

MANAGING DIGITAL AND TECHNICAL EVIDENCE IN ELECTORAL DISPUTE RESOLUTION

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ABSTRACT

The rapid integration of Artificial Intelligence (AI) and digital communication technologies into electoral processes has fundamentally transformed the landscape of electoral governance in Africa. This paper examines the implications of these developments for transparency, public confidence, and the management of electoral disputes. It argues that electoral dispute governance can no longer be confined to formal legal processes but must be understood as a continuum shaped by pre-litigation dynamics within the digital public sphere. Platforms such as Facebook, X, Instagram, Tik Tok, and WhatsApp have emerged as critical arenas where electoral outcomes are debated, contested, and legitimised in real time, often preceding formal adjudication. On the one hand, AI offers significant opportunities to enhance electoral transparency through data analytics, auditability, and improved information management systems. On the other hand, it poses serious risks through algorithmic amplification of misinformation, computational propaganda, and the proliferation of synthetic media, all of which can undermine trust in electoral institutions and judicial outcomes. The paper conceptualises “pre-litigation contestation,” highlighting how digital narratives shape the trajectory and legitimacy of electoral disputes. It further examines the role of civic actors in mitigating these risks and proposes a set of policy and institutional reforms aimed at strengthening governance frameworks for AI in elections. It recommends that the effective regulation of AI, grounded in transparency, accountability, and multi-stakeholder collaboration, is essential for sustaining democratic legitimacy in Africa’s evolving digital electoral landscape.

Keywords: *Artificial Intelligence; Algorithmic Amplification; Civic Actors; Electoral Integrity; Misinformation*

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1. Introduction

The integrity of electoral processes in Africa has increasingly become intertwined with the dynamics of digital technology. In recent years, the deployment of electronic voting systems, biometric voter registration, and digital result transmission platforms has transformed the administration of elections across the continent. While these innovations hold significant promise for enhancing efficiency and transparency, they have also introduced new complexities into the governance of electoral disputes. At the centre of this transformation lies Artificial Intelligence (AI), which is rapidly reshaping how electoral information is generated, disseminated, and contested.¹ Traditionally, electoral dispute resolution was largely confined to formal institutional arenas (electoral commissions, tribunals, and courts of law). However, the emergence of digital communication ecosystems has fundamentally altered this landscape. Platforms such as Facebook, X, Instagram, and WhatsApp now function as parallel arenas where electoral outcomes are debated, legitimised, or delegitimised in real time.² In this context, electoral disputes no longer begin with the filing of petitions; they often originate in the digital public sphere, where narratives are shaped, amplified, and contested long before they reach formal adjudicatory bodies.

Artificial Intelligence plays a dual and paradoxical role within this evolving ecosystem. On the one hand, AI-driven tools offer opportunities to strengthen electoral transparency through real-time data analysis, anomaly detection, and improved information management systems. These capabilities can enhance the credibility of electoral processes and support more efficient dispute resolution mechanisms.³ On the other hand, the same technologies underpinning AI, particularly algorithmic content curation and automated amplification, can exacerbate the spread of misinformation and disinformation. In highly contested electoral environments, such dynamics can intensify public distrust, polarise political discourse, and undermine confidence in both

¹ S Wachter, B Mittelstadt and L Floridi, 'Why a Right to Explanation of Automated Decision-Making Does Not Exist in the General Data Protection Regulation' [2017] 7 (2) *International Data Privacy Law* 76; M Veale and F Zuiderveen Borgesius, 'Demystifying the Draft EU Artificial Intelligence Act' [2021] 22 (4) *Computer Law Review International*, 97.

² N Cheeseman, G Lynch and J Willis, *The Moral Economy of Elections in Africa: Democracy, Voting and Virtue* (Cambridge University Press 2021); T Nyabola, *Digital Democracy, Analogue Politics: How the Internet Era is Transforming Politics in Kenya* (Zed Books 2018).

³ International Institute for Democracy and Electoral Assistance, *Elections and Technology: The Impact of Digital Tools on Electoral Integrity* (International IDEA 2021); S Ebbe, 'Electronic Voting and the Challenges of Electoral Integrity in Nigeria' [2022] 6 (1) *Nigerian Journal of Electoral Law* 45.

electoral institutions and judicial outcomes.⁴ The implications of these developments are particularly profound in African democracies, where electoral legitimacy is often fragile and public trust in institutions remains uneven. The rapid diffusion of digital technologies has outpaced the development of corresponding regulatory, institutional, and ethical frameworks for their governance. As a result, electoral dispute governance is increasingly influenced by forces that operate outside traditional legal and institutional controls, raising critical questions about transparency, accountability, and the resilience of democratic systems.⁵

Against this backdrop, this paper examines the intersection of AI, transparency, and public confidence in electoral dispute governance in Africa. It interrogates the risks associated with the algorithmic amplification of electoral contestation and misinformation and explores the evolving role of civic actors in fostering transparent and trustworthy digital dispute ecosystems. The paper contends that while AI has the potential to enhance electoral integrity, its unregulated or poorly governed use may deepen existing challenges of mistrust and contestation unless deliberate efforts are made to align technological innovation with principles of transparency, accountability, and participatory governance.

2. Artificial Intelligence and Electoral Transparency

The integration of AI into electoral processes presents significant opportunities for enhancing transparency, accountability, and efficiency in electoral governance across Africa. While much of the current discourse is dominated by concerns about misinformation and digital manipulation, it is equally important to recognise that AI, if properly designed, regulated, and deployed, can serve as a critical enabler of electoral integrity. The challenge, therefore, is not the technology itself, but the governance frameworks within which it operates. At its core, electoral transparency requires that the processes through which votes are cast, counted, transmitted, and adjudicated are verifiable, auditable, and publicly intelligible.⁶ In many African jurisdictions, historical

⁴ W L Bennett and S Livingston, 'The Disinformation Order: Disruptive Communication and the Decline of Democratic Institutions' [2018] 33 (2) *European Journal of Communication* 122; C Ireton and J Posetti (eds), *Journalism, "Fake News" and Disinformation: Handbook for Journalism Education and Training* (UNESCO 2018).

⁵ African Union, *African Union Convention on Cyber Security and Personal Data Protection (Malabo Convention)* (2014); Economic Community of West African States, *Supplementary Protocol on Democracy and Good Governance* (2001); Centre for Democracy and Development, *Fake News, Hate Speech and Nigeria's 2019 General Elections* (CDD 2019).

⁶ P Norris, *Why Electoral Integrity Matters* (Cambridge University Press 2014) 21-25.

challenges such as opaque result collation processes, delays in result transmission, and limited access to electoral data have contributed to public distrust and recurrent electoral disputes.⁷ AI-driven systems offer the potential to address these deficits by introducing new layers of data-driven verification and real-time oversight.

One of the most significant contributions of AI lies in its capacity for real-time data analysis and anomaly detection. Machine learning algorithms can be deployed to monitor voting patterns, turnout rates, and result transmission flows to identify irregularities that may indicate fraud, suppression, or administrative error.⁸ For instance, statistical models can flag improbable turnout spikes or inconsistencies between polling unit results and aggregated totals, thereby enabling electoral management bodies (EMBs) to respond promptly and transparently. In this sense, AI can function as an *early warning system*, reducing the likelihood that disputes escalate into protracted legal or political crises. Closely related to this is the role of AI in enhancing the auditability of electoral processes. Traditional electoral systems often rely on manual verification mechanisms that are time-consuming and susceptible to human error or manipulation. By contrast, AI-enabled systems can generate detailed audit trails, tracking every stage of the electoral process, from voter accreditation to final result declaration.⁹ Such auditability is particularly important in the context of electoral dispute resolution, where the availability of reliable and verifiable data can significantly influence judicial outcomes. In jurisdictions like Nigeria and Kenya, courts have increasingly relied on documentary and digital evidence in adjudicating election petitions, underscoring the need for robust and trustworthy data systems.¹⁰

Apart from process integrity, AI also has the potential to enhance institutional transparency through improved information management and public communication. Electoral commissions can deploy AI tools to organise, analyse, and disseminate electoral data in user-friendly formats, thereby improving public access to information. Open data portals, interactive dashboards, and

⁷ N Cheeseman and B Klaas, *How to Rig an Election* (Yale University Press 2018) 3-15; J Aiyede, 'Electoral Reforms in Nigeria: Challenges and Prospects' [2015] 9 (1) *Journal of African Elections* 1.

⁸ M A Alvarez, T E Hall and S D Hyde, *Election Fraud: Detecting and Deterring Electoral Manipulation* (Brookings Institution Press 2008) 45-60; S Birch, *Electoral Malpractice* (Oxford University Press 2011).

⁹ International Institute for Democracy and Electoral Assistance, *Introducing Electronic Voting: Essential Considerations* (International IDEA 2011); A Gelb and J Clark, *Identification for Development: The Biometrics Revolution* (Center for Global Development 2013).

¹⁰ *Raila Odinga v Independent Electoral and Boundaries Commission* Petition No 1 of 2017 (Supreme Court of Kenya); *Aminu Tambuwal v Independent National Electoral Commission* (2015) 18 NWLR (Pt 1491) 251.

automated reporting systems can demystify electoral processes and reduce the information asymmetry that often fuels suspicion and contestation.¹¹ In this regard, transparency is not merely about making data available, but about ensuring that such data is accessible, comprehensible, and verifiable by stakeholders, including political parties, civil society organisations, and the general electorate. Another important dimension is the application of AI in electoral dispute resolution and judicial processes. AI-assisted legal research tools can support judges and tribunal members in analysing large volumes of electoral petitions, identifying relevant precedents, and ensuring consistency in decision-making.¹² In complex electoral disputes, often characterised by extensive documentary evidence, witness testimonies, and technical data, AI can enhance the efficiency and quality of adjudication. However, this must be approached with caution to avoid over-reliance on automated systems in contexts that require nuanced legal reasoning and appreciation of local realities.

Notwithstanding these opportunities, the deployment of AI in electoral governance raises critical questions regarding transparency, explainability, and accountability. AI systems, particularly those based on complex machine learning models, often operate as “black boxes,” making it difficult for stakeholders to understand how decisions are reached.¹³ In the electoral context, this opacity can undermine rather than enhance trust, especially where electoral outcomes are contested. It is therefore imperative that AI systems used in elections adhere to the principle of explainable AI (XAI), ensuring that their operations can be understood and scrutinised by both experts and laypersons.¹⁴ Furthermore, the effectiveness of AI in promoting electoral transparency is contingent on the institutional capacity and regulatory environment within which it is deployed. Many African EMBs face resource constraints, limited technical expertise, and weak regulatory frameworks governing digital technologies.¹⁵ Without adequate safeguards, the introduction of AI may inadvertently create new vulnerabilities, including data breaches, system manipulation, and unequal access to electoral information. Consequently, the adoption of AI

¹¹ H Scholl and M Janssen, ‘Open Data, Open Government, and E-Government: A Literature Review’ [2014] 32 (4) *Government Information Quarterly* 343.

¹² R Susskind, *Online Courts and the Future of Justice* (Oxford University Press 2019) 61-85.

¹³ F Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information* (Harvard University Press 2015) 4

¹⁴ D Castelvetti, ‘Can We Open the Black Box of AI?’ [2016] 538 *Nature* 20; B Mittelstadt and others, ‘The Ethics of Algorithms: Mapping the Debate’ [2016] 3 (2) *Big Data & Society*.

¹⁵ United Nations Economic Commission for Africa, *Governing Artificial Intelligence in Africa: Policy and Capacity Needs* (UNECA 2021); African Union, *Continental Artificial Intelligence Strategy* (2024).

must be accompanied by investments in capacity building, legal reforms, and multi-stakeholder oversight mechanisms.

Obviously, AI holds considerable promise as a tool for enhancing electoral transparency and strengthening public confidence in electoral governance. Its capacity for real-time analysis, auditability, and improved information dissemination can address longstanding challenges that have undermined electoral credibility in many African states. However, these benefits are neither automatic nor guaranteed. They depend fundamentally on the existence of robust governance frameworks that prioritise transparency, accountability, and inclusivity. Absent such frameworks, the very technologies designed to enhance trust may instead deepen suspicion and contestation.

3. Risks of Algorithmic Amplification and Electoral Misinformation

While AI offers important opportunities for enhancing electoral transparency, it simultaneously introduces profound risks that may undermine public confidence and destabilise electoral dispute governance. Chief among these risks is the phenomenon of algorithmic amplification, through which digital platforms prioritise and disseminate content based on engagement metrics rather than veracity or public interest. In the context of elections, this dynamic can significantly distort the information environment, shaping perceptions of legitimacy and influencing the trajectory of electoral disputes even before they enter formal adjudicatory processes. At the heart of algorithmic amplification is the logic of attention optimisation. Social media platforms deploy AI-driven recommender systems designed to maximise user engagement by promoting content that is likely to provoke strong emotional reactions.¹⁶ In politically charged environments, this often results in the prioritisation of sensational, polarising, or misleading content, including unverified claims of electoral fraud, manipulated results, or institutional bias.¹⁷ The consequence is the rapid diffusion of narratives that may lack factual foundation but nonetheless acquire widespread acceptance through repeated exposure. This dynamic is particularly problematic in African electoral contexts, where structural factors such as low levels of media literacy, limited access to verified information, and pre-existing distrust in state institutions create fertile ground

¹⁶ T Gillespie, *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media* (Yale University Press 2018).

¹⁷ Z Tufekci, 'YouTube, the Great Radicalizer' *The New York Times* (10 March 2018); S Vaidhyanathan, *Antisocial Media: How Facebook Disconnects Us and Undermines Democracy* (Oxford University Press 2018).

for the spread of misinformation.¹⁸ Existing studies demonstrate that false information tends to spread more rapidly and widely than accurate information, especially when it aligns with existing political biases or grievances.¹⁹ In such environments, algorithmic amplification does not merely reflect public sentiment; it actively shapes and intensifies it, often in ways that are detrimental to democratic stability.

The rise of computational propaganda further exacerbates these risks. Political actors and interest groups increasingly deploy automated accounts (bots), coordinated networks, and targeted advertising strategies to manipulate online discourse during electoral periods.²⁰ These techniques enable the artificial inflation of narratives, creating the illusion of widespread support or outrage. In electoral disputes, this can translate into the rapid construction of competing “truth claims,” each backed by seemingly credible digital evidence, thereby complicating the task of adjudication and undermining the authority of electoral institutions. A related and increasingly concerning development is the use of synthetic media and deepfakes. Advances in AI have made it possible to generate highly realistic audio, video, and image content that can misrepresent candidates, electoral officials, or events.²¹ In the context of elections, such materials can be used to fabricate evidence of misconduct, incite violence, or delegitimise electoral outcomes. The evidentiary implications are significant: as the line between authentic and manipulated content becomes increasingly blurred, courts and tribunals may face heightened challenges in assessing the credibility and admissibility of digital evidence.²²

The impact of these dynamics on electoral dispute governance is both direct and indirect. Directly, misinformation and manipulated content may be introduced as evidence in electoral petitions, requiring courts to engage with complex technical questions relating to authenticity, chain of custody, and forensic verification.²³ Indirectly, and perhaps more significantly, the

¹⁸ T Nyabola, *Digital Democracy, Analogue Politics: How the Internet Era is Transforming Politics in Kenya* (Zed Books 2018); Centre for Democracy and Development, *Fake News, Hate Speech and Nigeria's 2019 General Elections* (CDD 2019).

¹⁹ S Vosoughi, D Roy and S Aral, ‘The Spread of True and False News Online’ [2018] 359 (6380) *Science* 1146.

²⁰ P N Howard and S Bradshaw, ‘The Global Disinformation Order: 2019 Global Inventory of Organised Social Media Manipulation’ (Oxford Internet Institute 2019).

²¹ R Chesney and D Citron, ‘Deep Fakes: A Looming Challenge for Privacy, Democracy, and National Security’ [2019] 107 (6) *California Law Review* 1753.

²² L Edwards and M Veale, ‘Slave to the Algorithm? Why a Right to an Explanation Is Probably Not the Remedy You Are Looking For’ [2017] 16 (1) *Duke Law & Technology Review* 18.

²³ S Mason and D Seng, *Electronic Evidence* (5th edn, Institute of Advanced Legal Studies 2021).

digital information environment shapes the context within which disputes are adjudicated. Judges and tribunal members do not operate in a vacuum; they are embedded within societies where public opinion is increasingly influenced by digital narratives. Where such narratives are saturated with misinformation, there is a risk that judicial outcomes, regardless of their legal soundness, may be perceived as illegitimate or biased. Moreover, algorithmic amplification contributes to the phenomenon of premature electoral delegitimisation, whereby electoral outcomes are rejected in the court of public opinion before official results are declared or judicial processes are concluded.²⁴ This erosion of temporal discipline in electoral governance, whereby the sequence of voting, counting, declaration, and adjudication is disrupted by real-time digital contestation, poses a serious challenge to the rule of law. It undermines the authority of constitutionally established mechanisms for dispute resolution and increases the likelihood of extra-legal responses, including protests and, in extreme cases, violence.

The regulatory response to these challenges remains uneven and, in many African jurisdictions, underdeveloped. Existing legal frameworks governing elections, evidence, and communications were largely designed for analogue contexts and are often ill-equipped to address the complexities of AI-driven information ecosystems.²⁵ While some countries have introduced legislation targeting cybercrime and misinformation, such measures frequently raise concerns about overreach, censorship, and the potential suppression of legitimate political expression.²⁶ This creates a delicate balancing act: the need to combat harmful misinformation without undermining fundamental rights such as freedom of expression and access to information. Importantly, the risks associated with algorithmic amplification are not solely technological; they are also institutional and political. Weak regulatory oversight of digital platforms, limited transparency in algorithmic decision-making, and the absence of effective accountability mechanisms all contribute to an environment in which harmful content can proliferate with minimal constraint.²⁷ To navigate these challenges, there is a need for a holistic approach that

²⁴ N Cheeseman, B Klaas and others, 'Elections and Electoral Violence in Africa' [2020] *African Affairs* 1; Norris (n 6).

²⁵ E Aiyede, 'Electoral Laws and the Challenges of Democratic Consolidation in Nigeria' [2016] 10 (2) *Journal of African Elections* 1.

²⁶ African Commission on Human and Peoples' Rights, *Declaration of Principles on Freedom of Expression and Access to Information in Africa* (2019).

²⁷ Pasquale (n 13) 3-5

goes beyond technical fixes to encompass legal reform, institutional strengthening, and multi-stakeholder collaboration.

While AI has the potential to enhance electoral processes, its role in shaping the digital information environment presents significant risks to electoral integrity and dispute governance. Algorithmic amplification, computational propaganda, and synthetic media collectively contribute to a landscape in which misinformation can thrive, public trust can erode, and the legitimacy of electoral outcomes can be contested even in the absence of substantive irregularities. The task for policymakers, electoral bodies, and civic actors is to mitigate these risks through frameworks that promote transparency, accountability, and resilience in the face of rapidly evolving technological challenges.

4. Electoral Dispute Governance in the Digital Age

Electoral dispute governance has traditionally been conceived as a post-election, institutionally bounded process, unfolding within the formal confines of electoral commissions, tribunals, and courts. However, the digital transformation of political communication has fundamentally altered both the timing and terrain of electoral disputes. In contemporary African democracies, disputes are no longer initiated solely through formal petitions; rather, they are increasingly prefigured, constructed, and escalated within the digital public sphere before any legal action is commenced.²⁸ This shift necessitates a reconceptualisation of electoral dispute governance as a continuum that begins well before litigation and extends beyond formal adjudication. At the core of this transformation is the emergence of what may be described as “pre-litigation contestation”; a phase in which electoral grievances are articulated, amplified, and legitimised through digital platforms prior to their formalisation in legal processes. Social media platforms have become central arenas for this form of contestation.²⁹ Political actors, supporters, and commentators deploy these platforms to frame electoral narratives, circulate allegations of irregularities, and mobilise public opinion. In doing so, they effectively set the evidentiary and rhetorical agenda for subsequent legal disputes. This development reflects a broader shift in democratic accountability, where informal, networked forms of scrutiny coexist with, and sometimes rival,

²⁸ N Cheeseman, G Lynch and J Willis, *The Moral Economy of Elections in Africa: Democracy, Voting and Virtue* (Cambridge University Press 2021) 45-52.

²⁹ T Nyabola, *Digital Democracy, Analogue Politics: How the Internet Era is Transforming Politics in Kenya* (Zed Books 2018) 88-110.

formal institutional mechanisms.³⁰ Digital platforms enable rapid dissemination of electoral information, including polling unit results, videos of alleged malpractice, and unofficial tallies. While such practices can enhance transparency, they also create conditions in which unverified or misleading claims gain traction, often outpacing the capacity of electoral authorities to provide authoritative information.³¹ The result is a fragmented informational environment in which competing narratives of electoral legitimacy emerge simultaneously.

The implications for electoral dispute governance are profound. First, the temporal structure of disputes has been fundamentally altered. Traditionally, disputes followed a linear sequence: voting, counting, declaration, and adjudication. In the digital age, however, contestation begins during the voting and counting processes, with real-time commentary and analysis shaping perceptions of credibility.³² By the time results are officially declared, public opinion may already be entrenched, making it more difficult for formal institutions to assert authority over the narrative of electoral truth. Second, digital pre-litigation dynamics influence the substantive content of legal disputes. Allegations that originate online often find their way into formal petitions, sometimes accompanied by digital evidence such as screenshots, videos, and data extracts.³³ This raises complex evidentiary questions regarding authenticity, reliability, and admissibility. Courts are increasingly required to engage with electronic evidence, necessitating the development of new judicial competencies and procedural standards.³⁴ In jurisdictions such as Nigeria and Kenya, electoral tribunals have grappled with these issues, highlighting both the potential and the limitations of digital evidence in resolving electoral disputes.³⁵ Third, the digital environment shapes the strategic behaviour of political actors. Electoral contestants are no longer confined to legal arguments; they also engage in narrative construction and public persuasion through digital channels.³⁶ By framing disputes in terms of injustice, fraud, or institutional bias, actors can mobilise supporters and exert pressure on adjudicatory bodies. This

³⁰ M Castells, *Networks of Outrage and Hope: Social Movements in the Internet Age* (2nd edn, Polity Press 2015) 3-12.

³¹ Centre for Democracy and Development, *Fake News, Hate Speech and Nigeria's 2019 General Elections* (CDD 2019).

³² Norris (n 6) 123-130.

³³ Mason and Seng (n 23) 45-60.

³⁴ *ibid* 61-75.

³⁵ *Raila Odinga v Independent Electoral and Boundaries Commission* Petition No 1 of 2017 (Supreme Court of Kenya); *Atiku Abubakar v Independent National Electoral Commission* (2023) LPELR-60067(SC).

³⁶ N Cheeseman and B Klaas, *How to Rig an Election* (Yale University Press 2018) 156-170.

dual-track strategy, legal and communicative, blurs the boundaries between law and politics, raising concerns about the independence of judicial processes and the potential for trial by public opinion.

A further dimension of this transformation is the role of data and technology in evidentiary production. Digital electoral systems generate vast quantities of data, including biometric records, transmission logs, and server information. In principle, such data can enhance the objectivity of dispute resolution by providing verifiable evidence of electoral processes.³⁷ In practice, however, access to and interpretation of this data often become contested issues in themselves. Disputes may arise over the integrity of electronic systems, the transparency of algorithms, and the availability of backend data to parties and the courts.³⁸ The Kenyan Supreme Court's decision in *Raila Odinga v Independent Electoral and Boundaries Commission*³⁹ is particularly instructive in this regard, as it underscored the centrality of technological transparency and auditability in determining electoral validity. Moreover, the digitalisation of electoral processes has introduced new forms of epistemic uncertainty into dispute governance. Where multiple sources of information (official results, parallel vote tabulations, social media reports) coexist, determining the authoritative account of electoral events becomes increasingly complex.⁴⁰ This uncertainty can erode public confidence, particularly where institutional responses are perceived as slow, opaque, or inconsistent. In such contexts, the legitimacy of electoral outcomes is shaped not only by legal correctness but also by perceived informational credibility.

The regulatory and institutional frameworks governing electoral disputes have struggled to keep pace with these developments. Many electoral laws in African countries were designed for analogue contexts and do not adequately address issues such as digital evidence, online misinformation, or platform accountability.⁴¹ While some jurisdictions have begun to adapt their legal frameworks, significant gaps remain, particularly in relation to pre-litigation digital conduct. The absence of clear rules governing the use of digital platforms during electoral

³⁷ International Institute for Democracy and Electoral Assistance, *Elections and Technology: The Impact of Digital Tools on Electoral Integrity* (International IDEA 2021).

³⁸ M Veale and F Zuiderveen Borgesius, 'Demystifying the Draft EU Artificial Intelligence Act' [2021] 22 (4) *Computer Law Review International* 97.

³⁹ (n 35)

⁴⁰ S Birch, *Electoral Malpractice* (Oxford University Press 2011) 210-225.

⁴¹ Aiyede, (n 25) 1.

periods creates a permissive environment for the spread of unverified claims and the manipulation of public opinion. Importantly, the transformation of electoral dispute governance in the digital age also raises questions about the balance between transparency and stability. On the one hand, the open exchange of information and the ability of citizens to scrutinise electoral processes are essential components of democratic accountability. On the other hand, the unregulated proliferation of contested narratives can undermine institutional authority and exacerbate political tensions.⁴² The challenge, therefore, lies in designing governance frameworks that harness the transparency-enhancing potential of digital technologies while mitigating their destabilising effects.

Electoral dispute governance in the digital age is no longer confined to the courtroom; it is a multi-stage, multi-actor process that begins in the digital public sphere and evolves through both informal and formal mechanisms. Pre-litigation contestation, shaped by AI-driven information flows and digital communication platforms, plays a decisive role in framing disputes, influencing legal strategies, and shaping public perceptions of legitimacy. Understanding and addressing these dynamics is essential for strengthening electoral integrity and ensuring that formal dispute resolution mechanisms remain effective and credible in an increasingly digitalised political environment.

5. The Role of Civic Actors in Supporting Transparent Digital Electoral Dispute Ecosystems

The challenges posed by AI-driven misinformation, algorithmic amplification, and digital contestation cannot be addressed solely through state-centric or technological interventions. Electoral dispute governance in the digital age increasingly depends on a broader constellation of actors operating within what may be described as a “digital electoral integrity ecosystem.” Within this ecosystem, civic actors, including civil society organisations (CSOs), the media, fact-checking networks, academia, and citizen observers, play a critical role in mediating information flows, enhancing transparency, and sustaining public confidence in electoral processes. At a foundational level, civic actors function as intermediaries of trust. In many African democracies, where public confidence in state institutions may be uneven or contested, CSOs and independent

⁴² W L Bennett and S Livingston, ‘The Disinformation Order: Disruptive Communication and the Decline of Democratic Institutions’ [2018] 33 (2) *European Journal of Communication* 122.

media organisations often serve as alternative sources of credible information.⁴³ Their involvement in election observation, parallel vote tabulation (PVT), and independent verification of electoral data provides an additional layer of accountability that complements the work of electoral management bodies (EMBs).⁴⁴ In the digital context, these functions have expanded to include real-time monitoring of online discourse, identification of misinformation trends, and dissemination of verified electoral information.

One of the most significant contributions of civic actors lies in the domain of fact-checking and counter-disinformation initiatives. Across Africa, specialised organisations and collaborative networks have emerged to verify claims circulating on digital platforms and to provide timely corrections. These initiatives are particularly important during electoral periods, when false information can spread rapidly and influence public perceptions of electoral integrity.⁴⁵ By leveraging digital tools, data analytics, and journalistic expertise, fact-checkers can mitigate the effects of algorithmic amplification and reduce the virality of misleading content. However, their effectiveness depends on both speed and reach, as corrective information must compete within the same algorithmically driven environments that favour sensationalism. Closely related to this is the role of civic actors in promoting digital and media literacy. The resilience of electoral systems in the face of misinformation is not determined solely by the supply of accurate information, but also by the capacity of citizens to critically evaluate the information they encounter.⁴⁶ Civic organisations, educational institutions, and community groups therefore play a vital role in equipping citizens with the skills necessary to identify false or misleading content, understand how algorithms shape information exposure, and engage responsibly in digital political discourse. In this sense, digital literacy is a form of preventive electoral governance, reducing the susceptibility of electorates to manipulation.

Civic actors also contribute to electoral transparency through the development and deployment of civic technology (“civic tech”) solutions. These include platforms for crowdsourced election monitoring, incident reporting, and real-time data visualisation. Tools such as election monitoring apps, SMS-based reporting systems, and open-data dashboards enable citizens to

⁴³ L Diamond, ‘Liberation Technology’ [2010] 21 (3) *Journal of Democracy* 69.

⁴⁴ National Democratic Institute, *The Promise and Challenges of Election Technology* (NDI 2016); Norris (n 6)

⁴⁵ C Ireton and J Posetti (eds), *Journalism, “Fake News” and Disinformation: Handbook for Journalism Education and Training* (UNESCO 2018); Africa Check, *Annual Report* (various years).

⁴⁶ R Hobbs, *Digital and Media Literacy: Connecting Culture and Classroom* (Corwin 2011).

participate directly in the oversight of electoral processes.⁴⁷ In several African countries, such innovations have been used to document electoral irregularities, track violence, and provide independent verification of official results. By decentralising information production and verification, civic tech initiatives can enhance both transparency and inclusivity in electoral governance.

In addition to these operational interventions, civic actors play an important role in framework development and advocacy. They contribute to shaping legal and policy frameworks governing the use of AI and digital technologies in elections, often advocating for principles such as transparency, accountability, data protection, and respect for fundamental rights.⁴⁸ In doing so, they act as a counterbalance to both state and corporate power, ensuring that the deployment of technology in electoral contexts aligns with democratic values. This is particularly important in Africa, where regulatory frameworks for AI and digital platforms remain in an evolving and, in some cases, fragmented state. The media, as a distinct category of civic actor, occupies a particularly influential position within the digital electoral ecosystem. Traditional and digital media outlets not only report electoral developments but also shape the narratives through which such developments are interpreted.⁴⁹ In the age of AI-driven information flows, the responsibility of the media extends beyond reporting to include verification, contextualisation, and debunking. Ethical journalism practices, such as source verification, transparency in reporting, and avoidance of sensationalism, are essential for countering the distortions introduced by algorithmic amplification. At the same time, media organisations themselves must adapt to the realities of digital platforms, where speed often competes with accuracy and where economic incentives may inadvertently favour high-engagement content.

Despite their critical role, civic actors face several constraints that limit their effectiveness. These include resource limitations, political pressures, regulatory restrictions, and digital divides.⁵⁰ In some jurisdictions, legal frameworks governing civil society and the media may restrict their ability to operate freely, particularly in politically sensitive contexts such as elections.

⁴⁷ J Goldstein and J Rotich, 'Digitally Networked Technology in Kenya's 2007-2008 Post-Election Crisis' [2008] *Berkman Center Research Publication*; M Bailard, *Democracy's Double-Edged Sword: How Internet Use Changes Citizens' Views of Their Government* (Johns Hopkins University Press 2014).

⁴⁸ African Commission on Human and Peoples' Rights, *Declaration of Principles on Freedom of Expression and Access to Information in Africa* (2019).

⁴⁹ J Stremlau and M Price (eds), *Media, Elections and Democracy in Africa* (Routledge 2009).

⁵⁰ S Gyimah-Boadi, 'Civil Society and Democratic Development in Africa' [1996] 7 (2) *Journal of Democracy* 118.

Additionally, the reach of civic initiatives may be uneven, with rural and marginalised communities often having limited access to digital tools and information. These challenges highlight the need for sustained investment, enabling environments, and cross-sector collaboration. Importantly, the role of civic actors should not be conceptualised in isolation but as part of a broader multi-stakeholder governance framework. Effective responses to the risks of AI in electoral contexts require collaboration between EMBs, the judiciary, technology companies, civil society, and international organisations.⁵¹ Civic actors can facilitate such collaboration by acting as bridges between different stakeholders, fostering dialogue, and promoting shared standards for transparency and accountability. For example, partnerships between CSOs and digital platforms can enhance content moderation during elections, while collaboration with EMBs can improve the dissemination of verified electoral information.

In the context of electoral dispute governance, the contributions of civic actors are particularly significant. By providing independent data, monitoring digital narratives, and promoting public understanding of electoral processes, they help to create an environment in which disputes can be assessed based on evidence rather than misinformation. This, in turn, strengthens the legitimacy of both electoral outcomes and judicial decisions. However, for these contributions to be effective, civic actors must be supported by legal frameworks that protect their independence, as well as by technological infrastructures that enable their work. Civic actors are indispensable to the construction of transparent and trustworthy digital electoral dispute ecosystems in Africa. Their roles in fact-checking, digital literacy, civic technology innovation, and policy advocacy complement and reinforce the efforts of formal institutions. In an era where electoral legitimacy is increasingly contested in the digital sphere, the capacity of civic actors to mediate information, build trust, and promote accountability will be a decisive factor in determining the resilience of democratic processes. Strengthening this capacity is therefore not optional but a central imperative for safeguarding electoral integrity in the age of Artificial Intelligence.

⁵¹ United Nations Development Programme, *Digital Technology and Elections: Policy Guidance Note* (UNDP 2020); International Institute for Democracy and Electoral Assistance, *Electoral Management Design* (International IDEA 2014).

6. Suggesting Policy and Institutional Reforms

The analysis in this paper demonstrates that the intersection of AI, digital communication ecosystems, and electoral dispute governance presents both transformative opportunities and systemic risks. The policy challenge for African democracies is therefore not whether to adopt AI-driven technologies, but how to govern them in ways that enhance transparency, protect electoral integrity, and sustain public confidence. This requires a coordinated, multi-level response that integrates legal reform, institutional capacity-building, technological safeguards, and civic engagement, which are proposed below:

a. Establishing Comprehensive Legal and Regulatory Frameworks for AI in Elections: A foundational priority is the development of clear and coherent legal frameworks governing the deployment of AI and digital technologies in electoral processes. As demonstrated in this paper, existing electoral laws in many African jurisdictions were designed for analogue systems and are often inadequate to address issues such as algorithmic decision-making, digital evidence, and platform accountability. There is therefore a need for targeted legislative reforms that define permissible uses of AI in voter registration, result transmission, and dispute resolution; establish standards for transparency, auditability, and explainability of electoral technologies; regulate the use of digital platforms during electoral periods, particularly in relation to political advertising and misinformation; and provide clear rules on the admissibility and evaluation of electronic evidence in electoral disputes.

Regional instruments such as the African Union's *Convention on Cyber Security and Personal Data Protection (Malabo Convention)* and the Economic Community of West African States's *Supplementary Protocol on Democracy and Good Governance* provide useful foundations but require domestication and contextual adaptation to address AI-specific challenges. Importantly, regulatory frameworks must strike a careful balance between combating harmful misinformation and protecting fundamental rights, including freedom of expression and political participation. Overly restrictive measures risk undermining democratic engagement and may be susceptible to abuse for political purposes.

b. Strengthening Institutional Capacity for Digital Electoral Governance: Legal reforms must be complemented by robust institutional capacity within EMBs, the judiciary, and law enforcement

agencies. The effective governance of AI-driven electoral systems requires both legal authority and technical expertise and organisational readiness. For EMBs, this entails developing in-house expertise in data analytics, cybersecurity, and AI systems; establishing dedicated units for digital monitoring and misinformation response during electoral cycles; enhancing transparency through proactive communication strategies and real-time information dissemination. For the judiciary and electoral tribunals, capacity-building should focus on understanding the technical dimensions of AI and digital evidence; developing procedural guidelines for handling electronic evidence; and ensuring consistency and coherence in judicial approaches to technology-related disputes. Judicial experiences in cases such as *Raila Odinga v Independent Electoral and Boundaries Commission* underscore the importance of technical competence in evaluating digital electoral systems and their impact on the validity of election results.

c. Promoting Transparency and Explainability in Electoral Technologies: A central principle for the governance of AI in elections is transparency, which must extend beyond formal disclosure to include meaningful explainability and auditability. Electoral technologies should be designed in ways that allow stakeholders to understand how decisions are made, how data is processed, and how outcomes are generated. Key measures include requiring independent audits and certification of electoral technologies prior to deployment; mandating the publication of technical specifications, system logs, and audit reports, subject to security considerations; adopting “explainable AI” models where possible, particularly in high-stakes decision-making processes; and ensuring that political parties, observers, and other stakeholders have controlled access to relevant data for verification purposes. Such measures are essential for building trust, particularly in environments where suspicion of electoral manipulation is high. Without transparency, even technically sound systems may be perceived as illegitimate.

d. Regulating Digital Platforms and Mitigating Algorithmic Risks: Given the central role of digital platforms in shaping electoral narratives, there is an urgent need for regulatory engagement with technology companies. Social media platforms operate as *de facto* public spheres, yet their governance structures are largely private and opaque. Policy interventions should aim to enhance algorithmic transparency, particularly in relation to content recommendation systems; require platforms to implement election integrity measures, including rapid response mechanisms for misinformation; promote transparency in political advertising,

including disclosure of sponsors and targeting criteria; and encourage data-sharing arrangements (with appropriate safeguards) to support independent research and oversight. At the same time, governments must avoid heavy-handed regulation that could stifle innovation or infringe on digital rights. A co-regulatory approach, involving collaboration between states, platforms, and civil society, is likely to be more effective and sustainable.

e. Empowering Civic Actors and Strengthening Multi-Stakeholder Collaboration: In view of the pivotal role of civic actors in supporting transparent digital electoral ecosystems, policy frameworks should prioritise the empowerment and protection of civil society organisations, media, and fact-checking networks. This can be achieved through legal protections for the independence and operation of civic actors, funding and capacity-building support for fact-checking and digital literacy initiatives; institutionalised partnerships between EMBs and civil society for information sharing and monitoring; and inclusion of civic actors in the development of electoral technology policies and standards. Multi-stakeholder collaboration is essential for addressing the complex and cross-cutting challenges posed by AI. No single actor, whether state or non-state, possesses the capacity to manage these risks in isolation.

f. Enhancing Public Communication and Trust-Building Mechanisms: Public confidence in electoral processes depends on both substantive integrity and perceptions of transparency and responsiveness. In the digital age, where information circulates rapidly and often unpredictably, electoral authorities must adopt proactive and strategic communication approaches. Such measures real-time publication of election data through accessible digital platforms; rapid response systems to counter misinformation and clarify contested claims; regular engagement with the media and civil society to provide updates and explanations; and development of public education campaigns on electoral processes and the role of technology. Effective communication can mitigate the impact of misinformation and reduce the likelihood that disputes escalate into crises of legitimacy.

g. Investing in Research, Innovation, and Regional Cooperation: There is a need for sustained investment in research and innovation to better understand and respond to the evolving role of AI in electoral processes. African states and regional organisations should support interdisciplinary research that integrates legal, technological, and social perspectives. Regional cooperation is particularly important, given the transnational nature of digital platforms and misinformation

networks. Institutions such as the African Union and the Economic Community of West African States can play a coordinating role in developing continental standards and guidelines for AI in elections; facilitating knowledge-sharing and best practices among member states; and supporting joint initiatives to combat cross-border misinformation.

7. Conclusion and Recommendation

This paper examined the implications of Artificial Intelligence (AI) and digital communication technologies for electoral dispute governance in Africa. It found that the increasing digitalisation of electoral processes has fundamentally altered the manner in which electoral disputes emerge, evolve, and are resolved. Electoral disputes are no longer confined to formal adjudicatory institutions such as electoral commissions, tribunals, and courts; rather, they are increasingly influenced by digital communication platforms where electoral outcomes are debated, contested, and interpreted in real time.

The paper further found that AI presents both opportunities and challenges for electoral integrity. On the positive side, AI-driven technologies can enhance electoral transparency through real-time data analysis, anomaly detection, improved information management, and greater auditability of electoral processes. These capabilities can strengthen the credibility of elections and support more effective dispute resolution mechanisms. However, the study also established that AI-driven algorithmic amplification, misinformation, disinformation, computational propaganda, and synthetic media pose significant threats to public confidence in electoral institutions and judicial outcomes. A further finding of the paper is that the governance of electoral disputes has increasingly become intertwined with the digital information environment. Digital narratives and online contestation often shape public perceptions of electoral legitimacy before formal legal processes commence. Consequently, the effectiveness and credibility of electoral dispute resolution mechanisms are now influenced not only by legal correctness but also by the quality and integrity of the broader information ecosystem.

The paper also established the critical role of civic actors, including civil society organisations, fact-checking networks, election observers, and the media, in promoting transparency, combating misinformation, enhancing digital literacy, and supporting public trust in electoral processes.

Their activities provide an important complement to the work of electoral management bodies and adjudicatory institutions.

In light of these findings, the following recommendations are proposed:

First, African states should develop and update electoral, cyber, and evidence laws to address the growing use of AI and digital technologies in elections. Such frameworks should establish clear standards for the deployment of AI in voter registration, voter accreditation, result transmission, and electoral dispute resolution. They should also provide rules governing digital evidence, algorithmic accountability, transparency obligations, and the use of political advertising on digital platforms. This will help close existing regulatory gaps and ensure that technological innovations operate within clearly defined legal boundaries. Electoral management bodies, courts, and electoral tribunals should strengthen their technical and institutional capacities to manage AI-enabled electoral systems and assess electronic and digital evidence effectively.

Second, electoral management bodies, courts, electoral tribunals, and relevant law enforcement agencies should be equipped with the technical expertise necessary to manage and evaluate AI-driven electoral systems. This requires regular training in digital forensics, cybersecurity, data analytics, and the handling of electronic evidence. Capacity-building initiatives should also focus on improving institutional preparedness to detect technological vulnerabilities, investigate digital electoral complaints, and effectively adjudicate disputes involving technical evidence.

Third, the credibility of technology-driven electoral systems depends largely on public confidence in their operation. Electoral technologies should therefore be subjected to independent testing, certification, and periodic audits before and after deployment. Electoral authorities should also ensure that relevant stakeholders, including political parties, election observers, and adjudicatory bodies, have access to sufficient information to verify the integrity of technological systems. Greater transparency and explainability will reduce suspicion, facilitate accountability, and enhance trust in electoral outcomes.

Fourth, Governments, electoral authorities, technology companies, and civil society organisations should collaborate to address the growing threats posed by misinformation,

disinformation, deepfakes, and computational propaganda. Social media platforms should be encouraged to adopt election-specific integrity measures, improve transparency in political advertising, and establish rapid-response mechanisms for identifying and addressing harmful false content. Such measures should, however, be implemented in a manner that respects constitutional guarantees of freedom of expression and access to information.

Fifth, civil society organisations, independent media institutions, election observer groups, and fact-checking organisations should be supported through appropriate legal protections, funding opportunities, and institutional partnerships. Their role in election monitoring, voter education, fact-checking, and digital literacy is critical to promoting transparency and public confidence. Governments and electoral bodies should therefore foster constructive engagement with civic actors as part of a broader multi-stakeholder approach to electoral governance.

Finally, electoral authorities should adopt proactive communication strategies aimed at providing timely, accurate, and accessible electoral information. This includes the real-time dissemination of election-related updates, prompt clarification of contested claims, and the use of digital platforms to engage citizens. At the same time, governments, educational institutions, and civil society organisations should invest in digital and media literacy programmes to enable citizens to critically assess online information, identify misinformation, and participate responsibly in democratic processes. An informed electorate is more resilient to manipulation and better positioned to contribute to credible electoral dispute resolution.