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DIGITAL FEEDBACK LOOPS AND EVIDENCE-BASED LAWMAKING IN NIGERIA

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ABSTRACT

This paper examines the role of digital feedback loops in enhancing evidence-based lawmaking in Nigeria, where traditional legislative processes have largely operated within a linear framework, characterised by limited mechanisms for continuous evaluation, public engagement, and data-driven decision-making. As a result, many laws face challenges relating to effectiveness, implementation, and societal relevance. The paper conceptualises feedback loops as iterative mechanisms that collect, analyse, and reintegrate information on laws' performance and impact into the legislative process. Drawing on lessons from the United States of America and Estonia, the paper argues that integrating digital technologies such as online platforms, data analytics, and e-governance tools can significantly strengthen feedback mechanisms by enabling real-time, inclusive, and evidence-based legislative practices. The paper uses a doctrinal and analytical methodology to examine existing legal frameworks, institutional practices, and emerging digital trends in Nigeria. It identifies challenges, including weak institutional structures, limited formalisation of post-legislative scrutiny, the digital divide, and inadequate regulatory frameworks for digital participation. The study further explores the gap between informal digital civic engagement and its limited incorporation into formal lawmaking processes. The paper finds that while Nigeria has significant potential to leverage digital technologies in governance, the absence of a structured framework undermines the realisation of evidence-based lawmaking. Consequently, the study proposes a context-specific model for embedding digital feedback mechanisms within the legislative cycle, emphasising institutional reform, legal backing, and technological innovation. It recommends adopting comprehensive legal and institutional strategies to operationalise digital feedback systems in lawmaking.

Keywords: *Digital Feedback Loops, Emerging Democracies, Evidence-Based Lawmaking, Legislative Process, Nigeria.*

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1. INTRODUCTION

Lawmaking in modern democratic systems is expected to be responsive, participatory, and grounded in empirical evidence. However, traditional legislative processes have largely operated within a determinist framework where laws are enacted with limited mechanisms for continuous evaluation. Evidence-based lawmaking has emerged in response, emphasising data, stakeholder input, and measurable outcomes in the legislative process. Central to this is the idea of feedback loops, enabling continuous collection and reintegration of information about how laws function in practice. This supports iterative lawmaking by allowing policymakers to identify gaps, unintended consequences, and areas for reform. Technological advancements have expanded this potential, and the rise of digital platforms and online civic engagement has created digital feedback loops that facilitate real-time interaction between citizens and lawmakers.

In emerging democracies such as Nigeria, however, feedback mechanisms in lawmaking remain limited, despite rising internet penetration and digital engagement creating new opportunities to incorporate feedback into legislative processes. Instead, a noticeable gap remains between the availability of digital tools and their effective utilisation in lawmaking. Citizen input is also often episodic rather than continuous, and policymakers underuse data generated from digital platforms. No coherent framework exists for integrating digital feedback into legislative drafting and review, resulting in laws that are insufficiently responsive, poorly informed by evidence, and disconnected from societal realities. This gap underscores the need for a more structured and context-specific approach to integrating digital technologies into the legislative framework. Against this backdrop, this paper examines how digital feedback loops can enhance evidence-based lawmaking in Nigeria.

The paper is divided into six parts. Part 1 is the General Introduction; Part 2 is the Conceptual Analysis and Theoretical Framework; and Part 3 examines Digital Technologies and Legislative Processes in Nigeria. Parts 4 and 5 cover the Legal and Regulatory Underpinnings and Cross-Country Analysis, respectively, while Part 6 presents the Findings, Recommendations, and Conclusion.

2. CONCEPTUAL ANALYSIS AND THEORETICAL FRAMEWORK

2.1 Conceptual Analysis

2.1.1 *Feedback Loops*

The notion of feedback loops is deeply connected to Systems Theory, particularly the works of Ludwig von Bertalanffy,[1] and Cybernetics, developed by Norbert Wiener.[2] In these disciplines, a feedback loop refers to a cyclical process in which a system's output is reintroduced as input to regulate and improve its performance. Some scholars emphasize that feedback loops are the fundamental structures that determine system behaviour, enabling systems to adapt, self-correct, and evolve.[3] Others have applied cybernetic principles to political systems, arguing that governance structures rely on communication flows and feedback mechanisms to maintain stability and responsiveness.[4]

2.1.2 *Feedback Loops in Lawmaking*

In legal and governance scholarship, feedback loops are closely associated with evidence-based policymaking, and Carol H. Weiss developed one of the most nuanced and enduring accounts of how knowledge feeds back into policymaking.[5] She argues that policy effectiveness depends on systematically integrating evaluation findings into decision-making.[6] Weiss theorizes lawmaking as an iterative and non-linear process, with her starting point being a rejection of the linear model of policymaking.[7] Another of Weiss's most influential ideas is the "enlightenment function" of research.[8] She argues that evidence rarely produces immediate legislative change; instead, it gradually influences how policymakers think about issues. This represents a diffuse feedback mechanism, i.e. evidence enters policy discourse incrementally, reshapes assumptions and concepts, and its effects become visible only over time. Rather than a direct loop in which data triggers reform, this is a cognitive feedback process that operates subtly within policymakers and institutions.

Although Weiss wrote before the rise of digital governance, her ideas translate seamlessly into modern contexts because her work reminds us that technology enhances

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[1] Bertalanffy, L. Von, 'General System Theory: Foundations, Development, Applications', (1968), Revised ed., George Braziller.
[2] Norbert Wiener, 'The Human Use of Human Beings: Cybernetics and Society', (1950) Houghton Mifflin, rev edn., 1954.
[3] Donella H. Meadows, 'Thinking in Systems: A Primer', (2008) Chelsea Green Publishing.
[4] Karl W Deutsch, 'The Nerves of Government: Models of Political Communication and Control', (1963) Free Press.
[5] Weiss, C.H., 'Evaluation: Methods for Studying Programs and Policies', (1998), 2nd Ed., Prentice Hall.
[6] Weiss, C.H., 'The Many Meanings of Research Utilization', (1997) *Public Administration Review.*
[7] Weiss, C.H., "How can Theory-Based Evaluation Make Greater Headway?'', (1997) Evaluation Review, 21(4), 501-524.
[8] Weiss, C.H., 'Research for Policy's Sake: The Enlightenment Function of Social Research', (1977), Policy Analysis, 3(4), 531-545.

feedback capacity, even if it does not automatically ensure better lawmaking outcomes. Weiss' approach is not without limitations, however. It can appear overly diffuse, making it difficult to translate into concrete institutional design. She also places less emphasis on formal legal mechanisms, such as mandatory review clauses or structured post-legislative scrutiny that could strengthen feedback loops in practice.

Peter H. Schuck offers a distinct and more institutional–legal perspective on feedback loops in lawmaking.[9] Schuck conceptualises law not as a static command, but as a dynamic system capable of self-correction. In his view, laws produce real-world consequences, and these consequences generate information about effectiveness and fairness. A major theme in Schuck's analysis is that feedback loops in lawmaking are often weak, fragmented, or distorted by institutional constraints. He identifies several structural barriers, including bureaucratic insulation, information asymmetry, and political incentives. One of Schuck's most powerful implicit critiques is that legal systems often experience repeated policy failures without meaningful learning. This occurs when feedback is generated but not analysed, lessons are known but not acted upon, and institutions lack incentives to adapt. Schuck's framework aligns well with modern digital feedback systems. He emphasises measurable indicators, administrative data, and structured reporting, and this aligns closely with real-time data analytics, digital monitoring platforms, and automated performance tracking.[10] Even with advanced technology, data may still be ignored or politicised, institutional fragmentation may persist, and incentive problems may undermine utilisation. Thus, digital tools enhance feedback capacity but do not resolve underlying governance challenges.

2.1.3 *Digital Feedback Loops and Governance Innovation*

Beth Simone Noveck argues that digital tools enable more participatory and data-driven governance by facilitating large-scale citizen engagement.[11] Noveck argues that digital technologies can fundamentally reshape governance by making it more participatory, collaborative, and data-driven. She contends that traditional bureaucratic decision-making is constrained by limited expertise, hierarchical structures, and closed information systems. Digital tools, by contrast, let governments tap into "collective intelligence" by opening problem-solving and policy design to a broader pool of citizens, experts, and stakeholders.[12] For Noveck, participation is not merely about consultation but about structural integration of

[9] Peter H. Schuck, 'Why Government Fails So Often: And How It Can Do Better', (2014), Princeton University Press.
[10] ibid.
[11] Beth Simone Noveck, 'Wiki Government: How Technology Can Make Government Better, Democracy Stronger, and Citizens More Powerful', (2010), Brookings International Press.
[12] ibid.

citizens into the policy process through technology. Platforms and digital infrastructure allow governments to crowdsource ideas, evaluate competing proposals, and co-produce policy solutions in real time. This approach, often associated with her concept of "crowdlaw", reconfigures lawmaking as an iterative and collaborative process where input is continuously gathered, refined, and translated into policy outputs.[13] In this sense, digital governance strengthens democratic legitimacy by expanding who can meaningfully contribute to decision-making, while also improving decision quality through diverse input.

Yochai Benkler highlights how networked digital environments enhance collaborative information production and policy input.[14] He argues that networked digital environments fundamentally transform how information is produced by enabling decentralised and collaborative knowledge creation outside traditional hierarchical institutions. Benkler argues that networked collaboration improves the quality and diversity of informational inputs available for governance and policy-making.[15] Because digital environments allow wide participation, they aggregate dispersed expertise, lived experience, and specialised knowledge that would otherwise remain fragmented or excluded from formal decision-making structures.

2.2 Theoretical Framework

2.2.1 *Systems Theory*

Systems theory is most closely associated with Ludwig von Bertalanffy, who developed General System Theory (GST) as a way to understand phenomena across disciplines through common structural principles.[16] Central to Bertalanffy's critique is that isolated analysis distorts reality by neglecting dynamic interactions and feedback relationships that define system behaviour.[17] He proposes that understanding a system requires examining how elements interact, how information and energy flow between them, and how these interactions generate stable or evolving patterns over time. Building on this foundation, Talcott Parsons[18] extended systems thinking into the social and political sciences. Parsons argues that a social system consists of interconnected institutions (such as law, economy, and family), each performing functions necessary for the survival of the whole. Rather than analysing isolated components, he emphasises how these parts interact and contribute to systemic equilibrium. A key contribution of Talcott Parsons is the AGIL schema,[19] which outlines four functional

[13] Beth Simone Noveck, "Crowdlaw: Collective Intelligence and Lawmaking'', (2018) Analyse and Kritik, 40(2), 359-380.
[14] Benkler, Y., 'The Wealth of Networks: How Social Production Transforms Markets and Freedom', (2006), Yale University Press.
[15] ibid.
[16] n.1.
[17] ibid.
[18] Talcott Parsons, 'The Social System', (1951), Free Press.
[19] ibid.

prerequisites that every system must satisfy to persist, i.e. Adaptation, Goal Attainment, Integration, and Latency (AGIL).

Systems theory is particularly relevant to this paper because it provides the theoretical justification for integrating digital feedback loops into lawmaking. If lawmaking is a system, then feedback loops are necessary for continuous system improvement; data becomes a critical input for evidence-based decision-making, and digital technologies enhance the efficiency and scope of feedback mechanisms. Despite its strengths, systems theory has limitations and draws criticism. Critics argue that the theory's abstract nature makes it overly theoretical and lacking in precise methodological tools.[20] It is also value-neutral because it tends to describe how systems function without addressing normative questions such as justice or fairness.[21] Some scholars also contend that it underestimates issues of power, politics, and inequality in decision-making processes.[22] Operational challenges also arise because translating systems theory into practical institutional reforms can be difficult, particularly in emerging democracies.[23] These critiques collectively demonstrate that while systems theory provides a foundational lens for understanding feedback loops, it is insufficient on its own for analysing digital governance. These limitations are important in the Nigerian context, where political dynamics, institutional weaknesses, and socio-economic disparities significantly influence lawmaking.

2.2.2 *Cybernetic Theory*

Cybernetic theory, developed by Norbert Wiener, focuses on control, communication, and feedback.[24] It views organisations, governments, and societies as self-regulating systems where information flows guide decision-making. Wiener's theory is grounded in the idea that both biological and mechanical systems can be understood through the lens of communication and control via feedback mechanisms.[25] He conceptualises feedback as the process by which a system self-regulates by continuously comparing its output with a desired state and making corrective adjustments. In this sense, cybernetics is fundamentally a theory of circular causality, where outputs loop back as inputs to influence future system behaviour. Wiener recognises that feedback systems are not inherently stable; rather, they can generate amplification, instability, and systemic distortion when feedback signals are delayed or manipulated. Wiener's framework provides both a theoretical foundation for understanding

[20] Robert K Merton, 'Social Theory and Social Structure', (1968), Free Press.
[21] Jurgen Habermas, 'The Theory of Communicative Action', (1987), vol. 2: Lifeworld and System: A Critique of Functionalist Reason, Thomas McCarthy tr. Polity Press.
[22] Steven Lukes, 'Power: A Radical View', (2005), 2nd edn., Palgrave Macmillan.
[23] ibid.
[24] Wiener N, 'Cybernetics: Or Control and Communication in the Animal and the Machine', (1948), MIT Press.
[25] ibid.

digital feedback loops and an early caution that such systems can produce unintended consequences when control mechanisms fail or when informational integrity is compromised.[26]

Karl Deutsch extends cybernetic theory from engineering and biology to political systems, arguing that governance can be understood as a self-regulating communication system.[27] In his view, political systems survive not primarily through coercion, but through their capacity to process information, respond to feedback, and adapt to environmental changes. Deutsch conceptualises governance as a system of "steering" in which decision-makers continuously adjust policies based on incoming signals from society. This positions feedback loops as central to political stability.

Applying this theory to lawmaking and digital feedback, cybernetic frames digital feedback loops as modern tools for enhancing legislative control and responsiveness. In Nigeria, where traditional feedback mechanisms are limited, cybernetic theory supports the argument that digital tools can operationalise continuous legislative adaptation, making lawmaking more responsive and accountable.

2.2.3 *Evidence-Based Policymaking Theory*

Evidence-Based Policymaking (EBP) emphasises that policy decisions should be informed by empirical data, rigorous analysis, and measurable outcomes rather than intuition or purely political considerations.[28] Systematic evaluation and feedback improve policy effectiveness and accountability.[29] EBP theory provides a normative justification for integrating feedback loops into the legislative process.

The theory's core principles are empirical decision-making, continuous evaluation, and iterative policy processes. In this paper, legislative decisions in Nigeria are often made without systematic data or empirical analysis. EBP theory underscores the need for structured feedback loops and promotes adaptive, transparent, and accountable governance.

3. DIGITAL TECHNOLOGIES AND LEGISLATIVE FEEDBACK IN NIGERIA

3.1 Digitalisation of Legislative Processes in Nigeria

The Nigerian legislature has made incremental progress in adopting digital tools to support legislative functions. The National Assembly and several State Houses of Assembly maintain official digital platforms (websites) where they disseminate legislative information such as bills, motions, and proceedings. However, this level of digitalisation remains largely administrative and informational, rather than participatory or feedback-oriented. Consequently,

[26] ibid.
[27] Deutsch KW, 'The Nerves of Government: Models of Political Communication and Control (1963), Free Press.
[28] n.6.
[29] n.8.

while digital presence exists, it has not yet translated into a functional digital feedback system that supports iterative lawmaking.

3.2. Digital Platforms and Citizen Engagement in Nigeria

3.2.1 *Formal Legislative Engagement Mechanisms*

Formal legislative engagement mechanisms in Nigeria are primarily anchored in constitutionally recognised processes such as public hearings, committee consultations, and stakeholder meetings conducted by the National Assembly and State Houses of Assembly. These mechanisms are designed to facilitate citizen input at various stages of the legislative process, particularly during bill consideration. While these processes provide an important institutional avenue for participation, they are largely episodic, urban-centric, and dependent on physical attendance, thereby excluding a significant portion of the population. This underscores the need to reform Nigeria's formal legislative engagement framework by embedding digital tools that can transform these processes into dynamic, accessible, and continuous feedback loops within the legislative cycle.

3.2.2 *Informal Digital Feedback Channels*

In Nigeria, informal digital feedback channels have become a prominent avenue for citizens to engage with legislative processes outside institutional frameworks. Platforms such as Facebook, X, and WhatsApp function as channels for real-time public expression, tools for agenda-setting and policy advocacy, and a means of direct interaction between citizens and public officials. Trending discussions, online campaigns, and coordinated advocacy efforts have drawn legislative attention to pressing issues, serving as de facto feedback mechanisms within Nigeria's governance landscape. Digital movements such as #EndSARS[30] protests demonstrate these platforms' capacity to influence legislative and policy attention.

However, these channels remain inherently unstructured and non-institutionalised, thereby limiting their reliability and policy impact. As a result, while informal digital platforms play a significant role in shaping public discourse and influencing legislative awareness, they cannot substitute for formal, technology-driven feedback systems. Instead, they highlight the urgent need for Nigeria to develop institutional frameworks that can capture, verify, and integrate digital feedback into the legislative process.

[30] This was a nationwide protest in Nigeria in the year, 2020, against police brutality, and calling for the disbandment of the Special Anti-Robbery Squad (SARS) and broader reforms in governance and accountability.

3.3 Open Data, Transparency, and Civic Technology

This is a critical pillar of digital legislative feedback loops in Nigeria, enabling access to government-held information needed to evaluate the effectiveness of laws and policies. Nigeria's participation in the Open Government Partnership (OGP) reflects a formal commitment to promoting openness, accountability, and citizen engagement. The Open Government Partnership (OGP) is a multilateral, multi-stakeholder initiative that fosters collaboration between government and civil society.[31] Nigeria joined the initiative in 2016 and has been working to implement reform commitments in relevant thematic areas. Each member country co-creates its National Action Plan (NAP) with ambitious reform commitments. Nigeria co-created its first, second, and third NAPs in 2016, 2019, and 2022, respectively. Nigeria concluded implementation of the third action plan (NAP III) in early 2025 and has collated early results.[32] Nigeria also began co-creating NAP IV in March 2025. This partnership is instructive to the theme of this paper because Nigeria's participation in OGP provides a formal international policy framework that supports digital legislative feedback loops, especially in areas such as open data, civic participation, and transparency.

Complementing state-led efforts, civic technology organisations such as BudgIT and Tracka have played transformative roles in operationalising transparency through digital tools. BudgIT, for instance, uses creative technology to simplify public information, stimulating a community of active citizens and enabling their right to demand accountability, institutional reforms, efficient service delivery and an equitable society.[33] Tracka, on the other hand, is a community of active citizens who track the implementation of government projects, participate in the governance process, and advocate for development in their communities.[34] These platforms translate complex government data into accessible formats, track budget implementation, and crowdsource citizen reports on public projects. They contribute to legislative feedback loops by generating data on policy implementation, enabling citizens to monitor government projects, and providing evidence for legislative oversight and reform.

Despite their significance, limited integration into formal legislative processes constrains their impact, leaving valuable data-driven insights largely unintegrated into lawmaking. This underscores the need for institutional frameworks that formally link open data ecosystems and civic technology outputs to legislative oversight and reform processes.

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[31] <https://ogpnigeria.gov.ng/about/> accessed 29th January, 2026.
[32] <https://drive.google.com/file/d/1RsCIMA1BAPy4YTASjpwvp5to15hn_sYT/view> accessed 29th January, 2026.
[33] <https://budgit.org/about-us/> accessed 10th January, 2026.
[34] <https://tracka.ng/about> Accessed 10th January, 2026.

3.4 Data Infrastructure and Institutional Capacity

The effectiveness of digital legislative feedback loops in Nigeria depends fundamentally on the strength of its data infrastructure and the institutional capacity of legislative bodies to use such data. These foundations remain underdeveloped. Legislative institutions, including the National Assembly and most State Houses of Assembly, lack integrated data management systems that can systematically collect, store, and analyse information on the implementation and impact of laws. This structural deficiency limits lawmakers' ability to access timely, reliable, and comprehensive data needed for informed decision-making and continuous legislative review.

Closely linked is institutional capacity, particularly technical expertise and organisational readiness. Legislative bodies in Nigeria generally lack dedicated data analytics units or sufficiently trained personnel to interpret complex datasets and translate them into actionable policy insights. As a result, even where data exists, the legislature rarely uses it effectively in decision-making. This gap underscores the need for deliberate investment in both digital infrastructure and human capital, including establishing specialised research and data units within legislative institutions. Without such reforms, the potential of digital technology to sustain robust and iterative legislative feedback loops will remain largely unrealised.

At this juncture, the presence of the National Institute for Legislative and Democratic Studies (NILDS) suggests that Nigeria has the intellectual and institutional base required to support feedback-driven lawmaking. In theory, NILDS should serve as a central processing node within a digital legislative feedback loop. In practice, however, NILDS is not embedded within a digitally integrated feedback architecture. Its operations remain largely research-driven in a traditional sense, rather than functioning as part of a real-time, data-enabled feedback loop. This reinforces the broader thesis argument that Nigeria’s challenge lies in transitioning from static institutional capacity to dynamic, technology-enabled feedback systems.

4. LEGAL UNDERPINNINGS

4.1 The Freedom of Information Act 2011

The Act sits at the centre of Nigeria's legislative feedback-loop architecture, particularly in a digital governance framework. It establishes a legally enforceable right of access to information held by public institutions, thereby reducing information asymmetry between the state and citizens. By mandating both proactive disclosure and reactive access to information, the Act creates a legal basis for digital feedback systems such as open data platforms, civic technology tools, and e-participation portals. Without such access, the data required for

evidence-based lawmaking and iterative legislative reform would remain inaccessible or unreliable.

However, the practical effectiveness of FOIA within a digital feedback framework is constrained by several structural and technological limitations. Compliance by public institutions remains inconsistent, with many agencies reportedly failing to respond to requests or maintaining records in non-digitised formats. The Act does not explicitly mandate the use of digital platforms for information dissemination or feedback integration, resulting in a largely manual and fragmented data-access process. Equally, delays in processing FOI requests are incompatible with the immediacy required for dynamic legislative feedback loops, where timely data is crucial for responsive lawmaking.

It suffices to state, therefore, that FOIA is a necessary but insufficient condition for effective digital feedback loops. From a reform perspective, FOIA's full potential to support digital legislative feedback loops lies in its technological and institutional operationalisation.

4.2 The Constitution of the Federal Republic of Nigeria 1999

The Constitution provides the overarching normative and institutional framework within which legislative feedback loops operate. Although it does not expressly contemplate digital technology or feedback systems, its provisions on the legislature's oversight function, including investigative powers over public institutions, create formal avenues to gather information on policy implementation and use it for law reform. These oversight functions align closely with the logic of legislative feedback loops, particularly when enhanced through digital tools that enable real-time data collection and analysis. Additionally, fundamental rights provisions[35] such as freedom of expression and the press, create an enabling environment for citizens to generate and disseminate feedback on governance, including through digital platforms.

Despite the relevance of these imperatives, the Constitution reveals significant limitations when examined through the lens of digital legislative feedback. Its silence on digital governance means that there is no explicit constitutional obligation for legislative bodies to adopt technology-driven engagement mechanisms or to institutionalise continuous feedback processes. As a result, the integration of digital tools into legislative practice is left to policy discretion rather than constitutional mandate, leading to uneven and inconsistent application.

[35] Chapter 4.

4.3 The Nigerian Data Protection Act 2023

As Nigeria increasingly needs to use digital platforms to collect, process, and analyse citizen-generated data, the Nigeria Data Protection Act (NDPA) establishes the safeguards necessary to ensure these processes are lawful, transparent, and respectful of individual privacy rights. In this paper, the Act serves as a regulatory stabiliser by enabling digital feedback tools while protecting citizens from misuse of their personal data. Without such a framework, large-scale digital engagement in lawmaking could undermine public trust, discourage participation, and weaken the effectiveness of feedback systems. The Act also establishes comprehensive rules on data collection,[36] consent,[37] processing,[38] storage,[39] and cross-border transfer of personal data.[40] It also creates the Nigeria Data Protection Commission[41] as the supervisory authority responsible for enforcement and compliance.

From a feedback-loop perspective, and for Nigeria to fully leverage digital feedback mechanisms, however, legislative bodies must not only comply with the NDPA but also proactively incorporate privacy-by-design principles into the architecture of their digital engagement platforms.

4.4 The Cybercrimes (Prohibition, Prevention, etc.) Act 2015

This Act is a key component of Nigeria's digital governance framework, particularly for the integrity and security of digital legislative feedback systems. As legislative feedback loops increasingly rely on digital platforms, safeguarding these systems from cyber threats becomes paramount. The Act provides the legal infrastructure for protecting digital environments by criminalising offences such as identity theft,[42] cyberstalking,[43] and the Willful misdirection of electronic messages.[44] It ensures that digital feedback mechanisms operate within a secure and trustworthy structure, thereby preserving the reliability of data used for evidence-based lawmaking.

Despite its strengths, the Act's provisions raise critical concerns when examined through the lens of participatory governance and digital feedback. Certain provisions, particularly those relating to cyberstalking, have been criticised for their broad and sometimes ambiguous wording.[45] Instructively, while the Act focuses on prohibiting and punishing cyber

[36] Part V.
[37] Section 35.
[38] Section 24.
[39] Section 39.
[40] Part VIII.
[41] Part II, Section 4.
[42] Section 22.
[43] Section 24.
[44] Section 11.
[45] Ifeoma E. Nwafor, 'Cyberstalking in Nigeria: An Exploratory Study of Section 24 of the Nigerian Cybercrimes (Prohibition, Prevention, etc.) (Amendment) Act, 2024', (2024) 5(3) International Cybersecurity Law Review.

offences, it does not provide guidance on how legislative bodies should design, manage, or secure digital feedback systems in a way that balances security with openness. This creates a regulatory asymmetry of limited direction on how to proactively build inclusive, transparent, and participatory digital systems for lawmaking.

4.5 Judicial Approach to Transparency and Feedback

In the absence of explicit statutory frameworks mandating digital feedback mechanisms, the courts have functioned as norm entrepreneurs, expanding access to information and reinforcing the legal foundations for feedback-driven governance. A central pillar of this judicial approach is the interpretation of the Freedom of Information Act 2011, referred to in this paper as the FOIA. The Supreme Court decision in *Attorney-General of the Federation v. The Guardian Newspapers Ltd and Ors*[46] is particularly instructive, as it clarified that the Act applies across all tiers of government, including state institutions. Another notable judicial decision is *Socio-Economic Rights and Accountability Project (SERAP) v. Federal Republic of Nigeria*.[47] Although not a direct interpretation of the FOIA, the case is often cited alongside FOIA jurisprudence for the principle that transparency is a constitutional and human rights-based governance requirement. In other words, Governments must justify secrecy in relation to public interest and accountability standards. Rulings such as the two discussed here underscore the judiciary's role in bridging the gap between formal legal rights and practical access, a gap that frequently undermines feedback systems in developing democracies.

The judiciary has also contributed to the broader feedback framework by protecting fundamental rights, particularly freedom of expression and the press.[48] In the digital age, this extends to online platforms, where public discourse increasingly occurs. By upholding these rights, courts indirectly support informal digital feedback channels, ensuring that citizens can critique laws, highlight implementation failures, and mobilise around policy issues. Notwithstanding this opening of new frontiers for feedback, judicial approach is not without limitations. Judicial intervention is inherently reactive rather than proactive, because courts typically act only when disputes are brought before them, meaning that their contribution to feedback systems is contingent upon litigation. From a theoretical standpoint, therefore, the judiciary's role can be conceptualised as enabling, but incomplete within the architecture of digital legislative feedback loops.

[46] (2019) 15, NWLR (Pt 1695) 181 (SC).
[47] *(2010) AHRLR 48 (ECW/CCJ 2010).*
[48] *Arthur Nwankwo v The State (1985) 6 NCLR 228 CA.*

5. CROSS-COUNTRY ANALYSIS

5.1 The United States of America (USA)

The USA represents one of the most advanced models of legislative digital feedback, combining legal mandates, technological infrastructure, and institutional capacity. Statutorily, the Administrative Procedure Act (APA)[49] mandates federal agencies to publish proposed regulations and solicit public comments before finalising them. Digital platforms also enable citizens, civil society organisations, and industry stakeholders to submit feedback, which agencies must consider and respond to.[50] Judicial oversight enforces this practice, as in *Motor Vehicle Manufacturers Association v. State Farm Mutual Automobile Insurance Co.*[51]The court invalidated the agency's action for failing to properly consider relevant public input. This established that feedback is legally binding in the decision-making process, embedding it in the USA's evidence-based governance culture.

Technologically, the USA has developed centralised and sophisticated platforms for capturing feedback. Regulations.gov[52] For instance, serves as a single portal for public comments, while Data.gov[53] provides open access to federal datasets, enabling evidence-informed policy analysis. Some sector-specific platforms[54] also allow stakeholders to monitor spending and regulatory compliance, ensuring that legislative and administrative decisions respond to real-world data. Despite this technological sophistication, the USA experience shows significant challenges, including participation inequalities (where certain groups are more digitally inactive), information overload, and the need for data analysis expertise to convert large volumes of citizen input into actionable policy.

5.2 Estonia

Estonia is widely regarded as a global leader in e-governance, demonstrating how digital feedback loops can be institutionalised, technologically integrated, and legally supported to create a highly responsive legislative system. Estonia provides a model for emerging democracies such as Nigeria, illustrating how digital participation, open data, and integrated administrative systems can strengthen evidence-based lawmaking. Estonia's legal framework establishes a strong foundation for digital participation in governance. The Constitution of the Republic of Estonia[55] guarantees citizens access to government

[49] Act of June 11, 1946, ch.324, 60 Stat. 237.
[50] <www.regulations.gov> accessed 25th December, 2025.
[51] 463 U.S. 29 (1983).
[52] <https://www.regulations.gov/> accessed 28th February, 2025.
[53] <https://data.gov/> accessed 28th February, 2026.
[54] <https://www.usaspending.gov/> accessed 28th February, 2026.
[55] (adopted 28 June 1992, entered into force, 3 July 1992) RT 1992, 26, 349).

information,[56] and participatory rights[57] While e-Governance in practice codifies the use of digital platforms for citizen engagement, data management, and service delivery.

Estonia does not rely on one "e-governance law, rather, it uses a layered legal architecture combining constitutional rights, administrative transparency law, digital identity law, and electronic transaction law.[58] Unlike many countries where digital submissions may be advisory, Estonia integrates citizen input directly into decision-making processes, from policy development to legislative refinement.

Estonia's digital feedback system relies on three main components:

1) e-Estonia Portal:[59]

Provides citizens with real-time access to legislation, proposed policy changes, and public consultations. Citizens can submit proposals or feedback directly through the portal, which are recorded, acknowledged, and routed to the relevant agency or legislative committee. This ensures that participation is continuous and systematic.

2) X-Road Integration Layer:[60]

Connects databases across ministries, municipalities, and independent agencies, enabling policymakers to access administrative data alongside citizen input. This interoperability allows legislators and committees to cross-reference digital feedback with empirical data, facilitating evidence-based decision-making.

3) Open Data Initiatives:[61]

Estonia's government maintains extensive open datasets covering budgets, public service performance, health, education, and other sectors. These datasets are accessible to policymakers, researchers, and the public, enabling data-driven insights to complement citizen feedback. Open data acts as both a tool for citizen oversight and a source of evidence for refining legislation. Together, these platforms allow Estonia to integrate citizen input and administrative evidence in real time, creating a continuous feedback loop that informs legislative drafting, policy adjustments, and regulatory monitoring.

By way of institutional and analytical capacity, Estonia's system is supported by dedicated institutional structures and skilled personnel. Legislative bodies, ministries, and oversight agencies employ specialists in policy analysis, data science, and digital systems,

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[56] Section 44.
[57] Section 46.
[58] < https://ega.ee/wp-content/uploads/2016/06/e-Estonia-e-Governance-in-Practice.pdf> accessed 4th April, 2026
[59] < https://e-estonia.com/> accessed 4th April, 2026.
[60] < https://e-estonia.com/solutions/interoperability-services/x-road/> accessed 4th April, 2026.
[61] Open data portals around Europe: Estonia supporting open data usage for research and data-driven decisions**,** <https://data.europa.eu/en/news-events/news/open-data-portals-around-europe-estonia-supporting-open-data-usage-research-and > accessed 4th April, 2026.

ensuring that feedback from citizens and administrative sources is systematically analysed, validated, and acted upon. Analytical tools allow policymakers to identify trends, prioritise issues, and monitor implementation effectiveness, converting raw citizen submissions into actionable legislative insights. Feedback loops are thus not symbolic, but integrated into the decision-making process, supporting iterative legislation and regulatory adjustment.

5.3 Comparative Synthesis and Lessons for Nigeria

The examination of digital feedback loops across the United States of America and Estonia shows that effective legislative participation depends on law, technology, institutional capacity, and citizen engagement. While each jurisdiction reflects unique features, several common themes and lessons emerge for Nigeria's effort to institutionalise evidence-based lawmaking. In the US, digital feedback is deeply integrated into the legislative and regulatory process through legal mandates such as the Administrative Procedure Act, which require agencies to solicit and consider public input. The aforementioned available platforms allow citizens, researchers, and interest groups to submit evidence, track policy developments, and access data for independent analysis. The U.S. model shows that legal obligation, centralised digital platforms, and institutional analytical capacity are essential to turning feedback into actionable, evidence-based legislative decisions. Estonia offers an example of a fully digitalised, integrated feedback ecosystem and shows that continuous, centralised, and secure feedback loops, backed by legal and institutional support, can create an iterative legislative process in which citizens directly influence policy and law.

From these comparative analyses, several lessons emerge for Nigeria. Legal Mandates are critical to formalising citizen input in law and regulations, ensuring feedback is considered in decision-making and moving beyond symbolic engagement. Digital platforms must also be accessible, secure, and interoperable because centralised platforms that integrate citizen submissions with administrative and research data are essential for continuous, evidence-informed lawmaking. Another key lesson is with institutional and analytical capacity being non-negotiable so that legislative staff, research institutes, and analytical units are mandatorily equipped to process, validate, and synthesise digital inputs. Equally instructive as a lesson is that hybrid systems can bridge gaps by civic tech and mobile platforms complementing formal processes, particularly in regions with limited digital infrastructure or institutional capacity. Finally, it is an apparent lesson that transparency and iteration build trust because citizens are more likely to engage meaningfully when they see how their feedback influences policy, reinforcing the participatory nature of lawmaking.

This synthesis forms the foundation for designing Nigeria's digital legislative feedback system, combining lessons from advanced democracies with practical and contextual applicability's.

6. FINDINGS, RECOMMENDATIONS, AND CONCLUSION

6.1 Findings

This paper finds that several factors constrain and prevent digital feedback loops from functioning as intended, limiting the legislature's ability to implement participatory, iterative, and evidence-informed lawmaking. These challenges, identified as the findings of this paper, are discussed as follows:

6.1.1 *Institutional Challenges*

The paper finds that institutional weaknesses are central to the limited integration of digital feedback loops in Nigeria. One major challenge is that of fragmentation and operation in silos. Despite the presence of research bodies like NILDS, committees, research services, and administrative units remain fragmented. As a result, feedback collection is often isolated and underutilised, and committees lack sufficient analytical tools and trained personnel to process digital submissions. Responsibilities are often disjointed across committees and agencies. This results in poor coordination, with feedback sometimes collected but never analysed or acted upon. Legislative staff and research officers also somewhat lack the skills to process large volumes of digital data from social media, mobile platforms, and civic tech initiatives. This limits the legislature's ability to translate citizen input into actionable policy recommendations.

Another challenge is inadequate institutional mandates: committees have no formal requirement to systematically integrate digital feedback into legislative drafting, meaning even collected inputs may not be used.

Operational delays pose another challenge, as legislative cycles in Nigeria are often slow, and committees cannot act on feedback in real time or in line with legislative schedules, reducing the relevance of the input received.

6.1.2 *Technological Challenges*

The paper also finds that technological challenges demonstrate the need for investment in integrated platforms, secure infrastructure, and data analysis capabilities because they constrain and further inhibit the integration of digital feedback loops. A major challenge is fragmented digital infrastructure. Unlike Estonia or the USA, Nigeria lacks centralised, interoperable platforms connecting parliamentary committees, MDAs, and research institutions. Related to this challenge are access and digital literacy gaps. Internet penetration and digital literacy is uneven across Nigeria, particularly in rural areas. This limits inclusivity

and introduces urban-centric biases in feedback. There is also the challenge of data security and privacy. Concerns about confidentiality and compliance with the Nigeria Data Protection Act (NDPA) may discourage citizens from submitting sensitive information. Weak cybersecurity infrastructure may also jeopardise trust in digital participation.

6.1.3 *Legal and Regulatory Challenges*

The paper also finds that Nigeria's legal environment creates both opportunities and constraints for integrating digital feedback. Ambiguity in the Freedom of Information Act (FOIA) creates a major challenge: while it theoretically facilitates citizen access to government information, enforcement is weak in practice. Citizens and civil society often lack clarity on participation channels, thereby reducing meaningful feedback. Another inhibition is the absence of mandatory consultation laws. Unlike the USA's APA, Nigeria has no statutory mandatory requirement for committees to consider citizen submissions in legislative processes. This limits accountability and enforceability of feedback.

6.1.4 *Socio-Cultural Challenges*

Beyond technology and institutions, this paper finds that socio-cultural factors influence feedback effectiveness. Low awareness of participatory channels means many citizens are unaware of opportunities to submit input or how it will be used, reducing engagement levels. A digital and literacy divide also excludes populations with limited digital skills or access, skewing representation and undermining the inclusivity and reliability of feedback. Cultural Norms and engagement practices also pose a challenge because, in some communities, participation in formal processes may be limited by hierarchical or deferential social norms, affecting the diversity of input.

6.2 Recommendations

Flowing from the articulated findings, this paper makes the following recommendations:

1. The paper recommends strengthened institutional and analytical capacity. Through centralised feedback units, the establishment of dedicated digital feedback units within the National Institute for Legislative and Democratic Studies (NILDS) or parliamentary committees tasked with aggregating, coding, and analysing citizen input would help bridge this gap.
2. Equally paramount, and another recommendation of this study, is capacity building for legislative staff who must be trained in general research, data analytics, digital tools, and evidence synthesis to convert digital submissions into actionable legislative recommendations.

3. Inter-Committee coordination is another important recommendation flowing from the analysis in the study. This would entail creating formal protocols for collaboration between committees, research units, and MDAs to ensure feedback is timely, analysed, and integrated into lawmaking.
4. It is also recommended that integrated digital platforms are built and developed. A platform linking committees, MDAs, and research institutes to collect, store, and analyse submissions would help create a centralised digital feedback portal.
5. The study also recommends the incorporation of mobile-based feedback channels to reach rural populations, thereby improving inclusivity. The study also recommends investing in software for automated coding, trend analysis, and visualisations (analytical tools) to support iterative, evidence-informed decision-making.
6. The study further recommends legal and regulatory reforms. In this regard, digital consultation by enacting statutory requirements for committees must be institutionalised in order to consider citizen input during bill drafting, review, and amendment processes, similar to the USA's APA system. Data laws must also be harmonised, and in this sense, it is recommended that the Freedom of Information Act, the National Data Protection Act, and the Cybercrimes (Prevention, Prohibition, etc.) Act be aligned to enable safe, efficient collection and processing of citizen feedback without legal ambiguity. Transparency provisions must also be harnessed by requiring committees to publish summaries of citizen input and responses, building accountability and trust.
7. The study also recommends the enhancement of citizen awareness and participation through civic education campaigns that promote public awareness of participation channels, legislative processes, and the impact of feedback, particularly in rural areas. The study also recommends inclusive outreach targeted at marginalised groups through community-based engagement, local radio, and mobile apps to ensure diverse perspectives. The study also recommends trust-building mechanisms, such as publicly demonstrating how feedback influences legislative decisions, to foster confidence in participatory processes.
8. The study further recommends procedural and operational improvements through the development of protocols for receiving, processing, analysing, and integrating feedback into committee reports and bill drafts. Feedback must also be integrated in a timely manner and aligned with legislative cycles to ensure it remains relevant and actionable.
9. Finally, the study recommends resource allocation, where there would be a dedicated budget for digital platforms, staff training, and analytical tools, ensuring sustainability of the feedback ecosystem.

6.3 Conclusion

This study shows that, through lessons from the USA and Estonia, Nigeria can adapt proven models to its institutional, technological, and socio-cultural context, creating a hybrid, resilient feedback system. By implementing the recommendations outlined above, Nigeria can institutionalise digital feedback loops, ensuring that lawmaking becomes iterative, participatory, and responsive, leading to more effective and legitimate governance.