Electronic voting machines for electorates



The use of Electronic voting machines for electorates has been in use since the 1960s when punch card systems debuted. The newer optical scan voting systems allow a computer to count a voter's mark on a ballot. Direct Recording Electronic (DRE) voting machines which collect and tabulate votes in a single machine, are used by all voters in all elections in Brazil and India, and also on a large scale in the Netherlands, Venezuela, and the United States. Internet voting systems have gained popularity and have been used for government elections and referendums in the United Kingdom, Estonia and Switzerland as well as party primary elections in the United States and France.

As Nigeria consider the adoption of electronic voting for her voting system, the security and credibility of the system has been an issue of debate. Information technology introduced to electoral system is one of the best means of having a reliable electoral system, fraud-free electronic voting and security conscious system. Without a reliable, effective, qualitative and error-free means of electoral process which is the "Electronic Voting Machine" (EVM) that check mate any act of diverting and or manipulating the facts, its main objective cannot be achieved. Electronic Voting Machine is the best tool for solving Nigeria's election problem. Electronic voting technology can speed the counting of ballots and can provide improved accessibility for disabled voters.

The Electronic Voting machine has been tried successfully in India where there was a registered voter population of about 600 million people and 400 million people reportedly voted. It is recorded that when the machine was

used for the first time in India, the opposition party won against the incumbent government which adopted the machine.

The Electronic Voting Machine (EVM) that is being proposed for the Nigeria's 2007 General Elections, has a real time clock, which indicates clearly when election starts and when election ends. It is said that nobody can tamper with it. The idea of somebody going to use the machine before or after the election is also removed. The machine is like a specialized tape recorder that records everything and prints it exactly as it has happened. The EVM is also designed to capture the more than 30 registered political parties at that time and provide room for more slots in the event INEC accepts independent candidature. There is also provision for a situation where simultaneous elections can be held at once. This means the Presidential and governorship elections can be held at once, on the same machine.

The idea of electronic voting is one that has been received with mixed feelings; and suspicion. There is palpable fear that the system can be manipulated. There is also the problem of pervasive illiteracy particularly in the rural areas. How will illiterates know how to use the machine?

These fears cannot be dismissed with a wave of the hard. The clear implication of this is that more work needs to be done to convince the electorate that the system will not and cannot be manipulated. Voter's education in this regard will also need to be pursued with vigour. Above all, good faith on the part of the election administrators should be demonstrably shown.

In some countries, history is littered with examples of elections being manipulated using paper ballot in order to influence their outcomes.

In 2004, India had adopted Electronic Voting Machines (EVM) for its elections to the Parliament with 380 million voters had cast their ballots using more than a million voting machines. The Indian EVMs are designed and developed by two Government Owned Defense Equipment Manufacturing Units, Bharat Electronics Limited (BEL) and Electronics Corporation of India Limited (ECIL). Both systems are identical, and are developed to the specifications of Election Commission of India. The System is a set of two devices running on 6V batteries. One device, the Voting Unit is used by the Voter, and another device called the Control Unit is operated by the Electoral Officer. Both units are connected by a 5 meter cable. The Voting unit has a Blue Button for every candidate, the unit can hold 16 candidates, but up to 4 units can be chained, to accommodate 64 candidates. The Control Units has three buttons on the surface, namely, one button to release a single vote, one button to see the total number of vote cast till now, and one button to close the election process. The result button is hidden and sealed; it cannot be pressed unless the Close button is already pressed.

1. 2 Theoretical Framework

Democracy depends on free and fair, accurate, and transparent electoral process with outcomes that can be independently verified. Conventional voting accomplishes many of these goals. Paper based ballots provide a verified outcome that can be re-counted if necessary.

However, "the accuracy and security of electoral arrangements are integral to the vitality and credibility of democracy" noting "one thing is for certain; public confidence in democratic elections takes decades to develop and far les to destroy".

Statement of the problem

Security is as important as reliability in guaranteeing the integrity of the voting process and public confidence in the system. People do not use things in which they have no confidence. Loosing confidence in election means loosing confidence in the system and the government. Elected government in the modern democracies derived their legitimacy from the electoral process. As such this process has an immense weight and importance and failing to secure its validity could undermine the system of government.

1. 4 Purpose of the study

Paper based voting system sometimes called "document ballot voting system", originated as a system where votes are cast and counted by hand, using paper ballots. This a traditional process of election in which voters registration, voters identity validation, voting and vote count are carried out using paper, pen and ink. With the advent of Electronic Voting Machine all these will be done electronically.

Election systems in Nigeria have traditionally been based on paper ballots.

The last ten to fifteen years following the wide trend of Information

Technology (IT) adoption in government, Nigeria has started the process of substituting traditional voting systems with Electronic Voting System (Evoting) using the electronic voting machine.

Significance of the study

The use of electronic voting machine in Nigeria's electoral voting system is undoubtedly the best system to forestall the present problems facing voting of undeserved people into power, political impasse, election annulment, snatching of ballot boxes, multiple voting and delay in the release of results will be things of the pasts, averted or at least decline with the computerization of electoral system.

Limitation of the study

This research work is aimed to enlighten those in power and the Nigerian citizens in general on the importance of using the Electronic Voting Machine for the countries electoral system. It is not aimed at stopping electoral violence, fraud or any act of election malpractice in Nigeria.

Scope/delimitation of the study

This project covers the security issues in electronic voting system, voter authenticity, system accountability and disability. Issues of people with disability, remote arrears and machine malfunction have also been tackled. Data Collation, image acquisition and voter registration as well as keeping voter record have all been discussed in these studies.

Operational definition of the terms

DRE direct recording electronic

EVM Electronic Voting Machine

EVS Electronic Voting System

E-voting Electronic voting

https://assignbuster.com/electronic-voting-machines-for-electorates/

IT Information Technology

INEC Independent National Electoral Commission

eMV electronic machine voting

eDV electronic distance voting

OBS open ballot system