G ! G A Focus | AFRIKA

Martin Acheampong

Smart Tech, Old Tricks: Digital Tools and Africa's Electoral Flaws

Elections in sub-Saharan Africa have entered a high-tech era. Governments are increasingly rolling out digital technologies with the promise of improving election quality. Yet, the outcomes tell a different story. Technical breakdowns, procurement scandals, and a surge in litigation over results show that this digital shift has not solved old problems and may even be creating new ones.

- Digital tools such as "biometric voter registration" kits and "voter identification" systems are widely promoted as ways to improve polls, making voter registers more credible, result collation more transparent, and, above all, elections more democratic.
- Yet, the reality has been less reassuring. Device failures on polling day and delayed or opaque results remain common occurrences. Rather than building confidence, these shortcomings have undermined trust, affected the quality of elections, and fuelled an unprecedented number of court cases over results.
- The problem lies in the politics driving digitalisation. The push for election tech is often less about integrity and more about expediency. Leaders frequently treat tech contracts as opportunities for patronage, with biometric systems involving huge deals that are often steered toward political allies.
- At the same time, ruling elites use digital reforms as a bargaining tool to appease opposition demands or to signal an image of modernity all while maintaining control. Elections in the region have, thus, received digital upgrades without addressing the underlying political flaws that compromise the quality of the elections.

Policy Implications

International actors and domestic stakeholders must recognise that technology alone cannot guarantee electoral integrity. Without transparency, digital systems may simply offer new tools of manipulation. Donors, policymakers, and civil society must focus on pushing for accountability and nurturing public trust to ensure digital reforms serve the people, not the powerful.

The Digital Turn in Sub-Saharan African Elections

Over the past two decades, elections in sub-Saharan Africa (SSA) have undergone a profound digital transformation. This has reshaped the way votes are registered,

Dr. Martin Acheampong
Research Fellow
martin.acheampong@giga-hamburg.de

German Institute for Global and Area Studies
Leibniz-Institut für Globale und Regionale Studien
Neuer Jungfernstieg 21
20354 Hamburg

cast, counted, and announced. Virtually every country that conducts multiparty elections in the region now relies on some form of electoral technology, ranging from "biometric voter registration" (BVR) systems to the electronic transmission of results. Digitalisation has not been introduced for its own sake here but in response to long-standing credibility challenges that have repeatedly undermined public trust in electoral processes. SSA historically ranks among the weakest regions globally in assessments of electoral integrity (Norris, Frank, and Martínez i Coma 2014). It is against this backdrop that technology has been widely embraced as a corrective measure promising to enhance the quality of African elections.

Technology-centric voices argue that systems like BVR possess technical solutions to the problem of duplicate registrations and bloated voter rolls that keep tainting elections in the region. By capturing voters' fingerprints and/or facial features, for instance, Election Management Bodies (EMBs) are able to establish unique digital identities that can be authenticated on election day. At the polling station, fingerprint- and facial-recognition devices can then be used to verify an individual before issuing ballot papers, reducing the scope for impersonation and multiple voting. Such measures, proponents argue, build greater confidence in the inclusiveness and credibility of the franchise. With this, allegations of "ghost voters" and inflated registers – which have been a long-standing source of dispute in African elections – will become a thing of the past, so the argument goes.

Beyond registration and authentication, the digitalisation turn is also touted as possessing the ability to transform how results are managed and communicated. Computerised tallying systems, electronic results transmission, and online portals can together accelerate collation, minimise opportunities for human error or manipulation, and project an image of transparency. Advocates argue that transmitting results electronically from polling stations to central servers, supplemented by online dashboards, can make provisional tallies publicly accessible in near real time. These reforms will not only curb malpractice but also address the perception gap between what happens at polling stations and what is finally announced at the national tallying centre – a gap that has historically fuelled disputes and post-election crises. Overall, these technological innovations are seen as a way to restore trust in SSA's elections.

The Uptake of Election Technologies in SSA

Given that digital technologies are perceived to enhance electoral quality, their adoption has expanded rapidly over the years and particularly since the early 2010s. The extent of this shift is documented in an original dataset covering 120 presidential elections across 35 SSA countries between 2006 and 2025. Analysis hereof reveals that digital tools have been systematically integrated at virtually every stage of the electoral cycle. In the pre-election phase, for example, EMBs in many SSA countries – including Burkina Faso, Liberia, and Uganda – have established centralised databases that aim to consolidate voter credentials, curb fraudulent registrations, and provide a reliable basis for credible electoral processes.

As Figure 1 below shows, this innovation stands out as the most extensively deployed pre-election tool in the region. It is closely followed by BVR systems, as

further reinforced by de-duplication procedures and biometric identity-verification technologies. In addition, some EMBs like those in Kenya and Uganda have introduced electronic pollbooks linked to central voter registers that back electronic voter ID cards. Others are leveraging "geographic information system" mapping technology to not only fine-tune constituency boundaries but also improve logistical planning.

Figure 1. Adoption of Digital Technologies across SSA Electoral Cycles
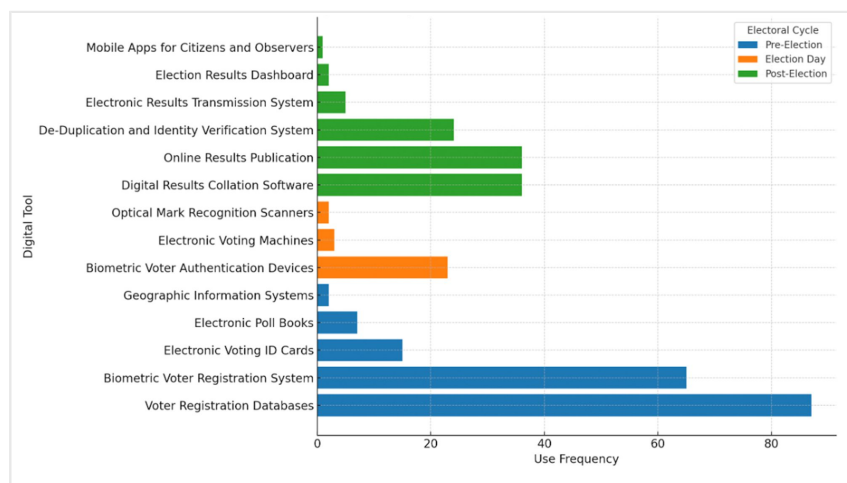
Source: Author's own compilation; data collection by Catharina Deeg.

Similarly, digital tools are increasingly becoming integral to voting procedures on election day itself. "Biometric voter authentication" systems are, for instance, now widely used at polling stations, and in some cases, even supplemented by drone surveillance for real-time monitoring. Electronic voting machines are also gaining traction, with the Democratic Republic of Congo and Namibia pioneering their use and South Africa actively considering their adoption.

The data again show that digital tools are widely deployed in the post-election phase as well. Electronic transmission systems, collation software, and online dashboards that publish polling-station results in real time have become central to speeding up tabulation and projecting transparency, with countries like Ghana and Nigeria rapidly investing in them. These measures are frequently complemented by interactive citizen engagement via SMS, mobile applications, and social media, with voters able to report irregularities and provide instant feedback on the conduct of elections.

Figure 2. Share of Digitalised versus Analogue Presidential Elections in SSA, 2006–2025
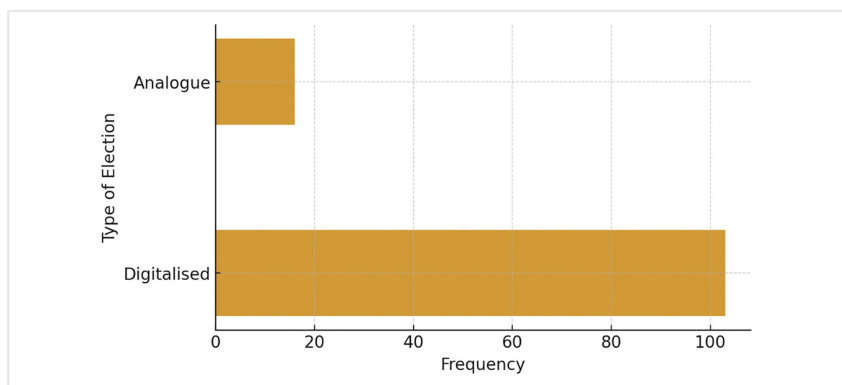
As evident from Figure 2, the digitalisation of elections in SSA is unfolding rapidly and in complex ways, with only a few polls remaining analogue. Moreover, this shift entails a mix of digital tools being added over time. The ultimate aim here is to improve efficiency and strengthen confidence in elections.

## And the Result? Old Problems, New Glitches

Despite these substantial investments and the accompanying high expectations, mixed outcomes have been seen in SSA so far. Election technology has delivered incremental improvements in certain areas while nonetheless falling short of fulfilling its broader promises. This has exposed enduring tensions between the region's technological ambitions, on the one hand, and practical electoral management, on the other. Elections continue to face old problems alongside new technical glitches, with equipment failures standing out as the most common example hereof.

Across the region, biometric devices often malfunction under field conditions – whether due to power outages, poor connectivity, or sheer manipulation. In Ghana, Nigeria, and Uganda, for instance, biometric devices have repeatedly slowed down polling as they struggled to read people's fingerprints, leading to frustration, delays, and the resorting to manual verification. In DR Congo, a new tablet-like touchscreen machine employed in the 2018 elections to accelerate vote counting, reduce fraud, and improve logistical handling broke down during a live demo to a parliamentary committee. This immediately sowed doubt about its reliability. Opposition parties proceeded to flatly reject the machines' use, arguing they could facilitate fraud or be used as a pretext to interfere with the vote. As it would turn out on election day, news of their breakdown was reported across the country (BBC 2018). With the share of elections utilising digital tools continuing to expand, instances of technical failure not only serve to disrupt electoral processes per se but also feed suspicions that technology is a tool for manipulation. In Nigeria, for instance, when the much-touted results-upload platform (IReV) abruptly slowed down during the critical post-voting phase of the 2023 presidential elections, public fears of behind-the-scenes manipulation intensified.

Such concerns not only erode popular trust in electoral commissions across the region (Figure 3) but also undermine the overall quality of elections (Figure 4). Regarding the first, Afrobarometer data from 1999 to 2025 reveal that the share

of citizens who do not trust electoral commissions "at all" has more than doubled over the past two decades, even with digital technologies being widely adopted. Over the same period, the proportion of those expressing "a lot" of trust has consistently declined.

Figure 3. Popular Trust in SSA's Electoral Commissions
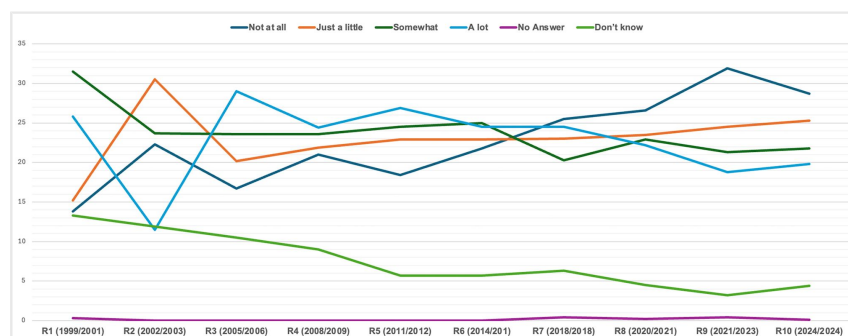
Source: Rounds 1 to 10 Afrobarometer survey (1999–2025).

Similarly, regarding the overall democratic quality of elections, a steady though modest decline is identifiable. The Ibrahim Index of African Governance's "Democratic Elections" indicator, which measures both the freeness and fairness of elections, confirms this downward trend.

Figure 4. Democratic Elections in Africa as a Whole
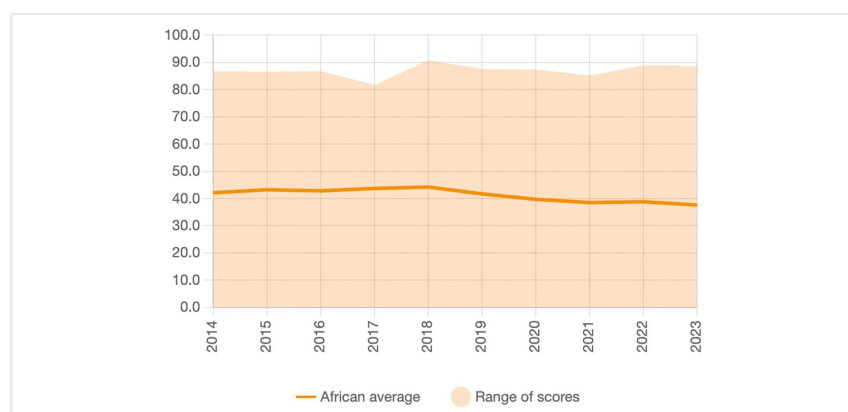
Source: Ibrahim Index of African Governance (2014–2023).

In sum, technology – supposed to build trust in African elections – is fuelling the very doubts it is meant to remove. Nowhere is this observation more evident than in Zimbabwe, where the much-hyped biometric voter roll for the 2018 elections quickly became embroiled in intense elite suspicion and mistrust after opposition groups uncovered several duplicate and ghost entries. Adding to these fears, the biometric kits failed at several polling stations, forcing a sharp U-turn to manual voting (News24 2018). As a consequence, instead of boosting confidence, the system only deepened scepticism. These widespread experiences show that while digitalisation has reshaped the mechanics of SSA elections, it has yet to resolve

core political problems. Instead, its advent has layered new vulnerabilities onto old flaws, leaving the digital dream still unfulfilled.

From Unfulfilled Digital Dream to Legal Nightmares

One of the most striking trends accompanying the digitalisation of elections in SSA has been the surge in legal battles over results. Of the 120 presidential elections analysed across the region, 82 (68 per cent) saw related court cases between 2006 and 2025; in comparison, there were only 38 instances of polling (32 per cent) that did not end in legal disputes (see Figure 5 below). Petitions brought before the courts spanned a wide spectrum of electoral malpractices, ranging from manipulation and irregularities in voter registration and the compilation of the electoral roll, to ballot-box stuffing, multiple and proxy voting, and tampering with results sheets. Other recurrent issues revolved around irregularities in voter verification, disenfranchisement arising from the failure of biometric machines, and allegations of plural voting.

The widespread incidence of post-election litigation in the region underscores not only the enduring distrust in the credibility of electoral processes but also the reality that technical reforms have largely not, as hoped for, resolved contestation. Instead, they have created new grounds for legal challenge. Two reinforcing mechanisms explain this: First, introducing election technology inevitably requires new legal frameworks or constitutional instruments. These laws and regulations govern the digital election space, including biometric registration, electronic verification, result transmission, data storage, and related processes. They not only define procedures, timelines, and responsibilities but also create fresh opportunities for contestation. Ambiguities in these frameworks, such as how to address practical field issues like power outages, failed biometric verification, or missing transmission logs, become fertile ground for litigation. Political actors, especially losing candidates, exploit these gaps by arguing that legal provisions were violated, thereby challenging the credibility of the process at large in court.

In Ghana's 2012 presidential petition, for instance, lawyers for opposition candidate Nana Akufo-Addo and the New Patriotic Party (NPP) argued before the Supreme Court that millions of votes should be annulled because, among other things, biometric verification devices had failed in many polling stations, in violation of both the Electoral Commission's own Constitutional Instrument requiring biometric authentication and the Constitution itself. Although the Supreme Court ultimately upheld the incumbent's victory, the case set a precedent in making electoral rules central to litigation. This episode repeated itself in the 2020 elections, when the opposition National Democratic Congress and its candidate, John Mahama, challenged the Electoral Commission over inconsistencies in electronically transmitted results, accusing it of breaching its own regulations on collation and public reporting. Paradoxically, these very efforts to codify and regulate digital polling have not curtailed disputes but instead multiplied the available hooks for legal contestation.

Figure 5. Litigated Presidential Elections in SSA, 2006–2025
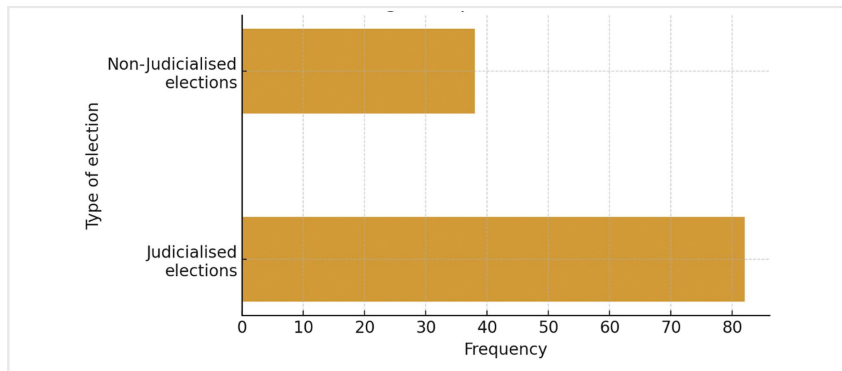
Source: **Author's own compilation; data collection by Catharina Deeg.**

Second, digitalisation generates a flood of electronic evidence, ranging from server logs and biometric records to screenshots of results portals. Political parties and candidates now have a wide range of data that can be mobilised in the course of legal disputes. This abundance of evidence, or information surplus, lowers the threshold for litigation as candidates no longer need to rely solely on eyewitness accounts or physical tally sheets but can present digital traces to substantiate claims of malpractice. Even when what is submitted here is inconclusive or contradictory, it still provides material for court petitions and prolongs the legal process. The very existence of such data creates expectations of transparency that, when unmet, fuel suspicions and trigger lawsuits. Kenyan opposition lawyers, for instance, rigorously combed server logs and electronic forms in 2017 for signs of hacking or irregularities in transmission, submitting these in evidence to the Supreme Court, which ultimately ruled that the irregularities were too grave to ignore. These dynamics explain why digitalisation is channelling post-election conflicts into the courtroom with unprecedented intensity.

## An Overview of Landmark Tech-Induced Election Cases

Observers of African politics now speak of the "judicialisation" of elections to capture the growing tendency for related disputes and contestations to be settled in court rather than via political negotiation or electoral administration. Kenya's experience illustrates this vividly. When the country's 2007 general elections descended into widespread violence that claimed more than 1,000 lives and displaced an estimated 600,000 people, deep flaws in the management of the vote and the credibility of the results were exposed. In response, authorities invested heavily in biometric technologies ahead of the 2013 elections, introducing BVR kits and electronic voter ID devices with the promise of restoring integrity and preventing a recurrence of the 2007 tragedy. Yet, despite this unprecedented investment, the 2013 presidential results still triggered a major legal battle. Opposition candidate Raila Odinga petitioned the Supreme Court, alleging widespread failures of the biometric identification devices, the collapse of the transmission system for results, and serious discrepancies in tallying that breached constitutional and statutory requirements. Although the Supreme Court ultimately upheld Uhuru Kenyatta's victory, its willingness to hear extensive technical evidence on digital failures established a critical precedent.

This precedent proved decisive four years later, when in 2017 Odinga once again challenged the results of the country's presidential elections. This time, he was successful. In a landmark ruling, the Supreme Court annulled the election, citing irregularities and illegalities largely linked to the electronic transmission of vote tallies. In effect, the digital system itself became the subject of dispute, with the opposition alleging that the results portal had been breached and data manipulated. The Independent Electoral and Boundaries Commission struggled to refute these claims due to gaps in audit logs and an absence of verifiable transmission records. The overturning of the results shows how digital reforms originally designed to build trust created new and decisive legal vulnerabilities.

Similarly, Malawi's 2019 presidential elections followed Kenya's demonstrated pattern of judicialisation. The opposition alleged widespread irregularities, including the presence of "ghost votes" and altered result sheets. Most emblematic was the notorious use of correction fluid (Tippex) on tally sheets to reconcile discrepancies between digital and manual counts, which came to symbolise the compromised integrity of the overall electoral process. After months of legal proceedings, the Constitutional Court delivered a landmark ruling in February 2020, nullifying the election because the irregularities were so pervasive that they undermined the credibility of the outcome. The Constitutional Court ordered fresh elections to be held within 150 days, making Malawi only the second African country, after Kenya, to annul a presidential vote. While these high-profile annulments would be unprecedented in Africa's digital era, they point to a wider continental trend: the increasing popularity of electoral litigation in the region.

This trend is reflected more broadly in the data (see Figure 6 below). Of the 80 presidential election petitions analysed between 2006 and 2025, 59 cases (73.7 per cent) centred directly on disputes involving digital tools. By contrast, 12 petitions (15 per cent) did not raise issues related to digital technology, while the remaining 9 (11.3 per cent) contained only partial or ambiguous references to technological matters.

Figure 6. Litigated Presidential Elections in SSA That Fault Digitalisation, 2006–2025
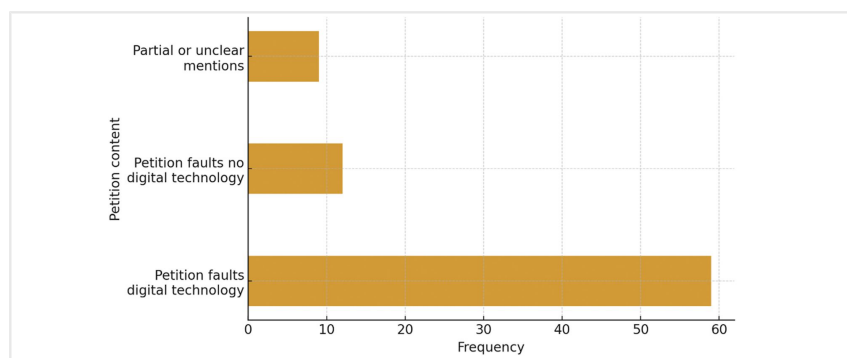
Source: **Author's own compilation; data collection by Catharina Deeg.**

But most importantly, not all court challenges have resulted in annulments like those seen in Kenya in 2017 and Malawi in 2020. In most instances, courts have

upheld electoral outcomes, maintaining the status quo despite evidence of irregularities. Yet the mere act of petitioning has entrenched the judiciary as a central arena of electoral politics in the region. Nigeria illustrates this dynamic vividly. The 2007 elections, the first to incorporate digital technology in the country, were widely condemned as deeply flawed, prompting more than 1,200 court petitions that challenged 86 per cent of contested seats (Omenma 2019). Subsequent digital reforms culminated in the 2023 presidential elections being branded the country's most technologically advanced, with biometric accreditation and real-time result uploads. Yet once again, the process would be marred by widespread technical glitches, triggering Nigeria's first major post-election court challenge by two leading presidential candidates seeking annulment of the results. Although the petitions were ultimately dismissed, the pattern of turning to the courts that began in 2007 came back strongly in 2023.

The same is true for Ghana's presidential elections, which have twice been subjected to Supreme Court petitions in 2012 and 2020, respectively. In 2012, the first time Ghana introduced digital elections, the NPP challenged the results, alleging irregularities tied to the new biometric register, such as overvoting and voting without verification. The Supreme Court, in a narrow 5–4 decision, upheld Mahama's victory, citing lapses but no decisive impact. In 2020, Mahama contested Akufo-Addo's re-election, accusing the Electoral Commission of constitutional and mathematical errors. The Supreme Court unanimously dismissed the petition, ruling that the claims were unproven and declining to compel the Electoral Commission's chair to testify. Both cases demonstrate the increasing intervention of the judiciary in Ghana's electoral process, a relatively new phenomenon that emerged alongside the West African country's adoption of digital technology from 2012 onwards.

High-Tech Politics, Old Tricks: Rent-Seeking and Modernity Signalling

If digitalisation is not consistently delivering high-quality elections but rather contentious ones, why do SSA leaders continue to invest in it? There are two principal reasons for this. The first is rent-seeking, the second modernity signalling. Rent-seeking refers to efforts to secure economic benefits by obtaining special government favours such as exclusive licences, tax breaks, or rules that block rivals. Regarding the digitalisation of elections, rent-seeking manifests as manipulating the policy or regulatory space to secure monopolies, protective tariffs, favourable procurement rules, tax exemptions, or discretionary enforcement without necessarily bringing any transformation to election quality per se. The currency here is excess profit or privilege extracted via the state.

The media discourse on the adoption of digital technologies across the 120 SSA elections studied here underscores rent-seeking, patronage, and the imperative of power retention being some of the oft-concealed but nevertheless key drivers at work in this context. Election tech tends to be expensive, creating lucrative contracts for those who supply the hardware, software, and support services. In many African countries, such contracts become opportunities for rent-seeking behaviour by elites (Cheeseman, Lynch, and Willis 2018).

News coverage, particularly via investigative reports as well as the oversight of civil society watchdogs and opposition-leaning outlets, frequently raises allegations of deliberate opacity in the procurement of biometric kits and other digital election equipment, creating opportunities for cost inflation and kickbacks. After the 2011 elections in DR Congo, for instance, claims emerged that the government's deal for biometric voter kits was tainted by corruption. A Belgian vendor, ZETES, was later sued for fraud linked to the contract. Regarding the Central African country's 2018 elections, the Independent National Electoral Commission (CENI) unilaterally procured touchscreen voting machines sold by South Korea's Miru Systems. This move met with intense domestic and international criticism over its legality and transparency. While Congolese law requires public procurement contracts to undergo a transparent tendering process, this deal – costing about USD 160 million – did not (CRG 2018). CENI later argued that there was no time for the procurement process to be followed, a situation allowed by law. In the heat of this controversy, some critics argued that the son of CENI's vice president had used his personal connections with Miru Systems staff to negotiate the contract (Mulongo 2018). The relationship established with the South Korean firm continued into DR Congo's 2023 elections on the basis of contracts awarded for the supply of voter ID cards and related electoral logistics. Allegations of defective cards, coupled with widespread concerns over the secrecy surrounding procurement decisions, again dominated media headlines (Rolley 2024).

In Ghana, the Electoral Commission announced in 2020 that the procurement of new BVR and verification devices would cost USD 56 million. This claim was strongly contested by the civil society watchdog IMANI-Africa, which alleged a "sham tender," inflated costs, and opaque justifications for discarding still-functional infrastructure (Cudjoe 2020). This sparked bitter protests and debates over whether the project was really necessary for a country that already had a biometric voter roll. While the transparency deficit to the deal was glaring, no formal investigation or adjudication pointed directly to corruption.

This was not the case with the 2022/2023 voter registration and ID card contracts concluded in Sierra Leone. *The Africanist Press* (Bah, Anderson, and Feldman 2022) alleged that the Electoral Commission of Sierra Leone had awarded procurement contracts worth over USD 10 million to two Freetown-based companies that lacked the technical capacity to provide the voter-registration technology and software required for the country's 2023 elections. Similarly, in 2015, Tanzania's Public Procurement Regulatory Authority launched an investigation into a controversial USD 117 million tender for the procurement of BVR technology from LithoTech Exports of South Africa (*The Citizen* 2014). The Tanzanian opposition fiercely criticised the process for its opacity in vendor selection and cost justification.

What is striking in all these examples is that the introduction of digital election technology became not only a technical issue but a source of fierce political contestation shrouded in opacity, ostensibly over rents and control. Liberia's episodes of dispute between the chairperson and the co-chairperson of its Electoral Commission over transparency and political favouritism in the selection of BVR vendors exemplify this point of elite control and murkiness in procurement. The

Public Procurement and Concessions Commission eventually intervened in seeking to address these irregularities, with the final award going to Laxton Group (Dodoo 2022).

The examples cited are far from exhaustive, as similar procurement controversies would surface in, among other instances, the context of Cameroon's 2012 BVR contract (Cameroon24 2012), Zimbabwe's BVR and ballot-paper scandal of 2024 (Donovan and Marchant 2024), and Zambia's irregularities of tender in the same year (*Zambia Monitor* 2025). This is not to say all digital reforms are driven by such cynical motives. However, political self-interest evidently has as much of a role to play here as public-spirited innovation. Existing research demonstrates that in contexts marked by endemic corruption, the adoption of such technologies is often shaped less by a clear commitment to enhancing electoral credibility and more by the opportunities they create for expanding patronage networks (Cheeseman, Lynch, and Willis 2018). This also underscores a broader point: far from being about straightforward technical improvement, election digitalisation has become another arena of political bargaining and manipulation.

Beyond rent-seeking and patronage, the digitalisation of elections offers enormous soft political capital. It allows incumbents to signal modernity and consequently win favour with international donors seeking to fund democratic reform. Digitalisation also creates space for concessions to and appeasement of domestic critics, especially opposition parties and civil society organisations. There are cases where governments, especially embattled ones, have unveiled new election technologies in response to opposition or civil society pressure for reform. However, these moves would eventually turn out to have been largely strategic in nature.

The introduction of biometric verification technology in Ghana in 2012 was, for instance, the result of heavy pressure from opposition parties and non-governmental organisations for improved authentication on election day. Such reform projected modernity and won both international and domestic approval, but opposition parties later took a case against the Electoral Commission to the Supreme Court over the selective application of the technology, as a number of individuals were alleged to have not undergone verification prior to voting. Kenya, on its part, rushed biometric registration in 2013 to satisfy donors and domestic opponents, while core operational challenges remain. Ten years later, Nigeria's Independent National Electoral Commission presented the IReV platform as a breakthrough for transparency, being under similar pressure for electoral reform to signal modernity, which ended up in court following the breakdown of this technology. Ruling elites may introduce technology not necessarily to project sound and improved elections but rather to shore up legitimacy and appease political dissent. Thus, digitalisation can proceed without ceding any real advantages. Even when technologies are deployed across the board, opacity in their operation can neutralise their integrity benefits.

Putting Transparency and Integrity First in Election Digitalisation

To align with the public interest, rather than elite strategising, concerted action is needed by international donors, civil society watchdogs, and political parties to shift away from flashy one-off tech purchases and towards transparency and accountability. This, for example, could mean conditioning funding on open, competitive procurement processes and independent audits of new election technologies. Again, technical training for Electoral Commission staff and robust pre-election testing of systems ought to be insisted on by donors and political parties instead of assuming that a costly new system will simply work by default.

Additionally, civil society and election observers should ensure that election tech serves voters. Domestic watchdog groups and NGOs should, accordingly, demand transparency at each stage of digital deployment. This includes not only monitoring the procurement of equipment and flagging any irregularities to media and anti-corruption bodies but also testing said devices before polling and ensuring electoral authorities make voter registries, results forms, and audit logs openly available in simple, accessible formats so that all stakeholders can verify – and thereby come to trust – the process.

Civil society should again advocate for legal frameworks that guarantee access to information on election technologies, such as the publication of source code or the independent certification of machines. Where digital failures or irregularities occur, NGOs and opposition parties should coordinate to gather evidence and litigate – and that responsibly when deemed necessary. Crucially, voter-education campaigns are required to set realistic expectations. Grassroots oversight can help redirect the focus of digitalisation back to the service of the electorate and away from the sole control of political elites.

Literatur

Bah, Chernoh Alpha M., Matthew Anderson, and Mark Feldman (2022), Sierra Leone: Electoral Commission Inflated Election Procurement Contract by US$6.3 Million, in: *The Africanist Press*, 28 September, accessed 18 May 2025.

BBC (2018), *DR Congo Election: Presidential Poll Hit by Delays*, 30 September, accessed 3 July 2025.

Cameroon24 (2012), *Elecam crée un scandale en Allemagne*, 23 October, accessed 16 August 2025.

Cheeseman, Nick, Gabrielle Lynch, and Justin Willis (2018), Digital Dilemmas: The Unintended Consequences of Election Technology, in: *Democratisation*, 25, 8, 1397–1418, accessed 13 October 2025.

CRG (2018), *The Electronic Voting Controversy in the Congo*, Congo Research Group Election Brief No. 1.

Cudjoe, Franklin (2020), IMANI: The Dangerous Games of The Electoral Commission, in: *Modern Ghana*, 24 February, accessed 12 August 2025.

Dodoo, Lennart (2022), Liberia: NEC Chair, Co-Chair Disagree over Selection of LAXTON for Biometric Voter Registration Exercise, in: *Front Page Africa*, 13 September, accessed 5 August 2025.

Donovan, Nick, and Michael Marchant (2024), South African Company, Ren-Form, and Wicknell Chivayo Embroiled in R570m Zimbabwe Corruption Scandal, in: *Daily Maverick*, 17 July, accessed 15 June 2025.

Mulongo, Freddy (2018), *CENI: Marcellin Mukolo Basengezi, mafieux négociant des machines à voler!,* Mediapart Blogs, 11 March, accessed 11 July 2025.

News24 (2018), *Zimbabwe Defends Electoral Roll Over "Ghost Voters",* 19 July, accessed 12 September 2025.

Norris, Pippa, Richard W. Frank, and Ferran Martínez i Coma (2014), Measuring Electoral Integrity around the World: A New Dataset, in: *PS: Political Science & Politics*, 47, 4, 789–798, accessed 13 October 2025.

Omenma, J. Tochukwu (2019), Courts' Involvement in the Electoral Process and Their Impact on Improving Election Quality in Nigeria, in: *Politeia*, 38, 1, accessed 13 October 2025.

Rolley, Sonia (2024), Smudged ID Cards, Missing Names Blemish Congo's $1 Billion Election, in: *Reuters*, 14 March, accessed 12 September 2025.

The Citizen (2014), Procurement Watchdog Should Stop Politicking, 7 October, accessed 12 September 2025.

Zambia Monitor (2025), Transparency International Raises the Alarm Over Suspected Irregularities in Biometric Voter Registration Equipment Tender, 7 August, accessed 12 September 2025.

Impressum

- Editor GIGA Focus Africa: Prof. Dr. Matthias Basedau
- Editorial Department: Petra Brandt, Dr. James Powell