

Why do Civic-Tech Tools Struggle? A Qualitative Comparative Case Study Approach

Arafat Aderonke Oseni & Hawa Coulibaly

Abstract

This study explores why civic technology (civic-tech) initiatives are often unable to scale, sustain citizen participation, and deliver lasting democratic effects in West Africa despite increased investment in digital participation. The study examines the differences among low-tech, high-tech, and hybrid civic-tech models; the barriers that impede their effectiveness; and the conditions that enable civic-tech to enhance voice, accountability, and public problem-solving among the citizenry. The paper relies on a qualitative comparative case-study design to compare and contrast eight purposively selected initiatives in Nigeria, namely Urban Alert, Alerti, Follow the Money, BudgIT, Tracka, BIMi AI, JENCIA, Dubawa Audio AI, and Podus AI in Mali. According to the authors, low-tech tools are defined as civic engagement tools that involve radio, SMS, USSD, basic social media, community meetings, or simple civic education and community verification, in contrast to tools that require advanced digital infrastructure, which are known as high-tech tools, and tools that use digital platforms alongside offline civic education, mobilisation, advocacy, and community verification, which are known as hybrid tools. The study draws on social accountability theory, digital divide scholarship, and user-centred design literature to conclude that civic-tech projects face more challenges not from technology but from digital exclusion, institutional unresponsiveness, low trust in the technology, donor reliance for sustainability, regulatory uncertainty, and poor alignment with citizen problems. For democratic impact, the analysis indicates that hybrid models generally have better prospects for scale, accessibility, trust-building, and community engagement. The paper argues for assessing civic-tech in West Africa by its ability to enable citizens to access information, express their voices safely, gain institutional responses, and resolve real civic issues, rather than relying on its technical sophistication.

Keywords: Civic-tech, citizen participation, high- and low-tech, scalability, West Africa

Arafat Aderonke Oseni, arafat.oseni@gmail.com, Department of Jurisprudence and International Law, University of Lagos & Hawa Coulibaly, hcoulibaly@tuwindi.org, Tuwindi Foundation, Mali.

The Nigerian Journal of Business and Social Sciences, Volume 13, 2026 (Special Issue)
A Journal of the Faculty of Social Sciences, University of Lagos, Akoka, Lagos, Nigeria
© 2026

1. Introduction

Digital technologies have transformed where and how citizens access public information, mobilise around public issues, interact with state institutions, and demand accountability worldwide. Aside from periodic elections, mobile phones, social media platforms, open data portals, online petitions, mapping platforms, and AI systems have contributed to the potential for greater participation (Asimakopoulou et al., 2025; Shin et al., 2024). Digital participation, meanwhile, has not necessarily led to a more participatory democracy. While civic technologies can enhance citizen voice, they can also reinforce inequalities, whether due to unequal access, limited literacy, limited language support, or inadequate institutional responses to the technology (Norris, 2001; Van Dijk, 2020). Civic technology (civic-tech) is one of the key areas of democratic innovation in this global change. Code for All (n.d.) describes civic tech as technology that positively impacts society and contributes to democratic, transparent, and people-centred public services. This is more broadly understood as the Creation of civic-tech, which are digital and technology-enabled tools designed by civil society organisations, governments, social enterprises, media organisations and civic communities to enhance citizens' engagement, transparency, accountability and responsiveness of public service (Bhanye & Shayamunda, 2025; Peixoto & Sifry, 2017). There is a tendency to link the African civic-tech movement to periods of crisis and experimentation with democracy. The development of Ushahidi in the aftermath of the Kenya post-election violence demonstrated how citizen reports, crowdsourcing and mapping could be leveraged to document public problems and to mobilise response (Okolloh, 2009). Since then, civic-tech ecosystems have expanded continentally across a variety of themes, such as civic education and access to justice (Karuri-Sebina & Mutua, 2023); civic finance, public finance, misinformation, and service delivery (Zisengwe, 2024); and, most recently, civic engagement and elections. In West Africa in particular, this has been especially apparent in Nigeria, Ghana, Mali, Senegal, Sierra Leone, and other countries, where civic actors – including civic society organisations, media actors, youth-led movements, and technology communities – have created tools to enhance civic engagement with governance (Civic Hive, 2025). However, as civic-tech has spread, an important question has emerged in the academic and practice literature: why do so many civic-tech tools fail? Having a platform is not enough to ensure citizen uptake, institutional accountability and sustainability. A few programs get donor dollars and publicity, but are not used by the target population. Others are technically high-tech but inaccessible due to a lack of stable Internet, smartphones, digital skills, or trust in government responses among citizens. Other factors that may constrain democratic impact include restrictive civic space, misinformation, and weak data protection systems and funding cycles (Civic Hive, 2024; Peixoto & Sifry, 2017).

This paper aims to fill this gap by analyzing eight civic-tech projects in West Africa. It does not believe that everything should be done with high tech rather than low tech. Rather, it looks at the circumstances in which low-tech, high-tech, and hybrid models can facilitate citizen engagement, reach multiple communities, and advance democratic stories. The logic being put forward is that the effectiveness of civic-tech can be gauged beyond tech features – accessibility, usability, institutional responsiveness, trust, sustainability, relevance to citizens' everyday governance issues.

1.2 Aim and Objectives

This research aims to identify and shed light on barriers to the sustainable reach, scalability, and democratic impact of civic-tech projects in West Africa, and the conditions under which low-tech, high-tech, and hybrid models are more likely to be effective.

This study has four objectives, which are to:

1. Categorise the Civic-tech initiatives selected from West Africa as Low-tech, high-tech, and Hybrid.

2. Investigate the technological, political, institutional and social challenges to their effectiveness and scalability.
3. Evaluate the extent to which these programmes contribute to citizen engagement and public accountability and to democratic narratives.
4. Offers recommendations for more inclusive, sustainable and people-centred civic-tech practice in West Africa.

1.3 Research Questions

Drawing on the above-mentioned objectives, the study seeks answers to the following questions:

1. What are the differences between low-tech, high-tech and hybrid civic-tech models in West Africa?
2. What are some obstacles to scaling selected civic-tech initiatives up, to citizen adoption, and to their democratic effects?
3. What are the impacts of the selected initiatives on citizen voice, public accountability, information integrity and access to public services?
4. What are the requirements for the design, governance and sustainability of civic-tech tools to yield meaningful outcomes in democratic processes?

2. Conceptualising Civic-Tech

The term civic-tech is a general and controversial One. It encompasses technologies and technology-enhanced practices to engage, distribute and connect citizens with government and with each other for civic purposes. Civic-tech has been linked to public participation (Bhanye & Shayamunda, 2025), open data (Schrock, 2018), monitoring service delivery, social accountability, and collaborative governance and democratic innovation (Zhang et al., 2022). This generality is good because civic-tech is applied across different sectors. However, it can also be problematic when all digital tools are perceived as civic tech, regardless of their purpose, ownership, inclusivity, or public value.

In this paper, civic-tech does not just mean technology that helps citizens; it is about how digital technologies and technology-assisted civic practices are used by public, civic, or private actors to enhance citizen engagement, public accountability, transparency, rights protection, information integrity, or public problem-solving. Deliberately, this definition includes advanced digital systems and simple communication channels; in West Africa, community radio, SMS, WhatsApp groups, public forums, and grassroots advocacy can be as civically important as artificial intelligence, dashboards, or geospatial platforms.

2.1 Distinguishing Low-Tech, High-Tech and Hybrid Civic-Tech Models

It is crucial to point out the dichotomy between low-tech and high-tech, hybrid civic-tech models. Low-tech civic-tech uses simple and familiar platforms such as radio, SMS, USSD, community meetings, public hearings, print materials, call-in programmes, and basic social media. It offers a key benefit of inclusion: it can be accessed by citizens who are disengaged from the digital world, not highly literate, live in rural areas, or do not have a smartphone or reliable internet connection. High-tech civic-tech requires more sophisticated digital infrastructure, including artificial intelligence, cloud computing, geospatial mapping, sensors, automated data processing, visualisation dashboards, application programming interfaces, web platforms, and mobile applications. The benefits of this are scale, speed, data aggregation, and automation. However, it could also be a barrier for citizens who lack devices, do not know how to use them, or do not trust automated systems. Hybrid civic-tech is a mix of digital systems and offline engagement. This could involve dashboards, AI tools, social media and community verification, field monitoring, town hall meetings, civic education, radio programmes, legal aid, advocacy letters, and engagement with public institutions. Hybrid approaches are gaining traction in the literature, as civic participation is not just about technical interfaces but also about relationships, trust, and institutional pathways (Dickinson et al., 2019; May & Ross, 2018).

2.2 The Effectiveness of Civic-Tech in the Sociopolitical Landscape

This study is guided by an integrated Civic-Tech Effectiveness Framework that draws on three bodies of literature: social accountability, digital divide scholarship, and user-centred design. Social accountability is an understanding of citizens' and civic organisations' expectations of public institutions beyond elections. Fox (2015) demonstrates that when voice is linked to institutional capacity and incentives for response, they become more powerful. Peixoto and Sifry (2017) also separate citizen uptake, or 'yelp', from institutional responsiveness, or 'teeth'. A civic-tech platform may gather complaints, reports or data, but if there is no way for the public institutions to respond, it has little democratic value.

Digital divide scholarship (DDS) is the body of knowledge underlying the concept of digital participation reproducing inequality. Devices or Internet access are not required. Skills, affordability, content, language, confidence and meaningful use (Donner, 2015; Van Dijk, 2020) are also included. In West Africa, inequalities between urban and rural areas, gender disparities in access, economic barriers and infrastructure gaps determine who can be engaged in digital governance, which is especially crucial.

In civic-tech literature, it is explained why civic-tech projects must be developed with users, rather than based on donor, technologist, or civil society thinking about what users need. May and Ross (2018) argue that civic technologies need to be understood in terms of the factors that influence representative participation and impact. Similarly, Berg et al. (2021) show that user experience and feedback, as well as usability, are important aspects of digital democratic innovations. Thus, civic-tech effectiveness is evaluated in this paper in five respects: accessibility and inclusion; relevance and usability; institutional responsiveness; trust and civic safety; and sustainability and adaptability.

3. Methodology

The approach used in this study is a qualitative comparative case study. A comparative case-study design is suitable, as the paper does not test statistical causality but instead observes patterns, similarities, and differences among civic-tech models across different governance contexts. The method enables the study of comparing the design of civic-tech tools, citizens' interactions with them, their potential barriers, and how institutional and social factors influence their democratic value.

To capture variation in country context, technological sophistication, governance focus, ownership and policies to engage citizens, eight (8) cases were purposively selected. The cases include Urban Alert and Alerti, Follow The Money, BudgIT/Tracka, BIMi AI, JENCIA, Dubawa Audio AI and Podus AI. They feature low-tech, high-tech, and hybrid models of accountability, disaster risk management, budget transparency, public finance intelligence, civic education, fact-checking, and access to Justice.

Qualitative document analysis was conducted on academic literature, organisational reports, platform documents, media reports, public documents, and available digital content. The analysis centered on four questions across each case: What civic problem does the initiative aim to solve? What technology model is being used? How does it involve citizens? What are any barriers to reaching, adopting, responding or sustaining citizens? The study then employed cross-case comparison to establish commonalities and differences between the initiatives.

There are two limitations of the study. First, it is based on publicly available material rather than interviews with users, implementers, or government officials. Second, it focuses on a sample of the civic-tech ecosystem in West Africa rather than the entire West African civic-tech landscape. The results presented here should be considered analytical findings from selected cases rather than an indicator of the overall situation of civic-tech initiatives in the region.

4. Categorisation and Comparative Case Profiles

The Analysis of the case studies is numbered and grouped below, extending the descriptive profiling. The categories are analytical, as some initiatives involve both online and offline approaches. The classification thus rests on the dominant model of participation and the primary barriers which are likely to influence effectiveness.

Table 1. Comparative classification of selected civic-tech cases

Case	Initiative and country	Dominant model	Governance focus	Comparative insight
1	Urban Alert, Nigeria	Low-tech/hybrid	Community accountability and citizen reporting	Uses radio and advocacy to lower participation barriers; impact depends on institutional follow-up.
2	Alerti, Mali	High-tech	Flood/disaster risk management and public safety	Uses data-driven alert systems for rapid response; requires maintenance, connectivity and preparedness systems.
3	Follow The Money, Nigeria	Hybrid	Public fund tracking and social accountability	Combines online advocacy, field verification and community mobilisation; links citizen voice to institutional pressure.
4	BudgIT/Tracka, Nigeria	Hybrid	Budget transparency and project monitoring	Translates complex budget data into citizen-facing accountability; relies on community tracking and advocacy.
5	BIMI AI, Nigeria	High-tech	Public finance intelligence and data access	Uses AI to simplify fiscal data; risk of benefiting mainly digitally skilled users unless insights are translated for wider publics.

6	JENCIA, Mali	Hybrid	Civic education, youth participation and digital literacy	Uses digital engagement with human-centred learning; outcomes require sustained civic education.
7	Dubawa Audio AI, Nigeria	High-tech	Fact-checking and information integrity	Automates audio transcription and claim detection; impact depends on editorial capacity, language coverage and public trust.
8	Podus AI, Nigeria	High-tech	Access to justice and legal empowerment	Provides legal information and document support; requires accuracy, human oversight and user protection.

Case 1: Urban Alert (Nigeria) - Low-Tech/Hybrid Community Accountability

Urban Alert is an example of democratic use of low-tech and hybrid civic-tech. Oju Eleri is a radio citizen-reporting programme through which community members can voice issues related to public services, infrastructure, the environment, and government response. It is a low-tech model since radio is accessible and familiar to many, including non-smartphone owners and non-internet-connected people. It is also hybrid – the reports can go through the verification process, advocacy, social media amplification, letters, and Freedom of Information requests (Nigeria Health Watch, 2025; Urban Alert, n.d.). Urban Alert is important because it can turn everyday community issues into public accountability demands. The problem is that impact depends on the capacity and willingness of public agencies to respond: citizen voice is amplified by radio reports, but public agencies must be willing and able to respond.

Case 2: Alerti (Mali) - High-Tech Disaster Risk Management

Alerti is a high-tech civic-tech project focused on flood and disaster risk management. It relies on digital infrastructure, including monitoring systems, data processing, and weather information and alerts, to warn vulnerable communities about environmental risks (Alerti, n.d.). It excels at providing information quickly and ensuring public safety. However, it requires technical maintenance, good data flows, connectivity, institutional collaborations and trust in warning systems. Alerti shows that in cases where civic issues demand speed, prediction, and coordination, high-tech civic-tech is essential. However, the democratic benefit of these tools relies on their availability, community understanding, and the capacity of local governments and people to respond effectively to alerts.

Case 3: Follow The Money (Nigeria) - Hybrid Social Accountability

Follow The Money is a mix of social accountability and public finance monitoring by Connected Development, which encourages community demands for good service delivery. It involves mobilisation and engagement with public institutions, online advocacy, data use and community verification. Together, this provides reach and credibility to the initiative. The model is very much in line with Social Accountability theory, as it does not end at information publishing. It brings citizen voice together with evidence, the media, and pressure on

decision-makers. Its challenge is sustainability: sustaining community networks and follow-up advocacy requires long-term funding, staff capacity, and political space.

Case 4: BudgIT/Tracka (Nigeria) - Hybrid Budget Transparency and Project Monitoring

The BudgIT model is One of the most well-known civic-tech models in Nigeria, alongside the Tracka platform. BudgIT breaks down fiscal information through infographics, reports, and digital communications, and Tracka allows citizens to track public projects and allocations in their neighborhoods (BudgIT, 2022; Tracka, n.d.). The model is hybrid because it leverages data visualisation and online reporting, is fielded by model officers, and also involves community engagement and public advocacy.

Tracka's value is in making the sometimes-difficult budget data accessible in a way that holds citizens accountable. This is consistent with the view that civic-tech is successful when it transforms public data from the abstract to the concrete, in this case, the question of roads, schools, health centres, water projects and other public goods.

Case 5: BIMi AI (Nigeria) - High-Tech Public Finance Intelligence

BIMi AI is a publicly available, high-tech public finance intelligence tool built by BudgIT that leverages artificial intelligence to search and explain large fiscal, macroeconomic and demographic datasets (BudgIT, n.d.). Its benefit is to reduce the technical hurdles to public finance data access for all stakeholders involved in research, media, civil society, and policy. Concurrently, BIMi AI raises the pressing question this paper addresses: Who benefits from the use of advanced civic-tech? Its impact on ordinary citizens might be indirect if the tool is primarily used by policy experts and those with advanced digital skills. Whether knowledge gained from the tool becomes available for public communication, civic Education and institutional accountability will shape its value for democracy.

Case 6: JENCIA (Mali) - Hybrid Digital Civic Education and Youth Engagement

JENCIA, created by Tuwindi Foundation, can be best described as a civic-tech hybrid model, not a 'moderate high-tech' model. It leverages technologies for civic information, Education, and civic engagement and participation by young people, with a strong reliance on human-centred civic engagement and participation processes, training, and awareness-raising (Tuwindi Foundation, n.d.).

JENCIA demonstrates that civic-tech can do more than complain about the budget or track complaints. It can also contribute to the development of a democratic culture by enhancing civic knowledge, digital literacy, critical thinking and youth confidence. The difficulty is that civic education outcomes cannot be measured when they are taught, but only after time has passed.

Case 7: Dubawa Audio AI (Nigeria) - High-Tech Information Integrity

Dubawa Audio AI is a cutting-edge civic-tech solution designed to bolster information integrity. It incorporates Artificial Intelligence and machine learning to transcribe audio content, flag fact-check-worthy claims, and assist fact-checkers with radio, podcasts, and other audio formats (Dubawa, n.d.). This is especially relevant as radio is the medium of choice for public information in many communities in Africa.

The platform can illustrate how AI can contribute to democratic dialogue by enabling journalists and fact-checkers to track public claims more effectively. However, its reach and impact will depend on newsrooms' capacity, the languages covered, public confidence, data control, and the ability to present fact-checking findings in ways the public can use.

Case 8: Podus AI (Nigeria) - High-Tech Access to Justice

Podus AI is a technologically advanced access-to-justice platform that offers legal advice, document assistance, and links to legal services (Podus, n.d.). It brings civic-tech from budget transparency and public accountability to rights protection and legal empowerment. Its civic significance lies in its potential to educate citizens about legal matters and provide them with basic legal information. However, caution is advised when using legal AI, as inaccurate or incomplete legal information can affect rights and remedies. The democratic nature of Podus AI thus relies on its reliability, transparency, human oversight of the law, protection of users and integration of citizens who might not be digitally connected or legally informed.

5. Findings and Discussion

Accessibility and digital inclusion are integral.

The first is that the degree of accessibility seems to be more important to citizen participation than the sophistication of the technology. Data can be used to power high-tech tools like BIMBI AI, Dubawa Audio AI, Alerti, and Podus AI to automate, process, and support at scale. However, where people lack internet access, a smartphone, electricity, digital skills, or confidence in digital systems, their direct reach as citizens may be limited. This result aligns with the findings of digital divide scholarship as relevant content, affordability, skills and actual use are necessary for meaningful digital inclusion in addition to infrastructure (Donner, 2015; Van Dijk, 2020). But in contrast to this, low-tech and hybrid approaches (such as Urban Alert, Follow The Money and Tracka) illustrate the ongoing viability of these methods. Citizens can engage without complicated platforms, as radio initiatives and community gatherings lower the barriers to entry. Radio programs and community events lower barriers to entry for citizens to engage. This is not to say that "low-tech" tools are always better; it demonstrates that civic-tech tools must be equally accessible to the target user. *Institutional Responsiveness is a key factor in whether participation translates to accountability.* The second is the absence of institutional responses to participation. The second is that civic-tech often fails because it lacks citizen participation to match. A platform can gather reports, complaints, and questions about public finance and public facts, but democratic value is realized only if they influence decisions, service delivery, or public accountability. This discovery reinforces Fox's (2015) assertion that voice should be linked to enforcement and responsiveness, or to institutional capacity for social accountability. The two other games, Follow The Money and Tracka, seem to be in a better position, as they are not just digital games. They use citizen-generated evidence, media engagement/advocacy, field verification and pressure on public institutions. Peixoto and Sifry (2017) try to match citizens' Yelp sentiment with the 'teeth' of institutions. If there is no such connection, civic-tech becomes a place to grumble and grouse rather than a place to change things.

Trust, Civic Space and Safety influence Citizen Adoption

The third discovery is that trust is a necessity. People are more inclined to use civic-tech tools when they feel it is safe, helpful and effective to participate. In situations where citizens are concerned about public reporting due to retaliation, online harassment, or political repercussions, they may not report it publicly even when they have platforms to do so. Civic-tech projects on issues of corruption, elections, rights protection, or misinformation are especially vulnerable to limitations on civic space. The relationship between the platform and the community is another factor in building trust. Dickinson et al. (2019) warn that there is danger in data-driven civic-tech models that treat citizens as transactions with civic services rather than fostering community relationships. The West African cases confirm this. A mix of technology and trusted local channels, civic education, and human engagement is more likely to support adoption than tools that expect citizens to participate simply because a platform has been launched.

Sustainability Beyond Donor Funding Is a Persistent Challenge

The fourth is that financial and organisational sustainability are still significant issues. A large number of civic-tech programs rely on the support of philanthropy, project-based funding, and donor grants. This support can lead to experimentation, but can also lead to short project cycles that do not foster citizen trust, institutional partnerships, or behavioural change. In the context of developing countries, the lesson for civic-tech sustainability is that the design and implementation of information systems often misfits with institutional realities (Heeks, 2002). Ongoing software maintenance, cybersecurity, field engagement, communications, staff capacity building, data stewardship, and user support and advocacy are all key areas of investment needed to sustain civic-tech. Low-tech initiatives also require resources for community meetings, radio airtime, verification and follow-up. So sustainability is not only a technical problem but also an organisational, financial and political One.

Relevance and Usability are More Important than Innovation Hype

The fifth observation is that citizens are interested in civic-tech when it addresses a problem they are aware of. Urban Alert serves the community's needs, including roads, electricity, the environment, and public services. Tracka links public budgets with public projects in communities. Follow the Money relates public expenditure to service provision. The JENCIA focuses on youth civic knowledge. These efforts are likely to be perceived as meaningful, since they link civic involvement to familiar issues. This discovery helps support scholarship at UCD. While civic technology must be designed around factors that enable representative participation and

impact, Berg et al. (2021) highlight the importance of usability and feedback in digital democratic innovation, and May and Ross (2018) illustrate this. Technological novelty, whether it be the integration of artificial intelligence, should, therefore, be seen as a means and not as an end. A basic, widely used platform that citizens are familiar with and have gained confidence in can be more democratically beneficial than a more sophisticated platform with fewer users.

Civic-Tech Can Strengthen Democratic Narratives, But Not Automatically

The last finding concerns democratic narratives. Civic-tech can promote democracy by reaffirming the principles that the public has a right to a voice, that public information should be public, that government should be held accountable to the public, and that collective action is a way to address public issues. Urban Alert, Tracka, Follow The Money, and JENCIA do this by enabling citizens to recognize issues, develop civic competencies, track projects, and influence decision-makers. Dubawa Audio AI adds value by helping ensure information integrity is maintained, which is essential for informed public debate. Civic-tech is not necessarily democratic, however. Participation may yield frustration rather than empowerment if citizen reports do not receive a visible response from others. Digital tools that are not available to everybody can create inequalities. In situations where civic participation is becoming risky or symbolic due to the erosion of trust stemming from misinformation, regulatory uncertainty, or a lack of civic space, the Internet can be a dangerous medium. Therefore, civic-tech only helps to reinforce the democratic narrative when it includes voice, information, safety, inclusion and institutional response.

6. Recommendations

- Civic-tech innovators need to start with a problem among citizens, not with a technology trend. Citizens and community members, civil society actors and relevant public institutions should be part of design processes from the very beginning. This will minimize assumptions, enhance usability and build trust.
- Organisations should use digital platforms with offline channels of participation like radio, community meetings, civic Education, local language communication, field verification and advocacy. Where there is uneven access to the internet, illiteracy and trust, hybrid models are particularly relevant.
- There is a need for clear pathways for public institutions to receive, process, and respond to civic-tech inputs. Civic-tech organisations also need to create escalation paths between citizen reports and agencies, legislators, media, courts, regulators or service providers. If citizens cannot observe what happens after they participate, then it is not meaningful.
- Civic-tech organisations need to diversify their funding from a temporary donor cycle by considering other funding options such as institutional partnerships, research collaborations, social enterprise models, local philanthropy, membership communities and responsible public-sector partnerships. Platforms should be launched long after sustainability planning has begun.
- Civic-tech should be measured by the extent to which citizens adopt it, include it, find it easy to use, respond to it institutionally, impact policy, trust it, and learn from it to solve problems. Merely downloading, viewing pages or using dashboards and AI is not enough to gauge the impact of democracy.
- It is necessary for civic-tech projects to establish robust data protection, user safety and ethical AI practices. This is significant for platforms that receive reports on corruption, legal concerns, misinformation, public finance, or political participation. Reliable civic-tech should safeguard citizens, too.

7. Conclusion

In this paper, eight civic-tech tools in Nigeria and Mali are analyzed qualitatively to examine why civic-tech tools fail in West Africa. The study reveals that civic-tech challenges are not just technological. They are influenced by digital exclusion, low institutional responsiveness, lack of public trust, reliance on funding, restrictions on civic space, and a lack of regulatory clarity and responsiveness.

The analysis questions the correlation between technological advancement and democracy. The use of high-tech tools like AI platforms, dashboards, and sensor-based systems can enable scale, speed, and data analysis, but they do not include citizens who may not have access or skills. Radio and community mobilisation, as

examples of low-tech approaches, have the potential to generate meaningful engagement, but they do require institutional response and advocacy. In many cases, hybrid models have the greatest promise due to both technical scope and social trust, community engagement, and offline accountability initiatives.

The main thesis is that civic-tech should be evaluated on whether it enables citizens to participate safely, access useful information, solve real-world problems, and obtain a response from the public sector. So, while civic-tech is a technology, the future of civic-tech in West Africa is not just about technology; it is also about inclusive design, community relevance, institutional partnership, sustainable financing, and democratic accountability. Civic-tech is not a goal to be achieved, but a tool to foster civic connection with the state.

References

- Asimakopoulou, G., Antonopoulou, H., Giotopoulos, K., & Halkiopoulos, C. (2025). Impact of Information and Communication Technologies on Democratic Processes and Citizen Participation. *Societies*, 15(2), 40. <https://doi.org/10.3390/soc15020040>
- Bannister, F., & Connolly, R. (2012). Defining e-Governance. *E-Service Journal*, 8(2), 3–25. <https://doi.org/10.2979/eservicej.8.2.3>
- Berg, J., Lindholm, J., & Högväg, J. (2021). How do we know that it works? Designing a digital democratic innovation with the help of user-centered design. *Information Polity*, 26(3), 1–15. <https://doi.org/10.3233/ip-200282>
- Bhanye, J., & Shayamunda, R. (2024). The Promise of Civic-Tech: Digital Technologies and Transparent, Accountable Governance. *Digitalisation and Public Policy in Africa, Studies in National Governance and Emerging Technologies, Chapter 5*, 93–99. https://doi.org/https://doi.org/10.1007/978-3-031-75079-3_5
- Bussu, S., Hidalgo, E. S., Olivier Schulbaum, & Eve, Z. (2024). Make (digital) space for and with the young: Arts-inspired co-design of civic tech for youth mental health policies. *Convergence: The International Journal of Research into New Media Technologies*, 31(1), 322–346. <https://doi.org/10.1177/13548565241264001>
- Civic Hive. (2025). West Africa CivicTech Landscape Report: Empowering Change through Technology for Good Governance. In <https://civichive.org/west-africa-civictech-landscape-report/> (pp. 6–9, 23).
- Civic Hive. (2024). Civic Tech Landscape In Nigeria: Understanding the Value-Add, Impact, Challenges and the Future. In <https://elections.civichive.org/wp-content/uploads/2024/03/CTLWebVersion.pdf> (pp. 3–13).
- Couldry, N., & Hepp, A. (2017). *The Mediated Construction of Reality*. John Wiley & Sons.
- Djarmiko, G. H., Sinaga, O., & Pawirosumarto, S. (2025). Digital Transformation and Social Inclusion in Public Services: A Qualitative Analysis of E-Government Adoption for Marginalized Communities in Sustainable Governance. *Sustainability*, 17(7), 2908–2908. <https://doi.org/10.3390/su17072908>
- Donner, J. (2015). *After access: inclusion, development, and a more mobile internet*. Cambridge, Massachusetts, The MIT Press.
- Gil-Garcia, J. R., Pardo, T. A., & Nam, T. (2015). What makes a city smart? Identifying core components and proposing an integrative and comprehensive conceptualization. *Information Polity*, 20(1), 61–87. <https://doi.org/10.3233/ip-150354>
- Gilman, H. R. (2017). Civic Tech For Urban Collaborative Governance. *PS: Political Science & Politics*, 50(03), 744–750. <https://doi.org/10.1017/s1049096517000531>
- Karuri-Sebina, G., & Mutua, A. (2023). Civic Tech in Southern Africa: Alternative Democracy and Governance Futures? *South African Institute of International Affairs*. <https://www.jstor.org/stable/resrep67380>

- Matlala, L. (n.d.). Citizen-Based Monitoring in the Digital Age: Balancing Online Platforms and Offline Practices for Context-Responsive Accountability. *Architectural Image Studies*, Vol.7(Issue 1, 2184-8645), pp.2447-2461. Retrieved May 20, 2026, from <https://journals.ap2.pt/index.php/ais/article/view/1245>
- Mansbridge, J., Bohman, J., Chambers, S., Christiano, T., Fung, A., Parkinson, J., Thompson, D. F., & Warren, M. E. (2012). A systemic approach to deliberative democracy. In J. Parkinson & J. Mansbridge (Eds.), *Deliberative systems: Deliberative democracy at the large scale* (pp. 1–26). Cambridge University Press. <https://doi.org/10.1017/CBO9781139178914.002>
- May, A., & Ross, T. (2017). The design of civic technology: factors that influence public participation and impact. *Ergonomics*, 61(2), 214–225. <https://doi.org/10.1080/00140139.2017.1349939>
- Mayne, J. (2011, January 1). *Contribution analysis: Addressing cause and effect*. ResearchGate. https://www.researchgate.net/publication/303836616_Contribution_analysis_Addressig_cause_and_effect
- Meijer, A., & Bolívar, M. P. R. (2016). Governing the smart city: a review of the literature on smart urban governance. *International Review of Administrative Sciences*, 82(2), 392–408. <https://doi.org/10.1177/0020852314564308>
- Mergel, I. (2016). Agile innovation management in government: A research agenda. *Government Information Quarterly*, 33(3), 516–523. <https://doi.org/10.1016/j.giq.2016.07.004>
- Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36(4), 101385. Science Direct. <https://doi.org/10.1016/j.giq.2019.06.002>
- Parkinson, J., & Mansbridge, J. J. (2012). *Deliberative systems: deliberative democracy at large scale*. Cambridge University Press.
- Polletta, F., Chen, P. C. B., Gardner, B. G., & Motes, A. (2011). The Sociology of Storytelling. *Annual Review of Sociology*, 37(1), 109–130. <https://doi.org/10.1146/annurev-soc-081309-150106>
- Report, W. Bank 2021. (2021). *World Development Report 2021: Data for Better Lives*. Wdr2021.Worldbank.org. <https://wdr2021.worldbank.org>
- Skaržauskienė, A. (2022). Monitoring the Potential of Lithuania's Civic Technologies Platforms to Co-create Collective Intelligence. *Indiana University Press*, Vol. 14, No. 1(10.2979).
- Skaržauskienė, A., & Mačiulienė, M. (2020). Mapping International Civic Technologies Platforms. *Informatics*, 7(4), 46. <https://doi.org/10.3390/informatics7040046>
- Shin, B., Floch, J., Rask, M., Bæck, P., Edgar, C., Berdichevskaia, A., Mesure, P., & Branlat, M. (2024). A systematic analysis of digital tools for citizen participation. *Government Information Quarterly*, 41(3), 101954–101954. <https://doi.org/10.1016/j.giq.2024.101954>
- Stern, E., Stame, N., Mayne, J., Forss, K., Davies, R., & Befani, B. (2012). *Broadening the range of designs and methods for impact evaluations* (Working Paper 38)—UK Department for International Development (DFID).
- Peixoto, T., & Sify, M. (2017). *Civic Tech in the Global South: Assessing Technology for Public Good*. <https://documents1.worldbank.org/curated/en/717091503398213001/pdf/119037-PUB-P133525-PUBLIC-21-8-2017-16-46-30-CivicTechPeixotoSify.pdf>
- Van Dijk, J. (2020). *The Digital Divide*. Cambridge Polity.
- World Bank. (2022). *The haves and have-nots: Who benefits from civic tech?* World Bank Blogs. <https://blogs.worldbank.org/en/developmenttalk/haves-and-have-nots-who-benefits-civic-tech>