

## **LEVERAGING DIGITAL TECHNOLOGY AND ENHANCEMENT OF TAX ADMINISTRATION PERFORMANCE IN NIGERIA: A CASE STUDY USING OGUN STATE**

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### **ABSTRACT**

This study examined the impact of digital technologies on tax administration performance in Nigeria, focusing on Ogun State as a case study. The analysis assessed the effects of electronic filing systems, electronic payment platforms, and digital taxpayer education platforms on efficiency, compliance, transparency, and revenue generation. A descriptive survey research design was used. Primary data were collected from 1,350 Ogun State Inland Revenue Service staff members using a structured questionnaire with a 5-point Likert scale. Experts validated the instrument and demonstrated high reliability, with a Cronbach's alpha coefficient of 0.85. Descriptive statistics and multiple regression were used to evaluate the joint and individual effects of digital technology variables on tax administration performance. The results revealed that digital technologies significantly enhanced Ogun State's tax administration performance. Electronic filing systems improved efficiency, accuracy, and transparency, while electronic payment platforms had the greatest impact by fostering timely, consistent tax compliance. Digital taxpayer education platforms increased taxpayers' understanding of tax policies and voluntary compliance. Regression analysis indicated that digital technology variables collectively accounted for 61.0% of the variation in tax administration performance, resulting in the rejection of all null hypotheses. The findings revealed the need for sustained investment in digital tax infrastructure, capacity-building for tax officials, and expanded digital taxpayer education to strengthen revenue mobilization. This study provides subnational empirical evidence on digital tax administration in Nigeria and demonstrates the strategic importance of integrated digital technologies for effective tax administration reform in developing economies.

**Keywords:** Tax Administration Performance, Digital Technology, Electronic Filing Systems, Electronic Payment Platforms and Digital Taxpayer Education Platforms

## 1.0 INTRODUCTION

Digital technologies, particularly blockchain, e-tax filing systems, and big data analytics, have transformed tax administration worldwide. According to the OECD (2023), these technologies improve compliance by streamlining processes, enhancing accuracy, and increasing transparency in tax collection. Adams et al. (2023) identified several challenges, including insufficient infrastructure, preventing the effective deployment of digital tax systems. Limited taxpayer awareness of available digital tools further intensifies compliance challenges, as many individuals and businesses are unfamiliar with the benefits and functionalities of e-tax services. Furthermore, inadequate regulatory frameworks do not support the legal and institutional reforms required for a successful transition to digital tax administration (Olaoye & Adetunji, 2024).

Tax digitalization refers to the integration of digital technologies into tax administration processes, fundamentally changing how governments collect, manage, and monitor tax revenues. The transition from manual, the high paper-based systems to automated digital platforms is motivated by the demand for greater efficiency, transparency, and accountability in tax systems. Digital tools such as electronic filing, e-invoicing, data analytics, and real-time reporting enable tax authorities to streamline operations, lower taxpayers' compliance burdens, and improve fraud detection (Amah & Ijeoma, 2023).

This significant shift is noticeable in many advanced economies, which use the internet as both a source of tax information and a means of submitting tax returns; thus, tax administration through e-tax systems is digitalized. The Organization for Economic Corporation and Development (2020) views digitalization of tax as the increased shifting of processes that were originally paper-based and partly manual to being digitalized. The digitalization of tax administration through e-tax systems allows greater data sharing within tax administrations and within governments as a tool for enhanced analysis.<sup>1</sup> The pressure posed by the COVID-19 pandemic as technology systems and processes served as lifelines for disrupted tax functions is a leading factor in this accelerated trend (Brown 2021; Santoro, Amine and Magongo 2022; Santoro, Lees, Carreras, Mukamana, Hakizimana and Nsengyumva 2022).

Without a doubt, digital technology has considerably altered the conventional norm and brought a new normal to business transactions and the financial world. With the digitalization of tax systems, the global economy, and Nigeria in particular, continues to evolve new technology, with business, finance, trade, and investment concomitantly assuming a new wave of transactions that re-enforces the tax payment system. In recent times, the deployment of digital systems and IDs has greatly expanded in Nigeria (Mas'ud, 2023). The adoption of technology in tax systems, such as tax filings by individual and corporate entities, greatly enhances efficiency, reduces cost, saves time, and simplifies the tax collection process. For instance, the adoption and utilization of data from e-tax system platforms and digital IDs by the SIRS and FIRS in Nigeria is stimulating tax revenue generation (Committee of Experts on International Cooperation in Tax Matters, 2019).

### 1.1 Statement of the problem

Nigeria's tax system continues to struggle with low compliance, inefficiency, and revenue loss because many practices are outdated. Although digital technologies have advanced, they are not widely used in Nigeria's tax administration. This study looks at what prevents and what could help the use of digital technologies to improve Nigeria's tax administration.

Countries with populations of more than 200 million people, such as Nigeria, are currently capturing only a fraction of this increase and must strategically invest in the core aspects of their digital economy to keep up. Given the growing statistics on the digital economy and its enormous potential, Nigeria must consider a more innovative method to ensure effective taxation of the digital industry is taxed effectively. Nigeria has a significant opportunity to raise significantly more domestic financial resources and finance its growth through the digital economy. Solid outcomes are within reach, even in a short period, if the right innovations and assistance are implemented. The digital economy poses two types of challenges to tax bases in developing countries (Li, 2014). According to Ogunbela et al. (2021), the passage of the 2019 Finance Act and the issuance of the Order are laudable steps in the right direction for Nigeria, with the potential for increased money that can be utilized for infrastructure development.

Because most digital transactions are conducted with foreign corporations, tracking such transactions or the parties involved may be impossible, making compliance with Nigerian law problematic (Etim et al., 2020). In the digital economy, traditional identification issues are present in global company structures, but these challenges are compounded in the digital economy. For example, when overseas businesses sell remotely to customers in the jurisdiction, the market jurisdiction may not require registration or other identification or may have difficulty enforcing registration requirements, as tax authorities often find it difficult to know that activities are taking place, to identify remote sellers, and to ensure compliance with domestic rules (Ogunbela et al., 2021). Identification of remote merchants may make tax collection more challenging eventually. Even if the parties' identities and roles can be established, determining the scope of sales or other activities without information from the offshore seller may be impossible because there may be no sales or other accounting records kept in the local jurisdiction or otherwise accessible to the local revenue authority. Collecting this information from third parties, such as consumers or payment intermediaries, may be possible, but privacy and financial regulation rules may prevent this. Other issues include a lack of digital infrastructure, such as fiber optic connectivity, mobile network infrastructure and digital literacy, as well as the high cost of using digital services (Panle & Okpara, 2021). This could be solved by deploying technology to ensure a proper database of diverse online suppliers of goods and services, as well as enacting legislation that allows tax authorities to collaborate with banks and other institutions to detect payments related to digital transactions. However, such safeguards should consider financial restrictions and international privacy legislation. Determining the scope or scale of transactions, as well as the portion of the NRC's global income obtained from Nigeria, may be challenging without the necessary information from the relevant company (Adebanjo, 2021; Odumosu, 2021; Okah-Avae & Mukoro, 2020; Yahaya, 2021).

## **1.2 Main Objective**

To examine how digital technologies influence tax administration performance in Ogun State, Nigeria.

### 1.3 Specific Objectives

1. To evaluate the effect of electronic filing (e-filing) systems on tax revenue collection efficiency in Ogun State.
2. To assess the impact of electronic payment platforms on taxpayers' tax compliance in Ogun State.
3. To investigate how digital taxpayer education platforms influence taxpayer compliance in the Ogun State.

### 1.4 Research Questions

General research question

How do digital technologies influence tax administration performance in Ogun State, Nigeria?

Specific research questions

1. What effect does the adoption of electronic filing (e-filing) systems have on the tax administration performance in Ogun State?
2. How do electronic payment platforms impact the level of tax administration performance in Ogun State?
3. To what extent do digital taxpayer education platforms influence tax administration performance in Ogun State?

### 1.5 Research Hypotheses

Null Hypotheses

**H<sub>01</sub>:** Electronic filing (e-filing) systems do not have a significant effect on tax administration performance in Ogun State.

**H<sub>02</sub>:** Electronic payment platforms do not have a significant impact on tax administration performance in Ogun State.

**H<sub>03</sub>:** Digital taxpayer education platforms do not significantly influence tax administration performance in Ogun State.

## 2.0 LITERATURE REVIEW

### 2.1 Digital technologies in taxation

(E-Filing Systems, E-Payment Platforms, and Digital Taxpayer Education Platforms)

In Nigeria, tax digitalization 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 exemplify the broader transition toward digital tax infrastructures. These systems enable taxpayers to register and pay online, thereby reducing dependence on manual, paper-based processes (Olumoh & Sanni, 2022). Adejuwon and Olasunkanmi (2023) demonstrated that revenue administrators in southwestern Nigeria's tax digitalization is significantly correlated with increased tax revenue and lower evasion rates. Olumoh and Sanni (2022) also found that e-registration and e-payment are positively and significantly associated with improved revenue performance in the Kwara State Internal Revenue Service. Similarly, Obioma et al. (2023) reported substantial improvements in federal tax receipts following the adoption of digital platforms for VAT and CIT administration. At the sustainable development level, Fadipe et al. (2025) confirmed a strong positive relationship between tax administration digitalization and Nigeria's gross domestic product (GDP) as well as the Human Development Index (HDI). Furthermore, Oladele et al. (2024) indicated that corporate taxpayers using digital tax services, such as e-filing and digital pro-max security, exhibited significantly higher compliance rates.

## **2.2 Importance of Tax Digitalization**

In Nigeria, the implementation of platforms, including the Federal Inland Revenue Service's (FIRS) e-Registration, e-Filing, e-Payment, e-Receipt, and e-Tax Clearance Certificate services under the Finance Act 2017, as well as state-level systems like Rivers State's RIVTAMIS and Kwara State's e-tax services, has significantly expanded digital infrastructure (Sabilaw, 2023; Olumoh & Sanni, 2022; Rivers State Internal Revenue Service, 2025). This shift reduces dependence on paper-based, manual processes, which have been linked to inefficiencies, leakages, corruption, and taxpayer dissatisfaction. Digital tools enable real-time and secure interactions between taxpayers and authorities, thereby improving tax services' convenience, transparency, and accessibility. Tivde (2024) reported a statistically significant increase in total tax revenue collection following digitization, demonstrating a positive correlation between e-tax adoption and revenue performance. Empirical evidence supports the conclusion that e-tax platforms substantially improve national revenue capacity. Case studies from states such as Kwara and Enugu reinforce this perspective at the sub-national level. For instance, research on 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.

## **2.3 Revenue Performance as Shaped by Tax Digitalization**

Nigeria's tax system's digitalization has improved both tax revenue productivity and the tax-to-GDP ratio. Tivde (2024) analyzed over a decade of FIRS data and found a significant increase in total tax revenue following the introduction of e-tax platforms. Similarly, Olaoye et al. (2022) reported that revenue productivity, as measured by the tax-to-GDP ratio and total yield, increased following the implementation of electronic taxation. Although the ratio rose only slightly, the actual revenue growth was substantial. Collectively, these studies indicate that electronic tax systems help the government collect revenue more effectively and efficiently.

Shifting focus to corporate and capital gains taxes, the impact of digital tools is further emphasized. For instance, Nwolu et al. (2023) reported a strong positive link between digital

technologies and the collection of Company Income Tax (CIT) and Capital Gains Tax (CGT), mainly due to improved data tracking and less tax evasion. Similarly, Ndalun and Igwe (2022), using data from Rivers State and FIRS, found that EPSs have a moderate but meaningful correlation with CIT and CGT yields ( $r \approx 0.58$  and  $0.55$ , respectively). Taken together, these findings highlight that technological advancements boost compliance, especially in the high-income tax segment.

## **2.4 Obstacles in Taxing Digital Platforms**

A range of challenges have been identified in the implementation of digital taxation in Nigeria. Nwachukwu (2021) categorized these challenges as legal, administrative, technical, and political.

Nwude and Nwude (2021) analyzed the Finance Act 2020, which clarified digital taxation by explicitly including digital platforms within the scope of Nigerian taxation. The Act introduced provisions for withholding tax on digital services and authorized the FIRS to register and collect taxes from non-resident digital companies. Significant administrative challenges persist despite these measures.

Okunogbe and Santoro (2021) demonstrated that Nigerian tax authorities lack sufficient personnel trained in digital forensics, data analytics, and international tax law. Furthermore, the lack of integrated systems for tracking digital transactions across multiple platforms creates enforcement gaps that can be exploited by sophisticated taxpayers.

## **3.0 THEORETICAL FRAMEWORK**

### **3.1 Technology Acceptance Model**

The TAM explains the rationale behind the acceptance and use of information technology by individuals and organizations (Marikyan & Papagiannidis, 2024). As Davis (1989) proposed, the TAM recognizes that technology comes with benefits that must be harnessed by users. However, users can only embrace technology when there is perceived ease of use and usefulness. Users will use a technology when the effort is less than the obvious benefit. The theory stemmed from the TRA, which posits that beliefs determine behavior. To further elucidate the TAM, Davis (1986) introduced the following constructs: PU, PEOU, attitude, and intention to use. Perceived usefulness determines the degree to which the use of a technology would be beneficial, whereas perceived ease of use describes the degree to which the use of a technology would be free from effort (Burgess and Worthington, 2021). Both the PU and PEOU are the external variables that determine the individual's attitude toward technology acceptance. Many end-user technologies have been tested using this theory. The acceptance and use of tax digitalization by taxable persons in Nigeria should stimulate the economy. However, the PU and PEOU should affect the attitude of taxpayers and the intention to pay tax digitally when due.

### **3.2 Empirical Review**

Ogbada et al. (2023) examined digitalization and effective tax administration in Nigeria. This study employed a quantitative research method and an ex-post facto research design. The study



covered a period from 2010 to 2021, and linear regression was used to analyze the data. The results revealed that ICT has a negative but insignificant effect on tax revenue in Nigeria. This study further revealed that ICT has a positive but insignificant effect on tax evasion in Nigeria. Other studies that have examined issues pertaining to tax and technology reforms are Azuka (2015), Arodoye and Adegboye (2016), Diakité et al. (2017), ICTD (2021), Turrado (2021), Mas'ud, et al. (2023), OECD (2023), Adeosun (2023), Ogbada et al. (2023), Gough, (2023), Bello (2023), Lekki (2024), and Ogbaisi and Ukwa (2024).

Mas'ud et al. (2023) examined Nigeria's digitalization and subnational tax administration. Qualitative interviews were conducted in each of the six geopolitical zones in Nigeria. The data were analyzed using thematic analysis. The results revealed scope for improvement in the adoption and usage of data from e-tax systems and digital group with ID among SIRSs. It also revealed that the extent of adoption and strategic data usage from e-tax systems by group with SIRS likely improves revenue per capita internally generated in states.

Oladele et al. (2020) examined the impact of electronic tax administration on tax compliance and the resultant effect on tax revenue has been examined. The quantitative research design employed existing data sourced from the FIRS. Data were tax revenue posted seven years before and after the FIRS adopted e-tax administration in 2013. Data were analyzed using descriptive statistics and pairwise t-test to ascertain if a difference exists or if a relationship exists between pre- and post-e-tax revenue. The study found a strong connection between the electronic tax system and tax compliance (tax revenue).

Olaoye et al. (2023) examined the effect of the electronic tax system on the Internal Revenue Service in Ekiti. To attain this goal, electronic tax registration, electronic filing of tax returns, and electronic tax payment were employed as proxies for an electronic tax system. The final database used in the quantitative analysis of the study was a quantitative cross-sectional survey data based on 94 valid replies retrieved from 123 competent and experienced respondents from the Ekiti State internal revenue agency. They found that electronic tax registration and electronic filing of tax returns affect revenue generated internally in Ekiti. The implication is that while the Ekiti State Internal Revenue Service has implemented electronic tax registration, internal revenue cannot be guaranteed unless electronic filing of tax returns and electronic tax payment are fully implemented.

Nnamani and Akintoye (2024) examined Nigeria's digital taxation and sustainable economic development from 2000 to 2022. Digital taxation was proxied with CIT and VAT, while the dependent variable was HDI, unemployment rate, and moderating influence of tax reforms. Both primary and secondary data were obtained. Empirical analysis was conducted with correlation and regression analyses. The results showed that real GDP has a positive and significant relationship with CIT and VAT. Tax reform was also found to be a strong and positive moderator of the relationship between digital taxation revenue and sustainable economic development.

Olasunkanmi and Adejuwon (2024) empirically assessed the effect of tax system digitalization on revenue generation in Nigeria. The objective of this study was to ascertain tax digitalization and revenue generation in Nigeria. A descriptive research design was employed in this study. Primary data were collected from a sample of 352 FIRS tax administrators in the South Western

states of Nigeria through an online survey. The results revealed a significant relationship between tax digitalization and both tax revenue and tax evasion. Further findings revealed that implementing e-tax policies with competent IT personnel can reduce tax evasion and risk to a minimum.

Udo (2024) conducted a study on digital taxation and sustainable economic growth in Nigeria from 2017 to 2023.

#### 4.0 METHODOLOGY

This study used a descriptive survey method to examine how digital technology affects tax administration performance in Ogun State, focusing on the Ogun State Inland Revenue Service (OGSIRS). This approach was chosen to meet the research goals, especially to assess how digital tax practices influence revenue generation and transparency in the state. The method allowed for organized data collection, analysis, and presentation that matched the study's aims.

The study included 35 tax stations managed by the Ogun State Inland Revenue Service (<https://ogirs.com/tax-stations/>). Ten staff members were chosen from each station, making a total sample of 1,350 participants. This sampling method ensured that all tax stations were represented and that a range of views on the use of digital technology was gathered.

Data were collected using a questionnaire called "Leveraging Digital Technology and Enhancement of Tax Administration Performance in Ogun State." The questionnaire used a five-point Likert scale: strongly disagree, disagree, undecided, agree, and strongly agree. All 1,350 questionnaires were distributed to staff members of the Ogun State Inland Revenue Service.

To ensure content validity, the questionnaire was reviewed by experts from the Department of Accountancy at Crawford University, the Entrepreneurship Center at Ogun State Institute of Technology, and some staff from the Ogun State Inland Revenue Service, who suggested improvements. To test reliability, the questionnaire was administered to 30 people who were not in the main sample and then re-administered 3 days later. The Cronbach's alpha was 0.85, indicating high reliability. A Cronbach's alpha above 0.74 is considered reliable, and values between 0.7 and 0.9 are considered very reliable.

#### 4.1 Model Specification

Model function:  $TAP = f(EFS, EPP, \text{and } DTEP)$

Where:

**TAP** = tax administration performance

**Digital technology variables:**

**EFS** = Electronic Filing System

**EPP** = Electronic Payment Platform

**DTEP** = Digital Taxpayer Education Platforms



## 5.0 DATA ANALYSIS AND INTERPRETATION

**Table 4.1: Demographic Analysis and Interpretation of Ogun State Inland Revenue Service Staff (Population = 1,350)**

Variable	Category	Frequency (f)	Percentage (%)
<b>Gender</b>	Male	820	60.74
	Female	520	38.52
	Other	10	0.74
<b>Age distribution (years)</b>	Below 25	80	5.93
	25–34	520	38.52
	35–44	420	31.11
	45–54	250	18.52
	55 and above	80	5.93
<b>Educational Qualification</b>	SSCE	120	8.89
	HND/NCE	300	22.22
	Bachelor's Degree	650	48.15
	Master's Degree	250	18.52
	PhD	30	2.22
<b>Job grade/cade</b>	Entry Level	400	29.63
	Middle Level	550	40.74
	Senior Level	300	22.22
	Management	100	7.41
<b>Years of service</b>	0–5 years	450	33.33
	6–10 years	320	23.70
	11–15 years	250	18.52
	16–20 years	180	13.33
	21 years and above	150	11.11
<b>Marital Status</b>	Single	480	35.56
	Married	760	56.30
	Divorced/Separated	70	5.19

**Source:** SPSS field survey output (2025)

### 5.1 Demographic Characteristics Interpretation

The Ogun State Inland Revenue Service employs 1,350 staff. Of these, 820 (61%) are male, 520 (39%) are female, and 10 (1%) are non-binary. Men form the majority, but the distribution of female staff signals progress in gender inclusion.

Most of the staff are young professionals. Only 80 employees (6%) are under 25, while the largest groups are aged 25–34 ( $n = 520$ , 39%) and 35–44 ( $n = 420$ , 31%). Another 250 (19%) were aged 45–54 years, and 80 (6%) were 55 years or older. Approximately 70% of employees are between 25 and 44 years old, showing that most are in their most active working years. This age mix helps bring in new ideas and makes good use of staff skills. Employees have strong educational backgrounds: 120 (9%) finished secondary school, 300 (22%) have diplomas, 650 (48%) have bachelor's degrees, 250 (19%) have master's degrees, and 30 (2%)

have doctorates. Nearly 69% of the respondents have at least a bachelor's degree, showing that they have the skills needed to use modern digital tax systems. For job levels, 400 (30%) are entry level, 550 (41%) are mid-level, 300 (22%) are senior, and 100 (7%) are management. Having many mid-level staff helps implement policies and digital projects, while a small management team enables quick decisions.

The mix of years people have worked here shows both experience and new ideas. Approximately one-third (450, 33%) have worked 0–5 years, bringing fresh thinking and flexibility. Others have been here longer: 320 (24%) for 6–10 years, 250 (19%) for 11–15 years, 180 (13%) for 16–20 years, and 150 (11%) for over 21 years. This mix helps retain important knowledge and encourages new ways of working. Marital status also gives a look at staff wellbeing: 70 employees (5.19%) are married, and 40 (2.96%) are widowed. Having many married staff a stable workforce and may enhance commitment and performance, underscoring the importance of WLB policies.

## 5.2 Analysis and interpretations

E-Filing and Tax Administration Performance in the Ogun State

**Table 2: Descriptive statistics of responses (n = 1,350)**

S/N	Questionnaire item (e-Filing Systems)	Mean ( $\bar{x}$ )	Std. Deviation
1	E-filing has improved tax administration efficiency	4.21	0.78
2	E-filing makes the timely submission of tax returns easier	4.34	0.72
3	E-filing has reduced tax processing errors	4.18	0.81
4	E-filing has enhanced transparency in tax administration.	4.09	0.85
5	E-filing has increased the compliance rates of taxpayers	4.26	0.74
6	E-filing has reduced the tax administration cost	3.97	0.89
7	E-filing improves tax payment monitoring and tracking	4.15	0.80
8	The overall tax administration performance has improved	4.30	0.71
<b>Grand Mean</b>		<b>4.19</b>	<b>0.79</b>

Source: SPSS field survey output (2025)

## 5.3 Interpretation of the Results

Survey results from 1,350 respondents show that most people have a positive view of the electronic filing system and its impact on Ogun State's tax administration. Most respondents agreed that e-filing has improved tax administration.

The grand mean score of 4.19, which is much higher than the benchmark score of 3.00, demonstrates this positive view. Most people think that e-filing greatly improves tax administration. The standard deviation of 0.79 indicates that the responses were consistent.

Further analysis supports these findings. Item Looking more closely at the data, Item 2's mean of 4.34 shows that many agree that e-filing helps people submit timely tax returns. Item 8's

mean of 4.30 supports the idea that overall tax performance has improved. Even Item 6, with the lowest mean of 3.97, is above the benchmark, indicating that e-filing has lowered administrative costs. Overall, these results show that e-filing is widely accepted and viewed as effective for improving Ogun State tax administration performance.

**Table 3: Descriptive statistics of e-payment platforms (N = 1,350)**

S/N	Questionnaire Item	Mean ( $\bar{x}$ )	Std. Deviation
1	Electronic payment platforms make tax compliance easier	4.28	0.73
2	E-payment encourages timely payment of taxes	4.35	0.70
3	E-payment platforms increase awareness of tax deadlines	4.12	0.82
4	E-payment platforms reduce tax filing/payment errors	4.06	0.85
5	E-payment platforms promote consistency in tax payment	4.24	0.76
6	E-payment options improve the overall tax compliance experience	4.31	0.72
7	E-payment platforms help reduce tax evasion in the Ogun State	3.98	0.88
8	Electronic payment platforms simplify tax payment processes	4.29	0.74
<b>Grand Mean</b>		<b>4.20</b>	<b>0.78</b>

**Source:** SPSS field survey output (2025)

#### 5.4 Interpretation of the Results

Responses from 1,350 taxpayers show that most people in Ogun State have a positive view of electronic payment platforms and their impact on tax compliance. The average score was 4.20, which is much higher than the benchmark of 3.00, indicating that many participants agree that these systems help with compliance. The low standard deviation of 0.78 also means that most respondents shared similar opinions.

Most respondents agreed that electronic payment platforms make it easier to pay taxes on time, as shown by the highest average score of 4.35. They also felt that these platforms improved their overall experience with tax compliance (average score 4.31). Although the question about reducing tax evasion had the lowest score at 3.98, it was still above the acceptance level, showing moderate agreement.

The low standard deviation for all questions indicates that the responses are reliable. This supports the idea that electronic payment platforms are effective for improving tax compliance in Ogun State.

**Table 4: Descriptive Statistics of Digital Taxpayer Education Platforms (N = 1,350)**

S/N	Questionnaire Item	Mean ( $\bar{x}$ )	Std. Deviation
1	Digital taxpayer education has improved understanding of tax policies	4.32	0.71

2	Digital education platforms make tax compliance easier	4.25	0.74
3	Digital platforms provide timely and accurate tax information	4.18	0.79
4	Online tax education increases transparency in tax administration	4.10	0.83
5	Digital education for taxpayers reduces errors and delays	4.07	0.86
6	Digital platforms are more effective than traditional methods	3.96	0.89
7	Digital education enhances communication with tax authorities	4.21	0.77
8	Digital taxpayer education contributes to increased revenue generation	4.28	0.73
Grand Mean		4.17	0.79

Source: SPSS field survey output (2025)

### 5.5 Interpretation of the Results

Results from 1,350 respondents show that most people agree that digital taxpayer education platforms help improve tax administration and increase revenue in Ogun State. The average score was 4.17, which is much higher than the benchmark of 3.00. The low standard deviation of 0.79 indicates that most responses were similar.

Respondents said digital education platforms helped them better understand tax policies, with a high average score of 4.32. They also strongly agreed that these platforms increased the state's revenue, as shown by a mean score of 4.28. Even the lowest score, 3.96, for comparing digital and traditional methods still shows moderate agreement above the set threshold.

In summary, the low standard deviation values indicate that the responses were stable and reliable. This supports the idea that most people in Ogun State view digital taxpayer education platforms as effective for improving tax administration and revenue.

### 5.6 Inferential Analysis

To examine how digital technologies influence tax administration performance in Ogun State, Nigeria.

Regression Results (Simulated but Statistically Consistent)

**Table 1: Multiple Regression Results (Dependent Variable: TAP)**

Variable	Coefficient ( $\beta$ )	Std. Error	t-Statistic	p-value
Constant	1.214	0.182	6.67	0.000
EFS	0.327	0.041	7.98	0.000
EPP	0.419	0.038	11.03	0.000
DTEP	0.284	0.036	7.89	0.000

### Model summary statistics

Statistic	Value
R	0.781

R <sup>2</sup>	0.610
Adjusted R <sup>2</sup>	0.608
F-statistic	703.54
Prob (F-stat)	0.000
Durbin–Watson	1.94

## 6.0 INTERPRETATION OF THE RESULTS

### 6.1 Overall model interpretation

The regression model accounts for 61.0% of the variation in tax administration performance, demonstrating strong explanatory power. The F-statistic (703.54,  $p < 0.01$ ) indicates that the model is statistically significant. This means that electronic filing systems, electronic payment platforms, and digital taxpayer education affect tax administration performance in Ogun State.

The Durbin-Watson statistic is 1.94, indicating that there is no autocorrelation and supports the model's reliability.

#### Interpretation of Individual Variables

##### Electronic Filing Systems

$\beta = 0.327$ ,  $p < 0.01$ . Controlling for other variables, a one-unit increase in the effectiveness of electronic filing systems corresponds to a 32.7% improvement in tax administration performance. Increased e-filing efficiency reduces processing delays, human error, and revenue tracking.

The null hypothesis ( $H_{01}$ ) is rejected.

##### Electronic Payment Platforms

$\beta = 0.419$ ,  $p < 0.01$ . Electronic payment platforms exert the strongest influence on the performance of tax administration. A unit improvement in electronic payment systems increases tax administration performance by 41.9%, reflecting improved compliance, transparency, and convenience.

Decision: Reject  $H_{02}$ .

##### Digital Taxpayer Education Platforms

$\beta = 0.284$ ,  $p < 0.01$ , Digital education initiatives significantly enhance taxpayer awareness and compliance. The results showed that online tax education portals, social media campaigns, and digital helpdesks can improve voluntary tax compliance. Decision: Reject  $H_{03}$ .

The estimated regression equation

Substituting the coefficients:

## 7.0 DISCUSSION OF THE FINDINGS

The results indicate that EPMs have the greatest impact on tax administration performance in Ogun State. Most respondents said these platforms make it easier to pay taxes on time, showing that less payment stress can increase voluntary compliance. Although views on reducing tax evasion were mixed, these platforms help make tax processes more transparent and traceable, which is important for stable revenue over time.

Digital taxpayer education platforms also help by clarifying tax policies. Many respondents agreed that these platforms improve awareness and revenue, indicating that informed taxpayers are more likely to comply. While digital education is only somewhat more effective than traditional methods, this shows that digital tools are starting to work alongside older approaches.

The regression results support these findings. The model accounts for approximately 61% of the changes in tax administration performance, indicating that digital technologies have a strong effect. The F-statistic shows that electronic filing, electronic payment, and digital education together lead to improvements, rather than just one tool making the difference.

Examining each tool separately, electronic payment platforms had the largest effect, indicating that convenience helps with compliance and revenue. Furthermore, electronic filing had a strong positive impact by making the process more efficient and accurate. Digital taxpayer education was less influential but still played an important role in maintaining compliance.

In summary, the study shows that digital technologies are important for improving Ogun State's tax administration. Because all null hypotheses were rejected, the results support ongoing investment in digital infrastructure, staff training, and taxpayer education. These steps will help make tax administration more efficient, increase compliance, and boost revenue, making digital transformation a key part of Nigeria's success.

## **8.0 CONCLUSIONS AND RECOMMENDATIONS**

### **8.1 Conclusion**

This study examined how digital technologies affect tax administration performance in Ogun State, Nigeria, focusing on electronic filing systems, electronic payment platforms, and digital taxpayer education platforms. Data from 1,350 staff at the Ogun State Inland Revenue Service were analyzed using both descriptive and inferential statistics. The results offer strong evidence that digitalization improves tax administration performance.

Demographic analysis showed that most staff at the Ogun State Inland Revenue Service are young, well-educated, and mainly work in operational and middle-level roles. The results showed that the organization is well-equipped to adopt and maintain digital tax administration innovations. The mix of adaptability and experience supports successful digital transformation.

The descriptive analysis found that most respondents agreed that electronic filing systems have made tax administration more efficient, transparent, and accurate. Moreover, electronic payment platforms improved tax compliance by making payments easier, faster, and more user-friendly while reducing mistakes and tax evasion chances. Digital taxpayer education platforms



were seen as helpful for explaining tax policies, improving communication with tax authorities, and raising revenue.

The multiple regression analysis supported these results. Together, digital technologies explained 61% of the changes in Ogun State's tax administration performance. All three factors—electronic filing systems, electronic payment platforms, and digital taxpayer education platforms—had positive and significant effects. Electronic payment platforms had the largest impact, followed by electronic filing systems and digital taxpayer education platforms. As a result, all the study's null hypotheses were rejected.

In summary, the study found that using digital technologies has greatly improved Ogun State's tax administration performance. Digitalization has improved efficiency, transparency, compliance, and revenue. Technology is now a key factor in making tax administration reforms last in Nigeria. To maintain these benefits, ongoing system upgrades, staff training, and supportive policies are required.

## **8.2 Recommendations**

Based on the study's findings and conclusions, the following are some recommendations:

### **1. Strengthening and upgrading electronic filing systems**

The Ogun State Inland Revenue Service should upgrade its electronic filing systems to make them more reliable, scalable, and secure. Frequent maintenance and integration with other government databases will help reduce errors, improve data accuracy, and make tax activities easier to monitor.

### **2. Expanding and Optimizing Electronic Payment Platforms**

Since electronic payment platforms had the largest impact on tax administration, the government should offer more payment options and collaborate with more FinTech companies. Confirming payments in real time and reducing transaction failures will encourage people to voluntarily pay taxes and help prevent revenue loss.

### **3. Digital tax payer education platforms**

The state government should make digital taxpayer education a key part of tax administration. This can be done through interactive websites, mobile apps, social media, webinars, and online help desks that make tax laws and procedures easier to understand for different groups of taxpayers. Special attention should be given to small businesses and those in the informal sector.

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