Smart Card Reader Machines and Political Participation in Ebonyi State, Nigeria: Problems and Prospects

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Abstract

Several elections conducted in Nigeria right from the first Republic up to the 4th Republic, have been characteristically marred by different forms of irregularities such as ballot box snatching, double voting, rigging of election results among others. It was in an attempt to checkmate the ugly trend that led to the introduction of Card Reader Machine in 2015. This study therefore investigates the use of Smart Card reader machines and Political Participation in Ebonyi State, Nigeria: Problems and Prospects. Thus; the study is aimed at determining the extent to which smart card reader machine has reduced rigging in the election process in Ebonyi State, the extent to which smart card reader motivates people to participate in electoral process in Ebonyi State, and the extent to which Smart Card reader Machine has promoted peaceful election in Ebonyi state Nigeria. System theory propounded by David Easton in 1962 was adopted as the theoretical framework. The study adopts descriptive survey research design. The population of the study was 553500 which was reduced to a researchable sample size of 400 using Taro Yamani's statistical formula. Data for the study were collected using questionnaire and data collected were analyzed using simple percentage frequency distribution tables. Findings of the study reveal among other things; That the use of Smart Card Reader Machines significantly reduced rigging in the electoral process in Ebonyi State, the use of Smart Card Reader machines significantly motivates people to participate more in the electoral process, Smart Card Reader machines significantly promotes peaceful election in Ebonyi State. It was recommended among other things; That INEC and other stakeholders like the National Orientation Agency should organize proper sensitization to all Nigerians on the need to accept the use smart card readers in the conduct of elections at all levels. That INEC Ad hoc staff should be properly trained on the use of smart card reader machine to eliminate the challenges experienced in the previous general elections. That INEC should endeavour to allocate more time ahead of election days to adequately organize training for ad hoc staff so as to give rooms for reasonable practical demonstrations on how to use the device effectively.

Introduction

There is no doubt that political participation is associated with democracy, which is traditionally considered by Lincon in 1858, as the government of the people by the people and for the people. If it is truly accepted that democracy is the government ruled by the people, then the question of who and who should participate in the government may not be an issue of serious concern but the quality of their participation and its attendant impact in the overall political decision making process becomes very necessary (George-Genyi,2015). According to Nnoli (2011), democracy is about participation. It is a product of sweat, toil, creativity, blood, and sacrifice of millions of people across space and time in the human struggles for a better life. Therefore, to negate democracy and freedom of choice of the people is to negate this history of struggle and the contribution of these struggles to human progress and further advancement of these struggles to greater heights.

Political participation according to Ikelegbe (1998) cited in Ogoyi and Obukeni (2019) connotes the political actions of the citizens designed to influence the political process. He maintains that it includes the real or actual involvement of the citizenry to influence directly or indirectly the directions of government or more precisely the output or outcome of the political process. In the same vein, Ogoyi and Obukeni (2019) opined that Political participation describes the extent to which individual members of the society shares, take part or get involved in the political life of that society. Going by the submission of these scholars, it is clear that participation is central to politics especially in a democratic setting. Indeed, one of the primary means of participating in politics of one's country is through election, which is the process of choosing a candidate for public office. It is a critical component of any democratic society that enables the citizens to make the choice of who steers the ship of governance in the country (Ebenyi, 2018). However, it is regrettable that Nigeria as a country has not satisfactorily conducted an election that gave the citizens an opportunity to exercise their right of choice in this all important aspect of democracy. Since Nigeria returned to democratic rule and engaged with other democratic process which led to the conduct of her general elections in 1999, 2003, 2007, 2011, 2015 and 2019. None of these elections were free from irregularities and malpractices (Momoh, 2019). And this to a great extent has hampered the citizens' spirit of participation in the politics of the country. Realizing this fact, Egbebulem (2015) opines that conducting elections in a supposedly rich pluralistic developing country like Nigeria cannot be said

to be an easy task by any yardstick. Conducting free and fair elections in such polity that allows the victor a free grab of resources is a much more difficult assignment, which even angels, could not guarantee. Obviously, conducting election in Nigeria is usually a difficult task at any time. In a nutshell, conducting credible elections in the history of Nigerian politics has remained a herculean task in view of the intensity of political struggle for access to state resources. Thus, successive electoral umpires who are poised with the zeal to make votes count in order to justify the citizens' reason for participating in the politics have had to contend with pressures from different interests of politicians to rig elections in their favor. Part of the serious effort made by the electoral umpires to resist the temptation of rigging and other electoral irregularities was the introduction of Card Reader Machine popularly called Smart Card Reader (SCR) in the electoral system.

The official use of the device in Nigeria elections first came up in 2015 while the 2019 general election was the second time it was used in the electoral process (Okonji, 2015). It was observed that when the Independent National Electoral Commission (INEC) first announced its plan to introduce card reader machine for the March 28 and April 11 2015 general elections, many Nigerians, especially politicians, vehemently opposed to it. They felt the country has not developed to a level where such technology can be employed for elections. Besides, they felt the use of card reader would disrupt the entire electoral processes. The public outcry that greeted the planned introduction of card reader machines was enough to discourage INEC from introducing it. Nonetheless, because of INEC's 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 were characterized by ballot box snatching and multiplicity of ballot tomb-printing, INEC went ahead and introduced the technology against all odds (Idowu, 2015). In the end, many technology experts in Nigeria and outside, who monitored the elections are full of praises for INEC to have insisted 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 therefore implored the electoral umpire to introduce card reader machines in subsequent elections, believing it is a sure way to achieve transparency and credibility in every election. Hence justify the citizens' interest for participating in the politics of their own country. However, 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.

In Ebonyi state for instance, the challenges of smart card reader machine got to an extent that 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. To that effect, 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. Understanding the fallbacks of the card reader machine noticed in the 2015 general elections, the INEC promised to enhance the smart card reader for better efficiency in achieving results in the 2019 and subsequent general elections. Thus technological experts were pressured to go back to the drawing board in order to modify the card reader machine for easy verification and authentication of the permanent voters' cards and at the same time infused more long-lasting batteries than the previous. At the end of the exercise, about 75% of success of the card reader's efficiency result was achieved in the 2019 general elections than in 2015. It reduced delay in the voting process as voter accreditation and vote casting went on concurrently. More over the idea of rejecting voters' card was ruled out while the battery energy was retained till the next day of the elections.

Statement of the Problem

The account of political participation in Nigeria's existence as a sovereign nation-state has remained a chronicle of political uncertainties. Nigeria has been struggling to install a viable and durable democracy that will enhance political participation but its dismal political actuality characterized by consistent inability to conduct credible and transparent elections in which its citizens have access to adequately enforced and effectively protected opportunities, to exercise their franchise in the choice of their leaders, has made the agenda of democratic sustainability largely a mirage. This accounts for the copious failed attempts at democratic transitions. For instance, the collapse of the First and Second Republics and the annulment of the June 12, 1993 General Elections coupled with consequent abortion of the Third Republic (Dudley, Akinsanya and Agbaje 2005). Since the

country's return to democratic rule in 1999, transitional elections in 2003, 2007 and 2011 were won and lost under conditions in which electoral malpractices, rigging and violence were pronounced, a phenomenon described by Dauda as "The Slippery side of landslide" (Dauda 2007).

Participating in Elections in Nigeria is characterized by machine politics which "involves the parceling out of parts of the State including territories to individuals, usually under the leadership of one or two notables who maintain their prebends essentially by force" (Ibeanu 2007). Ibeanu further asserts that under such circumstances, elections give rise to the primitive accumulation of votes, which he refers to as the "winning of votes by both objective and structural violence and disregard for the rule of law" (Ibeanu 2007). In this kind of environment, there is usually sustained rigging which ensures that votes do not count and voters are not counted leading to the lack of credible elections (Jinadu 2007 and Mohammed 2007).

Concerned about the massive electoral fraud witnessed in the past general elections in Nigeria, INEC decided to introduce card reader machine in 2015 general elections in order to change the ugly trend. And to ensure a credible, transparent, free and fair election Nigeria's electoral democracy and further to encourage the masses to participate more in the politics of their country. However, the used of the card reader in the 2015 and subsequently 2019 general elections generated debate among election stakeholders before, during and after the elections. Parts of the arguments given were; the inability of the card reader machine to allow voters to vote anywhere and everywhere they are once they are accredited. At the same time, the issue of battery failure as was the case in 2015. Moreover, verifying a PVC with and refusal to accept a voter's thumb-print for authentication as noticed more during the 2015 and 2019 elections and poor network connection for E-collection of the result among others were the faults of the carder reader machine towards the progress of achieving credible elections to satisfy citizens interest in political participation in Nigeria. It is based on this background that the study tends to investigate on the use of card reader machine and political participation in Ebonyi State Nigeria: Problem and Prospects. The following questions were formulated to guide the study.

1. To what extent has card reader machine reduced rigging in the election process in Ebonyi State?
2. To what extent has the card reader machine motivated people to participation in election process in Ebonyi State?
3. To what extent has smart card reader machine promoted peaceful election in Ebonyi State?

Objectives

1. To determine the extent to which smart card reader machine has reduced rigging in the election process in Ebonyi State.

2. To examine the extent to which smart card reader motivated people to participation in electoral process in Ebonyi State.

3. To ascertain the extent to which smart card reader machine has promoted peaceful election in Ebonyi State Nigeria.

Conceptual Review

Concept of Political Participation

Political participation like every other concept in the field of social sciences has not gained a universally accepted definition. This accounts for the reason why many scholars have viewed the concept in the different ways. According to Anifowose (2004) political participation is defined as those voluntary activities such as holding public and party office, being a candidate for office, attending election campaigns, voting and exposing oneself to political stimuli. In a similar way, Maclosky (1968) cited in Oni and Agbude (2011) sees political participation as a series of voluntary activities through which members of a society share in the direct or indirect selection of rulers and formation of public policy. Sanghera, (2005) on the other hand, defines political participation as the active engagement by individuals and groups with the governmental processes that affect their lives. This encompasses both involvements in decision-making and acts of opposition. Lewu (2005) however, defines political participation as a variety of ways in which people try to exercise influence over the political process. For Lawson and Wasburn (1969) in cited Oni and Agbude (2011), Political participation is the process by which individuals acting singly or through group organization attempt to influence decision-making or alter the manner in which power may be distributed and the principles by which it may be exercised in a particular society.

Political participation according to Barrett and Brunton-Smitt (2014) takes a number of different forms, including both conventional forms which involves electoral processes (like voting, election campaigning etc.) and non-conventional forms which occur outside electoral processes (for instance, signing petitions, participating in political demonstrations, among others). Dimitrova, Shehata, Stromback, and Nord (2011) argued along the same line when they state that political participation is categorized into two types, conventional and unconventional political participation. According to

them conventional participation refers to a behaviour of being a responsible citizen by attending and participating in a regular election exercise, while unconventional participation simply means any legal activity that sometime shows a sign of inappropriate manner such as signing petition, organizing and supporting boycotts and staging demonstration or protests in public places.

George – Genyi (2016), opines that Political participation equally describes the voluntary or non-coercive involvement of citizens in the political affairs of their country. This definition points to the fact that political participation should not entail the use of force. Riley, Griffin and Morey (2010) noted that political participation is thought of as a set of rights and duties that involve formally organized civic and political activities. Verba (1995) cited in Falade (2014) characterized political participation as an activity that has the intent or effect of influencing government action – either directly by affecting the making or implementation of public policy, or indirectly by influencing the selection of people who make those policies. Adelekan (2010) defines political participation as the process through which an individual(s) plays a role in the political life of his society and has the opportunity to take part in deciding what common goals of the society and the best way of achieving these goals. Akamare (2003) conceives political participation as an aspect of political behavior which focuses on the way in which individuals take part in politics. According to him, it is a voluntary activity which one can participate directly or indirectly. He further maintained that political participation is not by compulsion since forcing someone to participate in an electoral process for instance tantamount to breach of the electoral act.

 Furthermore, according to Ugwuja (2015) Political participation refers to as getting involved or taking part in activities that has to do with politics or discussion about the happenings of the government. This definition points to the fact that political participation is an action which citizen should get involved in as much as it concerns their society. Awolowo and Aluko (2010) in their own perspective stressed that the essence of political participation in any society, either civilized or primitive, is to seek control of power, acquisition of power and to influence decision making. Awoleso (2014) on his own defines political participation as voluntary activities shared by members of a society in the selection of their rulers and directly or indirectly involves in the formation of public policies. Falade (2014) describes political participation as an aspect of political behavior which focuses on the way individuals take part in politics. To him, it encompasses a wide range of political activities such as voting, contesting for elective post, belonging to a political party, holding public office, attending political rallies, and meetings and so on.

Oji and Okafor (2000) cited in Ogoyi and Obukeni (2019) opines political participation describes the extent to which individual members of the society shares, take part or get involved in the political life of their society. According to him, political participation includes those actions of private citizens by which they seek to influence or support government and politics consequent upon the benefits of such actions. Okafor and Okeke, (2002) stated that, Political participation could be conventional or orthodox. To them, conventional participation on one is a relatively routine behavior that uses the institutional channels of representative government, especially campaigning for candidates and voting in elections. On the other hand, unconventional participation is relatively uncommon behavior that challenges or defines government channels of political communications.

Ikelegbe (1998) cited in Ogoyi and Obkeni (2019) asserts that Political participation connotes the political actions of the citizens designed to influence the political process. According to him, it involves the real or actual involvement of the citizenry to influence directly or indirectly the directions of government or more precisely the output or outcome of the political process. And it describes the extent to which individual members of the society shares, take part or get involved in the political life of that society.

From the opinions of the scholars reviewed so far, it can be drawn that political participation involves;

1. Voting in an election

2. Influencing the composition and conducts, or personnel and policies of government

 3. It is concerned with the activities of private citizens

 4. It could be positive or negative, though only positive is approved and often emphasized, but other nefarious activities aimed at sabotaging the efforts of government such as organized terrorism could be political participation when they aim at achieving political objectives.

The Card Reader Machine

The smart card reader is a technological device setup to authenticate and verify on election day a Permanent Voter Card (PVC) issued by INEC (Engineering Network Team, 2015). 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 card reader machine is designed to read information contained in the embedded chip of the permanent voter's card issued by INEC to verify the authenticity of the Permanent Voter's Card (PVC) and also carry out a

verification of the intending voter by matching the biometrics obtained from the voter on the spot with the ones stored on the PVC (Engineering Network Team, 2015). The ability of the card reader to perform the above described functions as well as keeping a tally of the total numbers of voters accredited at the polling unit and forwarding the information to a central database server over a Global System for Mobile (GSM) network makes the machine the most welcomed development in time in the nation's electoral history (Engineering Network Team, 2015).

According to INEC (2019) the Card Reader reads the embedded chip on the PVC, not the barcode. It shares a secret code with the PVC; thus it is impossible to falsify the cards. The Card Reader authenticates the identity of the voter by cross-matching his/her fingerprints with that stored on the embedded chip. This makes it difficult for person to vote using another person's PVC. The Card reader machine keeps a tally of all cards read, comprising the details of all voters verified as well as those not verified, and transmits the collected information to a central INEC server via GSM data service. The information transmitted to the server will enable INEC to audit results from polling units, as well as do a range of statistical analysis of the demographics of voting. Collation officers will also be able to use information transmitted by the Card Reader to audit polling unit result sheets and determine whether accreditation figures have been altered (Engineering Network Team, 2015).

According to Momoh (2019), the card reader machine has been very beneficial to the electoral system which include among other things;

1. Time saving: the card reader enables the electoral exercise to be carried out faster since it can be accredited as many intending voters as possible within a short interval.
2. Energy saving: The card reader enables the officials of INEC to conduct elections easily against the manual system in which the staff exhausts their energy by following the rigorous processes accreditation before voting.

The Emergence of Card Reader machine in Nigerian Electoral System
The development of the card reader machine started as a memory device which keeps data and record for future use (Ibrahim and Makama, 2015). Personal computer cards (PC) were among first commercial memory card formats (type I cards) to come out in the 1990s, but are now mainly used in industrial applications and to connect I/O devices such as modems. In the 1990s, a number of memory card formats smaller than the PC Card arrived, including Compact Flash, Smart Media, and Miniature. The desire for smaller cards for cell-phones and compact digital cameras drove a trend

that left the previous generation of "compact" cards looking big. In digital cameras Smart Media and Compact Flash had been very successful. In 2001, Smart Media (SM) alone captured 50% of the digital camera market and compact flash (CF) had captured the professional digital camera market (INEC, 2015).

By 2005 however, memory cards had nearly taken over Smart Media's spot, though not to the same level and with stiff competition coming from Memory Stick variants, as well as Compact Flash. In industrial and embedded fields, even the venerable memory cards still manage to maintain a niche, while in mobile phones and PDAs, the memory card market was highly fragmented until 2010 when micro-SD came to dominate new high-end phones and tablet computers (Lori, 2010). Since 2010, new products smart card reader and Olympus (previously only using XD-Card) have been offered with an additional feature. The new feature among other things reads the content of the encrypted voter's bio-data and biometrics details with the associated private key and the availability of a matching voter ID to the smart card then begins to run a live matching with the voter information database where a version of each voter's bio-data and biometric details is housed. If a match is found, the person is authenticated and certified as a duly registered voter (INEC, 2016).

Reasons for the introduction of Smart Card Reader in Nigerian Electoral System

The smart card reader was the most contentious and critical issue in the Nigerian electoral system especially when it was firstly introduced in the 2015 and subsequently used in the 2019 general elections (Ogoyi and Obukeni, 2019). However, irrespective of different opinions and reactions of people from different quarters regarding its introduction, the obvious truth is that the card reader machine remains one of the greatest innovative technologies that have happened to the Nigerian electoral process (Okonji, 2015). Consequently, it is clearly obvious that past elections in Nigeria were characterized by desperate bid of politicians to acquire power at all cost which manifested into various forms of electoral malpractices such as multiple voting, impersonation, manipulation and falsification of results which have led to incessant legal action, electoral conflict and violence in the country.

The situation was well captured by Dudley, Akinsanya and Agbaje (2015) who opined that Nigeria has been struggling over the years to install a viable and durable democracy that will enhance political participation but its dismal political actuality characterized by consistent inability to conduct credible and transparent elections in which its citizens have access to adequately enforced

and effectively protected opportunities, to exercise their franchise in the choice of their leaders, has made the agenda of democratic sustainability largely a mirage. And this accounts for the copious failed attempts at democratic transitions. For instance, the collapse of the First and Second Republics and the annulment of the June 12, 1993 General Elections coupled with consequent abortion of the Third Republic. In the same vein, (Dauda 2007) decries that ever since Nigeria as a country returned to democratic rule in 1999, transitional elections from 2003, 2007 and 2011 were won and lost under conditions in which electoral malpractices, rigging and violence were pronounced.

The preponderance of electoral malpractices in the country over the years has left many citizens with no choice than to lose interest and confidence to participate in electoral process. Realizing the consequences of this ugly situation, Alvarez and Hall (2008) asserts that lack of confidence and believe in the fairness, accuracy, openness and basic integrity of the election process is a threat to any democratic society. In the same vein, López-Pintor (2010) pointed out that electoral fraud has more serious political implications in the sense that it allows a party or candidate to take over public positions contrary to the popular will. This undermines the democratic process and usually leads to electoral violence, insecurity and political instability. He therefore pointed out that such instances have accounted for the collapse of governments of Cote d'Ivoire, Peru and Serbia all in 2000 as a result of popular rebellions against fraudulent elections. Similarly, the so-called 'Orange Revolution' in Ukraine in 2004 which led to the presidential elections being completely re-scheduled after extensive fraud was demonstrated (López-Pintor 2010).

It is in a bid to salvage the country from the ugly trend of electoral fraud that propelled the independent national electoral commission to introduce the Card Reader machine into the electoral system. However, the use of card reader machine though may not be considered as an absolute end to electoral fraud has to a great extent engendered some significant level of transparency in the electoral system (Okonji, 2015). The smart card reader is a technological device to authenticate and verify voters with PVCs. The device uses a cryptographic technology that has ultra-low power consumption, with a single core frequency of 1.2 GHz and an Android 4.2.2. operating system (INEC 2015). The INEC card reader is designed to read information contained in the embedded chip of the permanent voter card issued by INEC to verify the authenticity of the PVC and carry out verification of the intending voter, by matching the biometrics obtained from the voter on the spot with the ones stored on the PVC (Engineering Network Team 2015). The card reader performs these

functions while also keeping a tally of the total numbers of voters accredited at the polling unit and forwarding the information to a central database server over a global system for mobile (GSM) network. These features make the card reader most welcome at this point in time in the nation's electoral history (Engineering Network Team 2015).

The fundamental reasons for the deployment of the technology-based device in the Nigerian electoral system according to INEC (2015) in the general elections include the following:
 • To prevent electoral rigging/fraud
• To allow the electorates' votes to count to reduce litigation arising from elections
• To authenticate and verify voters
 • To protect the integrity and credibility of the election
• To audit results from polling units across the federation
• To ensure transparency and accountability. Other reasons included the need for statistical analysis of demographic data of voters and voting for the purposes of research and planning, to build public confidence and trust in the election, to reduce electoral conflicts, to ensure a free and fair election, and to further deepen Nigeria's electoral and democratic process.

Election Rigging in Nigeria and the Card Reader Machine
Over the years, election rigging appears to have become a culture in the Nigerian electoral history (Agbu, 2016). The reason for this is because, ever since political independence in 1960, Nigeria's democratization has witnessed massive election rigging. The situation has compromised the ethics of democracy despite several electoral reforms on the electoral process. Electoral, rigging which can also be referred to as election fraud, or described as electoral malpractice are palpable illegalities committed with corrupt, fraudulent or sinister intention to influence, intimidate and foist other acts of coercion on voters, including the falsification of results and fraudulent in order to announce of a losing candidate as a winner (Agbu, 2016). Nigeria has conducted at least five elections since her return to democratic dispensation in 1999 comprising the 1999, 2003, 2007, 2011, 2015 and subsequently the 2019 general elections respectively.

However, apart from the general elections in 2015 and consequently 2019, they were all roundly condemned for not meeting up to the required global standards but characterized by rigging. For instance, in the 2003 general election, rigging was rampant. Consequently, results were said to have been written in the private homes of individuals, and in some cases, announced even when the

elections had not been conducted (Eguavoen 2009). In other places, fictitious thumb-printed ballot papers were stuffed into ballot boxes and used to compute figures for pre-determined winners. Security agents were used by government to intimidate and harass the electorate in different parts of the country. Money was equally used to influence the electorate to vote for unpopular candidates. In fact, the European Union Election Observer Mission (EU-EOM) Team led by Max van den Berg mentioned 12 States where fraud and irregularities were rampant and concluded that the 'minimum standard for democratic elections were not met' (European Union Electoral Observer Mission, 2004).

 Furthermore, the general elections of April 2007 were characterized by several shortcomings. These were as a result of poor preparation and widespread manipulations of the electoral process by the government using law enforcement agencies, especially the police and the Economic and Financial Crimes Commission (EFCC). The irregularities in the election included the late arrival of materials and officials, stealing of ballot papers, vote buying, harassment, chanting, shooting and taunting of voters, lack of secret voting, police interference, ballot snatching and stuffing, intimidation and political violence, denial of access to polling stations, partiality of electoral officials and the police, improper voting procedures, late commencement of elections, and underage voting (Omotala 2007).

After evaluating the reports of observers deployed throughout the country, the Domestic Election Observation Group noted that numerous lapses, massive irregularities and electoral malpractices had been documented, and came to the conclusion that the whole election was a charade and did not meet the minimum standards required for democratic elections (Domestic Electoral Observer Mission (2008). The 2011 general election like every other elections in the country, was not free from rigging as several cases of irregularities were equally recorded. In the words of Momoh (2015), "The 2011 general election was marred by different forms of rigging such as, ballot box snatching and multiple voting coupled with a high level of violence". According to him, the situation became obviously possible considering the fact that, the Peoples Democratic Party (PDP) did all they could to ensure that they retains the power while the opposition party; All Progressive Congress (APC) was vigorously determined to take the leader power.

The above state affairs coupled with the general public outcry from the Nigerians across different quarters necessitated the introduction of Card reader machine into the electoral system by the

Independent National Electoral commission under the chairmanship of Prof. Athahiru Jega in 2015 (Eze and Agena, 2016). The card reader machine to a great extent has brought about some level of transparency and credibility in the Nigerian election history. Thus, the 2015 general elections was popularly upheld to free, fair and credible (Agbu, 2016). Prior to the 2015 general election, the card reader machines were test-ran in some states and the FCT ahead of the elections on 28 March and 11 April 2015 (INEC Fact Sheet on Permanent Voters' Cards and Card Reader 2015). Indeed, on 7 March 2015, INEC went to the field to test run the reliability of the PVCs and the SCRs ahead of the elections. The trial took place in 225 out of the total 120 000 polling units and 358 out of the 155 000 voting points that were to be used for the elections (Ahmed 2015). While there were some hiccups, the exercise was generally considered a good outing across 12 States in the six geopolitical regions of the country. The field reports largely justified the objective of the exercise: to verify Permanent Voters Cards presented by voters at polling units to ensure that they are genuine; and to biometrically authenticate the person who presents a voting card at the polling unit to ensure that he or she is the legitimate holder of the card. The real objective of the experiment was to ensure that only eligible voters exercised their franchise and that only such legal votes would be counted and tallied. To this extent the introduction of this technology was justified (Okonji, 2015).

However, the technical problems experienced were significant enough for many political stakeholders to express misgivings about its workability, while some canvassed outright for its non-use or postponement (Odiakosa, 2015). Overall, a verdict on the success or otherwise of this electronic technology depends on its overall contribution to the transparency and credibility of the elections. According to the Idowu (2015), the use of these card readers has enormous advantages. These include the fact that once configured, the card reader can read only PVCs issued by INEC. Any person who shows up at the polling unit without a Permanent Voters' Cards or with a card not issued by INEC will not be able to vote. Also, the card reader machine reads the embedded chip on the PVC, not the barcode, and it shares a secret code with the PVC; thus it is impossible to falsify the cards. The card reader authenticates the identity of the voter by cross-matching his or her fingerprints with that stored on the embedded chip. No person can vote using another person's PVC (Olanipekun and Adesanya, 2015). The card reader keeps a tally of all cards read, comprising the details of all voters verified as well as those not verified, and transmits the collected information to a central INEC server via GSM data service. Information transmitted to the server will enable INEC to

audit results from polling units, as well as do a range of statistical analysis of the demographics of voting (Idowu, 2015).

Further, collation officers will also be able to use information transmitted by the card reader to audit polling unit result sheets and determine whether accreditation figures have been altered (Idowu 2015). The use of the card reader machine to accredit voters is one of the innovations introduced by the Commission to improve the integrity of the electoral process. It does not violate the Electoral Act 2010, as Amended, or the 1999 Constitution of the Federal Republic of Nigeria, as Amended. It rather adds value to the process in line with the yearnings of Nigerians for credible elections, and accords with international best practice. The card reader is used only for the accreditation of voters, and data transmission. To prevent fraudulent use, the card reader was configured to work only on election days. In addition, the device was configured to specific polling units and could not be used elsewhere without requiring reconfiguration by authorized INEC personnel. The commission procured more than 35 000 back-up batteries that could be rapidly deployed in the event of failure during use, as well as 26 000 spares for card readers (Idowu 2015). This was necessary as a result of observations made from the use of smart card readers in Ghana's 2012 general elections.

Impacts of the Card Reader Machines on the Nigerian Electoral System

Despite the challenges that confronted the operation of some of the card reader machines during when it was first introduced in 2015 and subsequently in 2019 general election, a significant impact of the device have largely observed after the elections.

Firstly, the use of the card reader machines increased and reinforced public confidence and trust in the electoral process. Public confidence in each step of an election process is critical to the integrity of an election. Citizens not only have a right to participate in elections, they have a right to know for themselves whether the electoral process is valid. However, the introduction of card reader machine has restored the hope of Nigerians in the electoral system (Odiakosa, 2015). This is in contrast to what was obtainable in previous elections in the Nigeria especially as it has to do with her return to democratic rule since 1999. For instance, the outcome of the 2003, 2007 general election which made Nigerians to completely lose confidence in the electoral process was not something to write home about with. Indeed, the flaws that characterized the conduct of the 2007 elections in particular severely dented Nigeria's image and electoral integrity (Orji and Uzodi, 2012). The election fell short of basic international standards, to the extent that it was considered the worst in the history of

electoral democracy in Nigeria. In short, public confidence depends on the integrity of an election, and the 2015 general election appeared to possess this consequent upon the introduction of the card reader machine. And that is why the Nigeria Civil Society Situation Room (2015) described the 2015 elections as the most successful general elections in recent Nigerian history, and as such the elections renewed citizens' confidence in the electoral process. Indeed, most Nigerians after the elections believed that their votes would count and their will could be respected in future elections; this perception has reinforced the legitimacy of Nigeria's democratic process.

Secondly, the card reader machine has reduced electoral fraud in the country. Recall that successive elections in Nigeria since independence lacked the essential ingredients of democratic electoral process like transparency, free and fairness. It is unequivocal to say argue that since the inception of the Fourth Republic, a series of elections has been conducted with large-scale electoral fraud and malpractice. According to Ijim (2011) the 2003 general elections effectively put Nigeria on the map of countries that do not understand or respect democracy. He further maintains that the monumental and state-sponsored structural rigging showed a country with no regard for people's votes. The 2011 general election, which was considered by the international observers as free and fair, however, lacked credibility in its conduct especially in the rural areas of Nigeria (Ijim 2011). With the advent of the card reader machines, the undemocratic attitude of politicians in polling-booth comprising of engaging and sponsoring ballot box snatching, multiple thumb printing and other forms of malpractices are checkmated. In fact Nigeria Civil Society Situation Room (2015) described the device as a game changer in the Nigerian electoral history. According to the Situation Room, the politicians and candidates were unfamiliar with and even afraid of the card reader machines, as they had not learnt how to manipulate them. This fact in itself limited their ability to rig the elections.

Thirdly, the introduction of card reader machine has reduced the level of post election litigations in the country. Considering the level of electoral irregularities in the country over the years, it has become a common culture in Nigeria that after every election there must be a court (Tribunal) litigation to challenge the victory of whosoever that is declared a winner. For instance, total number of post-election litigation cases related to the general elections of 2003, 2007, 2011 and 2015 were 560, 1290, 731 and 297 respectively. Judging from these figures presented, it shows that the 2015 elections incurred the least litigation during Nigeria's Fourth Republic. The 2019 at the same time has attracted little litigation. Owing to the card reader machine, there seems to be a departure

from the past where every election outcomes are mostly challenged at the election petition tribunal. In 2015 for instance, some of the strongest contenders who did not win in the election embraced and congratulated the winners. A typical case of that nature is the effort of the PDP presidential candidate – Good Luck Jonathan to immediately congratulate the APC presidential candidate – Muhammadu Buhari who had won the presidential election. This attitude was evident across many states of the federation during the governorship, State House of Assembly and National Assembly elections.

Furthermore, the introduction of the card reader machine has reduced the level of post electoral conflict and violence which has somewhat become a norm in the history of Nigerian general elections. Recall that Elections in Nigeria since independence have been marred by violence. However, the 2011 postelection violence stands out in terms of its magnitude, severity and consequences (Orji and Uzodi 2012). Indeed, the usual excessive and pointless attack and degrading between the election winners and losers in past electoral contests were significantly reduced in the 2015 and subsequently 2019 general elections. In view of the minimal level of electoral fraud brought about by the use of the card reader machines, tensions were reduced among the political gladiators, and electoral conflict and violence was grossly diminished after the 2015 elections compared with past elections in Nigeria.

Moreover, the introduction of card reader machine has strengthened the Nigeria's democratic institutions (Okonji, 2015). It is obvious that free, fare and credible election is one of the characteristics of democracy. It is in recognition of this that Dahiru, Ibrahim and Mustapha (2017) opine that the strength of democracy of any state includes the power of her electoral body to independently conduct an election that can be popularly adjudged as credible one. Therefore, with the advent of card reader machine Nigerians and Nigeria's democratic institutions now have the knowledge needed to hold a free and fair election in order to deepen the democratic process. The Nigerian citizens on the other hand can now have the hope that their vote can count in elections.

Theoretical Framework

The study is anchored on System theory propounded by David Easton in 1962. The theory assumes that a political system is a process in which inputs emanating from the environment are converted into outputs through the process of authoritative allocation of values. Value here stands for anything that makes life meaningful, for instance free and fair elections. As describe by Easton, there are four

(4) distinctive procedures involved in the functioning of a political system: the input process; the output process; the conversion and the feedback processes (Udu, 2015). Consequently, Easton conceives that while the inputs give the political system its vibrant character because it is made up of: demands, and supports; the authoritatively allocated values constitute the outputs (Akwen and Adejoh, 2015). Other fundamentals of the political system include the conversion process which depicts how the various demands are converted into outputs inform of public policies and programs, and feedback loop that provides information to policy makers on the impact of their policies on environment. Outputs do help to control events in the wider society that housed the system and in doing so, help to determine each succeeding round of inputs that finds its way into the conversion process. This process is known as a feedback mechanism. It is a key mechanism that helps the system to avert support stress that could lead to the collapse of the system. Outputs, flowing through the feedback loop, are means of breeding specific support. The feedback mechanism is thus, an active process through which the feeling of the environment about the accomplishment of the system is conveyed back to the conversion mechanism. Easton also drew attention to a salient feature that is critical in a political system survival. He calls it equilibrium, and defines it as the ability of the political system to conveniently respond to the numerous demands emanating from the environment without disenchantment from the environment. When a system is unable to sustain equilibrium, unconverted demands can lead to demand stress. More so, unfulfilled demands, that are core values desired by the environment can cause support stress. These stresses put together can collapse the political system (Easton, 1979).

The theory is considered relevant to the study because it serves as a platform to demonstrate that the introduction of card reader machine in the 2015 general elections by INEC was as a result of the demand from Nigerians for a credible elections and a quest for electoral fairness. The Nigerian and Ebonyi state in particular is the environment in the context of this study. It is characterized by poor electoral administration. As such, the need for electoral plainness emanates from the environment. The conversion process in Nigeria context refers to those saddled with the responsibility o authoritative allocation of values. In this case, those elected as the representatives of different constituencies. They also include other groups that constitute the instrument of government. They are in charge of evaluating and converting the inputs which are the demands coming from the environment into acceptable outputs during the process of decision making. This is the process that

necessitated the establishment of INEC and empowering it to fashion out suitable strategies for organizing credible elections in Nigeria without interference from other quarters.

Methodology

The study adopted descriptive survey research design. Owing to the large nature of the area of the study and time constraint, the target population comprised of adult persons drawn from three Local Government Areas selected according to the three senatorial district of Ebonyi State, namely; Afikpo North LGA from Ebonyi South, Ezza South LGA from Ebonyi Central and Ebonyi LGA from Ebonyi North. However, according to the 2006 National population Census as projected 2016, the total number of Adult persons drawn from the three (3) Local Government Areas were Afikpo South LGA = 208,400, Ebonyi LGA = 168,300, Ezza South LGA = 176,800 when combined together, it gives a total 553500 and this forms the population of the study.

Out the entire population, a sample size of 400 was determined using Taro Yameni's statistical formula. Data for the study were gathered through the use of questionnaire instrument. Data collected were analyzed using simple percentage distribution tables.

Data Presentation and Analysis
Table 1: Socio-demographic Characteristics of Respondents

S/N	Items	Analysis			
1	Questionnaire distributed	No distributed 400 (100%)	No returned 383, (95.8%)	Number not returned 17 (4.3%)	No wrongly filled 3 (0.75%)
2	Distribution of questionnaire based on gender of respondents	Male 196 (51.6%)	Female 184 (48.4%)		
3	Distribution of questionnaire the based on age(years) of Respondents	18yrs - 30yrs 128 (33.7%)	31yrs-40yrs 122(32.1%)	41yrs-50yrs 84(22.1%)	51yrsand above 46(12.1%)
4	Distribution based Marital Status of the Respondents	Single 153 (40.3%)	Married 199(52.4%)	Divorced 4(1%)	Widowed 24 (6.3%)
5	Distribution of questionnaire based on occupation of the Respondents	Farming 102(26.8%)	Trading 175 (46.1%)	Civil/Public service 83(21.8%)	other occupation 20(5.3%)
6	Distribution of questionnaire based on educational qualification	FSLC-SSCE 178(46.8%)	NCE/OND 75(19.7%)	HND/B.Sc 102(26.8%)	M.Sc/Ph.D 25(6.7%)

| of respondents |

Source: Field survey, 2021.

The above table shows that, item I in the above table shows that, out of the 400 questionnaire items administered, 383, (95.8%) were returned, 17 (4.3%) were not returned, 3 (0.75%) out of the returned were wrongly filled while 380 (95%) were the total valid. Therefore, data presentation and analysis was based on the 380 total valid questionnaire copies. Analysis of Items 2 in the above table shows that 196 (51.6%) of the respondents were male while 184 (48.4%) respondents were female. Therefore, majority of the respondents were male. Item 3 above shows that 128 (33.7%) are in between 18 - 30years, 122 (32.1%) are between 31-40 years, 84 (22.1%) are between 41-50 years while 46(12.1%) are between 51 and above years. This means that majority of the respondents and between 51 years and above. Item 4 above, shows that 153(39.7%) of the respondents are single, 199 (52.4%) are married, 4 (1%) are divorced while 24(6.31%) are widowed. This means that majority of the respondents are married. Item 5 above, shows that 102 (26.8%) of the respondents are farmers, 175 (46.1%) are trades, 83(21.8%) are Civil/Public Servants, 20(5.3%) of the respondents engage in other occupations. Item 5 above shows that 178 (46.8%) respondents have FSLC-SSCE, 75(19.7%) respondents have between NCE and OND. 102 (26.8%) respondents have HND/B.Sc, 25(18.9%) respondents have M.Sc/Ph.D. This shows that majority of the respondents have FSLC and SSCE.

Thematic Analysis

Table 2: Extent to which smart card reader machine has reduced rigging in the election process in Ebonyi State

S/N	Items	SA	A	U	D	SD
8	Smart Card Reader Machine has significantly reduced rigging in the electoral process in Ebonyi State	209 (55%)	72 (18.9%)	18 (4.8%)	49 (12.9%)	32 (8.4%)
9	Smart Card Reader machine has reduced multiple voting during election in Ebonyi State	196 (51.6 %)	97 (25.5%)	20 (5.3%)	45 (11.8%)	22 (5.8%)
10	Smart Card Reader machine discourages ballot box snatching in Ebonyi State	200 (52.6%)	81 (21.3%)	33 (8.7%)	39 (10.3%)	27 (7.7%)

| 11 | Smart Card Reader Machine verifies and authenticates original voters card and reject fake ones | 218 (57.4%) | 85 (22.4%) | 28 (7.3%) | 26 (6.8%) | 23 (6.1%) |
| 12 | Smart Card Reader gives accurate result of the total votes casted by electorates | 210 (55.3%) | 70 (18.4%) | 31 (8.2%) | 40 (10.5%) | 29 (7.6%) |

Source: field survey, 2021.

Table 1, shows that 209 (55%) of the respondents strongly agreed, 72 (18.9%) of the respondents agreed, 18 (4.8%) of the respondents are undecided, 49 (12.9%) respondents disagreed while 32 (8.4%) respondents strongly disagreed. This shows that majority of the respondents strongly agree that Smart Card Reader Machine has significantly reduced rigging in the electoral process in Ebonyi State. Item 9 above shows that 196 (51.6 %) respondents strongly agree, 97 (25.5%) respondents agree, 20 (5.3%) respondents are undecided, 45 (11.8%) respondents disagree while 22 (5.8%) respondents strongly disagree. This shows that majority of the respondents strongly agree that Smart Card Reader machine has reduced multiple voting during election in Ebonyi State. Item 10 above shows that 200 (52.6%) respondents strongly agree, 81 (21.3%) respondents agree, 33 (8.7%) respondents are undecided, 39 (10.3%) respondents disagree while 27 (7.7%) respondents strongly disagree. This indicates that majority of the respondents strongly agree that Smart Card Reader machine discourages ballot box snatching in Ebonyi State. Item 11 above shows that 218 (57.4%) respondents strongly agree, 85 (22.4%) respondents agree, 28 (7.3%) respondents are undecided, 26 (6.8%) respondents disagree while 23 (6.1%) respondent strongly disagree. This means that majority of the respondent strongly agree that Smart Card Reader Machine verifies and authenticates original voters card and reject fake ones. Item 12 above shows that 210 (55.3%) respondents strongly agree, 70 (18.4%) respondents agree, 31(8.2%) respondents are undecided, 40 (10.5%) respondents disagree while 29 (7.6%) respondents strongly disagree. This shows that majority of the respondents strongly agree that Smart Card Reader gives accurate result of the total votes casted by electorates.

Table 3: The extent to which smart card reader motivated people to participation in electoral process in Ebonyi State

S/N	Items	SA	A	U	D	SD
13	Smart Card Reader significantly motivates people to participates more in the electoral process	196 (51.6%)	83 (21.8%)	20 (5.3%)	47 (12.4%)	34 (8.9%)

14	People participate more in the electoral process because the smart card reader enables their votes count	223 (58.7%)	71 (18.7%)	35 (9.2%)	32 (8.4%)	19 (5%)
15	People come out to vote because the smart card reader makes voting process less stressful	230 (60.5%)	74 (19.5%)	27 (7.1%)	24 (6.3%)	25 (6.6%)
16	People are interested to vote during election because the card reader machine does not give room for manipulation of election results	186(48.9%)	105 (27.6%)	41(10.8%)	28 (7.4%)	20 (5.3%)
17	People willingly come out to vote during election because smart card reader leads to the victory of the candiates of their choice	189 (49.7%)	99 (26.1%)	40 (10.5%)	31 (8.2%)	21 5.5%

Source: Field Survey, 2021.

From the above table, item 13 shows that 196 (51.6%) respondents strongly agree, 83 (21.8%) respondents agree, 20 (5.3%) respondents are undecided, 47 (12.4%) respondents disagree, while 34 (8.9%) respondents strongly disagree. This indicates that majority of the respondents strongly agree that Smart Card Reader significantly motivates people to participates more in the electoral process. Item 14 above shows that 223 (58.7%) respondents strongly agree, 71 (18.7%) respondents agree 35 (9.2%) respondents are undecided, 32 (8.4%) respondents disagree, while 19 (5%) respondents strongly disagree. This shows that majority of the respondents strongly agree that people participate more in the electoral process because the smart card reader enables their votes count. Item 15 above shows that 230 (60.5%) respondents strongly agree, 74 (19.5%) respondents agree, 27 (7.1%) respondents are undecided, 24 (6.3%) respondents disagree while 25 (6.6%) respondents representing strongly disagree. This implies that majority of the respondents strongly agree that People come out to vote because the smart card reader makes voting process less stressful. Item 16 above shows that 186(48.9%) respondents strongly agree, 105 (27.6%) respondents agree, 41(10.8%) respondents are undecided, 28 (7.4%) respondents disagree while 20 (5.3%) respondents strongly disagree. This indicates that majority of the respondents strongly agree that people are interested to vote during election because the card reader machine does not give room for manipulation of election results. Item 17, above shows that 189 (49.7%) respondents strongly agree, 99 (26.1%) respondents agree, 40 (10.5%) respondents are undecided, 31 (8.2%) respondents disagree while 21 (5.5%) respondents strongly disagree. This shows that majority of the respondents

strongly agree that people willingly come out to vote during election because smart card reader leads

to the victory of the candiates of their choice.

Table 4: The extent to which smart card reader machine has promoted peaceful election in Ebonyi State Nigeria

S/N	Items	SA	A	U	D	SD
18	Smart Card Reader machine significantly promotes peaceful election in Ebonyi State	200 (52.6%)	84 (22.1%)	32 (8.4%)	42 (11.1%)	22 (5.8%)
19	Smart Card reader discourages thugs from snatching ballot box during election in Ebonyi State	215 (56.6%)	71 (18.7%)	38 (10%)	33 (8.75%)	23 (6.0%)
20	The accurate result of smart card reader does not give room for rejection and agitations after election	218 (57.4%)	69 (18.2%)	37 (9.7%)	36 (9.5%)	20 (5.2%)
21	Smart Card Reader machine gives the masses the hope of achieving free and fair election in Ebonyi State	203 (53.4%)	111 (29.2%)	24 (6.3%)	19 (5%)	23 (6.1%)
22	Smart card reader promotes transparency and accountability in election process in Ebonyi State	184 (48.4%)	93 (24.5%)	39 (10.3%)	27 (7.1%)	37 (9.7%)

 Source: Field survey, 2021

From the above, item 18 above shows that 200 (52.6%) respondents strongly agree, 84 (22.1%) respondents agree, 32 (8.4%) respondents are undecided 42 (11.1%) respondents disagree while 22 (5.8%) respondents strongly disagree. This indicates that majority of the respondents strongly agree that Smart Card Reader machine significantly promotes peaceful election in Ebonyi State. Item 19 above shows that 215 (56.6%) respondents strongly agree, 71 (18.7%) respondents agree, 38 (10%) respondents are undecided, 33 (8.75%) respondents disagree while 23 (6.0%) respondents strongly disagree. This shows that majority of the respondents strongly agree that Smart Card reader discourages thugs from snatching ballot box during election in Ebonyi State. Item 20 above shows that 218 (57.4%) respondents strongly agree, 69 (18.2%) respondents agree, 37 (9.7%) respondents are undecided, 36 (9.5%) respondents disagree while 20(5.2%) respondents strongly disagree. This indicates that majority of the respondents strongly agree that the accurate result of smart card reader does not give room for rejection and agitations after election. Item 21 above shows that 203 (53.4%)

respondents strongly agree, 111 (29.2%) respondents agree, 24 (6.3%) respondents are undecided, 19 (5%) respondents disagree, 23 (6.1%) respondents strongly disagree. This shows that majority of the respondents strongly agree that Smart Card Reader machine gives the masses the hope of achieving free and fair election in Ebonyi State. Item 22 above shows that 184 (48.4%) respondents strongly agree, 93 (24.5%) respondents agree, 39 (10.3%) respondents are undecided, 27 (7.1%) respondents disagree while 37 (9.7%) respondents strongly agree that Smart card reader promotes transparency and accountability in election process in Ebonyi State.

The challenges of the use of Card Reader Machines in Elections in Ebonyi State

Despite assurances given by INEC to address the issues raised during the pilot use of the card reader machines in twelve states of the federation, before the official use in the 2015 general elections which includes inability of the device to deliver effectively in a large number of polling units. The use of the card reader machine was faced with a lot of operation challenges especially as witnessed in Ebonyi State during the first time of its introduction in 2015 and subsequently in the 2019 general elections. Prominent among the operational problems can be seen as follows;

1. **Poor sensitization of the voters:** according to Chukwu (2019), poor voter sensitization posed a challenge to the use of smart card reader machines in Nigeria. First, the level of awareness among voters about the card reader machines in Ebonyi state was poor. Prior to the introduction of card reader machine, a large number of Ebonyians, especially the electorate in rural communities, were completely unaware of the device. Many of these people had neither seen nor heard about the card reader machines until Election Day. These voters had no information about the role of the card reader machines in the elections and there was a lot misconception about the device. To some of the electorate, the card reader machines seemed like a voting device. The inadequate dissemination of information and poor sensitization of the electorate regarding the card reader machines led to some strained human relations, with resulting uncooperative attitudes between some illiterate voters and election officials.

2. **Inadequate Training of the Ad-hoc Staff:** According to Alebiosu (2019) the training given to ad hoc and INEC staff on the use of the card reader machines was inadequate. In fact most of the Presiding Officers (POs) and Assistant President Officers(APOs) in the polling units were not effectively trained in the proper use and handling of the card reader machines. In most cases the venues provided by INEC for training were crowded and not conducive to learning, such that most trainees did not receive proper instruction on the use of the card reader machines. In Ebonyi state,

precisely in Ohaozara LGA, the Supervising Presiding Officers (SPOs) could not give effective practical demonstrations of how the card reader machines can be used. In some cases, only two card reader machines were provided for a class of a hundred trainees and many trainees did not have the opportunity to operate the device. In some cases, those who received training were replaced by people who had no proper knowledge of how to use the device effectively. All these issues led to poor handling of the card reader machines during the elections, to the extent that the protective film of some card reader machines was not removed, which resulted in the device being unable to detect thumbprints.

3. **Malfunctioning of the card reader machine:** Malfunctioning of the Card reader machines was a major challenge witnessed during the election. Some devices malfunctioned on the day of the elections. Although INEC had provided back-ups in case of card reader machines breakdown, it was obvious that some of the back-ups failed to function. Some card reader machines were unable to function owing to blank screens, non-activation of subscriber identification module (SIM) cards in the device, or flat batteries. Some INEC officials, according to Momoh (2019), attributed the failure of card reader machines to INEC engineers who could not decode the inbuilt security installation in the devices. The security code in the card reader machines is reportedly designed to record the time and date of voting. When the card reader machines did function, 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 card and voters respectively were components of the accreditation process for the election. A number of PVCs issued to voters by INEC could not be authenticated, thereby disenfranchising some eligible voters in the elections. Where voters' cards were authenticated, often their holders' biometric data could not be verified after several trials; and where it was verified, the devices worked slowly. However, the inability of the device to capture the fingerprints of voters was attributed to greasy or dirty fingers of the voters. Often people had to scrub their hands on the ground to ensure the device could read their fingerprints (Okoro 2015). Following the widespread failure of the card reader machines, Prof. Jega changed the guidelines for the conduct of elections on 28 March 2015 and approved the use of manual accreditation in areas that the card reader machines had malfunctioned during the presidential and National Assembly elections in the country (Odiakose 2015). These changes were made while the election was ongoing and after millions of frustrated voters had gone home disenchanted.

4. **Delay in Accreditation Process:** In many cases during the 2015 election processes, there were reason delays in the verification and authentication process. In fact, in Ebonyi State the verification of permanent voters' card alone lasted up to 10 minutes while the authentication of the finger print on its own took up to 12 minutes thereby slowing down the process. The situation was exactly the case during the test-run of the card reader machines and the in Nassarawa, Rivers and Ebonyi state respectively, where the card reader machines recorded significant failures (Okonji, 2015). In the 2019 general election, precisely in Ebonyi State, similar incidences of delay in accreditation equally occurred.

Prospects of Smart Card Reader Machine

Without doubt, the smart card reader played a significant role in the 2015 and 2019 general elections in Nigeria. However, there is a need to ensure that issues and challenges that arose through the use of the device around the time of the elections do not reoccur in future elections in order to benefit from it laudable potentials in the Nigerian electoral system. Going by the positive results achieved so far in the Nigerian electoral process, it is obvious that the card reader machine has the following prospects:

1. **Reduction of Election Rigging:** According to Odiakosa(2015) Election rigging is an act of dishonesty in organizing an election in order to get a particular result. It is an electoral fraud and an interference with the election process. However**,** judging from interesting results achieved in the recent elections in Nigeria through the use of the card reader machines, there is an optimism that that the card reader machine has the potentiality of ultimately reducing incidences of election rigging as which seems to have become part of Nigeria.

2. **Discourage Multiple Voting:** Multiple voting refers to a situation whereby an individual votes severally at different or same polling unit(s) in an election using same means of voter identification (voter card) (Agbu, 2016). In Nigeria, the issue of multiple voting seems to have remained part of the history of the electoral process. However, in as much as the card reader machine, takes note of every the VIN number of voters card that has been accredited at the poll units, time of accreditation, it has the tendency of completely eliminating multiple voting in the Nigerian electoral if the necessary atmosphere is given for it to thrive.

3. **Credibility:** An election is said to be credible when it is by characterized by inclusiveness, transparency, accountability, and competitiveness (George-Genyi, 2015). Over the years, the idea of achieving credible election has remained a herculean task in Nigerian elections. For instance, since

Nigeria returned to democratic rule in 1999 several elections has been conducted especially from 1999 to 2011 but unfortunately none of these elections has been able to deliver the ingredients of credibility. A cursory look at the scenario shows that the electoral body could not adopt the necessary strategy for a credible election. However, the successful result recorded in electoral process consequent upon adoption of the Card reader Machine in the 2015 and 2019 general elections is a typical proof that the card reader machine will eventually lead Nigeria to achieving a credible election.

4. **Accuracy:** Accuracy has to do with the degree to which the result of a measurement, calculation, or specification conforms to the correct value or a standard. Accuracy in an election is achieved when the result of the election is judged to be free from error especially as the result of adopting. Unarguably, Nigeria's electoral history had been characterized by electoral fraud, since independence. Eguavon (2009) declared that Nigerian political experience had shown that the country has never had accurate elections. However, the card reader machine has the tendency of achieving a high level of accuracy in the Nigerian electoral system. Since it takes account of the number of the accredited voters, it makes it very easy to determine when the number of votes casted and checkmate the result when it falsely increased.

5. **Efficiency:** According to Odiakosa(2015), the **c**ard reader machine has the potential to make elections more efficient, more transparent and more responsive to the needs of the electorates. This is because since the card reader can assist election administrators to store and search huge amounts of data, easily identify multiple registration in voters register, prevent voters from voting in more than one polling stations, prevent multiple voting, speed up the tabulation of results and expedite boundary delimitation exercises.

6. **Transparency:** According Idowu (2015), the use of these card readers has brought about significant level of transparency in the electoral system. These include the fact that the card reader reads only percent voters issued by INEC. This implies that any person who shows up at the polling unit without a Permanent Voters' Cards or with a card not issued by INEC will not be able to vote. Also, the card reader machine reads the embedded chip on the PVC, not the barcode, and it shares a secret code with the PVC; thus it is impossible to falsify the cards. The card reader authenticates the identity of the voter by cross-matching his or her fingerprints with that stored on the embedded chip. No person can vote using another person's PVC. The card reader keeps a tally of all cards read, comprising the details of all voters verified as well as those not verified, and transmits the collected information to a central INEC server via GSM data service. Information transmitted to the server will enable INEC to

audit results from polling units, as well as do a range of statistical analysis of the demographics of voting (Idowu, 2015).

Conclusion

The study has established that that political participation is associated with democracy, which is traditionally considered by Abraham Lincon in 1858, as the government of the people by the people and for the people. It is obvious that one of the primary means of participating in politics of one's country is through election, which is the process of choosing a candidate for public office. Election is a critical component of any democratic society that enables the citizens to make the choice of who steers the ship of governance in the country. Despite this fact, it appears that several efforts to conduct an election that can be popularly adjudged to be free and fair in order to justify the citizens interest in participation in politics of their country has not been possible. It is based on this that this study became imperative to investigate the use of smart card reader machines and political participation in Ebonyi State, Nigeria: Problems and Prospects. However, from the findings of this study so far, it can be concluded that smart card reader machine has significantly reduced rigging in the election process in Ebonyi State, that smart card reader significantly motivates people to participation in electoral process in Ebonyi State and that smart card reader machine has significantly promoted peaceful election in Ebonyi State Nigeria.

Recommendations

Consequent upon the findings made from the data analyzed, the study recommends among other things;

1. That INEC and other stakeholders like the national orientation Agency should organize proper sensitization to all Nigerians on the need to accept the use smart card readers in the conduct of elections at all levels.
2. That INEC Ad hoc staff should be properly trained on the use of smart card readers to eliminate the challenges experienced in the previous general elections.
3. That INEC should endeavour to allocate more time ahead of election days to adequately organize training for ad hoc staff so as to give rooms for reasonable practical demonstrations on how to use the device effectively.

4. That INEC should endevour to use only trained ad hoc staff to handle the smart card reader and avoid substitution of people who did not attend training based on the dictates of politicians.

5. That INEC should advice the manufacturers of smart card reader to build stronger battery that will sustain the smart card reader usage throughout the election periods.

That Government should ensure that power supply is available during the election period to guarantee the charging of the smart card reader machines.

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