

TAXATION BARRIERS, POLICY RESPONSES AND TAX COMPLIANCE IN NIGERIA'S INFORMAL DIGITAL ECONOMY

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Abstract

This study examined taxation barriers within Nigeria's informal digital economy and evaluated policy responses aimed at improving tax compliance and revenue generation. A survey research design was adopted, and the population comprised 4,668 staff of the Nigerian Revenue Service. A sample size of 368 respondents was determined using the Taro Yamane formula, and a snowball sampling technique was employed to select participants. Primary data were collected using a structured questionnaire rated on a five point Likert scale, while hypotheses were tested using Spearman's Rank Order Correlation Coefficient. The findings showed that: taxation barriers have a significant negative relationship with tax compliance in Nigeria's informal digital economy ($\rho = -0.735$, $p = 0.000$); existing policy measures have a very weak positive relationship with tax compliance, and this relationship is not statistically significant ($\rho = 0.033$, $p = 0.560$). In conclusion, strengthening digital tax systems and addressing institutional constraints are essential for improving revenue generation in Nigeria's informal digital economy. The study recommended that the Nigerian Revenue Service should strengthen data integration systems by linking digital transaction platforms, identity databases, and tax records in real time to reduce existing gaps that weaken compliance in the informal digital economy. This will improve visibility of digital economic activities and support more accurate tax administration across online businesses and freelancers.

Keywords: Informal digital economy, taxation barriers, tax compliance, tax policy measures.

1.0 Introduction

The global economy is increasingly shaped by digital technologies that enable businesses to produce, exchange and deliver goods and services through online platforms, mobile applications and digital payment systems. Digitalisation has reduced the importance of physical location and expanded market access, particularly in developing economies. However, it has also challenged conventional tax systems, which were largely designed around identifiable physical businesses and location-based transactions (Putrevu&Mertzanis, 2024; Akinboboye et al., 2025). As economic activities increasingly occur through digital and decentralised channels, governments face difficulties in identifying taxable persons, measuring income and enforcing compliance (Odia et al., 2022; Mpofu, 2022; Olaniyi et al., 2025).

In Nigeria, digitalisation has expanded opportunities for employment, entrepreneurship and income generation. Online vendors, freelancers, content creators and other digital service providers increasingly conduct economic activities through social media, e-commerce platforms and digital payment systems. While this expansion contributes to economic inclusion, a substantial proportion of these activities operates outside formal registration and reporting structures (Idris &Maikomo, 2024). Consequently, the growth of the informal digital economy presents a paradox: it promotes economic participation while simultaneously reducing the visibility of taxable economic activities.

The decentralised and informal nature of digital activities creates significant barriers to taxation. These include inadequate data on operators, weak identification and transaction-tracking systems, limited technological capacity, low tax awareness, inconsistent income patterns and weak enforcement mechanisms. In addition, some operators may avoid formalisation because of distrust in government, concerns about excessive taxation and limited confidence in the benefits derived from tax payments (Adebisi, 2023; Aina et al., 2025; Adeola et al., 2025). Thus, the challenge is not merely the existence of tax laws, but the capacity of tax authorities to identify, monitor and secure compliance from digitally active but informally organised economic actors.

Nigeria has introduced policy and administrative measures aimed at modernising tax administration, including electronic tax systems, improved taxpayer registration, digital identification and greater integration of financial and identity databases. Such measures are intended to improve taxpayer identification, transaction monitoring and compliance (Erimwinorosee et al., 2025; Akinboboye et al., 2025). However, the effectiveness of these reforms depends on institutional capacity, accessibility, public awareness and consistent implementation. Digital tax innovations may therefore improve compliance, but technological reforms alone may be insufficient where enforcement capacity and taxpayer trust remain weak.

Empirical evidence suggests that electronic tax systems and digital reporting tools can improve tax compliance. However, their effectiveness varies across institutional environments and depends on governance quality, technological capacity and the willingness of taxpayers to participate in formal systems (Dagunduro et al., 2025; Ackom et al., 2025). This creates an empirical problem: despite increasing policy interventions, it remains unclear whether existing responses adequately address the specific barriers associated with Nigeria's informal digital economy. The continued expansion of informal online economic activities therefore raises questions about the extent to which taxation barriers affect compliance and whether existing policy measures are producing the intended outcomes.

Existing studies have examined digital taxation from legal, technological, policy and informal-sector perspectives (Odia et al., 2022; Mpofu, 2022; Munjeyi et al., 2024; Aina et al., 2025; Adeola et al., 2025). However, limited attention has been given to the perspectives of revenue service personnel who are directly involved in tax administration, enforcement and policy implementation. Furthermore, many existing studies rely on qualitative reviews, doctrinal analyses or data collected from informal-sector participants. There is therefore limited quantitative evidence examining the relationship between taxation barriers, policy responses and tax compliance from the perspective of tax administration personnel.

This study addresses this gap by examining taxation barriers within Nigeria's informal digital economy and assessing the influence of policy responses on tax compliance. Using data obtained from relevant tax administration personnel and Spearman's correlation analysis, the study provides an institutional perspective on the practical challenges of taxing informal digital activities.

The specific objectives are to:

- i. identify the key barriers affecting effective taxation of the informal digital economy in Nigeria; and
- ii. assess the effectiveness of existing policy measures in improving tax compliance within Nigeria's informal digital economy.

The following null hypotheses were tested:

H01: Identified taxation barriers have no significant influence on tax compliance in Nigeria's informal digital economy.

H02: Existing policy responses have no significant influence on improving tax compliance in Nigeria's informal digital economy.

2.0 Literature Review

Empirical studies on taxation within the informal and digital economy generally agree that weak institutional capacity constitutes a major constraint to effective revenue mobilisation. However, the literature differs in the extent to which it attributes poor tax outcomes to the informal sector itself, policy inadequacies, or weaknesses in implementation. For instance, Aina et al. (2025) attributed the limited taxation of the informal sector to weak enforcement, poor compliance culture, inadequate record keeping and socio-cultural constraints, while proposing BVN and NIN integration, simplified tax structures and public sensitisation as possible solutions.

Similarly, Odia et al. (2022) found that although the Finance Act 2020 expanded Nigeria's legal framework for digital taxation, enforcement gaps and limited coverage of individual online transactions continued to create opportunities for tax avoidance. These studies are complementary in showing that the existence of a legal or administrative framework does not necessarily translate into effective compliance. However, they focus primarily on the presence of structural weaknesses rather than empirically establishing how such weaknesses influence compliance behaviour. Consequently, they provide useful explanations of the taxation problem but offer limited evidence on the relative influence of specific taxation barriers.

Mpofu (2022) extends this argument beyond Nigeria by showing that digital taxation presents both revenue opportunities and risks of inefficiency across African economies. The study emphasises that policy effectiveness depends on context-specific implementation and institutional capacity. This broader perspective is useful because it challenges the assumption that digital taxation reforms can produce uniform outcomes across countries. Nevertheless, the African-level perspective may obscure country-specific institutional realities.

Nigeria's informal digital economy operates within a distinct administrative, technological and regulatory environment; therefore, regional conclusions cannot automatically explain the effectiveness of taxation policies in Nigeria. Taken together, Aina et al. (2025), Odia et al. (2022) and Mpofu (2022) suggest that the central challenge is not simply the absence of tax policies but the gap between policy formulation and implementation.

A second group of studies examine whether digital tax reforms can improve compliance. Dagunduro et al. (2025) found that electronic tax systems, including e-filing, e-billing and digital payment platforms, improved timely filing and payment among informal sector operators in Southwest Nigeria. However, the study also recognised that these benefits depend on accessibility, awareness and digital inclusion. This qualification is important because it indicates that technology does not independently produce compliance. Rather, its effectiveness is conditional on users' capacity and willingness to adopt it.

Akinboboye et al. (2025) similarly found that digital tax reporting systems and Tax -Pro Max reduced the tax gap, although electronic tax systems generally produced weaker and less consistent

effects. The difference between the two studies is analytically significant. While Dagunduro et al. (2025) present electronic systems as instruments capable of improving compliance, Akinboboye et al. (2025) demonstrate that not all forms of digitalisation generate the same outcome. This suggests that the effectiveness of digital tax reforms should not be assessed merely by their adoption but by their specific design, functionality and implementation.

Adeola et al. (2025) further complicate the optimistic view of digital tax innovation by arguing that simplified tax schemes, platform-based withholding mechanisms and digital reporting systems could integrate informal digital actors into the tax net, but that privacy concerns, resistance from operators and weak institutional capacity may limit their effectiveness. Likewise, Olaniyi et al. (2025) found that taxation of the digital economy could enhance revenue generation and reduce reliance on borrowing, while identifying enforcement difficulties, unclear tax thresholds and technological limitations as continuing obstacles.

These studies reveal an important tension within the literature. Digital reforms are generally presented as solutions to informality, yet the same institutional weaknesses that contribute to poor compliance may also undermine the implementation of those reforms. Thus, the literature does not support a simple conclusion that greater digitalisation automatically leads to improved tax compliance. Instead, the available evidence suggests that digital tools operate within institutional environments and are unlikely to overcome enforcement, trust and capacity problems independently.

Regional and comparative studies provide further evidence that institutional conditions mediate the relationship between tax reforms and revenue outcomes. Ackom et al. (2025) found that efficient tax systems significantly improve revenue mobilisation in Sub-Saharan Africa, whereas the informal sector did not have a direct statistically significant effect. This finding is particularly important because it challenges the common assumption that the size or growth of the informal sector is, by itself, the principal explanation for poor tax revenue. Rather, the insignificant direct effect suggests that institutional and technological conditions may mediate the relationship between informal economic activity and tax outcomes. However, because the study is conducted at a regional level, its findings may not fully capture the operational realities of Nigeria's tax administration.

Munjeyi et al. (2024) reached a related conclusion in Zimbabwe by finding that traditional presumptive tax systems were largely ineffective in capturing informal sector revenue and consequently proposing a digital tax framework to improve efficiency and inclusion. Although this study strengthens the argument for digital approaches, its proposed framework does not, by itself, establish that digital taxation will overcome the underlying causes of non-compliance. In particular, if weak institutional capacity and enforcement constrain traditional taxation, similar constraints may affect digital systems. This limitation is consistent with the findings of Ackom et al. (2025), which suggest that institutional quality remains central to revenue performance.

Erimwinorosee et al. (2025) add another dimension by examining Nigeria's Significant Economic Presence rules and identifying jurisdictional limitations, weak technological capacity and poor compliance among non-resident digital firms as major implementation challenges. Unlike studies focused on domestic informal operators, this study demonstrates that digital taxation also involves cross-border and jurisdictional problems. However, its emphasis on non-resident firms means that

its findings cannot be directly generalised to small-scale domestic digital operators such as online vendors, freelancers and content creators. This distinction is important because the compliance challenges associated with multinational digital firms may differ substantially from those associated with informal individuals and micro-enterprises. Therefore, the literature addresses different dimensions of the digital taxation problem, but these dimensions are not always analytically integrated.

Overall, the empirical literature demonstrates broad agreement that taxation outcomes are shaped by the interaction of enforcement capacity, technological infrastructure, policy design and taxpayer behaviour. Nevertheless, the findings also reveal several limitations. First, the literature provides mixed evidence regarding the effectiveness of digital tax systems. While Dagunduro et al. (2025) report positive compliance outcomes, Akinboboye et al. (2025) show that the effects of electronic tax systems are not uniformly strong or consistent. Second, several studies identify similar barriers, including weak enforcement, inadequate technology and low compliance, but do not sufficiently establish the extent to which these barriers influence tax compliance. Third, regional and cross-country studies provide useful comparative insights but may not adequately reflect Nigeria's specific institutional environment. Finally, existing studies largely approach the problem from the perspectives of policy frameworks, taxpayers, informal-sector operators or broad regional systems.

These limitations indicate that the literature has established the existence of taxation barriers and the potential usefulness of policy responses, but it remains less clear how these factors relate to compliance within the specific context of Nigeria's informal digital economy. There is also limited attention to the perspectives of tax administration personnel who are directly involved in implementing policies, identifying taxpayers and enforcing compliance. The present study therefore contributes to the literature by examining taxation barriers and policy responses from an institutional perspective and empirically assessing their relationship with tax compliance. By focusing on revenue service personnel and applying Spearman's correlation analysis, the study seeks to move beyond the descriptive identification of challenges towards an empirical assessment of the relationship between identified barriers, policy responses and tax compliance in Nigeria's informal digital economy.

Theoretical Framework

The study is underpinned by the Theory of Tax Compliance developed by Allingham and Sandmo in 1972. The theory emerged from public economics and applies expected utility reasoning to explain taxpayers' decisions to comply with or evade tax obligations (Efuntade & Efuntade, 2023). Its central assumption is that taxpayers behave rationally by comparing the potential benefits of tax evasion with the probability and consequences of detection.

According to the theory, tax compliance is influenced by factors such as the probability of detection, the severity of penalties and the economic consequences of non-compliance. Where taxpayers perceive a low probability of detection and weak enforcement, the incentive to evade taxes may increase; conversely, stronger monitoring and penalties are expected to encourage compliance (Alem & Tewabe, 2022). Bişgin (2025) similarly emphasises the role of rational decision-making in determining tax behaviour. The theory is therefore particularly relevant to taxation because it links compliance directly to the effectiveness of monitoring and enforcement mechanisms.

However, the theory has limitations when applied to the informal digital economy. Its emphasis on rational economic calculation may not fully explain compliance behaviour where factors such as tax awareness, trust in government, technological accessibility and institutional legitimacy are also important. Although later extensions acknowledge psychological and social influences, the core model places greater emphasis on detection and penalties. Consequently, the theory may be insufficient on its own to explain all dimensions of compliance within Nigeria's informal digital economy. This limitation is particularly relevant because the empirical literature reviewed above identifies technological capacity, policy design, awareness and institutional weaknesses as factors that extend beyond the narrow calculation of detection and punishment.

Despite this limitation, the Theory of Tax Compliance provides an appropriate analytical foundation for the present study. The theory helps explain how identified taxation barriers may reduce the perceived probability of detection and thereby weaken compliance. For example, inadequate data on digital operators, weak transaction-tracking systems, poor enforcement capacity and limited technological infrastructure can make informal digital activities less visible to tax authorities. Under such conditions, taxpayers may perceive the risk of detection as low, which is consistent with the theory's prediction of lower compliance.

The theory is also relevant to the study's examination of policy responses. Electronic tax systems, digital identification mechanisms and improved tax reporting platforms may increase the capacity of tax authorities to identify and monitor taxable activities. From the perspective of the theory, such measures can potentially increase the perceived probability of detection and reduce opportunities for non-compliance. However, consistent with the empirical literature, the effectiveness of these measures cannot be assumed. Their impact depends on implementation capacity, accessibility and the ability of tax authorities to translate technological systems into effective monitoring and enforcement.

Therefore, the Theory of Tax Compliance provides a useful, though not exhaustive, framework for examining the relationship between taxation barriers, policy responses and tax compliance. It is particularly appropriate because the study investigates whether barriers that weaken detection and enforcement influence compliance and whether policy responses designed to strengthen tax administration contribute to improved compliance within Nigeria's informal digital economy.

3.0 Methodology

The study adopted a survey research design. This design was considered appropriate because it allowed for the collection of primary data from respondents in order to examine taxation barriers within Nigeria's informal digital economy and evaluate policy responses aimed at improving tax compliance and revenue generation. The design also enabled the researcher to obtain opinions, perceptions, and experiences of tax officials who were directly involved in the administration and enforcement of tax policies in Nigeria (Nworie et al., 2026).

The population of the study comprised two main components. The first population consisted of all staff of the Nigerian Revenue Service, totaling 4,668 (RocketReach, 2025). The study covered relevant departments responsible for tax administration, taxpayer services, compliance, investigation, and enforcement, including both senior management and operational staff with responsibilities related to tax policy implementation and enforcement. The population also covered personnel working at the Nigerian Revenue Service headquarters and its field offices, thereby

ensuring that respondents had direct knowledge and practical experience of taxation and compliance issues affecting Nigeria's informal digital economy. This group was selected because they were directly involved in tax administration and implementation, particularly in relation to informal sector taxation and digital tax policies. The sample size for this population was determined using the Taro Yamane formula at a 5 percent margin of error to ensure representativeness while maintaining manageability. The formula was applied as follows:

$$\text{Sample size (n)} = \frac{N}{1+N(e)^2}$$

Where:

n = sample size

N = population (4,668)

e = margin of error (5% or 0.05)

Therefore, sample size (n) is obtained thus:

$$\begin{aligned} n &= \frac{4,668}{1+4,668(0.05)^2} \\ n &= 368 \end{aligned}$$

A snowball sampling technique was used to select respondents. This method was adopted because access to some relevant tax officials required referrals due to administrative structure and internal restrictions. Initial respondents who met the inclusion criteria were identified, and they subsequently assisted in reaching other eligible participants within the organization. This approach ensured that sufficient and relevant data were obtained from knowledgeable respondents involved in tax operations. Primary data were collected using a structured questionnaire. The instrument was designed to capture information relating to taxation barriers and policy responses within Nigeria's informal digital economy. The questionnaire was divided into sections based on the research objectives and was administered to the selected respondents. Responses were measured using a five point Likert scale consisting of very high degree, high degree, neutral, low degree, and very low degree. This scaling system allowed respondents to indicate the extent of their agreement or perception regarding each statement in a consistent manner.

The validity of the research instrument was established through face and content validation. The questionnaire was reviewed by experts in taxation and research methodology to ensure that the items were clear, relevant, and adequately covered the research objectives. The questionnaire was reviewed by three experts, comprising two experts in taxation and one expert in research methodology, who assessed the instrument for clarity, relevance, and coverage of the study objectives. A pilot test was conducted with 30 respondents, and the questionnaire items were adapted from relevant previously validated instruments, with modifications made to suit the context of Nigeria's informal digital economy. Their suggestions were used to refine and improve the instrument before administration. Reliability of the instrument was tested using Cronbach's alpha to determine internal consistency of the items. The result (alpha values > 0.7) indicated acceptable reliability, confirming that the instrument was consistent in measuring the intended variables.

Table 3.1:
Cronbach's Alpha Reliability Test for the Research Variables

Variable	Number of Items	Cronbach's Alpha (α)	Decision
Key Barriers Affecting Effective Taxation	5	0.879	Reliable
Existing Policy Measures in Improving Tax Compliance	5	0.880	Reliable
Tax Compliance in Nigeria's Informal Digital Economy	5	0.876	Reliable
Overall Reliability	15	0.878	Reliable

Source: SPSS Version 26.

The results in Table 3.1 show that all three research variables recorded high Cronbach's alpha coefficients ranging from 0.876 to 0.880, which exceed the acceptable threshold of 0.70 and indicate strong internal consistency. The overall reliability coefficient of 0.878 further confirms that the research instrument was highly reliable and suitable for data collection. Data analysis was carried out using both descriptive and inferential statistics. Descriptive statistics such as frequency counts and percentages were used to summarize respondents' demographic information and responses to research questions. This helped to provide a clear picture of the distribution of opinions among respondents. The hypotheses were tested using Spearman's Rank Order Correlation Coefficient. This non parametric test was chosen because the data were ordinal in nature due to the Likert scale measurement. It was also appropriate for examining the relationship between taxation barriers, policy responses, and tax compliance within the informal digital economy. The results of the analysis were used to determine whether to accept or reject the null hypotheses at a 0.05 level of significance.

4.0 Data Analysis

Descriptive Analysis

Table 4.1 presents the descriptive statistics of respondents' views on key barriers affecting effective taxation of the informal digital economy, existing policy measures in improving tax compliance, and tax compliance in Nigeria's informal digital economy. In the table, VLD stands for Very Low Degree, LD stands for Low Degree, N stands for Neutral, HD stands for High Degree, and VHD stands for Very High Degree. These response options were used to measure the level of agreement of respondents on each statement. A total of 368 questionnaires were distributed to respondents. Out of these, 318 were returned and found usable for analysis, giving a response rate of 86.4 percent.

Descriptive Statistics of barriers, policy measures, and Tax compliance in Nigeria's Informal Digital Economy

Item	Variable	VLD	LD	N	HD	VH D	M
Key Barriers Affecting Effective Taxation of the Informal Digital Economy							
1	Limited access to reliable data on informal digital activities affects tax administration.	19	46	72	134	47	3.45
2	Weak digital identification systems make it difficult to track taxpayers.	25	56	72	94	71	3.41
3	Low awareness of tax obligations among digital operators reduces compliance.	44	50	11 5	102	7	2.93
4	Inadequate technological capacity in tax agencies affects monitoring of online transactions.	67	17	78	67	89	3.30
5	Poor record keeping among informal digital operators limits accurate tax assessment.	41	91	74	92	20	2.87
Existing Policy Measures in Improving Tax Compliance		VLD	LD	N	HD	VH D	Mea n
6	Electronic tax filing systems have improved ease of tax reporting in Nigeria.	34	38	89	74	83	3.42
7	Linking Bank Verification Number and National Identification Number has helped improve taxpayer identification.	29	67	61	123	38	3.23
8	Digital tax platforms such as online payment systems support better compliance.	65	31	43	110	69	3.27
9	Taxpayer education programs have improved awareness of tax obligations.	60	105	57	49	47	2.74
10	Government digital reforms have strengthened monitoring of informal digital activities.	88	99	45	56	30	2.50
Tax Compliance in Nigeria's Informal Digital Economy		VLD	LD	N	HD	VH D	Mea n

11	Many informal digital operators now register and pay taxes voluntarily.	48	139	65	43	23	2.54
12	Compliance with tax rules among online businesses has improved in recent years.	68	102	53	66	29	2.64
13	Digital platforms have made it easier for operators to meet tax obligations.	7	104	10 1	50	56	3.14
14	Tax compliance is influenced by trust in government tax policies.	89	48	96	12	73	2.79
15	Most informal digital operators comply when enforcement is consistent and fair.	10	114	12 6	42	26	2.87

Note. VLD=Very Low Degree; LD=Low Degree; N= Neutral; HD= High Degree; VHD= Very High Degree; .M= Mean. N =318. Scale: 1=VLD, 2= LD, 3= N,4= HD,5= VHD.

Table 4.1 presents the descriptive statistics on key barriers affecting effective taxation of the informal digital economy, existing policy measures, and tax compliance in Nigeria's informal digital economy. For the first item, which focuses on limited access to reliable data on informal digital activities, the frequencies show that 134 respondents indicated a high degree, while 47 indicated a very high degree. Only 19 respondents selected very low degree and 46 selected low degree, while 72 remained neutral. The mean score of 3.45 suggests that respondents generally agree that lack of reliable data is a major barrier affecting tax administration.

For the second item on weak digital identification systems, 94 respondents selected high degree and 71 selected very high degree, showing strong agreement that this is a major challenge. However, 25 respondents indicated very low degree and 56 low degree, while 72 were neutral. The mean value of 3.41 reflects a general agreement that poor identification systems make it difficult to track taxpayers effectively.

The third item on low awareness of tax obligations shows a different pattern, where 115 respondents were neutral, 102 indicated high degree, and only 7 selected very high degree. Meanwhile, 44 chose very low degree and 50 low degree. The mean of 2.93 suggests a moderate perception, indicating that respondents are divided on whether awareness is a major issue.

For the fourth item on inadequate technological capacity in tax agencies, 89 respondents indicated very high degree and 67 indicated high degree, showing strong agreement that this is a serious barrier. On the other hand, 67 selected very low degree and 17 low degree, while 78 were neutral. The mean score of 3.30 indicates general agreement that limited technological capacity affects monitoring of online transactions.

The fifth item on poor record keeping among informal operators shows mixed responses, with 92 respondents indicating high degree and 20 very high degree. However, 41 selected very low degree, 91 low degree, and 74 were neutral. The mean of 2.87 suggests a weaker level of agreement that record keeping is a major barrier compared to other items.

For the sixth item on electronic tax filing systems, 83 respondents selected very high degree and 74 high degree, while 89 were neutral. Only 34 indicated very low degree and 38 low degree. The

mean of 3.42 shows that respondents generally agree that electronic filing systems improve tax reporting.

The seventh item on linking BVN and NIN shows 123 respondents selecting high degree and 38 very high degree, indicating strong agreement that it improves taxpayer identification. Meanwhile, 29 selected very low degree and 67 low degree, while 61 were neutral. The mean score of 3.23 reflects a positive perception of this policy measure.

For the eighth item on digital tax platforms, 110 respondents indicated high degree and 69 very high degree, showing strong support for their role in improving compliance. However, 65 selected very low degree, 31 low degree, and 43 were neutral. The mean of 3.27 suggests general agreement that digital platforms support tax compliance.

The ninth item on taxpayer education programs shows that 105 respondents selected low degree and 60 very low degree, while 57 were neutral. Only 49 indicated high degree and 47 very high degree. The mean of 2.74 indicates that respondents generally do not strongly agree that taxpayer education has significantly improved awareness.

For the tenth item on government digital reforms, 99 respondents selected low degree and 88 very low degree, while 45 were neutral. Only 56 indicated high degree and 30 very high degree. The mean of 2.50 suggests a generally low perception of effectiveness of these reforms in strengthening monitoring.

For the eleventh item on voluntary tax registration and payment, 139 respondents indicated low degree and 48 very low degree, while 65 were neutral. Only 43 selected high degree and 23 very high degree. The mean of 2.54 shows that respondents generally do not agree that voluntary compliance is common.

The twelfth item on improved compliance over time shows 102 respondents selecting low degree and 68 very low degree, while 53 were neutral. Only 66 indicated high degree and 29 very high degree. The mean of 2.64 suggests weak agreement that compliance has improved significantly.

For the thirteenth item on ease created by digital platforms, responses were more positive, with 101 respondents neutral, 104 low degree, and 56 very high degree, while 50 selected high degree and only 7 very low degree. The mean of 3.14 shows moderate agreement that digital platforms have made compliance easier.

The fourteenth item on trust in tax policy shows mixed responses, with 96 respondents neutral, 89 very low degree, and 48 low degree, while 73 indicated very high degree and 12 high degree. The mean of 2.79 suggests that trust is not strongly established as a driver of compliance.

Finally, the fifteenth item on consistent enforcement shows 126 respondents neutral and 114 low degree, while 42 indicated high degree and 26 very high degree. Only 10 selected very low degree. The mean of 2.87 indicates that respondents are not strongly convinced that consistent enforcement is widespread or effective in improving compliance. For the five-point Likert scale, the benchmark for decision-making is based on the mean score intervals: 1.00–1.80 = Strongly Disagree, 1.81–2.60 = Disagree, 2.61–3.40 = Neutral, 3.41–4.20 = Agree, and 4.21–5.00 = Strongly Agree. Thus,

a mean score of 3.00 or above indicates agreement with the statement, while a mean score below 3.00 indicates disagreement.

Test of Hypotheses

Test of Hypothesis I

H₀₁: There is no significant influence of identified taxation barriers on tax compliance in Nigeria's informal digital economy.

Table 4.2:

Test of Hypothesis I

			Tax Compliance in Nigeria's Informal Digital Economy
Spearman's rho	Key Barriers Affecting Effective Taxation of the Informal Digital Economy	Correlation Coefficient	-.735**
		Sig. (2-tailed)	.000
		N	318

Source: SPSS V. 26 Output, 2026.

Table 4.2 presents the result of the test of hypothesis one, which examined whether identified taxation barriers have any significant influence on tax compliance in Nigeria's informal digital economy. The Spearman's rank order correlation result shows a negative and strong relationship between key taxation barriers and tax compliance, with a correlation coefficient of -0.735 and a p value of 0.000. Since the p value is less than 0.05, the result is statistically significant at the 5 percent level. This means that the null hypothesis is rejected. It suggests that as taxation barriers increase, tax compliance tends to reduce in the informal digital economy. The strength of the coefficient also indicates that this relationship is strong and not due to chance.

Test of Hypothesis II

H₀₂: Existing policy responses have no significant influence on improving tax compliance in Nigeria's informal digital economy.

Table 4.3:

Test of Hypothesis II

			Tax Compliance in Nigeria's Informal Digital Economy
Spearman's rho	Existing Policy Measures in Improving Tax Compliance	Correlation Coefficient	.033
		Sig. (2-tailed)	.560
		N	318

Source: SPSS V. 26 Output, 2026.

The result in Table 4.3 presents the test of hypothesis two, which assessed whether existing policy measures have any significant influence on tax compliance in Nigeria's informal digital economy. The Spearman's correlation coefficient is 0.033 with a p value of 0.560. Since the p value is greater than 0.05, the result is not statistically significant at the 5 percent level, and the null hypothesis is not rejected. This shows that existing policy measures have a very weak and negligible positive

association with tax compliance, and the relationship is not strong enough to be considered statistically meaningful in this study.

Discussion of Findings

The first finding shows a strong and significant negative relationship between taxation barriers and tax compliance in Nigeria's informal digital economy ($\rho = -0.735$, $p = 0.000$). This outcome suggests that as structural and operational difficulties increase, compliance levels tend to fall sharply. The result can be explained by persistent challenges such as weak digital identification systems, poor data availability, inadequate technological capacity, and low awareness among operators, which make it difficult for tax authorities to track and engage participants in the informal digital space. These conditions reduce the ease of compliance and create avoidance tendencies among operators. This finding is consistent with Aina et al. (2025), who reported that weak enforcement systems, poor record keeping, and socio-cultural barriers reduce tax compliance in Nigeria's informal sector. It also aligns with Erimwinorosee et al. (2025), who highlighted jurisdictional and technological limitations as major obstacles to effective digital taxation. Similarly, Dagunduro et al. (2025) found that weak administrative systems negatively affect compliance in the informal sector. Ackom et al. (2025) further support this outcome by showing that inefficiencies in tax systems weaken fiscal performance, while Odia et al. (2022) noted that gaps in regulatory enforcement contribute to revenue leakages in digital taxation.

The second finding reveals a very weak and statistically insignificant positive relationship between existing policy measures and tax compliance ($\rho = 0.033$, $p = 0.560$). This suggests that current policy interventions have not been strong enough to meaningfully influence compliance behaviour within Nigeria's informal digital economy. The result may be explained by issues such as weak implementation, limited accessibility of digital tax platforms, low awareness among informal operators, and insufficient institutional capacity to enforce policies effectively. Although several digital tax initiatives exist, their impact remains minimal due to poor adoption and trust challenges within the informal sector. This finding is supported by Aina et al. (2025), who observed that policy initiatives such as digital tools and tax reforms require stronger implementation to achieve meaningful compliance outcomes. It also aligns with Erimwinorosee et al. (2025), who reported weak implementation of Significant Economic Presence rules due to institutional limitations. In contrast, Dagunduro et al. (2025) and Akinboboye et al. (2025) found that digital tax systems can improve compliance when properly implemented, suggesting that the weak result may be due to implementation gaps rather than policy design alone. Similarly, Olaniyi et al. (2025) and Mpofu (2022) noted that while digital taxation frameworks exist, their effectiveness is often reduced by enforcement difficulties and infrastructural weaknesses.

5.0 Conclusion and Recommendation

The results show that conditions within Nigeria's informal digital economy are closely tied to how taxation challenges are experienced and managed in practice. The strong negative association between taxation barriers and tax compliance suggests that structural and operational difficulties within the system continue to shape how individuals and businesses respond to tax obligations. When issues such as poor data availability, weak identification systems, limited technological capacity, and poor record keeping are present, compliance behaviour tends to decline across the sector. At the same time, the very weak and statistically insignificant association between existing policy measures and tax compliance suggests that current interventions have not been strong

enough to consistently influence behaviour within the informal digital space. This points to a situation where administrative realities and compliance outcomes are not yet fully aligned with policy intentions. It also reflects a context where digital economic activities are expanding faster than the systems designed to regulate them, leaving gaps in enforcement and monitoring. As a result, tax outcomes in this sector appear to be shaped more by systemic constraints than by formal policy tools, indicating a disconnect between regulatory structures and actual practices within the informal digital environment in Nigeria. The recommendations of this study are directly based on the two major findings.

Recommendation Based on the Finding on Taxation Barriers

Since taxation barriers were found to have a strong and significant negative relationship with tax compliance, the Nigerian Revenue Service should prioritise the reduction of the major administrative and technological barriers affecting the taxation of the informal digital economy. In particular, the Service should strengthen data integration and taxpayer identification systems by improving the linkage between relevant identity databases, tax records, and digital economic activities. It should also improve its technological capacity for monitoring and administering digital transactions and increase taxpayer awareness regarding tax obligations. Reducing these barriers would improve the ability of tax authorities to identify and engage informal digital operators, thereby creating conditions that are more conducive to voluntary tax compliance.

Recommendation Based on the Finding on Existing Policy Measures

Since existing policy measures were found to have a very weak and statistically insignificant relationship with tax compliance, the Nigerian Revenue Service and relevant tax policy authorities should focus on improving the implementation and effectiveness of existing policy measures rather than merely introducing additional reforms. Existing electronic tax systems and other digital tax initiatives should be made simpler, more accessible, reliable, and easier for informal digital operators to use. In addition, the implementation of these measures should be supported by clearer communication, increased taxpayer education, adequate technological infrastructure, and consistent enforcement. Strengthening the practical implementation of existing policy measures would increase their likelihood of producing a meaningful influence on tax compliance within the informal digital economy.

Contribution to Knowledge

This study adds to existing literature by shifting attention to the perspective of tax administration officials, an area that has received limited focus in earlier studies. While previous works by Aina et al. (2025), Erimwinorosee et al. (2025), Adeola et al. (2025), Akinboboye et al. (2025), Olaniyi et al. (2025), Dagunduro et al. (2025), Ackom et al. (2025), Munjeyi et al. (2024), Mpofu (2022), and Odia et al. (2022) mainly examined policy issues, legal structures, digital taxation systems, and experiences of informal sector operators, this study focuses on staff within the revenue service who are directly involved in enforcement and implementation. It also moves beyond descriptive and doctrinal approaches commonly used in earlier research by applying a quantitative method using Spearman's Rank Order Correlation to examine the relationship between taxation barriers and policy responses. In doing so, it links administrative realities with compliance challenges in a way that has not been adequately explored in the Nigerian context. The study therefore provides empirical evidence from an institutional viewpoint, helping to bridge the gap between policy formulation and practical tax administration within the informal digital economy.

Limitations of the Study and Suggestion for Further Studies

The study was limited to staff of the Nigerian Revenue Service, which means the findings may not fully represent the views of other stakeholders such as informal digital operators and platform owners. The use of snowball sampling may also affect how evenly participants were selected. In addition, the study relied on self-reported answers, which may not always reflect true situations. Time and resource limits also made it difficult to reach a wider population across all regions of Nigeria, which may affect how widely the results can be applied.

Future studies should consider including other groups such as small business owners, freelancers, and digital platform users to get a fuller picture of the issue. Researchers can also expand the study to different regions in Nigeria to compare results across areas. Using mixed methods such as interviews and surveys together may give deeper understanding. Longitudinal studies can also be carried out to see how taxation barriers change over time with new policies and digital systems.

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