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### DIGITALIZED ACCOUNTING PRACTICES AND ACCOUNTABILITY OF MDAs IN NIGERIA: MODERATING EFFECT OF INSTITUTIONAL QUALITY

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#### **Abstract**

*The public sector has long struggled with issues such as inefficiency, lack of transparency, and widespread corruption. In Nigeria, government agencies are increasingly adopting digitalized accounting practices to enhance efficiency and reduce corruption. However, the impact of institutional quality on the effectiveness of these practices in ensuring accountability in the public sector remains unclear. This study therefore, examines the moderating effect of institutional quality on the relationship between digitalized accounting practice and accountability of Ministries, Departments, and Agencies (MDAs) in Nigeria. Utilizing a survey research design, data were collected from 233 auditors across various ranks within the Office of the Auditor-General of the Federation. Structural equation modeling (SEM) was used to assess the individual and joint moderating effects of institutional quality. The results indicate that institutional quality significantly moderates the relationship between digital accounting practices and accountability in MDAs. Specifically, the interaction of institutional quality with digital tax administration ( $p = 0.012$ ), digital treasury management ( $p < 0.001$ ), and digital financial management ( $p < 0.001$ ) demonstrated a positive significant effect on accountability. However, the joint moderating effect of institutional quality was marginally significant ( $p = 0.057$ ). The study concludes that institutional quality significantly influences the relationship between specific components of digitalized accounting practices and accountability. It recommends among others that the National Assembly develops comprehensive regulatory frameworks that support digital innovations and provides standards for their implementation, including guidelines for integrating digital accounting systems into existing processes to ensure consistency and reliability.*

**Keyword:** Digitalized Accounting Practices, Institutional Quality, Accountability, MDAs, Public Sector

#### **INTRODUCTION**

Accountability in the public sector serves as a fundamental pillar of governance, ensuring that public officials are answerable for their actions, particularly in the stewardship of public resources. It encompasses the core principles of transparency, efficiency, and integrity, which are essential for building public trust and ensuring that government institutions effectively serve the needs of the populace. Over time, digitalization has emerged as a transformative approach in enhancing accountability across the global public sector, providing tools for real-time financial monitoring and significantly reducing corruption (Gascó & Martínez, 2019). The adoption of digital

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accounting systems has become a vital aspect of promoting good governance, particularly in countries with robust institutional frameworks (Diamond & Khemani, 2006).

In Nigeria, the public sector has long struggled with issues such as inefficiency, lack of transparency, and widespread corruption. Financial scandals within Ministries, Departments, and Agencies (MDAs), including cases of budget mismanagement, poor tax collection, and misappropriation of public funds, are common (Oladimeji & Adetula, 2021). In an attempt to address these challenges, the Nigerian government has implemented several digital reforms aimed at strengthening accountability, including the Treasury Single Account (TSA) and the Integrated Payroll and Personnel Information System (IPPIS). These reforms aim to consolidate public revenue, eliminate ghost workers, and enable real-time monitoring of financial activities (Ihenyen & Robert, 2023; Ezinando, 2020). However, the outcome of these initiatives has been mixed, as issues such as non-compliance, weak institutional backing, and slow adoption by certain MDAs persist (Rotimi et al., 2021).

Institutional quality plays a critical role in determining the success of digital accounting practices in improving accountability. Strong institutions provide the necessary support for the implementation, monitoring, and maintenance of digital systems, ensuring that these reforms achieve their intended outcomes. In the absence of strong institutional frameworks, digitalization efforts risk being undermined by inefficiencies and misuse of resources (Shehu, Teru & Musa, 2020). For example, while the TSA has curbed revenue leakages, some MDAs continue to operate outside the system, and the IPPIS has faced issues of data inaccuracy and system compatibility (Olaoye & Talabi, 2019; Folorunso & Simeon, 2021). These challenges underscore the importance of institutional quality in supporting the digitalization of public financial management.

Given Nigeria's ongoing challenges with public sector accountability, it is crucial to examine the extent to which digital accounting practice has enhanced accountability of Ministries, Departments, and Agencies (MDAs), particularly within the current institutional quality structures in Nigeria. Therefore, this study aims to investigate the moderating effect of institutional quality on the relationship between digital accounting practices and MDA accountability. The specific objectives include: assessing the influence of institutional quality on the overall impact of digital accounting practice on MDA accountability in Nigeria; and investigating the role of individual components of institutional quality in shaping the relationship between digital accounting practice and MDA accountability. By examining these dynamics, the research aims to contribute valuable insights into the effective integration of digital tools within public financial management, ultimately fostering greater accountability and trust in governance.

### ***Research Hypotheses***

The hypotheses for this study are formulated as follows:

**H<sub>01</sub>:** The individual components of institutional quality do not significantly moderate, the relationship between the overall impact of digital accounting practice and the accountability of Ministries, Departments, and Agencies (MDAs) in Nigeria.

**H<sub>02</sub>:** The joint effects of institutional quality do not significantly moderate the relationship between the overall impact of digital accounting practice and the accountability of Ministries, Departments, and Agencies (MDAs) in Nigeria.

## LITERATURE REVIEW

The literature review provides a thorough examination of existing research on institutional quality and its critical role in shaping accountability within government entities. This section explores the conceptual clarification, theoretical foundations and empirical studies that investigate the moderation effects of institutional quality on the relationship between digitalized accounting practices and accountability of MDAs in Nigeria.

### ***Accountability of Ministries Department and Agencies (MDAs)***

Government service delivery accountability entails officials and government entities ensuring the quality and responsiveness of services to meet citizens' needs. Decision-makers, both collective and individual, bear responsibility for their choices (Frank, 2022). Transparency, explanation, and the potential for sanctions characterize this accountability. Effective remedies exist against maladministration and civil rights violations by local authorities. Accountability necessitates the transmission of information, its receipt, and subsequent actions for performance improvement (Akotia, 2016; Amahalu et al., 2022).

### ***Digitalization of Government Accounting Practice***

In Nigeria, the digitalization of government accounting practices has emerged as a response to demands for more efficient, transparent, and accountable financial management. The rapid development of Information and Communication Technology (ICT) has prompted Ministries, Departments, and Agencies (MDAs) to adopt digital accounting systems to enhance their operations. Initiatives like the Government Integrated Financial Management Information System (GIFMIS) and the Treasury Single Account (TSA) have significantly transformed public fund management. These systems enable MDAs to consolidate accounts onto a single platform, improving oversight and control. Notably, the TSA has been recognized for enhancing cash management and curbing the diversion of public funds (Shehu et al., 2020; Echekoba et al., 2020).

### ***Institutional Quality***

Institutional quality pertains to the effectiveness of formal institutions, such as government bodies and regulatory agencies, in shaping economic and social outcomes through governance, transparency, and accountability (North, 1990). In Nigeria, the performance of Ministries, Departments, and Agencies (MDAs) is crucial for implementing government policies, and the institutional quality of these bodies directly impacts the government's ability to achieve developmental goals. However, Nigeria's public sector has faced significant criticism for inefficiency, corruption, and weak institutional frameworks, which obstruct accountability and effective governance (Adegbite & Nakajima, 2011). The World Governance Indicators (WGI) offer six benchmarks to assess institutional quality: voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption (Kaufmann et al., 2003). These indicators are particularly pertinent for Nigeria's MDAs, as they shed light on how institutional structures can support or hinder public sector accountability and governance.

- i. **Political Stability and Absence of Violence:** This indicator evaluates a nation's stability by focusing on political unrest and violence. In Nigeria's MDAs, political instability significantly disrupts governance structures and service delivery (Adenuga, 2023).
- ii. **Rule of Law in MDAs:** The rule of law is a fundamental pillar in Nigeria's public sector, influencing the effectiveness of legal institutions and regulatory enforcement. However, external pressures often hinder the proper implementation of these frameworks.

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iii. Control of Corruption: Corruption is pervasive within Nigeria's MDAs, affecting public trust and compliance with policies. Mahmood et al. (2022) noted that anti-corruption policies often struggle to address both systemic and individual-level corruption, particularly in public procurement and contract management.

iv. Regulatory Quality in MDAs: Regulatory quality measures the government's capacity to craft and implement effective policies. Agostino et al. (2020) emphasized that public administrators face challenges in balancing regulatory requirements with a rapidly changing economic landscape.

v. Government Effectiveness in MDAs: This aspect captures the quality of public services and civil service independence from political pressure. MDAs often experience bureaucratic inefficiency, struggling with political interference and complex service delivery systems (Garcia-Sanchez et al., 2013).

vi. Voice and Accountability in MDAs: This metric assesses citizens' ability to engage in governance and hold public officials accountable. Bovens (2007) argued that MDAs must establish systems aligned with democratic principles to ensure accountability.

The introduction of digitalized practices in MDAs holds promise for improving institutional quality by enhancing transparency, streamlining processes, and reducing corruption opportunities. However, the effectiveness of such initiatives depends on the strength of institutional frameworks (Rotimi et al., 2021).

### **Theoretical Framework**

To establish a solid theoretical foundation for understanding the moderating effect of institutional quality on the relationship between digital accounting practices and the accountability of MDAs in Nigeria, this study drew upon the Institutional Theory. The theory was developed by Meyer and Rowan (1977), to explore how organizational behavior is influenced by institutional norms and the quest for legitimacy. This theory posits that organizations, including MDAs, are shaped by external pressures such as regulatory requirements, legal norms, and societal expectations. The quality of institutional frameworks such as the rule of law, government effectiveness, and anti-corruption measures plays a crucial role in the successful implementation of digital tools. High-quality institutional frameworks support the effective use of digital technologies, thereby enhancing accountability (World Bank, 2021).

### **Empirical Studies**

Allison and Ndukwe (2021) evaluated the role of the TSA in enhancing public sector accountability in Nigeria. They found that the TSA promoted centralized and transparent revenue management, thus improving fiscal discipline. Content analysis was used, but the study's qualitative nature limited its generalizability. Adekoya et al. (2020) investigated the influence of control of corruption (COC) on tax compliance in South-West Nigeria, finding a positive relationship between COC and voluntary tax compliance. Trust in government and employment status also significantly influenced compliance, while demographic factors like gender, age, and educational level did not.

Berthelot (2020) focuses on African countries, finding that higher governance quality leads to improved accountability among public officials. The findings indicate that strong institutional frameworks are crucial for promoting accountability in the region. Soro (2020) analyzed the relationship between institutional quality and tax revenue in Côte d'Ivoire, finding that poor institutional quality and a large informal economy contribute to low tax mobilization. Other factors

like GDP per capita and education level positively influenced tax revenues, while trade openness had a negative impact. The study highlighted the need for higher institutional quality to improve tax revenue mobilization.

Wang (2016) investigates local governments in China and finds that improved institutional quality correlates with greater transparency and accountability in local government actions. The findings indicate that enhanced local governance mechanisms lead to better public service delivery and increased citizen trust. Arezki and Brueckner (2015) assessed the quality of governance in the Arab world and finds a significant relationship between governance quality and government accountability, particularly in the context of the Arab Spring. The findings highlight that heightened demands for accountability during this period are linked to governance improvements. Andrews (2010) emphasizes the need for strengthening institutions to enhance accountability and service delivery, arguing that effective governance mechanisms are critical for public sector accountability. The findings suggest that institutional capacity directly impacts the quality of service delivery.

### METHODOLOGY

The study employs a survey research design to collect data directly related to its primary objectives. Primary data were gathered from a population of 588 eligible auditors, ranked from Grade Level 12 to 17, within the Offices of the Auditor-General for the Federation (AuGF) as of December 2021. These auditors were selected for their extensive knowledge of the operational activities of Nigeria's ministries, departments, and agencies (MDAs) and their role in representing public interests through oversight functions with the National Assembly (Adeyemi & Fagbemi, 2011). Using the Krejcie and Morgan (1970) formula, a sample size of 233 was determined for the study.

A two-stage sampling technique was employed. The first stage utilized a stratified random sampling approach with proportionate allocation, ensuring appropriate sample sizes for each stratum. The second stage involved purposeful sampling, recognizing that not all population members would have equal chances of inclusion. This non-probability approach acknowledges potential biases in sample selection, leading to estimates with limited precision (Kothari, 2004; Zikmund et al., 2017). A breakdown of the sampling process is provided in Table 1.

**Table 1: Sample Size Apportionment**

Auditors' Rank	Population	Proportionate Stratified Sampling	Sample Size
AuGF	1	1/588x233	1
Director of Audit	22	22/588x233	8
Deputy Director Audit	50	50/588x233	19
Assistant Director	80	80/588x233	32
Chief Auditor	62	62/588x233	25
Chief Executive Officer	41	41/588x233	16
Assistant Chief Auditor	136	136/588x233	54
Assistant Chief Executive Officer	9	9/588x233	4
Principal Auditor	187	187/588x233	74
<b>Total</b>	<b>588</b>		<b>233</b>

*Source: Authors' Computation, 2024*

### Model Specification

This research extends and adapts the model initially proposed by Ezenwaka, Obi, and Okudo (2022), making targeted modifications to better align with the study's specific objectives and context. These adjustments enhance the model's applicability to the moderating effect of institutional quality on accountability of MDAs in Nigeria. The modified version of the model is specified as follow:

$$ACC_i = \beta_0 + \beta_1TEFR*IQ_i + \beta_2TCP*IQ_i + \beta_3TAAR*IQ_i + \beta_4EFT*IQ_i + \beta_5CAS*IQ_i + \beta_6ARP*IQ_i + \beta_7RTRM*IQ_i + \beta_8SDPM*IQ_i + \beta_9IOGS*IQ_i + \beta_{10}INVM*IQ_i + \beta_{11}ASSM*IQ_i + \beta_{12}BUP *IQ_i + \beta_{13}PRM*IQ_i + \beta_{14}FRT*IQ_i + + \beta_{15}PAU*IQ_i + \beta_{16}PIM*IQ_i + \beta_{17}PDI*IQ_i + \beta_{18}DMS*IQ_i + \beta_{19}FRE*IQ_i + \mu_i \dots \dots \dots (5)$$

Where;

ACC = Accountability of MDAs

$\beta_0$  = Constant

TEFR\*IQ = Interaction between TEFR and IQ

TCP\*IQ = Interaction between TCP and IQ

TAAR\*IQ = Interaction between TAAR and IQ

EFT\*IQ = Interaction between EFT and IQ

CAS\*IQ = Interaction between CAS and IQ

ARP\*IQ = Interaction between ARP and IQ

RTRM\*IQ = Interaction between RTRM and IQ

SDPM\*IQ = Interaction between SDPM and IQ

IOGS\*IQ = Interaction between IOGS and IQ

INVM\*IQ = Interaction between INVM and IQ

ASSM\*IQ = Interaction between ASSM and IQ

BUP \*IQ = Interaction between BUP and IQ

PRM\*IQ = Interaction between PRM and IQ

FRT\*IQ = Interaction between FRT and IQ

PAU\*IQ = Interaction between PAU and IQ

PIM\*IQ = Interaction between PIM and IQ

PDI\*IQ = Interaction between PDI and IQ

DMS\*IQ = Interaction between DMS and IQ

FRE\*IQ = Interaction between FRE and IQ

$\beta_1$  = The coefficient of TEFR, EFT, INVM, & PAU

$\beta_2$  = The coefficient of TCP, CAS, ASSM, & PIM

$\beta_3$  = The coefficient of TAAR, ARP, BUP, & PDI

$\beta_4$  = The coefficient of RTRM, PRM, & DMS

$\beta_5$  = The coefficient of SDPM, FRT, & FRE

$\beta_6$  = The coefficient of IOGS

$\mu$  = error term.

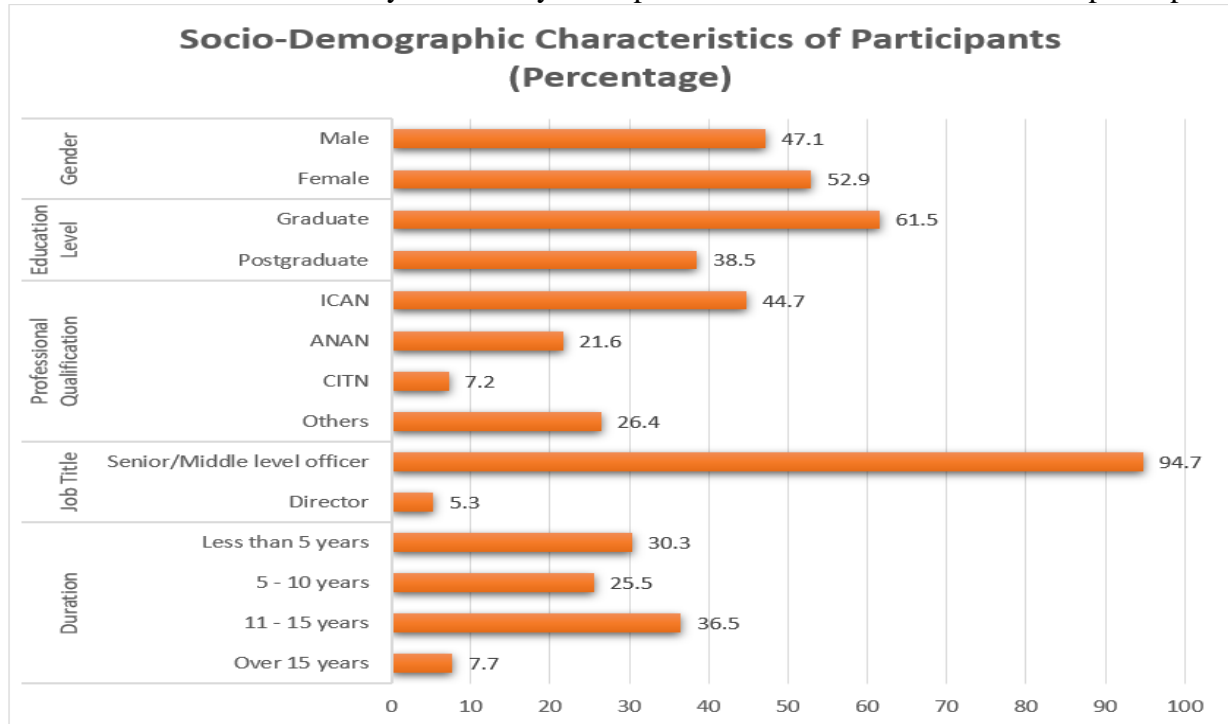
### Model Estimation Techniques

The research employed Ordered Logistic Regression, Ordinary Least Square (OLS) and Partial Least Square-based Structural Equation Modeling (PLS-SEM) as inferential statistical methods.

## RESULTS AND DISCUSSION

### Descriptive Result

The results of the descriptive analysis are presented in Figure 1 to describe the socio-demographic indicators included in the study. This analysis helps to understand the distribution of participants,



**Figure 1: Socio-Demographic Characteristics of the Respondents**

The results indicate a nearly equal gender distribution among employees in the Office of the Auditor General, with 52.9% being female and 47.1% male. In terms of educational qualifications, most respondents (61.5%) are graduates, while 38.5% hold postgraduate degrees. Regarding professional certifications, 44.7% possess ICAN, making it the most common certification, followed by 21.6% with ANAN and 7.2% with CITN. The majority of employees (94.7%) hold senior or middle-level positions, while 5.3% are directors. In terms of service years, 30.3% have less than 5 years of experience, 36.5% have 11-15 years, and 7.7% have over 15 years in service.

### Measurement Model

The quality of the constructs in this study was evaluated through a comprehensive assessment of the measurement model as presented in Table 2,3,4,5,6, and 7.

**Table 2: Factor loadings**

Indicators	Digital Personnel Mgt. Practice	Digital Tax Admin Practice	Digital Treasury Mgt. Practice	Institutional Quality	Public Sector Accountability	Digital Financial Management
FRT 1	0.727					
FRT 3	0.903					

INVM 1	0.622			
PRM 1	0.783			
TDM 3		0.702		
TDM 1		0.646		
PAU 3		0.63		
DIM 1		0.772		
TAAR 2			0.701	
TAAR 4			0.872	
TEFR 4			0.677	
CAS 3				0.826
EFT 1				0.609
RTRM 1				0.803
CC 1				0.788
CC 3				0.666
CC 2				0.776
GE 1				0.656
GE 2				0.582
GE 3				0.583

**Authors' Computation from SmartPLS (2024)**

An initial review of factor loadings presented in Table 2 indicate that certain items do not meet the recommended threshold of 0.50 (Hair et al., 2016), resulting in their exclusion from further analysis. The retained factor loadings, as presented in Table 3, demonstrate a strong correlation with their corresponding factors, confirming their relevance and validity (Pett et al., 2003).

**Table 3: Multicollinearity Test**

Indicators	VIF
ADACC 2	2.212
ADACC 3	1.891
ADACC 1	2.498
CAS 3	1.324
CC 1	2.844
CC 3	2.956
CC 2	3.825
TDM 3	1.659
TDM 1	1.932
PAU 3	1.393
FACC 1	2.403
FACC 2	1.865
FACC 3	1.744
FACC 4	2.729
FRT 1	1.765
FRT 3	2.546
EFT 1	1.143
GE 1	3.928
GE 2	3.948

**Authors' Computation from SmartPLS (2024)**

Multicollinearity was assessed using the Variance Inflation Factor (VIF), Table 3 shows that all values remaining below the critical threshold of 5 (Hair et al., 2016). This finding indicates that multicollinearity is not an issue in this analysis (Fornell & Bookstein, 1982).

**Table 4: Construct reliability analysis (cronbach alpha and composite reliability)**

Constructs	Cronbach's alpha	Composite reliability
Digital Financial	0.764	0.811
Managements	0.742	0.728
Digital Personnel Mgt.	0.734	0.711
Practice	0.717	0.755
Digital Tax Admin. Practice		

Digital Treasury Mgt Practice	0.929	0.937
Institutional Quality	0.917	0.934
Public Sector Accountability		

***Authors' Computation (2024)***

Reliability was confirmed through both Cronbach's Alpha and Composite Reliability, with values exceeding the recommended threshold of 0.70 (Hair et al., 2011). Specifically, Cronbach's Alpha ranged from 0.717 to 0.929, while Composite Reliability values ranged from 0.711 to 0.937 as shown in Table 4. These results affirm the stability and consistency of the measurement instruments used (Mark, 1996).

**Table 5: Average Variance Extracted**

Average Variance Extracted	(AVE)
Digitalized Financial Management Practices (DFMP)	0.586
Digitalized Personnel Payroll Management Practice (DPMP)	0.760
Digitalized Tax Administration Practices (DTAP)	0.571
Digitalized Treasury Management Practices (DTMP)	0.566
Institutional Quality (IQ)	0.858
Public Sector Accountability (ACC)	0.552

***Authors' Computation from SmartPLS (2024)***

Convergent validity, which is critical for confirming that various measures of the same construct align, was evaluated using the Average Variance Extracted (AVE). The analysis in Table 5 revealed that all constructs, with a few exceptions, exhibited AVE values exceeding the threshold of 0.50, thereby affirming the presence of convergent validity (Fornell & Larcker, 1981; Bagozzi et al., 1991).

**Table 6: Discriminant Validity Heterotrait-Monotrait Ratio (HTMT)**

	DFMP	DPMP	DTAP	DTMP	IQ	ACC
DFMP						
DPMP	0.643					
DTAP	0.228	0.448				
DTMP	0.742	0.252	0.593			
IQ	0.226	0.347	0.315	0.409		
ACC	0.433	0.525	0.33	0.624	0.733	

***Authors' Computation from SmartPLS (2024)***

Discriminant validity was assessed through the Heterotrait-Monotrait Ratio (HTMT), revealing all values to be below the threshold of 0.85, which indicates the presence of distinct constructs (Westen & Rosenthal, 2003). Also, the Fornell and Larcker criterion further confirmed discriminant validity, as the square root of the Average Variance Extracted (AVE) for each construct surpassed its correlations with other constructs as shown in Table 6.

**Moderating effects of Institutional Quality (Structural Models)**

This session is divided into two parts in line with the specific objectives of this study which are to assess the influence of institutional quality on the overall impact of digital accounting practices on MDA accountability in Nigeria; and investigate the role of individual components of institutional quality in shaping the relationship between digital accounting practices and MDA accountability.

Table 9 shows the moderating effect of institutional quality on the relationship between digital accounting practice and accountability of MDAs in Nigeria (Joint effects). The interaction term reveals a negative relationship between institutional quality and accountability, with a coefficient of -0.130. The t-statistic of 1.904 and p-value of 0.057 suggest that this relationship is marginally statistically significant, indicating that institutional quality might slightly reduce the positive impact of digital accounting practices on accountability. These results indicate that while digital accounting practices significantly enhance accountability in MDAs, the moderating effect of institutional quality suggests a potential negative influence. Thus, the result does not provide strong support for the hypothesis that institutional quality jointly moderates the relationship between digital accounting practices and accountability. Figure 2 visually illustrates this joint moderating effect.

**Table 7: Joint moderating effect of institutional quality on the relationship between the digital accounting practice and accountability of MDAs in Nigeria (Joint effects)**

Variables	Coefficient	T statistics	P values
Institutional Quality x Digital Accounting Practice -> Accountability in MDAs	-0.130	1.904	0.057

Source: Authors' Computation (2024)

**Figure 2: Visual illustration of the moderating effect of institutional quality on the relationship between digital accounting practice and accountability of MDAs in Nigeria (Joint effects)**

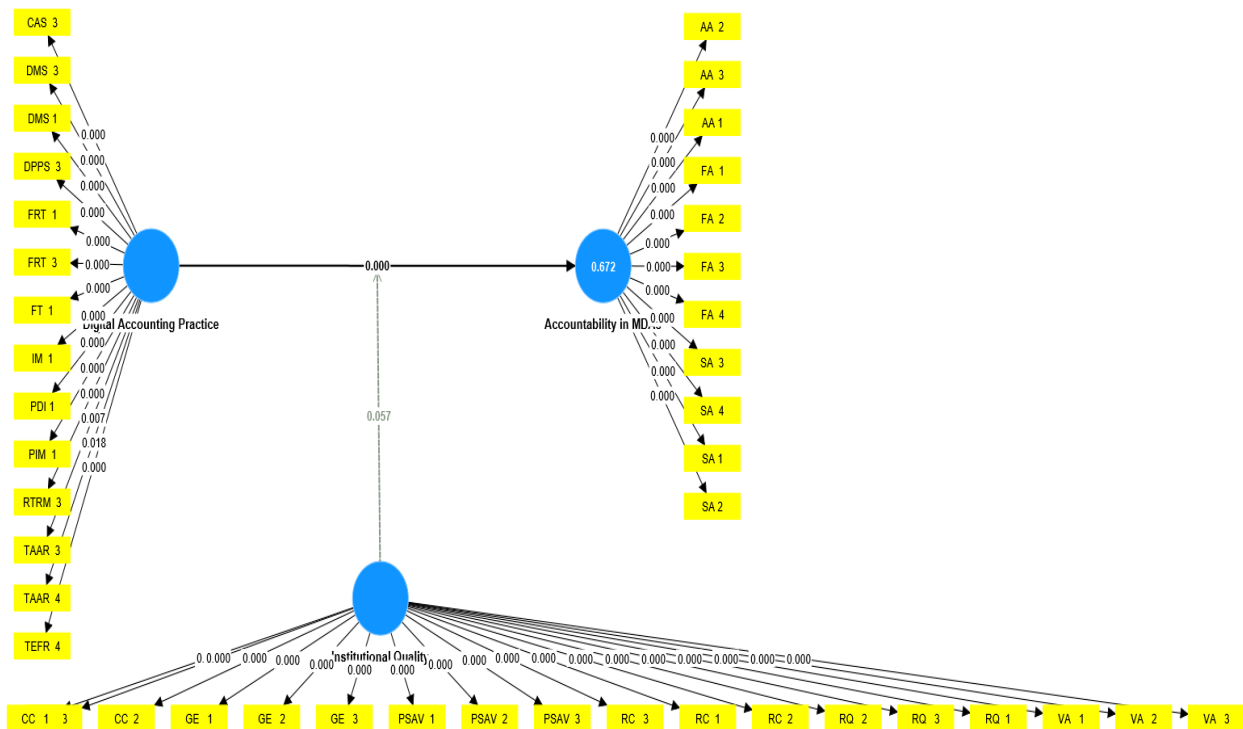




Table 8 presents the moderating effects of individual components of institutional quality on the relationship between the composite digital accounting practices and accountability of MDAs in Nigeria. Each institutional component’s coefficient, t-statistic, and p-value offer insights into their influence. The result reveals that the interaction effect between political stability and digital accounting practices shows a positive, though statistically insignificant, relationship with accountability (coefficient = 0.098, p = 0.198). Also, rule of law exhibits a negative but statistically insignificant interaction with digital accounting practices (coefficient = -0.086, p = 0.360), indicating neither of these factors significantly moderates the relationship with accountability.

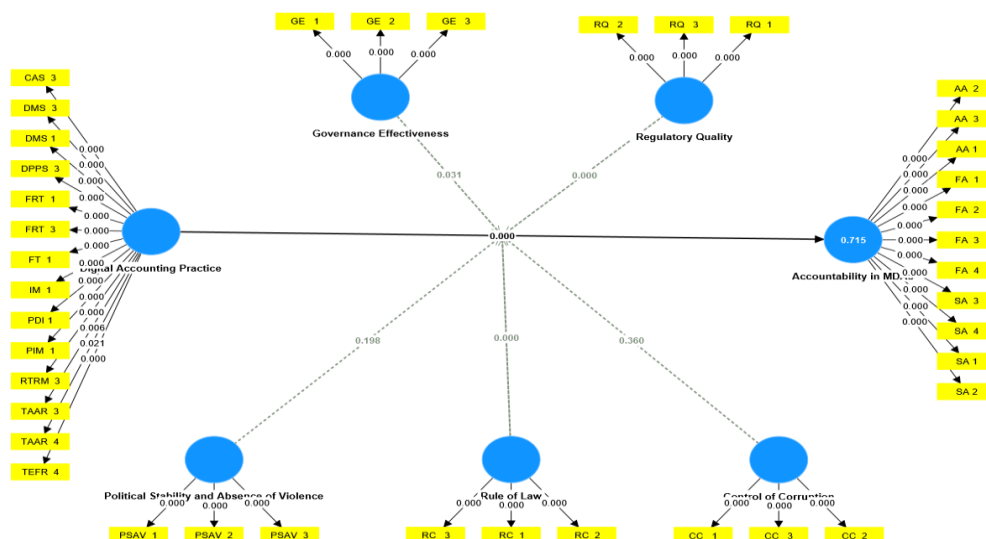
However, control of corruption demonstrates a significant negative interaction, with a coefficient of -0.456 (p = 0.000), suggesting that higher levels of corruption control reduce the positive impact of digital accounting practices on accountability in MDAs. On the other hand, regulatory quality shows a strong positive moderating effect, with a coefficient of 0.375 (p = 0.000), indicating that better regulatory frameworks enhance the benefits of digital accounting on accountability. Governance effectiveness presents a significant negative interaction (coefficient = -0.084, p = 0.031), suggesting it may diminish the effectiveness of digital accounting practices in improving accountability. Figure 3 visually illustrates the individual moderating effects of these components on the relationship between digital accounting practices and accountability in MDAs.

Table 8 Moderating effect of individual components of institutional quality on the relationship between the composite digital accounting practice and accountability of MDAs in Nigeria (Individual effects of Institutional Quality)

<b>Variables</b>	<b>Coefficient</b>	<b>T statistics</b>	<b>P values</b>
Political Stability and Absence of Violence x Digital Accounting Practice -> Accountability in MDAs	0.098	1.288	0.198
Rule of Law x Digital Accounting Practice -> Accountability in MDAs	-0.086	0.916	0.360
Control of Corruption x Digital Accounting Practice -> Accountability in MDAs	-0.456	4.054	0.000
Regulatory Quality x Digital Accounting Practice -> Accountability in MDAs	0.375	4.475	0.000
Governance Effectiveness x Digital Accounting Practice -> Accountability in MDAs	-0.084	2.164	0.031

*Source: Authors’ Computation, (2024)*

***Figure 3: Moderating effect of individual components of institutional quality on the relationship between the composite digital accounting practice and accountability of MDAs in Nigeria (Individual effects)***



### Discussion of Findings

The study applied structural equation modeling to examine the moderating effects of institutional quality on the relationship between digital accounting practices and accountability in Nigerian MDAs. Specifically investigating the joint and individual moderating effect of institutional quality on the relationship between digital accounting and accountability of MDAs in Nigeria.

The first specific objective was to assess the influence of institutional quality on the overall impact of digital accounting practices on the accountability of Ministries, Departments, and Agencies (MDAs) in Nigeria. The findings indicated that institutional quality has a marginally significant negative moderating effect, with a coefficient of -0.130 (t-statistic = 1.904, p-value = 0.057). This suggests that higher levels of institutional quality may slightly diminish the positive impact of digital accounting practices on accountability. The findings corroborate the outcomes reported by Yaki et al. (2019), Folorunso and Simeon (2021), Okoronkwo (2021), Uyanah et al. (2021), and Olowu (2022), as well as Ahmed et al. (2023), emphasizing the importance of institutional quality in promoting effective and accountable governance. This unexpected outcome can be attributed to the rigidities and complexities introduced by stringent institutional standards, which may hinder the flexibility and adaptability required for effective digital accounting implementation (Acemoglu et al., 2019; North, 2020; Warren et al., 2021). The findings reveal the need for a balanced approach, where institutional quality enhances rather than constrains innovative practices like digital accounting.

The second specific objective revealed an in-depth analysis based on the individual components of institutional quality. The interaction between control of corruption and digital accounting practices shows a significant negative relationship with accountability (coefficient = -0.456, t-statistic = 4.054, p-value = 0.000), suggesting that while anti-corruption measures strengthen accountability, they may inadvertently reduce the effectiveness of digital systems due to bureaucratic and compliance burdens (Mauro et al., 2021; Kaufmann et al., 2020). On the other hand, regulatory quality positively moderates the relationship, with a significant positive coefficient (0.375, t-statistic = 4.475, p-value = 0.000), indicating that clear regulatory frameworks support digital innovations by providing necessary standards for effective implementation (Djankov et al., 2017; La Porta et al., 2018). While political stability positively affects accountability (coefficient = 0.188, t-statistic = 3.081, p-value = 0.002), its interaction with digital accounting practices is not significant (coefficient = 0.098, t-statistic = 1.288, p-

value = 0.198), suggesting that political stability alone does not significantly influence the effectiveness of digital systems (Keefer et al., 2019). Governance effectiveness negatively moderates the relationship (coefficient = -0.084, t-statistic = 2.164, p-value = 0.031), implying that stringent governance protocols may restrict the adaptability of digital accounting systems, limiting their impact on accountability (Kaufmann et al., 2020). In conclusion, the study underscores the importance of a supportive institutional environment, particularly in regulatory quality to maximize the benefits of digital accounting practices in enhancing accountability in MDAs.

### CONCLUSION AND RECOMMENDATIONS

Based on the summarized findings of this study, this study concludes that the relationship between digital accounting practices and accountability within Nigerian Ministries, Departments, and Agencies (MDAs) is intricately influenced by institutional quality. While digital accounting practices significantly enhance accountability, the presence of high institutional quality introduces constraints that may diminish this positive impact, particularly through factors such as the control of corruption and governance effectiveness. Conversely, robust regulatory quality is essential for amplifying the benefits of digital innovations.

This conclusion aligns closely with Institutional Theory, which posits that the behavior of organizations is heavily shaped by the formal and informal rules, norms, and structures within their environment. High institutional quality, characterized by effective governance and regulatory frameworks, can serve as a facilitator or a barrier to the adoption of new practices. In this context, while digital accounting practices offer substantial improvements in accountability, their effectiveness is contingent upon the surrounding institutional landscape. Therefore, the need for a balanced institutional framework is underscored, one that enhances flexibility and adaptability, thereby enabling the effective implementation of digital accounting systems. This perspective emphasizes the interplay between technology and institutions, highlighting that successful integration of digital innovations in accounting necessitates a supportive institutional environment.

Based on the findings of this study, as well as the conclusions that emerged from the findings, the following recommendations are made to improve accountability in Ministries, Departments, and Agencies in Nigeria.

- i. Given the significant negative relationship between the control of corruption and the effectiveness of digital accounting practices, it is crucial to review existing anti-corruption policies. The federal government should consider streamlining compliance requirements and reducing bureaucratic burdens associated with these measures to ensure that they do not undermine the implementation of digital systems. This can be achieved by utilizing technology to enhance compliance while minimizing manual processes.
- ii. The positive moderating effect of regulatory quality on digital accounting practices highlights the importance of clear and effective regulations. The National Assembly should work towards developing comprehensive regulatory frameworks that not only support digital innovations but also provide necessary standards for their implementation. This includes providing guidelines for the integration of digital accounting systems into existing processes to ensure consistency and reliability.
- iii. The finding that governance effectiveness negatively moderates the relationship between digital accounting practices and accountability indicates the need for a more flexible approach to governance. It is recommended that MDAs adopt adaptive

governance frameworks that allow for innovation while maintaining accountability. This could involve periodic reviews of governance protocols to ensure they remain relevant and conducive to digital transformation.

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