# CHALLENGES OF ICT AND ELECTION MANAGEMENT IN RURAL AREAS IN NIGERIA

## **ADELEKE**, Israel Adewale

#### (adeleke\_israel@yahoo.com) 07062229188

Department of Computer Science, Emmanuel Alayande College of Education, Oyo.

# Abstract

Previous studies on computer utilization in electoral processes have been focused on the use of the digital gadgets on election conducted in developed nations like U.S.A, China, Britain, etc and some underdeveloped countries like South-Africa, Botswana, Malaysia, etc. The present study has been focused on examining the challenges facing the use of ICT devices in election management in rural areas in Nigeria with a specific reference to the Southwestern part of the country. The methods of gathering the data were through oral interview and participants observations. Our findings revealed that the use of ICT in election management in the rural areas in Nigeria is faced with the problems of epileptic power supply, insufficient personnel to handle ICT facilities, malfunctioning of the ICT facilities in the rural areas, problem of vandalisation of the ICT facilities by political hooligans, etc. This paper concludes that Nigerian rural areas should be provided with electric power, qualified ICT personnel and reliable ICT facilities in order to improve the e-voting process in those areas. Keywords: ICT, E-voting, election-management, Southwestern, rural-areas.

#### 1.1 Introduction

Information Communication Technology (ICT) is gaining its popularity in this era because nothing can be embarked upon with greater success without employing it. This has motivated many countries to bring in ICT usage into the management of election whenever there is time for political transition in government. Nigeria is not exempted in the utilization of these ICT tools because of the people's concern to have free and fair election and also to make that period a violent free period.

The word, "election" has been defined by many scholars because of its relevance in any country that is practicing democratic system of government. For instance, Kompetenzzentrum (2004) defined election as a means of selecting the officers or representatives of an organization or by the vote of the qualified members and that elections are means of making political choice by voting so that leaders would be elected in the determination of issue. For effectiveness of election management, election system was instituted as the detailed constitutional arrangements and voting systems that convert the vote into a political decision. Due to inability of election system body to succeed, electoral reform sprang up. The Electoral reform describes the process of introducing fair electoral systems to any organization or government that is not in place in selecting leadership, or improving the fairness or effectiveness of existing systems. As a result of electoral reform, discovery and employment of e-voting that has been heralded in developed countries emerged in developing country like Nigeria. However, they only thought of people in urban areas without giving consideration to the people in the rural areas where larger percentage of them are less privileged educationally.

The employment of ICT devices in election management system is because of several experiences of most countries in election management which is characterized by rigging and violence. These have triggered them to venture into the use of ICT devices in election process in many countries around the world from which Nigeria is not exempted. For instance, in Nigeria the birth of the Fourth Republic in 1999 assumed an unprecedented magnitude of violence, resulting in instability in democratic consolidation as well as loss and displacement of many innocent lives (Adesola and Abimbola; 2014).

In addition, the elections conducted in 2003 and especially 2007 were also characterized by widespread malpractices such as *violence, corruption and falsification of results*. After the 2007 election, there was widespread disenchantment with the electoral process in 2004 (Human Right Watch, 2004).

These are unavoidable palavers Nigeria has been experiencing. Particularly, *electoral violence* which is the use of threat or force against an opponent within the context of electoral competition for state power is the order of the day. The acts of electoral violence include murder, arson, abduction, assault, rioting, violent seizure and destruction of electoral materials, and psychological intimidation.

In rural areas people are not exposed to internet services and most of these devices such as finger print scanner, camera laptop, etc these people are not exposed to. As a result, these devices are not fully used, hence wastage of resources, rigging, violence and all sorts of disorder emanating from these rural areas spread to urban area. Narasimhaiah (2008) said that because e-governance could not succeed among rural people as a result of problem of adoption of technology by rural area people that is why e-voting system could not be fruitful during election exercise in Nigerian rural areas, meanwhile, e-voting can only be fully utilized where we have e-governance.

## **1.2** Statement of the problem

Election has been the means of selecting political leaders in the developed nations like China, U.S.S.R, France, Germany, etc and also in the developing nations like Ghana, Togo, South Africa, Nigeria, etc. despite the usefulness of election in the choice of a leader in a democratic regime, this political means of choosing leaders is bedeviled by the problems of rigging, violence, etc. These problems led to the use of electronic medium in the election processes most especially in the developed nations. This electronic means of conducting election is termed as e-voting. The e-voting, however, despite its usefulness is equally faced with problems of epileptic power supply, malfunctioning, poor personnel, and using electronic voting to engage in election fraud. These problems besides others are what informed the choice of the research of this nature.

Meanwhile, several scholars have examined the use of electronic medium in election processes. However, it has been observed that scanty literature exists on the use of computer in election process in Nigeria particularly in rural areas. This study is therefore used to fill the existing vacuum in research in computer study and electronic voting system.

### **1.3** Significance of the study

Previous research works on the use of ICT in electoral processes have been carried out through the employment of digital devices but outside Nigeria (e.g. Aaisha, et al, 2012; Andreas et al, 1999). Also, the control of violence in Nigeria during election period (e.g. Adesote and Abimbola, 2014). This study is significant because it examines the challenges facing the employment of this digital tool in management of election in Nigerian rural areas.

## 1.4 **Objectives of the study**

The specific objectives of this research work are:

- To examine e-voting system which sprang from election reform that encompasses all activities that take place before, during and after election process.
- To investigate into election management in rural areas coupled with the integration of ICT facilities.
- To identify various challenges confronting ICT facilities usage and proffer solution to such challenges.

## 1.5 Methodology

The methods of data gathering for this study were through participants' observation and oral interview. This was carried out among one hundred and twenty (120) which were randomly selected within Southwestern Nigeria electorates. The sample and sampling technique covered four out of six states in Southwestern Nigeria, namely; Oyo, Osun, Ondo, and Ogun. Respondents in the oral interview were randomly selected through the stratified random sampling technique and since the study is a descriptive research the gathered information was studied and analyzed.

# 2.0 Review of Related Literature

Several scholars have written on election management system because this is the only avenue to democratically have political transition in any society. Meanwhile, any country that is politically stable will enjoy uncommon development. An election is a formal decision-making process by which a population chooses an individual to hold public office Elections have been the usual mechanism by which modern representative democracy has operated since the 17th century. Electoral systems are the detailed constitutional arrangements and voting systems that convert the vote into a political decision. Jeff Fischer (2002) said that electoral process is an alternative to violence as it is a means of achieving governance. It is when an electoral process is perceived as unfair, unresponsive, or corrupt, that its political legitimacy is compromised and stakeholders are motivated to go outside the established norms to achieve their objectives. To therefore have credible electoral system, election management system (EMS) must be on created and fully established.

According to Schimpp and Frances (2001), Election management system is the set of processing functions and databases within a voting system that defines, develops, and

maintains election databases; performs election definitions and setup functions; formats ballots; counts votes; consolidates and reports results; and maintains audit trails. These EMSs run on jurisdictions' of existing personal computers and generally consist of one or more interactive databases containing information about a jurisdiction's area, the election contest, the candidates, and the issues being decided. They can then be used to design and generate various ballots, program vote-casting and tabulating equipment, and centrally tally and generate reports on election progress and results. From candidates' nominations, to voter registration and ballot design, EMS organizes the information in any given country or region where an automated electoral process will be deployed with security, simplicity and accuracy. This body equally performs all administrative tasks related to the chosen electoral configuration such as contests and jurisdiction, specification, polling stations, candidate registration, ballot generation, results collection, results tabulation, proclamation of winner, election results publication.

For instance, in 2004, it was estimated that approximately 30 percent of the voting population in the United States used some form of e-voting technology, including direct electronic recording (DER), touch screen s or optical scanner s, to record their vote for President. There, electronic votes are stored digitally in a storage medium such as a tape cartridge, diskette , or smart card before being sent to a centralized location where tabulation programs compile and tabulate results.

Andreas Schedler, *et al* (1999) stated that new democracies all over the world are finding themselves haunted by the old demons of clientelism, corruption, arbitrariness, and the abuse of power—leading to a growing awareness that, in addition to elections, democracy requires checks and balances. These checks and balances can be achieved when a right leader is voted in. Some developing countries have made all efforts to bail themselves out of the problem of election exercise to the point of informing foreigners to assist them. According to Robert (1998), international groups formulated mainly for this purpose, however, have several times helped to save elections from what otherwise would have been irremediable flaws and they have played pivotal roles in a large number of countries, most especially African countries like Nigeria over the past decade. Meanwhile this group is established to look into various methods of conducting election in developing and underdeveloped countries, monitor their election exercise and comment on them. However, despite their efforts and involvement Nigeria is still on the battle ground to have free and fair election. Hence, it is highly imperative to find alternative way of delivering ourselves from this election violence and rigging palaver which led to the embracement of e-voting system.

### 2.1 E-voting system

In a narrow understanding, e-voting means the use of electronic means (ICT) in at least the casting of the vote. E-voting system is generated from election reform by the electoral management body in order for them to have free and fair (credible) election. This will give room for peaceful transition process in any democratic system of government. E-voting or electronic voting in a broader sense is the use of electronic means in one of the following three processes, identification of voters, casting the vote, counting the vote. In this paper, every other activity before, during and after election or voting that is electronic in nature is categorized as e-voting. All these activities come to consummation by voting exercise which is the means of choosing leaders to lead any society. The said categories are; (i) E-Voter registration means eligible voters will be registered in an electronic procedure. (ii) E-campaign: This designates the use of ICT devices such as internet, mobile phone in campaigning during election period. Through these ICT devices, millions of audience can be reached within a short period of time without resulting into any political violence. (iii) E-voting: an election system that allows a voter to record his or her secure and secret ballot electronically. It is a device which allows voter to transmit their voted ballot to electoral officials over the internet. (iv) *E-counting* is the use of electronic means to count the votes. (v) *E-compilation*: This simply means the system of using electronic devices to collate the result of election that had been conducted electronically before the final result would be released. (vi) *E-result*: This is a situation whereby all voting results are in electronic devices to discover the overall winner of the contestant in an election for necessary transition. This will enable the result of the election conducted to be transparent and circulated without any delay.

# 2.2 Election Management Stages and the ICT Devices that can be employed

There are several ICT devices but not all of them can be employed to have effective e-voting. Meanwhile, every electorate should be able to recognize and identify most of these devices and must be made available in all our INEC (Independent National Electoral Commission) offices before election time.

Election stages	ICT Devices that can be employed
E-Registration	Dashboard, Internet WWW, E-mail, ballot delivery, electronic poll-
	book, E-card, electronic voters registration system, optical scan, touch
	screen, line of electronic voting station, acute vote, printer module and
	obscene voting system
E-Campaign	Graphic printing press, ball point pen, telephone, video sound e-mail,

	computer animation, electronic pool book
E-Voting	Punched card, optical scan voting system, voting kiosk, mobile voting,
	television, electronic ballot, tackle ballot periodic list optical voting
	card (OVC), remote voting, private computer, mark sense, digital peg
	and Permanent Voters Card (PVC)
E-Counting	Optical Character Recognition, Punched card counting machine,
	electronic ballot boxes, DRE voting machine
E-Compilation	Internet WWW, mobile phone, diskette, e-mail, broadcasting station,
	data storage device
E-Result	Radio, television, electronic publication, electronic magazine,
	electronic laboratory, broadcasting station, digital exhibition.

## **3.0** Findings and Discussions

Our findings revealed that the employment of ICT facilities in election management in Nigerian rural areas is characterized by several problems viz;

Firstly, the problem of epileptic power supply is badly affecting the use of ICT devices in the management of elections in Nigerian rural areas. According to one hundred and eighteen (118) of the respondents we orally interviewed, since the government provided no electricity in most of Nigerian rural areas, the ICT facilities procured for election management in those areas e.g data capturing machine could not be recharged when need arose. This often badly affected the result of election because many electorates in rural areas were often disenfranchised.

Secondly, vandalization of ICT facilities by political thugs hired by politicians as reported by the respondents orally interviewed in which one hundred and one (101) of them stated that the e-voting in Nigerian rural areas is marred by rigging as a result of the destruction of these electronic devices in those areas. The resultant effect of this makes the e-voting in the rural areas to be unreliable. Many people in Nigeria believed that the country is not yet ripe for the use of e-voting as a result of the use of these political thugs.

Thirdly, one hundred (100) of the respondents orally interviewed affirmed that the use of ICT in election management in Nigerian rural areas is bedeviled by the problem of lack of personnel to handle the digital devices. Apart from the fact that there are no enough personnel, those ones available are not expert in the operations of these devices. The effect of this often led to election rigging in such rural areas.

Also, information dissemination barrier is another challenge discovered. Not less than one hundred responded that this is facing election management in rural areas. Because in embarking on e-voting system, most of the needed information is online and for any data or information to fulfill its purpose, it must be accurate, timely, complete and not jittered. This is not so when it comes to rural areas where there is no means of enjoying internet services and other ICT tools that will guarantee free flow of such pertinent information required during the election period. Hence, the purpose of e-voting is defeated.

In addition, ninety five (95) respondents declared that e-voting employment in rural areas will not permit democratic system of government that every nation is agitating for. This is because people in rural areas are not allowed nor given opportunity to present reliable, trustworthy and dependable candidate to represent their constituencies due to the fact that majority of them are ICT illiterate and hence they impose people that are educated from urban areas on them. As a result, many rural areas Nigerians would be disenfranchised.

Another challenge is low level of transparency in which one hundred and five (105) respondents supported as a serious cankerworm that is waging war against e-voting in rural areas. Meanwhile, in any country where non-electronic voting system is being practiced, especially open ballot system, every activity would be made known to people including rural areas, but e-voting does not guarantee high level of transparency and freedom of information. This is because voting, counting, compilation and release of result would be carried out through ICT devices and it is only few that are literate and have access to these devices that will benefit from its usage while most of the rural areas people will be in total darkness.

Cybercrime is also part of the challenges of the involvement of ICT facilities in e-voting in rural areas. This cybercrime, according to Adeleke (2013) is one of the major disadvantages of internetworking worldwide because it concerns with theft of personal information, spamming, etc. Halder and Jashankar (2011) also express it as offences that are committed against individual or group of individuals with a criminal motive of intentionally harming the reputation of the victim or causing physical or mental harm to the victim directly or indirectly using modern telecommunication networks such as internet, mobile phone. This kind of havoc still exists in e-voting system too. Even though some people that were interviewed orally could not initially understand the meaning of cybercrime but over eighty (80) of them eventually affirmed the possibility of manipulating results on internet in rural areas and yet the electorates would not know so far most of them could neither recognize nor identify most of these tools not to talk of their respective functions or uses. As a result, lots of crimes, rigging and manipulations can be done successively on internet without any challenge.

Besides, our study equally revealed that the employment of ICT in election management in Nigeria is marred with the problem of malfunctioning of these devices in Nigerian rural areas. Because they know that greater percentage of people in rural areas are illiterate, they send second-hand devices to them and inefficient personnel to take care of them in those areas. Out of one hundred and twenty (120) respondents, one hundred and thirteen held the view that ICT facilities do malfunction in Nigerian rural areas. This often lead to the poor election management and unreliable result of election through rigging and violence that eventually cause destruction of lives and properties in Nigeria.

# 4.0 **Recommendations**

To curb most of the challenges of this new system of voting process in Nigerian rural areas the following facts should be noted for actions.

- People in Nigeria rural areas should be synthetized with the uses of various electronic devices by creating ICT centres in each local government with qualified and experienced personnel.
- E-voting system should be a gradual process and not a system that should be ventured into within a period and thought of succeeding.
- To do this, experts from those countries that have been using it should be employed to give us details of how to go about it.
- Every rural area in Nigeria should be internet service sensor for the effective functionality of these ICT facilities
  - Nigerian government should take universal basic education (UBE) more serious for our people in rural areas to have basic education that will be ICT focused, fruitful and achievable in the area of e-voting.
  - Also, adequate electricity power supply that will enable digital and electronic devices functioning during and after election.
  - Electoral management body should have enough personnel to handle the devices to protect election against rigging and violence.
  - Availability of new branded ICT devices and not second-hand that disappoint. Because use of second-hand gadgets during election often leads to malfunctioning of those gadgets and disenfranchisement of electorates.

#### 5.0 Conclusion

By and large, the misuse and malfunctioning of the digital and ICT facilities in the just concluded Nigerian election led to election rigging in many states in Nigerian rural areas, according to our findings. These discovered lapses were used as the avenue for election rigging which is the result of employment of e-voting system. Meanwhile, all these atrocities that occurred in the e-voting system in Nigerian rural areas were caused by epileptic power supply, insufficient ICT personnel in rural areas, malfunctioning of the fairly used election data capturing machines sent to rural areas and others mentioned in the paper.

As a result, for the effective use of e-voting in Nigeria, the government needs to often purchase new and not fairly used data-capturing machines, card reader machines with permanent voters card (PVC) that can not be forged. They should also encourage and properly fund ICT literacy in the country. Besides, Nigerian government should always use ICT gadgets to encourage transparency and discourage fraud during, before and after election. If all these are done, evoting will bring about proper democracy and fairness to Nigerian environment.

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