



Electronic Accreditation and Electoral Administration in Nigeria's 2019 General Elections

by

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Abstract

Over voting, mutilation of result sheets, modification of results, and theft of vote boxes are only some of the anomalies and malpractices that have plagued the Nigerian election system. By deploying 'Biometric Smart Card Reader' technology in 2015, the Independent National Voting Commission (INEC) made a significant step toward upgrading Nigeria's electoral system. Among other ICT tools, the biometric smart card reader is a technical equipment designed to check, authenticate, and accredit electorate permanent voter cards (PVCs) in order to determine whether the card was issued by INEC and to validate the card's ownership using biometric finger scanning. The goal of using this technology is to eradicate electoral fraud and ensure Nigeria's legitimacy, transparency, and free and fair elections. The employment of this technology in the Nigerian electoral system, on the other hand, has sparked discussion among stakeholders both before and after the 2015 elections. The study investigated the influence of electronic accreditation and electoral administration in Nigeria's 2019 general elections within this context. The study was theoretically based on the cybernetics model of communications theory as an analytical tool. Using the documentary method of data collection, descriptive and historical research design, and content analysis, it was discovered that, while the use of biometric smart card readers in the 2019 presidential elections increased election credibility by eliminating the occurrence of over-voting, it also created a lot of controversies as a result of malfunctions, effectively disenfranchising the electorate. Based on the findings, it is strongly recommended that the Independent National Electoral Commission take advantage of available technology and consider the possibility of introducing electronic voting in the future using personal identification numbers (PINs) in order to improve Nigeria's free, fair, and violence-free elections.

Key words: Smart Card Readers, Electronic Voter Register; Automatic Fingerprints Identification System

1. Introduction

In Nigeria, the use of technology in general elections is not new. Prior to the reign of Professor Attahiru Jega, Chairman of the Independent Electoral Commission (INEC), its use was sporadic and uneven. From June 2011 to July 2015, Jega served as the chair of INEC. Prior to Jega's term, the haphazard use of technology exacerbated Nigeria's electoral crisis. In the past, Nigerians voted with temporary voters' cards (TVCs) rather than permanent voters' cards (PVCs) in several general elections, which resulted in massive vote manipulation.

The 2015 general elections were the first time that the election management body's leadership was adamant about breaking with the prior custom of using TVCs in favour of PVCs. The PVCs were supposed to be checked using a smart card reader (SCR) and validated using fingerprints and biometric data. This was done to prevent voter impersonation and to create an audit trail by include records of verified voters in each polling unit's results (PU). In the annals of Nigerian election history, this technique was both creative and revolutionary. The action sent shivers down the spines of dishonest politicians who tried all they could to stop INEC and its leadership, including using the legal system, the media, politics, and the military. From Parliament to the Council of State, from Service Chiefs to the Office of the National Security Adviser (NSA), the whole political control machinery grew panicked and nearly psychotic. Some attempted to prevent INEC's leadership from using SCRs, claiming that doing so was illegal and unconstitutional (Iwuoha, 2019).

According to the above, the 2015 general elections in Nigeria was a watershed moment in the country's electoral administration, as it saw the electronic accreditation of voters for the polls through the use of a Smart Card Reader (SCR). According to Shuaibu, Mohammed, and Arthur (2017), the use of voter accreditation technology during Nigeria's 2015 general elections decreased electoral fraud such as multiple voting, ballot box stuffing, and ballot box theft. This is due to the fact that every qualified voter must undergo biometric capture before being allowed to vote.

According to Uzodike and Onapajo (2017), the 2015 Nigerian elections were not only transparent, but also fair and credible, and contributed to strengthen democracy and democratic ideals in the nation. The authors agreed that the technical techniques utilised made accreditation more transparent and less time-consuming, and that they offered backup material that could be used for legal purposes if the necessity for such procedures arose. Bayode (2017) examined the role of digital identification in safeguarding the electronic voter accreditation system in terms of fraud prevention, concluding that the technology offered possibly the greatest option in shaping up Nigeria's political arena.

According to Ayodele (2016), the use of voter accreditation technology during the 2015 general elections in Lagos, Nigeria, significantly reduced the likelihood of bloody electoral violence among voters. Sabo, Siti, John, and Rozita (2015) were able to show that voter accreditation technology helped to prevent electoral fraud. Olurode (2017) backed up this claim, claiming that the adoption of voter accreditation technology to Nigeria's electoral process greatly improved the process, increased the identification of electoral fraud, and decreased duplicate voting. Sabo et al. also looked at other aspects of

this new technology, such as faith in electronic voting systems, voting characteristics, computer self-efficacy, and the capacity to utilise electronic voting systems. The authors came to the conclusion that e-voting technology has the potential to improve fledgling democracies' voting processes. There has been no research on how the employment of this technology in future elections can be perpetuated.

Most developing countries, including Nigeria, are currently facing enormous challenges, particularly in the areas of infrastructural decay, economic mismanagement, and system collapse, all of which are consequences of systemic corruption that has pervaded the system for so long, with disastrous consequences for governance. Furthermore, in Nigeria, the employment of new technology for governance objectives in public institutions is not only rare, but also fraught with distrust and mistrust. As a result, despite some success in the 2015 and 2019 general elections, the use of ICT technologies in Nigeria's electoral process continues to be plagued by several difficulties. The problems, like in many other developing countries, vary from the failure of ICT tools to politicians' intent on winning at any costs, as well as a slew of other human rights breaches. Many claim that incorporating ICTs into the election process has resulted in significant benefits, including a decrease in electoral malpractice (McGrath and Maiye, 2010; Gunawong and Gao, 2017; Olusadum and Anulika, 2018).

Despite its use, the use of ICT and electronic technologies in the electoral process has been hampered by inadequate or inconsistent power supply, malfunctions, inexperienced staff, mass illiteracy, and election fraud utilising electronic voting. According to Olurode (2017), during the 2015 general elections in Nigeria, the use of voter accreditation technology assisted in exposing fake voters and reducing multiple voting, resulting in a dramatic decrease in the number of voters from 39,469,484 during the 2011 general elections to 29,432,083 during the 2015 general elections. The deployment of ICT and the connection between human and non-human actors in the electoral process are seen to have contributed to the failure of the SCR, EVR, and AFIS in various ways. This presentation will focus on voter authentication utilising Smart Card Readers (SCR), EVRs, and AFISs in connection to human aspects and difficulties in the election process. In accordance with the above concept, this study is interested in analysing the efficacy of electronic accreditation in the administration of the 2019 general elections through the use of Smart Card Readers, Electronic Voter Registers, and the Automatic Fingerprint Identification System (AFIS). Only the presidential election was included in this study for the sake of emphasis.

2. Objectives of the Study

- i. To examine how the applicability of Smart Card Readers (SCR) aided in checkmating multiple voting.
- ii. To appraise the effectiveness of the Electronic Voter Register (EVR) in minimizing electoral irregularities like rigging and ballot snatching.
- iii. To suggest measures that should be employed to make the application of ICT into election administration more effective.

3. Election Administration in Nigeria

3.1 Information and Communication Technology and the Management of Elections

As can be seen in most political transitions, democratic societies are built on the ideals of elections and the ability to express oneself. As a result, most sovereign countries are governed by pure democratic ideas, in which citizens express their right to choose a leader with whom they think their nation's fate may be entrusted through the conduct of an election (Ahmed and Usman, 2015). However, election management bodies throughout the globe have used a variety of creative ways to enhance election administration and conduct, some of which are now regarded best practice. The use of information and communication technology, the adoption of more transparent and inclusive processes, professionalisation of the organisation, revisions to the legal framework, and improved connections with external stakeholders are among the electoral reforms that have been implemented. As a result of these efforts, a variety of election management bodies have had various degrees of success in the way they plan, organise, administer, and conduct elections in recent years (Jega, 2012).

Information and communication technology's role in human civilizations should never be underestimated. According to Kroeker (2010), the use of information and communication technology has become unavoidable and important to organisations' and societies' operations and activities in recent years. Information and communication technology, according to Statistics Canada, is a sector of labour and study that encompasses technologies such as desktop and laptop computers, software, peripherals, and internet connections, which are largely used for information processing and communications activities. This definition emphasises the fact that information and communication technology (ICT) entails the use of computer software and hardware to process data for both private and public purposes (Kroeker, 2010).

Multiple registrations, which had been one of the primary political instruments for manipulating elections by unscrupulous and savage forces, have been abolished by the use of ICT in elections, according to research (Ejikemjombo, 2015). However, due to a lack of full implementation of the required electronic voting system in the country, which entails combining electronic voter registers and smart card readers with self-auditing election result devices that are fully equipped with real-time facilities, Nigeria has yet to meet international standards for the provision of a viable, successful, and widely accepted electoral system in democracy (Esan and Ayeni, 2017).

3.2 Overview of electoral fraud in Nigeria since 1999

Generals Ibrahim Babangida and Sani Abacha tried twice unsuccessfully to transition Nigeria to democracy before returning to civil government on May 29, 1999. The method and ultimate outcome of the 1999 General Elections were more acceptable and less controversial than the subsequent elections of 2003, 2007 and 2011. Although the Transition Monitoring Group (TMG), the Carter Center, the National Democratic Institute (NDI), the International Republican Institute (IRI), and the European Union Election Observer Mission (EU-EOM) all reported isolated sharp practices and irregularities, the

Alliance for Democracy and the All Peoples Party candidates were unable to mobilise substantial evidence to reverse the trend (Ezeani, 2005).

Nonetheless, the scenario was very different for the 2003 national elections. There were several irregularities and acts of violence during the polls. In their different findings, both local and foreign election monitors recognised that major electoral malpractices occurred during the general elections. General Muhammadu Buhari, the All Nigerian Peoples Party's presidential candidate, condemned the elections as the most rigged since Nigeria's independence, and asked for their annulment and the formation of an interim government to take over on May 29th, 2003. (Odeh, 2003). Other electoral frauds committed by INEC and its dishonest officials include unlawful possession of ballot papers and boxes, unlawful possession of authorised/unauthorised voters' cards, stuffing of ballot boxes, forgery of results, falsification of result sheets, tampering with ballot boxes, collusion with party agents to share unused ballot papers for large financial rewards, and inconsistent application of INEC's procedures across the country (Ezeani, 2005).

The quality of Nigerian elections is deteriorating, posing a danger to the country's democratic consolidation. The 2007 General Elections were the third in a series of elections that charted Nigeria's democratic development since 1999. The elections provided another chance for the country to experience transformation and power shifts. However, many Nigerians' and international partners' expectations were crushed by the general quality and outcomes of the elections. Massive violations were observed by several certified election observers, including the TMG, The Carter Center, NDI, IRI, and EU-EOM. The election results were hotly challenged in an unusual but mostly peaceful way. As a result, according to Aiyede (as reported in Omotola, 2010), "There were 1,250 election petitions arising only from the election process. The presidential election featured eight candidates: 105 for governor, 150 for senator, 331 for House of Representatives, and 656 for State Houses of Assembly."

The 2007 General Elections' mismanagement fueled civic movement for electoral reform and compelled the government to make some modest concessions. CSOs, pro-democracy groups, and opposition political parties battled tooth and nail for comprehensive election reform. The Electoral Reform Network and the Centre for Democracy and Development, for example, are shining examples of legitimate election advocacy organisations that presented memoranda to the Mohammed Uwais Electoral Reform Committee and followed up in the National Assembly (Omotola, 2010).

3.3 Smart card reader and the credibility of the 2015 general elections in Nigeria

Nigeria's 2015 General Election was the country's fifth quadrennial election since the end of military rule in 1999. The 2011 General Elections were a milestone moment in Nigeria's democratic trajectory, as they contrasted dramatically with prior votes' mishandling and extensive fraud. INEC stated that 73 million Nigerians had registered by the end of the voter registration operation in 2011, however the Automated Fingerprint Identification System had deleted 800,000 persons for duplicate registration (Aziken, 2015). In order to enhance the outcome of the 2011 elections, INEC implemented

technical advances to combat electoral fraud. A biometric PVC and card reader equipment were used to validate the legitimacy of the PVC as well as to authenticate the identity of the intended voter by comparing biometrics collected on the spot with those stored on the PVC (Orji, 2017).

The 2011 voters' register, Nigeria's first electronically produced record, was instrumental in the manufacture of PVCs for the 2015 General Elections. The card reader is intended to read biometric data from the PVC's integrated chip. It displays the names and face pictures of voters, as well as verifying their fingerprints. The gadget was used to guarantee that each voter voted only in the registration region and polling unit where they were registered. The introduction of SCRs makes it more difficult to openly rig the 2015 General Elections, notwithstanding the fact that technology does not offer a solution to all types of electoral fraud.

INEC tested the biometric technology's dependability in 225 of the 120,000 polling units and 358 of the 155,000 voting locations utilised for the elections on March 7, 2015. (Idowu, 2015). The gadget was put to the test in 12 states: Delta and Rivers (South-South), Kano and Kebbi (North-West), Anambra and Ebonyi (South-East), Ekiti and Lagos (South-West), Bauchi and Taraba (North-East), Nasarawa and Niger (North-East) (North-Central). While noting the device's difficulties in verifying fingerprints, the Commission was pleased that the card reader's primary function, namely to certify the validity of PVCs, was nearly always fulfilled. The decision to deploy SCRs for the 2015 General Elections has four major aims, according to Mr. Kayode Idowu, the Chief Press Secretary to the INEC Chairman.

- i. INEC provided (not cloned) cards to validate PVCs submitted by voters at polling units and guarantee that they are authentic. This goal was completely accomplished.
- ii. To biometrically authenticate the individual who presents PVC at a voting station and guarantee that he or she is the card's lawful owner. During the public rally in certain states, there were a few difficulties in this respect. Overall, 59 percent of those who attended the event had their fingerprints validated properly.
- iii. To offer disaggregated data on accredited voters in the male/female and elderly/youth categories, which has hitherto been unavailable from INEC and is essential for research and planning? This goal was completely met by the demonstration.
- iv. To transfer all accredited voters' data to INEC's central server, allowing the Commission to verify statistics later reported by polling officials at polling units and, as a result, assess whether fraudulent changes were made. In this sense, the public demonstration was also completely successful (Idowu, 2015, <http://inecnigeria.org/inecnews>).

As a result of the 41% failure rate in (ii), the Commission, in collaboration with registered political parties, established that in cases where biometric authentication of a legitimate holder of genuine PVC proved difficult, the person could be physically authenticated and an Incident Form filled out to allow them to vote. In response to criticism of the deployment of biometric technology, Alhaji Lai Mohammed, the Publicity

Secretary of the then-leading opposition party, the All Progressives Congress (APC), says:

Nigerians have given all they have to get their PVCs, which are now their most valuable asset. They have also praised INEC's intention to deploy the card reader to ensure that Nigerian elections are legitimate. Only dishonest politicians, those planning to rig, those who have purchased a large quantity of PVCs, and those with anything to conceal oppose the machine's usage (Adeyemi, Abubakar, and Jimoh, 2015).

In support of this, Professor Jega (as stated in Oche, 2015) claimed that only individuals who had previously nourished intentions to illegally alter the outcome of elections were complaining about the technology's adoption. As previously stated, the usage of the biometric equipment during the elections was marred by errors. These issues varied from limited or non-verification of voters' fingerprints after validating their PVCs, to a delayed accreditation procedure due to poor internet server operations in some places, to INEC officials' and voters' lack of understanding of how to use card readers. Because some polling officials were handling the equipment for the first time and failed to peel off the nylon film coverings of the lenses to permit correct biometric reading, these issues were particularly prevalent during the March Presidential and National Assembly (NASS) elections. As a result, the 28 March elections were marked by scenarios in which:

In several cases, the electronic readers of biometric PVCs failed to authenticate fingerprints, causing voter authentication delays in a large number of polling locations. When fingerprint scanning failed, polling officials did not appear to have a common grasp of contingency plans, such as the need for large-scale manual verification of voters' identities against the printed voter registration and the issue of Incident Forms. When INEC workers meticulously filled out Incident Forms, accreditation was sometimes delayed even longer due to the time it took to fill out a form for each voter whose fingerprints could not be read (NDI, 2015, p. 3).

Rejection of fingerprints and even PVCs, especially those brought in from other polling units (the rejections were mostly among the elderly); cases of SCRs not working at all; delays in using the SCR in some polling units; network failure; and cases where voters' pictures did not appear on the card were all problems observed with the SCR during the 2015 General Elections. Others include the slow functioning of some SCRs while others failed to pick them up on time; some cards were not very sensitive to thumbprints while others initially rejected them; cases of low battery strength and, in some cases, completely drained batteries; cases where the SCR did not correspond with the manual; some SCRs stated card mismatch information; some cards had incorrect settings; and cases where the governorship and State House of Assembly (SHA) el (Election Monitor, 2015).

The presidential and NASS elections were marked by the majority of these snafus. In terms of logistics, material availability, and polling officers' knowledge of biometric technology, the INEC as an institution advanced substantially between the 28

March and 11 April elections. The Commission was able to fix its errors from the 28th of March, resulting in more free, fair, and credible gubernatorial and SHA elections. The failure rate of SCRs fell considerably following the Presidential and NASS elections, especially in the South-West geographical zone, as shown in Figure 1.

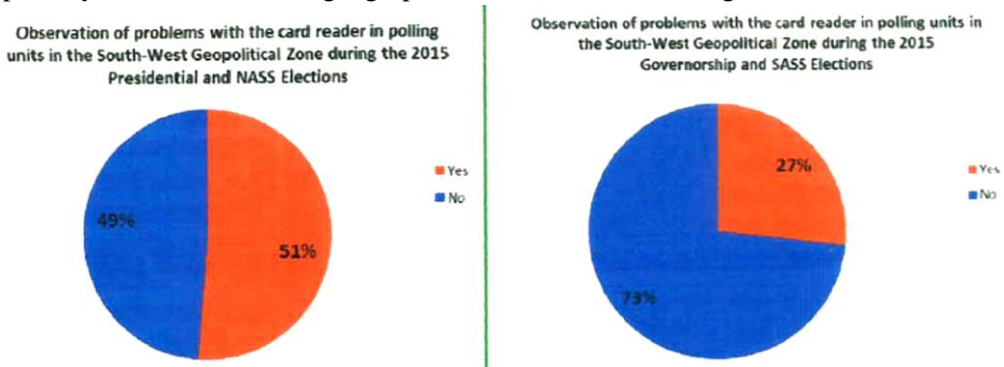


Figure 1: Rate of failure of card reader during the 2015 general elections.

Source: Election Monitor, 2015.

While the adoption of biometric technology did not ensure that the elections were completely free and fair, it did ensure that they were credible. Despite difficulties, particularly with fingerprint verification, the card readers helped to reduce electoral fraud. Professor Jega argues in his post-election evaluation that:

We have made it impossible for them (electoral fraudsters) since the total number of votes cast at a polling unit can never exceed the number of people who have been accredited. A disparity in statistics of this magnitude will be quickly noticed. This technique makes it impossible for a crooked election official to collude with a politician to rig the system. Once there is proof of tampering, the information saved in both the card readers and the result sheets taken to the ward levels will be recovered (Oche, 2015).

The election's credibility, which stems from the deployment of anti-rigging technology, may also be inferred from the fact that this is the first time in Nigeria's electoral history that candidates have admitted loss and called to congratulate the winners. This began at the national level on March 31, 2015, when President Goodluck Jonathan phoned to congratulate General Muhammadu Buhari. In Niger, Benue, Adamawa, Lagos, Kaduna, and Oyo States, defeated PDP governorship candidates followed this same behaviour. It was also the first time that so many sitting governors lost their Senate bids to candidates from the opposing party. This happened in Adamawa, Bauchi, Benue, Kebbi, and Niger states.

4. Materials and Methods

Research Design

For this study, the historical and descriptive techniques were used as research designs. The use of these approaches is motivated by the fact that historical research provides a platform for systematic and critical study of past events, experiences, and changes, which allows researchers to get a better understanding of the present. Descriptive research also provides an analytical view of the issue. This is because descriptive studies are intended to gather information about a phenomenon's current state.

Method of Data collection

The information in this article was gathered from a variety of sources, including books, journals, conference papers, reliable online sites, publications, and other publicly available materials, such as government reports. Official records pertaining to INEC's participation in the Nigerian election process are among the other documentary sources.

Method of Data Presentation and Analysis

This article is a historical and descriptive effort on electronic accreditation and electoral administration in Nigeria's 2019 general elections. The data will be analysed primarily utilising a content analysis technique based on secondary sources and data gathering methods. This technique was chosen based on the relative accessibility of prior material and the opportunity to expand on earlier work. According to Shank (2002), the content analysis technique has the following benefits: it allows for relatively simple access to data and gives the researcher the freedom to choose what to use, how to use it, and where to use it. Nonetheless, the fact that the source of the data may be suspect, as well as the widespread scepticism about the authenticity and trustworthiness of the data obtained, may serve as roadblocks to the strategy. To avoid distortion of facts, the researcher rigorously analysed the data obtained in order to avoid this occurrence.

"Any qualitative data reduction and sense-making endeavour that examines a volume of qualitative material and seeks to justify their basic consistencies and meanings," according to Patton (2002:452). The adoption of this method is believed to have resulted in a better understanding of INEC's role in the use of ICT technologies in election administration. A review of relevant academic books, journals, seminars, articles, government gazettes, and films was used to accomplish this.

5.1 Results and Discussion

Below is the summary result for the 2019 Presidential election in the 36 states of the federation and Abuja the Federal Capital Territory that features only the two major political parties.

Table 1: The 2019 Presidential Election result in Nigeria across the 36 states and FCT Abuja

States	Registered voters	Total collected PVS	Voters' turnout (%)	Accredited	APC	%	PDP	%	Others	%	Rejected	Total votes cast	Valid votes
Abia	1,932,892	1,729,943	20.90	361,561	85,058	26.31	219,698	67.96	18,535	5.73	21,180	344,471	323,291
Adamawa	1,973,083	1,788,706	48.91	874,920	378,078	46.59	410,266	50.55	23,190	2.86	49,222	860,756	811,534
Akwa Ibom	2,119,727	1,931,362	35.98	695,677	175,429	30.31	395,832	68.39	7,514	1.30	26,365	605,140	578,775
Anambra	2,447,996	2,071,714	32.59	675,273	33,298	5.50	524,738	86.63	47,698	7.87	19,301	625,033	605,734
Bayelsa	2,462,843	2,335,717	46.04	1,075,330	798,428	77.95	209,313	20.43	16,566	1.62	37,648	1,061,955	1,024,307
Benue	923,182	769,509	44.73	344,237	118,821	36.93	197,933	61.51	5,013	1.56	14,089	335,856	321,767
Borno	2,480,131	2,244,376	35.02	786,069	347,668	47.70	356,817	48.95	24,427	3.35	34,960	763,872	728,912
Cross River	2,315,956	2,000,228	49.36	987,290	836,496	90.94	71,788	7.81	11,502	1.25	35,419	955,205	919,786
Delta	1,527,289	1,387,314	33.23	461,033	117,302	27.81	295,737	70.09	9,226	2.10	24,145	446,046	421,901
Edo	2,845,274	2,470,924	36.09	891,647	221,292	26.67	594,068	71.59	14,402	1.74	52,492	882,254	829,762
Ebonyi	1,459,933	1,299,048	30.16	391,747	90,726	25.26	258,573	71.99	9,832	2.75	20,263	379,747	359,131
Enugu	2,210,534	1,726,738	35.02	604,915	267,842	47.77	275,691	49.17	17,178	3.06	38,517	599,228	560,711
Ekiti	909,967	666,591	57.18	381,132	219,231	57.52	154,032	40.42	7,869	2.06	12,577	393,709	381,132
Enugu	1,944,016	1,787,537	25.33	452,765	54,423	12.93	355,553	84.45	11,038	2.62	30,049	451,063	421,014
FCT	1,394,856	1,026,920	45.55	467,784	152,224	35.90	259,997	61.33	11,730	2.77	27,457	451,408	423,911
Gombe	2,394,393	1,335,223	45.25	604,240	402,961	72.71	138,484	24.99	12,758	2.30	26,446	580,649	554,203
Imo	2,272,293	1,702,178	34.41	585,741	140,463	27.46	334,923	65.47	36,200	7.07	31,191	542,777	511,586
Jigawa	2,111,106	1,625,721	72.08	1,171,801	794,738	71.84	289,895	26.21	21,611	1.95	43,678	1,149,922	1,106,244
Kaduna	3,932,492	3,648,831	48.18	1,757,868	993,445	59.72	649,612	39.05	20,546	1.23	45,402	1,709,005	1,663,603
Kano	4,457,747	4,695,747	43.72	2,006,410	1,464,768	77.45	391,593	20.71	34,773	1.84	73,617	1,964,751	1,891,134
Katsina	3,230,230	3,187,988	51.09	1,628,865	1,232,133	79.22	308,056	19.80	15,284	0.98	63,712	1,619,185	1,555,473
Kebsa	1,806,231	1,718,180	48.61	835,238	581,552	76.86	154,282	20.39	20,771	2.75	47,150	803,755	756,605
Kogi	1,646,350	1,435,751	39.75	370,773	285,894	54.87	218,207	41.88	16,915	3.25	32,480	553,496	521,016
Kwara	1,406,457	1,149,969	42.56	489,482	308,984	67.22	138,184	30.06	12,508	2.62	26,578	486,254	459,676
Lagos	6,570,291	5,531,389	21.63	1,196,490	800,825	53.31	448,015	41.12	60,727	5.57	67,023	1,156,590	1,089,567
Nasarawa	1,617,786	1,442,184	42.55	613,720	289,903	49.92	283,947	48.89	6,928	1.19	18,621	599,399	580,778
Niger	2,390,035	2,173,204	41.96	911,964	612,371	71.88	218,052	25.59	21,514	2.53	45,039	896,976	851,937
Ogun	2,375,003	1,694,867	36.19	613,397	281,762	49.94	194,655	34.49	87,839	15.57	41,682	605,938	564,256
Ondo	1,822,346	1,478,460	40.49	598,586	241,769	43.48	275,901	49.62	38,324	6.90	30,833	586,827	555,994
Osun	1,680,498	1,266,587	57.87	732,984	347,634	48.64	337,377	47.21	29,671	4.15	17,200	731,882	714,682
Oyo	2,934,107	2,176,352	41.58	905,007	365,229	42.29	366,690	42.46	131,612	15.25	54,549	891,080	863,531
Plateau	2,480,455	2,095,409	51.26	1,074,042	468,555	45.28	548,665	53.02	17,633	1.70	28,009	1,062,862	1,034,853
Rivers	3,215,273	2,833,101	23.94	678,167	150,710	23.47	473,971	73.81	17,484	2.72	24,420	666,585	642,165
Sokoto	1,903,166	1,726,887	55.02	950,107	490,333	56.24	361,604	41.47	19,954	2.29	54,049	925,107	871,891
Taraba	1,777,105	1,729,094	43.73	756,111	324,906	45.58	374,743	52.57	13,228	1.85	28,687	741,564	713,877
Yobe	1,365,913	1,261,914	47.63	601,059	497,914	89.01	50,763	9.08	10,688	1.91	26,772	586,137	559,365
Zamfara	1,717,128	1,626,839	37.88	616,168	438,682	75.84	125,423	21.68	14,334	2.48	18,785	597,439	578,439
Total	84,004,084	72,775,502	39.09	28,445,137	15,191,847	55.54	11,262,978	41.18	826,419	3.28	1,289,607	28,613,925	27,351,583

Source: Collation Centre in Abuja via channel television on 25th and 26th February, 2019.

Apart from the delays, the data in Table 1 reveals that there were several instances of voter intimidation and ballot box snatching, which contributed to voter indifference. The nationwide voter turnout percentage dropped from 43.7 percent in 2015 to just 35.6 percent in 2016, continuing a downward trend that began in 2003. In the four years between 2015 and 2019, turnout dropped despite an increase in the number of participating parties from 27 to 91, eligible voter numbers from 68.8 million to 84 million, and card-collection rates from 82 percent to 86 percent (CDD West Africa Election Analysis Centre). The conduct of the February 23 elections revealed a pattern of operational failure that harmed the democratic process' integrity.

5.2 The Challenges of Application of SCR, EVR and AFIS in the 2019 General Elections

Apart from the delays, the data in Table 1 reveals that there were several instances of voter intimidation and ballot box snatching, which contributed to voter indifference. The nationwide voter turnout percentage dropped from 43.7 percent in 2015 to just 35.6 percent in 2016, continuing a downward trend that began in 2003. In the four years between 2015 and 2019, turnout dropped despite an increase in the number of participating parties from 27 to 91, eligible voter numbers from 68.8 million to 84 million, and card-collection rates from 82 percent to 86 percent (CDD West Africa Election Analysis Centre). The conduct of the February 23 elections revealed a pattern of operational failure that harmed the democratic process' integrity. The total number of votes was 28.6 million as shown below:

Table 2: Votes in the 2019 Presidential Election

Registered voters and votes scored	Total
Total Number of Registered Voters	84,004,084
Total Number of Registered Voters (As Collated)	82,344,107
Total Number of Accredited Voters (As Collated)	29,364,209
Total Number of Valid Votes (As Collated)	27,324,583
Total Number of Rejected Votes (As Collated)	1,289,607
Total Number of Votes Cast (As Collated)	28,614,190
Percentage Turn Out (As Collated)	35.66 -voter turnout

Source: INEC Nigeria (2019)

Table 3: Voter Turnout in Nigerian Presidential Election 1999-2019

Year	Voter Turnout (%)
1999	52
2003	69
2007	57
2011	54
2015	44
2019	35.66

Source: Center for Public Policy Alternative, 2015 and the INEC 2019

Despite INEC's promises of preparation and the one-week postponement of the 2019 elections, there were major delays in getting voting underway on election day, February 23, in several regions of the nation. According to reports from the Situation Room's network of observers and partners, INEC personnel and materials did not arrive at a substantial number of voting locations around the nation until around 11 a.m., rather than the scheduled hour of 8 a.m. As a result, the polls opened late and closed late. Lagos, Ogun, FCT, Benue, Taraba, Gombe, Kaduna, Kano, Nasarawa, Niger, Kogi, Ebonyi, Enugu, Imo, Abia, Delta, Cross River, Akwa Ibom, and Zamfara have all reported delays. A nationwide pattern of delays was discovered by a Situation Room Partner organisation:

The South East and South South had the fewest early polling stations. Approximately 27% of voting booths in the South East had opened as of 10 a.m. Only 21% of people in the South were unemployed. The national average was at 45 percent as of 10 a.m. (At 3:00 p.m. on February 23, 2019, the Nigeria Civil Society Situation Room published an interim statement).

Aside from the delays, there were several instances of voter intimidation and ballot box snatching, all of which contributed to increased voter indifference. The nationwide voter turnout percentage dropped from 43.7 percent in 2015 to just 35.6 percent in 2016, continuing a downward trend that began in 2003. In the four years between 2015 and 2019, turnout dropped despite an increase in the number of participating parties from 27 to 91, eligible voter numbers from 68.8 million to 84 million, and card-collection rates from 82 percent to 86 percent (CDD West Africa

Election Analysis Centre). The conduct of the February 23 elections revealed a pattern of operational failure that harmed the democratic process' integrity.

A free and fair election requires a legitimate voter registration, and the correctness of the data in the register is what assures its integrity. Biometric registration using card readers, the issue of machine-readable voter cards, and the subsequent use of the card readers on Election Day to authenticate and accredit voters are all measures done by INEC to ensure accurate voter data.

INEC's efforts to create an accurate and inclusive record through ongoing voter registration, public verification of the register, and the issue of voter cards are recognised in Situation Room (2019). Situation Room (2019) commissioned professional pollsters, NOI Polls, to conduct a survey of potential voters and their experiences in January 2018 to obtain a sense of how the registration process was progressing. Long lines, sparsely scattered centres, insufficient computers, late arrival of officials, and poor communication skills among the key difficulties cited by INEC in the registration process received a 57 percent rating. In the end, many individuals registered but did not get their voter cards, and no state was able to accomplish 100% voter card collecting.

The continuous voter registration effort added 14.2 million new registrants to the voter rolls, increasing the total number of voters on the rolls to 84 million. In 30 of Nigeria's 36 states, however, there were inconsistencies between the total number of registered voters before the election and the total number of registered voters declared by INEC following the collation. The total number of registered voters revealed after the collation was 82,344,107, compared to 84,004,084 declared before the election. There was a difference of 1, 659, 977 registered voters between the two numbers.

This might explain the large number of reports of voters unable to locate their names in the polling station register, despite the fact that the card readers were able to read their cards. On the surface, the inference was that 1,659, 977 individuals were denied the opportunity to vote due to no fault of their own. The biggest differences were seen in Lagos state, where there were 256,784 registered voters, and Imo state, where there were 234,724 registered voters. The case when the number of registered voters for a state at the time of collation surpassed the total number registered before the elections is even more perplexing. This occurred in Borno State, where the number of registered voters grew by 3,478 people, bringing the total number of registered voters to 2,319,434.

In 2015, biometric card readers and cards were utilised for the first time in Nigerian elections as a failsafe method to guarantee voting integrity. Their implementation has shown mixed results, partially because they occasionally fail and, more importantly, because their usage is not fully supported by the legislation. A majority of voters did not undertake biometric verification in 2019, as they did in 2015, and MPs highlighted this as one of the grounds for Electoral Act revisions that aimed, among other things, to make biometric authentication mandatory.

INEC's voting rules provide that if a voter's card is scanned by the card reader but the fingerprint is not authenticated, the voter shall be permitted to vote if he or she thumbprints against his or her name in the voter register and gives his or her phone number (INEC, 2019). In practice, this meant that people could vote using other people's

voter cards. In states including as Abia, Anambra, Enugu, Bauchi, Edo, FCT, Gombe, Kano, Kaduna, Kebbi, Ogun, Nasarawa, Plateau, and Taraba, card readers have been reported to be malfunctioning. In response to this situation, the Situation Room ordered an audit of ballots at polling stations where more than 5% of voters had problems with their card readers while determining its criteria. Questions concerning the number of persons who had complete accreditation (both card authentication and biometric verification) vs the number of those who had partial accreditation emerge from the votes cast in the Presidential elections (NCSSR, 2019a).

Voters were to get ballots for all three seats (presidential, senatorial, and representative) at the same time, according to INEC's voting standards. An examination of the voting statistics, however, revealed a significant disparity in the numbers recorded for presidential and parliamentary votes. Overall, it appeared that the Presidential elections received more legitimate votes than the National Assembly elections. INEC did not immediately respond to a request for comment.

Another notable disparity in the 2019 presidential and parliamentary elections was the number of registered voters' vs the actual number of votes cast. Accreditation and voting were meant to happen at the same time, according to INEC standards, and if all went according to plan, both figures should equal.

This was not the case, since the disparity between the statistics became apparent throughout the process of compiling the data. One theory is that voters were accredited but did not vote, which is difficult to believe considering that voters were expected to do both at the same time. In the lack of an explanation from INEC for this discrepancy, it is difficult to account for these floating figures or determine if they had any bearing on the election's outcome. Over 700,000 voters were registered but did not cast ballots (NCSSR, 2019b).

A total of 2,497,181 votes were cancelled as a consequence of INEC's official results released on February 27, 2019. The reasons for the cancellation ranged from violence to a malfunctioning card reader. Some incidents went unsolved, implying that they were either random or designed to suppress voting. This is especially true when the criterion for cancellation due to violence is unclear, and many state-level decisions are made without clear coordination with INEC's leadership, creating doubts about whether the choices are objective.

Though INEC claimed that the use of the card reader was required, with fast replacement in the event of a failure, manual accreditation was used more frequently in the field than replacement. As a result, it was never apparent what role a malfunctioning card reader had in the cases of annulled results. INEC did not publicly disclose reasons for cancellations in Kebbi and Katsina states, for example. In several states, like as Lagos and Kaduna, where more than 300,000 votes were disqualified, INEC offered no public explanation, making verification impossible. There are legitimate causes for concern given the impact of arbitrary cancellations on the legitimacy of Osun state elections in 2018.

6. Conclusion and Recommendations

The incorporation of ICT into the Nigerian electoral system has really modernised the system and improved election management in the country. Results revealed that the introduction of the Electronic Voters Register (EVR), Automatic Fingerprint Identification System (AFIS) and Smart Card Reader (SCR) have reduced the incidence of multiple registration and multiple voting to the barest minimum, while the introduction of the e-collation support platform has drastically reduced the incidence of manipulations at collation centres because results are transmitted in real time. Hence, the incorporation of information communication technology into election management in Nigeria has curbed excessive electoral fraud to the barest minimum, fostering credible elections and adding credence to INEC transparency.

The submission of this paper is that the many challenges observed during the 2019 presidential elections in Nigeria cannot be solely attributed to the malfunctioning of the SCR, EVR and AFIS technologies that were employed for the accreditation and voting exercise but largely due to certain intervening variables that were deliberately concocted by ‘win-at-all-cost’ politicians in collaboration with compromising INEC officials, ad hoc staff and their political parties. The position of this paper is that, all things being equal, the technologies so applied remain an effective and efficient tool in weeding out multiple/double registration, multiple voting, and electoral irregularities like rigging and ballot box snatching, while restoring credibility and transparency in our election process.

The following recommendations have been made in light of the aforesaid findings:

- i. In order to improve free, fair, and violent-free elections in Nigeria, the Independent National Electoral Commission should take use of available technology and investigate the possibility of adopting electronic voting in the future utilising personal identification numbers (PINs).
- ii. If the use of computerised collation is completely implemented with the appropriate legislative frameworks, INEC is expected to solve the problem of delay in the final collation of results. It will eliminate the need for collation officials to go in the dead of night to submit results for final collation. It would also save some money for INEC.
- iii. Due to the fact that some of the voters on the current electronic register are deceased, many permanent voter cards have yet to be collected, and issues of duplicate registrations have not been fully handled, the present electronic register has to be updated. Attempting to clean the register any more might be highly costly and may not produce the desired results. The poor business regulation that demands at least two fingerprints to be included in the register should be reconsidered. Furthermore, the large number of authentication failures in card readers is cause for worry. In view of all of the concerns mentioned, it is critical that the present voter's registration be completely abandoned. The existing voter registration list should be scrapped in favour of a new voter registration process using more advanced electronic equipment that can quickly record potential

- voters' fingerprints, similar to those used for the recent bank verification numbers (BVN) exercise. To eliminate any instances of duplicate registrations in the new registries, a licenced AFIS should be obtained.
- iv. Furthermore, the collecting of voter cards should be tracked electronically to guarantee that the cards reach their intended recipients and to allow INEC to maintain an accurate record of individuals who have received their cards. Voters who refuse to collect their cards before a big election should be removed from the voter registration list. Since no one is permitted to vote without a permanent voter card, anyone whose card is with INEC a few weeks before a general election is most likely not ready to vote and should be removed from the register to reduce the number of elections that are declared inconclusive. Only voters who are willing, ready, and qualified to vote will be included in the voter registration list.
 - v. Before each general election, a voter registration update and revalidation operation should be conducted. INEC will be able to discover and delete deceased voters from the voter rolls as a result of this. Furthermore, sufficient time should be set up for ICT-based operations such as computer purging and installation for Continuous Voter Registration (CVR), Smart Card Reader purging and configuration, and register printing. The eleventh-hour rush always allows for preventable errors, which can lead to extra stress and complications. It will also lessen the strain on technical support personnel.
 - vi. In addition, INEC's ICT employees should be required to attend certification courses and training both in Nigeria and abroad. Outsourcing ICT-related jobs to consultants will be less expensive as a result of this. It will also help to reduce security concerns. It is also suggested that the operating system on card readers be upgraded, or that a new set of devices be purchased that can readily identify and validate fingerprints.

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