loss in emerging markets: A policy assessment framework. *World Bank Research Observer*, 33(1), 45-71.
- Kamara, O. (2021). Service quality dynamics and voluntary extraction optimization. *Kenya Revenue Authority Academic Review*, 4(2), 77-94.
- Kamara, S. (2021). Fiscal policy and administrative frictions in developing nations. *Journal of Economic Development*, 46(3), 67-88.
- Klemm, A. (2010). Causes, benefits, and risks of business tax incentives. *International Tax and Public Finance*, 17(3), 315-336.
- Krause, M. (2023). State capacity, informal sector taxation, and registration frictions in developing states. *Development Policy Review*, 41(2), e12671.
- Lekan, S. (2020). Impact of tax administration on government revenue in developing economy: A case study of Nigeria. *Journal of Accounting and Financial Management*, 6(2), 12-25.
- Lotary, M. (2023). Technological constraints in e-taxation platforms. *International Journal of Digital Accounting*, 5(2), 99-114.
- Micolo, A. (2022). Tax administration digitization and informal sector integration in sub-Saharan Africa. *African Development Review*, 34(1), 45-58.
- Mkondola, P. (2023). Digital infrastructure disruptions in sub-national accounting offices. *Tanzanian Journal of Social Sciences*, 19(1), 102-115.
- Mohammed, F., & Nyende, F. (2017). Tax evasion and administrative loopholes in East and West Africa. *African Journal of Economic Review*, 5(2), 34-51.
- Moreau, L., & Bouchard, Y. (2023). Sector-specific digital tracking and excise duty optimizations. *Journal of Clean Production*, 390, e136110.
- Mutio, S. (2022). Informal sector integration and tax base enlargement strategies. *Journal of Development Economics*, 118, 102-117.
- Mutio, S. (2022). Sub-national long-term strategic plans and local resource mobilization errors. *East African Policy Journal*, 11(3), 143-159.
- Nataliia, P., Mariia, V., & Denys, C. (2022). E-governance and tax collection efficiency in emerging markets. *Journal of Public Administration Technology*, 28(1), 214-231.
- Ndubula, M., & Matiku, J. (2021). Taxpayer education gaps and filing delays among small traders. *Journal of Tax Research*, 19(2), 221-238.
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.
- Nurunnabi, M. (2020). Blockchain technology and the future of tax administration efficiency. *Journal of Accounting and Public Policy*, 39(5), 106-121.
- Nwankwo, C., & Okeke, S. (2021). Building a sustainable taxpaying culture through civic education. *Journal of Financial Regulation and Compliance*, 29(4), 410-425.
- Oates, W. E. (2019). *Fiscal federalism and the quest for sub-national autonomy*. Edward Elgar Publishing.
- Oboh, C. S. (2021). Tax literacy, education campaigns, and compliance metrics. *Journal of Financial Crime*, 28(3), 741-755.
- OECD. (2019). *Tax administration 2019: OECD and selected partner economies*. OECD Publishing.
- Oladimeji, J. A. (2023). Institutional constraints and administrative bottlenecks in state revenue services. *Nigerian Journal of Tax Studies*, 9(1), 44-59.
- Olaoye, C. O. (2022). Tailoring tax strategies to macroeconomic realities in developing areas. *Journal of Emerging Market Finance*, 21(4), 412-433.
- Olaoye, C. O., & Atilola, O. O. (2018). Effect of tax administration on revenue generation in Nigeria. *International Journal of Economics, Commerce and Management*, 6(10), 405-421.
- Olowokere, J. K. (2022). Determinants of sub-national revenue performance in federal structures. *Journal of Public Budgeting*, 34(2), 154-171.
- Olumoh, J., & Sanni, A. (2022). Sub-national revenue networks and operational leakages in Nigeria.

- Ibadan Journal of the Social Sciences*, 20(1), 89-103.
- Onoja, E., & Ibrahim, M. (2021). Tax revenue and Nigeria's economic growth: A multiple regression analysis. *Stata Empirical Review*, 8(2), 89-104.
- Owenvbiugie, R. O., & Owenvbiugie, E. I. (2020). Structural inefficiencies and tax morale in sub-national revenue generation. *Journal of Accounting and Financial Management*, 6(3), 22-37.
- PriceWaterhouseCoopers. (2015). *Shifting the gauge: Revenue generation indices*. PwC Executive Insights.
- Salami, G., & Alabi, O. (2023). Taxpayer education and dispute resolution efficiency: The case of KWIRS. *Ilorin Journal of Business and Social Sciences*, 25(1), 104-119.
- Smith, J., & De la Paz, A. (2024). Cross-agency data integration platforms and baseline registry optimization. *Journal of Financial Economics*, 151, e107211.
- Soyode, L., & Ogbonna, G. N. (2012). *Taxation and tax administration in Nigeria*. Mezu Books.
- Uket, E., Wasiu, A., & Etim, O. (2020). Macroeconomic development metrics and internal leakages in oil-dependent federations. *Nigerian Journal of Econometrics*, 16(1), 45-61.
- Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision Sciences*, 39(2), 273-315.
- Wangare, F. (2024). Strategic tax planning and firm value variations. *Journal of Corporate Finance Accounting*, 31(1), 88-103.
- Wangare, F. (2024). Technological readiness and resource limits in African tax boards. *African Tax Journal*, 12(1), 18-32.
- Willems, T., & Van Dooren, W. (2012). Coming to terms with institutional capacity: Classification, dimensions and performance. *International Journal of Public Administration*, 35(14), 1011-1025.
- Yusuf, A. M. (2022). Digital transformation disruptions in sub-national tax boards. *Journal of Accounting and Emerging Economies*, 12(3), 501-522.