



TECHNOLOGICAL INNOVATION AS ANTIDOTE TO ELECTION RIGGING

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INTRODUCTION

- The fundamental challenge of any Election Management Body (EMB) is to be able to offer **free, fair and credible elections**.
- The electoral process includes the selection of candidates, the registration of voters and the actual voting process; and the procedures leading to these three activities must be said to be credible.
- Manual processes are known to be prone to manipulations, human interventions and fraud, hence the need to apply technology to:
 - *reduce human interference;*
 - *produce credible processes;*
 - *produce results from processes in a timely manner;*
 - *improve the accuracy of the processes.*

PRESENTATION OUTLINE



- What Rigging is
- Application of Technology – so far
- Voter Registration Process
- Voter Authentication on Election Day
- Balloting – Journey so far
- Transparency in Transmission of Results
- Managing People, Process & Technology

WHAT RIGGING IS

- Election rigging can be defined as any process that has an illegal interference with the election process, either by increasing the votes of a particular candidate, suppressing the votes of a rival candidate, or both;
- No matter how little the magnitude of Election rigging may be, it has adverse effects on the outcome of an election, because if the scale of rigging does not change the winner of the election, the confidence of the electorate in the electoral system is adversely affected;
- Election rigging can occur before, during or after an election is conducted;
- To consider the ways in which technology can be used to combat rigging, it is important to consider the acts involved in rigging.

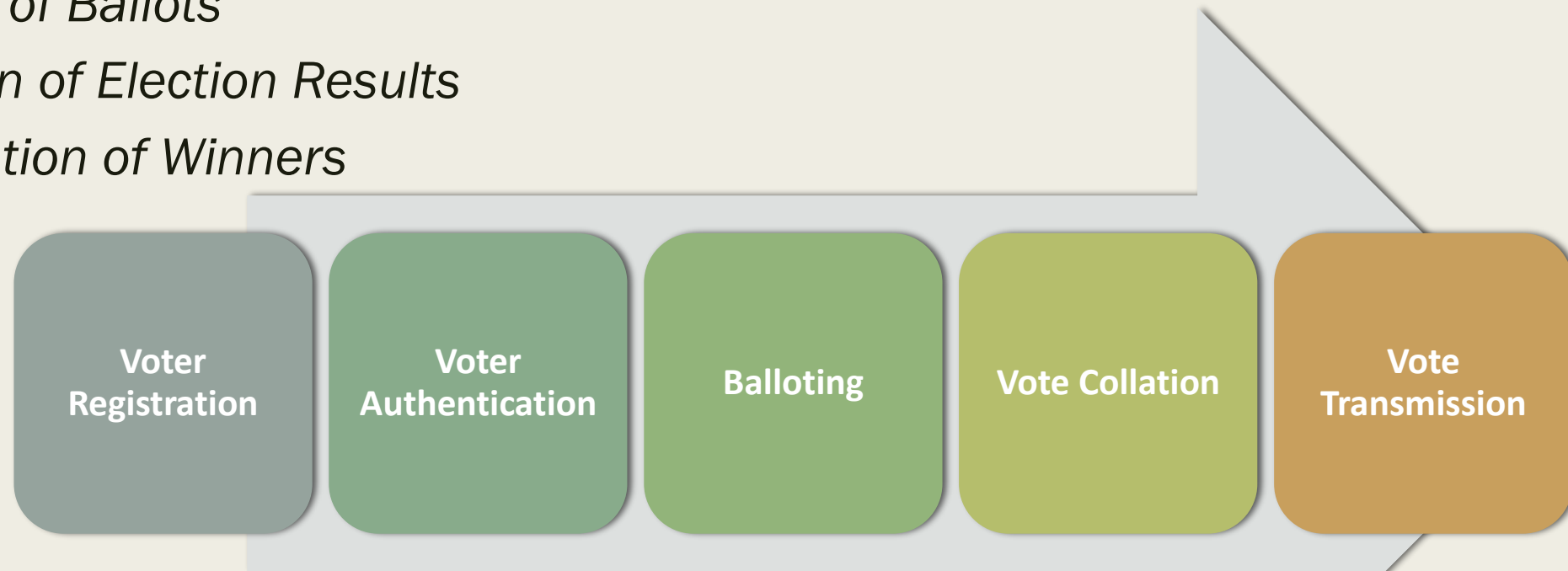
ACTS OF RIGGING

- Acts classified as rigging, may differ from one Country to another; but generally, the following constitutes acts of rigging:
 - *Disenfranchisement of voters*
 - *Voter intimidation*
 - *Voter misinformation*
 - *Vote buying*
 - *Misleading or confusing ballot papers*
 - *Ballot stuffing*
 - *Mis-recording of votes*
 - *Voter impersonation*
 - *etc...*

- The application of technology to elections is able to eliminate or drastically reduce these acts of rigging.

APPLICATION OF TECHNOLOGY - Journey so far

- Core processes in the electoral system include the following:
 - *Registration of Voters*
 - *Authentication of voters on Election Day*
 - *Casting of Ballots*
 - *Collation of Election Results*
 - *Declaration of Winners*



INEC has made efforts at the application of Technology to these processes, and efforts are still ongoing.

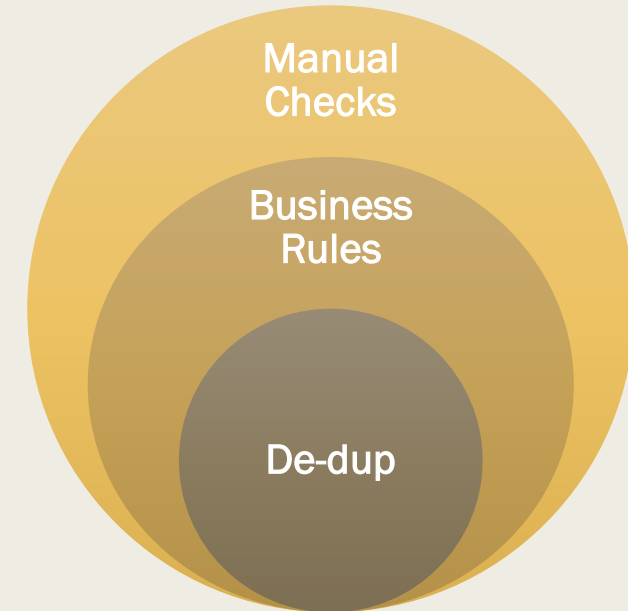
VOTER REGISTRATION PROCESS



- Voter Register is the foundation for the conduct of credible Elections;
- Lack of an authentic VR provides the necessary environment for electoral vices to thrive;
- A voter register that is not credible can only compound the problems in the electoral process by making it difficult for the outcome of the election itself to be widely acceptable;
- The process of registering voters and producing voter lists is one of the most important and time-consuming activities carried out by EMBs;
- A credible voter register must ensure that a person only appears once in the register, hence can only exercise his/her franchise once;
- The application of biometrics to any electoral process therefore must start with a biometric registration which has every capability to ensure one-man-one-record.

VOTER REGISTRATION PROCESS ...2

- Before the conduct of any election, there must be a voter register that contains names and details of all those eligible to cast their votes in an election
- INEC has ensured that the voter register keeps getting better and better as observed inefficiencies are dealt with;
- Between 2011 and 2015, optimization processes led to a cleanup that necessitated the removal of over 15million records due to de-duplication and not meeting set business rules;
- Between 2015 and 2019, a total of 15.7M registrations took place, with 1M records removed due to de-duplication processes;
- Continuous Voter Registration exercise commences on 28th June 2021;
- Every register of voters is a living document that requires regular updates;
- To ensure that these updates take place, and successfully too, technology has to be involved;
- Technology evolves and at a very fast pace too, this therefore implies that the technologies deployed by the Commission need to be refreshed at regular intervals;
- Hence the current introduction of newer technologies to the register update process.



VOTER REGISTRATION PROCESS ...towards 2023



- The voter enrollment software will be a new software because of the following:
 - *The rate of voter authentication has been on the decline since 2015, so the need to recapture as much fingerprints as possible, using better fingerprint capturing software and hardware is important;*
 - *INEC database needs to conform in totality with the NIMC requirements for citizens registration;*
 - *With the plans to commence the use of EVM, it is important to update the register of voters to include additional biometric features like facials, as this will strengthen the integrity of the register;*
 - *The need to have additional fields captured – like email addresses, disability status – for those who are living with disabilities, etc*
- All these necessitated the need for **a new voter enrollment software**

VOTER REGISTRATION PROCESS - INEC VOTER ENROLLMENT DEVICE (IVED)



- a. a tablet computer with the underlisted components:
 - i. *Fingerprint Scanner*
 - ii. *Camera – with facial detection, barcode reading capability*
 - iii. *High processing capability*
 - iv. *Large storages – RAM, internal and external*
 - v. *Ruggedized*
 - vi. *Multiple connectivity ports*
- b. 4-4-2 Fingerprint scanner
- c. USB-powered portable thermal printer
- d. External backup power (Power Bank)

VOTER REGISTRATION PROCESS - ONLINE VOTER REGISTRATION PORTAL

- It was discovered, over the years, that the application of technology in the areas of voter registration and voter updates has been minimal;
- The existing methods are not friendly and are very time consuming;
- Intending voters have to wait in long queues and for days or weeks to enable them get enrolled or update their details;
- Also, with the consciousness of COVID-19, a new and better method of voter registration and update was ideal;
- INEC has therefore decided to use technology in this area, to make it easier for the voters and also the Commission's staff that handle the processes;
- This brought about the online Voter Registration Portal.

ONLINE VOTER REGISTRATION PORTAL



SEE THE COVID-19 PROTOCOLS



Services ▾

Sign In / Register

Other Portals ▾

Submit Feedback

Help

Welcome!

This is the INEC Continuous Voter Registration Portal. As a New Voter, you can Pre-Register online, or as a Registered Voter, you can Revalidate your Voter Registration, Request to Update your Information or Transfer your Voter Registration to another Polling Unit.

GET STARTED

LEARN MORE



Welcome to our site, if you need help simply reply to this message, we are online and ready to help.



Customer Support

5 minutes ago

Type here and press enter..



Message from the INEC Chairman

I am pleased to introduce the Online Portal for the Continuous Voters Registration Exercise.



Home Page

ONLINE VOTER REGISTRATION PORTAL - SERVICES RENDERED

NEW VOTER PRE-REGISTRATION

If you have not registered for your voter's card before and would like to do so now, click the button below to pre-register and save a lot of time when you visit the Biometric Data Collection Centres.

[Start Registration](#)

VOTER INFORMATION REVALIDATION

If you have registered and you have not yet revalidated by providing your photo online on this platform (or at any registration centre since June 28, 2021), click the button below to begin the process.

[Start Revalidation Process](#)

LOCATE REGISTRATION CENTRES

If you wish to visit a Registration Centre to complete your application or registration, there are centres available in INEC State and Local Government Offices and many other locations. Click the button below to find centres closest to you.

[Find Registration Centres](#)

TRANSFERS & INFORMATION UPDATE

If you are a duly registered voter and you wish to update the information on your Voter's Card or change your voting location, click the button below to begin the process.

[Start Update Request](#)

UNCOLLECTED PVC

If you have registered previously and you have not gotten your Permanent Voters Card (PVC), click the button below to find out where you can pick your PVC.

[Check Pickup Locations](#)

LOST OR DAMAGED PVC

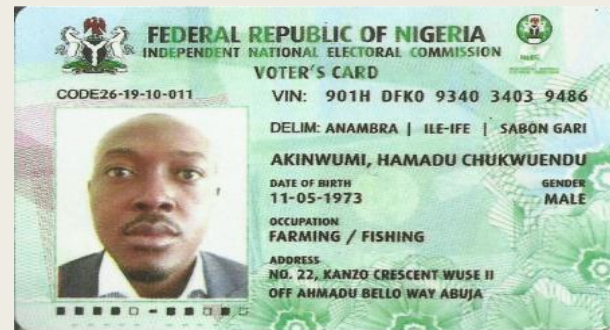
If you have misplaced your PVC or if your PVC is damaged and you would like a replacement, click the button below to apply for a re-issue.

[Submit Request](#)

***** For registration of new voters, the fingerprints capture will take place at INEC offices at the LGA or the State Offices*****

VOTER AUTHENTICATION ON ELECTION DAY

- Voter Authentication is the process of verifying that the person that registered to vote is the same person that is at the polling station to cast his/her vote;
- Hitherto manual - exposing the process to human manipulations and fraudulent practices;
- Improvement came in 2011 with the introduction of accreditation before voting – ensuring that voting commences about the same time in all the Polling Units;
- For the 2015 General Election however, INEC decided to apply technology to optimize the process with the advent of the Permanent Voter Card (PVC) and the Smart Card Reader (SCR);
- This brought a lot of credibility to the electoral process, though with some challenges.



VOTER AUTHENTICATION

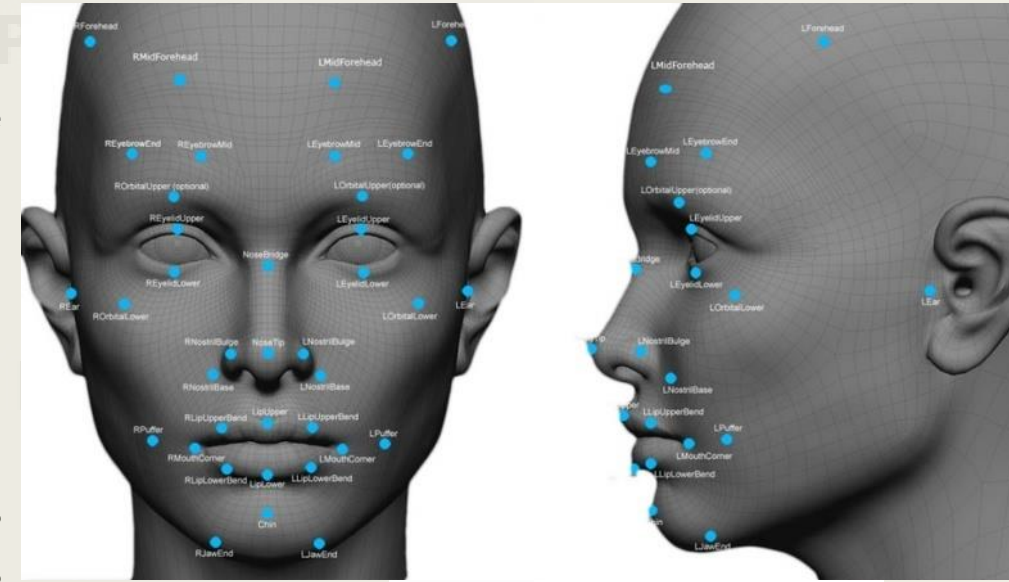
...2023



- The need to have one-person-one-vote cannot be over-emphasized as this is the bedrock of any credible election;
- Smart Card Readers (SCRs) were first deployed in 2015 and has been used at every election since then;
- The SCRs are used to compare the fingerprints of a voter that appears at a Polling Unit (PU) to vote with the fingerprints captured from that same voter when he/she was registered;
- However, it has been observed over the years that the rate of successful authentication has been on the decrease;
- It has therefore become difficult to ascertain that indeed the person that brought a Permanent Voter Card (PVC) to the PU is the rightful owner of the PVC;
- The manual process of verification of the face of the card holder with the picture on the PVC has been grossly abused at the PU;
- Going forward, with improvement in technology, and the hardware restrictions of the SCR, INEC is considering a leap in its technology for voter authentication.

VOTER AUTHENTICATION ...Bi-modal

- **Biometrics** are distinctive, measurable characteristics which can be physical or behavioral, that can be used to digitally identify a person; eg **fingerprint, palm veins, face recognition, DNA, palmprint, hand geometry, iris recognition, retina and odour/scent;**
- Every human being therefore has certain features that make up his/her digital identity, which makes every human unique and digitally different from another;
- A bimodal biometrics authentication system uses two biometric features to identify a person;
- INEC is using both facials and fingerprints identification system for voter authentication – come 2023 – using tablet computers.



BALLOTING – Current status



- Balloting is basically the act of voting in an election;
- Manual balloting has been taking place since the inception of elections in Nigeria;
- These manual balloting methods have been paper-based;
- The manner of casting of votes has been open-secret balloting
 - *Where the voter makes his/her selection in secret and*
 - *Casts his/her vote in the public view*

BALLOTING – Journey so far

- In 2004, INEC embarked on studies and campaigns on the use of Electronic Voting Machines (EVMs) for the conduct of Elections;
- Restrictions of the Electoral Law truncated the process;
- Currently, an Electronic Voting Implementation Committee (EVIC) is set up to consider the possibilities and modalities for the deployment of EVM for elections;
- Late last year, INEC had a demonstration of EVM solutions by experienced industry players;
- The main aim of the demonstration was to enable the Commission learn from recent technologies in electronic voting which would guide in the decisions to be taken on the type of machine that suites our clime;
- The demonstrations exposed the Commission to various technological solutions and the different available options;
- The Commission hopes to commence the purchase of some EVMs to commence testing and piloting.

BENEFITS OF e-VOTING

- Faster vote count and tabulation, thereby increasing transparency & building trust
- More accurate results as human error is excluded
- Efficient handling of complicated electoral systems formulae that require laborious counting procedures
- Improved presentation of complicated ballot papers
- Increased convenience for voters
- Possibility of multilingual user
- Potentially increased participation and turnout, particularly with the use of Internet voting
- More attuned to the needs of an increasingly mobile society
- Prevention of fraud in polling stations and during the transmission and tabulation of results by reducing human intervention
- Increased accessibility, eg audio ballot papers for blind voters, with Internet voting for diaspora voting
- Reduction of spoilt ballot papers as voting systems can warn voters about any invalid votes
- Potential long-term cost savings through savings in poll worker time, cost of printing & distribution of ballot papers



TRANSPARENCY IN TRANSMISSION OF RESULTS

- If Polling Unit (PU) election procedure is carried out, devoid of all malpractices, and the results are not securely guarded and correctly collated, the election process can not be termed credible;
- From inception of elections in Nigeria, till 2014; results were transmitted manually, from the PUs to the Collation centres;
- This made room for election malpractices – results could be hijacked, could be exchanged, etc between the PU and Collation Centre;
- Electronic Transmission of Results ensures secure migration of election result from the PU to the point of collation;
- It is a robust and well secured platform that collects data from the PUs and collates the results up to the required level for any set Election;
- INEC was in the process of piloting the electronic results collation and transmission (e-Collation) system – had been piloted in many bye-elections prior the 2019 General Elections;
- The piloting was halted, due to legal impediments.

TRANSPARENCY IN TRANSMISSION OF RESULTS ...2

- However, to improve the openness and credibility of elections, INEC decided to make available electronic copies of the PU Result Sheet (EC8A) for the General Public to view;
- This implies that the EC8A form filled and signed by each Presiding Officer (PO) is scanned or photographed and uploaded to a Public Domain which can be viewed by the General Public;
- This system ensures that the EC8A filled at the PUs is the same as that brought to the Collation centre, as the RA Collation Officer checks the uploaded EC8A before collating the result;
- This was successfully piloted during the 8th August 2020 Bye Election in Nasarawa State, and has been deployed for all bye elections since then.

TRANSPARENCY IN TRANSMISSION OF RESULTS ...3

- The IREV public portal is on <https://inecelectionresults.com/>
- An interested person visits the site;
- He/She is made to register on the portal with his/her:
 - *Full name*
 - *Gender*
 - *Email address*
 - *Phone number*
 - *State or Country of residence*
- A verification mail is sent to the registered email to eliminate attacks like denial of access from internet bots (applications running automated tasks on the internet) as well as other spywares or malwares that may target unsuspecting users of our system
- The User gains access to view the EC8As.



INDEPENDENT
National Electoral Commission

Login

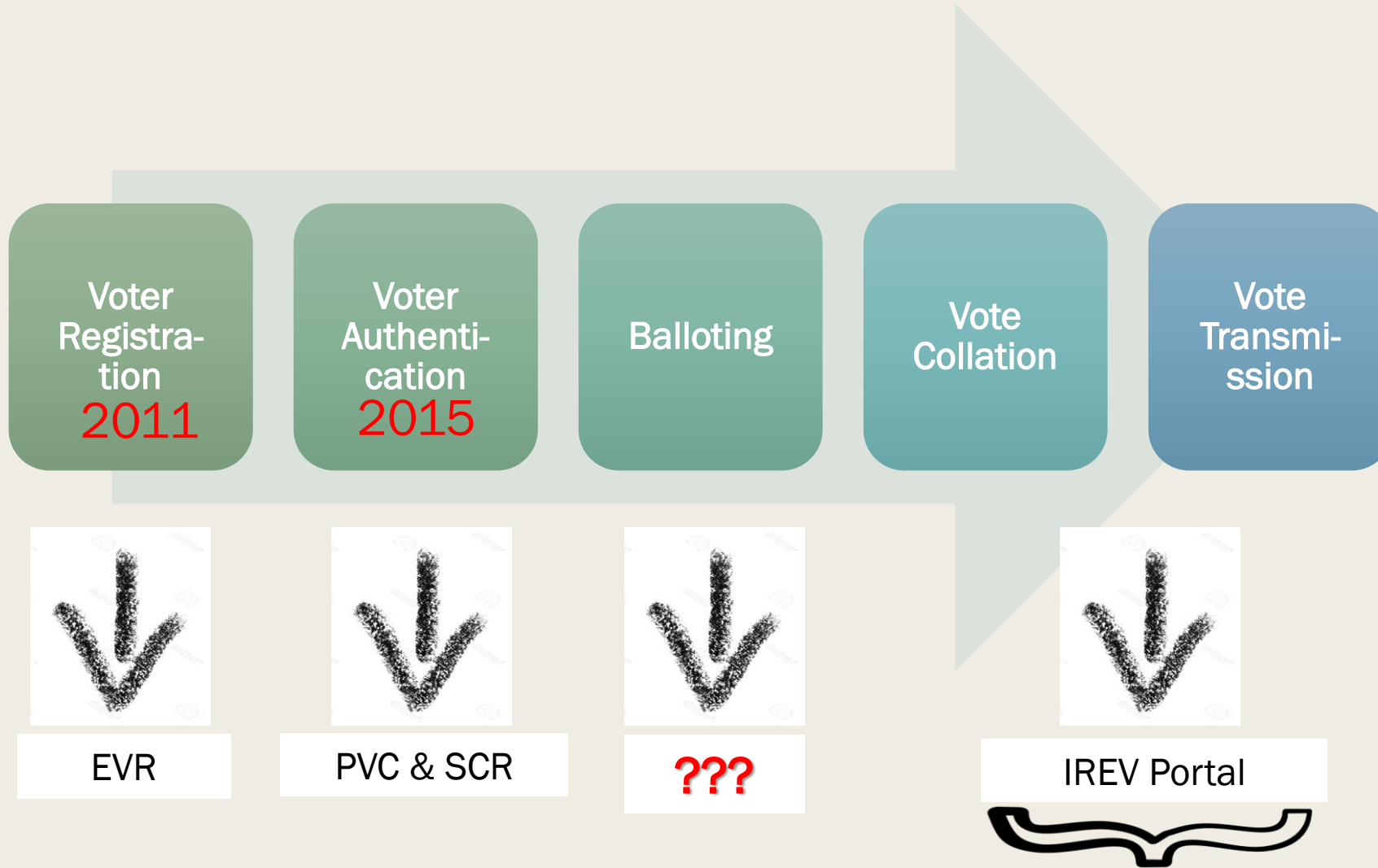
You must be logged in to access content.

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HOME SCREEN OF IRev

THE ELECTRONIC VOTING SYSTEM



OTHER TECHNOLOGICAL SOLUTIONS

- As mentioned in a previous slide, the process of selection of candidates could also fall under the vices of electoral fraud;
- INEC has deployed an inhouse solution to ensure that candidates lists are submitted as at when due and that the candidates meet the requirements set by the law;
- This and other systems, to help manage the electoral process are currently being used for elections;
- These are:
 - *INEC Candidate Nomination Portal (ICNP),*
 - *INEC Media Accreditation Portal (IMAP),*
 - *INEC Observer Group Portal,*
 - *INEC Political Party Management System*



MANAGEMENT + TECHNOLOGY

Technological Driven Electoral System must be able to manage these three:



OVERCOMING THE CHALLENGES OF THE PEOPLE & PROCESS

- In the context of this discussion, **the PEOPLE** could be seen as the set of persons that are encountered in the electoral process:
 - *INEC Staff*
 - *Adhoc Staff*
 - *Politicians*
 - *Security Agencies*
 - *Election Observers*
 - *Media*
 - *Voters*

OVERCOMING THE CHALLENGES OF THE PEOPLE & PROCESS...2

- The Process aspect involves the steps and actions that are executed with the People;
- In essence, we would consider the Process & People together because of the interwoven nature of the two;
- The processes involve Pre-, during, and Post-election processes;
- Will focus more on the processes that have some bearing with ICT deployment for elections.

OVERCOMING THE CHALLENGES OF THE PEOPLE & PROCESS...3

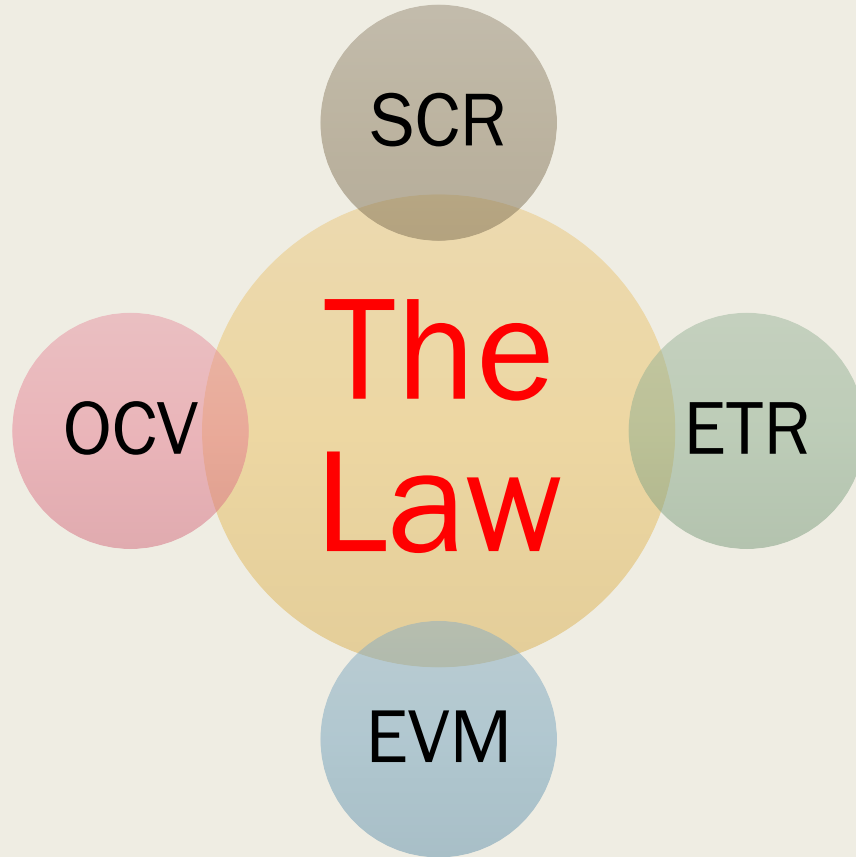
1. DATA AVAILABILITY

- *Source of truth* for verifying an intending voter – National Identity database is still being built;
- *Age confirmation* – How is technology helping???
 - Underaged registrations
 - Application of Artificial Intelligence under consideration
- *Records of Dead* – No information made available on dead persons – How many Nigerians register births and deaths???
 - No data at NPC, hospitals, etc

This can be achieved when Govt Agencies start doing their duties right - technologically

OVERCOMING THE CHALLENGES OF THE PEOPLE & PROCESS...4

2. THE LAW



* OCV – Out of Country Voting

SCR – Accreditation is by ticking the register

EVM – prohibited by the contents in the Electoral Act

ETR – Manual collation process is recognized

OCV – Personal appearance at the PU

The election credibility that was accrued in 2015 via the use of SCRs was almost eroded when electronic reports generated were turned down by the Courts.

This, hopefully, will be resolved with planned amendments to the electoral Law

OVERCOMING THE CHALLENGES OF THE PEOPLE & PROCESS...5

3. THE POLITICAL CLASS

- The Commission has mandatorily ensured that right from the planning stage, valuable time and resources are spent to “sell” its technological plans to the Political Parties;
- Yet, some politicians are the group of people who look for loopholes, or even create them, to make INEC processes look seemingly non-credible;
- Some politicians induce the populace to indulge in multiple registrations either by moving from one PU to another or by registering using special registration options meant for people who are physically challenged;
- Circumventing the use of SCRs; there are efforts at frustrating its use – especially on election day;
- Political rivalry – tense elections, IT gadgets get smashed, etc

The Electronic Results Transmission & Collation is the ONLY SOLUTION!

OVERCOMING THE CHALLENGES OF THE PEOPLE & PROCESS...6

4. SECURITY AGENCIES & THUGGERY

- The recent activities of some Security personnel during elections is worrisome
 - Some security personnel tend to pander to political actors
 - In some instances, some Security Personnel have aided and abetted thugs
 - Security of Technical Support Staff and gadgets was threatened;
 - The recent unfortunate burning of INEC offices has resulted in the loss of election gadgets and materials.
-
- **Subject to the amendment of the Electoral Act, Electronic Results Transmission right from the PUs offers the best prospect for protecting the integrity of results.**
 - **Prosecution of electoral offenders, possibly the enactment of the Electoral Offences Commission Act, would minimize these attitudes of many actors in the electoral process.**

OVERCOMING THE CHALLENGES OF THE PEOPLE & PROCESS...7

5. INEC STAFF – ADHOC & PERMANENT

- The infiltration of staff by Politicians is still a source of concern
- Some INEC staff try to connive with Politicians to circumvent the electoral processes
- Sabotage

6. PROSECUTION OF ELECTION OFFENDERS:

- Poorly executed - If offenders are allowed to go unpunished, then election offenders will keep increasing;
- Electoral Offences Commission Act to be enacted, hopefully soon

7. CHANGE FACTOR:

- People are just comfortable with the status-quo, find it difficult to shift from comfort zones;
- the introduction of technology to the electoral process has met with brick walls at some quarters – even staff fear losing their jobs and relevance.

OVERCOMING THE CHALLENGES OF TECHNOLOGY



1. FUNDING

- Technology is very capital intensive; for an organization that executes key functions like an EMB, funding shouldn't be an issue;
- Some projects became unsustainable and had to be truncated due to lack of funds – WAN, DR (at some point), etc;
- Also affected are other salient processes that would better have been fully automated, but we have had to apply some manual interventions at some levels;
- The EVM project still depends on the availability of funds.

OVERCOMING THE CHALLENGES OF TECHNOLOGY ...2



2. INFRASTRUCTURAL DEFICIT

- Poor national communications network coverage – voice over 2G edge is 80%, Data over 3G is 74.2% (a large % with a single network)
- Security challenges to installed infrastructure

Collaboration with Government Agencies – failed attempts made

The Ministry of Communications & Digital Economy should consider this as a major project

OVERCOMING THE CHALLENGES OF TECHNOLOGY ...3

3. TRUST ISSUES

- Nigerians have personal trust issues, which has translated into lack of trust of agencies of Government

More transparency on the side of INEC – Edo and Ondo Gov Elections EC8A public portal helped to achieve needed transparency

4. LITERACY LEVEL

- Average Adult literacy rate in English Language in Nigeria is 58% (2010 NBS report)

Major challenge to nationwide technology deployment – assisted voting to the rescue

OVERCOMING THE CHALLENGES OF TECHNOLOGY ...4

5. DATA SECURITY

- INEC is keen at ensuring the security of its data, networks and other infrastructure;
- Several attempts have been made on INEC's sites, portals, etc; and more will be made – especially as INEC deploys more of its infrastructure online – to serve the people better.

More enforcement of the 2015 Cybercrimes (Prohibition, Prevention, etc) Act

BEYOND TECHNOLOGY???

- Areas technology cannot be applied, especially those that are beyond the reach of the Electoral Commission:
 - *Political Party Primaries and selection of candidates*
 - *Disruptions to normal voting and results collation processes*
 - *Security of men and materials*
 - *Vote “buying” and “selling”*
 - *etc*

Beyond
technology

WAY FORWARD

- Deployment of technology has touched most of the election processes, and INEC is working on the last part – deployment of EVMs;
- INEC is institutionalizing the technologies
- More Research, Developments and Study Tours
- Adequate training and staff development
- More support (funding) from Government and International Partners needed
- Law should be made to support technology, rather than be a barrier
- Public enlightenment and more stakeholder engagements because having a free, fair and credible election – which is devoid of rigging, is a collective duty of all Nigerians – voters, Political Parties & Politicians, Civil Society Organisations, the Media, Security Agencies, INEC & its staff, etc.

CONCLUSION

- The challenges with IT deployment could be overwhelming, especially for a vast Country like ours;
- Technology is evolving, and therefore it is important to move with the trend to get the benefits therein.
- Battling with the crisis of People, Technology and Processes is a major task in a technologically driven electoral process;
- It is very important to always realise that technology may most times not give a full end-to-end solution, the people aspect need to be well handled;
- The use of technology in elections has come to stay, especially in this part of the World, and therefore needs to be improved upon.

