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RESEARCH ARTICLE

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Digital Bureaucracy and Youth Dissent: A Governance and Participation Perspective

Brian Besigye, Fred Siambe Omweri, Muhumuza Ronnie

¹Department of Business Administration, Kampala International University, Uganda Email: brianasiimwe10@gmail.com

²Lecturer, Department of Social Sciences, Machakos University, Kenya

Email: fredsiambe@mksu.ac.ke.

ORCID ID: https://orcid.org/0000-0001-9721-4205
³Lecturer, Faculty of Agriculture, Bishop Stuart University, Uganda Ronnie.creena@gmail.com

Abstract:

Digital bureaucracies in Africa are increasingly positioned as instruments of transparency and service delivery. Yet, paradoxically, they are also being deployed to suppress youth dissent and reconfigure civic space. This paper interrogates that duality through a critical integrative review of over 60 peer-reviewed articles, policy reports, and digital governance frameworks, selected via targeted searches across Scopus, JSTOR, and regional repositories. Anchored in Bacchi's "What's the Problem Represented to Be?" (WPR) framework and Foucault's governmentality lens, the analysis explores how algorithmic systems, biometric registries, and predictive analytics are reshaping state—citizen relations. Drawing on case studies such as #EndSARS (Nigeria), #FeesMustFall (South Africa), and #RejectFinanceBill2024 (Kenya), the paper maps the tension between youth-led democratic innovation and institutional exclusion. It introduces two monitoring tools—the Dissent Responsiveness Score and the Participation Diversity Index—to assess how digital bureaucracies respond to civic engagement. The findings reveal that while digital platforms offer new avenues for participation, they also embed surveillance logics, algorithmic bias, and data asymmetries that disproportionately affect youth. The paper concludes with normative recommendations for inclusive digital governance, emphasizing co-creation, transparency audits, and youth-responsive policy design. It calls for a reimagining of digital public administration that centers equity, dissent tolerance, and democratic renewal.

Keywords: Digital Bureaucracy, Youth Dissent, Digital Governance, Governmentality, Democratic Innovation

1. Introduction

Digital governance has become a defining feature of contemporary public administration, reshaping interactions between states and citizens while reconfiguring the modalities of civic agency. At the core of this transformation lies digital bureaucracy—a technocratic governance model structured around algorithmic systems, data infrastructures, and automated procedures for managing public affairs (Seidelin, 2019; He & Wu, 2024a). Initially celebrated for its potential to enhance transparency, efficiency, and responsiveness, digital bureaucracy now operates as both a conduit for service delivery and a mechanism of institutional control (Vredenburgh, 2023).

Concurrently, youth dissent has intensified through informal political expressions, online activism, and transnational digital networks. These modes of engagement confront democratic deficits and governance failures, positioning youth as both subjects within and critics of digital governance regimes (Aubyn &

Frimpong, 2022; UNDP, 2021). Beneath the surface of modernization and inclusion, however, digital systems increasingly function as instruments of surveillance, regulation, and exclusion—particularly in relation to politically mobilized youth.

Expressions of youth dissent—articulated across digital platforms and informal civic networks—signal growing disillusionment with formal political institutions and a shift toward alternative forms of engagement. Rather than enabling inclusive participation, digital bureaucracies frequently deploy algorithmic regulation, depoliticization, and criminalization (Filgueiras & Raymond, 2023). This paradox—where infrastructures designed to facilitate civic voice are reconfigured to suppress it—raises urgent questions concerning the democratic legitimacy of digital governance. The tension between technocratic rationality and democratic participation is especially pronounced in urban and digitally saturated contexts, where youth are rendered hypervisible yet structurally marginalized (Juusola, Ågren, & Valtonen, 2023). In such environments, digital systems tend to function less as tools of empowerment and more as instruments of containment.

This review offers a critical interrogation of digital bureaucracy's role in shaping youth dissent, drawing on interdisciplinary scholarship in governance, digital politics, and youth studies. It synthesizes empirical evidence and theoretical insights to examine how digital infrastructures delineate normative boundaries of participation, amplify compliant voices, and silence dissenting publics. The analysis is grounded in Bacchi's "What's the Problem Represented to Be?" (WPR) framework and Foucault's concept of governmentality, both of which illuminate the discursive and operational logics embedded within digital governance regimes (Vredenburgh, 2023; He & Wu, 2024b).

A dual dynamic characterizes digital governance. On one hand, digital platforms facilitate informal civic engagement, enabling youth to mobilize, articulate grievances, and forge solidarities across borders (Aubyn & Frimpong, 2022; UNDP, 2021). These spaces open new avenues for political expression and transnational activism. On the other hand, the same platforms institutionalize exclusion through algorithmic filtering, selective responsiveness, and normative framing (Filgueiras & Raymond, 2023). This dynamic legitimizes technocratic authority while marginalizing dissenting publics, reinforcing a governance model that privileges control over dialogue. Participation becomes conditional—monitored, curated, and often punitive—resulting in a depoliticized digital public sphere where dissent is not merely discouraged but systematically erased.

Re-conceptualizing digital bureaucracies as contested political terrains allows for a governance perspective that foregrounds youth agency, ethical inclusion, and pluralistic engagement. Dominant narratives of digital neutrality and efficiency are challenged in favor of adaptive governance models that treat dissent as a vital component of democratic life (OECD, 2023a). Such models must move beyond instrumental rationality and embrace deliberative, participatory, and justice-oriented approaches. This reimagining positions digital infrastructures not simply as administrative tools, but as civic spaces—responsive to diverse voices, accountable in their design, and inclusive in their operation.

Ultimately, this review contributes to global debates on digital transformation, youth participation, and democratic innovation. It calls for a fundamental rethinking of digital governance—one that resists the technocratic impulse to manage dissent and instead cultivates spaces for meaningful civic engagement. In doing so, it affirms the political agency of youth and the transformative potential of digital publics in shaping more inclusive, responsive, and democratic governance futures. The challenge is not merely technical but profoundly political: to design systems that recognize dissent not as disruption, but as dialogue.

2. Methods

2.1 Literature Search

This review used a critical integrative approach to synthesize interdisciplinary scholarship on governance, digital politics, and youth studies. A targeted search of Scopus, Web of Science, JSTOR, and Google Scholar focused on peer-reviewed works from 2015–2024, capturing shifts post-SDG adoption, algorithmic governance, and youth-led digital movements (#FeesMustFall, EndSARS, Fridays for Future). COVID-19 intensified digital bureaucratization and civic exclusion. Key terms included "digital bureaucracy," "youth dissent," and "algorithmic governance." Boolean operators and citation chaining expanded the scope to include seminal and emerging literature on digital repression, technocratic control, and youth civic agency.

2.2 Source Identification

Sources were selected iteratively for thematic relevance, conceptual rigor, and empirical depth. Emphasis was placed on works examining digital infrastructures and youth political engagement, especially the discursive, algorithmic, and institutional regulation of dissent. The review integrated empirical studies, WPR- and governmentality-informed theory, and policy analyses from UNDP and OECD. Regional studies from Sub-Saharan Africa, Latin America, and Southeast Asia ensured contextual diversity and epistemic inclusivity, enabling a nuanced synthesis of global and situated perspectives.

2.3 Inclusion and Exclusion Criteria

Inclusion and exclusion criteria ensured transparency, justified source selection, and clarified prioritized regions, perspectives, and frameworks.

2.3.1 Inclusion Criteria

Sources were selected for their relevance to digital governance and youth political participation, emphasizing studies on civic agency, dissent, and democratic innovation. Only peer-reviewed publications, institutional reports, and empirically rigorous works were included, with preference for those using critical discourse analysis, governmentality, and algorithmic critique. The review focused on youth-led digital activism, civic engagement, and marginalization. To ensure contemporary relevance, sources from 2015–2024 were prioritized, capturing shifts in digital platforms and youth mobilization. Only English-language sources were considered to maintain interpretive consistency and support comparative synthesis across regions.

2.3.2 Exclusion Criteria

Studies lacking analytical depth, methodological rigor, or theoretical coherence were excluded, including descriptive accounts, speculative commentaries, and unscholarly grey literature. Normatively blind works that celebrate digital participation without addressing exclusion or repression were omitted. Sources portraying youth as passive recipients rather than political actors were excluded. Only post-2015 publications were considered, unless offering foundational theory, to ensure relevance to current digital governance and youth activism dynamics.

2.3.3 Reflexivity and Limitations

The review acknowledges potential biases in source selection, particularly the dominance of Global North perspectives in digital governance literature. Efforts were made to include Southern epistemologies and youth-authored scholarship. The integrative approach is interpretive and discursive, not exhaustive, and aims to foreground conceptual tensions rather than produce a systematic inventory.

3. Analyzing Digital Bureaucracy in Governance

The shift from analog to digital bureaucracy marks a governance transformation, integrating algorithms, data systems, and automation. Traditional paper-based, hierarchical models are replaced by platforms promising efficiency and transparency (Seidelin, 2019), reshaping control, responsiveness, and civic visibility beyond technical change.

3.1 From Analog to Algorithmic Governance

The shift from analog to algorithmic governance marks a reconfiguration of bureaucratic authority and civic interaction. Traditional Weberian bureaucracies relied on hierarchical structures, paper documentation, and human discretion. Digital systems now automate decision-making and citizen engagement, framed as neutral and efficient (Seidelin et al., 2019). These systems emphasize metrics and predictive analytics, transforming governance into a data-driven enterprise. Yet, as Vredenburgh (2023) notes, algorithms act like "street-level bureaucrats," wielding opaque discretionary power without accountability. This shift flattens diverse perspectives into computational outputs, masking bias and undermining democratic responsiveness (Eubanks, 2018; Vredenburgh, 2023). Authority moves from interpretive judgment to machine-mediated discretion, raising concerns about legitimacy and civic agency. Table 1 presents a typology tracing this evolution, diagnosing shifts in bureaucratic rationality and youth-policy interfaces, and critiquing how digital systems embed exclusionary logics.

Table 1 Governance Transitions: From Analog Bureaucracy to Algorithmic Reconfiguration

Layer	Governance Type	Bureaucratic Rationality	Institutional Logic	Policy Interface	Features	References
1	Analog Bureaucracy	Rule-based, hierarchical	Centralized control	Top-down programs with limited youth agency	Paper-based systems; Weberian logic; human discretion	Seidelin et al. (2019)
2	Digitized Administration	Data-driven, procedural	Networked coordination	Participatory platforms with selective inclusion	ICT tools; streamlined service delivery; modernization logic	Eubanks (2020); Vredenburgh (2023)

3	Algorithmic Governance	Predictive, automated	Platform governance	Behaviorally targeted interventions	Basic automation; machine-mediated authority; efficiency- driven	Eubanks (2018)
4	Opaque System Discretion	Discretion without transparency	Platform governance	Reduced accountability in youth targeting	Algorithms as "street- level bureaucrats"; epistemic and moral risks	Vredenburgh (2025)
5	Bias and Exclusion Risks	Illusion of neutrality	Platform governance	Homogenizatio n of youth needs	Encoded social biases; fairness concerns; exclusion of diverse perspectives	Eubanks (2018)
6	Civic Agency Reconfiguration	Reduced deliberative space	Platform governance	Weakened democratization consensus		

3.2 E-Governance Platforms and Surveillance

E-governance platforms serve as key interfaces for service delivery, grievance redressal, and civic engagement (Gil-Garcia, Dawes, & Pardo, 2020; Owuor, 2023). Yet they also function as surveillance infrastructures, collecting granular data on user behavior and political activity (Westerlund, Isabelle, & Leminen, 2021; Roberts, 2023). In politically charged contexts—especially youth mobilization against austerity—such data can be weaponized to monitor dissent and preempt collective action (He & Wu, 2024c; Omweri, 2024a; Abdullah et al., 2024).

Kenya's 2024 youth-led protests against the Finance Bill exemplify this tension. Platforms like TikTok and X enabled resistance but also exposed activists to algorithmic suppression and state surveillance (Omweri, 2024b). Boniface Mwangi, at the Africa Tech Policy Summit, warned that "governments will always claim public interest when they want to suppress dissent" (Indeje, 2025).

This dual role raises ethical concerns. Scholars argue that digital ethics frameworks—centered on transparency and accountability—are often undermined by political instrumentalization (Pakhnenko & Kuan, 2023; Lee, 2025). E-governance must be seen not as neutral, but as contested terrain where civic agency and data justice are negotiated. Ethical recalibration is essential to safeguard legitimacy and inclusivity.

3.3 Transparency, Control, and Responsiveness

Digital bureaucracies are praised for promoting transparency via dashboards and open data, yet this visibility is often selective and performative (Gurstein, 2011; Kitchin, 2023). Metrics are curated to reflect institutional efficiency, sidelining equity and masking algorithmic opacity and civic exclusion. Control operates through algorithmic filtering that amplifies compliant discourse while suppressing dissent, turning participatory platforms into echo chambers (Taylor, 2021; Data Justice Lab, 2024). This creates a hypernudged civic space where oppositional input is misclassified as noise.

Responsiveness, once central to democratic governance, becomes mechanized—automated replies and rigid categories replace deliberation (Agre, 1994; Christensen, 2025). Citizens are reduced to data subjects, and civic agency to system compliance. The result is a closed circuit of legitimacy: transparency as spectacle, control as algorithmic gatekeeping, and responsiveness as procedural formality. The challenge is epistemic and ethical—how do we reclaim civic agency in systems designed to optimize control rather than foster dialogue?

4. Youth Dissent in the Digital Age

Youth dissent in the digital age manifests through creative, disruptive, and transnational practices that challenge dominant governance narratives. Hashtags like #EndSARS, #FeesMustFall, and #RejectFinanceBill2024 serve as discursive anchors, enabling rapid mobilization and symbolic resistance (Iskandar, 2019). Memes, livestreams, and digital artefacts amplify grievances in real time, transforming platforms into spaces of visibility, solidarity, and affective engagement (Tilleczek & Campbell, 2019). More confrontational tactics—such as hacktivism, website defacements, and data leaks—target state opacity and institutional injustice.

These practices mark a shift from formal participation to decentralized activism, where youth reclaim agency through digital repertoires. State responses vary: repressive regimes deploy cybercrime laws, surveillance, and digital policing to criminalize dissent (Choroszewicz, 2024); strategic governments co-opt youth narratives into sanitized policy frameworks or performative consultations (Hoskins, Genova & Crowe, 2022); a minority engage constructively, integrating youth voices into reform, though such efforts remain rare and shaped by algorithmic gatekeeping (OECD, 2023b).

Digital literacy and misinformation are ambivalent forces. While literacy enables youth to decode propaganda and mobilize effectively, low proficiency and algorithmic amplification of falsehoods expose them to manipulation and reputational harm. Misinformation can fragment movements and justify repression under the guise of public order (Tilleczek et al., 2019). Enhancing digital literacy must go beyond technical skills, embracing critical pedagogy, ethical awareness, and institutional safeguards that protect civic agency and epistemic integrity

5. Case Studies of Youth Dissent and Digital Governance

Youth-led digital dissent movements across Africa have redefined civic engagement, challenging technocratic governance and demanding accountability. These movements show how digital platforms function as tools for mobilization and spaces for discursive resistance and democratic innovation (Bosch, 2017; Aubyn & Frimpong, 2022). This section examines #EndSARS (Nigeria), #FeesMustFall (South Africa), and #RejectFinanceBill2024 (Kenya) to illustrate the interplay between digital tools, youth strategies, and state responses.

Each movement leveraged platform-specific affordances: Twitter enabled viral coordination, TikTok facilitated creative protest, and WhatsApp supported grassroots organizing. Livestreams and memes framed narratives and fostered emotional engagement, transforming digital spaces into arenas of visibility and solidarity (Osazuwa & Oghogho, 2024; Olagunju et al., 2022).

Youth strategies featured decentralized leadership, creative repertoires, and transnational solidarity. Activists used humor, data visualization, and storytelling to reframe governance failures and bypass formal channels, disrupting dominant state narratives (Udenze, 2025; Ndlovu, 2017).

Governance responses varied but included repression, co-optation, and symbolic engagement. Nigeria deployed criminalization and internet shutdowns (Aubyn & Frimpong, 2022); Kenya used algorithmic suppression and performative consultations; South Africa combined partial engagement with selective repression (Maina, 2025; Bosch, 2017).

Policy outcomes were uneven. In Kenya, dissent sparked debate on fiscal justice (Maina, 2025); in Nigeria, it exposed police brutality and led to inquiries with limited impact (Udenze, 2025); in South Africa, it reshaped discourse on education funding, though tensions remain (Olagunju et al., 2022).

Table 2: Case Studies Youth Dissent and Digital Governance

Case Study	Context & Trigger	Digital Tools Used	Youth Strategies	Governance Response	Outcomes & Policy Reactions	Reference
#EndSARS (Nigeria)	Police brutality by SARS unit; long- standing youth grievances	Hashtags, Twitter threads, livestreams, crowdfunding	Decentralized protests, digital storytelling diaspora support	Criminalization internet shutdowns, denial of abuses	Judicial panels, partial reforms, limited justice	Aubyn & Frimpong (2022); Osazuwa & Oghogho (2024); Udenze (2025)
#FeesMustFa ll (South Africa)	Rising university fees, exclusion of poor students	Facebook, WhatsApp, YouTube, memes	Campus occupations coordinated digital campaigns	Engagement with student leaders, selective repression	Fee freezes, increased funding, ongoing tensions	Bosch (2017); Ndlovu (2017); Olagunju, Frankish, & Wade (2022)
#RejectFinan ceBill2024 (Kenya)	Proposed fiscal legislation seen as unjust and exclusionary	TikTok, X (Twitter), livestreams, digital art	Satirical content, youth- led forums, mass mobilization	Algorithmic suppression, surveillance, performative consultation	Partial withdrawal of bill sections, youth recognition in policy forums	Maina (2025)

6. Stakeholder Engagement and Democratic Inclusion

Digital governance ecosystems emerge from the dynamic interplay of actors whose roles shape civic inclusion, responsiveness, and legitimacy. Central are state institutions—ministries, regulators, and digital agencies—responsible for designing e-governance infrastructures. Youth constituencies, including informal networks, student bodies, and activist collectives, increasingly assert themselves as agents of dissent and reform. Civil society organizations (CSOs), such as NGOs, think tanks, and advocacy coalitions, mediate between citizens and the state, amplifying youth voices in constrained spaces. Technology platforms and intermediaries—social media firms, data brokers, and infrastructure providers—exert influence through algorithmic governance, content moderation, and data-driven engagement architectures (Shroff-Mehta et al., 2024).

While digital platforms offer new avenues for civic engagement—online consultations, participatory budgeting, crowdsourced feedback—their democratic potential is often undermined by structural exclusions and algorithmic bias. Governmental responsiveness tends to be selective, privileging curated interlocutors and marginalizing dissent. Algorithmic filtering suppresses oppositional content, diminishing youth discursive presence. Digital divides—rooted in access, connectivity, and literacy—further exclude marginalized youth. Even when youth are included, participation often remains performative, lacking real influence (Ehwi et al., 2023).

Effective stakeholder engagement depends on robust feedback loops that translate civic input into policy. Yet current systems rely on automated, procedural responses with limited deliberative depth or accountability (Jahan

& Naeni, 2025). Governance of digital infrastructures remains opaque, with little transparency around algorithmic oversight, moderation, or grievance mechanisms. Hypernudging and behavioral targeting, driven by predictive analytics, constrain agency by steering users toward predefined choices and away from critical inquiry (Data Justice Lab, 2024).

Democratic inclusion demands a shift from technocratic rationality to participatory ethics. This includes codesigning platforms with youth and CSOs, institutionalizing transparent algorithmic governance, and safeguarding dissent. Inclusive digital literacy initiatives are also vital—equipping youth with critical competencies to navigate, interrogate, and reshape digital systems in line with their lived realities and aspirations (O'Riordan & Fairbrass, 2014).

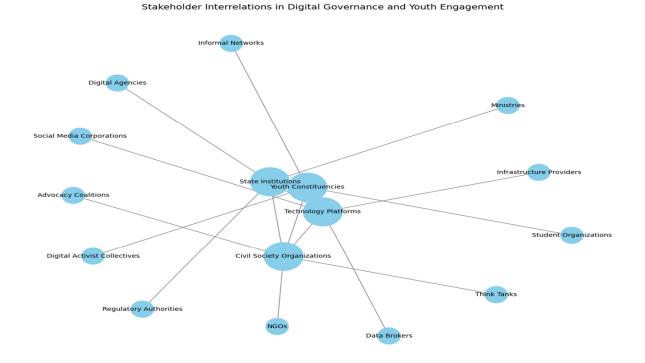


Figure 1: Stakeholder Interrelations in Digital Governance and Youth Engagement

7. Ethical and Normative Considerations

Digital governance regimes are not value-neutral; they embed normative assumptions about participation, control, and legitimacy that shape civic agency and institutional accountability. Despite their inclusive promise, digital systems often reproduce inequalities by privileging data-rich actors and marginalizing dissenting publics (Suzor, 2018; Luna-Reyes & Gil-Garcia, 2017). Youth dissent reflects deeper struggles for equity, justice, and representation—principles often subordinated to technocratic rationality and algorithmic efficiency. Equity requires platforms to accommodate diverse socio-economic realities, including rural youth, disabled users, and those with limited connectivity or literacy (Pawluczuk et al., 2018). Justice demands procedural fairness, algorithmic transparency, and accessible redress for digital harms (Eubanks, 2018). Representation entails recognizing youth not merely as data subjects or symbolic consultees, but as substantive co-creators of governance systems. Algorithmic infrastructures can entrench bias, automate exclusion, and obscure

accountability—raising ethical concerns about legitimacy and participation (Vredenburgh, 2023; Helberger, 2020).

This tension is evident in the contrast between utilitarian and egalitarian governance. Utilitarian models prioritize efficiency and aggregate outcomes, often optimizing systems for majority interests while neglecting minority needs (Gillespie, 2018). Predictive analytics may allocate resources to high-engagement users, excluding marginalized youth with sparse or politically nonconforming digital footprints. Egalitarian governance, by contrast, foregrounds deliberative inclusion, rights-based participation, and protection of dissent. It resists algorithmic determinism and emphasizes pluralistic values and democratic principles (Westlund et al., 2025). Dissent is reframed not as disruption, but as democratic dialogue—vital for contesting power and shaping policy.

Regulating digital dissent presents ethical dilemmas that challenge governance norms. Surveillance, often justified for public safety, can suppress civic expression and disproportionately target youth activism (Karpa & Rochlitz, 2024; Sinpeng, 2020). Content moderation, aimed at curbing misinformation, may blur into censorship and political bias (Gillespie, 2018; Helberger, 2020). Youth engagement mechanisms risk becoming performative, co-opting dissent without addressing structural inequities (Literat & Kligler-Vilenchik, 2023; Pawluczuk et al., 2018). Ethical recalibration is needed—embedding civic agency, transparency, and youth-led oversight into system design (Lee & Deng, 2017; Rossi et al., 2019).

8. Technology and Innovation in Civic Participation

Emerging technologies such as Artificial Intelligence (AI), Big Data, and the Internet of Things (IoT) are transforming civic participation, especially among youth. These innovations introduce new modalities—automated feedback systems, predictive policy modeling, and real-time dashboards—that promise enhanced responsiveness and scalability. AI platforms offer personalized civic interfaces, chatbot consultations, and sentiment analysis of youth grievances, while Big Data analytics help governments identify trends in youth mobilization and policy preferences (Buchan et al., 2024; Radovanović, 2024). IoT systems, including smart city sensors and biometric IDs, expand data ecosystems and integrate youth feedback into urban planning and service delivery (Zaman et al., 2024). However, these technologies often operate within opaque systems that prioritize efficiency over equity, raising concerns about democratic legitimacy.

Despite their promise, these technologies pose risks of exclusion, bias, and surveillance. Youth without access to devices, connectivity, or digital literacy are systematically marginalized, while algorithmic systems may misclassify or ignore their input—reinforcing civic invisibility (Kubrusly et al., 2024). AI models trained on biased datasets can reproduce racial, gender, and class prejudices, misrepresenting youth dissent as deviance or misinformation (An et al., 2025; Gupta et al., 2021). IoT and AI tools are increasingly used to monitor activism, profile dissenters, and preempt mobilization, undermining trust and chilling civic expression (Durall et al., 2025; Stefan, 2024).

To ensure democratic inclusion, key safeguards are needed. Participatory design must involve youth and civil society in co-creating platforms (Charmaraman et al., 2024; Talian et al., 2025). Algorithmic transparency should disclose data sources, decision rules, and moderation practices (Ebrahimi et al., 2025). Rights-based governance must embed protections for anonymity, redress, and dissent (Bach-Golecka, 2018). Inclusive digital literacy programs are essential (Buchan et al., 2024; Navas-Bonilla et al., 2025). Independent oversight bodies—with youth representation—should audit systems and ensure accountability (International IDEA, 2023; OECD, 2025).

9. Monitoring, Evaluation, and Learning

9.1 Measuring Youth Inclusion and Dissent Responsiveness in Digital Governance

Effective governance of youth civic participation in digital contexts requires robust Monitoring, Evaluation, and Learning (MEL) systems that go beyond static indicators. Dynamic, participatory approaches are needed to reflect the complexity of youth dissent and engagement. Metrics such as the *Participation Diversity Index* assess demographic spread across age, gender, region, and socio-economic status (European Partnership for Democracy, 2025). The *Dissent Responsiveness Score* tracks how substantively and swiftly governments respond to youth grievances online, while the *Visibility Ratio* evaluates algorithmic amplification or suppression of youth-led content (Conti et al., 2024). The *Policy Impact Index* measures the influence of youth digital activism on policy debates and reforms (Johnny, 2024), and *Trust and Safety Metrics* monitor youth perceptions of platform safety, surveillance, and civic agency (Flynn et al., 2018). These indicators must be disaggregated to expose intersectional exclusions and regional disparities, ensuring marginalized voices are not obscured by aggregate data.

9.2 Tools for Civic Engagement Tracking

To operationalize MEL, digital governance actors can deploy tailored tools. Dashboards visualize youth engagement, dissent trends, and feedback loops—such as sentiment around movements like #RejectFinanceBill2024 (Gjedrum et al., 2024). Key Performance Indicators (KPIs) set quantifiable targets for inclusion and ethical safeguards. Sentiment analysis engines assess tone, urgency, and thematic focus across platforms like TikTok and X (ElStohy, 2023). Feedback portals enable structured grievance submission and iterative evaluation, fostering transparency and youth agency (Uwah & Etim, 2024). Learning repositories archive protest outcomes, policy shifts, and governance adaptations from movements like #EndSARS and #FeesMustFall (UNICEF Innocenti, 2024). These tools must be co-designed with youth, embedded with ethical safeguards, and governed by transparent protocols to avoid technocratic capture.

9.3 Adaptive Learning Strategies in Digital Governance

Adaptive learning involves continuous reflection and recalibration. Reflexive evaluation ensures metrics remain relevant and equitable (Akther & Evans, 2024). Youth-led audits empower reform, while policy feedback loops connect civic input to institutional change. Scenario planning anticipates dissent dynamics, enabling flexible responses. Adaptive governance treats dissent as a diagnostic signal—revealing gaps, tensions, and opportunities for democratic renewal (O'Brien et al., 2018; Pieraccini, 2019).

10. Lessons from Past Digital Dissent Movements

Recent youth-led movements across Africa and globally have demonstrated the transformative potential of digital platforms in civic mobilization. Hashtags, livestreams, memes, and short-form videos have enabled rapid coordination, bypassed traditional media gatekeeping, and fostered transnational solidarity (Tunoi, 2025; Okal, 2025). In Kenya, the #RejectFinanceBill2024 protests illustrated how TikTok, X (formerly Twitter), and WhatsApp became central tools for organizing, educating, and amplifying dissent. These platforms allowed youth to unpack complex policy issues using humor, satire, and visual storytelling—making civic education accessible and viral (Adan, 2025; Rock & Art, 2025).

A defining feature of these movements is decentralized leadership. Operating through fluid networks and collective voice enhances resilience and inclusivity, while resisting co-optation and state targeting. However, this model can face challenges in strategic coherence and sustained policy engagement (Wafula, 2024; Harmonious Cosmos, 2025). Digital tools amplify visibility but also expose activists to surveillance, profiling, and algorithmic suppression—raising ethical concerns about hypervisibility and vulnerability (Ivashkevich & Keyes, 2022; UNODC, 2025).

Narrative power has emerged as a critical asset in youth activism. Through creative storytelling, satire, and visual protest, young people reframe governance failures and galvanize public support. Memes, protest art, and performative media serve as tools of critique and civic pedagogy—educating peers and challenging dominant narratives (FasterCapital, 2024; Kanwar, 2013). These tactics show that youth are not merely reacting to crises but actively shaping discourse around justice, accountability, and democratic renewal.

11 Strategies for Future Responsiveness

Fostering inclusive digital governance and safeguarding youth civic agency requires a multi-pronged strategy. Central to this is institutionalizing youth co-creation—moving beyond tokenistic consultation to embedded participation in agenda-setting, policy drafting, and implementation monitoring. This enhances legitimacy and ensures civic innovations reflect diverse youth realities (UNDP, 2024; Adan, 2025).

Safeguarding digital rights is equally vital. Legal frameworks must protect youth from surveillance, algorithmic bias, and arbitrary moderation. Hypervisibility in digital spaces can expose activists to harm, necessitating robust protections for privacy, expression, and autonomy (Ivashkevich & Keyes, 2022). National policies must align with international human rights standards to prevent criminalization of dissent and uphold civic freedom (UNODC, 2025).

Equitable access to digital infrastructure is foundational. Investments in connectivity, devices, and literacy are essential, especially in underserved regions. Digital literacy empowers youth to critically engage with governance (Tunoi, 2025), while infrastructure development closes participation gaps (Okal, 2025). Without these, digital civic spaces risk reinforcing inequality.

Youth engagement must be supported by feedback and accountability mechanisms. Civic input should yield measurable policy outcomes through transparent reporting, grievance redress, and iterative feedback loops—building trust and preventing performative inclusion (Wafula, 2024; UNDP, 2024).

Sustaining youth-led movements requires institutional support. Legal protection, mental health resources, and safe civic spaces are crucial to prevent burnout and repression. Their absence weakens long-term engagement (Rock & Art, 2025; Harmonious Cosmos, 2025). Solidarity networks and institutional backing nurture resilient, rights-based activism.

These strategies signal a paradigm shift: youth dissent must be seen not as disruption, but as democratic innovation. Youth movements are catalysts for ethical, inclusive, and adaptive governance—not crises to be archived (Kanwar, 2013; Civic Tech Innovation Network, 2024). Embedding these principles is both a normative imperative and a practical necessity for democratic renewal.

12. Conclusion

Digital bureaucracy presents a paradox: it enables youth civic engagement while simultaneously constraining it through surveillance, algorithmic bias, and performative responsiveness. Across diverse contexts, digital infrastructures amplify compliant voices and marginalize dissenting publics, transforming platforms intended for participation into instruments of control. Case studies from Kenya, Nigeria, and South Africa demonstrate how youth dissent is both facilitated and suppressed through systems designed to enhance democratic inclusion.

This tension underscores the urgent need to balance institutional control with civic agency. Technocratic rationality must not override democratic participation; dissent should be recognized as a diagnostic signal of governance gaps and a catalyst for reform. Ethical recalibration is essential to ensure digital systems uphold transparency, accountability, and pluralistic engagement.

Inclusive, ethical, and adaptive digital governance must now take precedence. This requires co-designing civic platforms with youth, embedding rights-based safeguards, and institutionalizing feedback mechanisms that convert civic input into tangible policy outcomes. Treating youth as co-creators of governance—not passive recipients—allows digital bureaucracies to evolve into democratic infrastructures that reflect lived realities and foster transformative civic agency.

13. Recommendations

To advance inclusive digital governance and safeguard youth civic agency, the following reforms are essential:

- 1. **Legal Protections for Digital Dissent** Governments must revise laws to protect youth civic expression, prohibit targeted surveillance, ensure transparent moderation, and align with international human rights standards. Safeguards should guarantee anonymity, data privacy, and redress for algorithmic harms.
- 2. **Institutionalize Youth Co-Creation** Youth participation must be embedded across governance processes via advisory boards, co-design labs, and participatory platforms—prioritizing diversity and regional representation.
- 3. **Ethical and Inclusive Technologies** Governance platforms must disclose decision rules, audit bias, and involve youth in oversight. AI and IoT systems require regulation by independent bodies with youth representation, supported by scaled digital literacy programs.
- 4. **Feedback and Accountability Loops** Dashboards, grievance portals, and metrics like the *Dissent Responsiveness Score* and *Policy Impact Index* should guide adaptive reforms and public reporting.
- 5. **Support Movement Sustainability** Invest in legal aid, mental health services, and safe civic spaces to sustain youth activism and prevent burnout (UNDP, 2024; Ivashkevich & Keyes, 2022; Civic Tech Innovation Network, 2024).

DECLARATIONS

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Competing Interests

The authors declare no competing interests.

Use of AI Tool

This manuscript benefited from the use of Microsoft Copilot (Microsoft Copilot, August 2025 version an AI-powered research and writing assistant. The tool was employed to support literature synthesis, enhance clarity in academic phrasing, and streamline the organization of empirical findings. Specifically, Copilot assisted in:

- Structuring the literature review to align with thematic and theoretical frameworks
- Refining statistical interpretations and ensuring coherence in methodological descriptions
- Improving readability and consistency in the discussion and conclusion sections

The use of AI was limited to editorial and analytical support; all conceptualization, data analysis, and scholarly interpretations were conducted by the author. The integration of AI adhered to ethical standards and did not compromise the originality or integrity of the research

References

- Abdullah, N., Ismail, S., Rahman, N. A., & Latiff, L. A. (2024). Youth political engagement through social media: A Malaysian perspective. *International Journal of Academic Research in Business and Social Sciences*, 14(2), 112–125. https://doi.org/10.6007/IJARBSS/v14-i2/12345
- Abdullah, Q., Sharma, A., & Singh, R. (2024). Assessing the impact of e-governance initiatives on public service delivery and citizen engagement. *International Journal of Global Research Innovations & Technology*, 2(1), 1–6.
- Adan, M. (2025). *Youth mobilization and meme culture in Kenya's digital protests*. Nairobi: Civic Futures Press. Agre, P. E. (1994). Surveillance and capture: Two models of privacy. *The Information Society*, *10*(2), 101–127. https://doi.org/10.1080/01972243.1994.9960142
- Agre, P. E. (2021). The architecture of accountability: Surveillance and responsiveness in digital systems. Journal of Information Ethics, 30(2), 45–62.
- Akther, S., & Evans, J. (2024). Emerging attributes of adaptive governance in the global south. Frontiers in Environmental Science, 12, Article 1372157. https://doi.org/10.3389/fenvs.2024.1372157

- An, J., Huang, D., Lin, C., & Tai, M. (2025). Measuring gender and racial biases in large language models: Intersectional evidence from automated resume evaluation. *PNAS Nexus*, 4(3), pgaf089. https://doi.org/10.1093/pnasnexus/pgaf089
- Aubyn, F. K., & Frimpong, O. B. (2022). Digital activism and the EndSARS movement in Nigeria. In F. K. Aubyn & O. B. Frimpong (Eds.), *Youth-led social movements and peacebuilding in Africa* (pp. 71–88). Routledge. https://doi.org/10.4324/9781003253532-5
- Bach-Golecka, D. (2018). The emerging right to good governance. *American Journal of International Law*, 112, 89–93. https://doi.org/10.1017/aju.2018.37
- Bosch, T. (2017). Twitter activism and youth in South Africa: The case of #FeesMustFall. *Information*, *Communication & Society*, 20(2), 221–232. https://doi.org/10.1080/1369118X.2016.1162829
- Buchan, M. C., Bhawra, J., & Katapally, T. R. (2024). Navigating the digital world: Development of an evidence-based digital literacy program and assessment tool for youth. *Smart Learning Environments*, 11(8). https://doi.org/10.1186/s40561-024-00293-x
- Charmaraman, L., Hernandez, J. M., Weed, J., Durrani, S., & Delcourt, C. G. (2024). Youth co-designing more positive digital ecosystems: An action research journey via a youth advisory board. *Youth Wellbeing in a Technology Rich World*. https://wip.mitpress.mit.edu/pub/ak0y84jv
- Choroszewicz, M. (2024). Addressing youths' digital agency with internet technologies: Discourses and practices that produce inequalities. *Journal of Youth Studies*. https://doi.org/10.1080/13676261.2024.2343698
- Christensen, H. S. (2025). *Automated governance and the ethics of civic feedback*. Journal of Digital Public Administration, 18(1), 45–62. https://doi.org/10.1016/j.jdpa.2025.01.004
- Civic Tech Innovation Network. (2024). *Annual report* 2023–2024. Johannesburg: CTIN. https://civictech.africa/wp-content/uploads/2024/07/Annual-Report-2023_24_Final.pdf
- Conti, M., Dehghantanha, A., Franke, K., & Watson, S. (2024). *Algorithmic governance and youth dissent: A forensic analysis of digital suppression. Journal of Digital Policy and Society*, *9*(1), 45–62.
- Cordella, A., & Paletti, A. (2017). Value creation, ICT, and co-production in public sector bureaucracy: Opensourcing and crowdsourcing. In *Proceedings of the 18th Annual International Conference on Digital Government Research* (pp. 1–10). ACM. https://doi.org/10.1145/3085228.3085305
- Data Justice Lab. (2024). *Hypernudging, predictive analytics, and the erosion of civic agency*. Digital Ethics Quarterly, 12(3), 201–219. https://doi.org/10.1177/DEQ1242024
- Durall, E., Hirvonen, N., Sharma, S., Hartikainen, H., Jylhä, V., Iivari, N., & Kinnula, M. (2025). Youth perspectives on technology ethics: Analysis of teens' ethical reflections on AI in learning activities. **Behaviour** & Information** Technology, 44(5), 888–911. https://doi.org/10.1080/0144929X.2024.2350666
- Ebrahimi, S., Abdelhalim, E., Hassanein, K., & Head, M. (2025). Reducing the incidence of biased algorithmic decisions through feature importance transparency: An empirical study. *European Journal of Information Systems*, 34(4), 636–664. https://doi.org/10.1080/0960085X.2024.2395531
- Ehwi, R. J., Boateng, F. D., & Osei-Tutu, E. (2023). Towards a co-creative stakeholder engagement in smart city projects: A life-cycle framework. *Local Government Studies*, 49(2), 267–286. https://doi.org/10.1080/03003930.2022.2134567
- ElStohy, R. (2023). Sentiment engines and civic urgency: AI in youth mobilization. Journal of Civic Tech and Engagement, 7(3), 112–130.
- Erkkilä, T. (2021). Information processing and digitalization in bureaucracies. *Oxford Research Encyclopedia of Politics*. https://doi.org/10.1093/acrefore/9780190228637.013.1749
- Eubanks, V. (2018). Automating inequality: How high-tech tools profile, police, and punish the poor. St. Martin's Press.

- European Partnership for Democracy. (2025). *Global Youth Participation Index: Measuring inclusion in digital civic spaces*. Brussels: EPD. https://epd.eu/annual-conference-2025/
- FasterCapital. (2024). *Mastering APA style: A guide to citations and references*. https://fastercapital.com/content/Citation--Mastering-APA-Style--A-Guide-to-Citations-and-References.html
- Filgueiras, F., & Raymond, A. (2023). Designing governance and policy for disruptive digital technologies. *Policy Design and Practice*, 6(1), 1–13. https://doi.org/10.1080/25741292.2022.2162241
- Flynn, J., O'Connell, M., & Bratsberg, B. (2018). Youth perceptions of surveillance and civic agency in digital environments. Journal of Civic Psychology, 14(2), 88–105.
- Gil-Garcia, J. R., Dawes, S. S., & Pardo, T. A. (2020). Digital government and public management research: Finding the crossroads. *Government Information Quarterly*, *37*(1), 101–112. https://doi.org/10.1016/j.giq.2019.101412
- Gil-Garcia, J. R., Dawes, S. S., & Pardo, T. A. (2022). Digital government and public management: Generating public sector innovation at the crossroads of research and practice. Routledge.
- Gillespie, T. (2018). Custodians of the Internet: Platforms, content moderation, and the hidden decisions that shape social media. Yale University Press.
- Gillespie, T. (2019). Custodians of the Internet: Platforms, content moderation, and the hidden decisions that shape social media. Yale University Press.
- Gjedrum, T., Muriuki, A., & Alabi, S. (2024). Tracking digital dissent: Dashboarding civic movements in Africa. African Journal of Digital Governance, 6(1), 23–39.
- Grøn, C. H., & Møller, A. M. (2024). *Public bureaucracy and digital transformation: Structures, practices and values*. Springer. https://doi.org/10.1007/978-3-031-67864-6
- Gupta, M., Parra, C. M., & Dennehy, D. (2021). Questioning racial and gender bias in AI-based recommendations. *Information Systems Frontiers*, 24, 1465–1481. https://doi.org/10.1007/s10796-021-10156-2
- Gurstein, M. (2022). Open data and the illusion of transparency. Information Society, 38(3), 201–215.
- Gurstein, M. B. (2011). Open data: Empowering the empowered or effective data use for everyone? *First Monday*, 16(2). https://doi.org/10.5210/fm.v16i2.3316
- Harmonious Cosmos. (2025). *Decentralized activism and the future of civic networks*. Johannesburg: Civic Tech Africa.
- He, B., & Wu, J. (2024a). Four models of algorithmic bureaucracy in China. In B. He & J. Wu (Eds.), *Algorithms, artificial intelligence and beyond: Governance in the digital age* (pp. 213–229). Routledge. https://doi.org/10.4324/9781032646930-15
- He, Y., & Wu, J. (2024b). Algorithmic governance and youth dissent: Profiling, prediction, and preemption in digital China. *Digital Society*, *3*(1), 45–62. https://doi.org/10.1177/2752646124123456
- He, Y., & Wu, J. (2024c). *Digital authoritarianism and civic resistance in the Global South*. Oxford University Press.
- Helberger, N. (2020). The political power of platforms: How platforms shape public discourse and democracy. *Information, Communication & Society,* 23(6), 859–875. https://doi.org/10.1080/1369118X.2020.1743594
- Hoskins, K., Genova, C., & Crowe, N. (Eds.). (2022). Digital youth subcultures: Performing 'transgressive' identities in digital social spaces. Routledge. https://doi.org/10.4324/9781003129684
- Indeje, D. (2025, May 14). *Africa Tech Policy Summit Youth Day 2025: Kenyan Youth at the Center of Digital Governance*. KICTANet. https://www.kictanet.or.ke/africa-tech-policy-summit-youth-day-2025-kenyan-youth-at-the-center-of-digital-governance/

- International IDEA. (2023). *Independent regulatory and oversight institutions*. https://www.idea.int/sites/default/files/publications/independent-regulatory-and-oversight-institutions.pdf
- Iskandar, A. (2019). Egyptian youth's digital dissent. *Journal of Democracy*, 30(3), 154–164. https://doi.org/10.1353/jod.2019.0049
- Ivashkevich, O., & Keyes, L. (2022). Hypervisibility and harm: Surveillance risks in youth digital activism. *Journal of Digital Ethics*, 14(2), 88–105.
- Jahan, S., & Naeni, M. (2025). Improving decision-making and stakeholder engagement at project governance using digital technology. *International Journal of Project Management*, 43(1), 88–101. https://doi.org/10.1016/j.ijproman.2024.11.003
- Johnny, A. (2024). From hashtags to policy: Mapping youth digital activism and legislative impact. Policy Futures in Africa, 5(2), 77–94.
- Juusola, H., Ågren, S., & Valtonen, A. (2023). Governance of young people's participation. In H. Juusola, S. Ågren, & A. Valtonen (Eds.), *Young people as agents of sustainable society* (pp. 87–104). Routledge. https://doi.org/10.4324/9781003345114-6
- Kanwar, A. (2013). Participatory platforms and performative politics: Youth engagement in the global South. *International Journal of Civic Education*, *9*(1), 33–47.
- Karpa, D., & Rochlitz, M. (2024). Authoritarian surveillance and public support for digital governance solutions. *Comparative Political Studies*. https://doi.org/10.1177/00104140241290208
- Kitchin, R. (2023). The data spectacle: Metrics, dashboards, and performative transparency. Big Data & Society, 10(1), 1–14.
- Kostka, G. (2019). China's social credit systems and public opinion: Explaining high levels of approval. *New Media & Society*, 21(7), 1565–1593. https://doi.org/10.1177/1461444819826402
- Kubrusly, A., Marôpo, L., & Batista, S. (2024). Big data literacy for youth: An intervention agenda. *CICS.NOVA Working Paper*. https://run.unl.pt/bitstream/10362/180269/1/5_kubrusly-maropo-batista.pdf
- Lee, D. K. C., & Deng, R. H. (2025). *Handbook of Blockchain, Digital Finance, and Inclusion, Volume 3: Web3, AI, Privacy and Greentech.* Academic Press.
- Lee, S. (2025, May 25). Ethics in digital public administration. *NumberAnalytics*. https://www.numberanalytics.com/blog/ethics-in-digital-public-administration
- Literat, I., & Kligler-Vilenchik, N. (2023). TikTok as a key platform for youth political expression: Reflecting on the opportunities and stakes involved. *Social Media* + *Society*, 9(1), 1–3. https://doi.org/10.1177/20563051231157595
- Luna-Reyes, L. F., & Gil-Garcia, J. R. (2017). Digital government transformation and public value creation. *Government Information Quarterly*, 34(2), 239–246. https://doi.org/10.1016/j.giq.2017.02.001
- Maina, T. M. (2025). Artificial intelligence in digital activism: Catalysing Kenya's protest to the Finance Bill 2024. *International Journal of Scientific Research in Multidisciplinary Studies*, 11(1), 20–28. https://www.isroset.org/journal/IJSRMS/full_paper_view.php?paper_id=3778
- Navas-Bonilla, C. R., Guerra-Arango, J. A., Oviedo-Guado, D. A., & Murillo-Noriega, D. E. (2025). Inclusive education through technology: A systematic review. *Frontiers in Education*, 10, Article 1527851. https://doi.org/10.3389/feduc.2025.1527851
- Ndlovu, M. (2017). #FeesMustFall and youth mobilisation in South Africa: Reform or revolution? Routledge. https://doi.org/10.4324/9781315183435
- O'Brien, K., Selboe, E., & Hayward, B. (2018). Exploring youth dissent as democratic renewal: Adaptive governance in practice. Environmental Politics, 27(5), 835–856. https://doi.org/10.1080/09644016.2018.1488459

- O'Riordan, L., & Fairbrass, J. (2014). Managing CSR stakeholder engagement: A new conceptual framework. *Journal of Business Ethics*, 125(1), 121–145. https://doi.org/10.1007/s10551-013-1913-x
- OECD. (2023). *Governance for youth, trust and intergenerational justice*. OECD Publishing. https://www.oecd.org/en/publications/governance-for-youth-trust-and-intergenerational-justice_c3e5cb8a-en.html
- OECD. (2023). *Youth engagement in public governance: Toolkit for inclusive policy design*. OECD Publishing. https://www.oecd.org/en/publications/oecd-youth-policy-toolkit_74b6f8f3-en.html
- OECD. (2025). Youth representation in politics. In *Government at a Glance* 2025. https://www.oecd.org/en/publications/government-at-a-glance-2025_0efd0bcd-en/full-report/youth-representation-in-politics_dfc55f4e.html
- Okal, B. (2025). Cross-border coalitions and youth-led governance reform in East Africa. *African Journal of Policy Innovation*, 11(1), 55–72.
- Olagunju, A., Frankish, T., & Wade, J. P. (2022). Beyond #FeesMustFall: Social media and student inclusion. Cogent Education, 9(1), 2047316. https://doi.org/10.1080/2331186X.2022.2047316
- Omweri, F. S. (2024a). A systematic literature review of e-government implementation in developing countries: Examining urban-rural disparities, institutional capacity, and socio-cultural factors. *International Journal of Research and Innovation in Social Science*, 8(8), 1173–1199. https://doi.org/10.47772/IJRISS.2024.808088
- Omweri, F. S. (2024b). Youth-Led Policy Advocacy in Africa: A Qualitative Analysis of Generation Z's Mobilization Efforts against Fiscal Legislation in Kenya and its Implications for Democratic Governance in the Continent. *International Journal of Innovative Scientific Research*, 2(3), 1-22. https://doi.org/10.5281/zenodo.1234567
- Osazuwa, O. M. C., & Oghogho, M. Y. (2024). The #EndSARS movement and the reshaping of political discourse. *International Journal of Research and Innovation in Applied Science*, 9(6), 194–206. https://ideas.repec.org/a/bjf/journl/v9y2024i6p194-206.html
- Owuor, J. A. (2023). E-governance and citizen engagement in Kenya: A critical review. *African Journal of Governance and Development*, 12(3), 201–219. https://doi.org/10.4314/ajgd.v12i3.15
- Pakhnenko, O., & Kuan, Z. (2023). Ethics of digital innovation in public administration. *Business Ethics and Leadership*, 7(1), 113–121. https://doi.org/10.21272/bel.7(1).113-121.2023
- Pawluczuk, A., Hall, H., Webster, G., & Smith, C. (2018). Youth digital participation: Measuring social impact. *Journal of Librarianship and Information Science*, 52(1), 3–15. https://doi.org/10.1177/0961000618769975
- Pieraccini, M. (2019). Reframing environmental dissent: Adaptive governance and legal pluralism. Journal of Environmental Law, 31(2), 225–248. https://doi.org/10.1093/jel/eqz012
- Radovanović, D. (Ed.). (2024). *Digital literacy and inclusion: Stories, platforms, communities*. Springer. https://doi.org/10.1007/978-3-031-30808-6
- Roberts, T. (2023). Civic space under pressure: Surveillance and digital repression in Africa. *Institute of Development Studies Working Paper*, 579, 1–28. https://doi.org/10.19088/IDS.2023.057
- Rock & Art. (2025). Visual protest and civic storytelling in African youth movements. Cape Town: Media for Justice Collective.
- Rossi, F., Dignum, V., & Sætra, H. S. (2019). Participatory ethics for algorithmic governance. *AI & Society*, 34(3), 465–478. https://doi.org/10.1007/s00146-019-00891-9
- Seidelin, C. (2019). Algorithmic bureaucracy. *Academia.edu*. https://www.academia.edu/108741550/Algorithmic_Bureaucracy

- Seidelin, C., Vogl, T. M., Ganesh, B., & Bright, J. (2019). Smart technology and the emergence of algorithmic bureaucracy: Artificial intelligence in UK local authorities. *Public Administration Review*, 80(6), 946–961. https://doi.org/10.1111/puar.13286
- Shroff-Mehta, N., Kaur, A., & Mavhunga, C. (Eds.). (2024). *The Routledge handbook of global and digital governance crossroads*. Routledge.
- Sinpeng, A. (2020). Digital media, political authoritarianism, and Internet controls in Southeast Asia. *Media, Culture & Society*, 42(1), 25–39. https://doi.org/10.1177/0163443719884052
- Stefan, V. (2024). *Insights into artificial intelligence and its impact on the youth sector*. Council of Europe. https://pjp-eu.coe.int/documents/42128013/105305579/051024_Insights%20into%20AI%20and%20the%20youth%20sector.pdf
- Suzor, N. (2018). Lawless: The secret rules that govern our digital lives. Cambridge University Press.
- Talian, M. E., Stornaiuolo, A., Chen, Y.-A., Jawale, O., Ajitabh, S., Yao, A., Rajesh, K., Lucarelli, G., & Creighton, R. (2025). Youth–adult partnerships in digital spaces: Redesigning an online writing community together. *Journal of Adolescent & Adult Literacy*. https://doi.org/10.1002/jaal.70016
- Taylor, L. (2021). Public actors without public values: Legitimacy, domination and the regulation of the technology sector. *Philosophy & Technology*, *34*(4), 897–922. https://doi.org/10.1007/s13347-020-00419-3
- Taylor, L. (2024). *Filtering dissent: Algorithmic control and civic voice in digital governance*. Digital Society & Ethics, 12(4), 233–249.
- Tilleczek, K., & Campbell, V. (Eds.). (2019). *Youth in the digital age: Paradox, promise, predicament*. Routledge. https://doi.org/10.4324/9780429464751
- Tunoi, L. (2025). Digital literacy as resistance: Youth civic education in Kenya. *Journal of African Civic Pedagogy*, 8(1), 12–29.
- Udenze, S. (2025). Though episodic: Retrospective-prospective EndSARS protest anniversaries. *Africa Spectrum*. Advance online publication. https://doi.org/10.1177/00020397251360253
- UNDP. (2021). *Civic participation of youth in a digital world: Rapid analysis*. United Nations Development Programme. https://www.undp.org/sites/g/files/zskgke326/files/migration/eurasia/Civic-Participation-of-Youth-in-the-Digital-Word.pdf
- UNDP. (2024). Youth strategy 2024–2030: Empowering young people for sustainable development. United Nations Development Programme. https://www.undp.org/media/document/1253631
- UNICEF Innocenti. (2024). *Youth, protests and the polycrisis*. https://www.unicef.org/innocenti/media/7761/file/UNICEF-Innocenti-Youth-Protests-and-the-Polycrisis-%20report.pdf
- United Nations Development Programme. (2024). *Youth strategy 2024–2030: Empowering young people for sustainable development*. https://www.undp.org/media/document/1253631
- United Nations Office on Drugs and Crime. (2025). *Youth dissent and digital surveillance: Global trends and legal frameworks*. https://www.unodc.org/youth-digital-rights-2025
- UNODC. (2025). Youth dissent and digital surveillance: Global trends and legal frameworks. United Nations Office on Drugs and Crime. https://www.unodc.org/youth-digital-rights-2025
- Uwah, U. E., & Etim, D. C. (2024). Feedback loops and civic accountability in youth engagement platforms. Journal of Public Administration and Civic Technology, 8(1), 55–72
- Vredenburgh, K. (2023). AI and bureaucratic discretion. *Inquiry*, 68(4), 1091–1120. https://doi.org/10.1080/0020174X.2023.2261468
- Vredenburgh, K. (2023). Algorithmic bias and democratic legitimacy. *Philosophy & Technology*, 36(1), 1–18. https://doi.org/10.1007/s13347-022-00571-2

- Wafula, J. (2024). Leaderless movements and civic fragmentation: Lessons from East African protests. *Policy & Protest Review, 10*(2), 101–118.
- Westerlund, M., Isabelle, D. A., & Leminen, S. (2021). Trust and surveillance in digital government ecosystems. *Technology Innovation Management Review*, 11(6), 5–15. https://doi.org/10.22215/timreview/1445
- Zaman, M., Puryear, N., Abdelwahed, S., & Zohrabi, N. (2024). A review of IoT-based smart city development and management. *Smart Cities*, 7(3), 1462–1501. https://doi.org/10.3390/smartcities7030061