EFFECT OF E-TAX ADMINISTRATION ON INTERNALLY GENERATED REVENUE OF ADAMAWA STATE

Akila Adzu

Department of Economics, School of Arts and Social Sciences, Adamawa State College of Education Hong.

aaishidi@yahoo.com

Abstract
This study assesses the effect of tax administration on internally generated revenue of Adamawa State of Nigeria. The study adopted survey research design. Primary data were collected from the sample population of 432 respondents. The study used Partial Least Squares (PLS) Technique in analyzing the data and hypothesis testing. The result of the study shows that e-tax system has a positive effect on tax administration in Adamawa State. Tax Knowledge also has a positive and significant effect on tax administration in Adamawa State. The study recommends based on the finding that Adamawa State Government should purchase e-tax infrastructure and facilities such as power plants, telecom network, wi-fi routers, laptops and desktops. Also, Adamawa State Government should continue in creating awareness and educate taxpayers on the need to pay tax through regular workshops, seminars, conferences, initiatives, programmes and training.

Keywords: E-Tax Administration, E-tax System, Tax Knowledge, Internally Generated Revenue

1.0 Introduction

Internally generated revenue is the engine of every successful government globally. The Nigerian states government were not considering taxation as a good source of internally generated revenue around 1970s and late 1980s because their attention was given only to oil revenue (Oni & Musa, 2020). Almost all the States government in Nigeria relied on federal allocation during this period. In the year 2013, when there was global recession that resulted in the oil prices fall, there was decrease in proceeds from federation accounts. The employment of taxation as another source of internally generated revenue at the time the crude oil crashed in global market became necessary.

Adamawa State government has burden of responsibilities that make it prepares toward developing its area which necessitated for the need of sufficient internally generated revenue. These responsibilities, according to the Constitution of Nigeria (1999) are: Provision of infrastructural facilities, ensuring security of lives and property and payment of salaries as well as meeting other administrative costs.

The internal revenue based of Adamawa state has been increasing, though not sufficiently high. This is shown on Table 1 below.

Table 1: Budgted and Actual Internally Generated Revenue of Adamawa State (2016-2024)

S/No.	Budgeted ₦	Actual ₦
1	8,180,000,000	2,340,000,000
2	6,840,000,000	6,830,000,000

3	7,520,000,000	6,200,000,000
4	15,650,000,000	9,710,000,000
5	12,830,000,000	8,330,000,000
6	20,520,000,000	13,010,000,000
7	24,990,000,000	13,200,000,000
8	22,420,000,000	17,070,000,000
9	22,230,000,000	17,000,000,000

Source: National Bureau of Statistics (2024)

Taking into consideration, the discrepancies that exist between the actual and the budgeted amount; in which the budgeted exceeded the actual, there is every need on the part of Adamawa state government to search for other sources of revenue or be innovative in the way in which revenue collection from other sources can be done.

E-tax system in developing countries has gained increased prominence as a result of its efficiency and effectiveness. E-tax system is among the strategies that were recently introduced by the Adamawa state government in order to improve the collection of tax revenue through making the process more convenient and easy for both taxpayers and tax authorities. The creation of computerized data based and e-revenue by the tax administrators in Adamawa state has improved its internally generated revenue. When Adamawa state government introduced e-tax system in the state in 2020, it has played significant role in revenue generation to the state (Saidu, Bakari & Mohammed, 2023). According to Abubakar, Aliyu, and Bugaje (2021), e-tax system generally is undertaken in order to improve the efficiency of tax administration and to maximize the economic and social benefits of the taxpayers. Therefore, Adamawa State tax administration can be considered to have improved as a result of the introduction of e-tax system, but not up to the expected level and hence the need to find out how the tax administration is efficient and effective on the internally generated revenue.

Tax knowledge as one of the proxies of tax administration is essential when imposing tax on taxpayers by tax authority. When there is limited knowledge on tax issues, it affects the revenue that will be generated through such tax. Tax knowledge has been limited to most taxpayers as they do not seem to understand the significant of paying tax in Adamawa state. Taxpayers may be seen as non-compliance to tax laws if they lack knowledge about the tax system and tax laws (Ahmed, 2019). There have been public enlightment by the Adamawa state government through its State Board of Internal Revenue (Festus, 2019). Despite the public enlightment by the state government to the taxpayers, it has not yielded much required results as expected. In Adamawa state, many taxpayers have not been complying with the payment of tax (Hamidu et al, 2022). Therefore, there is a need to further investigate how tax knowledge can efficiently and effectively improve the generation of sufficient internal revenue to the Adamawa State government.

Several studies have been carried out on the area of tax administration and internally generated revenue. Among these studies are: Ojo (2025), Paul and Tokoni (2024), Onuigwe, et al (2023), Ogundipe (2022), Adebayo et al (2022). They assessed tax administration and internally generated revenue. These studies considered company income tax, value added tax, tax regulation, tax technology, tax compliance, tax structure, tax penalty, tax proceed and self-assessment, hence there is a need to consider e-tax system and tax knowledge as independent variables which are the better and core components of tax administration that influenced revenue generation most especially at the state government level which the current study used.

Research Questions

i. What is the effect of e-tax system on IGR in Adamawa State?

ii. How does tax knowledge affect IGR in Adamawa State?

Objectives of the Study

The main objective of this study is to assess the effect of tax administration on IGR of Adamawa State. The specific objectives are:

i. To assess the effect of e-tax system on IGR in Adamawa State.

ii. To determine the effect of tax knowledge on IGR in Adamawa State.

Research Hypotheses

Ho_1: E-tax system has no significant effect on IGR in Adamawa State.

Ho_2: Tax knowledge has no significant effect on IGR in Adamawa State.

Literature Review

Conceptual Review

Concept of Internally Generated Revenue

Internally Generated Revenue is important part of accruable total revenue to the states government. According to Ogundupe (2022), IGR is the revenue supplement of states government to the ones tapped from external sources, but is providing viable support for accomplishment of states government budgetary plans. This definition did not state the viable of the internally generated revenue to states government. According to Ojo (2025), internally generated revenue is a fund raised by government within the Nigerian nation which is independent of the federation account revenue share. Ojo (2025) opinion did not show how independent is the internally generated revenue from federation account revenue share. Bitrus (2021) views internally generated revenue as the source of government fund which is generated by the three tiers of government that help in enhancing non-oil revenue source of the state government. This view did not state the non-oil revenue source. According to Adekoya et al (2021), internally generated revenues are the type of revenues that are raised within the power of the government which are peculiar and distinct.

This study adopts the definition of Bitrus (2021). Therefore, internal generated revenue refers to all revenues that are constitutionally approved which are accruing to the three ties of government but without loans and other funds from external sources.

Concept of E-Tax System

Ike and Bright (2024) defined e-tax system as the governments' use of information and communication technology to improve the accountability and administration of public services. The system allows taxpayers to conduct a number of activities such as registration of vehicle license, tax identification number, file tax returns and direct payment of taxes. According to Abubakar, et al (2021), e-tax system is expected to increase tax collection and make tax administration process friendly and efficient. According to Chukwuebuka, Ogochukwu, David, Sheila and John (2020), e-tax system refers to as the collection and administration system of tax via application of electronic medium. They further states that e-tax system is concerned with online network where the taxpayers can have platform licence through the internet use so as to have access into the facilities which include electronic tax filing of tax returns and registration for a tax identification number.

Concept of Tax Knowledge

According to Appah and Aganaba (2024) the tax knowledge is defined as the comprehension of the tax policies in a given area or society. Tax policies understanding by taxpayers will ascertain tax compliance level within a given area or society. Appah and Aganaba (2024) further argued that tax knowledge is one of the important factors in voluntary tax compliance. While Bett, Ogaga and Limo (2024) viewed that tax knowledge improvement in any given area or society will help in advancing the level of tax compliance. Mianti and Budiwitjaksono (2021) contended tax knowledge as way of comprehending provisions of tax that affected the tax obligation fulfillment attitude. Muhammad, Hassan and Gugong (2023) viewed tax knowledge as about what is understood by taxpayers in tax regulations. Tax knowledge has been conceptualized to include three basic dimensions, namely: technical tax knowledge, general tax knowledge and legal tax knowledge (Abubakar et al, 2021). According to Akan and Azaka (2023), tax knowledge is a complete awareness of the government tax rules and regulations that govern the tax system. This study adopts the definition of Abubakar et al, (2021) Tax knowledge is therefore can be defined as understanding of taxes laws.

Empirical Review

E-Tax System and Internally Generated Revenue

Olayeye and Adedeji (2025) examined the effect of electronic taxation on revenue generation of Ondo State (2019 - 2023). The study used secondary data. The data were collected in two phases that is; pre-e-tax period and post-e-tax period. The data were analyzed using comparism of pre-post analysis. The results of study shows that, before the e-tax implementation, revenue generation reported of the state waere below average. While after the e-tax implementation, revenue generation significantly improved. The study recommended that Ondo State Internal Revenue Service should enlighten the taxpayers and pronounce severe punitive action on tax avoidance and tax evasion in the state. However, the study failed to use suitable technique of data analysis such as regression and ANOVA rather than just comparing the revenue generated pre-e-tax and post-e-tax. It would have also used primary data to validate the secondary data result.

Onwudinjo, Chukwu and Chioma (2025) examined the effect of e-tax on internally generated revenue in South East Nigeria from 2010 - 2023. Target population of the study is 2004 and 190 sample size was used which was drawn from the target population using Taro Yamane formula. The study used survey design in data collection. The study used primary and secondary sources of data. The data were analyzed using means of simple percentages and means scores and the Z-test while frequencies were used to present data. The study result shows that z-cal is 35.31 > z 1.64, showing e-governance has significantly helped in improving internally generated revenue in the South East of Nigeria. It was recommended that government shall deploy available fund to developmental projects so that taxpayers should have benefits of paying tax which will in-turn increase internally generated revenue of the zone. However, the technique of data analysis is too minor. The study would have used suitable technique such as regression, ANOVA and PLS-SEM.

Khan, Ullah, Khattak, Akhter and Haide (2025) evaluated the e-taxation impact on Pakistan's revenue generation. The research used quantitative method and quasi experimental research. The secondary data was collected from Pakistan Bureau of Statistics and Federal Board of Revenue (FBR) which was divided into two; that is before and after introduction of e-taxation. The paired sample t-test and ANOVA were used with the help of SPSS in data analysis.

The finding of the study reveals that introduction of e-taxation has significantly impacted revenue generation in Pakistan at 5% level of significance showing a 0.000 probability value. Also, there is a significant increase in tax revenue after implementation of e-taxation in Pakistan. It was recommended that there should be a continue investment in the e-taxation infrastructure and tax awareness so as to foster higher in the country's tax compliance. However, the study fails to state the pre e-taxation and post e-taxation period and the years covered in data collected.

Owoeye (2024) examines how e-taxation enhances tax compliance in Nigeria. The secondary data was used and the data were collected from Federal Inland Revenue Service and the National Bureau of Statistics. The data were analyzed with comparative analysis and descriptive statistics. The result of the study shows the value of mean has after the implementation of e-taxation increased in Nigeria. It was also shows that the e-taxation helped in addressing the issue of tax evasion in Nigeria at 5% significance level. The study recommended that Federal Inland Revenue Service should develop a mobile App that will help in raising simplify and awareness of e-tax system in Nigeria. However, the study fails to indicate the period covered and the technique of data analysis is not sufficient and suitable to analyze secondary data. Other technique such as regression and ANOVA can be used. Also, primary data can also be used together so as to support the result of the secondary data.

Tivde, (2024) examines the e-taxation effect on revenue generation within Nigeria. The study employed the design of ex-post facto research and the data were collected in quarterly from Federal Inland Revenue Service reports spanning 40 quarters. The study used t-test technique in data analysis while descriptive statistic was employed for the means comparison. The study result shows a higher positive mean between pre e-tax and post e-tax collection at 5% significance level with 0.000 probability value. The study concludes that there is a significant effect of e-taxation system on revenue generation in Nigeria. However, other techniques of data analysis can be used such as ANOVA, multiple regression and PLS-SEM than using only t-test and descriptive statistics.

Ihenyen, Ehiogu and Odoni (2024) evaluated the effect of e-tax system on the tax compliance jurisdiction in Nigeria. The study adopted primary source of data and the sample of 100 respondents was randomly selected from SMEs in Bayelsa and Delta States of Nigeria. The study employed descriptive statistics and multiple regression technique for analysis. The study results shows that user-friendly online interface and convenience of e-tax structure have significant effect on revenue generation in Bayelsa and Delta states at 5% significant level with 0.025 and 0.000 probability value respectively while the overall probability value is 0.001. It was recommended that the government need to do more in enlighten people's understanding of the important of payment of taxes through the internet-based tax filing system so as to offer an easy way for people to pay their taxes. However, the sample population of 100 respondents is too small for the 2 states. Also, the study fails to state the technique used to arrive at the only 100 sample population.

Tax Knowledge and Internally Generated Revenue

Appah and Aganaba (2024) assessed tax knowledge and voluntary compliance on the public trust in Nigeria. The study employed cross sectional survey design which was employed using 30,450 population of informal sector in the state. The study adopted stratified sampling technique in data collection. Primary data was obtained using questionnaires. The data was analyzed using univariate, bivariate and multivariate. The study results from the analysis indicated general tax knowledge and voluntary tax compliance have positive and significant relationship in informal sector operators within Bayelsa State at 5% significant level with a 0.000 probability value. Procedural tax knowledge and voluntary tax compliance also have positive and significant relationship with informal sector operators at 5% significant level with a 0.017 probability value. The result further reveals that legal tax knowledge and voluntary tax compliance have positive and significant relationship with informal sector operators in Bayelsa State at 5% significant level with a 0.045. It was concluded that influence of tax knowledge on taxpayers voluntary tax compliance behaviour in the state. However, the study did not indicate the sample population used because the whole target population of 30,450 informal sectors is too large.

Bett, Ogaga and Limo (2024) carried out research on impact of tax knowledge and Pay-As-You-Earn (PAYE) on the compliance of tax between small and medium enterprises in Kenya. Explanatory research design was employed in data collection which focused on registered small and medium enterprises. The study target population is 1,223 small and medium enterprises while the sample size was 301. The primary data source was generated using structured questionnaire. The descriptive statistics and inferential statistics were used to analyze the data. The result found that there is a positive and a significant effect of tax knowledge on PAYE in Kenya at 5% level of significance with a probability value of 0.000. The study recommended that Kenya Revenue Authority should work towards simplifying and streamlining the tax system and reduce administrative burdens so as to influence tax compliance. However, the use of inferential descriptive statistics could lead to only surface level view. Other technique can be used such as regression, ANOVA and PLS-SEM.

Muhammad, Hassan and Gugong (2023) study investigated the impact of tax fairness, tax knowledge and religious ethics on evasion of tax on the SMEs in Katsina State. Study data were sourced from Katsina South Senatorial Zone from 200 SMEs through structured questionnaire administration. Data was analyzed PLS-SEM. The results indicated that tax fairness, tax knowledge and religious ethics have significant impact on tax evasion at 5% significant level showing probability of 0.000, 0.000 and 0.000 respectively. It concludes that tax fairness, tax knowledge and religious ethics are playing important role in tax evasion activities. However, religion ethics sometimes has nothing to do with payment of tax because of lack of honesty and corruption of the tax officials and government. Also, there are more than 200 registered SMEs in Kaduna Southern Zone based on the National Bureau of Statistics.

Appiah, Domeher and Agana (2023) evaluated tax fairness, tax knowledge and trust effect on tax compliance voluntary on SMEs in Ghana. The study employed survey research and 341 sampled SMEs were used for the study. The study analyzed data using Structural Equation Modeling. The study results indicated that behavioural motivations and social factors are the key components of tax compliance voluntary in

Ghana. It specifically, revealed that SMEs' perception of tax knowledge, tax fairness and trust in government significantly predicted tax compliance voluntary at 5% significance level with the probability of 0.000, 0.000 and 0.000. It was recommended that government should raise tax revenues and manage its public debt which will help in providing important insights that could help in enhancing tax compliance in Ghana. However, the study fails to indicate the technique used to derive the sample population of 341 respondents.

Useni, Allahoki, Amamki and Usman (2022) carried out research on effect of the tax awareness, tax knowledge and social cost on tax compliance of SMESs in Jalingo. The study focused on only Jalingo capital of the state. The study made use of primary data and the sample of the study is 190 SMEs managers in Jalingo using purposive sampling. The survey research design was employed in data collection. The data was analyzed through linear regression analysis and descriptive statistics. The study results revealed that tax knowledge and tax awareness have significant and positive effect on tax compliance in Jalingo while social cost has a negative and insignificant impact on SMEs tax compliance. The study recommended that tax authority should carry taxpayers' awareness through workshops, conferences and seminars and also tax authority should simplify the process of tax collection in order to motivate taxpayers to pay their fair share of tax. However, this study concentrated on only the state capital of Taraba state without considering the whole state. Also, the study fails to indicate the target population of the registered SMEs in Jalingo.

Amin, Buhari, Yaacob and Iddy (2022) evaluated tax knowledge influence on increasing tax education compliance at tertiary institutions in Malaysia. The study made use of a quantitative approach and the data was collected from 208 respondents which consist of 93 accounting students and 115 other students. The study used G-Power to arrive at the sample population. The result of the study shows that tax knowledge influenced the level of tax compliance in Malaysia at 5% level of significance with a probability value of 0.045. It was concluded that there is a high level of knowledge and education on the system of taxation as a result of teaching basic courses in taxation as a compulsory subject at Malaysia tertiary level. However, the study did not indicate the technique utilized in data analysis.

Bhalla, Sharma and Kaur (2022) assessed the impact of tax knowledge on the business performance in India. Survey research design and primary source of data were used for the study. The sample of 450 registered MSMEs in Indian was used to collect the data using structured questionnaire. The technique of data collection is Partial Least Square Structure Equation Modeling. The finding shows that tax knowledge has improves efficiency operation and prevented fraud from MSMEs in India. Also, the tax system advancement in technological in knowledge has led to tax administration proper and governance by Indian government. It was concluded that tax knowledge effect on the MSMEs on the performance of business is under-studied most especially after new tax reform. However, the study fails to indicate the target population of Indian MSMEs and the statistical technique used in arriving at the sample population.

Theoretical Framework

Modernization Theory

One theory of tax administration in Nigeria is based on the modernization theoy. According to this theory, tax padministration should focus on adopting modern techniques, technologies, and process of enhancing efficiency and effectiveness of revenue generation. The theory suggests that government should invest in advanced tax administration systems such as electronic filling as payment system, tax payer identification data base, and data analytics tools to streamline tax process and improve tax compliance. The advancements can help reduce administrative costs, minimize corruption, and increase tax payer trust and voluntary compliance (Ademoleken, 2002). Therefore, this theory explains the relationship between e-tax system and internally generated revenue.

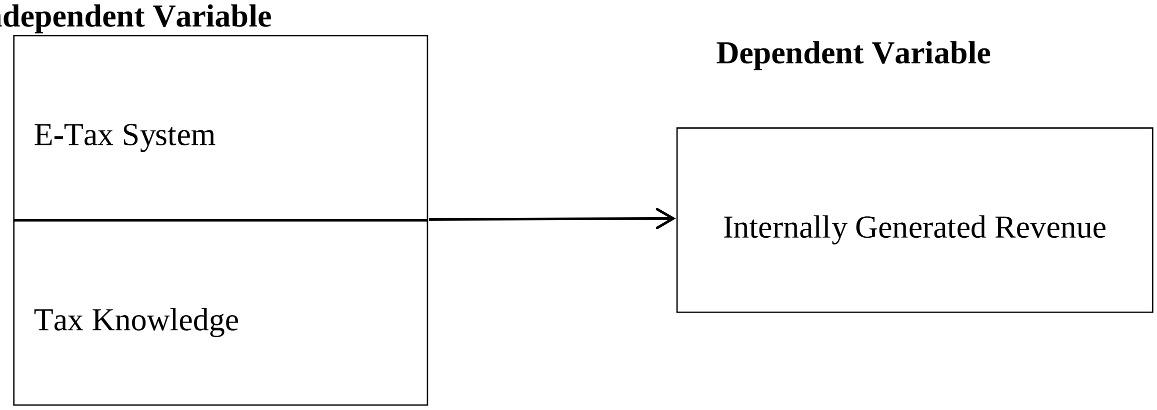
Benefit Theory

Benefit theory focuses on the benefit that the taxpayers will derive from payment of tax. Lindahl propounded the benefit theory in 1919. The theory explains the relationship between the benefits derived by the taxpayers for paying taxes through proper tax administration and the government that imposes such taxes in order to generate revenue internally. This theory states that citizens are willing to pay taxes when they are able to get enough benefits from the state government activities arising from the fund generated internally. The benefit theory is on the basis of benefit derived by government from tax payment. The received benefits contributed to the distribution basis of burden of tax in a manner that is good (Aliyu & Mustapha, 2020). Thus, the theory maintains that the payment of taxes should be based on individuals who benefit the most from public services. This shows the relationship between the state who imposed such tax through its revenue administration board and the taxpayers as contract. It is the state that provides goods and services while the cost are extracted in the received benefits proportion of the taxpayers (Akinola & Akinrinola, 2023).

According Adefolake and Omodero (2022), the benefit theory establishes that government and taxpayers have exchange relationship that is mutual of which the state government provides goods and services and any other necessary benefits to citizens in a given society in return to the payment of taxes. This theory basically establishes links between tax administration, internally generated revenue and taxpayers. Therefore, this theory explains the relationship between tax knowledge and internally generated revenue by the state.

Conceptual Framework

Independent Variable



Methodology

Survey research design was adopted in the study, hence, primary source of data were collected. Questionnaire of the study were adopted from various sources. All the variables measurements were adapted from various studies. All the variables are measured using five (5) likert scale in which five (5) stands for strongly agree, four (4) agree, three (3) undecided, two (2) disagree, one (1) strongly disagree. Being a survey research, data was collected from the chosen sample of the population through the administration of questionnaire to 432 sampled respondents. The target population of the study is 38292 while the sample population is 379 which was ascertained through the application of Krejcie and Morgan table. The population of the study constitute of staff of Adamawa State Board of Internal Revenue, Adamawa State civil servants, staff of federal institutions and establishment, business owners and tax consultants and auditors. The usable questionnaire after assessement of outliers and missing value is 432. The study adopted Partial Least Squares (PLS) Technique in data analysis.

Results and Discussion

Normality Test

Table 2 Normality Test: Skewness and Kurtosis Statistics

	N	Mean	Std. Dev.	Skewness		Kurtosis	
Constructs	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
E-Tax System	432	4.1919	0.61110	-0.622	0.117	0.030	0.234
Tax Knowledge	432	3.9776	0.71887	-0.450	0.117	-0.400	0.234

Source: Generated by SPSS 22, 2026

The Table 2 shows the result generated. The skewness statistic ranges between -0.622 and -0.385 and kurtosis ranges between -0.515 and 0.101. None of the values are greater than 2, hence, the data are normally distributed.

Table 3 Multicollinearity Test: Tolerance and VIF

	Collinearity Statistics	
Constructs	Tolerance	VIF
E-Tax System	0.988	1.012
Tax Knowledge	0.996	1.004

Source: Generated by SPSS 22, 2026

The Table 3 indicates the tolerance levels of all independent variables in the study (that is, e-tax system and tax knowledge) are higher than the critical value of 0.20 and VIFs are below 5 of all the variables. This clearly shows the multicollinearity absence between the research variables. The correlation matrix and collinearity statistics through tolerance and VIF proved that the independent variables of the current study are free from any problem of multicollinearity.

Table 4 Path Coefficients of the Variables

Hypotheses	Beta	STDEV	T Statistics	2.5%	97.5%	P Values	Decision
H_{01} ETS -> IGR	0.527	0.030	17.594	0.464	0.582	0.000	Rejected
H_{02} TKN -> IGR	0.408	0.025	14.665	0.352	0.462	0.000	Rejected

Source: Research Output, 2026

The statistical analysis from Table 4 shows that e-tax system has a positive and significant effect on internally generated revenue (t-statistics = 17.594, p-value = 0.000). Hence, the hypothesis (H_{01}) which states that e-tax system has no significant effect on internally generated revenue in Adamawa State is rejected. This means that when there is increase e-tax system, it would lead to the increase in internally generated revenue of Adamawa State. In other words, at 1% significance level, the higher the e-tax system, the higher the internally generated revenue of Adamawa State.

The result for the effect of tax knowledge on internally generated revenue of Adamawa State shows a positive and significant (t-statistics = 14.665, p-value = 0.000). Therefore, the hypothesis (H_{02}) which states that tax knowledge has no significant effect on internally generated revenue in Adamawa State is rejected at 1% level of significance. This implies that the higher the tax knowledge, the higher the internally generated revenue.

Discussion of Findings

The first objective of the study was to assess the effect of e-tax system on internally generated revenue of Adamawa State. The statistical analysis indicates that the effect of e-tax system on internally generated revenue is positive and significant ($\beta = 0.527$, $p = 0.000$). This shows that, an increase in e-tax system will lead to increase in internally generated revenue. Therefore, the null hypothesis which states that e-tax system has no significant effect on IGR of Adamawa State is rejected. The result is in line with Khan et al (2025), Tivde (2024) and Iheyen et al (2024) that established a positive and significant relationship between e-tax system and internally generated revenue. The result however, contradicts the study of Ike and Bright (2024) that indicated that e-tax system has no significant effect on internally generated revenue. The result is supported by modernization theory.

To achieve the second objective of the study which was to determine the effect of tax knowledge on internally generated revenue of Adamawa State. The result of the study shows that the effect of tax knowledge on internally generated revenue is positive and significant ($\beta = 0.408$, $p = 0.000$). Therefore, the null hypothesis which states that tax knowledge has no significant effect on IGR of Adamawa State is rejected. This result is in line with the findings of Bett et al (2024), Muhammad et al (2023), Useni et al (2022), Amin et al (2022) which found a positive relationship between tax knowledge and internally generated revenue. The study however, contradicts the work of scholars like Fauziati et al (2016) who established that tax knowledge has no significant effect on internally generated revenue. This also indicates that any increase in tax knowledge will lead to increase in internally generated revenue. The result is supported by benefit theory.

Finally, this study made significant contributions in specific areas of academic research; theoretical, managerial and methodological. Empirical evidence showed that despite the internally generated revenue, it is not sufficient enough to meet up with the developmental need of Adamawa State government.

Conclusion

Generally, tax administration has a positive and significant effect on internally generated revenue in Adamawa State within the study period. Specifically, e-tax system has a positive and significant effect on internally generated revenue in Adamawa State. This signify that, any increase in e-tax system will result to increase in internally generated revenue of the state. Tax knowledge has a positive and significant effect on internally generated revenue in Adamawa State. This also indicates that any increase in tax knowledge will lead to increase in internally generated revenue in the State.

Recommendations

i. Adamawa State Government should continue with purchasing of e-tax infrastructure and facilities such as power plants, telecom network, wi-fi routers, laptops and desktops.
ii. Adamawa State Government should continue in creating awareness and educate taxpayers on the need to pay tax through regular workshops, seminars, conferences, initiatives, programmes and training.

Recommendation for Further Studies

The adoption of a single person in answering the questionnaire may result in none-response bias. Therefore, future researches could consider multiple respondents responses in order to provide a balanced perspective. However, further researches may consider e-tax filling, e-tax return, e-governance, e-tax identification and e-tax clearance as independent variables. Future researchers should broaden the study scope to include such variables.

References

Abubakar, A., Aliyu, I. A. and Bugaje, I. B. (2021). *Social Impact of Tax Reforms in Kaduna State: A Distributive Analysis*. Hexis Vates Consulting Limited, 1-155.

Adebayo, A. O., Adeyemi A. Z. and Osunwole, O. O. (2022). Tax Administration and Revenue Generation: A Perspective of Osun Internal Revenue Service. *Business Administration and Business Economics, 1* (41), 112-124.

Adefolake, A. O. and Omodero, C. O. (2022). Tax Revenue and Economic Growth in Nigeria, *Cogent Business and Management, 9* (1), 1-19.

Ademoleke A. (2002). Modern theory of taxation. 4th Edition. Ibadan: Frontline Publishers.

Ahmed, S. U. (2019).Tax Knowledge and Tax Compliance: Some Observations, *The Cost and Management, 47* (06), 39-46.

Ajike, E. O., Ariguzo, A. V., Akinyosoye, O., Nwankwere, I. A. and Oyedeji, F. (2020). Internally Generated Revenue and Transport Infrastructural Development in Lagos State Nigeria between 1998 to 2018. *Journal of Critical Reviews, 8* (01), 987-995.

Akan, D. C. and Azaka, L. (2023). The Perception of Tax Fairness and Tax Knowledge of Taxpayers in Response to the Finance Act of 2019-2023. *International Journal of Science Academic Research, 04* (10), 6368-6374.

Akinola, O. M. and Akinrinola, O. (2023). Impact of Tax Revenue and Infrastructural Development on Economic Growth in Nigeria. *Journal of Economics, Management and Trade, 29* (3), 1-15.

Aliyu, A. B. and Mustapha, A. A. (2020). Impact of Tax Revenue on Economic Growth in Nigeria (1981-2017). *Bullion, 44* (4), 64-77.

Amin, S. N., Buhari, P. Z. A., Yaacob, A. S. and Iddy, Z. (2022). Exploring the Influence of Tax Knowledge in Increasing Tax Compliance by Introducing Tax Education at Tertiary Level Institutions. *Open Journal of Accounting, 11* (1), 57-70.

Appah, E. and Aganaba, D. (2024). Tax Knowledge and Voluntary Tax Compliance: The Role of Public

Trust in Nigeria. *British Journal of Psychology Research, 12* (2), 54 - 80.

Appiah, T., Domeher, D. and Agana, J. A. (2023).Tax Knowledge, Tax Fairness and Trust in Government and Voluntary Tax Compliance: Insights from an Emerging Economy. *Journal of Financial Crime, 28* (3), 1-13.

Bett, C. M., Ogaga, B. and Limo, P. (2024). Effect of Tax Knowledge on Pay As You Earn Tax Compliance Among Small and Medium Enterprises in Thika Town, Kenya. *Journal of Finance and Accounting, 4* (2), 27-34.

Bhalla, N., Sharma, R. K. and Kaur, I. (2022). Effect of Tax Knowledge and Technological Shift in Tax System on Business Performance: A PLS-SEM Analysis. *Journal of Sustainability, 14* (1), 2-18.

Bitrus, E. (2021). *Impact of Internally Generated Revenue (IGR) To Revenue Generated in Adamawa State (2014 - 2020).* B.Sc Project, Adamawa State University Mubi.

Chukwuebuka, N. I., Ogochukwu, O. G., David, C. O., Sheila, A. O. and John, O. R. (2020). Effect of E-Taxation on Revenue Generation in Nigeria a Pre-Post Analysis. *Academy of Entrepreneurship Journal, 26* (3), 1-19.

Federal Republic of Nigeria. (1999). *The Constitution of Federal Republic of Nigeria.* Federal Government Printer.

Festus, A. (2019). Application of Time Series Analysis on Revenue Generation in Adamawa State, A Case Study of Adamawa State Board of Internal Revenue Yola Nigeria. Adapoly Printing Venture, Yola.

Hamidu, W. U., Adamu, B. M., Soba, B. M. and Yusuf, A. J. (2022). Empirical Analysis of Internal Generated Revenue in Adamawa State Nigeria. *Confluence Journal of Economics and Allied Sciences, 3* (2), 46-57.

Ihenyen, C. J., Ehiogu, K. E. and Odoni, J. A. (2024). Electronic Tax System and Tax Compliance, Evidence from Nigeria Tax Jurisdiction. *International Journal of Banking and Finance Research, 10* (6), 36-48.

Ike, E. R. and Bright, A. O. (2024). *Impact of E-Taxation on Tax Administration In Nigeria*, Proceedings of the 7th Annual International Academic Conference on Accounting and Finance Disruptive Technology: Accounting Practices, Financial and Sustainability Reporting Rivers State University of Science and Technology University of Port Harcourt, 1-20.

Khan, M. A., Ullah, K., Khattak, A. A., Akhter, M. and Haide, A. (2025). The Effect of E-Taxation on Revenue Generation in Pakistan. *Journal of Political Stability Archive, 3* (1), 157-179.

Muhammad, L., Hassan, S. U. and Gugong, B. K. (2023). Impact of Tax Knowledge, Tax Fairness and Religious Ethics on Tax Evasion of Small and Medium Enterprises in Katsina South Senatorial Zone. *UMYU Journal of Accounting and Finance Research, 5* (1), 141-159.

Ogundipe, M. (2022). Impact of Tax Administration on Revenue Generation in Lagos State. *Online*, 1-19.

Ojo, L. O. (2025). Impact of tax Administration on Government Revenue in Developing Economy: A Case Study of Nigeria. *Advance Journal of Financial Innovation and Reporting, 4* (04), 1-16.

Olayeye, F. F. and Adedeji, E. A. (2025). E-Tax Collection on Revenue Generation in Ondo State, Akure. *Nigeria Journal of Economics, Finance and Management Studies, 08* (01), 666-670.

Oni, A. A. and Musa, U. (2020). E-Revenue Adoption in State Internal Revenue Service: Interrogating the Institutional Factors. *Journal of Organizational and End User Computing, 32* (1), 41 - 61.

Onuigwe, G. C., Haruna, A. and Ekpe, M. (2023). Tax Administration in Nigeria: A Primary Determinant for Effective Revenue Generation. *International Journal of Recent Innovations in Academic Research, 7* (4), 38-43.

Onwudinjo, M. U., Chukwu, S. A. and Chioma, S. O. (2025). Effect of E-governance on Internally Generated Revenue in South East, Nigeria. *GPH-International Journal of Business Management, 8* (02), 112-126.

Oti, P. A. and Odey, F. I. (2017). Analysis of Internally Generated Revenue and Capital Expenditure Utilization in Cross River State, Nigeria. *International Journal of Development and Economic Sustainability, 6* (1), 9-18.

Owoeye, A. B. (2024). A Critical Examination of the E-Taxation, Improvement in Tax Compliance and Revenue Collection of Economic Development in Nigeria: An Examination covering 2008 to 2023. *International Journal for Multidisciplinary Research (IJFMR), 6* (3), 1-18.

Paul, O. A. and Tokoni, M. A. (2024). Efficient Tax Administration as Panacea to Revenue Generation in Delta State. *International Journal of Advanced Academic Research. 10* (11), 81-94.

Saidu, S. A., Bakari, M. and Mohammed, D. (2023). Impact of Online Tax Filing on Tax Administration of Adamawa State Board of Internal Revenue. *Uniben Journal of Accounting, 6* (2), 72-83.

Tivde, J. K. (2024). Leveraging E-Taxation for Enhanced Revenue Generation in Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS), VIII* (IX), 661-670.

Useni, Y., Allahoki, N. V., Amamki, E. A. and Usman, S. Y. (2022). Effects of Tax Awareness, Knowledge and Social Costs on Tax Compliance of SMES Operators in Jalingo of Taraba State. *Global Journal of Arts, Humanities and Development Studies (SGOJAHDS, 5* (3), 81-93.