



## Implications of Independent National Electoral Commission Result Viewing Portal (IREV) on the 2023 Presidential Election in Nigeria

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### Abstract

The study investigates the INEC Result Viewing Portal and its impact on the 2023 Nigeria's presidential election. To investigate this, the study adopted a qualitative methodology using historical and analytical approach through secondary data sourced from books, journals, newspapers and other published and unpublished materials. The study also adopted institutional theory in explaining the implementation of IREV system by INEC which presents both opportunities and challenges that significantly impact the outcomes of the presidential election. The study examined the strategies used by INEC to boost electoral legitimacy, and policy steps or measures that can be used to guide against the manipulation of election results. The article found that the credibility and integrity of the 2023 presidential election were greatly enhanced by the deployment of the IREV portal and had a beneficial effect on voter confidence. The article recommends that INEC must first bolster cyber security and put in place strong cyber security measures in order to guard election technologies against possible attacks, create backup systems and procedures to guarantee data integrity and continuity and also update and improve technology systems often to stay up to date with new developments and risk

**Keywords:** Elections, IREV, INEC, Technology, Security

### INTRODUCTION

Information and Communication Technology (ICT) revolution has changed nearly all activities of the human being such as governance and how elections are conducted. ICT innovations are increasingly employed worldwide to enhance electoral integrity, improve transparency and rebuild the confidence of citizens in the democratic processes (Diamond, 2002; Norris, 2014). Electoral technologies like electronic voting, biometric verification and digital result-transmission systems, have been developed to reduce manipulation, logistical inefficiencies and transparency which is likely to mar the elections in emerging democracies. In this context, the INEC in Nigeria presented two significant innovations, namely the Bimodal Voter Accreditation System (BVAS) and the INEC Result Viewing Portal (IREV) as a part of the overall strategy of improving electoral credibility and entrenching democratic values.

Elections continue to be the basis of democracy and the key system of choice and control of leaders. However, in most African States, the entire electoral process remains marred with legitimate crises, elite manipulation, and poor institutions (Ham and Lindberg, 2015; Luqman, 2009). Political economy of poverty, clientelism and the culture of winner takes all syndrome has



created a culture of incumbency where leaders use state resources to stay in power (Freedom House, 2015). This means that there are usually numerous elections that happen on the continent including the Nigeria elections which do not indicate the true will of the people. Although democratisation may have had some waves, electoral reversals have been observed in countries like Burundi, Burkina Faso, Uganda and Zambia where constitutional violations and deteriorating electoral integrity have characterised them (Crisis Group, 2015).

Trying to consolidate the electoral credibility and restore the confidence of people, INEC declared a chain of reforms prior to the 2023 general elections. Election administration through the use of digital technologies was one of the reforms that made the biggest difference. INEC justified the heavy spending on these technologies by pointing out that the technologies would make elections more open and credible, and they would help to regain the confidence of the voters in the process. As stated by INEC (2022), the Commission had committed to holding free, fair and verifiable polls that would be supported by digital tools that would help in guaranteeing transparent accreditation and publication of polling-unit results in real time. The innovations were also foreseen to curb historical flaws of the Nigerian electoral system, such as falsification of the polling-unit returns, voter register manipulation, and result collation (Itodo, 2022).

The 2023 technological framework adopted by INEC was based on two main innovations that are complementary namely the Bimodal Voter Accreditation System (BVAS) and the INEC Result Viewing Portal (IREV). The BVAS is a hardware that checks and authenticates the voters using biometric and facial recognition. It also contains an inbuilt camera which allows the presiding officers to take and send scanned images of result sheets through polling units straight to the IREV. The IREV is an online portal, which enables the population to view current polling-unit results uploaded in real time, which enables cross-verification of official results between parties, observers and citizens. The portal is a groundbreaking move towards electoral transparency because it gives people the ability to track the transmission of results and identify any discrepancies at an early stage (Independent National Electoral Commission, 2023).

It is not only in Nigeria that such technologies have been adopted in the management of elections. In sub-Saharan Africa, Ghana and Kenya, among other nations have also implemented similar digital instruments to promote electoral transparency and curb fraudsters (Crawford, 2022). An example is Ghana, which registers and verifies its voter database by biometric technology, and Kenya, which releases the results of polling-stations electronically and in real-time. According to scholars, digitalisation can be used as a forensic tool to combat the cases of electoral irregularities such as voter impersonation and manipulation of results (Debrah, Effah, and Owusu-Mensah, 2018). Besides, technology has helped in elevating voter confidence and trust in democracies, and in certain instances, boost voter turnout (Achieng & Ruhode, 2013; Debrah et al., 2018).



Nonetheless, as much as digital technology has a huge potential in enhancing electoral integrity, there are emerging dangers. These are hacking threats, interference through cyber-attacks and failures in the system that may jeopardise the fact of the whole process. The Nigerian presidential election of 2023 was a bright example of what electoral digitisation could bring and what pitfalls to avoid. The technical glitches, delayed uploading of results, and poor internet connectivity destroyed the anticipated real-time transmission of the results on the IREV portal which resulted in a large number of people believing that the process was not truly being conducted (Premium Times, 2023; Channels Television, 2023). These issues highlight the interrelation of technology, institutional capacity, and political will. Although most developing nations are spending a fortune on electoral technologies, as Ban Ki-moon (2009) warned, most of them lack the structural and infrastructural bases to facilitate the successful operation of the technologies.

The case of Nigeria shows that even the most important technological reforms cannot ensure credible elections independently. Investment in institutional capacity, appropriate funding, and extensive voter education are the keys that will be necessary to make sure that an innovation like IREV is successful and will reach their goals. In terms of methodology, the article utilised qualitative and historical data sourced from secondary sources and data were analysed using thematic content analysis to discuss how the Result Viewing Portal of the Independent National Electoral Commission (IREV) affected the performance and reputation of the 2023 presidential election in Nigeria. It assesses the level to which IREV has contributed to the enhancement of transparency, preventing manipulation, and restoring the citizen faith in democratic institutions. In so doing, the paper will add on the body of literature regarding the potential of ICT to encourage democratic development in cases of governance crisis and weak institutional frameworks.

## Literature Review

### Technology

One of the most important forces in contemporary elections is technology. Technology can be understood as the set of tools, systems, processes, and knowledge that people develop and apply to solve problems, meet needs, and extend human capabilities in everyday life. It is not limited to machines or digital devices, but also encompasses skills, methods, and organisational systems that embody human creativity and culture. United Nations Educational, Scientific and Cultural Organisation (UNESCO) emphasises that technology is not culturally neutral but rather emerges from and is shaped by social values, environments, and traditions, highlighting the importance of *technodiversity*, or the recognition that different societies develop and use technology in unique ways (UNESCO, 2021). Thus, technology should be seen both as an instrument for practical problem-solving and as a meaningful human construct that influences identity, relationships, and ethical choices. Yet, the use of technology in learning is not without challenges, many of which are likely to be encountered by the faculty members. For Ellul (1964) people are thus faced with



technology that has its own course and is often used for purposes for which it was never intended, thereby creating hassles that could potentially compromise the electoral process. While technology has many benefits, it is crucial to remember that it is just a tool. The ideas of liberty, equality, and accountability remain the foundation of valid elections. Whether through traditional methods or technological innovations, the core values that define free and fair elections must be upheld to ensure that the will of the people is accurately represented.

### **Elections**

Elections will continue to be among the most important process in the contemporary human society as it is the process which allows citizens to convey their choice and make decisions regarding the governance collectively. It is an essential process that promotes accountability, representation and legitimacy in the democratic systems. Modern literature underscores the fact that the elections are not simply procedural processes; they are also a tool that governs the quality of governance, shapes political behavior, and defines how people trust the institutions (Duggan and Martinelli, 2020; Sadat and Basir, 2025).

Elections become a vital element in the idea of popular sovereignty in the theory of democracy, which is the notion that political authority is derived by the people and should be used on their behalf in a legitimate way. According to Sari (2025) elections give people a participatory platform by which they can affect the direction of policies, punish poor performing leaders and strengthen the spirit of civic responsibility. However, elections in established democracies and emerging ones still encounter many issues, such as voter apathy, misinformation, clientelism, and the elite seizing the political process (Givi et al., 2023; Chatterjee and Dutta, 2024).

Recent reviews emphasise that electoral integrity is not focused solely on the presence of a periodical voting but rather on its fairness, competitiveness, and openness (Lodato et al., 2024). In the event that such principles are undermined, the problem of elections being turned into rituals that attribute procedural legitimacy but not substantive accountability arises. This problem is especially acute in the developing democracies, where structural inequalities, inefficient institutions, and technological weaknesses tend to manipulate the results of elections. According to Duggan and Martinelli (2020), the accountability of elections is directly related to the receptiveness of political participants and the effectiveness of institutional checks, which promotes the electoral process.

Finally, elections are what represent the outpouring of the political will of people and the practical display of democracy. They reiterate that the people are the ones who are sovereign and that by holding periodical, credible and inclusive contests, the people may know who should govern them and the leaders should be answerable to their people. Nonetheless, according to the recent global and African experience, to get such ideals, it is necessary to continuously innovate, engage in civil society, and strengthen institutions to make elections actually the means of democratic consolidation (Sadat & Basir, 2025; Sari, 2025).



### **Theoretical Review**

This article relied on the institutional theory to provide explanation on the subject matter. According to DiMaggio and Powell's (1983) organisations are shaped by the institutional frameworks in which they operate (Scott, 2001). This theory states that corporations adopt practices, structures, and behaviors that align with the institutional norms and values that are currently in place (DiMaggio & Powell, 1983). Organisational behavior and decision-making processes are shaped by these institutional influences (Meyer & Rowan, 1977). Furthermore, according to institutional theory, organisations could look to institutional norms for legitimacy (Suchman, 1995).

Primarily, institutional theory aims to clarify the development of regulations and standards that organisations must follow in order to be supported and given legitimacy (Scott & Meyer, 1983). This attitude is strong now, maybe because every sector, industry, and nation-state in the world is engulfed in regulations and standards. Nonetheless, institutional theory has a place in organisational communication. Ultimately, individual communicative behavior in groups and organisations. i.e., “language and social interaction that promote coordinated action toward a common goal” is a common subject of organisational communication (Eisenberg, 2009). Therefore, it would seem reasonable to consider the greater institutional landscape to be outside the scope of organisational communication. The main focus of institutional theory is on how formal and informal norms, as well as institutions themselves, influence society outcomes and individual behavior (North, 1990).

Institutions are social constructs that continue to live through time and space and in many cases, institutions outlive the organisation and practice seen in any single period. Selznick (1949) believes that institutional meaning is created around institutions and functions beyond their direct functional purposes and develops an interest in its dependent meaning and in influencing others. Scott (2001) adds further that, institutions contain various dimensions of social reality such as cultural-cognitive, normative, and regulative aspects. Greenwood et al. (2008) further assume that institutions attain certain degree of sophistication by reflecting on the basically accepted recurrent social behaviors that are supported by normative structures and cognitive realisations. These, in their turn, give social interaction a context and make it possible to reproduce social order.

In a historical approach, Commons (1934) defines institutions as the representatives of working rules, which govern behavior in the direction of certain goals. In short, institutions can be interpreted as institutionalised forms of practices and communication that pass beyond the walls of individual organisations. According to Weber (1968), the two leading institutions of the 19th century were the state and the church, and the later centuries of the 20th century saw the institutionalisation of other forms of social structures (family, markets, political systems, including representative democracy). The idea that a single government organisation or agency



can become institutionalised in its own right was popularised in the 20th century (Selznick 1949, 1957).

The Institutional theory focuses on how institutions including formal rules and informal norms, influence individual behaviour and societal outcomes. It emphasises the enduring nature of social phenomena and the organisational structures that govern them. From an institutional perspective, the IREV portal represents an elaboration of rules and requirements for electoral legitimacy. It institutionalises transparency by providing access to electoral results, thereby shaping societal expectations of electoral processes. Moreover, the portal establishment reflects the endurance and social significance of institutional mechanism in organising democratic practices, aligning with the idea of institutions as enduring social phenomena.

### **The Use of Irev in the 2023 Nigerian Presidential Election**

The unveiling of the Independent National Electoral Commission (INEC) Result Viewing Portal (IREV) was one progressive move in the electoral management practices in Nigeria, aimed at bringing transparency, popular trust, and credibility to the election results. The IREV portal was developed as part of the wider digital reform agenda of the commission, which enabled the real-time display of polling-unit results, making transparency in the electoral process a permanent institutionalised aspect (Yakubu, 2022). This was further reinforced by the passage of the Electoral Act 2022 which made electronic transmission of results and an electronic register legally mandatory, enhancing the institutional significance of IREV in enhancing electoral credibility and accountability (Anjide, 2025). Mixed outcomes were observed in the North Central zone which comprised the Federal Capital Territory, Benue, Kogi, Niger, and Plateau States. Presidential election result uploads were sometimes delayed or partial, whereas civil-society groups and party representatives were able to use alternative sources of data to fill in, like scanned result sheets and social dashboards (Dubawa, 2024). These joint verification pursuits showed more involvement of citizens and institutional flexibility. The process promoted civic engagement and the development of local capacity to monitor elections.

In the North East, transparency was hindered by security problems and lack of presence of observers. However, the IREV framework developed an independent verification reference model, which allowed further electoral processes in conflict-prone regions to be more facilitated by hybrid data-gathering and resilient upload systems (Democracy in Africa, 2024). The experience in the region has highlighted the necessity of customised infrastructure and local contingency planning, which enhances the institutional learning of INEC.

Nigeria is a country with the North West being the most populous, and there is an indication of both development and disparity due to access to the Internet. There were high quality uploads and strong verification rates of urban polling units, and it is possible to affirm that IREV can empower voters with the power of real-time visibility (BudgIT, 2023). The experience



demonstrated that the areas where infrastructure and training were given priority, the level of transparency was developed dramatically, indicating the advantages of the focused resources allocation.

Civic activism and technological literacy were the means of successful public monitoring in South East. The creation of separate dashboards by civil-society organisations was a supplement to IREV data, which enhanced the process of verification and added valuable evidence to the electoral petitions (TechCabal, 2023). These inventions were examples of how digital transparency can be generated by the civil society and the electoral bodies through which accountability and democratic maturity could be improved.

The region of South-South that comprises the leading oil-producing states proved that transparency can be achieved through the demand of the population hastening the responsiveness of institutions. Although upload of presidential results with the IREV was slower than that of legislative election, a technical audit by INEC later revealed that the differences were procedural and not systematic (Channels Television, 2024). The episode triggered a fresh wave of societal discussion of the reliability of technologies, which strengthened the need to invest in cybersecurity and automatise processes, which can bring about positive result in the election in the future.

The South West provided the best testimony to the potential of IREV. Efficiently, almost all the polling unit results were uploaded on the day of the elections, and the citizens were able to cross-verify the results almost instantly in states as Ekiti (Dubawa, 2024). Digital election management systems have the potential to transform the electoral process due to the transparency and accessibility that were demonstrated in the region when well deployed and backed by skilled and trained persons.

### **Implications of IREV on the 2023 Presidential Election in Nigeria.**

Election procedures must be genuine and equitable in order to produce a functioning democracy. The Independent National Electoral Commission (INEC) has faced numerous obstacles in its efforts to ensure free, fair, and credible elections in Nigeria. Over time, voter fraud, electoral malpractice, and result manipulation have undermined public trust in the electoral system.

INEC has taken a number of actions to improve election integrity and transparency in order to address these problems. Technological innovations like the INEC Result Viewing Portal (IREV) and Smart Card Readers (SCR) have been essential to the execution of these processes. It has been suggested that the use of SCRs has considerably decreased election fraud, including multiple voting, as one of the effects of IREV in Nigeria's 2023 national elections. This has changed since the INEC Result Viewing Portal (IREV) was introduced, allowing for real-time election results monitoring. Since it would make data accessible to everyone and guard against result manipulation, this portal could encourage transparency (Kiia, 2023).



When the electoral process is transparent, election observers, political parties, and voters can all verify that every procedure is adhered to within the laws and regulations that govern elections. When the electorate can access election-related information freely, the actions of the electoral actors such as INEC and political parties, and the capacity to independently verify that the outcome is a true reflection of the people, it makes the people trust the process. Due to the real-time nature of IREV, stakeholders could follow the progress of the results and ensure the collation process was transparent and verifiable. IREV increased the legitimacy of the electoral process. IREV also assisted in reducing election related conflicts. There were rumors of manipulation of the outcome before its implementation, and the impartiality of IREV helped to neutralize these concerns. In states like Kaduna and Kano, where election disputes have historically been common, enhanced monitoring via the INEC Result Viewing Portal (IREV) has been reported to improve transparency in result uploads (e.g., Kaduna exceeded 95% upload rate in recent by-elections), thereby helping reduce ambiguity (Premium Times Nigeria, 2025). More trust needs to be built in order to guarantee that the electoral system is valid and can be utilised to affect voter turnout in subsequent elections. The rise in voter turnout is typically linked to increased trust in the political process. Voters are more inclined to cast ballots in elections when they have faith that they will be held in an accurate and transparent manner (Kiia, 2023).

In order to prevent mishaps, INEC should also put in place top-notch cyber security measures to guard the IREV against hacking and illegal access and these should include advanced encryption, frequent security audits, and real-time threat detection and response (Akinbade, 2023). Strong cyber security is necessary to maintain the integrity of the IREV system and guarantee the safety of the data. Audit the IREV system on a regular basis to make sure it is dependable. The major positive trends were observed across the six geopolitical zones. First, the establishment of IREV raised awareness of transparency to a large extent and forced the stakeholders, such as political parties, the media, and civil society, to take part in the digital verification practice (INEC Nigeria, 2023). Second, the information asymmetry became lower in those regions which were technologically literate and media-active, as citizens used digital tools to augment electoral reporting (Dubawa, 2024). Third, in cases of technical malfunctions, the overall institutional learning grew, and the post-election assessment provided by INEC suggested improving cybersecurity, uniform uploads, and improved communication practices (Yakubu, 2022).

In terms of governance, IREV was an embodiment of institutional modernisation and greater democratisation. The implementation of the portal also made people trust in the electoral system, even in the case of transitional struggles. It further highlighted the significance of policy coherence, cybersecurity infrastructure and digital literacy to consolidate democracy in Nigeria. As could be seen in this paper, the wider impact of IREV was not its direct operational performance; instead, it led to a culture of transparency, accountability and civic engagement in the elections in Nigeria (Cinjel & Doosuur, 2024).



### **Measures to Guard Against Manipulation of the IREV System**

As the election technologies evolve rather fast, the threat of the cyber-attacks and manipulations of electronically stored information (ESI) has grown significantly. Therefore, the Independent National Electoral Commission (INEC) should enhance its cyber security architecture to ensure that the INEC Result Viewing (IReV) portal is not hacked, with its data breached, or accessed by unauthorized parties. This, as Akinbade (2023) says, should be through the implementation of superior encryption systems, frequent system audits, and live security controls to identify and counter possible threats in the quickest possible time. Strong cybersecurity is required to provide data integrity and the IReV system reliability.

The necessity to constantly audit and monitor the IREV infrastructure is also important. Regular system reviews are supposed to be made institutional to detect anomalies or red flags at the time of elections. These audits can play a preventive role as well as an extra accountability measure so that the system can work as expected and no uploaded results can be changed (Akinbade, 2023).

Moreover, INEC ought to come up with an elaborate legal framework within which any bid to breach or manipulate the IREV portal is defined and criminalised. Such laws, as noted by Ojo (2022), should define what legal repercussions may happen in case of interference with digital electoral systems, and those responsible should be harshly punished as an individual or organisation. The protection framework that is clearly defined serves as a deterrent as it strengthens the severity of cyber violations and proves that the state is concerned about protecting electoral integrity.

Besides protection by law, another vital one is capacity building and training. According to Nwangwu (2023), the election officials and the citizens should be properly trained to use the IREV system and other fundamental principles of cybersecurity. The training programs should address on how to post results properly, identify anomalies and report any discrepancy via the right channels. Voter awareness of the importance of IREV platform can also be sensitised through public sensitisation campaigns in order to have civic participation in guarding electoral process.

INEC needs to come up with elaborate contingency and redundancy plans to also enhance resiliency. These are ensuring the existence of offline data backup, having more than one storage server, and having fallback infrastructure that will keep the IREV platform running in case of a cyberattack or a technical failure (Akinbade, 2023). Redundancy systems are essential in maintaining the continuity and credibility of the election data, hence avoiding the possibility of manipulation and reducing downtimes during the operations of the election process.

Lastly, and, hopefully, not the least, in case of any suspected breach, INEC will have to be ready to provide a forensic investigation of the extent and origin of attack. According to Sibe (2021), post-incident forensic analysis, besides assisting in regaining the trust, is also part of future



preventive measures, as it reveals the vulnerabilities of the systems and ensures the institutions are ready in the event of an incident. Essentially, the IREV system security needs a multi-dimensional mechanism that entails the incorporation of technology fortification, legal implementation, human capacity building, and the active contingency planning mechanisms. By doing so, INEC is able to increase the resilience of the electoral technology infrastructure in Nigeria and to encourage people to develop more trust in the democratic processes.

### **Conclusion and Recommendations**

The study finds that Independent National Electoral Commission (INEC) Result Viewing Portal (IREV) is a major institutional innovation in the Nigerian democratic and electoral environment. The portal brought transparency, accountability, and inclusiveness in the electoral process since it offered real-time access to the polling-unit results. IREV became a significant tool during the 2023 presidential election to enhance the public trust and electoral credibility and made citizens believe in the strength of the votes they cast and the willingness of INEC to reform.

Despite the fact that the system had its troubles like slow uploads and poor performance across the regions, the net effect was revolutionary. IREV also increased the transparency of the election results, but also minimised chances of manipulating the results at collation centers, which had been a bane in the electoral history of Nigeria. Its implementation has shown how a digital innovation can improve the governance, boost the civic participation, and promote the institutional legitimacy.

In addition, the adoption of IREV demonstrated the increasing ability of Nigeria to make its elections meet the global standards of transparency and technological sophistication. Its partial failures and successes have been lessons that it can use to keep on improving and innovating policies. The research thus concludes that in case the IREV system is optimised to maximum level and accompanied by proper legal, technical and operational support systems, this system can transform the electoral integrity and stabilize democracy in Nigeria.

Based on the results and discussion, the research recommends the following important recommendations on how to improve the functionality, security and sustainability of IREV system in future elections:

1. To prevent hacking and access control, INEC is advised to invest in the latest encryption, firewall defense, and real-time surveillance systems. An active cybersecurity infrastructure will guarantee data confidentiality and integrity of elections.
2. It should be audited and have integrity checks before, during and after elections in order to identify anomalies and to make sure that data is accurate and has not been altered. Accountability can be enhanced by introducing independent technical observers.



3. The National Assembly ought to revise the current laws in electoral and cybersecurity and criminalise any effort to tamper with or to interfere with electronic election system. People or other groups who are found to have violated the system should face severe legal penalties
4. INEC needs to hold regular training sessions in order to train eligible election officers, ICT workers, and ad-hoc workers on appropriate use of IREV, cybersecurity and best practices, and data protection processes, Citizens should also be educated through public awareness campaigns on the ways to check results and report any discrepancy
5. The commission should also come up with detailed contingency measures, such as offline data backups and mirrored servers, to make the system continuity in case of system failures or computer attacks. This redundancy will ensure that the result data is not lost when there are technical disruptions
6. Should there be any form of suspected system breach, INEC is supposed to conduct a full-scale forensic investigation to determine vulnerability and take corrective measures. This will enhance institutional learning and popular faith
7. The INEC ought to collaborate with the civil society groups, research institutions, and the technology experts to further improve transparency and independent verification. These collaborations may be used to create more effective monitoring devices and expand the digital literacy of voters.
8. INEC should maintain open communication with the people during elections to avoid misinformation, a process that should update the people on the performance of the system in time, upload the progress, and any technical problems being faced.

## References

- Achieng, S., & Ruhode, E. (2013). The adoption and challenges of electronic voting technologies within the South African context. *International Journal of Managing Information Technology*, 5(4), 1–12.
- Anjide, S. T. (2025). The Electoral Act 2022, the 2023 polls, and the judiciary's verdict. *Kogi Journal of Politics and International Relations*, 8(1), 45–63.
- Ban Ki-moon. (2009). *Democracy and the role of technology*. United Nations Press.
- BudgIT. (2023). *Nigeria Decides 2023: What went wrong in the presidential election?* BudgIT Foundation Report.
- Channels Television. (2023, February 23). *Why 2023 presidential election results failed to upload on IReV INEC*. <https://www.channelstv.com>
- Channels Television. (2024). *Analysis: INEC's IReV portal and public trust after the 2023 elections*. <https://www.channelstv.com>
- Chatterjee, J., & Dutta, G. (2024). A systematic literature review to understand the difference between critical factors affecting the national election and state elections in India. *Frontiers in Political Science*, 6, 1323186. <https://doi.org/10.3389/fpos.2024.1323186>



- Cinjel, N. D., & Doosuur, A. (2024). Does the use of IReV guarantee an acceptable election's outcome? Evidence from Nigeria's 2023 presidential election. *International Journal of Scientific Research in Humanities, Legal Studies & International Relations*, 8(1), 89–102.
- Crawford, G. (2022). Technology and the quality of elections in sub-Saharan Africa. *Electoral Studies Review*, 45(2), 1–10.
- Crisis Group. (2015). *Elections and stability in Africa (Africa Report No. 223)*. International Crisis Group.
- Debrah, E., Effah, J., & Owusu-Mensah, I. (2018). The impact of biometric technology on electoral fraud prevention in Ghana. *African Journal of Political Science and International Relations*, 12(3), 45–57.
- Democracy in Africa. (2024, March 10). *Why did digital technology fail in Nigeria's 2023 elections?* <https://democracyinafrica.org>
- Diamond, L. (2002). Elections without democracy: Thinking about hybrid regimes. *Journal of Democracy*, 13(2), 21–35. <https://doi.org/10.1353/jod.2002.0025>
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organisational fields. *American Sociological Review*, 48(2), 147–160.
- Dubawa. (2024). *Civic tech and election transparency in Nigeria's 2023 elections*. <https://dubawa.org>
- Duggan, J., & Martinelli, C. (2020). Electoral accountability and responsive democracy. *The Economic Journal*, 130(627), 675–715. <https://doi.org/10.1093/ej/uez070>
- Eisenberg, E. M. (2009). Organizational communication. In S. W. Littlejohn & K. A. Foss (Eds.), *Encyclopedia of communication theory* (pp. 726–730). SAGE.
- Ellul, J. (1964). *The technological society*. Vintage Books
- Freedom House. (2015). *Freedom in the world 2015: Discarding democracy – Return to the iron fist*. <https://freedomhouse.org>
- Givi, G. M., Delabays, R., Jacquemet, M., & Jacquod, P. (2023). *On the robustness of democratic electoral processes to computational propaganda*. arXiv preprint arXiv:2308.11569. <https://arxiv.org/abs/2308.11569>
- Ham, C., & Lindberg, S. I. (2015). *The quality of elections in Africa: Dimensions, problems, and opportunities*. *Electoral Studies*, 37, 1–11. <https://doi.org/10.1016/j.electstud.2015.01.002>
- Independent National Electoral Commission. (2022). *Statement on the use of technology for the 2023 general elections*. INEC Nigeria.
- Independent National Electoral Commission. (2023). *Report of the 2023 general elections*. Abuja: INEC Publications.
- Itodo, S. (2022). *Understanding Nigeria's electoral technology reforms: BVAS and IReV explained*. Yiaga Africa Policy Brief.
- Kiia, S. (2023). *The impact of INEC Result Viewing Portal on electoral transparency in Nigeria*. *Journal of Electoral Studies*, 32(1), 45–67.



- Lodato, S., Mavridis, C., & Vaccari, F. (2024). *The unelected hand? Bureaucratic influence and electoral accountability*. *arXiv preprint arXiv:2402.17526*.  
<https://arxiv.org/abs/2402.17526>
- Luqman, S. (2009). *Electoral reforms and democratic consolidation in Nigeria*. *African Journal of Political Science and International Relations*, 3(2), 56–65.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340–363.  
<https://doi.org/10.1086/226550>
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.
- Norris, P. (2014). *Why electoral integrity matters*. Cambridge University Press.
- Ojo, E. O. (2022). Legal safeguards for electronic voting and result transmission in Nigeria's electoral process. *Nigerian Journal of Electoral Law and Policy*, 7(3), 76–93.
- Premium Times Nigeria. (2025, February 4). *By-election: IReV performed well in Oyo, Jigawa, worse in Enugu, Kano – Report*. <https://www.premiumtimesng.com>
- Sadat, A., & Basir, M. A. (2025). *Clientelism, coalitions, and concessions: Pragmatism in local elections and its democratic costs*. *Frontiers in Political Science*, 7, Article 1664786.  
<https://doi.org/10.3389/fpos.2025.1664786>
- Sari, A. R. (2025). Government strategies in increasing public participation in general elections. *International Journal of Social and Education*, 2(5), 1407–1511.
- Scott, W. R. (2001). *Institutions and organisations* (2nd ed.). SAGE Publications.
- Selznick, P. (1949). *TVA and the grass roots: A study in the sociology of formal organization*. University of California Press.
- Sibe, R. (2021). *Cybersecurity and the protection of democratic institutions in Nigeria*. Port Harcourt: Rivers State University Press.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20 (3), 571–610.
- TechCabal. (2023). *How civic tech shaped Nigeria's 2023 elections*. <https://techcabal.com>
- UNESCO. (2021, November 4). *Rethinking technodiversity*.  
<https://www.unesco.org/en/articles/rethinking-technodiversity>
- Weber, M. (1968). *Economy and society: An outline of interpretive sociology* (G. Roth & C. Wittich, Eds.; Vols. 1–2). Bedminster Press.
- Yakubu, M. (2022). Improvements in election result management in Nigeria: The role of law, administration, and technology. Independent National Electoral Commission.