



## **THE IMPACT OF TECHNOLOGY ON NIGERIA'S DEMOCRATIC DEVELOPMENT: AN ANALYSIS OF THE CARD READING MACHINE**

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### **Abstract:**

*The public outcry that greeted the planned introduction of card reader machines was enough to discourage INEC from introducing it. However, because of INEC confidence in the efficacy of modern technologies in achieving quick results, coupled with its vision to transform the country's electoral process from its old norms that was characterized by ballot box snatching and multiplicity of ballot tomb-printing, INEC went ahead and introduced the technology against all odds. The paper examines the role of technology in consolidating and developing democracy in Nigeria. Secondary methodology was adopted and findings show that, the card reading machine worked for the Nigerian democratic process especially during the 2015 general elections. The paper concludes that the card reader has now thrown up an entirely different phenomenon in the electoral system of Nigeria as it is the most reliable way to electioneering in Nigeria to avoid election rigging. The paper recommends that in order to continue to raise the quality of Nigeria's electoral process with particular emphasis on the organization of elections. The application of the card reader technology had its merits, but was made redundant by allegations of electoral officials and community collusion to ensure that the machines played no part in determining electoral results. It is certainly a technology that needs to be improved upon in the run up to the 2019 general elections, among other things.*

**Keywords:** Technology; Elections; Card; Reader; Development & Machine

### **Introduction:**

As observable in most political transitions, democratic societies are founded on the principles of elections and on opinion expression capabilities. Most sovereign nationalities are governed by pure democratic ideals where citizens express their right through the conduct of an election in choosing a leader whom, they believe their nation's destiny can be entrusted with. This form of governance has been termed Democracy, which is a government of the people by the people and for the people. In March 2015, Nigeria held its fifth general elections since the country returned to democratic rule in 1999. Previous elections in Nigeria have been marked by allegations of fraud and disputes over results.

The 2007 general elections, in particular, were widely adjudged as generally flawed (Suberu 2007; Ibrahim and Ibeanu, 2009; Onapajo 2014). This forced the Independent National Electoral Commission (INEC), the government, civil society groups and Nigeria's development partners to initiate and implement electoral reforms. These reforms contributed largely to the success of the 2011 elections, yet the risk of flaws affecting Nigerian elections still remains (Akhaine 2011; Lewis 2011). Part of the reforms lead to the introduction of card reading machine in the conduct of 2015 general election.

### **General Assessment in the use of Card Reading Machine during 2015 General Election**

Many technology experts in Nigeria, who monitored the elections, are full of praises for INEC for insisting on the use of card reader machines, saying it is the best thing that has ever happened to the Nigerian electoral process in the area of election

transparency. They have called on the electoral umpire to introduce card reader machines in subsequent elections, believing it is a sure way to achieve transparency in every election. (ThisDayLive, April 23 2015).

#### **The Test-Run:**

In order to prove its point on the use card reader machines and to win the minds of the electorates, especially those opposing it, INEC decided to test-run the technology in 12 states of the federation to determine its strength and weakness. At the completion of the mock voters' accreditation in select constituencies across 12 states of the federation, INEC recorded some successes and failures. However, the commission was determined to go ahead with the machine for elections, based on the success recorded.

For instance, it took between two to 10 minutes to successfully test the machines in some areas, while in other areas several attempts were made, running into several minutes before the machines actually worked. But in some areas, the machine did not work at all until major adjustments were carried out. Many of the machines, however, worked perfectly within seconds without stress. International observers, who monitored the exercise, however, commended INEC for the initiative. At the end of the test-run, they were confident that should INEC address the observed lapses before implementing them in the election proper, it would add credibility to the country's electoral process (ThisDayLive, April 23 2015).

#### **Implementation:**

Confident that the machines will perform effectively based on the outcome of the test-run, INEC went ahead to implement the use of card readers for the 2015 general elections. INEC officials were trained on the use of card reader and the machines were supplied to all polling units across the country. During the elections, INEC insisted on the use of card readers for accreditation across all polling units and the machines were actually used for accreditation. Although they were successfully used in some polling units, some had challenges, which INEC attributed to both technical and human errors (ThisDayLive, April 23 2015).

#### **The Challenges:**

Despite the confidence of INEC in the use of card reader in the 2015 general elections, the machines came with some challenges, even though the elections have been widely adjudged as being successful. For instance, during the March 28 Presidential and National Assembly elections across the country, the card readers malfunctioned in several polling units, a situation that caused undue delay in the accreditation process. It, however, worked perfectly in other polling units. The challenges ranged from rejection of permanent voter's card (PVC) by the card readers, inability to capture the biometrics from finger tips, to irregular capturing and fast battery drainage.

INEC officials have to abandon their polling units and took the card readers back to their office for proper configuration. In order to salvage the situation, which was almost becoming frustrating, INEC ordered the use of manual process for accreditation, But before the order could go round the states and local government areas, it was already late to conduct accreditation and actual voting in some areas, a situation that forced INEC to extend the exercise to the next day in all affected areas.

The card reader, for instance, was unable to recognize the fingertips of President Goodluck Jonathan and his wife Patience, when they went to vote in Otuoke, in Bayelsa State. Such was the experience of using the card readers. But the challenge was visibly noticed during the Presidential and National Assembly elections on March 28. During

the Governorship and State House of Assembly Elections, the complaints reduced drastically across the country, as INEC was able to tackle the lapses within the two weeks break before the April 11 Governorship and State House of Assembly elections (ThisDayLive, April 23 2015).

#### **INEC's Defense:**

Speaking after the conclusion of the general elections across the country, INEC's Chairman, Prof. Attahiru Jega said he was satisfied with the performance of the card readers, but accepted that the card readers had issues in some polling units, especially during the March 28 Presidential and National Assembly elections. He, however, blamed some of the lapses on the inability of some INEC officials in handling the technology of the card readers. He said although the staff members were trained on the use of card reader machines, but that some still had to fumble with the machines for lack of mastery. Jega blamed some of the INEC officials, who handled the card reader machines for their inability to remove the thin cellophane covering on the card readers, which he said was largely responsible for the inability of the machines to recognize the fingertips of the electorates (Ibeanu, 2009).

Although Jega admitted that some of the card readers had technical faults, he said all of that were addressed before the April 11 governorship and state House of Assembly elections, He and attributed the success of the use of the machines during the April 11 elections, to the quick response of INEC in addressing the challenges observed during the March 28 elections (This Day Live, April 23, 2015).

#### **The Challenges of Smart Card Reader in the 2015 General Elections in Nigeria:**

In spite of the assurances given by INEC to address the issues that aroused with the card readers after it's test-run in twelve states of the federation, the 2015 general elections witnessed the inability of the device to deliver effectively in a large number of polling units especially in the Presidential and National Assembly Elections. Therefore, what are the challenges the card reader was confronted with in its operation for the purpose of accreditation in the 2015 general elections?

The level of awareness among the electorates about the card reader was poor. A large number of Nigerians especially the electorates in rural communities are completely unaware of the device. Many of these categories of people have neither seen nor heard about the card reader until the Election Day. These categories of people have no information on the role of the card reader in the elections. There was a lot misconception about the device. To some of the electorates, the card reader was a voting device. This inadequate information dissemination and poor sensitization of the electorates on the card reader led to some poor human relations and uncooperative attitudes between some of the illiterate electorates and election officials (Onapajo, 2014).

The training given to the ad hoc and INEC staff on the use of the card reader was inadequate. Majority of the Presiding Officers and Assistant President Officers I in the polling units were not effectively trained on the proper use and handling of the card reader. In most cases the venues provided by INEC for their training were crowded and not conducive such that most of the trainees did not properly receive the instructions on the use of the card reader. There were imperfect practical demonstrations of how the card reader would properly be effective. In some cases two card readers were provided for a class of hundred trainees (Suberu, 2007).

A large number of the trainees did not have the opportunities of operating the device. In some few cases, those that received training were replaced with those that have no proper idea of the effective use of the device. All of these led to the poor

handling of the card reader during the elections to the extent that the protective film of some the card readers were not removed thereby leading to the impossibility of the device to detect thumbprints in some cases.

Card reader breakdown was also witnessed during the elections. Some of devices malfunctioned on the day of election. Though, INEC had provided back-up in case of any card reader breakdown. However, some of the back-up failed to also function. For instance, five card readers were deployed for use at the polling unit of the Presidential Candidate for PDP in Bayelsa State yet none of them functioned. Similarly, the card reader at the polling unit of the Vice-Presidential Candidate of APC was non-functional. A number of the smart card readers were not smart to function effectively. A few of the card readers were unable to function due to blank screen, non-activation of the Subscriber Identification Module (SIM) card in the device and low battery. Some INEC officials according to Vanguard (2015) attributed the failure of the card readers to INEC engineers who could not decode the inbuilt security installation in the card reader. The security code in the card reader is reportedly designed to update the time and date of voting. One official claimed that the cards were initially programmed for February 14 that with the postponement to March 28, some of the cards readers had not been re-programmed (Vanguard News, 2015).

Wherein the card readers functioned, a few of the devices were confronted with the challenge of PVC authentication and biometric data verification of the voters in the polling units. The authentication and verification of voters was part of the accreditation process for the election.

A number of the PVC issued to voters by INEC could not be authenticated thereby disenfranchising some eligible voters in the elections. Wherein some voters' cards were authenticated, their biometric data could not be verified after several trials; and where it is verified, it is slow in some cases especially the fingerprints. For instance, in Borno State, ten percent of eligible voters cards were authenticated and biometric data verified by the card readers at most of the polling units (Odiakose, 2015).

However, the inability of the device to capture the fingerprints of some voters was attributed to greasy or dirty fingers of the voters. In most cases, people had to scrub their hands on the ground just to ensure that the device recognizes their finger prints (Okoro, 2015).

Following the widespread failure of the card reader, Jega, changed the guidelines (while the election was ongoing and after millions of frustrated voters had gone home disenchanted) in the conduct of the election on March 28 and approved the use of manual accreditation in areas that the smart card readers malfunctioned during the Presidential and National Assembly elections in the country (Odiakose, 2015).

The announcement by the INEC Chairman seemed to have eased accreditation in many places.

However, the extent to which this announcement may have inadvertently opened the flood gates for electoral fraud is yet to be fully analyzed (Amenaghawon, 2015). It is unfortunate that the rules of the game were changed in the middle of the electoral competition. In spite of this, the smart card reader had an impact on the 2015 general elections.

#### **Effect of Card Reading Machine on the Conduct of 2015 General Election :**

Industry stakeholders have continued to hail INEC for introducing card readers in the 2015 general elections, which they said, helped in no small measure in reducing election fraud across the country, despite the challenges that came with it. According to them, the card reader technology did not only reduce election rigging and snatching of

ballot boxes from polling units, but also enhanced speedy and accurate electoral processes during accreditation of voters. Chief Executive Officer of Teledom Group, Dr. Emmanuel Ekuwem, told THISDAY that the use of card reader machines for the 2015 general elections has proved that INEC could conduct credible elections with minimal complaints (This Day Live, 2015).

The use of card readers for elections is highly commendable because it has helped reduced election fraud like multiple registrations and multiple voting. With the card readers, the true identities of card holders were matched with the details contained in their permanent voter's cards (PVCs), during accreditation and the process helped in reducing fraudulent accreditation that marred electoral processes in the past," (Ekuwem, 2015).

He advised INEC to continue to explore the power of technology in subsequent elections, and called on the electoral body to create a backend database that is linked with the card readers in order to give voters the opportunity to vote from anywhere in the country, using their PVC, instead of restricting them to vote only in their registration centres. He advised INEC to apply the technology of Automated Teller Machines (ATM) cards issued by banks, which allows card holders to withdraw cash from any bank that is located anywhere in the country.

According to Ekuwem (2015), voters should be able to use their PVCs on any card reader for accreditation and voting in any part of the country, irrespective of where the voter was registered. That it will allow people who may have relocated from their place of registration, to vote in their new areas of residence. Reacting to the situation where some of the card readers malfunctioned during the elections, Ekuwem said it was expected because the technology was new and that most of the INEC officials were not conversant with the card reader technology. He said he became pleased with INEC when some of the complaints about card readers were addressed during the Governorship and State House elections (Ekuwem, 2015).

The President of Information Technology Systems and Security Professionals (ITSSP), Mr. Rogba Adeoye, commended INEC for the use of card readers. According to him, the card reader technology was able to reduce election fraud by providing accurate records of accredited voters who were the same people that were allowed to vote. He said the card readers were able to address discrepancies between actual voters and fake voters. Chairman of the House Committee on ICT, Honourable Shehu Gusau, told THISDAY that although the card reader technology is new to Nigerians, it has help to achieve a fair and free election, without massive rigging (Onapajo, 2014).

President of the Association of Telecommunications Companies of Nigeria (ATCON), Mr. LanreAjayi, also commended INEC for the introduction of card reader machines for election, and described the technology as a worldwide technology that is driving economies. Having successfully tested and implemented the card reader technology for the 2015 general elections, it will be good if INEC take into consideration the observed lapses from the use of the machines, and perfect them in subsequent elections in order to surpass the election credibility and transparency it achieved in the just concluded elections (Amenaghawon, 2015).

### **Technical Hitches in the use of Card Reading Machine during the 2015 General Elections:**

According to Amenaghawon (2015), the card reader was part of the registration and authentication of duly registered voters – those who had Permanent Voter Cards (PVCs) – and who ultimately participated in Election Day. The card reader had been promoted by INEC as an anti-electoral fraud device and was introduced to enhance



the integrity of the voting process and dissuade multiple voting (as only duly accredited and verified PVC holders could vote). The card readers were also programmed to work for specific polling units. This meant that PVCs could not be used in multiple polling units (Amenaghawon, 2015).

Despite the pockets of challenges concerning its use, which included possible battery failures to power the device and timeliness issues in verifying PVC holders and how many voters could be covered within the accreditation process, Nigerians were generally optimistic that the readers would positively impact the voting process. Sadly, technical hitches were still recorded. These complications ranged from simple issues, such as the lack (or poor) understanding among INEC's ad-hoc staff on the need to remove film covering from the screen of the device which facilitates better fingerprint decoding, to the outright malfunction or failure of the card readers themselves. Of particular note was the failure of the some card readers to recognize President Goodluck Jonathan's card, which was quite embarrassing for the incumbent leader. After four repeated trials and failures, Goodluck was accredited to vote manually in line with stipulated INEC procedure – i.e. filling the incidence form. But the media soon caught wind, and there were a range of reports circulating about similar card reader and finger recognition challenges nationwide.

This prompted the INEC to instruct those polling units that were experiencing card reading challenges to immediately revert to the old system of manual accreditation. The announcement seemed to have eased accreditation in these places; however the extent to which this announcement may have inadvertently opened the flood gates for electoral fraud by some politicians and polling officials. There were further allegations of voter list mark-up's (manipulation) and ghost voting (electoral fraud), even though, according to the INEC, the card readers functioned in 99% of polling units nationwide ( Ekuwem, 2015).

While this is a very high reliability factor, a number of aggrieved candidates and their parties were still contesting procedures. The card reader challenges, as well as incidences of late arrival of INEC staff and commencement of accreditation, dragged the voting process well into the night (and even the next day in some polling units across the country). Three hundred polling units had their voting postponed to that following Sunday (Ekuwem, 2015).

### **Impact of Card Reading Machine in Reducing Electoral Fraud during the 2015 General Election:**

Despite the challenges that confronted the operation of some of the smart card readers during the 2015 general election, a significant impact of the device usage was observed after the elections. First, the use of the card reader led to the increase and reinforcement of public confidence and trust in the electoral process. This public confidence is dependent on the integrity of an election which the 2015 general election appears to possess.

Majority of Nigerians after the elections believed that their votes could count and as such their will could be respected in future elections; and this has reinforced the legitimacy of Nigerians in the democratic process. Secondly, electoral fraud was reduced. Inflation of the number of voters present and multiple voting at polling stations were reduced. The device checked the undemocratic attitude of politicians in polling booth electoral malpractices (Amenaghawon, 2015).

Thirdly, election litigations were minimized. There was a departure from the past where every election outcome is being contested at the election tribunal. Most of the candidates that lost in the 2015 general election did not challenge the outcome. In

fact, some of the major contenders that did not win in the election embraced and congratulated the winners. For instance, the PDP presidential candidate immediately congratulated the APC presidential candidate, the winner of the presidential election. This attitude also happened across many states of the federation in the governorship and house of assembly elections and national assembly elections.

In addition, electoral conflicts and violence was very minimal as the election was seen to be transparent and credible due to the use of the card reader. The usually excessive and pointless attacking and degrading between the election winners and losers in past electoral contest was significantly reduced. In view of the minimal level of electoral fraud due to the use of the card reader, tensions were reduced among the political gladiators, and as such, electoral conflict and violence was grossly diminished in the 2015 general elections outcome compare to past elections in Nigeria (Ekuwem, 2015),

Furthermore, Nigeria's democratic capacity has increased and its democratic institutions strengthened. Nigerians and Nigeria's democratic institutions now understood the knowledge needed to have a free and fair election in order to deepen the democratic process.

#### **Smart Card Reader and Future Elections in Nigeria: The Way Forward:**

The introduction of information and communications technologies (ICT) into the electoral process is generating both interest and concern among voters, as well as practitioners across the globe. Today, most electoral management bodies (EMBs) around the world use new technologies with the aim of improving the electoral process (ACE Project). These technological software and devices including the smart card reader must however be deployed in manner that will lead to their effectiveness (Ekuwem, 2015).

No doubt, the smart card reader had played a very significant role in the 2015 general elections in Nigeria. However, there is need to ensure that the issues and challenges which confronted the use of the device before, during and after the elections do not reoccur in future elections. Therefore, a number of mechanisms would need to be in place by INEC for the deployment of the card reader in future elections so as to strengthen the democratic process.

INEC should ensure that its conduct and activities in future elections is transparent especially with the use of technology like the card reader. This is because transparency is a key principle in credible elections; and this will bring about trust and public confidence in the electoral process. Also, INEC should consult widely and carryout effective campaigns on the card reader and any other technology to be deployed in future elections. Stakeholders including the media, political parties, civil societies, national assembly and the electorate should be adequately consulted. INEC should partner with them to carryout massive dissemination of information; sensitize them on the need to key into the technology in order to improve the electoral process and deepen the democratic process (Ekuwem, 2015).

INEC should endeavour to manage information about the technology and changes so that stakeholders do not have unrealistic expectations and do not impose impossible deadlines (ACE Project). These stakeholders can be engaged to make rules and regulations on the electoral process. The need to strengthen the electoral law in conformity to the technology deployed for future elections is germane. The Electoral Act, 2010 (as amended) should be amended to include the use of the card reader for biometric verification of voters for the purpose of accreditation in future elections. Therefore, the National Assembly should quickly be approached by INEC to amend the

electoral legal frameworks on the use of card reader in order to address the issue of legality which the card reader had generated.

Furthermore, adequate training of election officials both temporary and permanent staff of INEC should be conducted in a conducive environment ahead of time in future elections so as to give rooms for practical demonstrations of how to use the device effectively. Enough card reader should be made available during the training session. Every one of the trainee should undergo a mock test during training. Strict compliance with all instructions handed down to the trainees should be monitored. The trainees' allowances should be paid in full in order to motivate them in handling the device properly (Ekuwem, 2015).

INEC must regularly update and re-examine the relevance of the card reader to future elections in Nigeria because technology is not static and the level of technological change is rapid such that a device used five years ago may not be too relevant to the present day. Therefore, to conduct a credible, transparent, free and fair election in the future with the use of the card reader, INEC must invest in regular staff training and development in order to be in tune with modern day technological changes that is fast occupying the democratic landscape and electoral process. Consequently, future general elections in Nigeria should gradually continue to be technologically driven.

#### **Summary of Findings:**

The use of the card reader generated debate before, during and after the 2015 general elections.

However, the significant impact of the device despite its challenges during the election cannot be quantified. Though, INEC deployment of the card reader was to improve the electoral process and deepen the democratic process. However, lack of trust, suspicion and altercations among the stakeholders with vested interest in the election created tension within the body polity. With the use of the card reader in the 2015 general elections and the gradual deployment of technology in subsequent general elections in Nigeria, the prospect of Nigeria belonging to one of the countries of the world where elections are driven largely by technology is nearby

To verify the efficiency of the use of card reader, we conducted a 'mock election test were conducted before the election' and deployed the proposed system for the election. Card reader machine were used as nodes with each card reader signifying a polling unit with customized voter card. Because of the financial implications, two card readers are used in each polling unit. Electorate present themselves for accreditation before voting. The arrangement suffice for the 'test election' for which it was adopted, even though it was believe that such scenario is not work in the general election ( Ekuwem, 2015).

Registered voter were accredited with the use of card reading machine. The card reader face challenges during the March 28 presidential election in some polling unit. INEC through its National chairman announce the use of incident form. Some INEC official and polling officers took the advantage of incident form to influence vote figure in their polling unit. But the case is different in the Governorship and state house of assembly election. In the April 11 Governorship and state house of assembly election INEC through its National chairman announce that all accreditation should be done with the use of card reader. The use of card reader has reduce election fraud when compare with the 2011 general election in Nigeria.

#### **Conclusion:**

Visible contradictions notwithstanding, the Smart Card Reading Machine has become a legacy for which history would continue to remember and possibly honor the



former Vice-Chancellor of Ahmadu Bello University Zaria and chairman of Independent National Electoral Commission.

It has to be emphasized in this study that the card reader has now thrown up an entirely different phenomenon in the electoral system of Nigeria. Long before the introduction of the card reader, politicians had taken it for granted that the electoral success of a contestant did not depend on the collective will of the electorate. This feeling was indeed, true because politicians, as long as they had the needed money and influence, were very easily able to manipulate the electoral system and got themselves declared victorious in a contest, even when it was obvious that they were not the people's choice. The outcome of this illegitimacy was that those that were elected through such manipulative acme had no regard for the electorate and, so, were completely insensitive to the plight of the masses.

But with the smart card reader, every one now should have realized that Nigeria has reached a stage where electoral success would have to be determined entirely by the voting population. Anybody that has a permanent voter's card has automatically become a stake-holder. Politicians that are known to be pompous and arrogant have been rendered irrelevant and ineffective in the present dispensation of things. This is a very positive way of strengthening the country's democracy, as every vote now matters and counts.

#### **Recommendations:**

Since the smart card reader has been introduced and has equally come to stay, it has become necessary that its use should form a legitimate integral part of the country's electoral laws and system. The eighth National Assembly of the Nigerian legislature, which is expected to come into existence from June 2015, would be expected to legitimize and formalize the use of the smart card reader by giving it a legal backing. This would demand for an amendment to the present electoral law or act as to give the use of smart card reader a legal existence.

The management of Independent National Electoral Commission should successfully invest on appropriate human capacity on the use of the smart card reader. The company that would manufactured the electronic equipment should be liberal enough to deeply drill Nigerian officials in the technical-know-how of the card reader so that indigenous Nigerians would, at the slightest notice, handle any technical challenge that could arise in the course of an election.

Once the National Assembly passes a law that mandates the Independent National Election commission to supervise the conduct of Party primary elections, using the card reader for accreditation and authenticate the winner(s) of the primary election, it would become very certain that internal democracy would have been injected into political parties and this would help reduce the magnitude of rancor and bitterness that are associated with party primary elections and, by so doing, stabilize Nigeria's democracy.

In order to continue to raise the quality of Nigeria's electoral process with particular emphasis on the organization of elections. The application of the card reader technology had its merits, but was made redundant by allegations of electoral officials and community collusion to ensure that the machines played no part in determining electoral results. It is certainly a technology that needs to be improved upon in the run up to the 2019 general elections.

National Assembly should create independent court to frontally treating electoral offences/offenders more seriously and making deterrents of culprits.

Federal Government should assess and consider reforms to portions of its current electoral law; ones that seem to weaken the Nigerian state responsiveness to electoral offences.

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