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RESEARCH ARTICLE

ELECTRONIC TAX MANAGEMENT SYSTEM AND TAX REVENUE COLLECTION EFFICIENCY IN SELECTED STATES IN SOUTH WEST, NIGERIA

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ABSTRACT

Recent discussions and debates on tax revenue generation in Nigeria have surfaced in accounting literature, posing serious concerns for the attainment of sustainable development. The difficulty in preserving accurate records of tax payers or defaulters, the multiplicity of taxes, the absence of a database, the complexity of tax compliance and collection, the nonpayment of tax refunds, and other problems have all been cited as reasons why revenue objectives have not been met. The study determined the gap between the paucity of literature in Nigeria and the lack of application of pertinent theories, ideas, and empirical reviews, and made an effort to close it. The study looked into the impact of an electronic tax management system on the efficiency of tax revenue collection. The survey research design and total enumeration sampling technique were used for the study. In order to collect data, a total of 2670 structured questionnaires were given out to respondents in the three states that were chosen. Of those, 2199 copies were recovered, representing an 82.4 percent response rate. The dependability ranged from 0.70 to 0.90. A well-designed questionnaire was used to collect the data. Data analysis methods included descriptive and inferential (multiple regression) statistics. The findings demonstrated that, based on their perceived usability, electronic tax administration systems, online payment systems, mobile payment systems, and electronic billing devices, significantly influenced the achievement of high tax compliance (Adj R^2 = 0.166, F-stat = 107.480, $p < 0.005$). The study found that the effectiveness of tax revenue collection was modified by computerized tax management systems. According to the findings, tax authorities and organizations should offer incentives to taxpayers who have willingly cooperated in order to encourage them to keep paying their taxes.

Keywords: Electronic Tax Management System, Tax Compliance, Tax Revenue Collection Efficiency, Tax Revenue Generation

1. Introduction

Tax administrators from all over the world have realized the value of computer systems and the internet in processing tax assessments, submitting tax reports, and making tax payments in this ever-changing environment. There are certain nations with established economies, like the UK and the US, where taxes may be paid and assessed from anywhere in the world as long as the taxpayer possesses the prerequisites to access the site. Pavel Vinogradov was the first to file taxes from the International Space Station using the Russian Federal Tax Service's website (Newman & Eghosa, 2019).

A lot of tax authorities are worried about tax compliance, especially in Nigeria (Mohammed, Derashid & Ibrahim 2016). Taxpayers will constantly search for methods to reduce their tax payments, whether through avoidance or evasion. The outcome might be that the government receives wrongly filed tax returns and loses money (Mohammed, Derashid & Ibrahim 2016).

Building administrations that successfully reduce the opportunities and incentives for rent-seeking and inappropriate behavior and are able to implement the voluntary compliance necessary to increase the tax base, like risk management and taxpayer segmentation, are some of the key similarities between the IMF's reform recommendations and those of other regulatory bodies, like the FIRS (tailoring intervention and services to deal with the unique challenges posed by different groups, starting with a large taxpayer office), Eliminating exemptions that squander money for little return and enacting a broadly based value added tax with a reasonably high threshold are the best options (the turnover level at which registration for the tax becomes compulsory). According to Ratnasari and Tjaraka (2020), individual taxpayer compliance in the implementation would decrease tax evasion and enhance revenue generation since active tax collection has been found to have a substantial impact on taxpayer compliance.

Depending on the government's capacity to tax multinationals relative to competitive domestic enterprises, policies may attract or discourage foreign investment. Although the nature and frequency of incentives vary, both emerging and developed nations utilize them to attempt to entice Foreign Direct Investment from multinational firms. Only 20% of Organization for Economic Cooperation and Development nations employs tax advantages or exemptions for foreign direct investment, compared to 55% of poor countries (EOCD). Only 5% of OECD countries, compared to 45% of developing nations, employ lower tax rates for foreign direct investment. However, just 5% of the nations that make up the Organization for Economic Cooperation and Development use investment, compared to 45% of underdeveloped nations. Both groups heavily employ investment or reinvestment allowances, albeit developing nations do so more frequently (EOCD). A third of the nations in each group apply accelerated depreciation. Reduced local taxes and subsidized loans are the two most popular incentives employed by Organization for Economic Cooperation and Development nations (Goodspeed, 2006).

A long-overdue significant shift was made in 2015 with the implementation of an electronic tax administration system, catapulting taxes to a brand-new level of exponential development (Okifo & Igbunu, 2015). Undoubtedly, one of the largest sources of government revenue utilized to support its budget is taxation, which is defined as the mandatory payment or levy imposed by the government on tax payers (Aguolu, 2004). Similarly, because the government reserves the authority to impose taxes on its citizens, the predictability and uniformity of taxation cannot be emphasized. The Nigerian tax system's design encourages revenue creation, and the majority of its modifications have significantly increased tax compliance, administration, and collection (Fatoki, 2014).

An effective, secure, and almost mistake-free internet delivery method, known as e-taxation, has replaced the manual, inefficient, and prone to error offline one (Amaefule, Okonya & Amaefule 2012 &Arya, 2012). The electronic system's function includes simplifying assessment, collecting, and administration as well as increasing the effectiveness of revenue collection. Increased revenue collection efficiency is the primary benefit of the electronic tax management system, which has replaced paper-based tax reporting methods (Muwonge, 2011).

The Federal Inland Income Service (FIRS) and State Internal Revenue Services have established objectives for tax revenue, however despite all the advantages associated with computerized tax administration systems, there has been growing fear that these targets would not be met (SIRS), investigating the impact of computerized tax administration systems on the effectiveness of tax revenue collection in the south west of Nigeria.

The majority of nations whose taxes make up a sizable amount of an economy's income have employed an electronic tax system for many years. Taxpayers may file their tax returns and utilize other tax-related services whenever and wherever they choose by using an electronic self-service platform known as e-taxation, provided they have internet connectivity.
According to the World Bank and PWC, sixty-six economies had completely embraced

electronic filing for tax payment as of 2010, with twenty of them doing so in the previous seven years (2013). Taxpayers may electronically file tax returns in about 45 percent of the nations examined, according to the World Bank and PWC's 2015 Paying Taxes Survey. Taxpayers may carry out at least a portion of their tax compliance procedure electronically in 83 percent of the nations studied. In order to make it simpler or less expensive for businesses to file returns and pay taxes, more than 24 nations adopted reforms in 2014, with the adoption or upgrading of electronic filing systems being the most prevalent element of international tax reforms. 18 nations, including Costa Rica, Cyprus, Mozambique, Spain, Vietnam, Serbia, and Zambia, underwent this kind of transition. The electronic filing of returns by businesses in these nations reduces compliance time.

The method also improved openness and reduced the chance of bribery and corruption (Ezomike, 2016). However, this system's perceived usability will boost tax compliance and lower the incidence of tax evasion. Taxpayers will therefore cooperate freely rather than under duress or force (Amaefule, 2018). The introduction and adoption of the electronic tax management system through various channels, including the internet payment system and mobile payment system, will also contribute to the administrative ease in the collection of these taxes, making computation very simple and easy for the tax authorities to make appropriate returns (Olaoye & Atiloba, 2018).

With an emphasis on the connection between electronic tax management systems and tax payer compliance, the study intends to objectively evaluate the relationship between electronic tax management systems and the effectiveness of tax revenue collection.

2. Literature Review

Moving to an electronic taxpayer registration system where a uniform Tax Identification Number (TIN) would apply regardless of whether a taxpayer is registering for Personal Income Tax (PIT), Company Income Tax (CIT), or Value Added Tax is one action that can be taken to improve tax collection and administration (VAT). Rates for CIT and VAT are punitive and do not include any built-in procedures to enhance self-assessment (Flossy, Elizabeth & Gregory, 2017).

The government will be able to create the required infrastructure to elevate and improve its residents' quality of life by employing tax money wisely and efficiently. In order to achieve the necessary tax collection, tax administration and collection should be effective and supported. Examples of this include starting a public awareness and education campaign about the significance of paying taxes, retraining tax staff, and computerizing the tax procedure. Strong effort should be made to stop income leakage, especially with regard to unpacked products and small commodities or services. Ofurum, Amaefule, Okonya & Amaefule, 2018, Olaoye & Atiloba, 2018, Awai & Oboh, 2020, Maisiba & Atambo, 2016, Akande & Awe, 2020, and Emmanuel & Jaya, 2016 are some examples.

Tax Compliance

According to Verboon and Dijk (2007), tax compliance refers to a person's readiness to cooperate with the appropriate tax authorities by paying their taxes. Tax compliance is the capacity of a tax-responsible entity to provide accurate, full, and satisfying returns to the authority for the purpose of assessing taxes in conformity with the state's tax laws and regulations (Badara, 2012). Tax compliance is the degree to which a taxpayer complies or discomplies with the tax rules of his or her country. The Organization for Economic Cooperation and Development categorizes compliance into administrative and technical areas (OECD). Administrative compliance also referred to as reporting compliance or regulatory compliance, is the act of adhering to administrative requirements for compensation and accommodations. Technical compliance is the observance of technical tax law requirements. Filing, reporting, and payment compliance are the three components of tax compliance.

According to Wenzel (2004), the attitude of the taxpayer is positively impacted by the interaction between the tax authorities and the taxpayers. Alm and Torgler (2006) assert that a person's attitude and commitment toward paying taxes are influenced by their level of faith in the government. The final goal is voluntary compliance, which is voluntarily disclosing tax information, submitting tax forms, and paying taxes when they become due.

Increasing tax compliance is still a top priority for policymakers and tax administrators (Wassao, 2014). This is due to the fact that tax compliance significantly affects revenue collection and, consequently, the government's budgetary objectives. The implementation of e-tax and the revision of tax regulations are required to achieve high voluntary tax compliance (Emmanuel & Jaya, 2016, Akande & Awe, 2020, Ofurum, Amaefule, Okonya & Amaefule, 2018, Olaoye & Atiloba, 2018, Awai & Oboh, 2020, Maisiba & Atambo, 2016).

Costs associated with tax compliance and the complexity of tax legislation go hand in hand. Marcus, Contos, Guyton, Langetieg, Lerma, Nelson, and Vigil (2013) found a link between the complexity of the income tax system and the expense of tax compliance.

Additionally, under self-assessment tax systems, complicated tax regulations inevitably lead to people engaging tax return preparers. Complex tax regulations need comprehensive accounting records, which force employers to hire bookkeepers, increasing the expense of tax compliance (Schoonjans, VanCauwenberge, Reekmans, & Simoens, 2011).

Taxpayers are responsible for both the financial and psychological expenses associated with compliance. While psychological costs refer to the assessment of stress and anxiety caused by complying with tax regulations, gross monetary compliance costs refer to the real money spent and opportunity costs incurred (Evans and Tran-Nam, 2014).

Electronic Tax Management system

The assessment, collection, and administration of tax laws by electronic means is known as e-taxation. Che-Azmi and Kamarulzaman (2014) claim that one method governments employ information and communication technology to enhance the provision of public services and the public's access to information about public administration is through the deployment of an E-tax payment system. According to Wasao (2014), an electronic tax system is a platform that allows taxpayers to access all of the services offered by the tax authority, including the registration for a tax identification number, submitting tax returns electronically, and applying for a compliance certificate; a perfect example of such a system is the Electronic taxation system that was implemented by Federal Inland Revenue Service.

In the United States, e-taxation was initially put into use in 1986. As part of its modernization agenda, Australia implemented electronic tax filing in 1987. Canadian taxpayers started utilizing E-fills to submit their tax forms online in 1993. Additionally, in 2009, e-taxation was launched for taxpayers in Malaysia, the Netherlands, and Uganda. In order to stay up with global commerce toward automated payment methods, notably for government services, Egypt introduced electronic tax payment for its taxpayers in March 2013. In order to incorporate technology into the Nigerian tax system, the Federal Inland Revenue Service (FIRS) collaborated with the Inter-bank Settlement System (NIBSS) in 2015. (Okunowo, 2015). In order to boost revenue collection, administer taxes more efficiently, provide taxpayers with services, lower compliance costs, and enhance tax compliance, the Nigeria Tax Authority created an electronic tax system. The paper-based tax system is being replaced progressively by it. These technologies offered advantages including quicker processing, cheaper costs, and more effectiveness. In order to fulfill its objectives of enhanced revenue collection and taxpayer voluntary compliance, the FIRS maintains a centralized Information Communication Technology (ICT) department that offers support services (Alade, 2018).

According to Waweru (2013), an electronic tax system is a web-enabled and secure application system that provides a fully integrated and automated solution for domestic tax administration. According to Atika (2012), the electronic tax system was implemented as part of the Kenya Revenue Authority's reforms to improve tax collection and tax efficiency. As a consequence, tax revenues have been rising quickly as a result of the new systems' acceleration of the nation's economic development. As a consequence, the Kenya Revenue Authority completed the planning and formulation phase of an efficient electronic system strategy, which was implemented in the fourth Corporate Plan of 2009. In order to increase revenue collection and encourage voluntary compliance, the Kenya Revenue Authority maintains a centralized Information Communication Technology (ICT) department that offers support services (Atika, 2012).

Perceived Ease of Use

Perceived ease of use is the degree to which a person assumes that utilizing a technology would be effortless. PEOU, in the context of this study, refers to the degree to which users perceive that their continuous usage of e-government is free of effort. If a system is reasonably easy to use, people will be more inclined to learn about its capabilities and eventually want to keep using it. Perceived ease of use is positively correlated with the desire to stay in web-based learning, according to studies (Chiu & Wang, 2019).

Compared to perceived ease of use, perceived usefulness is different. Perceived usefulness refers to how much a user thinks a specific technology will help him or her perform better at work. In the TAM paradigm, PU is predicted to be a direct predictor of behavioral intention to use (BI) of the relevant technology (Park, 2019). The intention to continue using e-text, instant messaging, mobile service providers, online travel services, e-learning, blog learning, and knowledge production have all been found to be positively correlated with PU in prior studies (Chou, Min, Chang, & Lin, 2019).

Internet Payment System

An online payment system is a way of carrying out transactions or paying for goods and services utilizing a digital medium as opposed to checks or cash. It is often referred to as an electronic payment system or an online payment system.

The growth of online banking and shopping has led to an expansion of the electronic payment system in recent decades. As technology advances, we may expect the rise of electronic payment systems and related hardware. The proportion of checks and cash transactions will decrease as these advance, improve, and make ever more secure online payment transactions possible (Sandra, 2021).

Mobile Payment System

A mobile payment is a financial transaction carried out to buy a good or service using a mobile phone or other portable electronic device. To send money to friends and family, you can utilize mobile payment systems like PayPal and Venmo (Grant, 2021).

Most banks now allow clients to transmit money straight from their bank accounts to friends and family members thanks to technology that has been recently included into their banking apps. Convenience businesses and major, international merchants alike accept mobile payments on-site by scanning a barcode with a phone app.

The cost of the purchase can be paid using a credit or debit card, or it can be debited from a pre-loaded amount on the account connected to the particular retailer. It is a safer mode of payment than using a debit or credit card since payment information is encrypted during transmission.

Before making their way to the United States and Canada, mobile payments initially were widely used in Asia and Europe. Mobile payments were initially transmitted by text message. Later, technology allowed for the capturing and transfer of photographs of cheques to the recipient of the payment using a mobile phone camera. This innovation led to the development of mobile check deposit capabilities for banking apps (Grant, 2021).

Electronic Billing Machine

EBMs have the potential to increase tax compliance since they give revenue authorities the ability to keep an eye on official business activities. EBMs, however, do not offer totally objective tax reporting and as a result, provide limited benefits to tax collection because enterprises can choose whether or not to send receipts (Steenbergen, 2018).

The process of paying invoices electronically to a company or organization through the Internet is known as electronic billing. It has been embraced by several governmental institutions and other groups. Due to the many advantages it provides, electronic billing is one of the most used ways to pay bills.

There are two methods utilized in electronic billing: biller direct and bank aggregator. The biller receives a direct payment from the customer and subsequently publishes the invoices on the asked-for website. The majority of biller websites use electronic billing service providers with expertise in payment service and electronic billing technologies. In the bank-aggregator strategy, the consumer pays the multiple billers from the conciliator or aggregator website. Most banks provide their clients with this model (Cowell, 2020).

The use of electronic billing has several advantages. The paperless method of transaction is economical and ecologically beneficial. For both the sender and the recipient, it is clutter-free. It saves time and effort and is more user-friendly than conventional billing methods. Billers should only concentrate on sending out bills effectively, not on how customers will pay. Customers have access to electronic payments every day of the week, 24 hours a day. Customers and billers can more easily trace previous activity or payments when using electronic payments..

2.1 Theoretical Review

Innovation Theory Translation offers an alternative perspective on innovation, as proposed by actor-network theory (ANT). Bruno Latour and Steve Woolgar developed the theory in 1979. It was later supported in 1983 by Callon, Bauin, Turner, and Courtial, who proposed that instead of using an innovation in its proposed form, potential adopters translate it into a form that meets their needs.

The Actor-Network Theory (ANT) adopts an anti-essentialist stance, rejecting the existence of any difference in essence between humans and non-humans. This is in contrast to traditional essentialism, which recognizes the essences of humans and social organizations in advance and distinguishes their actions from the inanimate behavior of technological and natural objects (Ofurum, Amaefule, Okonya & Amaefule, 2018). Latour (1986) claims that ANT rejects both social and technological determinism and presents a socio-technical explanation that does not give either a higher priority. There is nothing entirely social or merely technological about this socio-technical arrangement. ANT addresses the social-technical divide by rejecting the notion of entirely technical or purely social connections. Both what looks to be social and what appears to be strictly technical are partially social. Actor-network theory's translation model is built on quite different presumptions than innovation diffusion's (Ofurum, Amaefule, Okonya & Amaefule, 2018). Translation, according to Callonet et al. (1983), includes the entire methods one actor uses to recognize and position other actors in relation to one another. The mere "ownership" of power by one actor does not automatically provide the capacity to effect change, according to Latour (1986), unless other players can be convinced to take the required steps. The FIRS and SIRS are the actors in this study, and they are solely responsible for administering and collecting taxes from taxpayers. According to Whittle and Spicer (2008), the use of ANT in organizational studies does not contribute to the development of critical organizational approaches.

2.2 Empirical Review

Individual taxpayers' compliance in the implementation of reduction is no different from the abolition policy of taxpayer administrative sanctions, according to Ratnasari and Tjaraka (2020), whereas active tax collection was found to have a significant effect on taxpayer compliance. Bhutta, Rasheed, and Khan (2019) identified psychological factors influencing the tax compliance behavior of Pakistani taxpayers. TPB was used by Arniati (2009) and Imelda (2014) to determine an individual's compliance level. As a result, the variables chosen in this study from the theory of planned behavior and moral obligation include attitude toward behavior. Consider subjective norms, perceived behavioral control, and moral obligation. Bobek and Hatfield (2003) discovered similar research findings by including moral obligation in their study of tax payer behavior.

Tarmidi (2019) used tax uncertainty as a moderating variable to examine the impact of employee internal factors on students. Understanding and ethics, according to the findings, had a significant impact on tax compliance, whereas ability had no significant impact. Furthermore, the impact of tax uncertainty moderation was discovered to weaken the impact of understanding and ethics on tax compliance, whereas ability only interacted. Thanjunpong and Awirothananon (2019) investigated the link between tax planning and financial performance. using secondary data collected between 2014 and 2016. According to the study, tax payers have a significant impact on financial performance.

Furthermore, Matarirano, Makina, and Chiloane-Tsoka (2019) conducted a study in South Africa on tax compliance costs and small business performance in the construction industry. Tarmidi, Murwaningsari, Umar, and Mayangsari (2020) investigated the relationship between tax compliance and earnings quality and financial performance. The analysis found no significant relationship between earnings quality and financial performance. Furthermore, a statistically significant effect of tax compliance on financial performance was discovered. According to additional research in this area, Sayyar, Basiruddin, Rasid, and Elhabib (2015) investigated the effect of auditing quality on financial performance for Malaysian listed companies from 2003 to 2012. According to the findings, auditing quality has a negligible impact on financial performance. As a result, the goal of this paper was to look into the impact of tax audits and audit quality implementations on financial performance in Thai publicly traded companies. From 1996 to 2009, Lee and Lee (2013) investigated the impact of auditing quality and financial statement quality on 32 Taiwanese listed companies. Auditing quality was also evaluated using auditor size (BIG4 versus non-BIG4 auditors). The findings revealed that BIG4 auditors' earnings and book value of equity could explain more variations in company stock returns than non-BIG4 auditors. Market participants place a high value on BIG4 auditors with industrial experience, according to Wang and Huang (2014). As a result, BIG4 auditors were linked to higher corporate values. Auditing quality, according to Alfraih (2016), has a positive and significant impact on the value relevance of accounting measures to market participants. Several previous studies have discovered that auditor type is related to financial performance. Prior research, on the other hand, shows that BIG4 auditors have no bearing on financial performance.

Akpubi and Igbekoyi (2019) investigated the impact of electronic tax awareness on tax compliance by small and medium-sized businesses in Lagos State. Purba, Simanjuntak, Rumapea, Sembiring, Siahaan, Goh, and Purba (2019) investigated the impact of implementing E-Filing systems on taxpayer compliance with internet knowledge. Solichah and Soewarno (2019) investigated a similar research topic, determining the effect of E-Filing implementation, tax comprehension level, and tax sanction on formal compliance. Solichah and Soewarno (2019) discovered that E-Filing implementation, tax sanction, and level of tax comprehension were all associated with formal compliance.

3. Methodology

The survey research design and total enumeration sampling technique were used for the study. A total of 2670 structured questionnaires were distributed to respondents across the three selected states in order to elicit responses, with 2199 copies recovered, accounting for an 82.4 percent response rate. The reliability was between 0.7 and 0.9. Data were obtained through the use of a well-structured questionnaire. Descriptive and inferential (multiple regression) statistics were used for data analysis.

Table 3.2A Population of the study (Questionnaire)

S/N	**States**	**Population of Staff**
1	LAGOS	2259
2	OGUN	126
3	OYO	285
	TOTAL	2670

Source: Researcher’s Computation as at December, 2021

3.1. Model Specification

The model specification for the variables are as shown below

$Y = f(X)$

TRCE= f(ETMS)

Where; TRCE= Tax Revenue Collection Efficiency

ETMS= Electronic Tax Management System

X = ETMS (independent variable)

Y = TRCE (dependent variable)

$Y = y_1$

y_1 = Tax Compliance (TC)

x_1 = Perceived Ease of Use (PEU)

x_2 = Internet Payment System (IPU)

x_3 = Mobile Payment System (MPS)

x_4 = Electronic Billing Machine (EBM)

$y_1=f(x_1, x_2, x_3, x_4)$

Therefore,

TC = f (PEU, IPS, MPS, EBM)

$TC_i = \beta_0 + \beta_1 PEU_i + \beta_2 IPS_i + \beta_3 MPS_i + \beta_4 EBM_i + \mu_i$……………….eqn i

Justification for variables

S/N	VARIABLES	MEASUREMENT	JUSTIFICATION
1	**INDEPENDENT VARIABLES** Perceived Ease of Use Internet Payment system Mobile Payment System Electronic Billing Machine	Self-structured questionnaire	Monica, Makokha and Namusonge (2017). Akpubi and Igbekoyi (2019).
2	**DEPENDENT VARIABLES** Tax compliance	Self-structured questionnaire	Monica, Makokha and Namusonge (2017).

			Akpubi and Igbekoyi (2019).

4. Results and Discussion

Table 4.1 Descriptive Response of Tax Compliance

	Strongly Disagree		Disagree		Undecided		Agree		Strongly Agree		Total		
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Mean	Standard Deviation
Tax compliance requirement does not cause me stress and anxiety	5	0%	14	1%	32	1%	989	45%	1153	53%	2193	4.49	.59
Paying tax is a responsibility that should be willingly accepted by all	1	0%	13	1%	14	1%	1498	68%	665	30%	2191	4.28	.51
Continuous reforming of the tax leads me to apply for it adequately	4	0%	18	1%	28	1%	985	45%	1154	53%	2189	4.49	.59
Adapting technological development by the government affect tax compliance	9	0%	12	1%	21	1%	1494	68%	655	30%	2191	4.27	.54

When taxes are high in one location, some tax payers shift to the other places where there will be low taxes	42	2%	102	5%	49	2%	1201	55%	798	36%	2192	4.19	.84

4.2 Regression Analysis

Electronic Tax Management System and Tax Compliance

Dependent Variable: TC

Variable	Coefficient	Standard Error	t- test	Prob
Coefficients: Constant	0.676	0.196	3.446	0.001***
PEU	0.098	0.030	3.224	0.001***
IPS	0.221	0.028	7.765	0.000***
MPS	0.238	0.026	9.092	0.000***
EBM	0.272	0.024	11.525	0.000***
R-square	0.167			
Adj- R-square	0.166			
Prob F-stat	0.000			
F-statistic	107.480			

Notes: ** and *** indicates statistical significance at 5 and 1 per cent respectively.

$TC_i = \beta_0 + \beta_1 PEU_i + \beta_2 IPS_i + \beta_3 MPS_i + \beta_4 EBM_i + \mu_i$………………eqn ii

$TC_i = 0.676 + 0.098_i + 0.221_i + 0.238_i + 0.272_i + \mu_i$………………..eqn iii

The regression analysis results presented of Model Three as presented in Table 4.2 showed the causality between Electronic Tax Management System and Tax Compliance. The result revealed that all the proxy of Electronic Management System (Perceived Ease of Use (PEU); Internet Payment System (IPS); Mobile Payment System (MPS) and Electronic Billing Machine (EBM) exert a positive effect on Tax Compliance. This is depicted by the positive signs of the coefficients ($\beta_1 = 0.098$); ($\beta_2 = 0.221$); ($\beta_3 = 0.238$) and ($\beta_4 = 0.272$) respectively. 1% increase in perceived ease of use will bring about 9.8% increase in tax compliance of the tax payers, 1% increase in internet payment system will bring about 22.1% increase in tax compliance, 1% increase in mobile payment system will bring about 23.8% increase in tax compliance of tax payers and 1% increase in electronic billing machine will bring about 27.2% increase in tax compliance.

Only 16.6% of the changes in the level of tax compliance in South West, Nigeria, were attributable to the interactions of the Electronic Tax Management System proxies in the model, with the remaining 83.4% coming from other factual factors, according to the Adjusted R2, which measures the proportion of changes in the level of tax compliance as a result of changes in Perceived Ease of Use (PEU), Internet Payment System (IPS), Mobile Payment System (MPS), and Electronic Billing Machine (E

Decision

At p 0.05, the probability, F-stat (107.480), = 0.000, is significant. This indicates that the degree of tax compliance among tax payers in south-west Nigeria is jointly impacted by Electronic Tax Management System proxies. Overall, the study's model does a decent adequate job of describing the dependent variable's fluctuation. Consequently, the combined impact of the independent factors is noteworthy (prob. F - Stat. = 0.000 0.05).

Thus, the alternative hypothesis was accepted, concluding that "There is a significant impact of electronic tax management system on the level of Tax Compliance in South West, Nigeria," while the null hypothesis, which states that "There is no significant impact of electronic tax management system on the level of Tax Compliance in South West, Nigeria," was rejected.

4.3 Discussion of Findings

The results of hypothesis three showed a link between electronic tax management systems and tax payer compliance that was positive. An increase in electronic tax management systems will lead to an increase in tax payer compliance, which will maximize revenue production. However, Ratnasari and Tjaraka (2020), who looked into the impact of electronic tax systems on the effectiveness of tax revenue collection, found that the results of this study were compatible with their findings. According to their research, electronic billing machines, mobile payment systems, and internet payment systems all helped taxpayers in the targeted states comply with the law more often and freely, increasing the effectiveness of tax revenue collection.

The results of this study concur with those of Bhutta, Rasheed, and Khan's (2019) study, which similarly examined the connection between the E-Tax system and tax revenue production. Due to the high compliance level displayed by tax payers who readily paid their taxes as a consequence of the straightforward procedure, e-Tax components were responsible for a rise in tax collection efficiency. The E-Tax system's components were made simple for taxpayers to grasp, which made it very simple for them to comply and pay taxes on time. This considerably enhanced the revenue generating collecting process and processes.

As a result, the findings of this study were consistent with the findings of Tarmidi (2019), who investigated the impact of an electronic tax management system on tax revenue efficiency. The perceived ease of use, as well as the use of the internet payment system and the electronic billing machine, greatly aided tax payers in complying. The mobile payment of taxes via mobile phones also contributed to a significant increase in taxes because all previous encumbrances were removed, prompting tax payers to comply adequately.

These findings however align with the Theory of Innovation Translation since it is on effectiveness of the computerized tax administration system and tax revenue collecting as it explains how the theory of Innovation Translation emphasizes on the need to transform or translate a technology already existing to meet with the need of tax payers and even the tax authorities which they will adapt to.

The finding of this study implies that management of tax authorities would formulate policies that will strengthen the electronic tax management system (Internet payments, mobile payments, electronic billing machines, and perceived ease of use) as this will enhance the overall performance of tax revenue collection efficiency in Nigeria. Secondly, policy makers such as Federal Inland Revenue Services (FIRS) in line with the findings of this study would always re-emphasize the need to embrace electronic tax system as it will assist tax payers in paying their taxes on time without bottlenecks and the electronic tax management system should be tested more frequently by them to ensure a smooth working operation to know if they are in place and adequate.

5. Conclusion and Recommendation

The study concluded that electronic tax management systems have a significant positive effect on tax compliance among Nigerian taxpayers and recommended that tax authorities and bodies ensure that some kind of incentive is made available to tax payers who have complied by paying their taxes, which will serve as motivation for them to continue paying taxes. Taxpayers are motivated by such action and will pay their taxes voluntarily. The research has aided in the following areas:

To Empirics: This study contributed methodologically to knowledge by developing a model that shows the effect of electronic tax management proxies on tax compliance.

To the literature: By introducing some components of the electronic tax management system and revenue collection strategies, the study's conceptual work has broadened our understanding of the impact that these systems have on the efficiency of tax revenue collection in a few South West Nigerian states. This study also looked at how the introduction of these components will affect all of the proxies for revenue collection efficiency.

To Empirics: By creating a model that illustrates how electronic tax management proxies impact tax compliance, this work made methodologically significant methodological contributions to knowledge.

To the literature: By introducing some components of the electronic tax management system and revenue collection strategies, the conceptual work of the study has widened the boundaries of knowledge on the impact electronic tax management systems have on tax revenue collection efficiency in a few South West states of Nigeria. Additionally, this study looked at how the introduction of these components will affect all proxies of revenue collection efficiency.

To Academics: The results of this study are valuable for academics and academia because they expand on the accounting literature already available in the disciplines of taxes and finance on the connection between the effectiveness of tax revenue collection and computerized tax administration systems.

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