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The Card Reader and the Conundrum of Digital Tools in Electioneering in Nigeria

Mashood Omotosho [α] & Udeoji, Ebele Angela [σ]

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I. Introduction

Elections do play a significant role in participatory democracy. African leaders are also conscious of the democratic strides in the continent and this development has prompted them to endorse the Declaration on the Principles Governing Democratic Elections in Africa and The New Partnership for Africa's Development (NEPAD) under the auspices of the African Union in 2002 (Ahiabenu, 2013). They all recognised and agreed that viable and credible elections play a crucial role in ensuring the fundamental and universal right to democratic and participatory government. Participatory democracy involves the collective democratic management of the electorate's lives and it requires the involvement of civil society in the decision-making and development of the general public (Adewumi and Daramola, 2010). Election is any organised event when somebody is chosen by vote for a duty especially for a public office. Therefore, there must be a general consensus before embarking in the voting process. In a situation where standard is required for record purposes, voters are pre-registered before the Election Day. This makes registration an essential part of every election. In the just concluded 2015 election, the doubt in every one's lip and mind is the ability of a diverse, developing and corrupt country like Nigeria to conduct credible election amidst the numerous challenges facing the country. Though the reiteration of political will to conduct credible election has become a song which both INEC officers and politicians sing without waiting for the choir master to signify the beginning of the notes, fear is still engulfing the well meaning citizens of this nation based on the past sagas we are used to in this part of the world (Ajah and Igwe, 2015).

The 2015 Global Information Technology Report, the West African Telecommunication Regulator Association (WATRA) which serves as a regional telecommunications regulatory institution and African Platform on Access to Information (APAI) campaign, all these bodies agreed that within the contemporary democratic development, some of the essential factors that promote the growth of a state from its captivity to its promise land are Information Communication Technology (ICT), electoral process and good governance (Democracy and Technology, 2015). There is no doubt that, these three factors have played tremendous roles in building countries into enviable standards both in the developed and developing courtiers. Arguably, these factors can bring about positive turning point in all ramifications of a country's democratic process. In fact, the so called developed countries of the world today, got their credibility of the word "developed" because of the role that ICT, electoral process and governance have performed in their political affairs (Bailard, 2012).

The ICT and digital tools in the electoral process have driven so many developed countries to destinations of exquisite standards and countries like United States of America, Britain, Canada and France can testify to its enormous effect. ICT and digital tools can be described as the merging of the computer networks, electronic registration of voters, card reader, and telephone through the same link system (Rouse, M. 2008). The digital technology involves the interconnection of equipments which are used for automatic acquisition, storage, manipulation,

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management, transportation, control, display, transmission of data or information. The International Telecommunication Union reported that Africa's wireless digital media market grew by more than 50 million subscribers in 2010, reaching 435 million mobile subscribers as at summer 2010. That represented a 20% increase in the size of the market and almost more than half of Africa's adult population (Kalyango, 2012).

The use of Permanent Voters Card (PVC), Smart SMS and the Smart Card Readers (SCRs) which were employed during the 2015 general elections signify the ability of the Independent National Electoral Commission (INEC) to bring the issue of electoral process from doddery state to a strong and firm state. The digital technology facilities and its on-line devices with security monitoring operating system denote the efforts of INEC towards a viable democratic process in Nigeria (Aziken, 2015; Bulama, 2015). INEC is satisfied that the use of SCRs in the 2015 general elections have added tremendous transparency and credibility to the accreditation and electoral processes. The Commission is very confident and reassures the public that the usage of digital tools ensure that the processes of the elections are seamless, free, fair, credible and peaceful. The usage of SCRs and other digital tools, such as online platforms, mobile applications, SMS and social media have augmented other modalities of electoral processes in the just concluded general election in the country. The 2015 general elections is an exciting time in the electoral processes in the country, particularly for the digital tools employed which is technically inclined (INEC Factsheet, 2015). The use of SCRs and other digital technologies that were employed by INEC to unlock the potential of technology for transparency and accountability in the electioneering process, but this phenomenon raises the question of how digital tools actually perturb the electioneering landscape in the country. This paper explores this question through a qualitative dual case study of social media and the use of digital technology during general elections in Nigeria. Participants suggested that the use of PVC and SCRs help to overcome previous anomalies during election, leading to increased anxiety and tension in the electoral process. Together, our findings suggest that given sufficient and effective coordination, the usage of digital technology can be an effective tool for electoral scrutiny and can help build public trust in the voting system and trust in direct democracy (Akonjom and Ogbulezie, 2014; Nkem, 2015).

II. Technology and E-election – A Conceptual Analysis

Under this conceptual analysis, our basic objective is to give a conceptual analysis about the actual impact of digital technologies on electoral processes and a narrative description of electioneering and democratic governance. It should be noted that, scholars have developed theories about how digital technology affects democracy. However, primarily due to a paucity of evidence, most of these theories have excluded our experience in this part of the world where meaningful access to digital tools is only beginning to emerge, especially where the struggles between failed state and functioning democracy are profound. Technology has significantly influenced all aspects of our existence. Modern technology has derived its power from the explosion area information science. Information and Communication Technology (ICT) tools have done credibly well in all facets of endeavour (Avgerou and Walsham, 2001). Affordable ICT tools and systems, especially mobile phones, are becoming increasingly available. Currently, there are over 6.8 billion mobile phones in the world (Adam, 2008). This creates fertile ground for ICTs to make a difference in both positive and negative ways. Citizens can now connect with elected and unelected officials using a myriad of online platforms, social media, and mobile phones. This leads to improved information exchange which is required to enhance accountability, strengthen good governance, and ensure improvements in public service delivery all these processes contribute to making tangible the dividends of democracy. ICTs do not only enable the typical government to citizen interaction, but, more importantly, they foster citizen-to-citizen, government-to-government, and citizen-to-government interactions, communication, and engagement (Ahiabenu, 2013).

Abu-Shanab, E., Knight, M., and Refai, H. (2010) argue that digital tools have brought a revolution into the world of information technology, particularly in the field of personal computer (PC). A Network is a way or means of transmitting or receiving (exchange) information from one or more sources. It provides the means for locating and transporting information. In computer networking, the origin of information request utilises the services of a network to locate and return the information. The entire computer network can be classified into two broad categories (however, elaborate categorisation exists), they are LAN (Local Area Network) and WAN (Wide Area Network). The benefit of computer networking includes, but not all; file sharing, sharing of peripheral devices such as printers, fax machines and scanners, manufacturing process control, data management, web browsing as well as voice and video communication (Adeiza, 2014). Over the ages so many technological feats has been designed and advanced. Although it depends on how these digital tools are used, and it should also be reiterated that the emerging technology is designed to contribute positively to development of the world for the benefits of mankind. Technological tools remains the catalyst on which the global development depends. It is therefore reasonable to think of how computer technology with other accessories have become a vital tool in ensuring that

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electoral process is transparent, free and credible. Most of the characteristics needed for ensuring credible election are embedded as features of digital technologies (Ajah and Igwe, 2015).

Among the numerous submissions on the issue of digital tools and its impact on democratisation and good governance, Ahiabenu (2013) reflects a conscious attempt to analyse the issue of social media in political action and civic engagement. This has included work taking a generally positive position on the impact of social media in politics, for instance, social media based monitoring shows encouraging signs of robustness concerning electioneering and good governance. A free and fair election constitutes one of the determinants for deepening democratic governance. Election of course, is the cornerstone of every democracy and the primary mechanism for exercising the principle of sovereignty of the people. Bhalla also affirms that elections are portrayed as democracy at an embryonic stage and that political systems in Africa are habitually characterised as nascent, highly personalised and fractious. Review of scholarly articles (Adesola, 2012; Bailard, 2012 and Rouse, 2008) have revealed the range and depth of research on the issue of technology as it affects electioneering process. It is clear from these write-ups that digital election monitoring in developing contexts is a promising area of socio-technical innovation. However, these articles and reports are chiefly descriptive, focusing on the technologies used and occasionally the lessons learned. The present article also examines the impact of social media on the electoral process in a developing democracy.

The National Democratic Institute (2015) at a round table discussion agreed that there is the need to provide necessary enlightenment in the e-voting process and access to all citizens, particularly those in less developed socio-economic areas. The institute also presents a related developmental challenge in the realms of digital technologies and democratic governance. Lack of access to technologies such as digital messaging and data capture systems and others no doubt have frustrated development efforts towards using technology to strengthen governance. This access is currently limited to a small segment of the world's population, and the technological divide between those with access and those without is significant and growing. At first glance this appears to pose a serious challenge to exploiting the potential of digital technology for democratic development and citizen participation in democratic governance. NDI's experience however suggests that pragmatic strategies for using the Internet and related technologies notwithstanding the technological divide are critical in beginning to narrow the gap and enhancing participation by those currently disconnected (Okwong, 2012).

Bulama (2015) also argues that the use of technology will enhance the integrity of electoral process, that is, "the use of election technology to ensure integrity and/or enhance transparency in the electoral process can be tremendously effective." Enhancing the use of technology in electoral process especially on the platform of social media, such as Facebook, Twitter, Blackberry Messenger (BBM), Whatsapp, Linked-in and Instagram are veritable means of technology that can be deployed in enhancing the electoral process for ensuring quick transmission of results. Innovative technology with peculiar local content will ensure hitch-free electoral processes. The Biometric Voter Registration (BVR) and Electronic Voter Identification (EVID) are the major pieces of election technology that will enhance electioneering process (ICT Youth and Electoral Process in Nigeria, 2014).

A good illustration of digital tools and its impact on democratisation may be drawn from the Centre for Media, Data and Society (CMDS) working paper (2014). It identifies how digital tools benefit and challenge democratic development. E-messaging tools provide an approved guideline towards the conduct of elections and biometric authentication of a legitimate holder of genuine PVC which allow the person to vote a voice for all people and groups in a democratic setting. The paper also recognises the capability of dubious politicians employing powerful technologies with equal, if not greater, efficiency and scope, and it is against this backdrop that massive boom in the online and wireless digital media should be employed to empowering democrats and institutions in emerging democracies to use ICTs as a tool to enhance the information sharing, efficiency and transparency that are crucial to building and sustaining democracy (Adeiza, 2014).

As Jega and Hillier (2012) have shown that, social media use and e-messaging tools help fill the gap of the traditional media, which had an inadequate presence in developing nations of the world. They also examine the broader media environment, the nature of social election monitoring and the ultimate effect of social media on the perception of the election by the general public. The employment of ICT in the electioneering process will also serve as watchdogs over politicians who might otherwise attempt to rig elections. They also argue that the speed of information sharing on social media may also have reduced the level of suspicion of malpractice, and ensured the acceptance of election results. The authors acknowledge that, digital tools operation during elections will definitely increase voter partaking and fasten up the publication of results after voting.

Bhalla (2012) and Adeiza (2014) reiterate the new digital technologies and actualisation of good governance in different parts of the world. They outline and map relevant projects in mounting automated voting systems that would provide insight on opportunities, challenges, and recommendations for using technology to strengthen governance.

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Nevertheless, they identify major gaps in the usage of digital project deployment. Biometric voter registration is not a "silver bullet" for eliminating fraud and electoral malfeasance. Where institutions are weak, and perpetrators of electoral crimes are not prosecuted, politicians can find ways to achieve undemocratic ends. Elections are more than just a technical exercise (Bhalla, 2012). The primary factors that hinder access to Internet and related technologies for the global, and especially rural, populations are: i. level of technology and infrastructure; ii. Cost; iii. cultural, linguistic or other social barriers; iv. low political will to address these issues. Many organisations are disconnected not because they lack telecommunications infrastructure or providers of equipment and training, nor because they lack recognition of the importance of getting connected and communicating or sharing information. They remain disconnected because they lack either the moderate financial resources required, or the technical and managerial expertise to adequately plan for and procure the needed equipment, systems and services (Akonjom and Ogbulezie, 2014).

A different experimental study of Internet users by Bailard (2012) in Tanzania during the country's election found that online users were more likely to be disillusioned and not vote. She argues that this disillusionment may be created by the users' exposure to online information about life in developed countries, fostering the attitude among some voters that their own political system is so bad that it does not deserve their participation. This argument assumes that people do not use other media (such as satellite television) and that such media is unable to expose them to Western economic development as convincingly as the Internet. This is a debatable assumption, but the research is interesting. It shows that rather than motivating people to vote, the Internet may have "window opening effects" on the electorate that discourages voting.

Literatures (Bhalla, 2012; Bailard, 2012; Adeiza, 2014; Bulama, 2015;) on digital network technology and electioneering process in Africa largely focuses on activist use of digital media in the conundrum of conducting elections and its consequences on participatory democracy. Paperless electronic voting and/or online voting systems has been adopted in so many part of the world for the purpose of making elections free, credible and fair to all candidates. It is therefore pertinent to say that designing of a robust and dependable electronic-voting system is an enormous task that nation states must undergo vigorously. It should be emphasised that, respect for human rights, citizen participation, constitutionalism, rule of law, separation of powers and checks and balances and equal distribution of the national wealth play an equally important role in participatory democracy (Adesola, 2012). Information and Communication Technology tools have done credibly well in all facet of endeavour. One of such areas is on the governance of citizenry. For people to choose leaders to occupy various positions in Nigeria for instance, different processes have been advocated for. The use of modern technology devices like computers with features of artificial intelligence, card reader, data capturing machine is all that is needed to develop an electronic voting system, which will ensure privacy of the electorate, simple to understand and produce acceptable result. This will encourage the entire voters irrespective of their personality and locality to participate without fear of any contradiction (Onyekwelu, 2010).

Much of the writings on how the Internet is "revolutionising" democracy in Africa are largely anecdotal media reports with little empirical data or attention to the mechanisms of the claimed effects. Some scholars (Olabamiji, 2014; Smyth and Best, 2013; Ugor, 2009) have conducted more empirically grounded studies of digital media use during election periods. Scholars of political communication are interested in election periods because political activities are heightened and attitudes and behaviours are more easily observable. The study of the impact of digital media on elections is necessitated, in part, by the African elites' historical manipulation of traditional mass media for political purposes (Schedler, 1998). Some scholars argue that digital media could improve the logistical coordination and the overall efficiency of elections. For instance, the alteration of election figures to fraudulently confer advantage on some candidates to the detriment of others.

III. A background Analysis on E-election in Nigeria

Taking a stroll down the electoral process of Nigeria, it should be noted that previous government and elections have being characterised by electoral malpractices, violence, declaration of state of emergencies and military intervention. In the past, methods like paper secret ballot, use of punched cards and various other voting systems were adopted for the purpose of conducting free and fair election. In spite of all this, elections in Nigeria and other developing countries were always marred by irregularities ranging from multiple voting, snatching of ballot boxes, killing of opponents, wrong summation of figures, declaring of wrong candidates and so on. The 1960 (independence) election was by secret ballot, which after 5 years the military took over and banned political activities. After almost thirteen years of military rule, the ban was lifted in 1978, a 24 member Federal Electoral Commission (FEDECO) was inaugurated.

Nigeria, 'Giant of Africa' as it is called can actually attain the height of a giant if ICT is allowed to play their roles. The electoral process will be transformed by the miracle-working hands of digital

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tools. Chief Obafemi Awolowo of the Action Group (AG) introduced some of the most genius means of campaigning into the Nigeria political system, one of which was his helicopter campaign, flyers and posters were also dropped from the helicopters to large scuffling crowds fighting to get one of the papers from above. The helicopter was a rare sight for most Nigerians and in fact it is glamour for the electorates. This development could be "faintly" called ICT because he was able to communicate and transport information to people at the grassroots, he took his campaigns into places where others could not access.

In 2003, INEC (inaugurated in 1999) promised to introduce ICT into the electoral process which will in turn eliminated incidents of multiple registrations. Prior to the general elections in 2005, INEC, had began sensitisation of the populace on the various concepts to be used, including the Option A4, Electronic Voting (e-voting) and Open Secret ballot systems (Ifukor, 2010). In the 2007 general elections, digital tools started to garner attention in Nigeria. In the run up to the election, INEC introduced data capturing of eligible voters from 18 years and above in a nationwide exercise for the first time; deploying Personal Computers (PCs), digital cameras and thumb printing scanners. The presence of ICT in the 2007 general election in Nigeria saw deployment of 22,000 Direct Data Capturing (DDC) machines as at December 2006, in addition to earlier deployment of 18,000 of devices for revalidation of voters register who are eligible on or before February 13, 2007, paving the way for the registration of over 61 million voters by the time it was concluded with 40,000 DDCs (Okwong, 2012; Jega and Hillier, 2012). Professor Maurice Iwu, the then Chairman of INEC explained that the adoption of DDC technology with manual back-up for the revalidation of voters' register in the 36 states against the Optical Mark Reading (OMR) system was to make the exercise more transparent, speedy and less cumbersome, adding that the equipment consists of two components; the data and the printer units. The deployment of the DDCs was a unique break for local ICT firms to prove their worth in terms of encouraging their inputs into digital tools and electioneering in Nigeria (Bulama, 2015). Equally, INEC set up elections website in 2007, "Elections 2007" to provide users with exact information with a page created for each of the 50 political parties, listing the names of their national chairmen, secretaries, treasurers, financial secretaries, and physical address of the national headquarters of the parties in addition to contact phone numbers. The site also provided roles like 'Find a Polling Station' and 'Track Candidates' used to check results. The former INEC chairman, Professor Maurice Iwu ensured that visitors to the INEC website including Nigerians in Diaspora and observers receive complete and authentic information from the INEC, just as there is Voter Contact and Response Centre (VCRC) meant for the public to get answers to questions with distinct telephone numbers (Akonjom and Ogbulezie, 2014).

The April 2007 poll was different, because technology brought about by the advent of Global System for Mobile communications (GSM) among other ICT tools came to play. During the 2007 general elections, party agents were armed with mobile camera phones during the elections at voting centres and who felt threatened simply had to use their camera phones to take shots and send it through Multimedia Messaging Service (MMS) to their party leaders. These shots could be tendered in a law court or tribunal in the case of discontents and litigations thereafter. Noteworthy is that political parties, especially the Action Congress (AC) and Peoples Democratic Party (PDP) stalwarts used SMS widely in Lagos State, much later after the public campaign was banned, in reminding relatives and friends to vote for their parties (Alemika and Omotosho, 2008). The Police and other law enforcement agents announced some GSM numbers as emergency lines in case of any disturbance and they also used their GSM phones to exchange relevant information concerning security reports. ICT tools were used to report directly to the INEC network server in Abuja, because it owned a network infrastructure which forestalled dependence on private Internet Service Providers (ISPs) for data delivery, during and after the elections (Bulama, 2015).

Since 2007, INEC has been utilising digital tools in elections, which is serving as a good foundation for electoral process in the democratic journey. However, the lack of incentive among political leadership to push these projects forward remains a key challenge. The 2011 elections in Nigeria were widely anticipated as years of troubled elections had reached a boiling point among the populace, most notably among the youth. Digital technology also promised to have an important impact. More significantly, the appointment of Professor Attahiru Jega as the new Chairman of INEC inspired fresh optimism into the political scene in Nigeria. It should be reiterated that the online communication during Nigeria's 2011 general elections revealed that online crowd sourced reports helped electoral officers reallocate resources to areas where there were inadequate materials, and possibly affected the overall voters turnout. It is important to point out, however, that the data they analysed only showed correlations between crowd sourced reports and voters turnout, which could have happened for completely different reasons. At the end of the voters' registration, some 65 million people had their pictures taken and fingerprints scanned in preparation for presidential and legislative elections in 2011 (Bhalla, 2012).

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IV. The Smart Card Readers (SCRS) and the 2015 Elections

Professor Attahiru Jega at the helm of affairs of INEC, being the Chairman of the electoral body in the country, set out an agenda to harness the power of information communication technologies (ICT) primarily as a tool to run elections. Beyond their application in electoral environments however, he initiated and worked towards the full implementation of new digital technologies to enable transparency, credibility and fight massive election rigging. In Nigeria, mobile phone subscription has risen from just over 866,000 in 2001 to over 121 million as at October 2013. During the same period, Internet users rose from 200,000 to 57 million. These technologies are now major social connectors, and there is hope that they may be transforming political life by enhancing democratic consolidation and increasing the quality of democracy. Technology potentially has the power to make elections in Nigeria more transparent and to encourage citizens to expect accountability from elected leaders (NCC, 2013; Adeiza, 2014).

Taking cognizance of the increase in the number of the populace having access to online and wireless digital media such as cellular phones which have penetrated remote areas in the country, it becomes worrisome to suggest that electronic voting should be jettisoned in its totality, taking into consideration the challenges the nation is facing today as far as election is concern. But if only credibility and integrity is a determinant for free and credible election, then we should not shy away from it. The PVC, E-Voting and the use of the SCRs which allow voters to cast their votes using electronic machine will further enhance the performance of voting process. Electronic votes are stored digitally in voter access cards until they are sent to a centralised location where tabulation programmes accumulate and tabulate results. E-Voting may be paper-based, direct recording, or still public-network direct recording electronic voting system (Ajah and Igwe, 2015).

The SCRs is the process of identification of a voter through a card reader which reads off his/her official identity card and retrieves the voters' records from the local Data Base (DB) (on the client side) or load the record from the central DB if it is not already in the local one. Records are loaded dynamically from the central DB to the local DB's either on demand or on a pre-fetch basis. The voter record includes, amongst others, a biometric description of a voter in question, that is, biometrically authenticate the person who presents his or her PVC at the polling unit and ensure that he/she is the legitimate holder of the card (Goldsmith, 2012; Cranor, 2011). This could be achieved with fingerprint authentication method (other methods can be added to the mode). Biometric systems allow for the creation of a permanent electronic register which can be updated as new voters become eligible or existing ones die. They capture data unique to an individual, in addition to biographical information, and can identify whether someone has registered more than once by centrally matching fingerprints. The voter will be rejected if his /her finger print does not match the stored record. In order to reduce false rejections, voters fingerprints are stored as an encoded text in order to reduce false rejections, each voter's fingerprints is taken at different time periods. Fingerprints are stored as an encoded text in order to reduce storage consumed by images. This dual process should guarantee that no voter can falsely impersonate another. Note that the use of fingerprints or any other scanned image directly impacts the message size, hence the performance of the network (Goldstein and Rotich, 2008; Idowu, 2015).

Biometric information will be captured at the point of registration. This highlights the pattern recognition property of the modern technology empowered by artificial intelligence. Finger print, eye iris and eye retina biometric properties captured during the registration process will be validated before voting. This is to ensure that each voter vote only once at the same point he registered. Another feature of the digital tools technology employed during the 2015 general elections is that, it authenticate and recognise the bio-data of the voter. If the electorates' voices are captured in the registration process, the system can be programmed and used it during accreditation for validation purposes. With advancement in technology, special feature like computer vision will play major role in terms of security, while surveillance becomes the sole business of robots. The high speed feature of these systems will make voting fast and the system will be programmed in such a way that immediately a vote is cast, the signal will automatically update the total vote cast for each contestant (Ajah and Igwe, 2015).

For the first time in Nigeria's electoral history, electronic voter authentication system (Smart Card Readers) is being deployed for the 2015 general elections. The card reader uses a highly secured and cryptographic technology that is used commonly in devices that need to perform secure transactions, such as at paying terminals. It has ultra-low power consumption, with a single core frequency of 1.2GHz and an Android 4.2.2 operating system. The card reader units have been broadly subjected to Quality Assurance, Integrity and Functionality testing and found reliable in ease of use, battery life and speed of processing. For instance, it takes an average of 10 seconds to authenticate a voter. INEC make a card reader available at every voting point in the 36 states and the Federal Capital Territory (FCT) during the 2015 elections, with a substantial number of spares available to address contingencies (INEC Factsheet, 2015). The smart card has certain features and benefits that will deter another

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person from using somebody else's card. When you insert your card, it will authenticate to be sure it is an INEC's card and whether the owner of the card is the person bearing it. The individual will put his thumb on the smart card reader and it will bring out the individual's features. The card reader is configured to be used in one particular polling unit. It cannot be used in two places. People that are yet to come to terms with that, thinking that they will buy packs of cards and use on polling day, should know that it won't work like that. It will be a more valid process that will not allow the integrity of the electoral process to be undermined (Akhigbe, 2015).

The design structure and the workability of the SRCs make it secured, durable, reliable and also provide for user-friendly tools that makes voting simple and pleasurable. The objective of using card reader and other modern technology tools is to make the electoral method simpler. The followings are the objectives of using the SRCs:

- To ensure accurate administration of the individual facts of an electorate.
- To avert multiple voting
- To guide against the usage of invalid votes.
- To provide legal backing on the actual number of people accredited.
- To ensure quick and well-organized method of processing of cast votes (Jega, 2015a).

The use of the PVC and SCRs has aided the electoral process in the country more than the traditional analogue procedures of conducting election. Before the conduct of the general elections in 2015, INEC engaged in a public demonstration of SCRs in 12 states. The states are Rivers and Delta (South-South), Kano and Kebbi (North-West), Anambra and Ebonyi (South East), Ekiti and Lagos (South West), Bauchi and Taraba (North East) as well as Niger and Nasarawa (North Central) (INEC Factsheet 2015). Apart from the public demonstration, INEC believes that the deployment and usage of the SRCs during the 2015 general elections rendered the election transparent and credible. The enthusiasm of the commissioners was upon their claim that the mock trial fully satisfied their objectives, even though there was a classical failure of the machine in Ebonyi State. Even more worrisome for many observers was the about 41 per cent failure rate of the Smart Card Readers in cross matching the fingerprints of card holders to their cards (Idowu, 2015). Nevertheless, the Commission was satisfied that the basic duty of the card reader, to wit, to authenticate the genuineness of the Permanent Voter Card, PVC was in almost all cases satisfactorily achieved. This development, it seemed, had thrown the voter cards buying industry in the country out of business. Political thugs and moguls who in the past had piled up voter cards to sell to politicians have with the introduction of the card reader and the PVC have gone out of that line of business.

The populace also agreed that only those that hitherto nurtured plans to fraudulently manipulate the outcome of the elections have been crying foul over the introduction of the digital technology in the electoral process in the country. INEC had perfected all its strategies and put every apparatus in place with a view to ensuring a hitch free poll that will reflect the summative choice of Nigerians. Professor Attahiru Jega also states that:

> The card reader machines will help us to address all those irregularities, starting from the accreditation of voters at all the polling units. How can they manipulate the election when all the information with regards to the number of voters that turned out at every polling unit is automatically captured and transmitted by the card reader machines? (Jega, 2015b).

He further reiterates that:

> We have made rigging impossible for them as there is no how the total number of votes cast at the polling unit could exceed the number of accredited persons. Such discrepancy in figures will be immediately spotted. This technology will further make it impossible for any corrupt electoral officer to connive with any politician to pad-up results (Jega, 2015b).

At this juncture, we wish to reiterate that, the introduction of the SRCs was criticised and many experts have cautioned about the negative effect of digital tools in the conduct of election in the country, they argue that the use of SRCs can lead to new opportunities for corruption in the electoral process. Although the SRCs, can assist the Commission to audit figures and be able to determine fraudulent alterations in the voting process however any malfunction of the SRCs can substantially increase the probability of violent conflict. However, on Election Day the system crashed to the irritation of many stakeholders as the biometric machines failed to read the fingerprints of many voters accurately forcing a resort to manual entry (National Democratic Institute, 2015). The case of the SCRs was worsened in some polling booths by the lack of power back up in the schools used as voting points given that many of the schools were without power supply. In response to the issue of SCRs failure, INEC quickly responded to critics, the card readers according to INEC sources can last up to 12 hours in continuous use a fact that was attested to given that there were no reports of card readers packing up. Besides, the card readers are equipped with backup batteries. Also important is the consideration of the Commission is the fact that the card readers can relay data on voters to a central server enabling analysis of the votes from each polling point. It is a technology that is bound to deepen the country's democratic system allowing politicians to

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get reliable data on voting patterns and indeed confirm the authenticity of votes cast at any voting point (INEC Factsheet, 2015).

Experts also warn of online hacking and censorship as a real threat to the digital technology for transparency and accountability projects. Invariably, projects aimed at exposing corruption and enabling greater transparency are also vulnerable to both online and offline security risks, so taking the necessary steps to mitigate these risks can ensure the survival of deployment of digital tools in electioneering process if such attacks occur.

V. E-election and Consolidation of Democratic Governance

E-election consists of several types of automated system in electioneering, for instance, e-voting, including electronic means of casting votes and counting votes. This equally could involve punch cards, optical scan voting systems and specialised voting kiosks otherwise known as self-contained Direct-Recording Electronic (DRE). Therefore, e-election involves transmission of ballots and votes via telephones, private computer networks or even the Internet with the merits of speeding up the counting of ballots and availing enhanced voting access for disabled persons, thereby curtailing electoral frauds like stocking of ballot boxes with ballot papers. The usage of digital tools entails the exploit of information and communication technology tools to embark on such actions like registration of voters, voting and collation (Ghassan and Ranni, 2007; Fernandez, La Red and Peláez, 2013; Ajah and Igwe, 2015). New digital technologies are becoming major contributors to transparency and good governance movement. E-election can help reduce electoral malpractice and increasing transparency in electioneering process, while at the same time building the confidence of the marginalised communities to participate in governance. Technologies can deliver a variety of functions, including: better delivery of government services to citizens, improved interaction by private sector actors, information availability leading to citizen empowerment with the goal of increased transparency, greater convenience for citizen's participation in democratic governance. ICTs can facilitate evidence-based advocacy and improved access to information about citizen rights. Digital technologies can also amplify citizens' voices, ensure effective public service delivery, facilitate real-time data collection, en-courage transparency and accountability in government expenditure (Rouse, 2008).

Even in limited statehood, ICTs are changing accountability by improving legitimacy; increasing responsiveness of the populace in political participation. The United Nations Development Programme (UNDP) held at the National Space Research and Development Agency (NASRDA) in Abuja, noted how developed nations had been accorded the use of technology in electoral process high priority (Global Information Technology Report 2013). Such, they noted, had led to conduct of peaceful elections, transparency and wider participation of citizenry. Governments have demonstrated a real willingness to transform relationships between government services and their users, particularly by strengthening the use of ICTs in the electioneering process in the country. Civil society is also committed to implementing a number of initiatives to improve democratic governance using ICT (The World in 2013- ICT Facts and Figures, 2015). Mobile phones are becoming increasingly relevant as a tool for citizen participation in decision-making processes due to their wide-spread availability, simple use, and lower operational costs. There are two types of governance related mobile applications, m-government, which refers to the provision of government services via mobile phones, while m-governance facilitates bottom-up participation and citizen empowerment. Mobile phones are increasingly enabling citizens to participate in good governance and economic transparency processes through crowd sourcing, yet information gathered through this means can only lead to results when a verification system is in place and relevant authorities are prepared to take necessary action. This reaffirms that when technologies are made easily accessible, they can enhance democratic processes (Avgerou and Walsham, 2001; Montero, 2009).

The electoral commission have employed various technologies for awareness building, voter education, results tracking, and fighting electoral malfeasance to bolster the democratic process in the country. During the 2011 and 2015 electioneering, there are boom time for discourse on social media in many different parts of the country, as citizens review their electoral choices, encourage each other to vote, and report what they are seeing on the social media. Electioneering therefore serves as an excellent lens on the broader phenomenon of politics and good governance. Multiple case studies of social media and digital tools came into play during the 2015 general elections in Nigeria, with a specific focus on how social media and digital technology were used to monitor and observe the electoral processes. So both political science and digital media research will mutually benefit from incorporating existing socio-political factors into the analyses of how new digital media technologies are utilised for good governance and consolidation of democratic governance in the country. The digital tools brought into play in the 2015 general elections proffered new opportunities in the electioneering process and viable democratic governance (Olabamiji, 2014).

The deployment of modern technological gadgets is a one sure way of aiding developing the electoral process in the country and this is to achieve

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credible and acceptable elections that will truly reflect the wish of the masses. This agrees with the assertion of Ban Ki Moon, through the Under- Secretary of United Nations Political Department, Mr Jeffrey Feltman when he states that, "credible conduct of the elections would positively impact on the rating of the country and contribute to the promotion of good governance". The emerging trend of digital election monitoring in "developing democracies" and advocated international standards for the practice, will significantly mitigate many of the factors that hamper a healthy progress of a given election process. Schuler also reported on several years of work by the National Democratic Institute (NDI) and its international partners using SMS as a conduit for the collection of election data from observers in the field on Election Day (National Democratic Institute, 2015).

VI. Conclusion

Ultimately, digital technology and ICT will collaboratively take Nigeria to the 'promised land'. If they are given the room and adequately employed, then they contribute to the promotion of credible elections and good governance. If there is still a glimmer of hope for "dodgy" Nigeria, then it should be from the robustness and performance of INEC in the conduct of elections. The role and effect of the card readers during the electoral process can be felt if other digital tools are employed in the electoral processes. INEC can be efficient and conduct credible elections if they are adequately equipped with all necessary digital tools. By this, they will effectively put it into place and maximise its benefit to build a better electoral process in Nigeria.

Since the general elections that ushered in democratic governance in 1999, there has been much preoccupation with Nigeria and its escalating failures in its election and electoral processes which is antithesis to participatory democracy. Virtually all elections held in the country were shrouded in heated political struggles between regional elites, stiff political party's opposition and weak democratic institutions. However, unless these contradictions are redressed the hope of conducting a viable election, protecting the electoral process from conflict and violence and consolidating Nigeria's democracy, will remain an illusion. The steps taken so far by INEC is commendable and sustainable, as political observers noted that the usage of digital tools in the just concluded general elections in the country has aided the process and marks a good beginning for the electoral process in country.

The usage of digital tools exhibit practical examples of technology making a difference in the conduct of election, and at the same time it should be reiterated that the use of technology alone cannot deliver results. Projects which deploy technology in tandem with other strategies therefore are more likely to succeed. There is the need to mobilise collective action, and encourage civic engagement. The inherent contradictions in the electoral processes, such as, State in conflict with voters, challenging the election results or the electoral hegemony of the State and political rivals in conflict with each other for political gain have retarded standards and capacity building in election management.

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