NIGERIA'S ELECTORAL PROGRESS: INSIGHTS AND LESSONS FROM INDIA'S E-VOTING JOURNEY

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Abstract

India's E-Voting system exemplifies the synergy between technological innovation and legal flexibility. Challenges with paper ballots in the late 1970s led to e-voting adoption, and amendments to the Representation of the People Act 1951 empowered the Election Commission of India (ECI) to use Electronic Voting Machines (EVMs). This integration of technology and legal structures sets a benchmark for Nigeria's electoral system. This paper argues that balancing technological dependency and legal oversight is crucial, with the judiciary playing a pivotal role in the transition from paper-based to technology-driven electoral processes.

Keywords: India; Nigeria; Election; Technology; Electronic Voting.

Introduction

The integrity of a democratic framework, for any sovereign entity, relies on the transparency, accessibility, and reliability of its elections. Around the world, electronic voting is gaining traction, aiming to overcome challenges tied to traditional voting methods. This article examines the controversies surrounding new voting technologies used in the Nigerian general elections. Nigeria ventures into the Bimodal Voters' Authentication System (BVAS) and the INEC Result Viewing Portal (iREV) during the 2023 general elections creating legal questions and challenges. Comparatively,

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India, with its e-voting evolution provides a wealth of knowledge, insights, and guidance for Nigeria. Although at different junctures in their electoral evolutions, both countries share a similar dilemma: orchestrating a balance between technological innovations and traditional ballot system. The jurisprudential milestones in India, epitomised by landmark cases highlight its proactive and adaptive approach towards technological advancements. To further fortify electoral credibility, India's integration of the Voters Verifiable Paper Audit Trail (VVPAT) mechanism into its EVMs is a testament to its foresighted legal perspective.

Central to the discourse on e-voting in both nations is the '*real-time'* transmission of electoral outcomes. India leans towards an aggregated release of results rather than instantaneous transmission purportedly promoted by the Nigerian electoral body, the Independent National Electoral Commission (INEC). Despite their technological advances, both nations remain tethered to paper trails – a paradox in the digital age. The integrity of election results, as evidenced in numerous Indian court cases, leans heavily on voting technology outputs. However, the inherent reliance on manual paper systems to audit and confirm results presents a conundrum. While the risks of traditional ballots are well-documented, and a transition to a technological system seems inevitable, the journey is replete with obstacles, discursive engagements, and evaluations of potential risks.

Overall, the goal remains clear: ensuring a transparent, accessible, and reliable democratic process for all citizens. However, a central dilemma remains, while the integrity of results from the manual voting system has frequently been challenged due to alleged malpractices, the trust in technological solutions is not unequivocal. In the legal realms of both India and Nigeria, discussions on electronic voting have exposed numerous vulnerabilities inherent in e-voting systems, which might cause concerns similar to those surrounding manual voting. For instance, the demand from a significant segment of the Nigerian public for real-time transmission of results stems from fears of potential result tampering, especially if there is a considerable delay before the results are announced. Such distrust often prompts stakeholders to

challenge the legitimacy of electoral outcomes, prompting comprehensive legal debate on electronic voting.

This paper explores the concerns surrounding adopting and applying electronic voting systems within the legal contexts of India and Nigeria. It tracks the historical development of India's e-voting, exploring its pivotal changes, key moments, and legal framework, and the synchronous development of the relevant legal frameworks and the enlightening lessons as Nigeria navigates its new voting technologies. A significant observation is the crucial role of the Indian judiciary in moulding the legal facets of e-voting, and how legislative responses have incorporated court-instructed regulations, firmly integrating them into the statutory framework. Nevertheless, both the Indian and Nigerian courts exhibit caution, avoiding decisions that might prompt a complete shift to digital voting while simultaneously supporting principles that favour traditional voting methods. Such caution is understandable, considering the variable public trust in e-voting systems. This paper contends further that conversations and initiatives promoting the improvement of e-voting in India have persisted over extended periods and will continue as an ongoing dialogue. Thus, expecting Nigeria to mirror the latest advancements rapidly would be unrealistic. Nonetheless, India's journey in digital voting offers a wealth of instructive lessons.

E-Voting Under Nigerian Law: Innovations and Challenges

Elections in Nigeria have been marred by rigging, violence, voter intimidation, and other electoral malpractices. Thus, casting doubts on the credibility of elections and the quality of the democratic system (Aluaigba, 2016). However, the general elections held in February 2023 were adjudged well organised relative to past elections due mainly to the use of voting technologies, that is, the Bimodal Voters' Authentication System (BVAS) and the INEC Result Viewing Portal (iREV). These technological implementations were primarily instituted to counteract electoral malfeasance, fortifying both credibility and transparency. A notable aspect of this technological advancement is the electronic transmission of election results, which facilitates direct uploads

from polling units to the iREV portal. This progression into electronic voting in Nigeria is nascent, predominantly anchored by the Electoral Act 2022 and the accompanying Electoral Regulations and Guidelines 2022. These legal frameworks delineate the usage of BVAS and iREV, as articulated in the Electoral Act. Based on section 47(2) of the Act, the BVAS serves a bifurcated role: it assists in voter accreditation and concurrently facilitates the upload of election results to the iREV. The iREV functions as a public portal, granting citizens access to view electoral outcomes. This marked shift towards digitalisation in the Nigerian electoral process underscores the nation's endeavours to align with global best practices in election management. The Electoral Regulations and Guidelines 2022 (paragraph 38) elaborates on the process as follows:

> On completion of all the Polling Unit voting and results procedures, the Presiding Officer shall: (i) Electronically transmit or transfer the result of the Polling Unit direct to the collation system as prescribed by the Commission; (ii) Use the BVAS to upload a scanned copy of the EC8A to the INEC Result Viewing Portal (iReV), as prescribed by the Commission; and (iii) Take the BVAS and the original copy of each of the forms in tamper-evident envelope to the Registration Area/Ward Collation Officer, in the company of Security Agents.

The introduction of the BVAS in Nigeria's electoral process sparked significant discourse, leading to two salient conclusions. BVAS emerged as a pivotal tool for collating, transmitting, and validating electoral results. Such a technological intervention, especially in the context of Nigeria's history of electoral challenges, naturally bred expectations. The very essence of BVAS, as marketed, was its purported capability to curb electoral fraud. Central to this claim was the anticipation of a real-time electronic transmission of election results, including real-time result transmission from all polling units, thereby minimising chances of result manipulation. In October 2022, the Chairman of INEC reportedly assured Nigerians that:

> …there is no going back on the deployment of the Bimodal Voter Accreditation System (BVAS) for voter accreditation. There is no going back on the transmission of results to the INEC Result Viewing Portal (iReV) in real-time on Election Day (Suleiman, 2022).

This real-time transmission was not delivered. As a result, the Independent National Electoral Commission (INEC) faced allegations of flouting electoral laws.

The overarching question however is whether the extant electoral regulations explicitly stipulate the necessity for real-time result transmissions. Moreover, does failing to adhere to such real-time transmission protocols amount to a legal violation to justify nullifying election results? Addressing the former, current legal frameworks do not explicitly prescribe a stringent timeline for result transmission. The notion of 'real-time transmission' gained traction not due to its legal imposition but rather because it was a term frequently employed by the INEC in their communications, thus creating public expectations. This discrepancy between popular understanding and legal obligation has further muddied the waters, necessitating a rigorous examination of both the law and the INEC's commitments to ensure clarity and uphold electoral integrity.

Paragraph 38 above, broadly interpreted as mandating the INEC to upload election results to the iREV in real-time (Ochei, 2023), is misleading for three reasons. One, it is not supported by the clear wordings and literal interpretation of the Electoral Act and the Guidelines, and two, it is technically infeasible to transmit election results in real-time, thus amounts to mandating the impossible. Three, and perhaps, most importantly, paralleling comparable jurisdictions like India, Nigeria’s adoption of voting technologies cannot be interpreted as wholly discarding manual or paper-based report collation. As India’s example shows, the process of wholly transitioning to electronic voting or electronic or real time transmission of results is gradual, contentious, and fraught with legal challenges that highlight the limitations of the system.

Regarding the first point, the literal interpretation of the

phrase 'On completion of all the Polling Unit voting and results procedures' in paragraph 38 above only suggests that results must be uploaded sometime after the completion of polls and announcement of results, not immediately, contemporaneously, or simultaneously with either the voting or results process. A search for the compound word 'real-time' exposes the difficulties of its non-colloquial usage. In an unrelated text, the Committee on Payment and Settlement Systems define 'real-time' as *"the processing of instructions on an individual basis at the time they are received rather than at some later time"* (Bank for International Settlements (2003). In *Carpenter v. United States* (2018), a landmark United States Supreme Court case concerning the privacy of historical cell site location information, the US Supreme Court distinguished real-time data collection from historical data. While the former describes "*a download of information on all the devices connected to a particular cell site during a particular interval,"* the latter refers to a download over some indefinite period. In *Privacy International* (2018), *La Quadrature du Net and Others* (2020), the Grand Chamber of the Court of Justice of the European Union (CJEU) suggested that 'real-time' relates to 'immediacy' or some spur-of-the-moment action. However, can this be the intention of the drafters of the Electoral Act and Guidelines?

In Nigeria, the electoral process involves manually casting ballots and manual result compilation and announcement before uploading and transmitting the result using the BVAS. Therefore, given the manual nature of the Nigerian process, achieving real-time transmission is a stretch of both the technical and legal meanings of the word. Perhaps the Electoral Guidelines provided an alternative to 'electronic transmission' for this reason. Paragraph 38 of the Guidelines requires the presiding officer to "*Electronically transmit or transfer the result of the Polling Unit, direct to the collation system as prescribed by the Commission*." The use of the disjunctive 'or' in the paragraph suggests that the results can be electronically transmitted (onto the BVAS) or otherwise transferred, for example, by moving the forms EC8A, on which the results are manually recorded, from one location (the polling units) to another (such as the collation centres at the ward). The Court appears to have accepted this position in *Labour Party (LP) v INEC* (2022) when it

concluded that "*the commission (INEC) is at liberty to prescribe or choose how election results shall be transmitted*."

Addressing the second point above, if we insist that the law does anticipate real-time transmission, can this be achieved given technological challenges? Technologies like the BVAS and iREV are susceptible to cyberattacks like hacking and distributed denial of service attacks because they 'transmit' or hold sensitive election information. The German experience stands as a testament to these perils. Germany, which had ventured into e-voting, eventually withdrew from it based on the country's Constitutional Court acknowledgment that the e-voting systems were penetrable and thus lacked credibility (Bundesverfassungsgericht, Docket Nos. 2 BvC 3/07 & 2 BvC 4/07). Indeed, the peculiarities of the Nigerian system aggravated security fears and technical failures. The BVAS purportedly suffered technical glitches ranging from poor network and password failure to power outages that impacted the round-the-clock functioning of the machine.

This prompts a critical assessment: could the law have genuinely envisaged 'real-time' transmission in such a technologically fraught context? The omission of a specific timeline in the Electoral Act (paragraph 38 above) is deliberate, and we cannot read what is not explicitly stated in the law. When interpreting a statute, courts generally apply the literal rule of interpretation, focusing on the plain and unambiguous words used by the legislator (Awe Olugbenga v Mainstreet Bank Registrars Limited, 2013; Our Line Ltd v SCC Nig Ltd, 2009). Reading the Electoral Act as a whole and considering its objective and context, it seems unlikely that the drafters of the law would have intended to mandate a technically infeasible method or one highly susceptible to attacks and compromises. The legal maxim "*Expressio Unius Est Exclusio Alterius"* (the expression of one thing is the exclusion of the other) further supports the idea that if the drafters intended to address mischief, such as electoral fraud, by providing for real-time electronic transmission, they would have expressly stated the same.

Arising from the deliberations mentioned above, the subsequent inquiry pertains to the ramifications of not transmitting

election results promptly, presupposing this was mandated by law. Does the delay or non-transmission of results, instantaneously or entirely, provide adequate grounds to invalidate the elections? To address this query, evaluating the evidential worth of the electronically conveyed results in conjunction with the legal criteria for annulling elections is imperative. Typically, in legal disputes, parties substantiate their claims by submitting documents, which can be categorised as primary or secondary evidence (Evidence Act, 2011: section 85). Primary evidence refers to a document for inspection by the Court, each part of a document executed in several parts, or each counterpart of a document executed in counterpart against the party who executed it, or documents made from a uniform process with the original and not from it (Evidence Act, 2011: section 86(1)). Secondary evidence includes certified copies of documents given under different provisions of the Evidence Act, such as copies of the original document made by mechanical or electronic processes, copies made from or compared with the original, and counterparts of documents as against the parties who did not execute them; oral accounts of the contents of a document given by some person who has himself seen it (Evidence Act, 2011: section 87 (1)(e)).

These provisions suggest that the manually completed form (EC8A) is the primary evidence of election results, and the copy uploaded unto the iReV, being a copy of the result, is the secondary evidence. The Nigerian Court of Appeal's decision in *Adegboyega Oyetola & Anor v Independent National Electoral Commission (INEC) & Ors* (2023) overruling the Election Tribunal's earlier decision in *Adeleke Ademola v Adegboyega Oyetola & Ors* (2023) highlights the complexities of interpreting electoral laws and implementing voting technologies. The Court of Appeal emphasised the importance of physical evidence and the order of the dual mode of transmission of results under the Electoral Act. By recognising the voters' register, the BVAS devices, and the EC8A form as the foundation of what transpired at the polling units, the Court demonstrated a nuanced understanding of the limitations and challenges of voting technologies. The BVAS requires an internet connection for uploading or transmitting results. Still, transmission is not instantaneous, and various human and technical factors may

affect its proper functioning. This reasoning led the Court to reject the superiority of the BVAS results and emphasise the need for a balanced approach that considers both technology and traditional (or manual) methods in the electoral process. Ultimately, this case serves as an important reminder of the importance of understanding the limitations of voting technologies and the need to carefully consider the legal, technical, and infrastructural challenges accompanying their adoption.

If it is correct that the law is that manually completed results on form EC8A have a higher probative value than the backend result from the INEC, then, it is appropriate to ask, what is the purpose of electronically transmitted results? One purpose, stated in the Electoral Act, is that it enables comparison with the manual results and could highlight inconsistencies in disputed elections. However, this only underlines further conflicts. First, the courts have held that there is no rule of law mandating the production of secondary evidence of a public document when the original can be tendered (Okeke v. Attorney-General of Anambra State,1993; Ajao v. Ambrose Family & Ors., 1969). Second, the electronic results may not be reliable as they may not always synchronise with the manual results. In Oyetola's *case* (at the Tribunal), the parties tendered different versions of the election result because they inspected and conducted a forensic analysis of the INEC systems at different times. This seeming error only aligns with the purpose of electronic results stated in the Electoral Act, that is, record keeping for elections in the form of the compilation and maintenance of the National Electronic Register of Election Results. This raises the presumption that the register will be updated routinely, and its accuracy and correctness will depend on varying factors.

Finally, the fact that non-transmission of results in real-time cannot be a ground for nullifying an election further underlines its secondary role in the voting and collation of results. The Electoral Act (section 134(1) provides that:

> An election may be questioned on any of the following grounds — (a) a person whose election is questioned was, at the time of the election, not qualified to contest

> the election; (b) the election was invalid by reason of corrupt practices or noncompliance with the provisions of this Act; or (c) the respondent was not duly elected by a majority of lawful votes cast at the election.

'Noncompliance with the provisions of this Act' is perhaps the operative phrase in the section above. This foregoing analysis has established that the electronic transmission of results is neither mandatory nor required to be in real-time or at any specific time. Therefore, the question of non-compliance does not arise. However, the courts have also required that the non-compliance complained of must occur during the election (Atiku Abubakar & Anor v. INEC & Ors, 2019). This qualification warrants a brief consideration. Based on the law, the following occurs during an election: voter authentication, casting the ballot, tallying, or computing the results, recording the result manually onto the form EC8A, and signing the results by the relevant electoral officers and party agents and the announcement of the results at the polling units.

In contrast, the sidenotes to Section 62 of the Electoral Act refer to the transmission of election results as a "post-election procedure". Thus, while the manual imputation of the results into the form EC8A is done during the elections, transmission is done after the elections have been concluded. The invariable conclusion here is that even if non-transmission of the results amounts to non-compliance, it is a post-election breach and cannot constitute a ground to nullify the election.

The observation from the above discussion is that the use of voting technologies in Nigeria is bound to create many legal issues, especially where the relevant laws are not well drafted. Even when the laws are drafted to near perfection however, litigants are bound to explore gaps when challenging the result of an election. The next section of the paper addresses the third point about Nigeria's precipitous adoption of voting technologies and the propensity to interpret this as wholly discarding manual or paper-based result collation. The consideration of India's journey to e-voting demonstrates the granular migration to e-voting and the contentious terrain of legal and social acceptance as a perquisite to moderating,

validating, and accepting the e-voting system. Nigeria can lean on this history and trajectory to understand its evolving e-voting.

Tracing the Evolution of India's E-Voting System: A Historical Overview

Nigeria shares India context for migration to e-voting system: mistrust in the electoral process. Between 1977 and 1982, India experienced rampant booth capturing/ ballot stuffing by political goons, as well as inconvenience caused due to incorrect marking by voters in the then prevalent paper ballot system. This led to several discrepancies in the number of votes earned by political parties in elections in India.

In a bid to rectify this predicament, the then Chief Election Commissioner of India, S.L. Shakdhar, championed the notion of integrating Electronic Voting Machines (EVMs) into the Indian electoral apparatus. Subsequently, a low-cost EVM prototype was co-developed by two Indian public enterprises, ECIL and BEL. In 1982, the ECI, under Article 324 of the Indian Constitution, issued Directions to use EVMs on an experimental basis in a by-election in India (ECI 2017: p 4).

In 1984, the legitimacy of the electoral outcome from this process was questioned before the Supreme Court of India in the landmark case, *A.C. Jose v. Sivan Pillai* (1984). The case was predicated on procedural technicalities. Specifically, the Supreme Court opined that the extant Conduct of Election Rules, 1961, lacked stipulations explicitly sanctioning the deployment of EVMs, instead solely prescribing guidelines for paper ballot-based elections. As a result, elections conducted using EVMs across 35 out of the 85 constituencies were annulled. In stark contrast, the outcomes from the remaining constituencies, which had adhered to manual voting, remained undisturbed and were thus exempted from a re-polling mandate. Notably, the Supreme Court abstained from evaluating the intrinsic merits and viability of the EVMs in the case.

Following the Supreme Court's ruling in the case, the Indian Parliament amended the Representation of the People Act 1951 by

inserting section 61A, authorising the ECI to use EVMs for elections. The amendment did not however ease the controversy around EVMs use and acceptance. In January 1990, the Indian Government constituted the Electoral Reforms Committee (ERC) to holistically review and enhance the electoral process. The Committee comprising representatives from various national, and state political factions underscored the importance of having technological experts evaluate the EVMs to alleviate concerns regarding their reliability. (Ministry of Law and Justice, 1990: p 30) Expert evaluation cleared the machines of the issues noted in the 1989 general election, and the Committee recommended deploying them in the then upcoming general elections of 1998 and 1999 (12th and 13th General Elections, respectively) (ECI, 2022: 92). In fact, the 13th General Assembly Elections of 1999 happened to be the last election conducted by the ECI, which predominantly used paper ballots for voting (ECI, 2022: 94).

The ECI, armed with further confidence about its EVMs, decided to increase their use by deploying them in all the polling stations for the Legislative Assembly Elections of Tamil Nadu, West Bengal, Kerala, and Pondicherry (now Puducherry) in 2001 (ECI, 2022: 100). These affirmations of the ECI, however, were not left unchallenged. In *All India Dravida Munnetra Kazhagam v. ECI* (2001), the Madras High Court dismissed several petitions against EVMs, which claimed that the machines could easily be tampered with. On appeal, the Supreme Court upheld the validity of section 61A of the Representation of the People Act, 1951 and the elections conducted. Similar petitions were filed in 2004, with the notable cases being *Pran Nath Lekhi v. Election Commission of India* (2004), *Micheal B. Fernandes v. C.K. Jaffer Sharief & Ors* (2004) and *Banwarilal Purohit v. Vilas Muttenawar & Ors* (2004). All three petitions were dismissed by the respective Courts.

Despite significant enhancements to Indian EVMs through the work of the technical committee established by the ECI, (ECI, 2006), concerns about the functionality of the EVMs persisted. In 2010, a consortium of prominent academicians, scientists, and professionals from the USA penned a letter to the then Chief Election Commissioner of India urging the ECI to consider

alternative voting methods apt for the Indian scenario, given the rising security issues, verifiability, and transparency surrounding the EVMs. A research paper, co-authored by Halderman, Prasad, and Gonggrijp, further spotlighted the significant security vulnerabilities of the EVMs. Their analysis was based on an actual EVM procured from an undisclosed source. They meticulously disassembled the EVM, pinpointing and highlighting various structural weaknesses (Halderman et al., 2010). The ground-breaking research received global media coverage and was followed by other articles further underscoring the security concerns associated with the Indian EVMs (Debnath et al, 2017; Desai and Lee, 2021: 398).

In the continuous discourse surrounding the refinement of India's EVMs, the potential adoption of the totaliser emerged as a prominent consideration. In 2008, ECI advanced a recommendation to revise the Election Rules, advocating for integrating the totaliser in the vote counting protocol. This instrument, designed to consolidate and reveal the results from a cluster of 14 EVMs in unison, starkly contrasts the extant system that tallies the votes for each polling station in isolation (Law Commission of India, 2015: para 13.1). The rationale behind such a shift lies in fortifying voter anonymity, thereby curbing potential coercive tactics or reprisals predicated on discernible voting inclinations. Beyond this, the totaliser resolves specific technical issues while safeguarding the sanctity and secrecy of electoral patterns. However, bureaucratic inertia seems inescapable. While the ECI's 2008 suggestion was tabled before a Parliamentary Committee the subsequent year, tangible progress remained elusive. By 2014, this inaction drew the scrutiny of the Supreme Court, prompting it to requisition an account of the stymied proposal from the government (Yogesh Gupta v. ECI, 2014). The latter's rejoinder entailed consultations with the Law Commission and an assurance of an interim report (Yogesh Gupta v. ECI, 2015).

Subsequently, in its 255th Report on "Electoral Reforms," the Law Commission of India deliberated on the merits of augmenting the EVM system with a "Totaliser" for tabulating votes (Law Commission of India, 2015: ch XIII). In synergy with the Legislative Department of the Law Ministry, the Commission

echoed the ECI's advocacy for a totaliser, as delineated in the Background Paper on Electoral Reforms (Ministry of Law and Justice and Election Commission of India, 2010: 41, p 2). According to the ECI, this apparatus, which had already been architected by EVM fabricators, was designed to amalgamate votes from various control units to offer a cumulative count of ballots cast across a designated set of polling stations. Concurring with the ECI's stance, the Law Commission proposed a revision to Rule 66A (Law Commission of India, 2015: ch XIII, para 13.6). Such an amendment bestowed on the ECI the discretion to determine the instances and locales suitable for deploying a totaliser, cognizant of the electoral backdrop and conceivable hazards of coercion or reprisals (Law Commission of India, 2015: ch XIII, para 13.7). This amendment granted the ECI the authority to decide when and where a totaliser should be used, considering the electoral context and potential risks of intimidation or retaliation.

Unlike in Nigeria, the progression of India's EVM journey was marked by significant milestones shaped by the contributions of multiple stakeholders. It is noted that the incorporation and subsequent refinements of EVMs in India have resulted from concerted efforts from entities such as the legislature, the ECI, the Law Commission, the Law Ministry, and academic experts, among others. The collaboration has been instrumental in test-running modifications to EVMs, identifying the gaps in adopting these modifications and providing the necessary legislative support for these modifications. Although the Indian e-voting system has not attained perfection yet, the developments over the years are remarkable. The next section further demonstrates the pivotal role of the judiciary, and how it influenced the rule-making process on EVMs. It illuminates the legal trepidations and vulnerabilities linked to EVM utilisation while also casting light on the judiciary's disposition vis-à-vis EVM incorporation.

Voting Technologies: A Journey through the Indian Cases

As preliminarily outlined, judicial stances have exhibited a measured approach, bolstering confidence in e-voting through measures calibrated to stimulate requisite evolution. We argue here

that the legal precedents that emerged over time provide invaluable insights instrumental for the evolution of Nigeria's e-voting paradigm particularly the use of voting technologies and the essence of paper trails in both ballot casting and result collation.

In *All India Dravida Munnetra Kazhagam v. Chief Election Commissioner & Ors* (2001), the constitutional legitimacy of Section 61A (introduced by the 1988 amendment to the Representation of the People Act) came under judicial scrutiny at the Madras High Court. The Court affirmed the constitutionality of Section 61A of the Representation of People Act. The Court further noted that the merits of EVM deployment distinctly overshadow those of traditional ballot systems. The shift negates the necessity to produce extensive volumes of ballot papers, subsequently economising on paper and printing expenses. Furthermore, in the paper-based system, invalidated votes bore significant sway on electoral outcomes. Conversely, with EVMs, such ambiguities are eradicated, ensuring every vote cast finds its accurate repository. These machines thus negate potential electoral malfeasance and expedite the result declaration process. Remarkably, the Honourable Court posited that a voter's prerogative does not extend to dictating the medium of casting his ballot, a position echoed and endorsed by the Supreme Court of India when a Special Leave Petition challenging the court’s decision came before it.

The seminal case of *Girish M. Das v. Chief Election Commissioner* (2012) recentred around the security and reliability of EVMs. The Gujarat High Court was approached through a Public Interest Litigation (PIL) seeking a directive for the ECI to bolster the defences of EVMs against vulnerabilities like hacking, tampering, and undue manipulation. Additionally, the petition proposed an interim cessation of elections in Gujarat and at a broader national level until the Court could be assured of the infallibility and authenticity of EVM operations. To further augment the security mechanisms, it was suggested that EVMs integrate cameras and chronological devices to monitor and deter fraudulent voting while identifying potential malefactors. The Court noted that the petitioner had not successfully illustrated any discernible acts or lapses by relevant bodies that might have risked the petitioner's

rights. The judgment solidified the notion that the judiciary does not function as a review panel over policy efficiency or pertinence. It concluded by reiterating that the role of courts is not to provide consultative feedback on policy matters to constitutional entities, recognising their inherent authority in policy formulation.

Subramanian Swamy v. Election Commission of India (2009) further underscores the intersection of technology and electoral transparency and re-asserts the need for the paper trail adopted by the Nigerian INEC (via form EC8A). Dr Subramanian Swamy, an influential figure in Indian politics, initiated legal action in the Delhi High Court seeking a mandate for the Election Commission of India to integrate a tangible "paper trail/ paper receipt" with EVMs. This would serve as irrefutable evidence that a voter's choice was accurately recorded. Despite the High Court's initial dismissal, Dr Swamy pursued the matter, leading to the landmark decision in the Supreme Court.

The apex court's judgement, siding with Dr Swamy, became instrumental in ushering in the Voters Verifiable Paper Audit Trail (VVPAT) mechanism within EVMs. The Court stressed that establishing trust in EVMs necessitates the presence of a verifiable "paper trail". It noted that the blend of EVMs with VVPAT is indispensable for upholding the integrity and transparency of elections, given that each vote embodies a citizen's democratic right. Acknowledging the logistical intricacies presented by India's expansive electoral framework, the Court greenlighted a phased or regional deployment of VVPAT systems. Furthermore, the Court's verdict delved into the Election Commission's assertions about the robustness and advanced safeguards for Indian EVMs, effectively countering potential tampering. The Commission delineated its proactive measures towards VVPAT integration, highlighting the ongoing design finalisation by a dedicated Technical Experts Committee. The transition to the VVPAT system significantly warranted modifications in the existing Conduct of Election Rules 1961.

The VVPAT was subsequently challenged (*Amitabh Gupta v. Election Commission of India* (2018); *Khemchand Rajaram*

Koshti v. Election Commission of India & Anr (2019). Notably, in *Association for Democratic Reforms (ADR) v. Election Commission of India & Anr* (2020), the (ADR) brought to light what it termed a 'mysterious rush and urgency' demonstrated by the Election Commission of India. This pertained to the premature destruction of the VVPAT slips used in the 2019 Lok Sabha elections, which occurred a mere four months after the announcement of the results. This action arguably contravenes the directives of the Conduct of Election Rules, 1961. Rule 94 (b) of the said Rules provides that: "The used or printed slips in any election shall be retained for one year from the date of declaration of the results of the election and shall thereafter be destroyed."

This revelation was alarming given that ADR had previously filed a petition on this exact matter with the Supreme Court in November 2019, and it was still pending judgment. Hence, spurred by the urgent need to prevent further potential erasures, the application was advanced to the apex court. In this context, ADR appealed to the Court to issue directives to the ECI mandating:

i) A halt to any further destruction or disposal of VVPAT paper slips related to any elections held in the preceding year. This was to ensure that the slips were retained for a minimum duration of one year, adhering stringently to the Conduct of Elections Rules, 1961.

ii) An insistence on the retention of all ancillary documents that had any linkage to the 17th Lok Sabha elections conducted in April 2019.

As of the status, the Supreme Court continues its deliberations on this case, with a conclusive judgment still awaited.

The cases above spotlight profound worries about the integrity of voting technologies like the EVMs and the imperative to ensure they are insulated from both external interference and technical glitches. In its interventions, the judiciary validated these apprehensions and put forth progressive remedies, specifically the VVPAT system, to inculcate reliable audit measures within the

EVM setup. Noteworthily, the very 'paper trails' EVMs aimed to pare down or obviate have re-emerged as the unassailable reference for verifying the EVMs, hinting at the enduring bond between age-old voting practices and their contemporary counterparts. Nigerian courts, like their Indian counterparts, are seeking a 'source of truth' to verify results from the process if the credibility of the process is questioned. The assertion in this paper is that there are lessons that the Nigerian courts and legislators can learn from India in a bid to increase public confidence in the e-voting process effectively. The next section highlights the gaps in the Nigerian system, which are resolvable by reference to the Indian system and the next steps for both countries to advance voting technologies and enabling laws.

Drawing Guidance: Lessons for Nigeria and Advancing Together

The Indian systems demonstrates the critical role of parliament, particularly its innovative enactment of Section 61A of the Representation of the People Act to give the ECI the constitutional mandate to deploy EMVs. The courts on their parts affirmed this mandate in several cases (All India Dravida Munnetra Kazhagam v. Chief Election Commissioner & Ors SLP (2001); Girish M. Das v. Chief Election Commissioner & Ors (2012); Amitabh Gupta v. Election Commission of India & Anr (2018)). The key lesson to be drawn from this is that the adoption of voting technologies should be constitutionally sanctioned to limit the likelihood of challenging their legality. Furthermore, the challenge to the constitutionality of EVMs in India enabled the courts to not only reaffirm its constitutionality but also to define rules which have aided the development of EVMs in India. Similarly, as the integrity of Nigeria's BVAS and iREV come under scrutiny, they should inform legislative revisions, and proactiveness by the Nigerian judiciary. The Indian Supreme Court's decision in *Subramanian Swamy v. Election Commission of India* (2013) is illustrative. To address the apprehensions about the EVM's credibility, the Court championed the integration of the VVPAT into the EVMs, setting a precedent for adaptive and responsive judicial intervention.

The controversy around real-time transmission of election

results, when seen through India's experiences, offers insightful context. While India's electronic voting mechanisms capture and transmit results, the ECI's process does not strictly adhere to the 'real-time' paradigm. Results from various EVMs are meticulously aggregated by the ECI, with a public declaration following the completion of this process. Drawing a parallel to Nigeria, where casting the ballot still bear a predominantly manual hallmark, the aspiration for instantaneous result transmission appears ambitious, both from technical and legislative viewpoints. A significant factor contributing to this gap in real-time reporting, enhancing the resilience against electoral malpractices, is the enduring presence of paper trails, palpably evident in both the Nigerian and Indian electoral architectures, especially concerning ballot records.

The issue of transmission is largely tied to the issue of constitutionality. E–voting must be recognised by law as the primary source of truth, leaving the manual mechanisms as only secondary. This recognition must be tied to the Constitution. Hence, the Nigerian courts must constitutionally justify the powers of the INEC to deploy the BVAS and iREV under the Electoral Act. The courts must then correctly interpret the Electoral Act to determine whether the Act has a clear intention of making the BVAS the primary source of truth. Although the issue of trust remains pivotal to the development of e–voting in Nigeria, as seen in the Indian situation, trust is a product of years of successfully deploying the system in a fair and transparent manner. In the interim, Nigeria's reliance on its erstwhile paper trail system can be utilised as an alternative source of truth.

Drawing from Indian legal precedents, the credibility of election results largely depends on the data produced by these electronic voting systems. However, a discernible contention persists: while digital systems are at the forefront, manual and paper-based protocols conspicuously linger, often serving as the de facto reference for rectifying technological discrepancies. The Indian judiciary, echoing this sentiment, acknowledges the multifaceted vulnerabilities that plague traditional balloting, leading to a pronounced inclination towards digital alternatives. This raises an imperative query: What underpins the sustained reliance on paper

trails by both Nigerian and Indian jurisdictions, especially when auditing and validating outcomes derived from modern voting technologies? This introspection is not conducted in a vacuum, disregarding the challenges digital platforms face. Nevertheless, the strategic emphasis should arguably shift towards persistent refinement of these technologies, advocating their inherent advantages over archaic balloting methods. The envisioned trajectory should be a definitive transition from paper dependency towards a robust, technology-centric electoral framework that constantly evolves, adapting to challenges and potential threats.

Furthermore, Nigeria can gain valuable insight from India's experience in implementing EVMs in its electoral system: the gradual shift from a paper-ballot-centric approach to an almost entirely paperless voting method. India's tryst with EMVs started way back in the 1980s (ECI, 2017: 4), much before any democratic country in the world had even seriously considered introducing such technology in their voting processes. However, as has been highlighted extensively in the history of the introduction of EVMs in earlier sections of this paper, such an effort was fraught with bureaucratic limitations (Yogesh Gupta v. ECI, 2014), various committee formations, repeated overviews and testing of the EVMs by domain experts, extensive incorporation of judicial, executive and legislative suggestions in order to prepare a final robust system capable of regulating the deployment of EVMs into the voting field. (ECI, 2006; Ministry of Law and Justice, 1990: p 30). The key learning from this case study is that the implementation of an idea, such as transitioning to a paperless model of voting in a democratic setup, can hardly be possible in the exact manner envisaged. It takes years of deliberations and reviews, and countless queries need to be addressed to all stakeholders of a participative democracy before consensus can be reached regarding innovating in the electoral space.

Exploring further, the Governments of India and Nigeria might contemplate dedicating resources to research a tamper-proof voting model utilising blockchain technology. Advocates (Sahib and Al-Shamery, 2021) of this technology suggest that a blockchain-based decentralised voting system can enhance accountability

compared to traditional oversight bodies like the India's ECI and the Nigerian INEC. Despite their touted independence and impartiality, electoral bodies can manipulate votes in favour of political groups or parties. The blockchain's unalterable nature would ensure the integrity of each vote. However, integrating blockchain technology into high-stakes processes like democratic elections might be challenging. For one, while the idea of decentralised voting is appealing, its implementation would require approval from the political and constitutional bodies responsible for overseeing elections. Such entities might be reluctant to relinquish their established powers, posing a challenge to the blockchain's adoption for elections. Additionally, governments would need to invest in capacity building for successful blockchain-driven elections, and finally, the most prudent approach for integrating blockchain into the voting systems would be thorough research and pilot testing, which require significant investments.

A detailed plan to educate voters (Jafar et al, 2021: 18) about the model of such an election would have to be drawn up to prevent a decrease in voter participation. The introduction of blockchain to the electoral process would require an overhaul of the existing voting systems with a switch being made to a more advanced voting technology entailing the use of smartphones and facial recognition systems (Jafar et al, 2021: 18). Proper protocols would need to be formulated to firstly- I) Ensure that every individual forming a part of the electorate would be equipped with the required technology and apparatus for blockchain voting to be conducted, and ii) ensure Privacy and cybersecurity measures are addressed during the conduct of the elections (Jafar et al, 2021: 7).

Conclusion

India and Nigeria, in their respective democratic journeys, have exhibited commendable progress in leveraging technology to enhance the transparency, fairness, and accessibility of their electoral processes. A salient highlight of India's electoral evolution is the embrace of EVMs, further augmented by incorporating the VVPAT system — a move spurred by judicial directives. Simultaneously, Nigeria's electoral innovation is epitomised by the

introduction of the BVAS and iREV systems. While technological advancements offer promise, they invariably implicate a myriad of challenges. The trajectories of India's EVMs and Nigeria's BVAS and iREV systems underscore this reality. However, the overarching narrative is one of potential: the mutual sharing of experiences, technological research findings, and judicial decisions could catalyse exponential growth in electoral technologies for both nations.

We contend that India and Nigeria are poised to transition seamlessly from traditional paper-centric voting to a technology-anchored model. However, integrating technology into the electoral domain demands a resilient legal infrastructure. It is paramount that laws are transparent, definitive, and adaptable, ensuring the harmonious melding of technological innovations into electoral systems. By analysing each other's legal developments concerning electoral technology, India and Nigeria can gather invaluable insights, ensuring legislative robustness. Conclusively, as illuminated throughout this article, the prospects for both nations transcend a mere transition from traditional to technological voting mechanisms. It encapsulates a broader vision: the synergetic convergence of technology and law, which, when realised, stands to fortify the democratic tenets of transparency, inclusivity, and fairness, garnering the unwavering trust of their electorates.

The Governments of India and Nigeria should also consider earmarking specific funds for research and pilot testing of various election models incorporating blockchain technology. Although mainstream adoption in electoral processes appears distant, blockchain holds promise to address many challenges presented by the existing electoral systems in both countries. Collaborative research and knowledge sharing between the two nations could eventually pave the way for a secure and fool proof blockchain-driven voting system, harnessing technology's full potential while upholding the core values of democratic processes.

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