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Comparative Analysis of Electoral Technology Deployment and Voter Trust in the 2015, 2019, and 2023 General Elections in Nigeria

Abubakar Abdulrahman

Department of Political Science,
University of Ilorin, Nigeria.
Corresponding author: abubakar.ar@unilorin.edu.ng

Abstract

The integrity of electoral processes is fundamental to democratic consolidation, and technological innovations have increasingly been adopted to enhance transparency and credibility. This study conducts a comparative analysis of electoral technology deployment and voter trust in Nigeria's 2015, 2019, and 2023 general elections. Drawing on a mixed-methods approach that includes document analysis, public opinion surveys, and key informant interviews, the study evaluates the evolution and effectiveness of technologies such as the Smart Card Reader (SCR), the Bimodal Voter Accreditation System (BVAS), and the electronic transmission of results. Findings reveal that while the 2015 elections marked a turning point with the introduction of SCR, subsequent elections in 2019 and especially 2023 saw significant technological upgrades intended to address past deficiencies. However, the study also finds that technological deployment alone does not guarantee voter trust; factors such as operational reliability, INEC's transparency, political interference, and public awareness significantly shape electoral credibility. The 2023 elections, despite the introduction of BVAS and result upload portals, witnessed mixed reactions from the electorate due to perceived inconsistencies and logistical shortcomings. The study concludes that while electoral technology has the potential to enhance voter trust, its impact is contingent upon effective implementation, stakeholder confidence, and institutional accountability. Recommendations are offered to strengthen the integration of technology in Nigeria's electoral process for future democratic resilience.

Keywords: Electoral Technology, Voter Trust, General Elections, Nigeria, Democratic Consolidation

Introduction

Elections are a cornerstone of democratic governance, providing citizens with the opportunity to choose their leaders and influence policy direction. In many developing democracies, including Nigeria, electoral integrity has long been undermined by issues such as ballot stuffing, voter impersonation, multiple voting, and post-election violence (Ayoade, 2008; Omotola, 2010). These malpractices have often eroded public confidence in the electoral process, thereby weakening democratic legitimacy. In response to these challenges, electoral bodies around the world have embraced technology to enhance transparency, accuracy, and credibility. In Nigeria, the Independent National Electoral Commission (INEC) has progressively adopted electoral technologies across three successive election cycles—2015, 2019, and 2023—in a bid to reduce fraud and restore voter trust.

The 2015 general elections marked a watershed moment in Nigeria's electoral history with the introduction of the Smart Card Reader (SCR) for voter authentication. This innovation, though initially met with skepticism, was largely viewed as instrumental in reducing multiple voting and

enhancing the credibility of the election results (Ibeanu, 2015). The successful deployment of SCR contributed to the first democratic transfer of power between an incumbent and opposition party at the federal level. However, subsequent elections in 2019 were marred by operational hitches, including equipment malfunction, delays in accreditation, and increased political violence, which negatively affected public perception of the electoral process (International Crisis Group, 2019).

Building on lessons from past cycles, the 2023 general elections introduced more advanced technologies such as the Bimodal Voter Accreditation System (BVAS) and the INEC Result Viewing Portal (IReV). BVAS combined biometric fingerprint and facial recognition, offering dual-layer verification for voters. Meanwhile, IReV allowed for real-time uploading of polling unit results, theoretically increasing transparency and public access to results (INEC, 2023). Despite these advancements, the 2023 elections were fraught with logistical setbacks, inconsistent deployment of BVAS, and contested delays in real-time result uploads, particularly during the presidential election. This generated widespread criticism and reduced public confidence in the process, especially among urban and educated electorates who had high expectations for technological credibility (YIAGA Africa, 2023).

The intersection between technology and voter trust in elections remains a complex and evolving dynamic. While the introduction of technology is often assumed to bolster confidence in electoral processes, evidence from Nigeria suggests that trust is influenced not only by the availability of technology but by its effective implementation, perceived neutrality, and the overall transparency of the election management body (Asunka et al., 2017). Voter trust is also shaped by broader socio-political factors including political party behavior, civil society engagement, and media narratives, all of which mediate the impact of technology on electoral credibility (Olowojolu, 2020).

This study undertakes a comparative analysis of Nigeria's 2015, 2019, and 2023 general elections to evaluate how the deployment of electoral technologies has influenced voter trust. The core objectives are to: (1) identify patterns in the technological innovations adopted during each election cycle; (2) assess the extent to which these technologies addressed previous electoral malpractices; and (3) analyze public trust and confidence in each electoral cycle as expressed in surveys, media reports, and observer findings. Through this approach, the research seeks to contribute to the broader discourse on the role of digital innovation in enhancing electoral integrity in transitional democracies.

In doing so, the study draws upon theories of democratic legitimacy and trust in institutions, recognizing that while technology can offer solutions to mechanical flaws in elections, it cannot substitute for political will and institutional accountability. The findings of this study have implications for election management bodies, civil society, political actors, and international development partners working to strengthen democracy in Nigeria and similar contexts.

Conceptual Review

The concepts of electoral technology and voter trust are central to contemporary discussions on democratic governance and electoral integrity, particularly in emerging democracies like Nigeria.

Electoral Technology

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Electoral technology refers to the use of technological tools and innovations to support the electoral process, including voter registration, accreditation, vote casting, counting, result collation, and dissemination (IDEA, 2011). It encompasses a broad range of digital and biometric systems aimed at enhancing efficiency, transparency, and credibility. In the Nigerian context, electoral technology has evolved from manual systems to the introduction of: Smart Card Reader (SCR) in 2015 for biometric voter authentication, Bimodal Voter Accreditation System (BVAS) in 2023, combining fingerprint and facial recognition and INEC Result Viewing Portal (IReV) for real-time result upload.

These innovations are designed to reduce human error, prevent voter fraud, and promote the transparency of results. However, the successful deployment of technology is contingent upon several variables including technical capacity, infrastructure, training, and the political will to enforce neutrality (Olowojolu, 2020). Electoral technology is not an end in itself; it is a means to achieve broader democratic goals. Poor implementation or technical failures can undermine its intended benefits, leading to disillusionment among voters and stakeholders (Adejumobi, 2015). Thus, the legitimacy of the technology depends not just on its availability, but also on its effectiveness and public perception.

Voter Trust

Voter trust refers to the confidence citizens have in the electoral process, electoral institutions, and the fairness of electoral outcomes (Norris, 2014). It is a psychological and political state shaped by perceptions of transparency, accountability, and impartiality in elections. High voter trust often translates into greater political participation, acceptance of outcomes, and reduced incidence of post-election violence.

In Nigeria, voter trust has historically been fragile due to repeated experiences with electoral malpractice, violence, and judicial reversal of declared results (Ibeanu, 2007). Although the introduction of technology has been intended to reverse this trend, trust has fluctuated due to inconsistent implementation and persistent allegations of manipulation or technical glitches. For example, while the 2015 elections witnessed increased public confidence due to successful use of SCR, the 2019 and 2023 elections were marred by complaints of equipment failure and delays in result transmission (YIAGA Africa, 2023).

Voter trust is both an outcome and a driver of electoral legitimacy. When citizens believe the electoral system is fair and reliable, they are more likely to accept results and participate in future elections. Conversely, a lack of trust can foster voter apathy, civil unrest, or outright rejection of election outcomes.

Relationship between Electoral Technology and Voter Trust

The linkage between electoral technology and voter trust is complex and often context-dependent. In theory, technological innovation is expected to enhance transparency and reduce human interference, thereby boosting trust (Hall, 2013). However, the empirical evidence suggests that technology alone cannot guarantee trust; it must be supported by institutional credibility, adequate voter education, and a political environment that respects the rule of law.

In Nigeria's case, the introduction of BVAS and IReV was expected to improve transparency and reduce opportunities for vote tampering. However, delays in result uploads and limited

access to real-time data during the 2023 elections undermined the confidence of key stakeholders, especially in the presidential poll (Centre for Democracy and Development, 2023). This implies that technological tools must be integrated into a broader framework of democratic accountability. Moreover, trust is not only based on outcomes but also on processes—how transparent, inclusive, and fair the use of technology appears to voters and political parties. Thus, for technology to foster trust, it must be accompanied by proper logistics, stakeholder engagement, and institutional integrity.

This study adopts a conceptual framework that links the deployment of electoral technology (input) to voter trust (output), mediated by factors such as: Operational effectiveness of the technology, Transparency of the electoral body (INEC), Stakeholder communication and engagement, and Media framing and civil society monitoring. This framework allows for a comparative analysis across election cycles to assess how these variables interacted differently in 2015, 2019, and 2023.

Empirical Review of Literature

The empirical literature on electoral technology and voter trust in Nigeria reveals a growing body of research examining the effects of digital innovations on electoral credibility. Scholars and observers have explored different aspects of election technology deployment, but many of these studies tend to focus on single election cycles or isolated technologies, leaving a gap in comparative analyses across multiple elections.

The 2015 General Elections and the Smart Card Reader

The 2015 elections are widely regarded as a turning point in Nigeria's electoral history due to the successful introduction of the Smart Card Reader (SCR). Ibeanu (2015) conducted a post-election assessment of INEC's deployment of SCRs and found that the technology significantly minimized incidents of voter impersonation and multiple voting, especially in urban areas. Using mixed methods, including key informant interviews and analysis of incident reports, the study showed that voter confidence was generally higher in areas where SCRs functioned effectively.
Similarly, Adesina (2016) conducted a survey of voters in Lagos and Abuja and observed that 78% of respondents believed the use of SCR enhanced the credibility of the elections. However, the study also noted disparities in SCR effectiveness between urban and rural settings, primarily due to infrastructural limitations. The overall conclusion was that technology can improve election outcomes, but only when supported by adequate logistics and personnel training.

The 2019 General Elections: Reversal or Progress?

Empirical studies on the 2019 elections paint a more mixed picture. Okonkwo and Ibrahim (2020) used content analysis of election observer reports and media narratives to show that while SCRs were still in use, their impact was diminished by operational challenges, including frequent malfunctions and poor network coverage in rural areas. They also noted a significant increase in political violence and voter suppression, which overshadowed whatever gains technology might have introduced. In another study, Udochukwu and Abiola (2020) conducted interviews with INEC officials and political party agents in three states and concluded that the failure of SCRs in many polling units eroded voter trust. According to their findings, nearly 60% of voters in surveyed states expressed doubts about the fairness of the process, citing both technological and political irregularities. This suggests that while technology remained part of INEC's toolkit, its

inconsistent implementation led to declining public confidence, particularly among first-time voters and civil society groups.

The 2023 General Elections: The BVAS and IReV Experience

The 2023 elections were characterized by high expectations due to the introduction of the Bimodal Voter Accreditation System (BVAS) and the INEC Result Viewing Portal (IReV). According to INEC (2023), these technologies were intended to enhance transparency by providing real-time accreditation and results collation data. However, empirical reviews reveal mixed outcomes.

A large-scale post-election survey by YIAGA Africa (2023) involving over 6,000 respondents across 36 states found that only 45% of voters believed that BVAS functioned effectively in their polling unit, while 58% expressed disappointment over the failure of IReV to upload presidential results in real-time. The study concluded that while voters appreciated the idea of technology, implementation failures significantly undermined trust, especially in the presidential poll. Similarly, the Centre for Democracy and Development (CDD, 2023) conducted a meta-analysis of observer reports and found widespread inconsistencies in BVAS deployment and training of ad-hoc staff. These issues led to delayed accreditation and confusion at polling units, which contributed to public skepticism about the integrity of the process. However, the study also noted that in states where BVAS and IReV functioned properly—such as Lagos and Edo—voters expressed higher levels of trust in INEC and the electoral outcome.

While there is substantial empirical work on each election cycle, few studies have conducted systematic comparative analyses across the 2015, 2019, and 2023 elections. Most existing literature treats each election in isolation, which limits the ability to trace patterns of progress or regression in technology deployment and public trust. For instance, Olowojolu (2020) provides a theoretical discussion of how electoral technology influences democratic outcomes but does not empirically compare multiple elections. Likewise, Adeyemi and Bello (2023) examine voter reactions to BVAS but focus exclusively on the 2023 elections without historical context. This leaves a gap that this study seeks to fill by offering a longitudinal comparative assessment of technology and trust over three election cycles.

Empirical evidence from Nigeria's recent elections underscores the potential of electoral technology to improve transparency and public confidence. However, the studies reviewed show that these benefits are highly contingent upon proper implementation, logistical preparedness, and the political environment. The comparative approach adopted in this study is therefore necessary to assess how voter trust has evolved in response to different levels of technological advancement and institutional performance across 2015, 2019, and 2023.

Theoretical Framework

The relationship between electoral technology and voter trust can be best understood through a multidisciplinary theoretical lens that incorporates elements of Democratic Legitimacy Theory**,** Institutional Trust Theory**,** and the Technology Acceptance Model (TAM)**.** These theories provide complementary perspectives for analyzing how the deployment of technology in elections influences public confidence in electoral outcomes and institutions.

Democratic legitimacy theory emphasizes the importance of free, fair, and credible elections in securing the moral and legal authority of governments (Beetham, 1991). According to this theory, the legitimacy of a political system depends on both the procedures used to select leaders and the outcomes that reflect the will of the people. Elections that are perceived to be transparent and credible enhance the legitimacy of the state, while flawed elections erode democratic trust and may trigger apathy or civil unrest.

In the Nigerian context, the deployment of technologies such as the Smart Card Reader (SCR), the Bimodal Voter Accreditation System (BVAS), and the INEC Result Viewing Portal (IReV) is intended to improve procedural integrity. If citizens perceive these technologies as reducing fraud and increasing transparency, they are more likely to view election outcomes as legitimate. Thus, this theory supports the hypothesis that electoral technology can serve as a tool for enhancing democratic legitimacy by promoting voter trust. Institutional Trust Theory posits that public confidence in government and its agencies is influenced by the perceived competence**,** transparency, and fairness of these institutions (Blind, 2007). This theory is particularly relevant to electoral bodies such as Nigeria's Independent National Electoral Commission (INEC), which must be seen as impartial and effective for citizens to trust the electoral process.

Empirical studies have shown that the same technology can produce different trust outcomes depending on the credibility of the institution deploying it (Norris, 2014). For instance, if INEC is seen as poorly managing BVAS or deliberately delaying result uploads on IReV, public trust may decline—even if the technology itself is sound. This suggests that technology alone cannot build trust; it must be backed by credible institutions, ethical leadership, and transparent operations. In this study, Institutional Trust Theory helps explain why the 2015 elections, despite being the first time SCRs were used, generated relatively high public trust—largely due to INEC's reputation under the leadership of Attahiru Jega. In contrast, trust in the 2023 elections diminished despite more advanced technologies being deployed, partly due to perceived institutional failures.

Originally developed by Davis (1989), the Technology Acceptance Model (TAM) explains how users come to accept and use a technology. TAM posits that two primary factors influence user acceptance: The belief that the technology will enhance performance or outcomes and the belief that the technology will be free of effort or complexity. Applied to electoral technology, TAM suggests that voters are more likely to trust and accept digital innovations if they believe the technology (e.g., BVAS or IReV) is both effective in preventing fraud and easy to use. However, if voters encounter repeated system failures, poor communication, or procedural confusion, their willingness to accept and trust the technology declines.

This model is particularly helpful in explaining why many Nigerian voters—especially the youth and educated urban populations—initially supported INEC's digital reforms but grew disillusioned when technical failures occurred during the 2023 elections. While all three theories are relevant, this study adopts Institutional Trust Theory as the most appropriate theoretical lens. This is because the success or failure of electoral technology in Nigeria has historically been less about the technology itself and more about the credibility of the institutions deploying it**.** The level of public trust in INEC—its transparency, consistency, and ability to enforce electoral rules—is a critical mediator between technological innovation and perceived electoral integrity.

By focusing on institutional trust, this study can more effectively explain: Why the same or similar technologies yield different trust outcomes across election cycles; How the behavior of electoral institutions affects voter perceptions; What factors strengthen or erode public confidence over time, regardless of technological advancements.

Comparative Analysis of Electoral Technology Deployment and Voter Trust in the 2015, 2019, and 2023 General Elections in Nigeria

Elections are vital to democratic governance, providing citizens with the opportunity to select leaders and influence policy. However, in many developing democracies, including Nigeria, electoral processes have often been undermined by fraud, violence, and low public confidence. In response to these challenges, the Independent National Electoral Commission (INEC) introduced various technologies in successive general elections to enhance electoral credibility. This paper presents a comparative analysis of the deployment of electoral technologies and their impact on voter trust during Nigeria's 2015, 2019, and 2023 general elections. Electoral technology refers to the use of digital tools and systems in the conduct of elections, such as biometric voter registration, electronic accreditation, and digital result transmission. Nigeria's adoption of electoral technology began modestly but gained momentum with the introduction of the Smart Card Reader (SCR) in 2015, followed by enhanced tools like the Bimodal Voter Accreditation System (BVAS) and the INEC Result Viewing Portal (IReV) in 2023.

2015 Elections and the Smart Card Reader (SCR)

The 2015 general elections in Nigeria represented a pivotal moment in the country's democratic evolution. It was the first national election to fully deploy the Smart Card Reader (SCR)—a device developed by the Independent National Electoral Commission (INEC) to enhance the credibility of the voting process. The SCR was introduced to verify the authenticity of Permanent Voter Cards (PVCs) and biometrically accredit voters before they cast their votes. Its goal was to reduce longstanding issues such as multiple voting, identity fraud, and vote inflation, which had plagued previous elections.

The SCR works by scanning the embedded chip in a voter's PVC, retrieving stored biometric data (particularly fingerprints), and matching it against the real-time biometric scan of the voter at the polling unit. A successful match permitted the voter to proceed with the voting process. According to Ibeanu (2015), this method improved the accuracy and transparency of voter accreditation and significantly minimized incidents of impersonation and underage voting. Public reception of the SCR was largely positive. Many Nigerians, civil society groups, and international observers viewed its introduction as a groundbreaking reform. Notably, the European Union Election Observation Mission (EU EOM) lauded the SCR's role in curbing electoral malpractice and enhancing voter confidence. The effectiveness of the technology, combined with INEC's operational efficiency and relatively impartial leadership under Professor Attahiru Jega, contributed to a high level of public trust in the 2015 electoral process.

Despite isolated cases of technical glitches—such as device failures in some polling units and low biometric recognition rates in specific areas—the SCR was generally seen as a success. In areas where devices failed, INEC implemented a backup plan involving the use of incident forms to manually accredit voters, a move that drew some criticism due to its potential for abuse but was limited in scale.

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One of the most notable outcomes of the 2015 elections was the peaceful transfer of power from the incumbent President Goodluck Jonathan to opposition candidate Muhammadu Buhari. This unprecedented event in Nigeria's political history further reinforced the perceived legitimacy of the election and validated the usefulness of the SCR as a tool for democratic consolidation. In summary, the 2015 elections showcased how even modest technological interventions, when backed by credible leadership and institutional transparency, can significantly enhance electoral integrity and voter trust. The success of the SCR in that election cycle set a new standard for subsequent reforms and raised public expectations for future technological deployments in Nigerian elections.

2019 Elections: Operational Challenges

The 2019 general elections in Nigeria were characterized by mixed outcomes, particularly concerning the continuity and effectiveness of electoral technology. Although the Independent National Electoral Commission (INEC) retained the Smart Card Reader (SCR) system introduced in 2015, the elections were marred by a host of operational and technical challenges that significantly impacted public trust and the perceived credibility of the electoral process.

1. Persistent Technical Failures

One of the most pressing issues during the 2019 elections was the widespread malfunction of SCRs across various polling units, particularly in rural and hard-to-reach areas. As reported by Okonkwo and Ibrahim (2020), these failures were due to inadequate device testing, poor network connectivity, low battery life, and insufficient training of ad hoc electoral staff. In some instances, the devices failed to recognize biometric data, forcing polling officials to revert to manual accreditation using incident forms—an approach previously criticized for its susceptibility to abuse.

2. Logistical and Administrative Shortcomings

INEC's logistical capacity was put to the test in 2019 and found wanting in several respects. Just hours before the scheduled opening of polls on February 16, 2019, INEC announced a one-week postponement of the presidential and National Assembly elections, citing “logistical and operational difficulties.” This sudden rescheduling, which affected all six geopolitical zones, led to voter frustration, increased costs, and lower turnout in some areas. Many voters who traveled to their home constituencies for the original date were unable to vote on the rescheduled day.

3. Erosion of Public Trust

The combination of technological failure and logistical mismanagement had a significant impact on voter trust. Unlike in 2015, where the SCR enhanced credibility and public confidence, the 2019 elections witnessed a noticeable decline in trust. According to surveys conducted by domestic election observers, many citizens expressed doubts about INEC’s competence and impartiality. The use of incident forms, originally intended as a backup, became widespread and in some regions, surpassed electronic accreditation—raising questions about the integrity of the final voter turnout figures.

4. Political Violence and Intimidation

The 2019 elections were also marred by widespread reports of electoral violence, ballot box snatching, and voter suppression. The European Union Election Observation Mission (EU EOM,

2019) observed that security agencies often failed to maintain neutrality, and political thugs disrupted voting in several constituencies. These events, though not directly related to the SCR technology, compounded the crisis of confidence and undermined the gains made in the previous election cycle.

5. INEC's Institutional Credibility

Public perception of INEC's independence and operational readiness declined during this period. The commission faced criticism for lack of transparency in procurement processes, inconsistent application of guidelines, and poor communication with stakeholders. Furthermore, delays in announcing results in key states fueled allegations of manipulation and electoral malpractice. Although SCRs were retained in the 2019 elections, several operational setbacks emerged. Okonkwo and Ibrahim (2020) reported widespread failures of SCR devices, particularly in rural areas where technical support was limited. Delays in accreditation and allegations of equipment manipulation led to a decline in public trust. The European Union Observation Mission (EU EOM, 2019) also cited increased political interference and logistical inefficiencies as factors that compromised the perceived integrity of the elections.

The 2019 elections demonstrated that technological continuity, in and of itself, does not guarantee electoral credibility. The same Smart Card Reader that enhanced trust in 2015 became a source of frustration in 2019 due to poor implementation and inadequate support systems. The experience underscores the importance of robust institutional frameworks, comprehensive training, adequate logistics, and transparent communication in reinforcing the utility of electoral technology.

2023 Elections: BVAS and IReV

The 2023 general elections in Nigeria were expected to mark a watershed in the use of electoral technology, with the deployment of two advanced digital tools: the Bimodal Voter Accreditation System (BVAS) and the INEC Result Viewing Portal (IReV)**.** These technologies were designed to address long-standing challenges of voter fraud, result manipulation, and public distrust in the electoral process. However, while the innovations signified a bold step forward, their implementation fell short of expectations in many critical areas.

1. **The Bimodal Voter Accreditation System (BVAS)**

The BVAS device was introduced as an upgrade to the Smart Card Reader (SCR), offering dual-mode biometric accreditation through **facial recognition** and **fingerprint scanning**. This was intended to eliminate instances of failed biometric matches and ghost voting, ensuring that only genuinely accredited voters could participate. In many polling units, BVAS functioned effectively, reducing the time required for voter verification and enhancing credibility. According to YIAGA Africa (2023), the BVAS significantly curtailed incidents of over-voting and impersonation in areas where it was properly utilized. However, the system faced technical glitches in several locations, particularly in rural and high-density urban centers, where poor connectivity, battery failures, and inadequate operator training led to delays and accreditation difficulties.

2. INEC Result Viewing Portal (IReV)

The IReV portal was introduced as a transparency measure, enabling the public to view real-time uploads of polling unit results. This innovation aimed to enhance electoral accountability by making it difficult to manipulate results during collation. Initially, the public welcomed IReV as a game-changing reform. During the gubernatorial and legislative elections, the portal performed relatively well in some states, increasing confidence in the collation process. However, during the presidential election, INEC failed to upload many results on time, citing "technical issues." This led to widespread suspicion, public outcry, and allegations of result tampering, particularly from opposition parties and civil society organizations. The delayed uploads undermined the very purpose of IReV and dealt a severe blow to its credibility.

3. Public Perception and Voter Trust

The expectation of a transparent, technology-driven election was high among the electorate. Consequently, the shortcomings of BVAS and IReV led to a significant breach of trust. Many voters, particularly young and first-time participants encouraged by previous reforms, felt disillusioned by the failure to deliver a seamless and transparent process. The uneven performance of the technologies contributed to a decline in post-election confidence, especially in urban areas where digital literacy and access to real-time information are higher.

4. INEC's Communication and Institutional Response

One of the critical failures during the 2023 elections was INEC's lack of proactive communication**.** Technical problems were not immediately addressed or clearly explained, and the delay in uploading results was not matched with adequate transparency. This vacuum allowed misinformation and public distrust to grow rapidly. INEC's inability to maintain the perception of neutrality and competence significantly weakened the credibility of both the institution and the technologies it deployed.

5. Political Context and Electoral Integrity

The 2023 elections were held in a highly polarized environment, with increased scrutiny from local and international observers. While the deployment of BVAS and IReV was intended to insulate the process from elite manipulation, political interference, vote-buying, and localized violence remained pervasive. These factors, coupled with technical failures, reinforced the belief that electoral technology alone cannot substitute for institutional integrity. The 2023 general elections represented a significant technological leap with the introduction of BVAS and IReV. However, the gap between design and implementation revealed the limits of technology in securing electoral integrity. The failure to ensure consistent, nationwide performance of these tools undermined the credibility of the process and shook public trust in Nigeria's democratic institutions.

Voter Trust: A Shifting Trend

Voter trust is a fundamental component of any credible electoral process. It reflects the public's confidence in the integrity, transparency, and fairness of elections and in the institutions responsible for managing them. In the context of Nigeria's 2015, 2019, and 2023 general elections, voter trust demonstrated a shifting trend—rising with the introduction of electoral technology in 2015, faltering in 2019 due to operational failures, and becoming significantly fractured in 2023 despite technological advancements.

The 2015 elections marked a high point in voter trust. The successful deployment of the Smart Card Reader (SCR) created a perception of increased electoral transparency and accountability. For the first time in Nigeria's democratic history, an incumbent president was defeated and peacefully handed over power to an opposition candidate. This peaceful transition, underpinned by visible technological safeguards, symbolized a maturing democracy and significantly boosted public confidence. The institutional credibility of INEC under Professor Attahiru Jega further reinforced this trust. Voters believed the electoral process was impartial and adequately safeguarded against manipulation, leading to higher participation and acceptance of results by both local and international observers (Ibeanu, 2015).

By the 2019 elections, however, voter trust had begun to erode. The reuse of the SCR without significant improvements exposed its vulnerabilities. Technical malfunctions, poor logistical planning, and the last-minute postponement of the presidential election shook public confidence. According to Okonkwo and Ibrahim (2020), many Nigerians expressed dissatisfaction with the inconsistent application of election rules and the lack of transparency in critical phases of the electoral process. The widespread use of manual accreditation via incident forms revived concerns about ballot manipulation. Additionally, the increased occurrence of violence and vote-buying created a perception that the election outcomes were influenced more by political actors than by the electorate's will. These developments caused a dip in civic morale and a growing sense of disillusionment with INEC's ability to deliver credible elections.

Expectations for the 2023 elections were particularly high due to the introduction of BVAS and IReV**.** These technologies were anticipated to restore trust by closing loopholes that previously allowed for rigging and opaque result collation. However, the inconsistent implementation of these tools had the opposite effect. BVAS was praised in several locations for reducing over-voting and improving the accreditation process. Still, the failure of INEC to timely upload presidential results on the IReV platform led to a nationwide credibility crisis. Civil society groups and election observers, such as YIAGA Africa (2023), criticized the institution for failing to uphold the transparency it had promised. The mismatch between public expectations and institutional delivery resulted in a deeper polarization of the electorate and widespread questioning of the election's legitimacy.

Although, **s**everal factors explain this shifting trend in voter trust:

a. **Technological Reliability:** Trust rises when electoral technologies function as expected, but technical failures immediately erode confidence.
b. **Institutional Credibility:** INEC's leadership, preparedness, and communication capacity directly influence how the public perceives the elections.
c. **Political Interference:** Perceptions of elite manipulation, voter suppression, or partisanship in INEC's decisions diminish trust.
d. **Transparency and Stakeholder Engagement:** Inadequate communication with the public and civil society during crises (as in 2023) accelerates the decline of trust.

The trend of voter trust in Nigeria's elections illustrates that technology alone cannot guarantee credibility. While the introduction of the SCR in 2015 significantly increased public confidence, the failure to maintain and improve upon those gains in subsequent elections has led to disillusionment. Trust is cumulative and fragile—built through consistent

transparency, institutional integrity, and citizen engagement. Without these pillars, even the most sophisticated technologies will fail to assure the electorate of the system's legitimacy.

This study adopts Institutional Trust Theory to understand how electoral technology affects voter trust. The theory posits that public confidence in electoral outcomes is not solely dependent on technology but also on the competence, transparency, and fairness of institutions like INEC (Blind, 2007). In 2015, INEC under Attahiru Jega was perceived as impartial and efficient, reinforcing the benefits of SCR deployment. In 2023, despite the introduction of superior technology, trust eroded due to perceived institutional lapses and inconsistent communication.

A comparison across the three election cycles highlights several critical insights:

1. **Technological Advancement**: Nigeria has made significant strides from SCRs to BVAS and IReV. However, technological advancement alone does not guarantee credibility.
2. **Institutional Credibility**: Voter trust is heavily influenced by the perceived integrity of INEC. Leadership changes and operational preparedness impact public perception.
3. **Public Expectations**: As voters become more informed, their expectations of transparency and real-time information increase. Failure to meet these expectations can lead to widespread disillusionment.
4. **Political Context**: The role of political actors, media framing, and civil society engagement also mediate the relationship between technology and trust.

Conclusion

While electoral technology has the potential to improve Nigeria's electoral credibility, its effectiveness is closely tied to institutional integrity, logistical efficiency, and stakeholder engagement. The 2015 elections illustrate that even basic technology can foster trust if managed well, while the 2023 elections demonstrate that advanced tools may still fail to inspire confidence if poorly implemented. Thus, there is the need to strengthen INEC's Institutional Capacity through better training, logistics, and leadership continuity. Improve Voter Education on how technologies work and their role in ensuring electoral integrity. Enhance Transparency by ensuring timely and full disclosure of result uploads and accreditation data. Engage Stakeholders Proactively**,** including political parties, CSOs, and the media. Institutionalize Independent Audits of technology deployment after each election to identify gaps and restore confidence.

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