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TRACKING OF INTERNALLY GENERATED REVENUE THROUGH DIGITAL TECHNOLOGIES AND PHYSICAL INFRASTRUCTURAL DEVELOPMENT IN SELECTED LOCAL GOVERNMENTS IN EBONYI STATE

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ABSTRACT

This study entitled tracking of internally generated revenue through digital technologies and physical infrastructural development in selected local governments in Ebonyi State from 2015 to 2023. The main objective of the study focused on investigating the relationship between tracking of internally generated revenue through digital technologies and physical infrastructural development in Ebonyi State. Specifically, two specific objectives with two corresponding null hypotheses were formulated to guide the study. The study adopted a descriptive survey design. Purposive sampling technique was used to select a sample size of 300 comprises both the local government staff and the indigenes of the study areas. The study utilized a structured questionnaire while data was generated from both primary and secondary sources. Both percentage and simple regression was used to analysed the data. The findings indicated that the tracking of internally generated revenue through digital technologies has not significantly contributed to the provision of physical infrastructure such as good road network, electricity, classroom blocks and portable water in the study areas in Ebonyi State. The findings by implication show that without effective investment in digital technologies with the corresponding facilities and training of the revenue officers on the platforms in tracking public revenue, efforts to improve physical infrastructure would remained elusive in Ebonyi State. Arising from the findings, the study recommended as follows: that both the state and local government should jointly ensure that adequate investment is made to provide the necessary facilities regarding to the digital technologies at all levels of government. that the revenue officers at the local government should be adequately trained on how to utilise the digital technologies in tracking revenue in Ebonyi State in particular and Nigeria in general.

Keywords: Internally Generated Revenue Digital Technologies, Physical Infrastructure Development

1 INTRODUCTION

Revenue generation is a major source of survival and challenge for every economy of the world including the so called advanced and developing economies. All country relies on tax revenue generated for the execution of public porgrammes and projects for the betterment of the citizens (Boukherouaa, AlAjmi, Deodoro, Farias, & Ravikumar, 2021). Revenue is a necessity in every country due to its importance to the running of government affairs (Akpan and Nwanseh.2013). Revenue is the life wire of every government; therefore, it is not an overstatement to state that the effectiveness of government in public service delivery largely depends on the amount of revenue generation (Akabom, 2017). Therefore, revenue generation is treated as a necessity in every country due to the importance (Boukherouaa, et al, 2021).

Globally, in this modern economy, government generates its revenue from various sources such as personal income tax, value added tax, company income tax, which are usually collected by the government through her assigned agencies (Adefolake and Omodero, 2022). Means of generating revenue have evolved over the years, the methods improved, and the systems and structures created have been updated to move with the trend and evolution of the world today (Akabom, 2017). In Africa also, revenue has significantly contributed to the economic growth of different countries. The tax-to-GDP ratios in eight African countries namely: Tunisia, Morocco, Nigeria, South Africa, Senegal, Mauritius, Cote d'Ivoire and Cameroon ranged from 16.1% to 31.3%, in 2015 while Tunisia had the highest tax-to-GDP ratio in 2015 (31.3%), followed by Morocco (28.5%) due to their substandard levels of revenue collection and remittances to the coffers of the government (Akpan, et al. 2013).

In Nigeria, revenue generation has always been in existence even before the amalgamation in 1914 of the North and South protectorate to form the territory now called Nigeria (Brown, & Lee, 2020). These revenues were in forms of homage paid to Oba's household contribution for maintenance of peace and maintenance of security guards, soldiers, penalty paid for non - performance of civil right and contribution to educational development (Brown, & Lee, 2020). In all, the collection of revenue in Nigeria has witnessed lots of setbacks due to sabotage by the government officials and inability to track electronically the payment of revenues (Ofurum, Bossco, Okonya & Amaefule, 2018).

In Nigeria, tracking tax revenue has remained a challenge especially the level of corrupt tendencies among government agencies that are responsible for the revenue collection (Balogun, 2015). In the early times, revenue are paid and received without any form of receipt to confirm their payment (Akpo,2009). Record revealed that government has introduced different strategy to inculcate the issuance of receipt so as to ensure proper remittance (Ofurum, Bossco, Okonya & Amaefule, 2018).The indicated that the strategies have failed due to numerous challenges including forgery of documents and continuous cash collection. After series of reforms, it has become mandatory that cash are paid directly into bank which thus issues receipts. Though, the introduction of issuance of receipt has helped to reduce forgery of receipt yet, there are still leakages in the system (Akabom, 2017).Record indicated that the establishment of Digital technology in Nigeria dates back to1980s when the federal government created the National Centre for Artificial Intelligence and Robotics (NCAIR). Though, the center was mainly established to

promote research and development through the application of Digital technologies but due to lack of funding and support, the center was shut down without the actualization of the objective (Adegoke, and Lawal, 2022). However, at the early 2000s, a few Nigerian universities began offering courses in Artificial intelligence that incorporated other digital technologies. The record however revealed that University of Lagos was one of the first universities to offer a course in Digital technologies (Adegbola, Nwanji, Eluyela, Inegbedion and Eleda, 2021). The course was aimed at equipping students with the necessary skills in application of artificial intelligence. With the rise and advancement in digital technologies, both the private and public sector are embracing the use of AI Digital technologies for effective and efficient service delivery. The convergence of Artificial Intelligence (AI) and Women Empowerment has gained significant attention in recent years as a crucial field of study and intervention. The rapid advancement of AI technology highlights their potential to accelerate good transformations in 278 different aspects of society, such as promoting gender equality and empowering women (Nwafor, Umetiti, and Achinike 2025).

Therefore, it is now a matter of necessity that government must invest in digital technologies if it must improve in its operation particularly in the area of revenue generation Anambra State Internal Revenue Service (ASIR, 2022). This is because; government in all society is faced with tax of improving the living standard of its citizens especially in the area of infrastructural development (Adefolake and Omodero, 2022). Digital literacy is not a fixed skill set but rather a spectrum of abilities that develop and evolve, as technology advances, digital literacy evolves, requiring ongoing learning and adaptation. (umetiti, Nwafor, Arachie & Ifeme 2025).

It is instructive to note that various strategies have been deployed for revenue collection in Nigeria. For instance, in the early times, revenue was paid and received without any form of receipt to confirm their payment (especially the tax revenue which is the surest form of revenue). Furthermore, in attempt to improve the collection of revenue, government introduced the strategy of the issuance of receipt for proper remittance (Okonyac Amaefule, 2018).Yet, this strategy failed due to forgery of documents. After series of reforms, it resolved that cash should be pay directly into bank which thus issues receipts. However, this therefore has helped to reduce forgery of receipt though there are still leakages in the system but much of the revenue accruing to the state are being embezzled by those that have access to the ICT (Owuor, 2016). In recent time, the adoption of modern digital technologies such as electronic tax filing systems and mobile tax collection platforms (Adefolake and Omodero,2022). This technological advancement aimed to streamline and improve compliance, and improve accountability and transparency in revenue collection. For instance, the introduction of integrated billing system in 2020 has consolidated multiple bills into a single payment platform, which resulted in minimizing the risk of over-taxation and fraud while facilitating online payments (Okifo & Igbunu,2015). Despite these advancements, challenges remain. Taxpayers continue to face difficulties while using the technologies for payments, especially in rural areas where issues such as poor network connectivity and lack of digital literacy prevail (John-Akamelu and Iyidiobi, 2019)

Nigeria federation consists of three tiers of government including central, state and local government. These tiers of governments

have their jurisdictions and functions specified by the constitution of the federal republic of Nigeria. The creation of local government is justified on the ground on its closeness to the people particularly to the rural people. The fourth schedule of the 1999 constitution of the Federal Republic of Nigeria as amended specifically outlined the functions of the Local Government Section 149 (2), 4, 5,6 and 7 of the 1999 constitution as amended any amount standing to the credit of the federation account shall be distributed among federal, state and local government in such terms and in such manners as may be prescribed by the national assembly. Ebonyi state was created in1996 by the then military head of state; the state was divided into three senatorial zones with thirteen (13) local government divisions. It was obvious that the new state lacked completely in terms of infrastructure in all indicators and therefore requires an aggressive or radical approach to provide the needed infrastructure to the citizens of the state especially the rural dwellers. To this end, as a new created state, the existence of local government would ensure that the policy of the central government trickled down the rural communities in all parts of the state.

The role of local government in the provision of infrastructure cannot be overemphasized. When discussing of infrastructure in the context of governance and public administration, it pertains to the provision of social amenities that contribute to the socio-economic wellbeing of citizens, primarily offered by the government (Angahar, in Dike, 2019). Physical infrastructural development is very crucial in all society particularly in country like Nigeria where most of the citizens reside in the local communities (Kay ode, Adagba, and Anyio,2013).Infrastructure s such as goad road network, modern markets, electricity, pipe born water and modern schools which contribute to improve the life and living conditions rural residents. Others are electricity, pipe born water, quality health centre, modern markets, amusement parks and town (Adesoji and Ogechi,2013). The prevailing challenges of physical infrastructural development at the local government level in Nigeria including Ebonyi State appeared to be insurmountable challenge. Udoh pointed out that over 75% of the citizens who reside in rural areas does not have access to electricity, portable drinking water and about 55% of the population does not have access to portable water. Physical Infrastructures are mostly concentrated in urban areas. Access to infrastructure such as; safe water supply, electricity and roads are necessary to reduce vulnerability and poverty at local areas in Nigeria, Ebonyi State inclusive. The integration of technology into the operations of internally generated revenue has raised critical questions regarding its impact on physical infrastructural development at the local government level.

Statement of the Problem

The prevailing scenario in revenue generation particularly at the local government level in Nigeria especially in Ebonyi State has revealed an intricate web of challenges. Over the years, generation revenue has remained a serious challenge at all levels of government in Nigeria, specifically, at the local government. Revenue collection has been characterized by sharp practices ranging from diversion of revenue, frauds, lack of transparency and accountability; embezzlements and missing of funds from government coffers as well as non-remittance of funds due to absence of tracking mechanisms. With the introduction and advancements of digital technologies, there is an optimistic that the platforms will restore the public confidence in revenue generation. Unfortunately, in spite of integrating digital

technologies to the revenue sector, collection of revenue has continued facing challenges with the application of the technologies. It appears that the local government authorities are yet to fully embrace the digital technologies which by implication has continues to undermining the effort in improving accountability and transparency in revenue collection. The idea of integrating digital technologies in tracking of government revenue at the local government in Ebonyi state has raised critical questions regarding its impact on physical infrastructural development. Thus, the situation demands a comprehensive evaluation and restructuring of the existing framework to enhance efficiency, effectiveness, and equity in the internally generated revenue at the local government level in Nigeria.

Objective of the Study

The broad objective of this study is to examine whether tracking of internally generated revenue through digital technologies has influenced Physical Infrastructural Development in selected Local Governments in Ebonyi State.

The specific objectives are:

(1). To examine whether tracking of internally generated revenue through digital technologies has improve physical infrastructural development in the selected local governments in Ebonyi State.

(2). To ascertain if tracking of the internally generated revenue through digital technologies has improve the revenue status in the selected local governments in Ebonyi State.

Research Hypotheses

In the course of the study, two null hypothetical statements were formulated to guide the study.

H01: Tracking of Internally Generated Revenue through digital technologies has not significantly improved physical infrastructural development in selected Local Governments in Ebonyi State.

H02: Tracking of Internally Generated Revenue through digital technologies has not significantly improved revenue status in the selected Local Governments in Ebonyi State

CONCEPTUAL FRAMEWORK

Local Government

In attempt to define the term, "local government" has resulted in various definitions by different scholars across the globe. For instance, according to Onwe (2004) defined local government as the smallest government body created by law to take care of all the local interest that required governmental attention. The guidelines for a reform of local government in Nigeria define local government as:

> Government at the local level exercised through representative council established by law to exercise specific powers within defined areas. These powers should give

the council substantial control over local affairs, as well as the staff and institutional and financial powers to initiate and direct the provision of services and to determine and implement projects, so as to complement the activities of the state and federal government in their areas, and to ensure, through active participation of the people and their traditional institutions, that local initiatives and response to local needs are maximized (Lawal, 2000).

According to umetiti, Nwumeh and Uzor (2000) The local governments are to see to the provision of water supply, education, health care facilities , parks , enforcement of law and order , etc in the communities.

Revenue

The Longman dictionary of contemporary English (1995) held that revenue is money that a business or an organization receives over a period of time especially from selling goods or services. It also described revenue as money that government received from tax. (Omodero, Ekwe, & Ihendinihu, 2018) opined revenue as an income or funds rose to meet the expenditure. He added further that revenue is a rising resources needed to provide government services. Fayemi (2021) sees revenue as all tools of income to government such as taxes, rates, fees, fines, duties, penalties, rents, dues, proceeds and other receipts of government to which the legislature has the power of appropriation. Therefore, revenue is an income generated by any organization (private or public) for the purpose of realization of its objective or goal (Umenweke, Nwabachili and Anushiem, 2023).

Sources of Internally Generation Revenue Sources in the Local Government in Nigeria Explicitly outlined, Section 7(2) of the1999 constitution as amended mandated that every state shall contribute 10% of its monthly internally generated revenue within its jurisdiction to the local government. It is imperative to note that local governments were also granted tax power which includes: fees, user charge fees, rents, rates, fees from licensing of radio, television, bicycles, trucks, wheel barrows, carts, canoes, pets etc (Oti & Odeh, 2017). However, the1982 Revenue Allocation Act increased the local government allocation to 15% in 1992 budget and further increased the allocation to 20%.

Digital Technologies and Revenue Generation

Today there exists up to seven different electronic payment channels in the country. Automated Teller Machines (ATM), points of

sale terminals, mobile voice, web, inter -bank branch and kiosks.

(i) Mobile Banking: The use of mobile phone for settlement of financial transactions has seen as one of the easiest means of payment and collection of money. This is more or less fund transfer process between customers with immediate availability of funds for the beneficiary. It uses card infrastructure for movement of payment instructions as well as secure SMS messaging for confirmation of receipts to the beneficiary. Services covered by this product include account enquiry; funds transfer; recharge phones; changing password and bill payments (Ochei, 2013).

(ii) Internet Banking: This involves conducting banking transactions on the worldwide web, using electronic tools such as the computer without visiting the banking hall. E-commerce is greatly facilitated by internet banking and is mostly used to effect payment. Internet banking, like mobile banking, also uses the electronic card infrastructure for executing payment instructions and final settlement of goods and services over the internet between the merchants and the customers. Commonly used internet banking transactions in Nigeria are settlement of commercial bills and purchase of air tickets through the websites of the merchants.

(iii) Electronic Card: This is a physical plastic card that uniquely identifies the holder used in transacting business on the internet, automated teller machine (ATM) and Point of Sales (POS) terminals Carow and Staten, (2000) in Ochei, (2013). This includes debit and credit cards, debit cards are linked to local bank accounts and offer immediate confirmation of payment while credit card can be used for assessing local and international networks. As credit cards are widely accepted in most countries, the underlying infrastructures and operational rules are often provided by global trust scheme (such as visa and master card) in addition to local lines. Debit cards are the dominant cards in Nigeria, they are also known as ATM cards and their usage is wider than POS transactions given the current limited deployment of POS terminals.

(iv) Point of Sale (POS)/Point of Purchase (POP) terminals: POS or POP is the location where a transaction occurs. A terminal or POS or POP is generally referred to the hardware and software used for check out, the equivalent of an electronic cash register. A POS manages the selling process by a salesperson accessible interface. The system allows the creation and printing of receipts.

(v) Automated Teller Machines: This is a computerized device that provides the customers of a financial institution with access to financial transactions in a public place without a need for assistance from bank teller or any official. It is commonest form of electronic banking which has gain popularity among the people including unlettered customers

(vi) Automated Facial Recognition: Machine vision seamlessly integrates with Automated Facial Recognition (FR) for attendance marking in educational settings (Richter et al., 2019). The FR system streamlines the attendance process, optimizing class time for both teachers and students while eliminating the need for manual crosschecking. Cameras embedded

with machine vision track movements tax payers.

(vii) **Machine Learning**: Machine learning is a subset of AI digital technology that enables systems to learn from data and improve their performance over time without being explicitly programmed. In the context of taxation, Machine Learning algorithms is one of the technologies is designed to analyze historical data regarding to identify patterns and prediction of future revenue generation.

(viii) **Predictive Analytics:** Predictive analytics involves using statistical algorithms and machine learning techniques to analyze current and historical data to make predictions about future events. In tracking of tax revenue, predictive analytics can be deploy to forecast potential the revenue evasion or non-compliance in any economy, this can be apply at the local government level to enhance the revenue collection to promote their revenue status.

(ix) **Natural Language Processing:** Natural Language Processing is one of the digital technologies which focus on the interaction between computers and human language. In tracking of tax revenue in public sector particularly at the local government system, the technology can be used to interpret and extract valuable insights from unstructured data sources, such as legal documents or taxpayer communications that contribute in boosting efficiency and effectiveness and reduced the revenue leakages particularly in the public sector.

Physical Infrastructure

Physical infrastructures are the pillars of economic transformation. Sustainable economic growth often occurs in an environment where there is adequate infrastructure, and there is evidence that it reduces inequality in the society. Physical infrastructure as necessary services, facilities, equipments and devices desired for the physical, mental, health and social well-being of the family and individual in a given community. World Bank (2019) pointed out that infrastructure in terms of quality and quantity is grossly inadequate and inferior to that existing in other parts of the world. Economic infrastructure means those basic facilities and services which directly benefit the process of production and distribution of an economy. Irrigation, power as (electricity power supply), transport and communication are the examples of economic infrastructure (Idachaba,1985). Physical infrastructure like roads, electricity, irrigation facilities; capacity building in terms of training, information dissemination; and support service namely, market services, and access to basic social services (Barrios, 2007). For instance, education does not directly affect economic activities like production and distribution but indirectly helps in the economic development of the country by producing administrators, scientists, technologists and engineers. So therefore, education and health services are important selected social infrastructures, sanitation and water supply are the example of social infrastructure (Mehta, 2002).

Revenue Generation and Physical infrastructural development in Local Government in Ebonyi State

The fourth schedule of the 1999 constitution of the Federal Republic of Nigeria as amended specifically outlined the functions of the Local Government to include:

- **Healthcare Delivery:** The provision health care service is one of the functions of local

government in Nigeria. However, in Ebonyi State has remained a serious challenge particularly at the local government level where the majority of the people of the state is located. Health centre are very few, and the available ones are not even equipped to serve the people. Finding in this work indicated that most of the heath centers in the study area do not always have drugs, the health professional like senior resident doctors and Nurses are not always available due to the fact that most of them usually operate from the urban where there is enough infrastructural facilities. This condition has not only worsened the health living condition of the rural people but has been attributed to the increase of death rate among the rural dwellers.

- **Provision of Education:** In Nigeria, most of the percentages of the population are located in the rural areas, which do not have access to good school facilities; lack of adequate infrastructure has posed challenge to the success of educating Nigeria children at local communities especially in Ebonyi State. Ikwuba (2010) in his study revealed that, it is not rare to see cases of 100 pupils crowded under a teacher or pupil sitting under trees outside the school building because of lack of classrooms. In like manner, majority of primary schools lack water, electricity, and toilet facilities, for example on average, there is only one toilet for 600 pupils in the rural primary schools in Nigeria. Apart from the very few government schools operating in urban area that received better attention in terms of physical infrastructures, those in the rural area are dilapidated and deteriorated for lack of attention of government. Most of those public schools operating in the rural area lacked furniture, laboratory, library sports facilities are not provided and has contributed to undermine the standard and quality of education

- **Provision of Electricity:**The provision of electricity remained poor and this has continued to affect the means of the livelihoods of the people therein in the communities. It's important to note that electricity plays a vital role in our economy. In the rural area or semi-rural communities, most of the small and medium business enterprises are operating and mostly require electricity to run their businesses. For instance, the beer pallor operators, barbing saloon and hair dressing saloon operators, welders who would have generating more income with the availability electricity but has to spent the money for running their individual generators.

- **Provision of Road Network:** Similarly, the accessibility of road network in the rural communities remained serious challenge to the rural dwellers, the means of transporting the farm products have continue posing hardship to the people, some communities in Ebonyi State have been totally cut off and therefore, has no means of getting the farm implements such as fertilizer, herbicide and other improved seedlings because of high cost of transportation occasioned by the poor road network. A nation-wide survey was conducted by the Central Bank of Nigeria (CBN) on the state of roads in the country revealed that the road network, as at December 2012, was estimated at 194,000 kilometers, with the Federal Government being responsible for 17%, state government 16% while local government 67%. Record equally indicates that most of the roads were in bad condition, especially those in remote areas of the country (CBN, 2002). Some of the roads constructed over 30 years ago had not been rehabilitated even once, resulting in major cracks and

numerous potholes that make road unsafe in most of the rural communities at the Local Government level.

- **Provision of Portable Water:** In like manner, in the area of provision of portable drinking water, the story remained the same. Record indicated that several efforts have been made by the government to put an end to the issue of water problem. Water is critical to human existence but yet a serious problem of human survivals, health and economic development. Millions of people in developing countries are faced with acute water stress from inadequate supplies. Survey conducted by Hall (2006) revealed insufficient or lack of provision of pipe borne or portable drinking water where 50% of the city dwellers and 90% of rural dwellers lack access, as a result, large proportion of households have resorted to drawing water from unhygienic sources.

Empirical Review

Ironkwe and Ndah (2016) studied the impact of internally generated revenue (IGR) on the performance of local governments in Rivers State Nigeria. The study adopted the ex-post facto research design and made use of a population size of 23 local government councils in Rivers State. The findings of the study revealed that TREV and NTRV had no significant impact on Local Government road construction (LGRC) in Ogba/Egbema/Ndoni Local Government Councils within the period studied. The p-value were ($0.26 > 0.05$ and $0.43 > 0.05$) for TREV and NTRV respectively. The result also showed that NTRV had a significant negative impact (p-value = $0.03 < 0.05$; t-statistics =-3.980) on local government staff salaries and wages (LGSW) while the TREV had a significant positive impact (p-value = $0.02 < 0.05$; t-statistics = 2.228) on LGSW. The study indicated that locally generated revenue cannot adequately enhance economic development, therefore the Ho4 is accepted.

Owusu (2015) carried out an assessment of the contributions of Internally Generated Fund (IGF) in the development of Metropolitan Assemblies in Ghana, using Kumasi Metropolitan Assembly (KMA) as a case study. The specific objective was to investigate the contribution of various revenue sources towards the development of KMA. The data generated for the study covered a period of six (6) years from 2009 to 2014. The revenue sources examined were rates, lands, licenses, rent, fees, fines and other income. The study employed a descriptive research design while simple percentage contribution was used to establish the extent of IGF contribution to economic development in KMA. The result showed that IGF contribution to Education was 26%, Health 1%, Environment 20%, Administration 15%, Economic 12%, Human Resources 5%, Office Equipment 5%, Project Management 9%, and other Miscellaneous 7%. Therefore, the null hypothesis which says that locally generated revenue does not significantly affect the economy could be accepted in this study which revealed that KMA IGF could not adequately contribute to the socio-economic needs of the citizenry.

Hamza, Qader, Gardi, Hamad and Anwar (2021) explored the impact of information technology on efficient tax management in Kurdistan. The research adopted a descriptive research approach and employed a questionnaire for data collection, with subsequent analysis carried out using multiple regression and Pearson product moment correlation. The findings of the study highlighted the positive influence of information technology on efficient tax management, particularly in the context of online tax filing, online tax registration, and online tax remittance. This literature review aims to summarize the key points from this research and contextualize it within the existing extant literature.

Adegoke and Lawal (2022) examined the pivotal role of technology in tax administration

within Nigeria, with a focus on the State Board of Internal Revenue Services (SBIRS).This paper assessed the current state of technology adoption within SBIRS, categorizing it into three groups: those embracing technology, those gradually moving toward it, and those still reliant on manual processes. Lagos State Internal Revenue Service (LIRS) stands out as a leader in technology adoption, leveraging digital tools to streamline tax processes effectively. However, many other SBIRS entities are in various stages of adopting technology, with some only recently shifting to online tax reporting due to the COVID-19 pandemic. The challenges hindering technology adoption within SBIRS include concerns over data privacy, system downtime, poor user interfaces, and a lack of IT experts. Despite these challenges, the benefits of embracing technology in tax administration are substantial.

John-Akamelu and Iyidiobi (2019) surveyed the impact of electronic taxation (e-taxation) on revenue generation within Anambra state. This research aimed to achieve three primary objectives: first, to assess how e-taxation influences tax revenue generation in Anambra state; second, to determine whether the implementation of e-taxation has led to a reduction in tax malpractice within the state; and third, to examine whether tax revenue has seen improvements following the adoption of e-taxation in Anambra state. To conduct this study, the researchers employed a survey design and collected relevant data, which was subsequently analyzed. The analysis involved the use of a one- sample t-test to evaluate the hypotheses formulated by the researchers. The study's results indicated several noteworthy findings. Firstly, it concluded that e-taxation indeed has a significant effect on tax revenue generation in Anambra state. Secondly, the adoption of e-taxation has played a role in reducing instances of tax malpractice within the state. Lastly, there was evidence to suggest that tax revenue has experienced a positive boost as a result of the implementation of e-taxation in Anambra state. In light of these findings, the researchers put forth several recommendations. Among these recommendations, they stressed the importance of government establishing well-equipped databases containing information on taxpayers.

Methodology

The study titled “tracking of Internally Generated Revenue through digital technologies and Physical Infrastructural Development in selected Local Governments in Ebonyi State was under taken to assess the level of provision of infrastructure at the rural communities in Ebonyi State. The choice of this survey design is base on the fact that it enables the researcher to have face to face interaction with the respondents that provides the indebt information on the application of digital technologies in revenue generation and infrastructural development in selected local governments in Ebonyi state. The population of the study comprises of local government staff and indigenes of the local government. The local government staff provided the data for the application of digital technologies in internal revenue generation while the indigenes provided information regarding to the infrastructural development in their local government. A total of 300 persons were chosen from the three local government selected across the three senatorial zones of Ebonyi State through purposive sampling technique. Data were collected from both primary and secondary. The primary data generated from the structured questionnaire. The secondary data was sourced from textbooks, newspapers, thesis and all official documents relevant to the local government administration in Nigeria. To ensure the validity of the research instrument, expert evaluation was conducted, and the instrument was reviewed by three experts. The reliability of the instrument was ensured through the test-retest method, which involved administering the questionnaire to a pilot group of 30 respondents, and then re-

administering it two weeks later. The reliability coefficient of 0.93 indicated a high level of consistency in the responses. Data analysis was performed using frequency tables, percentage, and simple regression. The decision rule for testing hypotheses was to reject the null hypothesis if the calculated value exceeded the table value at a 5% significance level. This meant that if the calculated value was greater than the table value, the null hypothesis would be rejected, indicating a significant relationship between the variables. Percentage was employed to answer the questions regarding to the application of digital technologies and revenue generation while simple regression was used to test the two hypotheses formulated in the study through Statistical Package of Social Sciences (SPSS version 23.).

Results

A total number of 300 questionnaires were distributed out of which a total of 280 (93%) copies of the questionnaire was retrieved while 20(7%) of the questionnaire could not been retrieved in the study. Also, it shows that 180 which constituted (60%) respondents were male, while 100 (33%) was female showing that the majority of the respondents are male in the study. Similarly, the study indicated that 80 respondents constitutes (27%) were staff of the local government, while 200 respondents which constitutes were local government staff while 200 constituted (73%) are the indigenes of the selected area of the study.

Table One: Responses on whether tracking of internally generated revenue through digital technologies has improve physical infrastructural development in the selected local governments in Ebonyi State.

SN	VARIABLE	N	SA	A	D	SD
1	Tracking of internally generated revenue through digital technologies have influenced the improved road network at the LG Level in Ebonyi State	280	60 21%	40 14%	80 29%	100 36%
2	Tracking of internally generated revenue through digital technologies have improved provision of classroom blocks at the LG Level in Ebonyi State	280	55 20%	35 13%	70 25%	120 43%
3	Tracking of internally generated revenue through digital technologies have improved provision of modern markets at the local government level in Ebonyi State	280	55 20%	40 14%	75 27%	110 39%
4	Tracking of internally generated revenue through digital technologies has improved portable water at the local government level in Ebonyi State	280	30 11%	25 9%	105 38%	120 43%
5	Tracking of internally generated revenue through digital technologies has improved electricity at the rural areas in Ebonyi	280	35 13%	65 23%	85 30%	95 34%

State

The table above shows that in one option, 60 (21%) of the respondents strongly agreed, 40 (14%) respondents agreed, while 80 which constituted (29 %) of the respondents disagree and 100 (36 %) strongly disagreed in the study. In option two, 55 (20 %) of the respondents strongly agreed, 35 (13 %) respondents agreed, while 70 which constituted (25 %) of the respondents disagree and 120 (43 %) strongly disagreed in the study. In option three, 55 (20 %) of the respondents strongly agreed, 40 (14 %) respondents agreed, while 75 which constituted (25 %) of the respondents disagree 110 (39 %) strongly disagreed in the study. In option four, 30 (38 %) of the respondents strongly agreed, 120 (43 %) respondents agreed, while 105 which constituted (41%) of the respondents disagree and 60 (21%) strongly disagreed in the study. In option five, 35 (13 %) of the respondents strongly agreed, 65 (23 %) respondents agreed, while 85 which constituted (30 %) of the respondents disagree and 95 (34%) strongly disagreed in the study.

Table Two: Responses whether if tracking of the internally generated revenue through digital technologies has improve the revenue status in the selected local governments in Ebonyi State.

SN	VARIABLE	N	SA	A	D	SD
6	Tracking of internally generated revenue through digital technologies has boosted local government performance	280	130 46%	70 25%	30 11%	50 18%
7	Tracking of internally generated revenue through digital technologies has reduced revenue diversion among the revenue authorities at the local government level in Ebonyi State	280	110 39%	90 32%	50 18%	30 11%
8	Tracking of internally generated revenue though digital technologies has reduced corrupt tendencies among the revenue officers at the local government level in Ebonyi State	280	120 43%	75 27%	35 13%	60 21%
9	Tracking of internally generated revenue through digital technologies has improved revenue collection at the local government level in Ebonyi State	280	100 36%	80 29%	40 14%	60 21%
10	Tracking of internally generated revenue through digital technologies have improved accountability in transparency at the local government level in Ebonyi State	280	140 50%	90 32%	20 7%	40 14%

The table above shows that in the sixth option, 130 (46%) of the respondents strongly agreed, 30 (25%) respondents agreed, while 30 which constituted (11%) of the respondents disagree and 50 (18%) strongly disagreed in the study. In option seven, 110 (39%) of the respondents strongly agreed, 90 (32%) respondents agreed, while 50 which constituted (18%) of the respondents disagree and 30 (11%) strongly disagreed in the study. In option eight, 120 (43%) of the respondents strongly agreed, 75 (27%) respondents agreed, while 35 which constituted (13%) of the respondents disagree and 60 (21%) strongly disagreed in the study. In option nine, 100 (36%) of the respondents strongly agreed, 80 (29%) respondents agreed, while 41 which constituted (41%) of the respondents disagree and 60 (21%) strongly disagreed in the study. In option ten,

140 (50%) of the respondents strongly agreed, 90 (32%) respondents agreed, while 20 which constituted (7%) of the respondents disagree and 40 (14%) strongly disagreed in the study.

Test of Hypothesis (1)

$H0_1$: Tracking of Internally Generated Revenue through digital technologies has not significantly improved physical infrastructural development in selected Local Governments in Ebonyi State.

Summary of Analysis

Computed R.	R. Square	Adjusted R.	Std. Error	Beta	T	Sig
.911	901	807	.066	713	.211	3. 410

Result of data analysis summarized above shows that the P.> value of .211 at 0.05 alpha is less than the sig. value of 3.410, Since the P< value 3.410 at 0.05 alpha variable is greater than P> value of .211, Therefore we rejected the null hypothesis (H0) and retained the alternative hypothesis ($\mathbf{H_1}$).The result shows that the Tracking of Internally Generated Revenue through digital technologies has significantly improved in selected Local Governments in Ebonyi State.

Test of Hypothesis (2)

$H0_2$: Tracking of Internally Generated Revenue through digital technologies has not significantly improved revenue status in the selected Local Governments in Ebonyi State

Summary of Analysis

Computed R.	R. Square	Adjusted R.	Std. Error	Beta	T	Sig
.710	614	703	.078	.616	.032	.0514

Result of data analysis summarized above indicated that the P.> value of .032 at 0.05 alpha is less than the sig. value of .0514. Therefore, since the P> value at .032 at 0.05 alpha is less than P< value at.0514, the null hypothesis (H0) is rejected while the alternative hypothesis ($\mathbf{H_1}$) is upheld. The result by implication indicated that the tracking of Internally Generated Revenue through digital technologies has significantly improved infrastructural development in selected Local Governments in Ebonyi State.

Findings

Hypothesis One: The summary of data analysis revealed that the P.> value of 7.907 at 0.05 alpha is greater than the sig. value of .000, Since the P> value is 7.907 at 0.05 alpha variable which is greater than P< value of.000. We therefore rejected the null hypothesis (H0) and retained the alternative hypothesis (HI).The result shows that the Tracking of Internally Generated Revenue through digital technologies has not significantly improved physical infrastructural development in Ebonyi State. This finding Hamza, Qader, Gardi, Hamad and Anwar (2021) explored the impact of information technology on efficient tax management in Kurdistan, which provided insights into the broader impact of technology, including IoT, on service quality. While it focused on tax management, the findings regarding the positive influence of information technology offered implications for service quality improvement through technological advancements

Hypothesis Two: The summary of data analysis indicated that the P.> value of .027 at 0.05 alpha is greater than the sig. value of .785, Since the P> value is 4.027 at 0.05 alpha variable which is greater than P< value of.785. We therefore rejected the null hypothesis (H0) and retained the alternative hypothesis(HI).The result revealed that Tracking of Internally Generated Revenue through digital technologies has not significantly improved infrastructural development in selected Local Governments in Ebonyi State. The findings by Adegbola, Nwanji, Eluyela, Inegbedion, and Eleda (2021) are consistent with prior research, highlighting that well-implemented electronic tax systems can effectively reduce instances of tax evasion. This study reinforces the notion that E-payment systems play a crucial role in enhancing tax compliance by providing a more efficient and transparent tax collection process. Similarly, Night and Bananuka's (2018) study underscored the positive impact of electronic tax system adoption on tax compliance. Their findings emphasize the correlation between the adoption of electronic tax systems and favourable attitudes toward them with improved tax compliance among small business enterprises. This suggests that the integration of electronic tax systems encourages greater compliance with tax regulations, thereby contributing to more robust revenue collection efforts

4. 3 Conclusion

This study basically focused on the tracking of internally generated revenue through digital technologies and infrastructural development in selected local governments in Ebonyi State. It is fact that there has been an inherent challenge such as tax evasion, inefficient tax assessment procedures, and a lack of real-time data analysis. The incorporation of digital technologies has shown promising results in addressing these issues. Additionally, the use of digital technologies enhances the detection of tax evasion through advanced data analytics, ensuring that taxpayers comply with regulations. An examination of global best practices in countries that have successfully implemented digital technologies in taxation provided valuable insights. The deployment of digital technologies in tax enforcement has also improved transparency in the taxation system. The automated processes reduce the likelihood of human errors and biases, fostering a fair and equitable tax environment. Furthermore, the accessibility of real-time data enables tax authorities to make informed decisions promptly, contributing to a more responsive and dynamic tax system. However, despite the benefits, it is imperative to acknowledge challenges such as data privacy concerns, the need for a skilled workforce to

manage digital technologies systems, and potential resistance to change. Addressing these challenges is imperative for the successful implementation and sustained effectiveness of digital technologies in taxation.

4.4 Recommendations

Arising from the findings, The recommendations below shall provide/offer a strategic roadmap for the government to navigate the complexities of integrating digital technologies into the tax system. With careful planning, investment, and collaboration, Nigeria has the opportunity to join the ranks of nations successfully leveraging technology for enhanced revenue collection and compliance.

The Nigerian government should prioritize investment in digital technologies. This includes acquiring state-of-the-art AI tools, developing secure databases, and implementing advanced data analytics platforms. There is a need for extensive training programs for tax officials. This training should cover the operation and maintenance of AI systems, as well as the interpretation of AI- generated insights. Continuous professional development will be essential to keep tax officials abreast of technological advancements.

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