

RESEARCH ARTICLE

# Election Technologies: BVAS and Public Trust in Nigerian Elections in Local Jurisdiction Context

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## Abstract

Elections are the cornerstone of any democratic society, ensuring the voice of the people is heard. The use of technology in election processes, often referred to as election automation, has become increasingly prevalent worldwide. This study delved into the complex relationship between the Bimodal Voter Accreditation System (BVAS) and public trust in elections from the local electorate's perspective. As survey research, estimation method at 5% significance was used to draft a total of 351 respondents from the registered voters in the Yewa South gather data on the strategies, public trust and challenges associated with the implementation of BVAS by INEC during the 2023 Presidential Elections. The findings revealed diverse implications and challenges associated with the implementation of BVAS in ensuring public trust in the 2023 presidential election. Based on the findings, actionable policy options were offered for the effective implementation of the BVAS for further elections in Nigeria.

**Keywords:** Public Trust, Election Automation, Voters Confidence, Electoral System, BVAS.

## 1. Introduction

The implementation of a Bimodal Voter Accreditation System known as BVAS in the electoral procedure elicited curiosity and apprehension from voters, stakeholders, and the general public. There has been an increasing interest in using election automation to improve the efficiency and transparency of electoral procedures in recent years. Although election automation has promise to enhance the efficiency and precision of elections, it also raises concerns over its influence on public confidence in the democratic system. Public confidence in elections is an essential aspect of democratic governance since it guarantees that the public has trust in the authenticity of election outcomes. Perceived abnormalities or malfunctions in the electoral process can erode trust in the election outcome, potentially undermining public confidence

in the democratic system. This is especially accurate when it comes to election automation, as the utilisation of technology might be seen as obscure and therefore susceptible to manipulation.

With the advancement of technology, it is anticipated that fully automated elections will inevitably become necessary, along with the need for a trustworthy and transparent voting procedure (Schultz-Herzberge 2014). Several nations worldwide have begun to adopt automation in their electoral processes, employing electronic voting machines and biometric technology for voter authentication. This system has undergone fluctuations in recent years. There are occasions when electoral events have caused significant technological issues. The Kenya integrated electoral management system (KIEMS) failed to meet the primary goals set for the 2017 Kenya presidential elections, as documented

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by Micheni and Murunba (2018), Cheeseman et al. (2018), and O'Brien (2018).

In Nigeria, several connected difficulties were apparent during earlier elections held by the Independent National Electoral Commission (INEC). These factors encompass the process of manually verifying voter registration, the presence of lengthy waits at polling stations, a rising number of ambiguous and invalid votes on the ballot, instances of stolen or miscounted votes, and concerns over transparency such as claims of election fraud. As a result, these issues had a detrimental impact on voter turnout and undermined the integrity, legitimacy, and public trust in the election results.

Given the above, the Independent Electoral Commission (INEC) introduced various technological solutions in Nigeria to improve the efficiency and cost-effectiveness of elections and to enhance public confidence throughout the electoral process. One of these solutions is the Bimodal Voters Accreditation System (BVAS), which played a significant role in the recently concluded 2023 presidential and governorship election. The implementation of BVAS has been regarded as a remedy for electoral difficulties, such as the establishment of precise voter registries, streamlined voting and result calculation, and expedited transmission of election results (The Punch News, 2023). As stated by Lawrence Bayode, the Deputy Director of Information and Communication for INEC, the BVAS is disabled from the backend to prevent any tampering with the vote by anyone who steals the device during an election (Channels TV, 2023).

Yet, the post-implementation of this technology in the 2023 Nigerian election has demonstrated that the implementation of a Bimodal Voter Accreditation System known as BVAS may pose potential electoral hazards, including equipment malfunction, disputed machine integrity, susceptibility to hacking, and a diminished level of public trust (The Vanguard News, 2023). It is crucial to evaluate the evolving trends of BVAS integration into Nigerian election management concerning public trust in election outcomes, especially from local electorate perspectives. Because of this, this article focuses on how the implementation of BVAS interferes with public trust in elections from the perspective of the local electorate, hence, the study examined the strategies implemented for BVAS, interrogated how BVAS affected public trust in elections, and analysed challenges associated with the implementation of BVAS in the election.

## 2. Literature

### 2.1 Strategies for Implementing Election Technologies

Nigeria's election cycle is marked by a myriad of problems such as some registered voters' names being absent, voter intimidation and disenfranchisement, multiple and underage voting, ballot box theft or destruction, incorrect computation, and result fabrication (Alabi, 2009; Ogbaudu, 2011). The federal government used technology in the voting process, known as election automation, to reduce these issues, and has started several initiatives to make sure the adoption is effective. As an essential prerequisite, the legal framework helps INEC and other stakeholders prepare the necessary financial, infrastructural, logistical, human, and capital resources (Ahmad, Abdullah, & Arshad, 2015). However, the INEC Chairman is clear that the main barrier to the use of electronic voting is Section 52(1) (b) of the Electoral Act 2010. This is also in agreement with Ajayi (2003), who contends that acts or constitutional provisions granting legality for the use of electronic voting still face significant obstacles to its acceptance in Nigeria.

According to Maiye and McGrath (2008), an ICT infrastructure that is complementary is essential. They argue that considerations of power and politics, literacy rates, culture, and religion should all be considered when deciding which systems to implement, in addition to the infrastructure that is already in place. Similar to this, the development of reliable technology—like electronic voting systems is directly related to the availability of energy (Onyekwelu & Akomolafe, 2010; Onu & Chiamogu, 2012). While polling place (client) voting devices require a sufficient supply of energy to run, internet access is necessary for online voting (e-voting). However, only around 40% of the population in Nigeria has access to electricity, making power outages a frequent occurrence there (Amadi, 2015). Furthermore, a fundamental requirement for the use of electronic voting is the lack of complete biometric data for identification and election monitoring (Umoru, 2012).

Mgba (2017) states that having a functional Electoral Management Body (EMB) is essential to the electoral process as it bears the responsibility of overseeing election administration among other things. Credible elections that can boost public faith in the electoral process require a strong, transparent, and functional EMB in addition to trustworthy electoral officials. Ahmad, Abdullah, and Arshad (2015) concurred,

stating that it is clear that Nigeria lacks honest electoral officials and a sustainable, independent, and functional EMB that would increase public trust in the election process. Put simply, credible elections can only arise from a credible EMB. However, because of the inadequate EMB, general election difficulties in Nigeria appear as electoral manipulation, electoral process violations, and corrupt bribery of officials and voters (Alemika, 2011).

In a similar spirit, Olaniyi, et al. (2011) contend that the public's confidence in the voting system may be raised by the security and dependability of the technology being used. He claims that if individuals believe that electronic voting is secure enough to shield their identities from prying eyes and temperamental voters, as well as to ensure that ballots are counted accurately, then they will be more confident and trusting of the system and be less likely to abstain from voting. On the other hand, while the availability of a safe and dependable ICT infrastructure, a legislative framework, strategic organizational design, and technological design are necessary for the successful adoption of electronic voting, the attitude that citizens have toward the technology plays a major role in its adoption (Mohammed & Bashir, 2010).

Therefore, tackling the corrupt inclinations and immoral conduct of electoral officials and other engaged parties is more important in the quest for a functional electoral process in Nigeria than modifying the voting method (Ahmad, Abdullah & Arshad, 2015). An environment that fosters discussion and debate among stakeholders and policymakers about the viability of the technology, as well as the feasibility of adoption, can result from the piloting of an electronic voting system, which has the potential to increase stakeholder trust and confidence and open the door for adoption decisions to be assessed (Ahmad, Abdullah & Arshad, 2015). Pilot projects can provide input on the financial advantages of electronic voting technology (Goldsmith, 2012). This suggests that before widespread, nationwide use of the technology, it must be practically tested on private election platforms. Some views contend that societal political climate has a major role in determining the acceptance of e-voting. Moynihan and Lavertu (2012) provide support for this theory by arguing that, although it is rarely used, political pressure in favour of or against a voting system is a significant factor in the adoption of a specific voting policy and practice pattern.

A crucial concern in Nigerian elections is maintaining social security as a significant voting component (Jega & Hillier, 2012). A successful voting system has to guarantee sufficient security for voters, ballots, and other election-related items. The implementation of polling place electronic voting is highly dependent on the growing awareness of security concerns in Nigeria, including the actions of the resurgence of "Boko Haram," MEND militias, and the ongoing kidnapping (LeVan & Ukata, 2012). However, care must be taken while implementing social security assurances. The unsightly practice of the incumbent powers mobilizing sizable contingents of the armed forces and paramilitary groups on election day under the guise of counter-terrorism to harass opponents and intimidate voters can only run the risk of depicting the nation as a "militarized democracy" or "garrison democratic state" (Premium Times, 2014; Niyi, 2014). On the other hand, Burmester and Magkos (2003) stated that finding election technology that the general public approves of is just as crucial as the election itself. To illustrate this, Baiyewu (2012) summarized that the adoption of electronic voting goes beyond just using it to improve elections; what matters more is that voters must be ready to embrace the technology. Thus, there is a need to sufficiently educate the public about the advantages of switching to electronic voting.

## 2.2 Public Trust in the Implementation of Election Technologies

Regarding the election's validity and the public's acceptance of the results, public confidence in the electoral process is essential (Williams & Agbesi, 2022). In the context of technology, some studies have looked into how the electorate perceives various election technologies in terms of trust (Kulyk et al., 2022). The authors contended that public trust plays a crucial role in the acceptance of related technologies. They also highlighted many aspects that impact public trust in the context of election technology, including openness of the system, perceived risk of security, social influence, and performance efficacy.

The legitimacy of government, faith in the Internet, and trust in service delivery were shown to be the main variables impacting public trust in the ongoing use of technology in the election process in a recent study by Li and Xue (2021). A popular topic in the context of global voting system modernization is election automation. Hossain Faruk (2024) asserts that automation shortens lines at the polls and streamlines the voting process, improving voter satisfaction. Also,

Kulyk et al. (2022) contend that voting uncertainty brought on by automation might diminish public faith in the process and overall voters satisfaction, particularly among older citizens. According to Brown (2018) and Maphephe (2019), automated technology can increase public trust by reducing the likelihood of human error and increasing the transparency of election outcomes. Rajput et al. (2021) express concern about the lack of transparency in electronic voting procedures, which calls into doubt the accuracy of the results and erodes public confidence.

Similarly, Salman et al (2022) argue that by lowering the possibility of fraud and manipulation and increasing public satisfaction, election automation may improve security. Arcos et al. (2021) highlight how vulnerable automated systems are to hacking and cyber threats, which can erode public confidence. Robinson (2022) argues that automation can facilitate voting for people who are physically impaired or who live far away, hence promoting inclusiveness and happiness. In contrast, Barrie et al. (2019) contend that certain groups may experience dissatisfaction as a result of disadvantages arising from technology issues and digital divides. It shows that the narratives of e-elections are complex and require more contextual investigations.

As technology becomes more and more integrated into daily life, Goswami et al. (2023) predicts that public trust in automated election systems will grow. However, Matzkin et al. (2023) worries that people's trust in technology is eroding, especially in the event of system failures or cyber-attacks that might lower customer satisfaction. Critics express concerns regarding possible security risks, technological difficulties, and the erosion of confidence, while supporters highlight improved effectiveness, precision, and ease of use. To effectively implement election automation and maintain public confidence in the electoral process, EMBs need to carefully consider these concerns and find a middle ground between maintaining the integrity of the voting process and developing technology.

### **2.3 Analyzing the Challenges of Implementing Election Automation by INEC**

Scholars have presented a complex array of challenges for INEC's use of election automation, along with counterarguments. Even if automation can improve efficiency and transparency, it is not without its problems. Uchendu et al. (2023) argue that, with sufficient funding, INEC can provide the necessary

technological infrastructure for automated elections, resulting in higher levels of accuracy and efficiency. This is similar to Aliyu (2021) and Beluchi (2020), who call attention to the current budgetary constraints INEC is dealing with, which may impede the widespread application of automation technologies and lead to technological issues. This is in line with position of Apeloko et al. (2020) which stressed that financial hurdles has always been a major constraint of technology adoption.

Voter education is crucial, according to Robinson (2022) since it helps people get ready for automated voting, which might increase voter participation and turnout. Matzkin et al. (2023) adds another dimension stressing that Nigeria's heterogeneous population and uneven literacy rates might provide a significant obstacle to educating voters about automation, leading to misconceptions and disenfranchisement. Election technologies can improve electoral security by reducing the possibility of fraud and manipulation, claims Maphephe (2019). Ogunlade (2021), on the other hand, discusses privacy and data security problems and emphasizes the need for robust security measures to stop the misuse of people's personal information.

Uchendu et al. (2023) claim that automated technology has been successfully used in several countries, demonstrating its reliability for election processes. On the other hand, Maphephe (2019) emphasize instances of technical glitches in past automated elections that led to confusion and delays for voters. Herrnson et al. (2009) predict that public trust in automated election systems will rise as technology becomes more pervasive in everyday life. Matzkin et al. (2023) offered an opposing perspective, expressing concern about the public's decreasing trust in technology, especially in the wake of system malfunctions or cyberattacks that have the potential to undermine public confidence.

### **3. Methods and Data**

This research employed a case study survey research design. This study examined the subjects of BVAS and public trust focusing on the 2023 Presidential Elections conducted in Yewa South Local Government. This approach enabled the researchers to summarize the data and offer an explanatory framework for the observed events. There was a total of 29518 registered voters in Yewa South Local Government of Ogun State. Taro Yamane estimation method at 5% significance was used to compute a

total of 395 samples for the study. This investigation mainly depends on primary data. The collection of primary data was through the survey questionnaire which was administered via a drop-and-pick method. The research instrument was divided into section A and section B. In section A, relevant background information of the respondents was considered while section B was further segmented into B1(strategies), B2 (public trust), and B3 (challenges) representing each of the stated research focuses. The respondents were asked to rate the research items using options strongly disagree (1), disagree (2), agree (3), and strongly agree.

**Table 1.** Cronbach Alpha

Sub-constructs	Items	Cronbach's alpha
Objectives	15	0.710

Source: SPSS Computations

Table 2 shows a descriptive analysis of data collected using frequency distribution and percentages to

**Table 2.** Descriptive Results on Strategies, Levels and Challenges of BVAS and Public Trust

Variables	SD (%)	D (%)	SA (%)	A (%)
<b>Strategies put in place by INEC in the implementation of BVAS</b>				
Legal Framework	39(11.1)	26(7.4)	156(44.4)	130(37.0)
ICT Infrastructure	13(3.7)	130(37.0)	104(29.6)	104(29.6)
Electoral Management Body (EMB)	13(3.7)	65(18.5)	65(18.5)	208(59.3)
Piloting E-voting System	26(7.4)	39(11.1)	130(37.0)	156(44.4)
Public Awareness	26(7.4)	26(7.4)	143(40.7)	156(44.4)
<b>Level of Public Trust in the Implementation of BVAS</b>				
Acceptance of Election Result	13(3.7)	65(18.5)	156(44.4)	117(33.3)
Public Transparency	26(7.4)	65(18.5)	104(29.6)	156(44.4)
Human Mistakes	13(3.7)	8(2.28)	200(56.9)	130(37.0)
Election Security	17(4.84)	100(28.5)	78(22.2)	156 (44.4)
Technology-driven mistrust	39(11.1)	52(14.8)	117(33.3)	143(40.7)
<b>Challenges Associated with Deployment of BVAS at the 2033 Presidential Election</b>				
Financial Constraints	26(7.4)	104(29.6)	143(40.7)	78(22.2)
Voter Education	-	52(14.8)	143(40.7)	156(44.4)
Data Privacy & Security Issues	52(14.8)	52(14.8)	169(48.1)	78(22.2)
Technological Hiccups	26(7.4)	52(14.8)	117(33.3)	156(44.4)
Technophobia among the public	52(14.8)	39(11.1)	156(44.4)	104(29.6)

Source: Field Survey, 2023

#### 4.2 Strategies for Implementing Election Technologies

Table 2 provides a detailed breakdown of key variables related to the readiness of a given electoral system for the implementation of BVAS. The legal framework is a critical aspect of any electoral system, and results indicate a relatively strong foundation for

## 4. Results and Discussion

### 4.1 Validity and Reliability Analysis of Survey Instrument

The face validity of the research instrument was ensured by the supervisor through meticulous editorial corrections. To assess the reliability of items, particularly the items used for ascertaining the reliability of items used collating data on each of the research focuses. Table 1 illustrates alpha values of 0.71. The alpha coefficient of the structures surpasses the threshold of 0.70, which is widely considered an acceptable level according to the existing scholarly literature (Taber, 2018).

present the pattern of the majority of the respondents sampled for this study.

the adoption of BVAS. The majority of respondents, constituting 44.4%, expressed strong agreement (SA) with the existing legal framework put in place by INEC. However, it is noteworthy that 11.1% indicated a degree of disagreement (SD), suggesting there might be areas for improvement or concerns within the legal framework that need to be addressed.

The second variable, ICT infrastructure, is a pivotal factor influencing the successful implementation of e-voting. Surprisingly, 37% of respondents disagreed (D) with the current state of ICT infrastructure, revealing a potential bottleneck in the technological readiness for the adoption of BVAS. This could be indicative of insufficient technological capabilities or outdated infrastructure that requires attention to ensure a smooth transition to e-voting in the Nigerian election chain.

The Electoral Management Body (EMB) plays a central role in overseeing the electoral process. The data suggested a more favourable scenario, with 59.3% of respondents strongly agreeing (SA) with the competence of the EMB. However, 18.5% expressed disagreement (D), signifying a significant minority that may harbour concerns about the effectiveness or impartiality of the EMB in the context of deploying BVAS for election.

Piloting e-voting systems is a crucial step in assessing feasibility and ironing out potential issues before full-scale implementation. Results indicated a balanced perception, with 44.4% strongly agreeing (SA). However, 11.1% expressed disagreement (D) and strong disagreement (SD), respectively, highlighting the presence of apprehensions or reservations among a portion of the respondents concerning this pre-implementation strategy of INCE concerning BVAS.

Public awareness is pivotal for the success of any major electoral system transition. The data suggests that 40.7% strongly agree (SA) with the existing level of public awareness, while 7.4% expressed disagreement (SD). This indicates a relatively positive outlook on the current state of public awareness but underscores the need for targeted efforts to bridge the awareness gap and address concerns.

### 4.3 Public Trust in the Implementation Outcome of Election Technologies

The acceptance of election results is a crucial aspect of

**Table 3.** *Regressing Adoption of BVAS on Public Trust in Election Outcome*

Variable	Coefficient	T-stat	P-value
Constant	11.533	16.358	.000
Adopting BVAS	0.302	5.911	.000
Adjusted R Squared		0.88	
F-stat		34.946	
Sig		.000 <sup>b</sup>	

a. Dependent Variable: Public Trust in Election

Source: *Field survey, 2023*

a healthy democratic process. Analysis indicated that a significant majority, at 44.4%, strongly agree (SA) with the acceptance of election results. However, a notable 18.5% express disagreement (D), suggesting a proportion of respondents' harbour reservations or concerns regarding the legitimacy or fairness of election outcomes after the implementation of BVAS.

Public transparency is vital for building trust in the electoral process. The table shows a balanced perspective, with 44.4% agreeing (A) with the existing level of transparency concerning the use of BVAS. However, 18.5% express disagreement (D), signalling potential areas for improvement in communication or information dissemination to enhance public confidence in the transparency of election processes even after the implementation of BVAS.

The presence of human mistakes in the election process can impact its integrity. The data revealed that 56.9% strongly agree (SA) with the existence of human mistakes in the deployment of BVAS for election. However, a small percentage of respondents, 2.28%, strongly disagree (SD), suggesting a perception that human errors may be overemphasized or that measures are in place to minimize human mistakes. Ensuring the security of elections is paramount for maintaining the integrity of the democratic process. Analysis showed a balanced response, with 44.4% strongly agreeing (SA) with the level of election security. However, a notable 28.5% express disagreement (D), indicating concerns or perceived inadequacies in the current security measures for deploying BVAS

As BVAS technology becomes more integrated into election processes, concerns about its impact on trustworthiness emerge. The data suggested some level of technology-driven mistrust, with 14.8% disagreeing (D). On the positive side, 33.3% strongly agree (SA) with the role of technology, indicating a divided perception that warrants more research attention to address and alleviate technological concerns.

#### 4.4 Challenges of Implementing Election Technologies by INEC

Financial constraints emerge as a significant challenge, with 40.7% strongly agreeing (SA) that limited financial resources pose a hurdle to the implementation of BVAS. This indicates a widespread acknowledgement of the financial burden associated with the adoption of advanced voting technologies. The 7.4% who strongly disagree (SD) suggests a minority perspective, perhaps indicating optimism about the feasibility of funding e-voting initiatives among the local electorates.

Voter education plays a pivotal role in ensuring a smooth transition to e-voting. The findings showed that the absence of strongly disagree (SD) responses suggests a consensus that voter education is necessary, this was further sustained by 40.7% and 44.4% of the respondents who went for strongly agree and agree. However, 14.8% disagree (D), indicating a notable proportion of respondents believe there is room for improvement in educating the public, especially the local masses about the intricacies of adopting BVAS for elections in Nigeria.

Concerns about data privacy and security of BVAS are evident in the responses, with 48.1% strongly agreeing (SA) that these issues pose a challenge emphasizing the significance of addressing these concerns to gain public trust while 14.8% of the respondents strongly disagree (SD). This suggested a prevailing awareness of the potential risks which might be associated with the electronic storage and transmission of sensitive voter information.

The likelihood of technological hiccups is acknowledged by a considerable percentage of respondents, with 33.3% strongly agreeing (SA) and 44.4% agreeing (A) that such issues may impede the successful implementation of BVAS. A lower rate of 7.4% of the respondents who strongly disagree (SD) indicated a shared understanding that technological challenges are a realistic consideration in the adoption of advanced e-voting-assisted systems like BVAS.

Table 2 revealed a noteworthy 44.4% of respondents strongly agree (SA) with the presence of technophobia among the public. An additional 29.6% also agree (A), suggesting a substantial concern about the resistance or fear of technology within the local voting population. The 11.1% who strongly disagree (SD) might represent a more optimistic view that technophobia is not a major obstacle among the respondents.

#### 4.5 Discussion of Findings

This section provides a summary of emerging findings from the quantitative data gathered to provide answers to research objectives. The findings are exposed to empirical results or arguments of previous related to ascertain the veracity of the findings generated by this study.

This study investigated the various strategies put in place by INEC in the implementation of BVAS to ensure transparency and credibility of the election results. The result of the findings revealed that the structure of an electoral management body (EMB) significantly influences the successful implementation of BVAS (United Nations 2012). A robust EMB is crucial for ensuring transparency, efficiency, and public trust in automated electoral processes (Robinson, 2022). These findings underscore the importance of having an independent and well-resourced EMB, equipped with competent personnel and clear mandates to oversee the adoption and execution of automated systems (BVAS). This ensures that election automation aligns with international standards and fosters confidence in the electoral process, promoting democratic principles.

These findings also connect with the work of Kulyk et al. (2022) and Brown (2018), who posited that the implementation of BVAS serves as a potent tool to mitigate electoral malpractices thereby improving citizens' confidence and trust in the electoral process. Findings established that automated systems such as BVAS are capable of the transmission of real-time results and significantly reduce opportunities for fraud and manipulation. The findings substantiate that BVAS minimizes human intervention in the electoral process, thereby curbing issues like ballot tampering and vote rigging. The increased accuracy and transparency provided by BVAS systems contributed to building public trust by ensuring a fair and credible electoral environment, ultimately enhancing the integrity of the democratic process. This result aligns with the position of Brown (2018) who proves that e-voting reduces the chance of human mistakes in the election process and helps to foster public confidence and trust in the election result.

The report of the findings also reveals a significant correlation between disparities in levels of literacy and the successful implementation of BVAS. Higher levels of literacy are associated with better understanding and acceptance of automated election processes, leading to increased public trust. Okonkwo (2022),

substantiated that addressing these disparities through targeted literacy programs and clear communication and strategies could enhance the effectiveness and public acceptance of election automation, ultimately fostering trust in the electoral process (Maphephe, 2019).

Technophobia among the public, advocated by Brown Lee (2021) suggests a substantial concern about the resistance or fear of technology within the voting population and stakeholders as it affects acceptance of election results. However, the findings show that technophobia, characterized by anxiety or resistance appears to be a critical factor affecting the successful adoption of BVAS for elections. Opinion of the despondence towards the findings reveals that addressing technophobia through educational initiatives and transparent communication about the security and reliability of BVAS is essential for building public trust in elections, aligning with Brown Lee's perspective on mitigating technological fears for societal to handle changing threats, participants underlined the importance of strong cybersecurity safeguards, frequent system audits, and ongoing development. Open-source solutions were strongly favoured by many as a means of promoting confidence through community inspection since transparency in the creation and deployment of automated systems was seen as crucial.

## 5. Conclusion and Recommendations

This study stressed the significant role of BVAS in shaping public trust in elections. The correct and transparent implementation of automated systems can bolster the perception of fairness and credibility among citizens. This process is not without its challenges, and it requires careful consideration of implantation uncertainties and the importance of accountability and public education. Given this submission, the following actionable policy options are suggested for handlers of the council administration in Nigeria.

- i. Election management bodies (INECs) should place a high priority on openness and public accessibility when it comes to the selection and implementation of election automation technology.
- ii. Governments should invest in expanding technological infrastructure, particularly in rural areas, to bridge the urban-rural technology gap to scale up awareness of the critical mass.
- iii. Robust cybersecurity measures must be implemented to protect electronic voting systems from manipulation and fraud.

- iv. To promote the effective use of BVAS, extensive public awareness efforts should be launched to inform the public of the advantages and security precautions of election automation.
- v. Election officials and poll workers should get thorough training from the election authorities (INEC) to guarantee the safe and efficient use of automated technologies like BVAS.

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