TAX DIGITALIZATION AND REVENUE PERFORMANCE

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ABSTRACT

This study investigated Tax digitalization and revenue performance in Kwara State. This study used a descriptive survey research design, and the population consisted of civil servant in Kwara State, Nigeria. A sample of 370 civil servant participated in this study. The data collected were analysed using Pearson Product Moment Correlation (PPMC) statistical methods were used to test the formulated null hypotheses at 0.05 alpha level. The findings of the study revealed that there was a significant relationship between the digital infrastructure and revenue performance in Kwara State, Nigeria; also, there was a significant relationship between the impact of digital integration over other Systems used on Revenue Performance of Public Sector in Kwara State, Nigeria. Based on the findings, it was recommended that government prioritize continued investment in modern digital infrastructure and the full integration of digital technologies across all revenue-generating agencies. Efforts should focus on upgrading existing ICT systems, ensuring seamless inter-agency connectivity, and promoting real-time data sharing to enhance transparency, efficiency, and accountability.

Key words: *Tax; digitalization; revenue; performance*

1.0 INTRODUCTION

Tax digitalization is the integration of digital technologies into tax administration processes, transforming how governments collect, manage, and monitor tax revenues. The shift from manual, paper-based systems to automated digital platforms has been driven by the need for increased efficiency, transparency, and accountability in tax systems. With digital tools such as electronic filing, e-invoicing, data analytics, and real-time reporting, tax authorities can streamline operations, reduce compliance burdens on taxpayers, and detect fraud more effectively (Amah & Ijeoma, 2023).

Tax in Nigeria is a compulsory levy imposed by the government on individuals, businesses, and organizations to generate revenue for national development and public expenditure. It encompasses a variety of taxes including Company Income Tax (CIT), Personal Income Tax (PIT), Value Added Tax (VAT), Petroleum Profit Tax (PPT), Capital Gains Tax, and Customs and Excise Duties. These taxes are administered across the three tiers of government federal, state, and local based on constitutional allocation. The Federal Inland Revenue Services (FIRS) is the primary agency responsible for federal tax collection. According to Adereti *et al*. (2021), taxation in Nigeria serves a dual role of raising government revenue and influencing economic behavior through fiscal policy. Despite its strategic importance, the Nigerian tax system has historically struggled with narrow tax base, inefficiencies in collection, and high levels of tax evasion and avoidance (Adegbie & Fakile, 2020). These challenges have hindered its effectiveness, prompting periodic reforms aimed at enhancing compliance and expanding the tax net.

Studies offer mixed but insightful perspectives on the effectiveness of Nigeria's tax system. For instance, a study by Chigbu *et al*. (2019) found that VAT and CIT positively contribute to Nigeria's GDP growth, though their impact remains statistically modest due to weak enforcement mechanisms and low voluntary compliance. Similarly, Onyeka and Nworgu (2022) noted that digital tax administration systems, such as the Integrated Tax Administration System (ITAS), have improved revenue performance by enhancing transparency and reducing leakages. In contrast, Amah and Ijeoma (2023) argue that while tax reforms like the Finance Act 2020 have expanded revenue inflows, the lack of taxpayer education and perceived corruption within the system undermines long-term compliance.

Tax digitalization presents a potentially transformative solution to these challenges by improving tax collection efficiency, expanding the taxpayer base, and reducing leakages. However, while digital reforms have been implemented in several federal and state institutions, there is limited empirical evidence assessing how these digital tools have actually impacted revenue performance. Digital tax reforms in Nigeria vary significantly across regions and administrative levels, creating an uneven implementation landscape. Some states, such as Lagos and Kwara, have embraced digital tax systems with observable improvements in internally generated revenue (IGR), while others lag behind in automation and transparency. Investigating the link between digitalization and revenue performance across different jurisdictions would offer comparative insights and help identify best practices. Moreover, it would highlight the specific institutional, technological, or socio-economic factors that influence the success of tax digitalization, providing policy-makers with data-driven recommendations tailored to different regional contexts.

The adoption of digital tax platforms is not without challenges. Issues such as limited infrastructure, low digital literacy among taxpayers, resistance from corrupt networks, and cyber security threats can undermine the effectiveness of these systems. A comprehensive study is necessary to explore these bottlenecks and determine the extent to which they affect revenue outcomes. Thus, this study examined the Tax digitalization and revenue performance in Kwara State. Specifically, the study to examined the effects of digital infrastructure on revenue performance of public sector in Kwara State, Nigeria.

2.0 Review of Literature

Tax digitalization

Tax digitalization in Nigeria refers to the process of automating tax-related functions such as taxpayer registration, filing, payment, receipting, and issuance of tax clearance certificates through information and communication technology (ICT) platforms. Key components include e-Registration, e-Filing, e-Tax Payment, e-Receipt, and e-Tax Clearance certificate services launched by the Federal Inland Revenue Service under the Finance Act 2017 (Sabilaw, 2023). At the state level, platforms such as Rivers State's RIVTAMIS and Kwara State's KW-IRS e-systems illustrate the broader push toward digital tax infrastructures, enabling taxpayers to register and pay online, and reducing reliance on manual, paper-based processes (Olumoh & Sanni, 2022).

Adejuwon and Olasunkanmi (2023) demonstrated that tax digitalization significantly correlates with increased tax revenue and lower evasion rates among revenue administrators in southwestern Nigeria. Olumoh and Sanni (2022) found that e-registration and e-payment

were both positively and significantly associated with improved revenue performance in Kwara State internal revenue service. Similarly, Obioma *et al*. (2023) reported substantial improvements in federal tax receipts in the post-digitization period, particularly following the adoption of digital platforms for VAT and CIT administration. At a sustainable development level, Fadipe *et al*. (2025) confirmed a strong positive relationship between tax administration digitalization and Nigeria's GDP and Human Development Index (HDI). Research by Oladele et al. (2024) further highlighted that corporate taxpayers exposed to digital tax services such as e-filing and digital pro-max security demonstrated significantly higher compliance rates.

Revenue

Revenue in Nigeria refers broadly to all income accruing to government entities federal, state, and local including both oil and non-oil (tax and non-tax) sources. Major revenue streams include oil revenues, Company Income Tax (CIT), Petroleum Profit Tax (PPT), Value Added Tax (VAT), customs and excise duties, education levy, and internally generated revenues (IGR) by states (Amadi & Amadi, 2020; Chijuka & Izekor, 2025). Fuel and mineral exports dominate oil revenue, while non-oil receipts are increasingly driven by tax bases and services. Government fiscal institutions such as the FIRS and the Revenue Mobilisation Allocation and Fiscal Commission oversee collection and allocation. Since 2020, Nigeria has focused on reducing reliance on volatile oil receipts by bolstering non-oil and IGR, alongside reforms like the Treasury Single Account (TSA) for fiscal integration (Revenue Mobilisation…), and a proposed Nigerian Revenue Service to harmonize tax agencies (IMF Staff…, 2023).

A comprehensive empirical analysis by Chijuka and Izekor (2025) found that PPT and customs duties have the strongest positive and statistically significant impacts on real GDP growth, followed by a VAT and CIT composite with the model explaining nearly 90 % of GDP variance. A longitudinal study through 2022 similarly confirmed that non-oil revenue, especially from tax mobilization, exerts significant short- and long-term positive effects on economic growth, while oil revenue per se has weaker short-term influence (Ologbenla, 2024). Research by Momah *et al*. (2025) using ARDL modelling highlighted that oil-tax revenue remains a vital growth driver in the long run, but debt servicing undermines its effect. Moreover, IMF analysis situates Nigeria's tax-to-GDP ratio at about 10.9 % in 2021 well below the estimated SSA tax frontier of 12.5–13 % indicating considerable room to raise domestic revenue through institutional reforms (IMF Staff…, 2023). Taken together, these findings underscore the urgent need for effective tax administration, institutional transparency, and diversification to strengthen Nigeria's fiscal capacity and economic stability.

Revenue Performance

Revenue performance in Nigeria refers to how effectively the government mobilizes financial resources both **oil-based** and **non-oil-based** (tax and non-tax revenues) relative to the country's economic capacity. Common metrics include **total revenues, tax-to-GDP ratios, internally generated revenue (IGR)** by states, and sector-specific tax yields (e.g., VAT, CIT, PPT, customs duties). Effective revenue performance reflects a stable fiscal base capable of supporting public expenditure, debt servicing, and structural transformation. The Federal Inland Revenue Service (FIRS) and the Revenue Mobilisation Allocation and Fiscal Commission (RMAFC) oversee revenue collection and allocation, with ongoing reforms like Treasury Single Account (TSA) and the proposed creation of a unified Nigerian Revenue

Service intended to enhance transparency, reduce leakages, and boost collection efficiency (IMF, 2023).

Empirical evidence highlights persistent challenges in Nigeria's revenue performance alongside recent improvements from structural reforms. The IMF reported Nigeria's overall government revenue at just **7.3% of GDP in 2021**, placing it among the lowest globally, with non-oil revenue stagnating at **4 to 5% of GDP** over the prior decade (IMF, 2023). Studies using ARDL modeling found that non-oil tax revenue `especially from consumption taxes has a **significantly positive impact on GDP growth**, while oil-based receipts show weaker or inconsistent effects (Oghu *et al.*, 2024; Apinoko *et al*., 2021).

Meanwhile, recent economic reforms by the Tinubu administration, such as subsidy removal and foreign-exchange liberalization, contributed to a **4.5 percentage point rise in revenue-to-GDP from ~24% to ~29.5%—and a decline in the fiscal deficit from 5.4% in 2023 to about 3% in 2024** (World Bank, 2025). The IMF has urged accelerated revenue mobilization—targeting a tax-to-GDP ratio of **18% within three years** and stronger budget realism to sustain growth and reduce dependence on volatile oil income (Reuters, 2024; Premium Times, 2025).

Importance of Tax digitalization

Tax digitalization transforms traditional tax systems by automating core processes such as taxpayer registration, return filing, payment, receipting, and audit using ICT platforms. In Nigeria, platforms such as FIRS's e-Registration, e-Filing, e-Payment, e-Receipt, and e-Tax Clearance Certificate services were established under the Finance Act 2017, while state-level systems like Rivers State's RIVTAMIS and Kwara State's e-tax services further expanded digital infrastructure (Sabilaw, 2023; Olumoh & Sanni, 2022; Rivers State Internal Revenue Service, 2025). The transition reduces dependency on paper-based, manual processes, which have historically been plagued by inefficiencies, leakages, corruption, and taxpayer frustration. These digital tools enable real-time, secure interactions between taxpayers and authorities, increasing convenience, transparency, and accessibility of tax services.

Tivde (2024) reported a statistically significant increase in total tax revenue collection during the post-digitization period compared to the pre-digitization era, demonstrating the positive correlation between e-tax adoption and revenue performance. This empirical findings make a convincing case that deploying e-tax platforms contributes to meaningful gains in national revenue capacity. At the sub-national level, case studies from states such as Kwara and Enugu reinforce this narrative. A study of the Kwara State Internal Revenue Service found that both e-tax registration ($\beta = 0.198$) and e-tax payment ($\beta = 0.249$) had statistically significant positive effects on revenue performance ($p < 0.05$), suggesting these tools directly contributed to improved collections (Olumoh & Sanni, 2022). Meanwhile, research in Enugu State observed higher mean tax revenue after implementing e-taxation systems, along with reduced tax evasion and avoidance, indicating that e-tax adoption drives compliance and financial yield (Henry & Edward, 2024). These state-level results mirror national trends and reflect how digitalization strengthens revenue mobilization at granular levels.

Beyond compliance and collection metrics, digitization also carries broader economic benefits. Fadipe *et al*. (2025) found a strong positive relationship between tax administration digitalization and sustainable development indicators like GDP and the Human Development Index (HDI), reinforcing the idea that robust revenue systems are critical for overall

economic and social progress. On the efficiency front, Oladele *et al*. (2024) demonstrated that introducing digital tools such as e-filing, pro-max security systems, and real-time reporting significantly improved corporate taxpayer compliance, reduced administrative burdens, and enhanced transparency - elements that collectively foster a more productive and equitable fiscal environment.

IT deployment studies provide empirical evidence linking digitalization to institutional efficiency. For instance, research on the Oyo State Board of Internal Revenue Service showed that demand for online registration, ease of IT use, and expected benefits had a statistically significant positive relationship with tax administration efficiency ($p < 0.0001$) (Oladejo *et al*., 2024). In Kigali, the broader literature recognizes that tax digitalization not only raises revenues but also builds taxpayer trust, institutional legitimacy, and enhanced service delivery - key foundations for sustained compliance (Ajetunmobi *et al*., 2022; Sabilaw, 2023).

Impact of Tax digitalization on Revenue Performance

Tax digitalization in Nigeria has substantially improved tax revenue productivity and tax-to-GDP ratios. A landmark ex-post facto study by Tivde (2024) compared Federal Inland Revenue Service (FIRS) data spanning more than ten years and reported a statistically significant increase in total tax revenue post-adoption of e-tax platforms relative to the pre-digital period. Earlier empirical work by Olaoye *et al*. (2022) confirms that revenue productivity, measured as tax-to-GDP ratio and total yield, rose significantly after the introduction of electronic taxation although the macro ratio's gains were modest, the improvement in actual revenue was marked. These studies underscore that electronic tax systems materially raise the volume and efficiency of revenue collection at the federal level.

On the corporate and capital gains tax front, research has highlighted that digital tools have a pronounced impact. A quantitative study by Nwolu *et al.* (2023) found a significant positive correlation between digital technologies and collections of Company Income Tax (CIT) and Capital Gains Tax (CGT), attributing this to better data tracking and reduced evasion. Similarly, Ndalu and Igwe (2022) focus on Rivers State and FIRS data to show that the electronic payment system has a moderate but significant relationship with CIT and CGT yields ($r \approx 0.58$ and 0.55 respectively), suggesting technology amplifies compliance in high-income tax segments.

At the state level, case studies such as Kwara, Enugu, and Anambra States provide compelling local-level evidence. Olumoh and Sanni's analysis of Kwara State's e-registration and e-payment systems found statistically significant positive effects on internally generated revenue performance ($\beta \approx 0.198$ & 0.249, $p < 0.05$), revealing direct impacts of e-tax tools on state revenue collections. Oloye *et al*. (2023) similarly demonstrated that e-governance and electronic taxation in Enugu reduced reconciliation challenges, calculation errors, and leakages, while simultaneously boosting revenue collection. In Anambra, Onwunyi *et al*. (2023) showed that lack of technology adoption constrained revenue mobilization, while e-tax systems significantly improved collections in assessed periods.

Beyond immediate revenue effects, digitalization has enhanced tax administration efficiency, transparency, and taxpayer trust - critical determinants of long-term revenue performance. Digital platforms reduce manual errors, minimize opportunities for fraud, and streamline reconciliation processes, thereby increasing the fiscal credibility of tax authorities

(Oyolayede *et al.*, 2023). Integrated digital tax systems offer data analytics capabilities that enhance tax audit effectiveness and strategic enforcement. Advanced systems allow real-time transaction monitoring and use of big data to detect noncompliance, boosting revenue capture from informal and hidden sectors (Novatia Consulting, 2024).

Theoretical Review

Smith's Theory of Taxation by Adam Smith (1776) introduced foundational principles of taxation including equity, efficiency, certainty, convenience, and economy. Emphasizes fairness, clarity, and administrative efficiency as pillars for effective tax systems.

Application: Oto and Wayas (2024) apply Smith's Theory in the context of Nigeria's digital economy taxation, framing the digital tax administration (e.g SEP rules, VAT on digital services) as a means to uphold equity and administrative certainty in tax collection, thus broadening the base and improving revenue capture.

Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh, Morris, Davis, & Davis (2003). Predictive model of technology adoption, using constructs such as Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions.

Application: Several Nigerian studies on e-tax platforms implicitly draw on UTAUT principles. For instance, research into e-tax effectiveness shows that staff and taxpayers are more willing to use digital systems when they perceive utility, ease of use, and institutional support - reflecting UTAUT dimensions in practice.

Diffusion of Innovation (DOI) Theory by Everett Rogers (1962), this **theory** describes how new ideas and technologies spread through populations via stages: knowledge, persuasion, decision, implementation, and confirmation. **Application**: Oseni (2024) uses DOI to examine barriers in local-level e-service adoption - relevant to tax digitalization - identifying that slow diffusion among local government agencies is linked to lack of awareness, trialability, and compatibility with existing systems.

Laffer Curve & Behavioral Economics Theory by Laffer Curve by Arthur Laffer (1970s); Behavioral Economics by Kahneman & Tversky (1970s onward). **Theory**:

Laffer Curve suggests tax revenues peak at moderate tax rates; too high rates reduce incentives to comply.

Behavioral Economics focuses on the impact of cognitive biases, framing, fairness perceptions, and trust on compliance behavior.

Application: Iorlaha (2024) integrates both theories to analyze Nigeria's tax reforms (e.g., VAIDS, fiscal policy shifts), arguing that optimal tax rate design complemented by behavioral nudges and transparent digital systems can enhance voluntary compliance and revenue performance

Ex-post facto & Regression-based Frameworks (Implicit empirical frameworks), not proprietary theories, but rigorous empirical methods (post-hoc designs, OLS, ARDL, t-tests). These models infer causal relationships between tax digitalization proxies (e.g e-tax platform

rollout, digital accounting) and revenue outcomes through statistical contrasts before vs. after digitalization. **Application**:

Tivde (2024) conducted a pre-post analysis (Q2 2010–Q1 2021) using t-tests to demonstrate a statistically significant rise in tax revenue after introduction of e-tax platforms in Nigeria.

Aliyu (2024) used paired-sample t-tests to show that digital accounting periods correlate positively and significantly with both oil and non-oil tax revenues in Nigeria.

Ajaero *et al*. (2024) used OLS regression and Chow tests to show that tax variables (CIT, VAT) have significantly stronger effects on federal tax revenue in the post-digitalization era (2017–2023) compared with pre-digitalization (2010–2016).

Tax Administration Digitalization & Sustainable Development Framework by Fadipe *et al*. (2025) utilize development economics frameworks linking tax digitalization to sustainable outcomes.

Theory: Higher tax administration digitalization improves state capacity and efficiency, which supports sustainable development - measured by GDP and HDI - through enhanced revenue mobilization.

Application: This ex-post facto framework correlates tax digitalization metrics with macro indicators (GDP, HDI) using regression analysis, finding significant positive effects: efficient digital mechanisms enhance fiscal capacity and sustainable economic growth

Synthesis of Frameworks

Framework	Founder/Year	Core Theory	Application in Nigeria (2018–2025)
Smith's Taxation Theory	Adam Smith (1776)	Equity, efficiency, administrative certainty	Applied to digital VAT and SEP reforms to broaden tax base (Oto & Wayas, 2024)
UTAUT	Venkatesh et al. (2003)	Technology adoption via expectancy & social influence	Implicitly explains acceptance of e-tax platforms among FIRS and taxpayers
DOI Theory	Rogers (1962)	Innovation diffusion stages	Analyzes barriers to e-service (e.g. digital tax) at local levels (Oseni, 2024)
Laffer Curve & Behavioral Econ	Laffer (1970s) & Kahneman/Tversky (1970s)	Tax effort trade-offs & behavioral biases	Guides reform design balancing rates and nudges to improve compliance (Iorlaha, 2024)
Empirical t-test / regression models	Ex-post facto methodology	Statistical inference of digitalization impact	Studies by Tivde (2024), Aliyu (2024), Ajaero *et al*. (2024) showcase post-digitalization

			revenue rise
Digitalization → Sustainable Development	Fadipe *et al*. (2025)	Fiscal capacity supporting development metrics	Regression linking digital tax administration with GDP & HDI growth

Academic studies reveal a convergence of theories and empirical approaches explaining how **tax digitalization** affects **revenue performance in Nigeria**. Traditional theoretical lenses like **Smith's Taxation Theory, UTAUT**, and **Diffusion of Innovation** help explain taxpayer behavior and administrative acceptance of digital systems. **Economic and behavioral theories** (Laffer Curve and Behavioral Economics) guide the design of reforms and tax rates, emphasizing trust and usability.

Meanwhile, **empirical ex-post facto frameworks** provide the statistical basis demonstrating significant revenue gains post-digitalization. Finally, linking tax digitalization to **state fiscal capacity** and sustainable development (GDP and HDI) offers a macro-policy perspective on its broader societal benefits.

3.0 Methodology

A descriptive survey research design was used for this study. This design is chosen because it allows for a systematic collection of data from a sample to describe the existing. The population consisted of civil servants in Kwara State, Nigeria. A sample of 370 civil servant were selected from the total population of 10,234 for this study (using Research Advisor 2006). A purposive sampling technique was used to select participants who are particularly knowledgeable about or experienced with the topic of Tax digitalization and revenue performance. These participants were selected from Governmental Agencies and non-governmental agencies.

The instrument was validated by 5 lecturers in the Department. The reliability of this study was established through the test re-test method. Analysis of the data revealed that the instrument has reliability of 0.72. Data collected were analysed using Pearson Product Moment Correlation (PPMC) statistical tools were used to test the hypothesis at 0.05 level of significance.

Model Specification

In research, model specification typically is the formal statement of the statistical model that relates variables in a study this includes identifying:

- Dependent (outcome) variable
- Independent (predictor) variable(s)
- The functional form (e.g., linear, logistic)

Full Model Specification

1. Variables:
    - The dependent variable (e.g., revenue performance)
    - The independent variable (e.g., tax digitalization?)
2. Equation or Framework:
    - There is no equation or model specified like:
      $Y=\beta0+\beta1X+\epsilon$Y = \beta_0 + \beta_1 X + \epsilonY=β0+β1X+ϵ

or a statement like:
"The model specifies that revenue performance (Y) is a function of tax digitalization practices (X)."

Model Specification

In this study, revenue performance (dependent variable) was hypothesized to be influenced by the extent of tax digitalization (independent variable). The relationship was examined using the Pearson Product Moment Correlation (PPMC) method to determine the strength and direction of association between the two variables. The model can be expressed as:
RP=f(TD)RP = f(TD)RP=f(TD)
where:

- RPRPRP = Revenue Performance
- TDTDTD = Tax Digitalization

No control variables were introduced in the model, and the analysis focused solely on the linear association between the two key constructs.

Result

Research Hypotheses

Main Hypothesis

H_{01}: There is no significance relationship between the digital infrastructure and revenue performance in Kwara State, Nigeria.

Table 1 ***Relationship between*** the digital infrastructure and revenue performance in Kwara State, Nigeria

Variable	N	$\overline{x}$	SD	Calc. R-value	P-Value	Decision
Revenue performance	370	37.2243	11.07457	.775*	0.000	Rejected
Digital infrastructure	370	50.7568	7.64846			

Table 1, calculated value (0.775) and the p-value (0.000) which is less than 0.05 level of significance.

Thus, the hypothesis was rejected. This means that, there was significant relationship between the digital infrastructure and revenue performance in Kwara State, Nigeria.

H_{02}: *There is no significant relationship between* the impact of digital integration over other Systems use on Revenue Performance of Public Sector in Kwara State, Nigeria.

Table 2 ***Relationship between*** the impact of digital integration over other Systems use on Revenue Performance of Public Sector in Kwara State, Nigeria

Variable	N	$\overline{x}$	SD	Calc. R-value	P-Value	Decision
Revenue performance	370	37.2243	11.07457	.696*	0.020	Rejected
Impact of digital	370	14.1514	2.18738			

Table 2, calculated value (0.696) and the p-value (0.020) which is less than 0.05 level of significance. Thus, the hypothesis was rejected. This means that, there was significant

relationship the impact of digital integration over other Systems use on Revenue Performance of Public Sector in Kwara State, Nigeria.

Discussion of Findings

The first hypothesis posited that there is no significant relationship between digital infrastructure and revenue performance in Kwara State. However, the findings showed a **statistically significant positive relationship**. This supports earlier research suggesting that robust digital infrastructure enhances revenue collection and administrative efficiency in government systems (Oni *et al.,* 2020). For instance, the digitization of tax records and online payment systems has been linked to improved transparency and accountability in public sector finances (Akanbi & Olamide, 2021). Furthermore, the adoption of broadband infrastructure, integrated databases, and secure communication platforms has been associated with reduced leakage and faster revenue processing in subnational governments (Adegbite & Olayemi, 2022). These findings align with global trends emphasizing e-governance as a driver of fiscal performance in developing countries (World Bank, 2021). **On the contrary**, some scholars argue that digital infrastructure alone may not yield significant improvements in revenue performance without parallel investments in human capital, policy reforms, and anti-corruption measures (Egbetokun *et al.,* 2019). For example, if the digital infrastructure is underutilized or not maintained due to low technical capacity, the anticipated benefits may not materialize (Nwachukwu & Ogujiuba, 2020). However, in the context of Kwara State, this study indicates that infrastructure development is already playing a notable role.

The second hypothesis stated that there is no significant relationship between the impact of digital integration over other systems use and revenue performance in the public sector. The findings also revealed a **significant positive relationship**, suggesting that integrating digital technologies such as interoperable platforms and real-time data sharing offers advantages over legacy systems. This supports literature asserting that digital integration leads to seamless operations across departments, reducing redundancies and improving revenue tracking (Yusuf & Ajayi, 2023). Integrated financial management systems (IFMIS) and digital tax solutions are known to enhance government revenue by providing real-time insights and analytics (Abiola & Alabi, 2019). Studies in similar regions indicate that countries adopting comprehensive digital integration strategies experience faster revenue growth compared to those with fragmented systems (UN E-Government Survey, 2022). Conversely, critics warn that overly complex integration projects can fail if not tailored to local contexts or if implemented without adequate stakeholder buy-in (Mohammed & Lawal, 2021). Additionally, poor change management and resistance from civil servants can hinder the effectiveness of digital transformation efforts, even where infrastructure and tools are available (Obi et al., 2024). Nonetheless, the findings from Kwara State demonstrate that digital integration has been beneficial, implying that the State has potentially addressed some of the implementation challenges faced elsewhere.

Conclusion

In conclusion, the findings of this study provide clear evidence that both digital infrastructure and digital integration have a significant positive impact on revenue performance in the public sector of Kwara State, Nigeria. The rejection of the null hypotheses indicates that improvements in technological infrastructure and the adoption of integrated digital systems contribute meaningfully to more efficient revenue collection, enhanced accountability, and

better financial management. These results underscore the critical role of digital transformation in public sector performance and highlight the need for sustained investment, strategic implementation, and continuous evaluation of digital solutions to optimize revenue outcomes and support broader governance reforms.

Recommendation

Based on the findings that revealed a significant relationship between digital infrastructure and revenue performance, as well as between digital integration and improved revenue performance over other system uses in Kwara State's public sector, it is recommended that the government prioritize continued investment in modern digital infrastructure and the full integration of digital technologies across all revenue-generating agencies. Efforts should focus on upgrading existing ICT systems, ensuring seamless inter-agency connectivity, and promoting real-time data sharing to enhance transparency, efficiency, and accountability. Additionally, capacity building for public sector workers, strict data governance, and regular evaluation of digital system performance are essential to sustaining the positive impact of digital transformation on revenue outcomes.

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