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ELECTRONIC VOTING IN NIGERIA: LEGAL CHALLENGES AND REFORM IMPERATIVES

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ABSTRACT

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Electronic voting (e-voting) refers to the use of electronic technologies in the processes of voter accreditation, voting, vote counting, and result transmission. In Nigeria, the Electoral Act 2022 (as amended) provides the principal legal basis for the deployment of technology in electoral processes, including the Bimodal Voter Accreditation System (BVAS) and the INEC Result Viewing Portal (IREV). However, the challenges experienced during the 2023 general elections raised significant concerns regarding the effectiveness, reliability, legal adequacy, and security of electoral technologies. This study examines the prospects of adopting comprehensive e-voting in Nigeria and evaluates the need to strengthen the existing legal framework to provide clear legal validity, regulation, and safeguards for electronic voting. The study adopts a doctrinal/qualitative research methodology, relying on relevant legislation, judicial decisions, scholarly literature, policy documents, and other authoritative sources. The study finds that e-voting has considerable potential to enhance electoral transparency, efficiency, accuracy, inclusiveness, and credibility by reducing human intervention, electoral fraud, manipulation, and delays associated with manual voting and result collation. Existing technological initiatives, particularly BVAS and electronic transmission of results, provide a foundation for further digital transformation of Nigeria's electoral system. However, significant obstacles remain, including inadequate ICT infrastructure, unreliable electricity supply, limited digital literacy, cybersecurity threats, inadequate technological capacity, public distrust, and the absence of a comprehensive legal framework specifically governing e-voting. These challenges are particularly significant in rural and underserved communities. The study therefore recommends comprehensive legislative reform to establish clear rules governing e-voting, cybersecurity, data protection, system verification, electronic evidence, auditability, and dispute resolution. It further recommends investment in digital infrastructure, reliable electricity, cybersecurity systems, technical capacity, and nationwide voter education. The study concludes that, if supported by robust legislation, secure technology, institutional capacity, and public confidence, e-voting can significantly strengthen Nigeria's electoral integrity and contribute to a more transparent, credible, inclusive, and accountable democratic system.

Keywords: Electronic Voting; Electoral Technology; Electoral Act 2022; BVAS; Cybersecurity; Electoral Integrity.

Introduction

Elections form the cornerstone of every democracy. They provide the means through which citizens exercise their right to elect leaders of their choice, ensuring the smooth transfer of power and fostering accountability.¹ In Nigeria, as with many other developing democracies, the electoral process has been fraught with numerous challenges over the years, ranging from electoral fraud and voter suppression to logistical inefficiencies and violence.² There is hardly any election in Nigeria where there is no complaint of election violence and malpractices.

Weak electoral process always gives room for crises and the aftermath effect is weak democracy, unstable political system and illegitimate government.³ Thus, the people's confidence, trust and interest in participating in the choice of who they vote for and entrust their power to carry on with legitimate authority to govern them is basically eroded. The consequence of manual electoral process does not only create room for desperate politicians and corrupt election officials to manipulate election results but also create room for the installation incompetent and mediocre leaders and illegitimate government.⁴ These challenges have on several occasions, undermined the credibility of election outcomes, leading to post-election conflicts and litigation.⁵

In the face of these challenges, the adoption of technology has been proposed as an alternative means to enhance transparency, reduce electoral malpractices, and improve the efficiency of elections.⁶ This shift towards electronic voting and e-technology is a growing trend in recent times as it reflects a global trend in which governments are increasingly leveraging digital tools to streamline electoral processes. Electronic voting refers to the use of electronic systems and technology to aid the voting candidates in election

including the counting of votes while electronic technology in elections includes a variety of tools such as biometric voter registration (BVR), electronic voting machines (EVMs),⁷ and the electronic transmission of results, all aimed at ensuring a free, fair, and credible electoral process.⁸

From the foregoing, what is obtainable in Nigeria is short of electronic voting as we do not implore the use of electronic voting in Nigeria. Regardless, Nigeria has largely adopted the use of technology in its electoral practices with the aim of ensuring a transparent and credible election, hence the insistence of INEC on the use of (BVAS) and (IREV) in the gubernatorial elections in the last two years and the 2023 general elections.

The article aims to carry out qualitative (doctrinal) based research to analyse the adoption of technology in Nigeria's electoral practices. The work will explore the state of electronic voting in Nigeria, examining whether Nigeria has a legal framework that provides for electronic voting and whether electronic voting has been practiced in Nigeria. It will further examine e-voting as a potential remedy to electoral shortcomings giving reasons why it should be adopted, factors to be considered before transitioning into electronic voting, the likely challenges of such transition and possible recommendations to identified challenges.

Overview of Electronic Technology in Electoral Practices Nigeria

Nigeria has gradually integrated various forms of electronic technology into its electoral processes. This journey began with the introduction of the Biometric Voter Registration (BVR) system in 2011,⁹ by the Independent National Electoral Commission (INEC), a system designed to eliminate voter impersonation and multiple voting. The BVR system captures voters' biometric data, including their fingerprints, during the registration process. This information is stored in a central database, which can then be used to verify voters at polling units during elections.¹⁰

The next significant technological advancement was the introduction of Smart Card Readers (SCRs) during the 2015 general elections.

¹ Robinson Tombari Sibe and Christian Kaunert 'Technology, Cyber Security and the 2023 Elections in Nigeria' *Journal of African Elections* (2023) 22 (2) 68-95 DOI: 10.20940/JAE/2023/v22i2a4 accessed 05/06/26

² ibid

³ Ibibia Lucky Worika, 'Corruption and Good Governance Challenge in Nigeria: What Are We Not Doing Right?' *LASJURE* (2022) 3 (2) 152-162 <https://heinonline> accessed 05/06/26

⁴ ibid

⁵ Peter, ThankGod Oyinmiebi and Preye Kuro Inokoba, 'Electoral technology and Credible Elections in Nigeria: A Study of the 2023 Presidential Election' *KDJAS* (2023) 2 (1) 56-71 <https://www.researchgate.net/publication/378680030> accessed 05/06/26

⁶ ibid

⁷ ibid

⁸ Robinson Tombari Sibe and Christian Kaunert ibid

⁹ ibid

¹⁰ Peter, ThankGod Oyinmiebi and Preye Kuro Inokoba, ibid

The smart card reader is a portable device that reads Permanent Voter Cards (PVCs) and compares the information on the card with the voter's biometric data in the database. This step was taken to further curb instances of impersonation and underage voting, both of which had been major concerns in previous elections.¹¹

In addition to these technologies, the Independent National Electoral Commission (INEC) has piloted the electronic transmission of results in the recently concluded 2023 general elections, the enactment of the Electoral Act, 2023 did not only solidify INEC legally but also empowered INEC's usage of f Bimodal Voters Accreditation System (BVAS) and the INEC Result Viewing Portal (IREV) in Nigeria's electoral process. The BVAS uses two biometric methods which are the fingerprint scanning and facial recognition to verify the identity of voters, the BVAS firstly authenticates the voters using biometric, it is also function as a voter accreditation machine to prevent multiple voting. After the voting process, BVAS is used to capture images of the result sheets at each polling unit and then finally used to transmit election results to INEC's central server in real-time via the internet.

This introduction of technology into Nigeria's electoral system was intended to reduce the risk of tampering during the manual collation process.¹² Despite these advancements, Nigeria's e-technology adoption remains partial. Full-scale electronic voting, for instance, is yet to be implemented due to concerns about infrastructure, cybersecurity, and the readiness of the Nigerian electorate.¹³ However, the foundation has been laid, and efforts to deepen the integration of technology into the electoral process are ongoing.

The Legal Framework Supporting Electronic - Technology in Election

Emerging use of technology in electoral processes in Nigeria must be regulated by laws enacted thereby deriving legitimacy from these laws. The Nigerian legal system provides a framework for the use of e-technology in elections. The 1999 Constitution of the Federal Republic of Nigeria (as amended), the Electoral Act 2022 (as amended) and the Regulations and Guidelines for Election 2022.

Form the basis of election-related legislation in Nigeria.¹⁴

¹¹ *ibid*

¹² Robinson Tombari Sibe and Christian Kaunert *ibid*

¹³ *ibid*

¹⁴ Daniel Taye Medoye and Mustafa Adedeji Tukur 'Nigerian Elections and Democracy in the Digital Age' (2022) 1-15 available at DOI:

The Constitution gives INEC the mandate to conduct elections in Nigeria.¹⁵ The Electoral Act empowers INEC to deploy technology for voter registration, accreditation, and result collation.¹⁶

The Electoral Act 2022 is the primary legislation for the conduct of elections in Nigeria, in examining the key provisions of the Act, the commissions has the mandate to provide suitable boxes, electronic voting machines, or other voting devices for conducting elections¹⁷, it further requires that the president officer uses a smart card reader or any other technological device prescribed by the commission to verify, confirm, authenticate, and accredit voters.¹⁸ In exercise of the powers conferred by the Act on INEC to decide whatever technology they deem fit to utilize during elections, INEC passed the Regulation and Guidelines for Election 2022 which incorporated several provisions promoting the use of technology in elections.

The Regulations and Guidelines provide that voting shall be in accordance with provisions of the Regulations¹⁹ and any other manual as may be issued by the Commission.²⁰ Persons intending to vote must first be verified with the use of the BVAS or any other 'device' as prescribed by the commission;²¹ this is a clear mandatory use of Bimodal Voter Accreditation System (BVAS).

Accreditation is done via the use of the BVAS by matching a voter's fingerprints or face (facial recognition) for the purpose of authentication,²² this is a technology adopted for the first time in elections in 2022 and the 2023 general elections, where voters are accredited with the use of technology to prevent the possibility of over voting or double voting by a voter. The BVAS includes the technological capacity to read the bar code on the back of the PVC or the QR Code against the name of the voter.²³

<http://dx.doi.org/10.5772/intechopen.105073>

accessed

05/06/26

¹⁵ Section 153 (f) and Paragraph 15 of Part 1 of the 3rd Schedule to the Constitution of the Federal Republic of Nigeria 1999 (as amended)

¹⁶ Section 47 Electoral Act 2022 (as amended)

¹⁷ Section 41(1) *ibid*

¹⁸ Section 47(2)

¹⁹ Clause 1, Regulations and Guidelines for Election 2022

²⁰ Clause 13 *Ibid*

²¹ Clause 18

²² Clause 19 (a)(iii) *ibid*

²³ Clause 19 (d) (i) *ibid*

The commission also envisaged the possibility of technology failure and malfunction by providing that where there's a sustained malfunction of the BVAS, the election is immediately suspended and the relevant officers such as the LGA and RA Supervisors, the Supervisory Presiding Officer (SPO), the Electoral Officer (EO), and the Election Monitoring and Support Centre (EMSC) must be informed for replacement.²⁴ In the event of failure to replace the faulty BVAS, by 2:30pm, the president officers shall inform other relevant officers, file a similar report while the accreditation shall continue the next day.²⁵ In situations, where the BVAS is replaced, the data verified voters in the faulty BVAS are merged with the data in the replaced BVAS for the purposes of determining the number of verified voters.²⁶

Another requirement that is aided by technology in Nigerian electoral process is the electronic transmission of results from the polling unit directly to the collation system²⁷ while the BVAS is used to upload a scanned copy of the EC8A to the IREV.²⁸

Furthermore, the commission provides that an election result shall only be collated where the collation officer of such result ascertains that the number of accredited voters corresponds with the number as recorded in the BVAS and votes scored by political parties on the result sheet also corresponds with the result so electronically transmitted.²⁹ The adoption of technology has become very crucial to elections in Nigeria under the Act and the Regulations passed by INEC that it is provided that elections may postponed in a polling unit by reason of a faulty BVAS.³⁰

Credibility of electoral processes in Nigeria has been a question in almost every election held in the last decade especially under the fourth republic, the Independent National Electoral Commission (INEC)³¹ are particularly saddled with the function of ensuring credible, free and fair elections in Nigeria. The adoption of technology in electoral processes in Nigeria has become visible in biometric registration, voters verification and accreditation, Result verification system (CSRVS), and electronic transmission of results.³²

²⁴ Clause 23(a) (i-iv) *ibid*

²⁵ Clause 23 (b) *ibid*

²⁶ Clause 23 (c) *ibid*

²⁷ Clause 38 (i) *ibid*

²⁸ Clause 38 (ii) *ibid*

²⁹ Clause 48 (a) *ibid*

³⁰ Clause 60 *ibid*

³¹ Section I53 (f) Paragraph 15 of Part 1 of the 3rd Schedule to the Constitution *ibid*

³² Robinson Tombari Sibe and Christian Kaunert *ibid*

Challenges of Existing Voting System in Nigeria

One of the factors affecting the existing ballot system method of voting in Nigeria is the topographical terrain of some rural communities, mobilizing electoral materials to these locations is a herculean task to the electoral management body as well as communicating results from these locations.³³ The transportation of electoral results from these locations leads to numerous attacks by political thugs, aggrieved party members; or manipulation by the corrupt motivated officials which invariably questions the credibility of the continual adoption of the traditional ballot system.³⁴

Another issues which has put the concept of franchise to dispute in Nigeria is the voting possibility for a large number of immigrants who live outside the borders of Nigeria,³⁵ also the electoral personnel dispatched to various locations for electoral purposes during this period are disenfranchised since they cannot vote in their various constituencies around the country, absentee voting is not provided for in the existing legal framework, how then is their franchise protected?

Some many political actors (such as government agencies, civic and media groups, religious organisations and student unions) play important roles in sustaining democracy in Nigeria.³⁶ One potential effect of e voting is the increase of policy inclusion to include marginalised groups, the disabled and citizens resident outside the country as e voting will enable an easier, convenient and more accessible means of exercising their franchise during elections.³⁷

The degree of privilege enjoyed by officials to manually collate, announce and declare electoral result has led to inadequate transparency in the electoral process in Nigeria as the results are prone to human error and deliberate manipulations.³⁸ Electoral officials with corrupt intents and their accomplice can easily rig elections at every stage without notice. The obtainable electoral practice in Nigeria gives room for multiple voting, voting by non eligible persons and intimidation of voters.³⁹

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³³ Sabo Ahmad, Siti Alida and Rozita Arsha, *ibid*

³⁴ Robinson Tombari Sibe and Christian Kaunert, *ibid*

³⁵ Peter, ThankGod Oyinmiebi and Preye Kuro Inokoba, *ibid*

³⁶ Sabo Ahmad, Siti Alida and Rozita Arsha, *ibid*

³⁷ *ibid*

³⁸ *ibid*

³⁹ Peter, ThankGod Oyinmiebi and Preye Kuro Inokoba, *ibid*

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There's a need for transparency in an e voting system as elections are a multi-stakeholder activity involving several parties and citizens. Therefore, the automation of an electoral process must be seen to be transparent. There must also be trust in the electronic voting process as the automation of an electoral process must be seen to be transparent.

Pilot tests are usually best practice in large-scale technology deployments such as electronic voting.

This allows for the testing of such technology in a controlled environment where the variables can be better managed. Election deployments are large-scale

technology deployments; therefore, it is a good practice to test any election technology in smaller elections or in mock elections to check for the reliability of the system, end-to-end. Electoral technology should be robustly tested in a controlled environment. Pilot testing allows for reliability verification with minimal impact.

Electronic Voting: A Potential Remedy

Political leaders in Nigeria have been elected over the years via the process of election, nevertheless, the country has experienced a weak electoral voting system, it is usually characterized by lack of transparency, loss of confidence, thuggery and corruption.⁴⁷ With growth and development of technology, countries across the globe have resorted to the deploy of technology in their electoral process which includes e voting, technology is now used as a tool to ensure credibility in elections as opposed to the traditional ballot paper and other manual processes which have often been criticized as prone to human related errors and irregularities.⁴⁸

Where a poor electoral systems subsist, the possibility of political competition consequently leading to electoral violence increases.⁴⁹ Election in Nigeria is often characterized by breach of voters' register, intimidation and disfranchisement of voters, multiple and under aged voting, snatching or destruction of ballot boxes, miscomputation and falsification of results. Aside from stimulating electoral violence, electoral fraud degenerates to other consequences such as eroding the trust of the citizenry in a democratic system.⁵⁰

There have been demands for the full utilization of technology in electoral practices in Nigeria especially e voting to enhance electoral framework in Nigeria and invariable, democratic practices. Permutation of ICT in electoral processes such as e-voting adoption and diffusion leads to significant improvement of democratic practices in various democracies around the globe.⁵¹

⁴⁷ Sabo Ahmad, Siti Alida and Rozita Arsha, 'Issues and Challenges of Transition to e-voting Technology in Nigeria' Public Policy and Administration Research (2015) 5 (4) 95-102 www.iiste.org accessed 05/06/26

⁴⁸ *ibid*

⁴⁹ *ibid*

⁵⁰ Lawrence Ogiewa and Adekunle Saheed Ajisebiyawo 'Transparent Elections in Nigeria: An Assessment of the Introduction of Electronic Voting (BVAS) in the 2023 General Elections in Nigeria' IRE (2023) 6 (10) 709-716 <https://www.researchgate.net/publication/370492077> accessed 05/06/26

⁵¹ Olufunmilayo Oyelude and Ibukunoluwa Bose Olojede, *ibid*

⁴⁰ Sabo Ahmad, Siti Alida and Rozita Arsha, *ibid*

⁴¹ Robinson Tombari Sibe and Christian Kaunert, *ibid*

⁴² Peter, ThankGod Oyinmiebi and Preye Kuro Inokoba, *ibid*

⁴³ Sabo Ahmad, Siti Alida and Rozita Arsha, *ibid*

⁴⁴ *ibid*

⁴⁵ *ibid*

⁴⁶ Peter, ThankGod Oyinmiebi and Preye Kuro Inokoba, *ibid*

The existing legal frameworks for elections in Nigeria make provisions for the use of technology in Nigeria,⁵² this includes the biometric capturing and registration of eligible voters, BVAS accreditation and the electronic transmission of results through the IREV portal.⁵³ Nevertheless, the Nigerian Bar Association Constitution 2015, provides that voting any elections conducted under the provisions of the constitution shall be by electronic means,⁵⁴ (e-voting) as elections shall be conducted electronically and eligible voters shall cast their votes electronically.⁵⁵ The ECNBA which is the body responsible for the issuance of guidelines for the conduct of electronic voting shall take into consideration, the available technology and information technology infrastructure of all NBA branches in order to afford all registered voters the opportunity to vote.⁵⁶

The NBA has a robust provision for the adoption of technology in its election relying heavily on the use of its official website for not just the voting but for publication of eligible voters, transmission of results to a central server and publication of results. The was enacted in 2015 and it has been used for the elections of at least 6 NBA Presidents and their cabinet, even the recently concluded NBA elections held on the 20th of June 2024 was conducted via electronic means. Regardless of the outcomes, there's always been a complaint of breach of the central server to enable the tampering of result and has led to the questioning of the credibility and transparency of the NBA elections held under this constitution, it is however, difficult to ascertain whether the complaint from parties are as a result of sore loosing or really based on the credibility of the election conducted via electronic voting

Electronic voting is a comprehensive system of casting, counting and transmission of votes through electronic means.⁵⁷ It may involve both the process of casting and counting of votes or may relate only to the process of counting. E voting technology includes punched cards, optical scanned voting systems and specialized voting cubicles or kiosks including self-contained direct recording electronic voting systems popularly referred to as DRE.

The term E-voting may also refer to transmission of ballots and votes through telephones, private computers or the internet.⁵⁸

The e voting system in elections has not been fully implemented in Nigeria, what we have presently is the EVR, BVAS and the IREV, which at best is used for accreditation of voters and transmission of results to the central database. E voting has been observed as a potential remedy to the traditional ballot system in Nigeria, the adoption of robust IT policies and programs in the Nigeria's electoral system will greatly improve the democratic structures in Nigeria. The feature of convenience attributed to e voting cannot be overemphasized which can remedy the hardships and inadequacies of the manual ballot system of voting.⁵⁹

As long as the robust, secured and safe nature of the e voting system, the likely human errors are completely prevented by this system as several works and literatures have confirmed that e voting goes further to improve efficiency and effectiveness of the electoral process, encouraging participation, and cost of elections.⁶⁰ The conventional paper-based election is characterized by limitations in respect of accuracy, security and verifiability, hence the reason why e voting has become appealing in recent times as a result of the manual operations of traditional systems concerning casting and counting, it will invariably increase voter's convenience and confidence in electoral procedure and is capable of improving decline of voters' turnout and perceived political apathy.⁶¹

Despite the possibility of introducing e voting into the Nigerian electoral space, there's a cogent need to take a careful observation of some factors and likely challenges or shortcomings of e-voting.

Considering that Nigeria is a developing country, while in a bid to adopt the electoral practices of other jurisdictions, we must put into consideration the environmental, socio-economic and political antecedents of these jurisdictions.⁶²

Factors to be considered

A voting machine for the purpose of advancing electronic voting should be considered for its correctness and accuracy including every other technology deployed for use in an election.

⁵² Section 47 (2) Electoral Act, Ibid and Clause 18 INEC Regulations and guidelines for the Conduct of Elections 2022

⁵³ Clause 38 ibid

⁵⁴ Order 2.4 (a) of the Second Schedule, Nigerian Bar Association Constitution 2015

⁵⁵ Order 2.4 (b) ibid

⁵⁶ Order 2.4 (c) ibid

⁵⁷ Olufunmilayo Oyelude and Ibukunoluwa Bose Olojede, ibid

⁵⁸ Obinne Obiefuna-Oguejiofor, 'Advancing Electronic Voting Systems in Nigeria's Electoral Process: Legal Challenges and Future Directions' J Sustainable Dev L & Pol'y (2018) 9 187-219

⁵⁹ Sabo Ahmad, Siti Alida and Rozita Arsha, ibid

⁶⁰ Sabo Ahmad, Siti Alida and Rozita Arsha, ibid

⁶¹ ibid

⁶² ibid

If there is no trust in the accuracy and correctness of the electronic voting as a technology deploys, there exists a possibility of the electorate challenging the outcome of a result from such election.⁶³

A comprehensive legal framework should be enacted to ensure the legitimacy of the process, such law or laws should recognise, validate and support its operation as elections are rooted in constitutional law, so transitioning into electronic voting should not be in violation of the existing electoral laws and legislations.⁶⁴ An electronic voting system should mirror the ideas of the traditional voting system such as security and anonymity, it should be deployed in such a way that it reflects and automate the procedural flow and objective of the thumbprinting/ballot paper system. Anonymity is an essential feature of any voting system be it manual or electronic, a voting system should protect the identity of the electorate/voter.⁶⁵

One other important factor to be considered in an attempt to transition to electronic voting in a developing country like Nigeria is the adequacy of cybersecurity, privacy and data protection. Cyber-attack on data subjects is a common issue associated with the use of technology and the possibility of data breach cannot be ignored where a country attempts to transition to e voting. E voting is a people – centric process involving the capture and storage of personal data and information of millions of citizens, there is definitely an emerging risk of data breach. There is a pertinent need to install necessary controls to ensure that cybersecurity risks and privacy concerns are mitigated in a voting system.⁶⁶

The concept of e voting has reached an advanced level in America and Europe at large but it is an emerging area of law in Africa,⁶⁷ most literature has over dealt with the adoption and the advantages of e voting in developing countries such as Nigeria while neglecting the possible challenges of transition. The research agrees that e voting may bring a different spell to the Nigerian electoral world but the importance of understanding the potential challenges of transition is a significant tool to the success of the transition. Nigeria shouldn't be engulfed in the crave for modernity it neglects to harness the needs and challenges involved with transition to e-voting.

Potential Challenges of E Voting In Nigeria

No doubts, e voting has been practicable in some countries such as USA, Australia, Estonia, Japan,

Brazil and India aided by so many factors such as availability of complementary technology, technological advancement, increase participation, or political will to ensure credibility are varied antecedents of e-voting adoption. Like earlier stated, understanding the technicalities and implications of adopting the e voting system is pertinent to its implementation and sustainability.⁶⁸ The robust ICT policies needed for the implementation of e voting in most of these countries are met with a lag in implementation owing to lack of critical evaluation of social and environment processes within which the projects are framed.⁶⁹

Given its sensitivity and complexities, discretion must be applied when selecting a particular voting system. In Nigeria, transition to e-voting adoption is likely to face wide-ranging challenges that are considered crucial for successful adoption. Understanding implication of these factors would abound policy makers and democratic practitioners with wherewithal to effectively commit to acceptable yet reliable voting system.⁷⁰ Such Challenges include:

Incomprehensive Legal Framework

Constitutional provisions and Electoral Act do not include any provision for the adoption of e thumbprinting in Nigeria, nevertheless, the Electoral Act has provided for the use of the BVAS and IREV in electoral processes in Nigeria

A critical impediment to the adoption of e-voting in Nigeria is the lack of a comprehensive legal framework. The Electoral Act, while allowing for the use of technology in some electoral processes (such as biometric registration, voters' verification and transmission of result), does not yet provide any guideline for the adoption and management of e-voting systems.⁷¹

A legal framework is essential for establishing the rules governing the use of such technology, addressing issues like the security of the systems, voter privacy, and how disputes regarding e-voting will be handled. Without appropriate laws in place, e-voting systems would lack legitimacy, leaving the entire electoral process vulnerable to challenges and allegations of fraud.⁷²

⁶³ Robinson Tombari Sibe and Christian Kaunert ibid

⁶⁴ Obinne Obiefuna-Oguejiofor, ibid

⁶⁵ Obinne Obiefuna-Oguejiofor,

⁶⁶ ibid

⁶⁷ Sabo Ahmad, Siti Alida and Rozita Arsha, ibid

⁶⁸ Toba Paul Ayeni et.al 'The Role of Technology in Nigeria 2019 and 2023 General Elections' *GSJ* (2023) 11 (12) 268-280

⁶⁹ Ibid

⁷⁰ Sabo Ahmad, Siti Alida and Rozita Arsha, ibid

⁷¹ Toba Paul Ayeni et.al, ibid

⁷² ibid

Ineffective Means of National Identification

An effective national identification system is vital for implementing an e-voting system. In Nigeria, the absence of a reliable national identification database hinders the ability to verify voters' identities, leading to potential fraud.⁷³ The National Identification Number (NIN) system, while being developed, has yet to reach full implementation across the country. Without a universally accepted and easily accessible identification system, it is challenging to ensure that only eligible voters participate in elections, especially in a digital voting environment.⁷⁴

Inadequate Database of Voters

For an e-voting system to work effectively there needs to be an up-to-date and comprehensive voter database. In Nigeria, this is a significant challenge, as the biometric voter registration (BVR) system is still not fully functional. Many voters are not properly registered, and there are numerous instances of double registration or incomplete data. Without an accurate and reliable database, e-voting cannot ensure the legitimacy of election results.⁷⁵

Inadequate Requisite ICT Infrastructure, Including Electric Power Supply

The ICT infrastructure required to support an e-voting system is largely underdeveloped in Nigeria. This includes internet access, server capacity, and data storage capabilities, all of which are crucial for the secure operation of an e-voting system.

Additionally, erratic electricity supply is a major obstacle. Many areas in Nigeria experience frequent power outages, and only a portion of the population has reliable access to electricity. Without stable power, the necessary hardware cannot be consistently used during the voting process, potentially leading to failures on Election Day.⁷⁶

Apprehension by Electorates over the Motives behind the Proposed E-Voting System

Many Nigerian voters are skeptical of the motives behind the introduction of e-voting. Given the history of electoral fraud in the country, there is concern that the technology could be manipulated to serve the interests of certain political parties or elites. This apprehension stems from a lack of trust in the political system and fear that e-voting may be used as a tool for disenfranchisement or vote rigging rather than as a means to enhance transparency.⁷⁷

⁷³ ibid

⁷⁴ Sabo Ahmad, Siti Alida and Rozita Arsha, ibid

⁷⁵ Sabo Ahmad, Siti Alida and Rozita Arsha, ibid

⁷⁶ Peter, ThankGod Oyinmiebi and Preye Kuro Inokoba, ibid

⁷⁷ Sabo Ahmad, Siti Alida and Rozita Arsha, ibid

Digital Divides

There is a significant digital divide between urban and rural areas in Nigeria, with rural populations having limited access to ICT tools and internet services. This disparity raises concerns about the inclusivity of e-voting. If the majority of rural voters cannot easily access the e-voting platform due to lack of infrastructure, the system could lead to voter disenfranchisement, further exacerbating inequality in the electoral process.

Low-Level Computer Literacy and Technology Phobia among the Electorates

A large proportion of Nigerian voters, particularly in rural areas, have low levels of computer literacy and are unfamiliar with technology. Many individuals, particularly older voters, may feel uncomfortable or even fearful of using e-voting systems. This technology phobia can lead to reluctance in adopting the new system, particularly if comprehensive voter education campaigns are not implemented to address these concerns.⁷⁸

Technological Inadequacy

Nigeria currently lacks the technical and managerial capacity required to operate and maintain a sophisticated e-voting system.

Electoral bodies would need to train personnel to manage the e-voting infrastructure, resolve technical issues, and ensure the security and integrity of the process. The absence of skilled professionals and administrators may result in operational failures, compromising the reliability of the voting system.⁷⁹

One of the biggest concerns surrounding the adoption of e-voting is the security and reliability of the technology. With cybercrime on the rise in Nigeria, there are concerns that an e-voting system could be vulnerable to hacking, tampering, or manipulation. Ensuring that the technology is secure, transparent, and tamper-proof is critical to maintaining public trust in the election results.

Additionally, the reliability of the system during times of high usage, such as Election Day, must be guaranteed to prevent technical failures that could disrupt voting.⁸⁰

⁷⁸ ibid

⁷⁹ Toba Paul Ayeni et.al, ibid

⁸⁰ ibid

Recommendations

Strengthening the Legal framework

One of the most significant steps toward the full implementation of e-technology in Nigeria's elections is the need to update the Electoral Act. While the current law allows for the use of technologies such as biometric registration and result transmission, it does not fully accommodate the introduction of electronic voting or other advanced technologies. Amendments to the law should provide clear guidelines on the use of these technologies, including provisions for their security, transparency, and accountability. The Nigerian government should prioritize enacting a comprehensive legal framework for e-voting.

This legislation must clearly define the rules, responsibilities, and mechanisms for implementing e-voting, covering aspects such as security, voter privacy, and dispute resolution. This will ensure the system's legitimacy and build public confidence in the electoral process. The courts have also insisted that the electronic transmission or transfer of polling unit results on Election Day is discretionary and not mandatory on INEC as held in *Obi v INEC*⁸¹ and *Atiku v. INEC*.⁸²

The supreme court in these appealed petitions claimed that no law exist that mandated INEC to electronically transmit polling unit results from the polling units in real time on Election Day.⁸³ This does not truly represent the provisions of the Electoral Act and the Regulation and Guidelines for the conduct of election 2022 which provides for the electronic transmission of results,⁸⁴ the only discretion given to INEC was in the choice of the electronic device to be used in the transmission of the polling units results data in real time on election day, which they made the choice of the BVAS. For the courts to make 360 turnaround and claim that there were no laws requiring for electronic transmission of the result is a fatal denial in the face of the law.

The Electoral Act made provisions for the use of the Smart card Reader (SCR) or any other technological device for the accreditation of voters⁸⁵ and where a functional default is experience in respect of the SCR, it could lead to re scheduling of the elections in the polling unit if that polling unit, in the opinion of the Commission will substantial affect the final result of the

whole election and declaration of a winner in the constituency concerned.⁸⁶

The Act expressly provides that voting at an election and transmission of results under the Act shall be in accordance with the procedure determined by the Commission.⁸⁷ The presiding officer is further burdened with the duty to transfer the results including total number of accredited voters and the results of the ballot in a manner as prescribed by the Commission.⁸⁸

In accordance with the provisions of the Electoral Act, INEC passed a Regulations and Guidelines for Elections 2022 and provides for electronic transmission of result and the mandatory use of the BVAS,⁸⁹ and that an election result shall only be collated if the collation officer ascertains that the number of accredited voters agree with the number recorded in the BVAS and votes scored by political parties on the result sheet is correct and agrees with the result electronically transmitted directly from the polling unit as prescribed in these Regulation and Guidelines.⁹⁰ The combined reading and interpretation of these section and clauses point at nothing but the provisions for the transmission of electoral results.

It is imperative to state that most of the provisions of the Act as relating to transmission of results are penalised where they are contravened,⁹¹ reason why it is surprising that the same courts with responsibility with these same laws have turned around to state that such provisions were merely discretionary and not mandatory. Earlier in *Oyetola v. INEC*⁹² the Supreme Court had earlier held that polling units' results transmitted to the collation system provides the relevant collation officer the means to verify a polling unit result as the need arises for the purpose of collation.⁹³

These and many more forms the need for the strengthening the existing legal framework in transitioning to electronic voting, to ensure that e voting will derive its validity from legislative tools as this will enhance enforcement.

⁸¹ (2023) LPELR-61532 (SC)

⁸² (2024) LPELR – 61787 (SC)

⁸³ *ibid*

⁸⁴ Clauses 18 and 38, *ibid*

⁸⁵ Section 47(2) Electoral Act 2022 (as amended)

⁸⁶ Section 47(3) *ibid*

⁸⁷ Section 50(2) *ibid*

⁸⁸ Section 60 (5) *ibid*

⁸⁹ Clauses 38 (i-iii), 48(a), 50 (v) (xx), 53 (xii) and 53(ixxx) *ibid*

⁹⁰ Clause 48(a)

⁹¹ Sections 60 (5) *ibid*

⁹² (2023) LPELR-60094 (CA)

⁹³ *ibid*

Improve the Voter Registration Database

INEC should conduct a comprehensive review of its voter registration database, removing duplicates and ensuring that the data is up to date. Regular maintenance and audits should be implemented to prevent voter registration issues and ensure that the system accurately reflects the eligible electorate.

Bridge the Digital Divide

Efforts should be made to reduce the digital divide by expanding internet access and ICT infrastructure to rural areas, and by providing subsidized technology. This will ensure that all segments of the population, regardless of geographic or socioeconomic status, can participate in e-voting. Special attention should be given to marginalized groups, including women and rural communities.

Enhance Computer Literacy and Provide Voter Education

The government should implement computer literacy programs across the country, particularly targeting older voters and those in rural areas who may be unfamiliar with technology. Alongside this, a well-designed voter education program should be introduced to explain the e-voting process, providing hands-on demonstrations to ensure that voters feel confident using the system.

Investing in Infrastructure

Addressing the infrastructural challenges that limit the use of e-technology is crucial. The Nigerian government must invest in improving internet connectivity and electricity supply, particularly in rural areas. Without reliable infrastructure, efforts to implement e-technology in elections will continue to face significant obstacles. Public-private partnerships can also be explored to expand digital infrastructure across the country.

Enhancing Cybersecurity

As electoral systems become more digitized, the risk of cyberattacks increases. Nigeria must invest in robust cybersecurity measures to protect its electoral technologies from interference. This involves not only securing the technology itself but also training election officials in best practices for cybersecurity. INEC should collaborate with cybersecurity experts to ensure that election data is protected from potential threats.

To address concerns about the security and reliability of e-voting, the government should invest in cybersecurity measures and enlist the help of IT experts to protect the system from hacking, data breaches, and manipulation. This includes building a secure voting platform with encrypted data transmission, multi-factor authentication, and regular security audits.

Confidence in the system's security is key to ensuring its successful implementation.

Bridging the Digital Divide

Ensuring that e-technology benefits all Nigerians, regardless of where they live, is essential. Special efforts must be made to bridge the digital divide between urban and rural areas. This includes providing infrastructure but also offering voter education programs that help rural voters understand and trust the new technologies. Ensuring that rural populations are not left behind in the digital transformation of elections is critical to maintaining the inclusivity and fairness of the process.

Conclusion

INEC first experimented the BVAS in 2021 during the Isoko South constituency 1 bye-election in Delta State, this was followed the deployment and successful use of BVAS in the local government election in Kaduna State, BVAS was first used in a statewide election in November 2021 in Anambra State. It was then implemented in the Ekiti and Osun state governorship elections in 2022 amidst several challenges.⁹⁴

The BVAS witnessed a colossal failure during the 2023 general elections, while it was expected that the BVAS technology combining the voter enrolment, voter accreditation, and result interface capabilities will eliminate the gaps that enable analogue manipulation of numbers in election. Of course, in the readiness of INEC to portray its motive to conduct a transparent, free, fair and credible election during the 2023 general elections, the management body insisted on the use of BVAS for the conduct of the elections and as a means of answering the heightened call in the nation for the application of the BVAS to elections.⁹⁵

The citizen saw BVAS as a solution and way out of electoral malpractices and irregularities, it is quite disheartening that the country found itself in the situations that were to be avoided by the use of the BVAS, which include Mutilation of results, Computational errors, Swapping of results sheets, Forging of result sheets, Obtaining declaration and result involuntarily, Making declaration and return while collation is still in progress and Poor record keeping.

⁹⁴ Lawrence Ogiewa and Adekunle Saheed Ajisebiyawo 'Transparent Elections in Nigeria: An Assessment of the Introduction of Electronic Voting (BVAS) in the 2023 General Elections in Nigeria' IRE (2023) 6 (10) 709-716 <https://www.researchgate.net/publication/370492077> accessed 05/06/26

⁹⁵ Lawrence Ogiewa and Adekunle Saheed Ajisebiyawo, Ibid

It is hence established that the deployment of BVAS for use in elections is not without its challenges as it is prone to errors, failure and manipulations. During the 2023 general elections, reports were given as to its inadequacies such as inability to read thumbprint or capture leading to disenfranchisement of eligible voters.⁹⁶ The foregoing forms the research suggestion for a more robust framework one voting, adequate improvement on technology and cybersecurity, power supply as the e voting method is not without the risk of cyber-attacks targeted at its mechanisms such as the BVAS and the IREV.⁹⁷

The integration of e-technology into Nigeria's electoral process has the potential to revolutionize the way elections are conducted, ensuring greater transparency, efficiency, and credibility. Technologies such as Biometric Voter Registration, Smart Card Readers, and electronic result transmission have already contributed to reducing some of the long-standing issues of electoral fraud and delays in result announcement.⁹⁸

However, the full benefits of e-technology will only be realized if Nigeria addresses the infrastructural challenges, cybersecurity risks, and public trust issues that currently hinder its adoption. Learning from the experiences of countries like India, Estonia, and Ghana will be critical in shaping Nigeria's approach to electoral technology. With the right investments in infrastructure, legal reforms, and voter education, Nigeria can ensure that its elections are not only free and fair but also technologically advanced.

The future of Nigeria's democracy lies in its ability to embrace and adapt to these new technologies. By doing so, the country can set a standard for transparent and efficient elections, ensuring that the voice of every Nigerian is heard and respected in the democratic process.

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⁹⁶ Robinson Tombari Sibe and Christian Kaunert, *ibid*

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