Digitalisation of Tax System and Revenue Generation in Nigeria

[1.]Olasunkanmi, Francis Olatayo, [2]Adejuwon, Joshua Adewale
[1.]PhD Accounting Student, Lead City University, Ibadan, Nigeria
[2.]Associate Professor of Management & Accountant, Lead City University, Ibadan, Nigeria

Abstract
The problem of tax evasion and other issues limiting maximum tax revenue collection in Nigeria is such that contemporary tax practice should encourage tax administrators to embrace Information and Communication Technology (ICT) to revolutionize tax processes and alleviate some of the difficulties associated with manual tax processing in Nigeria. This study examined tax digitalization and the problem of revenue collection in Nigeria. A descriptive research design was employed, and a sample size of 352 tax administrators was determined using the Taro Yamane formula (1967) from a population of two thousand nine hundred and thirty-two (N=2,932) operating in southwest Nigeria. Data were collected by means of an online questionnaire with a reliability test of 0.7747 > 0.70. Four hypotheses were tested using Chi square and regression analysis with the aid of an Excel sheet and SPSS. The findings revealed that Tax Digitalization has a significant relationship with Tax Revenue and also showed that Tax Digitalization has a significant effect on Tax Evasion. The study concluded that if adequate e-tax policies are implemented, and qualified and competent IT personnel are equipped, tax digitalization can curtail Tax Evasion and reduce Tax Risk to the minimum in Nigeria. According to the study, tax collectors of all quantities should invest more in ICT and embrace ICT in tax collection because it boosts Nigeria's tax revenue drive. This should be accomplished by automating the entire tax filing process, from filing to receiving a tax clearance certificate, to reduce tax evasion and increase tax revenue generation.

Keywords: Tax Administrators, Tax Collection, Tax Compliance, Tax Evasion, Tax Risk.

Introduction

The Nigerian Tax system has undergone a series of developmental stages, transitioning from the traditional (manual) tax system to the modernization programme, which was based on a piece of advice from the Fiscal Affairs Department of the International Monetary Fund (FAD/IMF) in 2005. This program was divided into phases, which later enabled reform project initiatives and implementation from 2008 to 2011. The third phase has had an enormous effect on Nigeria's journey towards tax digitalization, as it embodies a project for payment procedure automation and taxpayer database creation, integrated tax administration system (ITAS) in 2011-2015. In 2015, Babatunde Fowler introduced "Amanda" a system designed to enhance the sophistication of the Nigerian tax Administration system. This system embodies e-tax, e-filling, e-receipt, and e-voicing, but the programme was complemented when Tax Promax was introduced by Muhammed Nami and officially flagged up in 2021. These developments gradually resulted in the tax digitalization system in Nigeria till today. Consequently, significant tax revenue has been generated in Nigeria since the inception of these modernization plans.

On the other hand, tax revenue has been one of the greatest essential sources of income for the government to finance its expenditures on programs and infrastructure development, among others. Most countries rely on tax revenue to fund and support government expenditures as outlined in the annual budget (Alaaray, Mohamed, & Bustamam, 2018). The tax administrative framework operating in the system has been responsible for the system's effectiveness and efficiency in revenue generation. It includes government processes, values, and tactics for achieving efficient tax preparation, mandatory tax imposing, easy gathering, proper accounting, and revenue utilization (Ogbonna & Appah, 2016). Due to this, tax digitalization was initiated, and since that time, the system has evolved into a shared network assisting many taxpayers (Nnubia, Okafor, & Chukwunwike, 2020).

Tax digitalization is a web-based system or channel which enable taxpayers to gain entry or permission to the platform in order to access all of the tax authority's offerings, such as enrollment for a tax identification number, electronic submission of tax returns, as well as the electronic taxation system which was introduced in Nigeria in 2013 by the Federal Inland Revenue Service (FIRS), 2015). However, the Nigerian Investment Promotion Commission forecasted in 2018 that Nigeria's digital economy would generate $88 billion and create three million new jobs by the end of 2021. However, unless Nigeria amends its laws to adapt to changing technological advancements, it may be unable to tax the massive income generated by the digital economy (Raphael, Mfon, & Dan Patrick, 2020). Indeed, the Nigerian Tax Administration has been supportive of the Nigerian tax system, but more is required as cases of evasion rise. To address some of the country's current tax issues, the system must be digitalized (Lipniewicz, 2017; IOTA's ebook, 2016).

Tax digitalization identifies the level of evasion while also scrutinizing and strengthening the system's auditing capacity. To some extent, the system addresses the level of corruption in the tax system and ensure no double taxation. Many tax administrations embrace digitalization by automating fundamental functions such as e-registration and e-filing, etc. However, more emerging economies, particularly Nigeria, enable real-time transaction data transmission to flow directly into tax administration (e.g., through a cash register function or an online accounting system linked directly to the tax administration data collection system). While the Nigerian tax authorities are working to ensure that the tax collection process is digitalized; regrettably, the digitization process has not been expanded to include effective tax tracking and gathering from digital transactions. For these explanations, an investigation was carried out to determine tax digitalization and the problem of Revenue Collection in Nigeria.

With the removal of geographical trade barriers and as the world transitions to the fourth industrial revolution, revenue officials face novel obstacles of collecting appropriate tax revenue and the issue of avoidance of taxes, which is made easier with the click of a button. This provides to the previously identified issues with the administration of taxes, such as cooperation between revenue agents and taxpayers, tax evasion, and mistakes. This results from manual computations and insufficient management of tax administrators' databases, among other things (Ayodeji, 2017). Digitalization, on the other hand, alters the order of our country's economic and social processes (Etim, Jeremiah, & Dan, 2020). These changes should elicit an equal reaction, resulting in changes to current laws and their implementation and a digital economy founded strongly on the fundamentals of technology for communication and information. As a result, tax administrators must embrace ICT to revolutionize their processes and alleviate some of the challenges associated with manual processing. Thus, the study is designed with the primary goal of assessing tax digitalization and the problem of Revenue Collection in Nigeria.

Objectives of the Study

The primary goal of this research is to investigate tax digitization and the revenue collection problem in Nigeria. While the specific objectives are to:

1. examine the relationship between Tax Digitalization and Tax revenue in Nigeria
2. determine the effect of Tax Digitalization on Tax Evasion in Nigeria
3. assess the impact of Tax Digitalization on Tax Risk in Nigeria
4. examine the relationship between Tax Digitalization and Tax Compliance in Nigeria

Hypotheses

H_{O1}: Tax Digitalization has no significant relationship with Tax Revenue
H_{O2}: Tax Digitalization has no significant effect on Tax Evasion
H_{O3}: Tax Digitalization has no significant impact on Tax Risk
H_{O4}: Tax digitalization has no significant relationship with Tax Compliance

The study examined the tax digitalization and the problem of revenue collection in Nigeria with specific focus on South-west Nigeria, while relevant data were obtained from the Federal Inland Revenue Service, statistical bulletin 2023. For sophisticated analysis, the study used a e-survey to capture relevant information from the staff of the Service. Taro (1967) was employed for sample size determination based on simple random.

Literature Review

A) Tax Digitalization

Tax Digitalization has far-reaching implications for taxation, influencing tax administration and policy on the national and global scale, offering new tools while posing fresh difficulties. As a result, the tax policy implications of digitalization are currently at the centre of a worldwide discussion about whether global tax laws are still relevant in a more and more changing environment (Adejuwon & Olasunkanmi, 2023). Tax digitalization refers to tax process gathering and management via electronic means. It is a network of computers that allows tax administrators to connect to the platform via the internet to use the tax expert's offerings, including recording a tax ID number and filing returns for tax purposes electronically (Olaoye & Atilola, 2018). Tax digitalization was implemented to increase revenue generation in Nigeria, making it simpler and quicker for taxpayers to pay their taxes from various places and at different times (Ofurum et al., 2018).

B) Revenue Collection

Total tax revenue as a percentage of GDP indicates how much of the output of a nation is collected by taxes. It may be considered as one measure of the government's level of control over the economy's resources. The tax burden is determined by splitting total tax revenues by GDP. This indicator applies to the entire governance (all levels) and is calculated in millions of dollars as a percentage of GDP. Taxation, including personal income tax, value added tax, and corporate income tax, has always been a significant source of government revenue. Onubia *et al.*, (2020) define revenue generation as the process by which businesses set up businesses and sell their products or services to generate revenue. Government revenue is government revenue. Government revenue comes from various sources such as oil revenue and non-oil revenue (Ofurum et al., 2018).

C) Tax Administration

The foundation of the Nigerian tax system is tax administration. It addresses relevant tax authorities' powers and duties as tax legislation outlines. Any government's processes, principles, and strategies for achieving effective tax planning, obligatory tax levying, easy gathering, proper finance, and earnings utilization are referred to as tax administration (Bautigam et al., cited in Adejuwon & Olasunkanmi, 2023; Ogbonna & Appah, 2016). The way a tax system is administered is an important factor. Unfortunately, tax administration is typically weak in many developing countries, with widespread evasion, fraud, and coercion. Compliance with taxes is frequently low, and a significant portion of the economic system's informal sector completely skirts the tax net. (Onyeka & Nwankwo, 2016).

D) Tax Evasion

Tax evasion is defined as any illegal action a taxpayer takes to reduce their tax liability through deception (Adejuwon & Olasunkanmi, 2023). While taxation indicates the extent to which a government can operate without incurring debt (Naiyeju, 2010). The system in place is a critical factor in collecting tax revenue (Artemenko et al., 2017). The amount of tax collected reflects the quality of the tax management system in place.

E) Tax Risks

Tax risk is a financial risk that indicates the possibility of unforeseen financial losses as a result of Changes in tax laws and rules, including the cancellation of tax breaks or "tax holidays," the increase of tax rates for current taxes, the modification of the procedure and time constraints for making payments for taxes, and other tax-related norms. Tax risks are additionally linked with a certain ambiguity in achieving the objectives of the region or economic entity as a consequence of unanticipated adverse variables in the method of taxation. (Johannes, 2022).

F) Taxation of Digital Transactions in Nigeria

The Finance Act 2019 depicted that the digital and online transactions of non-resident companies to company income tax in Nigeria are deemed to have derived profits from Nigeria and thus taxable in Nigeria if they meet the following conditions (Finance Act of Companies Income Tax Act, 2019):

1. The company sends, receives, or transmits signals, sounds, messages, images, or data of any kind to Nigeria via cable, radio, electromagnetic systems, or any other electronic or wireless apparatus in connection with ANY activity, including the following: Electronic commerce (Application store; High-frequency trading; Electronic data storage; Online adverts: Participative network platform; Online payments)
2. Profit is attributable to such activities.
3. The company has a significant economic presence in Nigeria.

These three conditions must be present for the non-resident company to be taxable in Nigeria.

G) Challenges and Prospects of the Tax Digitalization of the Nigerian Tax Administration

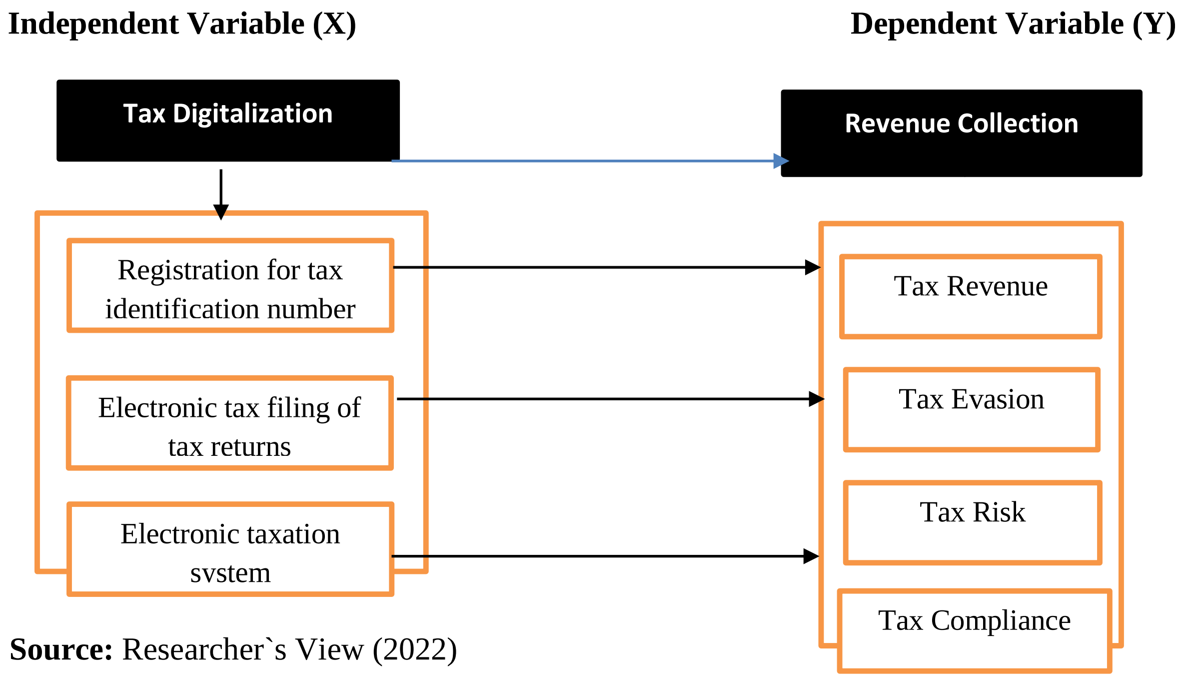
Tax digitalization in Nigeria is critical for increasing transparency, improving administrative efficiency, and, among other things, reducing the compliance burden. This is not to say that the electronic tax system is without problems. There are numerous challenges, some of which are; Lack of readiness in people to pay tax, Illiteracy; difficulties in understanding the language of computer; lack of use of electronic tax system in tax administration; and internet fraud**.** The tax system in Nigeria typically has some challenges that could be resolved by tax digitalization, emphasizing that this concept is not just a trend but a necessity. However, this new idea will not solve all of these problems. A proposed system that addresses current challenges is required for tax reform. It must also consider all aspects of tax administration that will be affected by tax digitalization, such as tax administrators, tax laws, and tax personnel, among others.

Theoretical Review

This study reviewed two theories: the ability to pay theory of (Adam, 1776), and Theory of Reasoned Action (Fishbein & Ajzen, 1977). The ability-to-pay theory implies that individuals with greater financial resources should pay more taxes than people with lower incomes. In this instance, taxes should be imposed based on a person's taxable capacity. The rationale behind the theory is that it ensures tax justice or equity for taxpayers' taxes are determined by the amount of cash people earn. Those with higher incomes are anticipated to pay higher tax rates, and vice versa. However, this does not account for the quantity of these amenities taxpayers truly use. However, the theory of Reasoned Action as developed by (Adejuwon, & Olasunkanmi, 2023). The theory's premise states that individuals' or entities' acts are determined by their motives. The theory has been criticized for assuming that all actions are motivated by motives (Ogden, 2003). The theory is appropriate for this study because it seeks to explain the connection between the independent and dependent variables. It demonstrates that ICT will be used in tax administration only when the degree of digitalization in the economy is believed to have a major impact on revenue from taxes or tax evasion.

Review of Empirical Studies

A study was carried out to investigate the impact of the digitalization of the economy on tax compliance in Nigeria. To collect data, a survey strategy and an organized survey were used by Akwa-Ibom State's Internal Revenue Service (AIRS). The data was collected from the entire workforce at the AIRS, which numbered forty people (40). Simple percentages, descriptive statistics, and regression analysis were used to analyze the data techniques. The finding revealed that when the economy is digitalized, tax compliance improves. It thus is suggested that the Nigerian government look into creating tax policies to aid in the taxation of e-transactions, tax education, and the inclusion of e-transaction taxation in tax laws (Raphael, Mfon, & Dan Patrick, 2020). An investigation into the effect of the e-taxation system on tax revenue and cost in Turkey was conducted. The study relied on secondary data from the Turkish tax authority, split into two groups: pre-electronic tax period 1993-2004 and post electronic tax period 2005-2016. The data was analyzed using the Mann-Whitney U Test. According to the research's empirical findings, the transition to an electronic tax system increased tax revenues while decreasing the cost per tax (Audu & Ishola, 2021). Similarly, a positive insignificant difference was discovered between pre and post-company income tax revenue, with t-statistics and p-value reported to be 0.833 and 0.421, respectively. That is, e-tax payment has a negligible effect on Value Added Tax (VAT) revenue. Finally, the results of the study showed a positive but irrelevant variance between pre and post-capital Gain tax revenue, with t-statistics and p-values of 1.218 and 0.247 accordingly. As an outcome, it was found that e-tax payments did not have any effect on capital gains tax, value-added tax, or corporate income tax generation in Nigeria (Allahverd, et. al., 2017).



Source: Researcher`s View (2022)

Materials and Methods

The population comprises the tax administrators of the Federal Inland Revenue Service within the southwest zone with an estimated total number of two thousand nine hundred thirty-two staff (N=2932) (*FIRS Nominal Roll* 2022). However, three hundred and fifty-two tax administrators (n = 352) were randomly selected from the population. The study's size was estimated by Yamane Taro in 1967). Further, the study used a simple random sampling technique in which every participant had an equal chance of being chosen. A survey was used as the main data-gathering tool to collect information from the tax administrators. It is also useful for the researcher to determine the fitness and applicability of the pretested questionnaire

(Audu & Ishola, 2021). A close-ended and pre-coded questionnaire was used to collect data for this study. Further, the instrument's reliability revealed that the individual results exceeded 0.07, indicating that all variables measured were reliable. However, out of 352 questionnaires distributed, 191 were fully retrieved and properly filled, accounting for 54.3% of the total questionnaires.

Data Presentation and Analysis

Table 1: Demographic Information

S/N	Items	Variables		
1	**Gender**		**Frequency**	**Percentage**
		Male	93	48.7%
		Female	98	51.3%
	Total		**191**	**100.0%**
2	**Age group**		**Frequency**	**Percentage**
		20 – 30 years	55	29.0%
		31 – 40 years	50	26.2%
		41– 50 years	66	34.6%
		51 – 60 years	18	9.4%
		61years and above	2	1.0%
	Total		**191**	**100.0%**
3			**Frequency**	**Percentage**
		Single	54	30.9%
		Married	126	65.9%
		Divorced	9	4.7%
		Widowed	2	1.0%
	Total		**191**	**100.0%**
4	**Education Qualification**		**Frequency**	**Percentage**
		SSCE/GCE	1	0.5%
		NCE/OND	7	3.7%
		HND/BSC	100	53.2%
		Master	68	35.6%
		Others	15	7.8%
	Total		**191**	**100.0%**
5	**Work Experience**		**Frequency**	**Percentage**
		1 – 10 years	79	41.4%
		11 – 20 years	62	32.5%
		21 – 30	34	17.8%
		31 years and above	16	8.3%
	Total		**191**	**100.0%**
			Frequency	**Percentage**
6	**Management Level**	Top Management	26	13.6%
		Middle Management	61	31.9%
		Low Management	104	54.5%
	Total		**191**	**100.0%**

Source: *Field Survey Report, 2022*

It was observed from Table 1 that 98 female respondents participated in the study, implying 51.3%. While 93 male respondents, representing 48.7%, also participated. Also, in terms of age, the table indicated that 66 (34.6%) respondents, the majority were between 41 – 50 years. The next in terms of percentage is the age group 20 – 30 years, which had a total of 55 respondents (29.0%). The age group 31 - 40 years recorded 50 respondents (26.2%), and 18 of the respondents were between the age group of 51 – 60 years, covering 9.6%, while only 2 respondents (1.0%) were between the age group of 61 years and above.

The table further indicated that the majority of the respondents, comprising 126(65.9%), are married, followed by those who are single, representing 54 (30.9%). 9 of the respondents, covering 4.7%, are divorced, and 2 of the respondents covering 1.0 are widows. The majority of the respondents were HND/BSc holders, covering the percentage of 100(53.2%) of the total distribution; 68 (35.6%) of the respondents held MSc. and 15 (7.8%) of the respondents had other certifications. 7 of the respondents covering (3.7%) had NCE/OND, while only 1(0.5%) of the respondents had SSCE/GCE. It could also be read from the table that most of the respondents were 79(41.4%) with work experience between 1 – 10 years, followed by those who have been working for between 11 – 20 years, representing 62(32.5%). Thirty-four of the respondents covering (17.8%) have 21 – 30 years of experience, while only 16(8.3) have been working 31 years and above. This shows that most respondents have been in the field for a while. The table above indicates that the majority of the respondents covering 104(54.5%) who participated are Low-Level Managers, followed by those who are Middle-level Managers representing 61 (31.9%). While only 26 of the respondents, covering 13.6 %, are Top Level Managers. Thus, it is evident that the majority of respondents are Low-Level Managers.

A) Descriptive Statistics

This study examines each independent variable component in relation to the dependent variable for analyzing the data collected.

Table 2: Descriptive Analysis of Tax Digitalization

	Tax Digitalization	**SA**	**A**	**U**	**D**	**SD**
7.	FIRS has adopted Tax digitalization system	111 (58.1%)	62 (32.5%)	9 (4.7%)	5 (2.6%)	4 (2.1%)
8.	FIRS is committed to adopting tax digitalization to improving her tax activities	122 (63.9%)	50 (26.2%)	8 (4.2%)	6 (3.2%)	5 (2.6%)
9.	Considerable time is saved through tax digitalization	80 (42.8%)	65 (34.0%)	25 (13.1%)	8 (4.2%)	16 (8.4%)
10.	Full compliance has prevented the business from unnecessary disruptions by tax agents thus, enabling it to plan	106 (55.5%)	52 (27.2%)	21 (10.9%)	6 (3.2%)	6 (3.2%)
11.	Tax digitalization has reduced filing cost considerably	105 (55.0%)	67 (35.1%)	12 (6.3%)	4 (2.9%)	3 (1.6%)
12.	The top management in FIRS is aware of the benefits of tax digitalization in tax compliance	83 (43.5%)	59 (31.0%)	(`16.2%)	10 (5.3%)	8 (4.2%)

Source: Field Survey, 2022

Item 7 of Table 2 showed that 111(58.1%) Tax administrators strongly agreed, 62(32.5%) agreed. 9(4.7%) picked undecided and 5(2.6%) disagreed while only 4(2.1%) strongly disagreed. This implied that FIRS has adopted a Tax digitalization system. Item 8 showed that 122(63.9%) Tax administrators strongly agreed, 50(26.2%) agreed, 8 of the respondents covering 4.2% picked "Undecided", 6 respondents covering (3.2%) disagreed, while 5(2.6) strongly disagreed. Consequently, their belief can be verified by most tax administrators that FIRS is committed to adopting tax digitalization to improve its tax activities. In Item 9 showed that 80(42.8%) tax administrators strongly agreed and 65(34.0%), 25(13.1%) picked undecided; 16(8.4%) strongly disagreed while only 8 covering 4.2% disagreed. Thus, this implies that considerable time is saved through tax digitalization. In item 10, 106 tax administrators strongly agreed, representing 55.5%; 52, representing 27.2%, agreed; 21 of the tax administrators, covering 10.9%, were undecided, and 6, representing 3.2%, disagreed, while only 6, covering 3.2%, strongly disagreed. This showed that complete compliance has shielded the company from needless interruptions by tax authorities, allowing it to prepare.

Item 11 showed that 105 tax administrators strongly agreed, representing 55.0%; 67 tax administrators agreed, representing 35.1%; 12 tax administrators, representing 6.3%, were undecided; 4, representing 2.9%, disagreed, while only 3, representing 1.6 %, strongly disagreed. This showed that tax digitalization has reduced filing costs considerably. Item 12 showed that 83 tax administrators strongly agreed, representing 43.5%; 59 tax administrators agreed, representing 31.0%; 31 tax administrators, representing 16.2%, were undecided; 10, representing 5.3%, disagreed, while only 8, representing 4.2 %, strongly disagreed. This showed that the top management in FIRS is aware of the benefits of tax digitalization in tax compliance.

Table 3: Descriptive Analysis of Tax Revenue

	Tax Revenue	**SA**	**A**	**U**	**D**	**SD**
13.	Periodical training of tax administrators should be introduced by the government to maintain high generation of tax revenue	139 (72.7%)	38 (20.0%)	3 (1.6%)	3 (1.6%)	8 (4.2%)
14.	People avoid the payment of tax in Nigeria due to low level of income	82 (42.9%)	43 (22.5%)	24 (12.6%)	19 (10.0%)	23 (12.1%)
15.	People fail to pay tax because they don't feel the impact of doing so.	110 (57.6%)	42 (22.0%)	11 (5.8%)	14 (7.3%)	14 (7.3%)
16.	The implementation of government budget is usually and successful in Nigeria because of ineffective tax administrative system.	48 (25.1%)	33 (17.6%)	36 (19.3%)	39 (20.9%)	35 (18.7%)
17.	Training and development of tax administrators does not significantly affect the generation of tax revenue in Nigeria.	54 (28.3%)	32 (16.8%)	20 (10.5%)	23 (12.0%)	62 (32.5%)

Source: Field Survey, 2022

Item 13 of Table 3 showed that 139 (72.7 %) tax administrators strongly agreed, and 38(20.0%) tax administrators agreed. 3(1.6%) each picked undecided; the same number picked disagree, while only 8, covering 4.2%, strongly disagreed. This implied that the periodical training of tax administrators should be proposed by government officials to keep tax revenue generation high as well. Item 14 table showed that 82(42.9%) tax administrators strongly agreed; 43(22.5%) picked agree,24 of them covering 12.6% undecided; 23 (12.1%) strongly disagreed while only 19 (10.0%) disagreed with the statement. Thus, it can be validated from their opinion that because of their low income, people in Nigeria avoid paying taxes.

Item 15 table showed that 110(57.6%) tax administrators strongly agreed; 42(22.0%) picked agree; 14 of them, covering 7.3 %, strongly disagreed; the same number picked disagreed while 11 covering 5.8% undecided. Thus, it can be validated from their opinion that individuals do not feel the consequences of not paying taxes. Item 16 table showed that 48(25.1%) tax administrators strongly agreed, 39(20.9%) disagreed, 36 of them covering 19.3% picked undecided, 35 covering 18.7% strongly disagreed, and 33 disagreed. Therefore, it is supported by their opinion that Nigeria's inefficient tax administration system makes government budget application generally successful. Item 17 table showed that 62(32.5%) tax administrators strongly disagreed, 54(28.3%) strongly agreed, 32 of them covering 16.8% agreed, 23 tax administrators disagreed, and 20 were undecided. Thus, it can be validated from their opinion that tax revenue generation in Nigeria is greatly impacted by the education and instruction of tax administrators.

Table 4: Descriptive Analysis of Tax Evasion

Item	Tax Evasion	SA	A	U	D	SD
18	As a taxpayer, I prefer to bribe tax officials than to pay the full amount of tax that I am asked to pay based on my assessment	30 (15.7%)	31 (16.2%)	18 (9.4%)	28 (14.7%)	84 (44.0%)
19	As a taxpayer, you are not always willing to pay Tax	27 (14.1%)	48 (25.1%)	28 (14.7%)	42 (22.0%)	46 (24.1%)
20	I do falsify records to avoid paying the required tax amount	17 (8.9%)	36 (18.9%)	22 (11.5%)	25 (13.1%)	91 (47.6%)
21	As a taxpayer, I desperately seek loopholes in tax administration to avoid paying Tax	29 (15.2%)	39 (20.4%)	38 (20.0%)	26 (13.6%)	59 (30.9%)
22	I do not usually pay tax whenever there is an avenue to do so	20 (10.5%)	40 (20.9%)	35 (18.3%)	36 (18.9%)	59 (30.9%)
23	I consider tax amount to be too high; hence, I try to dodge the payment	26 (13.0%)	54 (28.3%)	28 (14.7%)	29 (15.2%)	51 (26.7%)
24	I believe the tax is an additional cost to the business; hence I try to eliminate it	36 (18.9%)	55 (28.8%)	30 (15.7%)	23 (12.0%)	45 (23.6%)

Source: Field Survey, 2022

In item 18 of Table 4, 84, representing 44.0% and 30, representing 16.2%, strongly disagreed and agreed; 30, covering 15.7%, strongly agreed; 28, covering 14.7%, disagreed, while 18(9.4) were undecided. This showed that taxpayers would rather pay the entire tax amount owed in light of their assessments. In item 19, 48, representing 25.1% and 46, representing 24.1%, strongly disagreed; 48 agreed; 42, covering 22.0%, disagreed; 28, covering 14.7%, were undecided, while 27 (14.1%) strongly agreed. This showed that taxpayers are not always willing to pay taxes. In item 20, 91, representing 47.6% and 36 covering 18.9%, strongly disagreed and agreed, respectively, 25 covering 13.1%, disagreed; 22 (11.5%) agreed, and only 17 covering 8.9%, strongly agreed. This showed that most taxpayers fake documents to evade paying the necessary tax amount.

Item 21 showed that 59 respondents, representing 20.9%, and 39, representing 20.4%, strongly disagreed and agreed; respectively, 38, representing 20.0%, were undecided; 29 (15.4%) strongly agreed while 26 (13.8%) disagreed with the statement. This showed that the taxpayer seeks ways to evade paying taxes through administrative loopholes. Item 22 showed that 59 respondents, representing 30.9%, and 40, representing 20.9%, strongly disagreed and agreed, respectively; 36, representing 18.9%, disagreed; 35 (18.3%) agreed, while 20 (10.5%) strongly agreed with the statement. This showed that most taxpayers generally pay taxes when there is a chance to. Item 23 showed that 54(28.3%) and 51, covering 26.7%, agreed and strongly disagreed, 29 representing 15.2% and 28 (14.7%) disagreed and undecided on the statement, while 26 (13.0%) strongly agreed. Thus, this implied that the taxpayers considered the tax amount too high; hence, they tried to dodge the payment. Item 24 showed that 55 (28.8%) and 45, covering 23.6%, agreed and strongly disagreed, respectively, 36 representing 18.9% and 30 (15.7%) strongly agreed and undecided, respectively, while 23 (12.0%) disagreed. Thus, this implied that the taxpayers believed they attempted to do away with the tax because it added another expense to the company.

Table 5: Descriptive Analysis of Tax Risks

Item	Tax Risks	SA	A	U	D	SD
25	There is Tax risks within the Nigerian tax system environment	80 (41.9%)	66 (34.6%)	26 (13.6%)	12 (6.3%)	7 (3.7%)
26.	The level of tax risks is not gaining momentum due to the effectiveness of digitalization in Nigerian Tax system	44 (23.0%)	72 (37.7%)	39 (20.4%)	21 (11.0%)	14 (7.3%)
27.	Digitalization has safeguarded tax system from tax compliance risks	70 (36.6%)	80 (41.9%)	21 (11.0%)	10 (5.2%)	10 (5.2%)
28.	The risks of loss of tax submission documents have been eliminated through e-tax submission systems	71 (37.2%)	79 (41.4%)	20 (10.5%)	12 (6.3%)	9 (4.7%)
29.	With digitalization, the system properly manages the various risks due to the availability of information on public domain	66 (34.6%)	71 (37.2%)	39 (20.4%)	7 (3.7%)	8 (4.2%)
30	Digitalization has enabled the tax system to identified problematic transactions thus increases accountability in tax submission	82 (42.9%)	80 (42.0%)	17 (8.9%)	8 (4.2%)	4 (2.1%)

Source: Field Survey, 2022

In item 25 of table 5, 80 tax administrators, representing 41.9% and 66, representing 34.6%, strongly agreed and agreed; 26 of them, covering 13.6%, were undecided, and 12(6.3%) disagreed, while 7(3.7%) strongly disagreed. This showed that there are Tax risks within the Nigerian tax system environment. In item 26, 72 tax administrators, representing 37.7% and 44, representing 23.0%, strongly agreed and agreed; respectively, 39 tax administrators, covering 20.4%, picked undecided, and 21(11.0%) disagreed while 14(7.3%) strongly disagreed with the statement. This shows that the level of tax risks is not gaining momentum due to the effectiveness of digitalization in the Nigerian Tax system.

In item 27, 80 tax administrators, representing 41.9% and 70, representing 36.6%, agreed and strongly agreed; 21 tax administrators, covering 11.0%, picked undecided, while 10(5.2%) strongly disagreed and the same number disagreed with the statement. This shows that digitalization has safeguarded the tax system from tax compliance risks. In item 28, 79 tax administrators, representing 41.4% and 71, representing 37.2%, agreed and strongly agreed; 20 tax administrators, covering 10.5%, picked undecided, while 12 (6.3%) disagreed and 9 (4.7%) strongly disagreed with the statement. This shows that the risks of loss of tax submission documents have been eliminated through e-tax submission systems. In item 29, 71 tax administrators, representing 37.2% and 66, representing 34.6%, agreed and strongly agreed; 39, covering 20.4%, were undecided, and 8 (4.2%) strongly disagreed, while 7(3.7%) disagreed. This showed that with digitalization, the domain of public data makes the system capable of handling the different risks. In item 30, 82 tax administrators, representing 43.9% and 80, representing 42.0%, strongly agreed and agreed; 17 tax administrators, covering 8.9%, picked undecided; 8 (4.2%) disagreed and 4 (2.1%) strongly disagreed. This demonstrates how digitization has enabled the tax system to identify problematic transactions, increasing tax submission responsibility.

Table 6: Descriptive Analysis of Tax Compliance

Item	Tax Evasion	SA	A	U	D	SD
31	I know the amount of tax to pay	63 (33.2%)	63 (33.2%)	38 (20.2%)	21 (9.6%)	6 (3.2%)
32	I am aware that tax payment is my civic duty	122 (64.2%)	50 (26.3%)	12 (6.3%)	3 (1.6%)	4 (1.6%)
33	I am aware of the approved channel for tax collection in the state	75 (39.3%)	67 (35.1%)	3 (17.3%)	40 (6.8%)	3 (1.6%)
34	I am aware of tax and levies in the state	63 (33.5%)	76 (40.0%)	33 (17.4%)	11 (5.8%)	8 (3.7%)
35	I have been approached by tax officials to pay Tax	56 (29.3%)	65 (34.0%)	36 (18.8%)	17 (8.9%)	17 (8.9%)
36	I love paying tax despite of no or little effect on our society	59 (30.9%)	59 (29.8%)	36 (18.8%)	21 (11.0%)	16 (9.4%)

Source: *Field Survey, 2022*

In Table 6, item 31, 63 representing 33.2% each strongly agreed and agreed respectively, 38 covering 20.2% were undecided, and 21(9.6%) disagreed while 6(3.2%) strongly disagreed.

This showed that the taxpayers were aware of the amount of tax to pay. In item 32, 122 respondents, representing 64.2% and 50, representing 26.3%, strongly agreed and agreed, respectively 12, covering 6.3%, picked undecided, and 3(10.1%) disagreed and strongly disagreed with the statement. This shows that the taxpayers are aware that tax payment is my civic duty. In items 33 and 75, representing 39.3% and 67, representing 35.1%, strongly agreed and agreed, 13, covering 17.3% picked, disagreed, while 3(1.3%) strongly disagreed and the same number picked undecided with the statement. This shows that taxpayers are aware of the approved channel for tax collection in the state. In items 34, 76, representing 40.0% and 63, representing 33.6%, agreed and strongly agreed; 33, covering 17.4%, picked undecided, and 11(5.8%) disagreed and, while 7(3.7%) strongly disagreed with the statement. This shows that the taxpayers are aware of taxes and levies in the state.

In item 35, 65, representing 34.0% and 56, representing 29.3%, agreed and strongly agreed; 36, covering 18.8%, were undecided; 17 (8.9%) strongly disagreed, and 17(8.9%) disagreed. This showed that tax officials have approached the taxpayers to pay tax. In items 30 and 59, representing 30.9% strongly agreed and agreed, 36 tax administrators, covering 18.8%, picked undecided, 21(11.0 %) disagreed, and 16(9.4%) strongly disagreed with the statement. This shows that the taxpayers love paying taxes despite of no or little effect on our society.

B) Test of Hypotheses

H_{01}: Tax Digitalization has no significant relationship with Tax Revenue

Table (a) Model Summary

Model	R	R square	Adjusted R square	Std. Error of the estimate
1	.243	.59	.56	4.029

Source: *Field Survey Report, 2022*

a. Predictors: (constant). Measures of Tax Digitalization

The model summary shows that a regression result of 0.243, which is 24.3%, shows a positive linear relationship between Tax Digitalization and Tax revenue. The R square of 0.59 indicates that about 59% of variations in the dependent variable (i.e., Tax revenue) are explained by the moderate independent variable (Tax Digitalization).

b) ANOVA

		Sum of Squares	Df	Mean Square	F	Sig.
2	Regression	314.917	1	314.917	19.401	.000
	Residual	5031.882	310	16.232		
	Total	5346.799	311			

Source: Field Survey Report, 2022

Dependents variable: Tax Revenue; **Predictors: (constant).** Tax Digitalization

The result exhibited from the variance analysis shows that the p-value is statistically significant at 0.000 < the alpha value (0.05). This indicates that the Tax revenue is determined by Tax Digitalization. Hence, the null hypothesis was rejected.

Table (c) Coefficients

		Unstandardized Coefficients		Beta	T	Sig.
		B	Std. Error			
2	(Constant)	4.327	3.362		1.287	.199
	C4	.774	.176	.666	4.405	.000

Source: Field Survey Report, 2022

a. Dependents variable: Tax Revenue

In this case, Tax Digitalization is significantly related to the criterion variable that Tax Digitalization (ß = 0.243, p = 0.0000); Tax Digitalization (F = 19.401, df =1, P=0.000) of the relationship between Tax Digitalization and Tax Revenue. From this same table, the simple linear regression equation can be written as: Y = 4.327+ 0.243x; the equation above implies that a unit change in Tax Digitalization will propel an increase of 14.965in Tax revenue. The first table (a) gives us an adjusted r2, which is 0.56. Therefore, the predictor variable (Tax Digitalization) explained 56 percent of the variance in the criteria of Tax revenue.

Hypothesis 2: H_{02}: Tax Digitalization has no significant effect on Tax Evasion

	X^2 Statistics
Chi-Square	9.1119[a]
Df	2
Asymp. Sig.	0.0000

Source: *Author's computation, 2022 (SPSS-20.0)*

From the table above, the chi-square figure of 9.1119a and the p-value are significantly less than the table value of 0.05. (i.e., 0.0000 < 0.05). This confirmed that Tax Digitalization has a significant effect on Tax Evasion. Since the p-value in which the study accepts or rejects the H1 that states "Tax Digitalization has no appreciable impact on Tax Evasion is < 0.05, the H1 is accepted, therefore, and the null hypothesis is rejected.

Hypothesis 3: H_{O3}: Tax Digitalization has no significant impact on Tax Risk

Table (e)Tax Digitalization Impact on Tax Risk

	X^2 Statistics
Chi-Square	9.698a
Df	4
Asymp. Sig.	0.007

Source: *Author's computation, 2022 (SPSS-20.0)*

The table shows the chi-square figure of 9.698a and the p-value read below the table value of 0.05. (i.e., 0007 < 0.007). This confirmed that Tax Digitalization has a significant impact on Tax Risk**.** Since the p-value in which the researcher is to accept or reject the H1 that states Tax

Digitalization has no significant impact on Tax Risk is < 0.05, the H1 is accepted, therefore, and the null hypothesis is rejected.

Hypothesis 4: H_{O4}: Tax digitalization has no significant relationship with Tax Compliance

Table (a) Model Summary

Model	R	R square	Adjusted R square	Std. Error of the estimate
3	.280	.79	.76	3.837

Source: Field Survey Report, 2022

Predictors: (constant). Tax Digitalization

The model summary shows a regression result of 0.280, which is 28.0%, shows a positive linear relationship between Tax Digitalization and Tax Compliance. The R square of 0.79 indicates that about 79% of variations in the dependent variable (i.e., Tax Compliance) are explained by the moderate independent variable (Tax Digitalization).

Table (b) ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
3	Regression	389.031	1	389.031	26.419	.005
	Residual	4564.888	310	14.725		
	Total	4953.920	311			

Source: Field Survey Report, 2022

Dependents variable: Tax Compliance; **Predictors: (constant).**

Tax Digitalization The analysis of the variance table depicts that the p-value is statistically significant at 0.005 < 0.05. This indicates that Tax Compliance is determined by Tax Digitalization. Hence, the null hypothesis was rejected.

Coefficients

		Unstandardized Coefficients		Beta	T	Sig.
		B	Std. Error			
3	(Constant)	12.883	1.229		10.483	.000
	D4	.348	.068	.280	5.140	.005

Source: Field Survey Report, 2022

a. Dependents variable: Measures of Tax Compliance

In this case, Tax Digitalization is significantly related to the criterion variable that: Tax Digitalization (ß = 0.280, p = 0.0005) Tax Digitalization (F = 26.419, df =1, P=0.005) of the relationship between Tax Digitalization and Tax Compliance. From this same table, the simple linear regression equation can be written as: Y = 12.883+ 0.280x; the equation above implies that a unit change in Tax Digitalization will propel an increase of 14.965 in Tax Compliance. The first table (a) gives us an adjusted r2 of 0.76. Therefore, the predictor variable (Tax Digitalization) explained 76 percent of the variance in the criteria of Tax Compliance in Lagos State.

Discussion of Findings

Based on the analysis, the study revealed that tax digitalization was statistically significant with tax revenue at ($ß = 0.243$, $p = 0.0000$) with adjusted r^2 of 0.56. Thus, the predictor variable (tax digitalization) explained 56 percent of the variance in the criteria of tax revenue. This result is in line with the study of Bate (2021) which revealed that digitalization has a positive impact on tax revenue as financial development, human capital and business are the main pathways that affect the taxability of digitalization. Wadesango *et al* (2020) also, reported that tax digitalization in Zimbabwe has increased revenue collection. Specifically, 60% of the survey respondents said that the use of electronic goods tax has a positive impact on Zimbabwe's VAT revenue. Also, in the analysis, tax digitalization was statistically significant on tax evasion (i.e, $0.0000 < p = 0.05$). This can be seen in the work of Adebisi and Gbegi (2013) who believed that there is a direct relationship between tax evasion, tax evasion, tax rate and personal income tax administration in Nigeria. Further, from the analysis, tax digitalization and tax risk revealed a significant impact at ($0007 < p < 0.007$), while tax digitalization was as well statistical on tax compliance as ($ß = 0.280$, $p = 0.0005$) with adjusted r^2, which was 0.76. Thus, tax digitalization explained 76 percent of the variance in the criteria of tax compliance in Lagos State. Kenani *et al.* (2021a), who found that the use of electronic financial instruments has a positive impact on tax compliance.

Conclusion and Recommendations

The Nigerian government must act quickly to pass tax legislation that eliminates loopholes and enhances the collection of taxes as the global economy digitalization. Based on the findings, the study viewed tax digitalization as a strategy capable of reducing tax evasion and tax fraud reduction in Nigeria. This would also enable the government to improve the Nigerian Tax Administration System and maneuvers towards achieving full compliance with low-cost effect. The study, therefore, concluded that if adequate digitalization of tax policies is given the full capacity of operation and qualified and competent IT personnel are equipped, it is enough to eliminate tax evasion and other tax fraud. Based on the above conclusions, the following recommendations are hereby made:

1. Since tax digitalization is capable of increasing tax revenue in Nigeria, tax authorities should embrace and fully support the prevailing tax process (i.e, tax promax) in pursuing the goals and objective of maximizing revenue collection in Nigeria.
2. Tax digitalization should be continuously improved so as to bring the tax evaders into tax net. Additionally, tax authorities at all levels should collaborate with legislative bodies at various governmental levels to create strict legislation to prevent tax evasion in the context of a digital economy.
3. Full utilization of digital systems should minimize tax
4. The Nigerian government should ensure creating tax laws that include e-transaction taxation, tax education, and tax strategies that facilitate e-transaction taxation in order to ensure compliance in the system.

References

Adebisi, J.F., &Gbegi, D.O. (2013). Effect of tax avoidance and tax evasion on personal income tax administration in Nigeria. *American Journal of Humanities and Social Sciences.*

Adegbie, F. F. & Akinyemi, O.O. (2020). Electronic payment system and revenue generation in Lagos State. *Journal of Accounting and Financial Management,* 6(1) , 59 – 85.

Adejuwon, J. A., and Olasunkanmi, F. O., (2023). Tax Digitalization and Problem of Revenue Collection in Nigeria. *IRJEMS International Research Journal of Economics and Management Studies.* 2 (4), 271-284

Alaaraj, S. Mohamed, Z. A., & Bustamam, U.S.B.A., (2018). Mediating Role of Trust on the Effects of Knowledge Management Capabilities on Organisational Performance. Procedia-Social and Behavioural Sciences, 235, 729-738

Allahverd, M. et al., (2017) Effect of e-taxation system on tax revenue and cost in Turkey. *European Journal of Social Sciences* (9) 100-150.

Artemenko, D. A. et. al., (2017). Causes of Tax Risks and Ways to Reduce Them. *European research studies journal*. 20(3b), 453-459.

Audu, S. I. & Ishola, K. (2021). Digital economy and tax administration in Nigeria. *Global scientific journal.* 9(9),1251-1262. 2021. DOI: 10.11216/gsj.2021.09.54166

Ayodeji, O. E., (2014). Impact of ICT on tax administration in Nigeria. *Computer Engineering and Intelligent Systems***,** 5(8), 26-29.

Bate, D. A. P. (2021). Does digitalisation improve the mobilisation of tax revenues in Africa? *African Multidisciplinary Tax Journal*, *2021*(1).

Bautigam, D. et al. (2005). *Taxation and State-Building in Developing Countries: Capacity and Consent.* Cambridge University Press, Cambridge, 1-33, 2005.

Etim, R. S Jeremiah, M. S., & Dan, P. S. (2020). Tax Compliance and Digitalization of Nigerian Economy: The Empirical Review. *American Journal of Social Science*, 9(2), 42-50. DOI: 10.30845/aijss.v9n2p5

Federal Inland Revenue Service (FIRS). (2015) *FIRS introduce electronic filing of tax returns and online payment of taxes".* Retrieved from:

IOTA(2016)ebook.DataDrivenTaxAdministration.tax.org/sites/default/files/pub/data_driven_tax_administration/mobile/index.html#p=5.

Kenani, J. M., Masiya, M., & Njolomole, M. S. (2021a). Assessment of the impact of electronic fiscal devices on compliance and VAT collection in Malawi. *African Multidisciplinary Tax Journal*, *2021*(1), 1–21.

Lipniewicz, R. (2017) Tax administration and risk management in the digital age. *Information System in Management,* 6(1), 26-37. DOI: 10.22630/ISIM.2017.6.1.3

Naiyeju, J. K. (2010) Taxation: A tool for social change, tax administration in Nigeria and the issue of tax refund. One-day symposium of 50th Anniversary celebration of the Chartered Institute of Taxation of Nigeria

Nnubia, I. C., Okafor, G. O., & Chukwunwike, O. D. (2020). Effect of e-taxation on Revenue Generation in Nigeria: A Pre-post Analysis. *Academy of Entrepreneurship Journal.* 26(3),1-19

Ofurum, C. N., et. al., (2018). Impact of E-taxation on Nigeria's Revenue and Economic Growth: A Pre-Post Analysis. *International Journal of Finance and Accounting,* 7(2), 19-26.

Ofurum, C.N., Amaefule, L.I., Okonya, B. E., & Amaefule, H.C. (2018). Impact of e–taxation on Nigeria’s revenue and economic growth: A pre–post analysis. *International Journal of Finance and Accounting*, 7 (2), 19-26.

Ogbonna, G. N., & Appah, E. (2016). Effect of tax administration and revenue on economic growth in Nigeria. *Research Journal of Finance and Accounting*. 7(13). ISSN 2222-2847 (Online)

Ogden, J. (2003). *Some problems with social cognition models: A pragmatic and conceptual basis*. Health Psychology, *22*(4), 424-428. 2003

Okunowo. AO (2015) *FIRS introduces E-filing Tax System in Nigeria*. Website: https://www.linkedin.com/pulse/firs-introduces-e-filing-tax-systemnigeria- okunowo-a-obafemi, 2015.

Olaoye, C.O., & Atilola, O.O., (2018). Effect of e-tax payment on revenue generation in Nigeria. *Journal of Accounting, Business and Finance Research*, 4(2), 56–65.

Onyeka, V. N. & Nwankwo, C. (2016). The effect of tax evasion and avoidance on Nigeria's economic growth. *European Journal of Business and Management,* 8(24), 158-166.

Raphael, S. M., Mfon, S. J. & Dan Patrick, B. S. (2020). Tax Compliance and Digitalization of Nigerian Economy: The Empirical Review. *American International Journal of Social Science* 9(2) DOI: 10.30845/aijss.v9n2p5

Wadesango, N., Chibanda, D. M., & Wadesango, V. O. (2020). Assessing the impact of digital economy taxation in revenue generation in Zimbabwe. *Academy of Accounting and Financial Studies Journal*, *24*(3).

Yamane, Taro, Mathematics for Economists, India Prentice Hall, 1967