



Participatory Digital Governance and Citizen Confidence in Local Institutions

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Abstract

Digital transformation is reshaping the relationship between citizens and local institutions, but the expansion of online public services does not automatically produce stronger institutional confidence. This study examines how participatory digital governance can influence citizen confidence when digital systems move beyond one-way service delivery toward transparent, responsive, inclusive, and accountable forms of civic interaction. The study is designed as a simulation-based research article because no original field dataset is claimed. A conceptual model is developed from contemporary research on digital government, public participation, institutional trust, privacy, digital inclusion, and local governance. Recent international evidence indicates that citizens who believe they have meaningful opportunities to influence government tend to report higher institutional trust, while effective participation depends on governments responding visibly to citizen input rather than merely providing digital access.

Four simulated governance conditions are examined: low digital participation, access-focused digital services, responsive digital participation, and co-creative local governance. The illustrative simulation produces mean citizen-confidence scores of 2.74, 3.18, 3.71, and 4.16 respectively on a five-point scale. These values are not presented as observed population estimates; they are analytical benchmarks used to investigate theoretically expected relationships.

The findings indicate that the strongest confidence gains occur when accessibility is combined with procedural transparency, institutional responsiveness, inclusive participation, privacy protection, and evidence that citizen contributions affect administrative decisions. The paper argues that local governments should evaluate digital governance by the quality of the citizen–institution relationship rather than by platform adoption or transaction volume alone. The proposed framework contributes a practical confidence-centered approach for assessing digital participation while identifying digital inequality, tokenistic consultation, privacy concerns, weak feedback closure, and institutional non-responsiveness as major risks.

Keywords: participatory digital governance; citizen confidence; local institutions; e-participation; digital government; institutional trust; civic engagement; local governance; digital inclusion; public accountability



1. Introduction

Digital government has moved beyond the narrow automation of administrative procedures. Local institutions increasingly use digital portals, mobile applications, social-media channels, open-data systems, online consultations, electronic grievance mechanisms, participatory budgeting platforms, and other technology-enabled systems to communicate with residents and organize public services. At their most basic level, these systems can reduce transaction costs and make government information easier to obtain. At a more advanced level, however, they can alter the relationship between residents and public institutions by creating continuous opportunities for citizens to contribute information, express preferences, question decisions, monitor implementation, and participate in the design of local policies.

The United Nations Department of Economic and Social Affairs defines e-participation around the use of information and communication technologies to foster citizen engagement and more open and participatory governance. Its broader digital-government work similarly emphasizes the relationship among information access, accountability, public participation, and citizen-centered services. The contemporary governance challenge is therefore not simply whether local institutions have become digital, but whether digitization makes local authority more intelligible, accessible, responsive, and accountable to citizens.

This distinction is important because the existence of a digital platform does not necessarily mean that meaningful participation is occurring. A municipality may provide an online complaint form without explaining what happens after submission. It may publish data that most residents cannot interpret, conduct online consultations whose results do not visibly affect policy, or introduce sophisticated applications that exclude citizens with limited internet access, low digital literacy, disabilities, linguistic barriers, or concerns about privacy. Technology can therefore improve participation while simultaneously reproducing or intensifying inequalities if institutional design is weak.

Recent OECD evidence strengthens the argument that participation and institutional confidence are connected. Its work on open government reports that people who feel they have a meaningful say in government tend to express higher levels of trust. The OECD's 2024 survey also showed that confidence in government remains a significant policy concern across participating countries, reinforcing the importance of responsiveness, reliability, openness, fairness, and meaningful citizen voice as institutional trust drivers.

The local level is especially important. Municipalities and other local authorities frequently manage services that directly affect citizens' everyday lives, including sanitation, licensing, roads, local infrastructure, neighborhood planning, water management, local taxation, community facilities, environmental services, and grievance resolution. Citizens therefore encounter institutional performance through highly visible and immediate experiences. A delayed complaint, unexplained permit decision, ignored neighborhood proposal, or inaccessible digital interface can influence perceptions of government just as strongly as broader political narratives.

Empirical research increasingly supports this relationship. Nurlinah's 2025 study of 394 respondents in Gowa Regency, Indonesia, found positive relationships among perceived digital transformation, trust in government, and citizen participation, while emphasizing differences across urban, semi-urban, and rural settings. Wang's 2025 study of rural digital governance similarly reported



that participation in digital governance was positively associated with grassroots political trust, although the strength of that relationship differed among social groups.

2. Literature Review

Research on digital governance has progressed from early studies of e-government adoption toward broader questions concerning public value, accountability, participation, trust, inclusion, and institutional transformation. This evolution reflects growing recognition that the success of digital government cannot be determined solely by the number of services placed online.

Li and Shang examined e-government use and citizen trust using empirical evidence from China and demonstrated the importance of understanding digital-government use as part of the broader citizen–government relationship rather than simply a matter of technological adoption. Their contribution is relevant because digital interactions can shape perceptions of government competence and accessibility, but those perceptions remain dependent on the quality of the institutional experience surrounding the technology.

Campbell's 2023 experimental research examined public participation and trust under different policy-performance conditions. The study found that participation produced a modest positive trust effect, but government performance had a substantially stronger influence. This finding challenges simplistic assumptions that participation automatically creates trust. Participation may strengthen procedural legitimacy, yet citizens also expect institutions to deliver tangible outcomes.

Zhao's 2023 research on digital transparency and citizen participation examined how online disclosure and interactive government systems can affect citizen involvement in public activities. The study is important to the present framework because transparency is not merely the publication of documents. Digitally mediated transparency can include searchable data, interactive information, personalized interfaces, traceable decisions, and mechanisms through which citizens can respond to government information.

Shin and colleagues conducted a systematic analysis of digital tools for citizen participation in 2024. Their work showed that digital participatory technologies can facilitate information flows from citizens to governments and demonstrated the diversity of tools currently used to organize digitally mediated participation. The research is significant because it moves analysis beyond the binary question of whether participation is online and toward the institutional functions performed by different technologies.

Gupta, Hooda, Jeyaraj, Seddon, and Dwivedi examined trust, risk, privacy, and security in e-government use through meta-analytic structural equation modeling. Their work demonstrates that privacy and security perceptions form an important part of digital trust and citizens' willingness to use government systems. These findings are directly relevant to participatory governance because citizens may be asked to disclose identities, locations, political preferences, complaints, community problems, or other potentially sensitive information.

The evidence also warns against technological determinism. OECD research on emerging technologies and citizen participation notes that newer tools can broaden opportunities while simultaneously generating risks related to inequality, security, accessibility, and exclusion. Accordingly, artificial intelligence, immersive technologies, blockchain, and automated engagement systems should



not be assumed to strengthen democratic participation merely because they are technologically advanced.

Table 1: Selected Evidence Relevant to Participatory Digital Governance

Study/Institution	Year	Focus	Principal Finding Relevant to This Study	Remaining Issue
Campbell	2023	Participation and government trust	Participation can improve trust, but performance remains critical	Participation alone may not overcome poor outcomes
Li and Shang	2023	E-government use and trust	Digital-government use is connected to citizen trust	Contextual mechanisms require further examination
Shin et al.	2024	Digital participation tools	Digital tools facilitate citizen-to-government information flows	Technology type does not guarantee institutional responsiveness
Karkın and Cezar	2024	Public value from e-participation	E-participation should create identifiable public value	Public-value realization varies across institutional settings
Gupta et al.	2024/2025	Privacy, security, risk, trust	Security and privacy affect digital-government trust and use	Trust must be integrated into participatory platform design

3. Research Gap

Existing research provides substantial evidence concerning e-government adoption, digital-service quality, public participation, institutional trust, and technological acceptance. Nevertheless, three important gaps remain.

First, a considerable portion of the digital-government literature continues to focus on adoption, service use, technical capability, or efficiency. These dimensions are important, but they do not fully explain whether citizens feel more confident in local institutions after digitalization. A resident may



successfully submit a form online while remaining uncertain about whether an institution is fair, responsive, or trustworthy.

Second, participation and digital service delivery are often analyzed separately. Participatory digital governance requires their integration. Digital systems need to support not only government-to-citizen transactions but also citizen-to-government input and, in advanced arrangements, citizen-government co-production.

Third, studies often examine individual predictors such as transparency, service quality, trust, digital literacy, or privacy in isolation. Fewer approaches explain how these elements operate together as an institutional ecosystem. Recent evidence showing geographic and social heterogeneity further suggests that digital participation cannot be evaluated adequately without considering inclusion and unequal access.

The present paper addresses these gaps through a confidence-centered model in which accessibility, transparency, responsiveness, inclusion, and privacy/security collectively determine the quality of participatory digital governance.

4. Novelty and Proposed Contribution

The primary contribution of this study is the distinction between digital availability and participatory digital governance maturity.

This distinction leads to a proposed Citizen Confidence-Oriented Participatory Digital Governance Framework. Rather than measuring success through the number of downloads, registered users, online transactions, or digital services, the framework evaluates whether technology changes the institutional experience of citizenship.

The study further contributes by using four progressive governance conditions rather than a simple digital/non-digital comparison. This makes it possible to demonstrate why an institution that provides extensive digital access but little responsiveness may produce smaller confidence improvements than an institution using comparatively simple technology with strong feedback and accountability mechanisms.

5. Research Objectives and Research Questions

The study seeks to examine theoretically how participatory digital governance may influence citizen confidence in local institutions; identify the institutional dimensions most important for confidence-oriented digital participation; distinguish access-focused digitalization from genuinely participatory governance; assess the role of transparency, responsiveness, inclusion, and privacy in the citizen-institution relationship; and develop a framework suitable for subsequent empirical validation.

Four supporting questions guide the analysis:

- Why is digital access alone insufficient for building sustained institutional confidence?
- How do transparency and responsiveness shape citizens' interpretation of digital participation?
- What role do inclusion and privacy/security play in determining whether digital participation is trusted?
- What design principles can local institutions use to transform digital engagement from consultation into confidence-building governance?

6. Methodology

This study uses a conceptual and simulation-based research design. It does not report a completed survey, experiment, or administrative dataset. This classification is deliberately selected to prevent illustrative numerical outputs from being interpreted as real empirical observations.

The analytical framework was developed through evidence mapping of recent scholarly and institutional literature related to e-participation, digital government, institutional trust, citizen engagement, transparency, privacy, inclusion, and local governance. Sources include peer-reviewed studies and institutional publications from organizations including the OECD, United Nations, and World Bank. OECD evidence concerning citizen voice and institutional trust, UN work on e-participation, and contemporary empirical studies of local digital governance were particularly important in defining the model.

Five analytical dimensions were identified.

Table 2: Analytical Dimensions of Participatory Digital Governance

Dimension	Operational Meaning in the Model	Expected Relationship with Citizen Confidence
Digital Accessibility	Ease of reaching services and participation mechanisms across devices and channels	Positive, but insufficient independently
Transparency	Clarity of information, procedures, decisions, criteria, and participation outcomes	Positive
Institutional Responsiveness	Timely acknowledgement, explanation, follow-up, and action on citizen input	Strong positive
Participatory Inclusion	Ability of diverse social groups to participate meaningfully	Positive
Privacy and Security	Perceived protection of identity, personal information, and participation records	Positive and enabling

7. Results

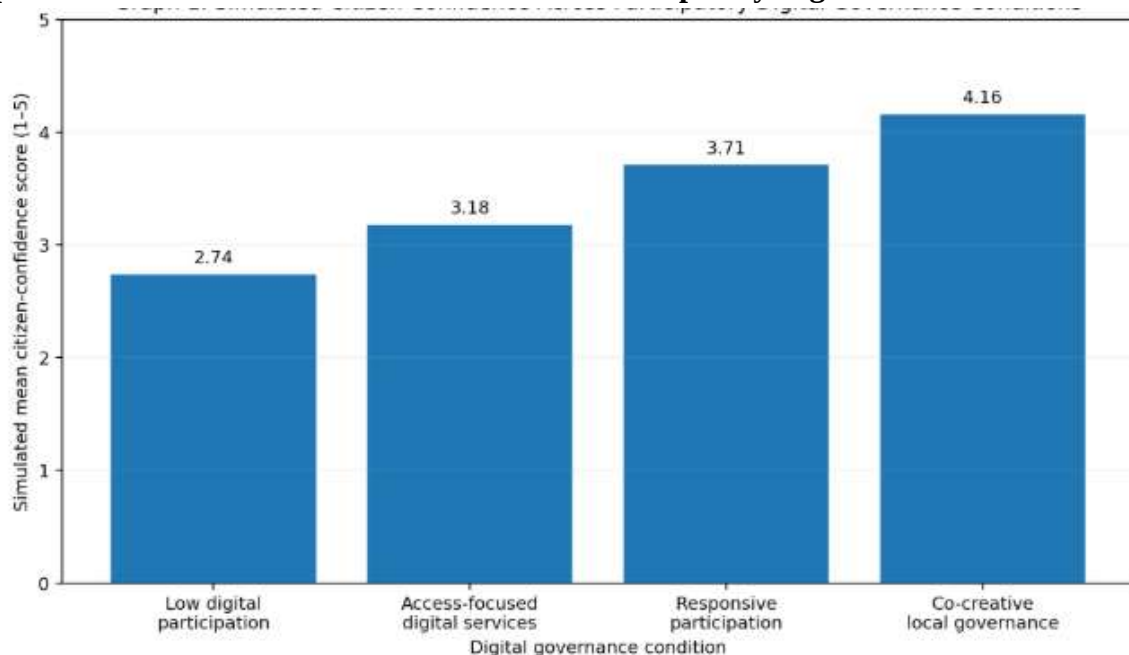
Table 3: Simulated Citizen-Confidence Outcomes

Governance Condition	Simulated Mean Confidence Score	Change from Previous Condition	Interpretation
Low Digital Participation	2.74	—	Weak interaction and limited institutional feedback
Access-Focused	3.18	+0.44	Convenience improves, but

Governance Condition	Simulated Mean Confidence Score	Change from Previous Condition	Interpretation
Digital Services			participation remains limited
Responsive Digital Participation	3.71	+0.53	Visible institutional response strengthens perceived voice
Co-Creative Local Governance	4.16	+0.45	Participation becomes embedded in decision processes

Note: Values are simulated analytical benchmarks on a five-point scale and are not derived from real respondents.

Graph 1: Simulated Citizen Confidence Across Participatory Digital Governance Conditions



8. Discussion and Critical Interpretation

The results suggest that the relationship between digital governance and institutional confidence should be understood as a progression from access, through interaction, toward influence.

Access is necessary. Citizens cannot participate digitally when platforms are unavailable, unreliable, unaffordable, inaccessible to persons with disabilities, incompatible with common devices, or dependent on broadband infrastructure that significant sections of the population do not possess. Yet access is the beginning rather than the endpoint of participatory governance.

A transaction-focused system can still reinforce a distant relationship between the citizen and government. The institution may become easier to use while remaining difficult to influence. This explains why the model predicts only a moderate confidence increase when digital service accessibility improves without corresponding advances in participatory responsiveness.



The difference becomes clearer when considering a municipal complaint system. A resident who can submit a complaint electronically experiences technological convenience. If the resident receives an acknowledgement, status updates, an explanation of institutional responsibility, a resolution timeline, and a final outcome, the same platform begins to generate procedural confidence. If anonymized complaint patterns are subsequently published and used to determine neighborhood priorities, the mechanism moves further toward participatory governance.

Responsiveness is therefore not synonymous with agreement. Local institutions do not need to approve every citizen proposal. Confidence may be supported even when a request is rejected if the decision is prompt, understandable, procedurally fair, and supported by transparent reasons. The damaging condition is often not disagreement but unexplained institutional silence.

Campbell's experimental evidence provides an important qualification. Participation contributes to legitimacy, but satisfactory government performance remains central to trust. A technologically sophisticated participatory system cannot compensate indefinitely for unreliable public services, corruption, arbitrary decisions, severe delays, or unfulfilled commitments. Digital participation should consequently complement administrative performance rather than become a substitute for it.

Transparency represents a second mechanism. Citizens may have limited confidence when they cannot determine why projects were selected, how local budgets were allocated, what happened to consultation responses, why applications were rejected, or whether participation data influenced decisions. Digital systems can reduce this information asymmetry by publishing timelines, criteria, records, dashboards, decision explanations, budget information, consultation summaries, and progress updates.

9. Research Contribution and Practical Implications

The theoretical contribution of this study is a confidence-centered interpretation of participatory digital governance. The framework proposes that citizen confidence is generated through the interaction of technological usability and institutional behavior.

For local governments, the implication is that digital-performance dashboards should incorporate governance indicators alongside technical indicators. Measures such as platform uptime, application downloads, online transaction completion, processing speed, and number of registered users remain useful, but they provide an incomplete picture.

A confidence-oriented dashboard would additionally examine whether citizen input receives acknowledgement, how long institutions take to respond, what percentage of consultations receive publicly documented follow-up, whether marginalized groups participate proportionately, how many users abandon digital participation processes, how frequently decisions are explained, and whether citizens perceive that their contribution had meaningful influence.

For policymakers, the model suggests that investment should not be concentrated entirely in front-end technology. Institutional capacity is equally important. Employees must be able to analyze citizen input, coordinate across departments, respond consistently, communicate decisions, manage participation data responsibly, and convert recurring citizen concerns into administrative learning.



For technology designers, interfaces should make the participation process visible. A citizen should ideally know where an input has gone, who is responsible for it, its current status, expected response period, and final disposition. The digital experience should reduce institutional uncertainty.

For civil-society organizations, the model provides a basis for evaluating whether digital-governance reforms deepen participation or merely digitize existing administrative routines. Community organizations can assess whose voices are present, whose voices remain absent, and whether participation produces observable changes.

For scholars, the framework creates testable hypotheses. Future studies can operationalize the five proposed dimensions and examine their direct, mediated, and moderated relationships with citizen confidence using real municipal samples.

10. Conclusion

Digital transformation offers local institutions an important opportunity to improve their relationship with citizens, but the value of this transformation depends on the governance arrangements surrounding technology.

The present simulation suggests a progressive increase in citizen confidence as digital governance moves from weak participation toward accessible services, responsive interaction, and ultimately co-creative decision-making. The simulated confidence score rises from 2.74 under low digital participation to 4.16 under the most participatory scenario. These numbers are illustrative rather than empirical, but the direction of change is consistent with contemporary evidence emphasizing citizen voice, responsiveness, public value, digital inclusion, and trustworthy digital-government design.

The central conclusion is that digital governance builds confidence not merely when citizens can reach government, but when government visibly listens, explains, responds, protects, includes, and acts.

This requires local institutions to avoid equating digitalization with participation. Online portals can make administrative processes easier without making institutions more participatory. Similarly, collecting citizen feedback cannot build sustained confidence when feedback disappears into opaque administrative processes.

Meaningful participatory digital governance therefore requires institutional feedback loops. Citizens need opportunities to contribute, mechanisms for tracking institutional responses, understandable explanations of decisions, evidence that participation influences public action, equitable access, and confidence that their information will be protected.

Local digital-government strategies should consequently shift from platform-centered measurement toward relationship-centered evaluation. The ultimate test of digital governance is not how technologically advanced the interface appears but whether citizens experience local institutions as competent, accessible, fair, responsive, inclusive, transparent, and worthy of confidence.



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