

## The Impact Of Electronic Card Reader On Nigeria’s General Elections: An Appraisal (2012-2017)

Ifegwu A Nduka,<sup>1</sup> Okeagu, Charlse,<sup>2</sup> Godslight, Maryann Ngozi<sup>3</sup> and Daniel, U. Nene<sup>4</sup>

<sup>1</sup>Department of Public Administration  
Abia State Polytechnic, Aba | Email:  
[visagiant@gmail.com](mailto:visagiant@gmail.com) | Tel:  
08034940510

<sup>2</sup>Department of Public Administration  
Abia State Polytechnic, Aba | Email:  
[nkwacharly@yahoo.com](mailto:nkwacharly@yahoo.com) | Tel:  
08105970496

<sup>3</sup>Accounts Department  
Independent National Electoral  
Commission (INEC) | Email:  
[wisdom4light@gmail.com](mailto:wisdom4light@gmail.com) | Email:  
07037404799

<sup>4</sup>Department of Public Administration  
Abia State Polytechnic, Aba | Tel:  
08063952684

**Abstract:** Nigeria has had a history of poorly organised electoral process that is marked with voter intimidation, ballot box snatching and stuffing, vote buying, multiple voting, underage voting, falsification of results and other electoral malfeasances. The introduction of the permanent voters’ cards (PVC) and the voters’ card reader— an anti-rigging technological device—for the authentication of PVCs and voters is to curb these electoral ills. This paper investigated the impact of the voter’s card reader on Nigeria’s General Elections between 2012 – 2017, and relied on documentary method for the generation of data. The cybernetics model of communications theory was adopted as the theoretical framework. Resting on four basic pillars: circularity, variety, process and observation; the cybernetics theory developed by Norbert Wiener focuses on how systems function and how they communicate with other systems or with their own components. The qualitative method of data analysis was employed to analyse the data. The paper found that the use of the voter’s card has curtailed voter’s impersonation, multiple voting, over voting or result bloating; has rekindled the confidence of most Nigerian voters and international partners and accounts for the drop in the volume of post-election petitions. It concluded that the voter’s card reader is a technological advancement in Nigeria’s electoral process and has made a positive impact in Nigeria’s General Elections. Though it has not functioned optimally nor has been very reliable to accredit all voters throughout the process without the resorting to the use of manual accreditation. Therefore, we recommends that the technology and software be improved to effectively verify and authenticate voters at a good speed during accreditation. Election officials should also be trained well enough to handle the device for maximum performance. Further studies have to investigate prospects of modernization of Nigeria’s electoral process through technology.

**Key words:** Contemporary society, practice of federalism

## **INTRODUCTION**

The Independent National Electoral Commission (INEC) introduced the voter's card reader also known as smart card reader for use, for the first time in Nigeria's electoral process in the 2015 general elections. The use of the voter's card reader for the purpose of voters' accreditation during an election is an INEC reform and a critical component of the 2015 general elections. The card reader is configured for use at specific polling units to authenticate permanent voter's card (PVC), verify voter's identity and provide an electronic backup for accredited voters on Election Day. Prior to its use in the 2015 general elections under the leadership of Prof Attahiru Jega, a number of technologically based reforms among which are biometric register of voters and advanced fingerprints identification system were introduced by INEC-The Nigerian Election Management Body (EMB). Today, technology is used in the electoral process of many countries across the globe for voters' registration and register compilation, to draw electoral boundaries, to manage and train election officials, to conduct voter education for stakeholders, to print ballots, to count and record votes, to announce and publish election results etc.

Election is an important component of democracy. Election, broadly speaking is the process of elite selection by the eligible voters of the population in any given political system. According to the Wikipedia, a general election is an election in which all or most members of a given political body are chosen. According to The Electoral Institute (TEI) report, general elections are elections conducted in the federation at large for federal and state elective positions. It involves the election of representatives to legislative and executive positions from constituencies throughout the country. Historically, Nigeria has held general elections in 1959, 1964, 1979, 1983, 1993, 1999, 2003, 2007, 2011 and 2015 respectively. Nigeria's fourth republic has witnessed general elections in 1999, 2003, 2007, 2011 and 2015. Since, after the 2015 general elections, there have been in-between occasions of re-run and bye-elections across the country.

Elections are meaningfully democratic if they are free, fair, participatory, credible, regular, competitive and legitimate. However, elections in Nigeria over the years have been marked with a wide range of electoral malpractices such as multiple voting, voting by under-aged persons, impersonation, manipulation and falsification of results etc. Electoral malpractices make the citizens lose confidence in the electoral process, undermine the democratic process and usually lead to electoral violence, political instability and insecurity, which bring about a major setback in the development and consolidation of democracy.

The voter's card reader was a thought out technological innovation to prevent electoral malpractices in the 2015 general elections and subsequent elections in Nigeria. The proper application of this and other technologies to the process can increase administrative efficiency, improve political transparency, and reduce long-term costs of conducting elections.

The use of the voter's card reader has generated varying opinions and discussions by stakeholder's especially political scientists on its strengths and weaknesses in the pursuance of free, fair and credible elections in Nigeria. On this score, this paper intends to examine the concept, uses, strengths and weaknesses of the voter's card reader in order to arrive at its impacts on Nigeria's general elections.

## **PROBLEM STATEMENT**

According to an interview with the program manager of the International Foundation for Electoral Systems (IFES), a legitimate electoral process and public confidence in democratic governance depends on both the actual and perceived integrity of an election (Hedlund, 2015). Elections in Nigeria is popularly characterized by multiplicity of double voting, ballot box snatching, violence, impersonation, voting by under-aged persons, manipulation and falsification of results, which altogether destroy the integrity and credibility of the electoral process. The procedures for organizing the elections and counting the votes are generally not transparent and leave so much room for election malpractices. These have led to massive disinterest and loss of confidence by voters in the credibility of elections in Nigeria. Consequently, many eligible voters have become politically apathetic not because they do not want to participate in the electoral process; but because they believe, their votes would not count.

The prevalence of electoral irregularities in Africa especially Nigeria, has accentuated the clamour for the use of voting technologies for uncovering and reducing electoral malpractices by which corrupt politicians ascend to power illegally. The idea of the introduction of the voter's card reader for the 2015 general elections was to curtail or eliminate electoral malpractices but was greeted by a public outcry for fear that INEC would use the technology to aid and cover up electoral malpractices. The approval by the Senate for the use of voter's card readers for accreditation in the election process has equally generated debates by some stakeholders and political scientists. While some expected that the device would promote the credibility of the elections, others expressed fears that it would be a failure and may be manipulated by INEC.

The use of the voter's card reader during the 2015 general elections came with some troubles ranging from technical glitches to operational inefficiencies of the election officials whose duty it was to operate the device. The malfunctioning of the voter's card readers in many polling units across the nation prompted INEC to instruct the election officials in the concerned polling units to revert to the manual system of accreditation.

## **OBJECTIVES OF STUDY**

The main objective of this study is to appraise the impact of voter's card readers on general elections in Nigeria between 2012-2017. Some specific objectives are:

1. To assess the relevance of the voter's card readers in the election process in Nigeria.
2. To evaluate the reliability of the voter's card reader during the election process in Nigeria between 2012 and 2017.
3. To determine the impact of the voter's card reader on general elections in Nigeria between 2012 and 2017.

## **RESEARCH QUESTIONS**

From the objectives of this study as stated above, these research questions are feasible and useful to guide the study:

1. Is the use of the voter's card reader useful in Nigeria's general election process?
2. Is the voter's card reader a reliable device for use in Nigeria's election process between 2012 and 2017.

3. What is the impact of the voter's card reader on general elections in Nigeria between 2012 and 2017?

### **CONCEPTUAL FRAMEWORK**

According to Webb, Gibbins, and Eulau, (n.d.) election is the formal process of selecting or rejecting a political proposition by voting. The Carter Center (2018), notes that an election is much more than the election day; "it is a cyclical process that unfolds long before and after voting. An electoral cycle starts at the end of one election and runs through the beginning of the next election. It has three basic phases: pre electoral preparations, electoral operations and post-electoral strategies (UNDP, 2010).

The origin of elections in the contemporary world lie in the gradual emergence of representative government in Europe and North America beginning in the 17<sup>th</sup> century. Governments were believed to derive their powers from the consent of the governed from time to time at regular intervals. Today representative government and elections are the bedrock of democracy – a system of government by the whole population or all the eligible members of a state through elected representatives.

Following decolonization in some African countries in the 1950s and '60, a number of countries held elections though many reverted to authoritarian form of rule. In the 1970s, elections were introduced in some African countries such as Ghana and Nigeria following the dissolution of some military dictatorships.

Elections enable voters to select leaders and to hold them accountable for their performance in office. According to the Carter Center (2018) elections provide political education for citizens and ensure the responsiveness of democratic governments to the will of the people. They also serve to legitimize the acts of those who wield power.

General election is an election that holds across the country for given political positions within a particular day or time. In presidential systems, a general election is a regularly scheduled election where both the president and either a class or all members of the national legislature are elected at the same time but can also involve special elections held to fill prematurely vacated positions (Wikipedia). A general election day may also include elections for local officials.

### **ELECTION TECHNOLOGY**

Automation is usually spurred by a sense of urgency to overcome a specific problem or situation. Most electoral management bodies in the world today employ the use of innovative ICT technologies with the aim of improving the electoral process and eliminating the cumbersome processes associated with the manual procedure. It is believed that technology not only makes electoral processes cleaner, easier and faster but can also makes it more secure, reliable and sustainable. Relevant technologies for electoral processes range from basic office automation tools like the word processing and spread sheets to sophisticated data processing tools like data base management systems, optical scanning and geographic information systems.

It is pertinent now to point out the various phases in an electoral process: the design and drafting of legislation otherwise called the legal framework, the recruitment and training of electoral staff, electoral planning, voter registration, registration of political parties, nomination of parties and candidates, electoral campaign, polling, counting, tabulation of results, declaration of results, resolution of electoral disputes, reporting,

auditing and archiving. Whichever technology to be employed, care must be given to the adoption of technology in a given political system to avoid the risk of compromising transparency and sustainability of any phase of or an entire electoral process.

The impacts of technology in many areas of life have prompted citizens of nations to expect their electoral institutions to keep pace with realities of modern technology. In the United States of America, online voter registration is growing exponentially, from two states in 2008 to over 29 states during the last elections that brought Donald Trump to power (Okonji, 2018). He maintained that when Great Britain launched the option of online registration in March 2015, over two million Britons registered to vote online during the five weeks prior to the deadline for the national elections.

African democracies are in the process of co-ordinating a generation jump in applied technology (Chan, 2017). In Nigeria, the process of casting a ballot has been the marking of a paper ballot with a pen and counting the paper ballots manually. INEC has recently secured an approval from the Nigerian Senate to use the electronic voting system in the 2019 general elections as a means to advance credibility, integrity and legitimacy, ensuring stronger democracy for the country.

Prior to the 2015 general elections in Nigeria INEC had used temporary voter's cards (TVCs) instead of permanent voters' cards (PVCs) to vote at various elections making a recipe for monumental rigging of votes. INEC introduced the use of PVCs for use in the 2015 general elections. The PVCs have many components and specialized features like the base substrate, security printing, personalization, lamination and chip embedding with an average life span of ten years, Ayinde and Idowu (2016). The embedded chip in the PVC contains all the biometrics of a legitimate holder including the fingerprints and facial image.

### **THE VOTER'S CARD READER**

The voter's card reader is a portable electronic device issued by the Independent National Electoral Commission (INEC), configured to read the permanent voter's cards, verify the voters and transmit information to a central database for the purpose of election result collations. The device uses a cryptographic technology that has ultra-low power consumption, with a single core frequency of 1.2GHz and an Android 4.2.2. Operating system (INEC, 2015).

The voter's card reader is designed to read the chip programmed in the PVCs to verify their authenticity and verify the intending voters by matching the biometrics obtained from the voters on the spot with the ones stored on the PVCs (Dahiru, Abdulkadir, Baba, 2015). The voter's card reader also has the ability to keep a tally of the total number of voters accredited at the polling unit and forward it to a central database server over a global system for mobile (GSM) network. It keeps the statistics of the voters' gender for easy collation.

The PVC is placed into a port in the voter's card reader, which then displays the voter's details. When the voter places his/her thumb on the device, and within 10-20 seconds, his/ her identity is confirmed through the fingerprint authentication system except when there are some technical glitches. On completion of the accreditation process, "a close-v" key is used to complete or end the process, while the total number of accredited voters can be previewed using the "query" key. The "communication" key is used to forward results to INEC's central database (INEC, 2015).

## **THEORETICAL FRAMEWORK**

### The Cybernetics Model of Communications Theory

This work adopts the Cybernetic Model of Communications Theory

Cybernetics is the branch of science concerned with the study of systems of any nature, which are capable of receiving, storing and processing information to use it for control. The term “cybernetics” was coined by the mathematician Norbert Wiener in 1948 to encompass “the entire field of control and communication theory, whether in the machine or in the animal” (American Society for Cybernetics n.d.). The communications theory was developed through the pioneering research efforts of Norbert Wiener, Louis Couffignal, John von Neumann, McCulloch, W. Ross Ashby, Alan Turing, W. Grey Walter and Karl W. Deutsch. Deutsch introduced the techniques of cybernetics to the sphere of political analysis through his work “The Nerves of Government: Models of Political Communication and Control” which happens to be the first attempt to formulate a fully developed theory of politics based on a communications model. However, it was Wiener’s work: “Cybernetics” that gave the cybernetics model its analytic fervour. Wiener further popularized the social implications of the model, drawing analogies between automatic systems and human institutions in his work, “The Human Use of Human Beings: Cybernetics and Society.”

According to Gauba (2003), “cybernetics is the study of the operation of control and communication systems; it deals both with biological systems and man-made machinery” (p. 98). The term “cybernetics...covers not only the versions of information theory...but the theory of games, self-controlling machines, computers and the physiology of the nervous system” (Varma, 1975, pp. 432-3). “The system codes incoming information, recognizes patterns, stores the patterns in its memory unit, learns from its experience, recalls information on command, recombines information in new patterns, and applies stored information to problem-solving and decision-making” (Winner, 1969, p. 9). Cybernetics theories focus on how systems function, that is to say how they control their actions, how they communicate with other systems or with their own components. According to the wikibooks, the cybernetics theories tend to rest on four basic pillars: circularity, variety, process and observation.

One of the earliest studies on voting decisions where the cybernetics model was applied to is “The American Voter” where Angus Campbell led other researchers to give sophisticated accounts of how computer technology influences electoral processes. In the field of computer technology, cybernetics has become a conceptual relic of communications theory.

The cybernetics model of communications theory has therefore been adopted as a tool for assessing the impact of Information and Communications Technology (ICT), particularly the card reader, in conducting a free, fair and credible election in Nigeria’s General Elections between 2012-2017. The growing complexity of the world has made the use of ICT for administrative purposes a desideratum. The 21st century is described as the “electric” or “jet” age in order to underscore the importance and pervasiveness of computer technology in different spheres of human existence hence; the practice of politics has increasingly involved the use of electronic mass media, mobile telephony and high-speed digital computers. Men, machines, and political units all use and dispose of information

from their environments in essentially the same manner, acting on certain varieties of messages and rejecting others.

Accordingly, Momodu (2014) argues that relying on election rigging is becoming obsolete and increasingly difficult as social media and mobile telephony are breaking down those walls that aided electoral malfeasance in the recent past. As an activity in which men and machines are involved hand-in-circuit, it is not surprising that the cybernetics model should become plausible as a basis for understanding the use of technology in electoral process.

## **EMPERICAL REVIEW**

### **THE BACKGROUND OF THE USE OF THE VOTER'S CARD READER**

The voter's card reader is an electronic device used during the accreditation of voters for the purpose on an election. According to Golden, Kramon & Ofose (2014, p.1), "these technological solutions, such as electronic voting machines, polling station webcams and biometric identification equipment, offer the promise of rapid, accurate, and ostensibly tamper-proof innovations that are expected to reduce fraud in the processes of registration, voting or vote count aggregation". Biometric identification machines authenticate the identity of voters using biometric markers, such as fingerprints, that are almost impossible to counterfeit.

Nigeria's quest for e-voting started in the Second Republic when the Chairman of the defunct Federal Electoral Commission (FEDECO), late Justice Victor Ovie-Whiskey, mooted the idea for the 1983 elections. The motion was however, opposed by the then leader of the defunct Unity Party of Nigeria (UPN) late Chief Obafemi Awolowo, who threatened to mobilise his supporters to smash the machines. In 2006, when the former INEC Chairman Prof. Maurice Iwu proposed the e-voting for the 2007 elections, it was still greeted with criticism. According to Salaudeen (2013), the pan-Yoruba socio-political group, Afenifere, rejected the method saying that the country was not ripe for it. Salaudeen (2013) noted that Anifere cited low literacy level and lack of time to ascertain its workability as an excuse to their objection to e-voting. Besides, the organization alleged that Iwu had a hidden agenda and if the proposal were approved, would serve as a rigging mechanism for him. Some politicians especially from the north opposed the idea of PVC on the ground that it offended their culture and religion, but the INEC Chairman Prof. Iwu swayed them when he informed them that if they had no objection having photographs on their international passports, then there was no cogent reason to oppose such procedure in the new voter's card. Prof. Iwu's proposal was however, dismissed by the Senate with one of the reasons being the low literacy level of Nigeria's voting population. Nigeria witnessed the first use of biometric registration in 2007 general elections. However, there was no electronic verification during accreditation and voters were issued with TVCs for use at the elections. According to Suberu (2007), the election turned out to be very controversial with some scholars and observers describing it as the worst election in the annals of general elections in the country.

On the June 8<sup>th</sup> 2010, Prof. Attahiru Jega was nominated by the then President Goodluck Jonathan as the new INEC Chairman subject to Senate confirmation as a replacement for Prof. Maurice Iwu who vacated office on 28<sup>th</sup> April 2010 at the expiration

of his term. Prof. Jega continued with the pursuit for electronic voting with the first step of conducting a fresh voter's registration using electronic data capturing system of registration. With the approval of the electronic data capturing system of registration by the Senate in 2010, INEC embarked on the purchase and deployment of 120,000 composite electronic voter registration equipment, principally laptop computers, fingerprint scanners, high resolution cameras, backup power packs and integrated printers for producing temporary but high quality voters cards that can be used for the proposed January 2011 general elections. With the fresh biometric voters' registration exercise in 2010 there has been continuous voter registration exercise going on in INEC to update the register for the purpose of including persons who recently attained the age of 18 or who did not register previously. After the 2011 general elections, there were claims and counter claims of exclusion by prospective voters while the voter turnout could not reconcile with the number of registered voters because the voters' register was oversubscribed with fictive and non-existent persons/names. This experience drove INEC to the determination of using PVCs and voters' card readers to improve the process.

To demonstrate the operation of the card readers for accreditation, INEC organised a test trial of the proposed card readers in twelve states. With about 90% success rate from the test trial of the voter's card reader on March 7<sup>th</sup> 2015, the Senate approved the use of the voters' card readers for accreditation in the general elections and the use of PVCs only for accreditation and voting. Although the public outcry that greeted the planned use of the card reader was enough to discourage INEC from using it in the general elections, INEC had confidence in the efficacy of modern technology in achieving quick result coupled with its vision to transform the country's electoral process from its archaic norms characterized by ballot box snatching and multiplicity of ballot tomb printing, and went ahead of INEC in the use of the voter's card reader machine for the general election, some challenges were inevitably apparent, though the election was still adjudged by domestic and international observers as being the best in Nigeria so far. to use the technology, against all hitches (Nnorom, 2015). However, despite the confidence

#### THE USEFULNESS OF THE VOTER'S CARD READER IN THE NIGERIA'S GENERAL ELECTION

The main use of the voter's card reader is to verify PVCs and voters who are eligible to vote and keep an electronic record of the particulars of those accredited to vote. While appraising the INEC smart card reader, John (2015) avers that "the card reader shall store the VIN of the scanned card and the accreditation status – successful or failed, after which the device shall show the total number of accreditation at the press of a single button and transmits the total number of accredited voters to a central server". The following statements by Prof. Jega while addressing the press shortly after the interactive session with Senators at the National Assembly, Abuja were extracted from the Vanguard (2015) in support of the use of the voter's card reader:

"An election is said to be validly conducted if it meets certain basic requirements, including accreditation of voters."

"The use of card reader for the purpose of accreditation of voters is one of the innovations introduced by the Commission to improve the credibility of the electoral process." (INEC Frequently Asked Questions n.d.)

“It is not offensive to the Electoral Act or to the 1999 Constitution. It adds value to the desires of Nigerians to have a credible election in line with International Best Practice.”

“Although Section 52 of the Electoral Act prohibits the use of electronic voting, the card reader is not a voting machine; it is only an electronic machine introduced to improve the integrity of the voting process.”

According to a press release by Idowu (2015), the Chief Press Secretary to INEC Chairman, the decision to deploy SCRs for the 2015 General Elections, have four main objectives.

- i. To verify PVCs presented by voters at polling units and ensure that they are genuine, INEC-issued (not cloned) cards.
- ii. To biometrically authenticate the person who presents PVC at the polling unit and ensure that he/she is the legitimate holder of the card. In this regard, there were a few issues in some states during the public demonstration. Overall, 59% of voters who turned out for the demonstration had their fingerprints successfully authenticated.
- iii. To provide disaggregated data of accredited voters in male/female and elderly/youth categories— a disaggregation that is vital for research and planning purposes, but which INEC until now had been unable to achieve. The demonstration fully served this objective.
- i. To send the data of all accredited voters to INEC’s central server, equipping the Commission to be able to audit figures subsequently filed by polling officials at the polling units and, thereby, be able to determine if fraudulent alterations were made. The public demonstration also succeeded wholly in this regard (<http://inecnigeria.org/inecnews>).

Prof. Jega had on many occasions observed that the use of the voter’s card readers would increase the credibility of the election process because of its numerous advantages. Some advantages of the voter’s card reader include:

- a. Once the card reader is configured, it can only read PVCs issued by INEC at the polling units that it has been configured for. This means that the indiscriminate use of PVCs for voting in multiple polling units and the use of fake PVCs is eliminated from the process.
- b. It reads the embedded chip card rather than the barcode, which enables authentication of the identity of the voter by matching his or her fingerprint with that on the chip of the card; this guards against impersonation.
- c. The voter’s card reader keeps tally of all cards read and of all voters verified with their details, including the time of verification. The voter’s card reader therefore facilitates the electronic documentation of voter statistics.
- d. Information from the voter’s card reader is sent to a central server from polling units. This promotes better collation and audit of election results.
- e. It helps in the statistical analysis of the demographics of voting, something INEC had not been able to do effectively.

- f. The ward collation officer uses the information on the voter's card reader to audit polling unit result sheets and determine whether accreditation figures have been altered; a common feature of electoral fraud in our jurisdiction.
- g. The voter's card reader has the capacity to prevent or minimize electoral malpractice by preventing multiple accreditation or impersonation and ensuring that the election officials do not go out of the way to bloat voting scores beyond the number of voters accredited.

**THE IMPACT OF ELECTRONIC CARD READER ON THE NIGERIA'S 2015 GENERAL ELECTIONS:**

The adoption of the card reader was one of the initiatives of INEC to arrest the inflation of voter roll in the country. At the end of the voter registration exercise in 2011, the Commission claimed that 73 million Nigerians had registered, out of which the Automated Fingerprint Identification System (AFIS) had removed 800,000 persons for double registration (Aziken, 2015). This was the first time in the history of Nigeria that details of double registrants were removed from the voter's register, and considering that a credible election begins with a credible voter registration with a valid identification for the election, the registration exercise was pertinent for the upcoming 2015 General Elections. Professor Jega noted that INEC did not see the need for an amendment of the Electoral Act to accommodate the use of the card reader and that the Commission would not revert to manual accreditation of voters during the elections nor will it use the Temporary Voter's Card (TVC) for the elections. The impact of the voter's card reader will be assessed in different sub headings:

**2015 General Election and Voter Turnout**

Despite the enthusiasm in the air on how to embrace and cope with the use of an electronic device for accreditation, the voter turnout for the General Elections was poor when compared to the last two General Elections. Table A. below shows the voter turnout in the 2015 Presidential election:

		% of Registered Voters
No. of Valid Votes	28,587,564	42.40%
No. of Rejected Votes	844,519	1.25%
No. of Votes Cast	29,432,083	43.65%
No. of Accredited Voters	31,746,490	47.08%
No. of Registered Voters	67,422,005	

Source: [inec.gov.ng/](http://inec.gov.ng/)

The voter turnout is the percentage of registered voters who actually voted. Studies have identified some causes of low voter turnout, which might affect elections, namely: difficulties of registering and of voting, voter fatigue, negative campaigning (Niemi and Weisberg, 1998; Krupnikov, 2011), security lapses leading to fear by voters, etc. The 2015 General Elections suffered these lapses in varying degrees. While 31,746,490 voters were accredited, only 29,432,083 actually stayed to vote. The table below shows a comparison of voter turnout between 2007-2015 general elections.

Table B: 2007, 2011, and 2015 General Elections figures compared:

Year	Voter Turnout	Total Vote	Registration	VAP Turnout	Voting Age Population	Population	Invalid Votes
2015	43.65%	29,432,083	67,422,005	32.11%	91,669,056	181,562,056	2.8%
2011	53.68%	39,469,484	73,528,040	48.32%	81,691,751	155,215,573	3.19%
2007	57.49%	35,397,517	61,567,036	49.85%	71,005,507	131,859,731	

Source: International IDEA: <http://www.idea.int/vt/countryview.cfm?CountryCode=NIG>

Note: VAP means Voting Age Population.

Information from the above table shows that Nigeria witnessed a low turnout in the 2015 General Elections as the voter turnout in percentage is lowest in the table above. The use of the card reader slowed down the accreditation process, as the fingerprint scanners of many were faulty. This led to the election exercise extending to the next day at several polling units and some voters who did not have the patience to wait had to leave without accreditation and voting. No wonder the former President Goodluck Jonathan having stood for over 30 minutes as the card reader malfunctioned urged Nigerians to be patient with the process as the election is one that the world is looking up to. According to Sotubo (2015) while reporting on the then President's accreditation, "three card readers failed to work, but a fourth was produced and began working". Some voters were not willing to make the sacrifice of waiting for too long and left without being accredited while some were accredited but could not wait behind to vote when accreditation was over.

#### 2015 General Election and its Credibility

While the use of the biometric technologies did not entirely make the elections free and fair, they however, accounted for their credibility. The credibility of the elections, arising from the use of the anti-rigging technology, is also deducible from the fact that it is the first time in the electoral annals of Nigeria that many candidates would concede defeat and call to congratulate the winners. This happened first at the national level when President Goodluck Jonathan called to congratulate General Muhammadu Buhari on March 31, 2015. This exemplary conduct was emulated by defeated PDP governorship candidates in Niger, Benue, Adamawa, Lagos, Kaduna and Oyo States. It was also the first time so many incumbent governors would lose their senatorial ambitions to opposition party candidates. This happened in Adamawa, Bauchi, Benue, Niger and Kebbi States.

Arising from the Election Observation Missions (EOMs) unanimous acclamation of the outcome of the 2015 General Elections, these international development partners not only repose more confidence in INEC and Nigeria's elections but also are keener to collaborate with the Commission in order to ensure that future elections in the country are truly free, fair and credible. Moreover, the goodwill gesture of some of these development partners to Nigeria has been demonstrated through the request of the Group of Seven (G-7) most industrialized countries asking General Muhammadu Buhari to prepare a "wish list"

and come with it for its consideration during its 41st Summit held between June 7 and 8, 2015 in Bavaria. Thus, the Outreach Programme for invited heads of government and global institutions offered President Buhari the opportunity to meet with Angela Merkel, Barrack Obama, Francois Hollande, David Cameron, Stephen Harper, Shinzo Abe, Jim Yong Kim, Ban Ki Moon, Angel Gurria, Christine Lagarde and Guy Rider of Germany, USA, France, UK, Canada, Japan, the World Bank Group, the United Nations, the Organization for Economic Cooperation and Development, the International Monetary Fund and the International Labour Organization respectively. This gesture is a demonstration of these partners' confidence in the electoral process that produced the present government in Nigeria.

Acknowledging the success of the general elections, Election Observation Missions (EOMs) of the Commonwealth, the African Union (AU) and Economic Community Of West African States (ECOWAS), accredited domestic and international EOMs unanimously described the elections as peaceful, transparent and generally credible (Nwanwgu, 2015). Among others, the observers attributed the credibility of the elections to INEC's insistence on the use of the PVCs and SCR.

#### The 2015 General Election and Election Petitions

The 2015 elections have witnessed a general reduction in election litigations. The total number of petitions filed after the 2003 General Elections was 560. By 2007, the petitions increased to 3000. 733 elections petitions were filed at the various Election Petition Tribunals across the Federation after the 2011 General Elections. Unlike in the 1999, 2003, 2007 and 2011 elections, there have not been avalanche of electoral petitions in 2015. The governorship, NASS and SASS petitions filed at the tribunals in Abia, Akwa-Ibom, Delta, Ebonyi, Imo, Rivers, Taraba, among others, were due to the general failure or non-use of the voter's card readers for accreditation and PVC authentication in these areas.

Most of the candidates that lost in the 2015 general elections did not challenge the outcome; rather some accepted defeat in good faith and congratulated the winners. For instance, the presidential candidate of the PDP, Goodluck Jonathan congratulated the APC presidential candidate Muhammadu Buhari who emerged the winner of the election. This behaviour cut across states of the federation in the other positions contested in the elections.

According to the INEC Chairman Prof. Yakubu Mahmood, INEC was made party to 680 cases filed by the various political parties at the end of the 2015 elections and with this, the 2015 general elections so far has the least petitions ever (INEC, 2015). This has been attributed to the transparency created by the use of the card reader for accreditation. Besides, electoral conflicts and violence was minimal as the election was seen to be transparent and credible due to the use of the card reader (Odiakose, 2015).

#### **FINDINGS**

INEC used the voter's card reader for the first time in the 2015 general election. This novel introduction is an attestation that the country is gradually transiting from manual processes to infusing technology into its voting processes and election culture. This paper analysed the impact of voter's card reader on Nigeria's general elections. It acknowledged the positive contributions the voter's card readers have offered the electoral process in

Nigeria between 2012 to 2017 and the shortcomings experienced by the use of the device. The following findings were made:

1. The deployment of voter's card readers for the purpose of accreditation is technologically innovative and has rekindled the confidence of many Nigerian voters along with that of development partners in INEC due to improved credibility ratings with Nigeria's last general elections.
2. Reports from many accredited observers and media organizations as well as domestic and international observers all confirm that the 2015 general elections were more credible than the previous elections in Nigeria.
3. Although the card reader device experienced some glitches in its operation, it curbed electoral rigging to a reasonable extent and largely accounts for the significant drop in the volume of election petitions filed by aggrieved candidates and political parties when compared with that of previous general elections. This is due to the difficulty in double voting and impersonation. More so, evidence provided by the device on number of accredited voters, cannot be short of the votes cast.
4. The usefulness of the voter's card reader for accreditation and collation of election results cannot be over emphasised. It has restored dignity and credibility to the electoral process.
5. The reliability of the device during a general election is not assured as the use of manual accreditation to supplement for accreditation where the card reader fails still lingers after two years of introducing the technology in Nigeria's electoral system. The Nigerian Senate has however banned the use of manual accreditation and approved the use of full biometric accreditation using the smart card reader from the next general election in 2019. If the issue of card reader failure is not resolved by then, the election credible ratings may drop.
6. The voter's card reader has made a great impact in Nigeria's electoral process and has resulted to the reduced election litigations and increased credibility ratings of elections by IFES, international and domestic observers, organizations and stakeholders.
7. However, the failure rate of the voter's card readers in verifying the identities of the owners and incompetency of election officials responsible for the card readers caused delay to the process, which led INEC to authorize the use of manual accreditation to complete accreditation where the card reader would not work properly. This arrangement was to ensure that no person was disenfranchised due to a faulty or slow card reader operation.
8. The difference in the number of voter turnout, accredited voters and votes cast has been attributed to the stress and delays in the use of the card readers, as voters had to remain at the polling units long after their accreditation before voting commenced.

The introduction of an electronic based voter register and the deployment of voter's card readers for elections in Nigeria is a giant step in the drive to reform the nation's electoral process.

## **RECOMMENDATIONS**

From the foregoing discussions and findings, the study recommends as follows:

1. INEC should improve the quality of the PVCs issued to voters to prevent the possibilities of obsolescence of cards used by the card readers. This is because, during the last general election several PVCs were already defaced and information on them unreadable.
2. Training of election officials for expertise in handling the card readers is highly recommended. Considering that minor issues such as non-removal of thin film from device lenses could disrupt accreditation, effort should be intensified in giving election officials the much-needed training to efficiently and effectively operate the voter's card.
3. INEC should improve the software and technology of the voter's card reader to avoid the glitches so far experienced with the card readers reoccurring in subsequent elections. The past general elections reveal that technology has shown its merit in Nigeria's electoral process and therefore should be improved for better and newer features.
4. There should be enough spare voters' card readers and batteries to go round the polling units for use should in case the card reader in use fails.
5. Biometric verification does not curb illegitimate registration wherein persons below the age of 18 are registered. In addition, INEC Automated Fingerprint Identification System (AFIS) has not functioned optimally in dictating double registrants. This has accounted for people owning and holding multiple PVCs. It is recommended that INEC upgrade AFIS software to dictate and eliminate all double registrants. A technology capable of rejecting under-aged persons at the point of registration should be developed in order to check irregularities throughout the electoral cycle.
6. Further studies should be undertaken to study the prospects of modernization of Nigeria's electoral process through technology especially in the area of the voter's card readers, PVCs and ways of curbing technical challenges arising therefrom.

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