

Evaluation of Digital Governance Implementation in the Public Sector: A Study of the Effectiveness of the Smart Governance Program in Makassar City

Muhammad Fadli Akbar¹

¹Public Administration Study Program, Universitas Dipa Makassar, Indonesia

ARTICLE INFO

Received: 20 August 2025
Revised: 26 October 2025
Accepted: 06 December 2025
Available online: 09 December 2025

Keywords:

Smart City
Public Administration Reform

Corresponding Author:

Muhammad Fadli Akbar

Email:

muhammadfadliakbar@gmail.com

Copyright © 2025, Asian Digital Governance Problems, Under the license [CC BY- SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/)



ABSTRACT

Purpose: This study aims to evaluate the implementation and effectiveness of digital governance within the Smart Governance Program in Makassar City, Indonesia. It seeks to understand how digital systems reshape public administration, bureaucratic behavior, and citizen engagement in a developing urban context. The research does not merely measure performance outcomes but explores how governance principles such as transparency, efficiency, accountability, and participation are enacted and negotiated in daily administrative practice.

Subjects and Methods: The study employs a qualitative evaluative design involving twenty participants, including local government officials, technical staff, and citizens who interact with digital service platforms. Data were gathered through semi-structured interviews, document analysis, and participant observation. The analysis followed an interpretative thematic approach using Miles and Huberman's interactive model, emphasizing the interrelation between institutional structures, technological adaptation, and user experience.

Results: Findings reveal that while the Smart Governance Program has improved accessibility and introduced innovative digital services, it remains hindered by fragmented infrastructure, uneven bureaucratic adaptation, and limited citizen responsiveness. The coexistence of manual and digital systems reflects a transitional bureaucracy, and participation mechanisms often function symbolically rather than substantively. Trust and inclusivity emerge as pivotal factors in shaping the success of digital governance.

Conclusions: Smart Governance in Makassar represents both progress and paradox. Its success depends not only on technological infrastructure but on institutional alignment, cultural readiness, and relational trust between government and citizens. Digital transformation must therefore be understood as a continuous process of learning, adaptation, and human-centered reform.

INTRODUCTION

In the twenty-first century, governance has entered an era defined not only by administrative reform but by digital transformation (Jia & Chen, 2022; Gebrihet & Pillay, 2021; Cioffi et al., 2022). Governments around the world are reimagining their roles and responsibilities in response to the accelerating influence of information technology on social, economic, and political life. Digital governance, often associated with the broader discourse of smart government or smart city, represents an institutional shift toward data-driven decision-making, online service

delivery, and interactive citizen engagement. Yet, beyond its technological sophistication, digital governance is essentially a reconfiguration of power, transparency, and accountability.

It redefines how authority is exercised and how citizens perceive their relationship with the state. In this new terrain, the challenge for governments is not simply to digitize existing procedures but to transform the very logic of administration into one that is adaptive, participatory, and responsive (Akopian et al., 2024; Basuki et al., 2022; Narne et al., 2024). In developing countries, the promise of digital governance is particularly compelling because it carries the potential to overcome longstanding barriers of bureaucratic inefficiency, corruption, and administrative opacity (Nambassa & Nurmandi, 2024; Omweri, 2024; Udoh, 2024).

However, the implementation of digital systems in such contexts is rarely smooth. It involves negotiating infrastructural limitations, uneven digital literacy, institutional inertia, and political complexities that shape the everyday practice of governance. Indonesia provides a vivid illustration of this reality. As one of the largest democracies in the world, Indonesia has embarked on an ambitious journey toward digital reform under its Smart City and e-Government initiatives. These programs seek to harness technology to promote transparency, efficiency, and inclusivity in public service.

Yet, despite considerable progress, the outcomes have been uneven across regions, revealing persistent gaps between technological design and administrative capacity (Trajkovski, 2024; Eze et al., 2024; Das, 2024). Within this national landscape, Makassar City stands out as a pioneering yet paradoxical case. It has been widely recognized for its innovation through the Smart Governance Program, a flagship initiative that integrates information and communication technologies into the delivery of municipal services and decision-making processes. The city's slogan, Makassar Sombere dan Smart City, reflects an ambition to blend technological progress with local wisdom, embedding modern governance within a culturally resonant ethos of empathy and cooperation. However, beneath this narrative of success lies a complex reality.

While digital platforms have expanded citizen access to public services and improved administrative visibility, questions remain about the depth of institutional integration, the inclusiveness of participation, and the sustainability of digital trust. The Smart Governance Program thus provides an invaluable opportunity to explore how digital ideals are translated into administrative and social practice within a dynamic urban context (Przebyłowicz & Cunha, 2024; Nastjuk et al., 2022; Demirel & Mülazımoğlu, 2022). The concept of digital governance itself implies more than technological adoption. It entails the transformation of governance philosophy, institutional design, and civic behavior.

Scholars such as Wu et al. (2015), have argued that the effectiveness of digital governance depends on how well technology aligns with organizational structures and cultural realities. When systems are introduced into bureaucracies without adequate adaptation, they often reproduce rather than reform existing inefficiencies a phenomenon known as the “design reality gap.” In Indonesia's context, where bureaucratic traditions remain deeply embedded, this gap can manifest in fragmented infrastructure, uneven inter-departmental coordination, and limited responsiveness to public input.

Therefore, examining Makassar's experience becomes crucial not only for assessing technological readiness but also for understanding the institutional and cultural processes that shape governance transformation (Setiawan et al., 2024; Suyuthi et al., 2023; Aslam et al., 2024). Equally important is the question of citizen engagement in digital governance. The shift toward online service delivery redefines the citizen's role from a passive recipient to an active participant in the governance process.

Yet participation in the digital sphere is stratified by access, literacy, and trust. Studies have shown that while digital platforms can enhance communication and feedback mechanisms, they do not automatically guarantee democratic accountability. In Makassar, public participation through complaint systems and service applications represents an important step toward interactive governance, but the responsiveness of these systems determines whether participation translates into empowerment or frustration. Understanding how citizens experience and perceive

these platforms offers insight into the relational dynamics between government and society in the digital age (Janowski et al., 2018; Lips, 2010).

Despite the growing body of research on e-governance and smart cities, there remains a gap in understanding how digital governance operates in local contexts marked by hybrid bureaucratic systems and diverse social structures. Much of the existing scholarship focuses on policy design and technological innovation, but fewer studies interrogate the lived realities of implementation how policies are interpreted by local bureaucrats, how digital systems interact with institutional cultures, and how citizens navigate these evolving interfaces. This study addresses that gap by evaluating the implementation and effectiveness of the Smart Governance Program in Makassar City through a qualitative and interpretative lens.

Rather than measuring success through numerical indicators, it seeks to understand how the program's underlying principles transparency, efficiency, accountability, and participation are realized, negotiated, or constrained in practice. The significance of this research extends beyond Makassar. It offers broader reflections on how cities in the Global South are localizing digital governance within their administrative and cultural ecologies. By examining both the achievements and the challenges of Smart Governance, this study contributes to the growing discourse on how technology reshapes the ethics and architecture of public administration. It argues that the digital transformation of governance is not merely a technical revolution but a moral and institutional evolution that redefines the relationship between the state and its citizens. Through this lens, Makassar's experience becomes more than a local experiment it becomes a mirror through which the possibilities and paradoxes of digital governance in Indonesia, and indeed in much of the developing world, can be critically observed and reimaged.

METHODOLOGY

Research Design and Approach

This study employs a qualitative evaluative design to explore in depth the implementation process of digital governance within the Smart Governance Program in Makassar City. This approach was chosen because it does not merely measure the success of the program in quantitative terms but instead investigates how governance values such as transparency, efficiency, accountability, and citizen participation are enacted and negotiated within digital bureaucratic practices. The evaluative design positions the researcher not as a distant observer but as an engaged interpreter who seeks to understand how technology-driven reforms influence institutional culture, administrative responsiveness, and public engagement. The qualitative orientation of this study reflects the belief that public policy realities cannot be fully captured through numerical data alone but must instead be understood through the meanings, interpretations, and interactions that shape implementation within complex sociopolitical environments.

Research Site and Context

The research was conducted in Makassar City, South Sulawesi, a municipality recognized as one of Indonesia's pioneers in implementing the smart city framework. The Smart Governance Program in Makassar serves as the primary locus of analysis because it represents a deliberate governmental effort to integrate digital technologies into the provision of public services and administrative decision-making. Makassar's experience is compelling not only because of its visionary commitment to digital transformation but also because of the challenges it faces in harmonizing technological innovation with the entrenched structures and cultures of public administration. Thus, the research context provides a rich opportunity to examine both the promise and the friction inherent in digital governance reform, revealing how local political and institutional dynamics influence the success of technological initiatives.

Research Participants and Sampling Technique

Participants in this study were selected using purposive sampling, ensuring that the information gathered reflects diverse perspectives from those directly involved in or affected by the program. The participants included local government officials from the Department of Communication and Informatics (Diskominfo), technical staff responsible for managing data and digital infrastructure, and members of the community who regularly interact with digital public service

platforms. This composition was chosen to provide a balanced representation of both policy-level and user-level experiences, enabling a more comprehensive evaluation of the program's effectiveness. In total, twenty participants took part in the study. Each was engaged in in-depth interviews whose duration varied depending on their role and involvement in the Smart Governance initiative. The diversity of perspectives among participants facilitated triangulation and deepened the interpretative understanding of the program's implementation.

Data Collection Techniques

Data collection relied on semi-structured interviews, document analysis, and participant observation. The interviews explored participants' experiences, perceptions, and assessments of the Smart Governance implementation, focusing on digital readiness, bureaucratic adaptation, and the degree of civic engagement in the system. The document analysis involved a review of official reports, strategic plans, technical guidelines, and publications issued by the Makassar City Government and national agencies concerning digital transformation policy. Participant observation was conducted at government offices and public service centers to capture first-hand how digital systems shape daily bureaucratic routines, decision-making, and public interaction. By integrating these three techniques, the study achieved a holistic understanding of how digital governance unfolds in practice, bridging the perspectives of institutional actors and everyday citizens.

Data Analysis Technique

The data analysis followed a thematic and interpretative framework, guided by the interactive model of Miles and Huberman (2014), which consists of ongoing processes of data reduction, data display, and conclusion drawing. During the data reduction phase, the interview transcripts and field notes were coded to identify key themes such as transparency, service efficiency, digital accountability, and public participation. The data display stage involved organizing these themes into analytical matrices that linked empirical observations with the theoretical constructs of digital governance. The final stage of interpretation and conclusion drawing emphasized the reflective synthesis of empirical evidence, theoretical insights, and contextual understanding. Throughout this process, data analysis was iterative and recursive, moving continuously between field data, literature, and conceptual interpretation to ensure a rich and balanced understanding of the findings.

Trustworthiness of the Study

To ensure the trustworthiness of the study, several validation techniques were applied. Triangulation was conducted across data sources and collection methods to ensure the internal consistency of findings. Member checking was employed by sharing preliminary interpretations with selected participants to confirm their accuracy and contextual relevance. Peer debriefing with academic colleagues was also undertaken to refine analytical rigor and minimize interpretative bias. Field notes and coding logs were maintained systematically, creating an auditable trail that strengthened the study's credibility, dependability, and confirmability. These measures ensured that the research findings were both empirically grounded and interpretatively robust.

Ethical Considerations

Ethical considerations were observed throughout the research process. Participants were informed about the purpose and procedures of the study and were invited to participate voluntarily. Consent was obtained prior to interviews, and all identifying information was anonymized to protect confidentiality. The researcher was sensitive to institutional and political contexts, particularly in presenting findings that involved government operations. Rather than adopting a confrontational stance, the research sought to promote constructive reflection by highlighting both the achievements and the areas for improvement within the Smart Governance program. This ethical orientation ensures that the research contributes not only to scholarly discourse but also to the enhancement of inclusive and accountable digital governance practices within local government institutions.

RESULTS AND DISCUSSION

Before presenting the specific findings, it is essential to clarify the interpretative stance that shaped the analysis of the data collected from interviews, observations, and document analysis. This study did not approach digital governance in Makassar City as a static object of measurement but as a living process situated within the institutional, technological, and cultural fabric of public administration. The purpose was to understand how digital reforms are experienced and negotiated in practice, rather than merely to determine whether they succeed or fail in quantitative terms. The results therefore emerge from an interpretative synthesis that connects empirical experiences, administrative realities, and theoretical reflections on governance transformation.

The findings are structured into three thematic clusters that represent the interdependent dimensions of Smart Governance. The first concerns digital infrastructure readiness and system integration, which forms the technological and operational foundation upon which digital governance is built. The second explores bureaucratic adaptation and institutional culture, examining how government actors interpret and internalize the values and practices of digital transformation. The third examines public participation and perceived accountability, focusing on how citizens engage with digital systems and how these systems reshape notions of trust, transparency, and responsiveness. These three dimensions are not separate layers but mutually reinforcing dynamics that together determine the success or fragility of digital reform in Makassar.

The first theme, which focuses on digital infrastructure readiness and system integration, provides the most fundamental perspective because it concerns the structural conditions that either enable or constrain the implementation of Smart Governance. The city’s ambition to digitize public services depends on reliable networks, interoperable systems, and user-friendly interfaces that connect citizens and institutions seamlessly. Yet, the empirical evidence reveals that technological infrastructure alone does not guarantee effective governance. Instead, its success hinges on how well it is integrated into administrative workflows and adapted to the diverse capacities of its users. The table below summarizes the core findings related to this dimension.

Table 1. Digital Infrastructure Readiness and System Integration

Indicator	Observation	Participant Insights	Analytical Note
Digital Infrastructure	Partial integration of databases between departments and limited bandwidth at sub-district offices	“Some services are fast, but others still rely on manual input because systems are not yet linked.” (Officer, Diskominfo)	Infrastructure remains fragmented, which reduces the efficiency and coherence of digital services.
Platform Usability	Mixed user experiences, particularly challenging for older citizens	“Younger people adapt easily, but older users often ask for help.” (Community member)	The usability gap reflects unequal access and uneven digital literacy across demographic groups.
System Maintenance	Irregular updates and inconsistent helpdesk response	“Sometimes the app is down for hours, and no one explains what happens.” (Technical staff)	Lack of technical continuity weakens user trust and institutional reliability.

The analysis of digital infrastructure readiness and system integration reveals that the Smart Governance initiative in Makassar operates within a transitional digital ecosystem that has not yet achieved full interoperability. The municipal government has established several platforms that facilitate online licensing, digital documentation, and complaint handling, yet these systems often function as isolated silos rather than interconnected networks. Such fragmentation constrains the fluid exchange of data between departments, which in turn disrupts the continuity of services that depend on real-time information flow. This condition reflects what scholars often describe as the infrastructural gap between technological ambition and operational feasibility. It is not that Makassar lacks the willingness to innovate, but that the architecture of digital governance demands synchronization across administrative layers that are still bound by traditional procedural hierarchies.

Another recurring pattern emerges from the usability dimension of these systems. Younger citizens tend to navigate the digital platforms with relative ease, while older residents or those with limited exposure to technology encounter persistent difficulties. This unevenness in user experience illustrates the digital divide that persists even within urban contexts. Technology, while ostensibly democratizing, can inadvertently reproduce social exclusions when usability is not designed with inclusivity in mind. The Smart Governance initiative, therefore, cannot be measured solely by technological sophistication but also by the degree to which it accommodates diverse citizens' capabilities and access conditions.

The issue of system maintenance deepens this discussion by highlighting the fragility of digital reliability. When applications malfunction without timely updates or responsive support, public trust becomes precarious. Users interpret technical silence as bureaucratic indifference, reinforcing old narratives of inefficiency even within new digital forms. Thus, technological sustainability depends not only on system development but also on institutional commitment to continuous support, feedback responsiveness, and transparent communication with users.

Table 2. Bureaucratic Adaptation and Institutional Culture

Indicator	Observation	Participant Insights	Analytical Note
Administrative Workflow	Hybrid workflow combining manual and digital processes	"We still use both online and paper forms depending on the department." (Officer, Licensing Department)	Bureaucratic transition remains incomplete, showing the coexistence of old and new administrative logics.
Organizational Mindset	Uneven digital awareness and resistance among staff	"Some colleagues prefer manual work because it feels more certain and safe." (Middle manager)	Resistance to change indicates that transformation requires cultural learning beyond technological training.
Policy Support	Strong political vision but weak enforcement at operational levels	"The mayor supports smart governance, but departments interpret it differently." (Policy analyst)	Policy diffusion lacks coherence across the bureaucratic hierarchy, limiting its institutional reach.

The exploration of bureaucratic adaptation uncovers an intricate process of negotiation between old routines and new digital expectations. Administrative workflows in Makassar are gradually shifting toward hybrid models, combining manual documentation with digital inputs. This duality is not merely a sign of resistance but an indication of the institutional learning phase through which bureaucracy must pass when adopting technological reforms. Many government employees occupy an ambivalent position they acknowledge the efficiency offered by digital systems but remain attached to the tactile and procedural certainty of paper-based administration. This transitional coexistence between manual and digital practices mirrors what Lipsky (1980) described as the negotiation of discretion within bureaucratic systems, where individual comfort and institutional norms intertwine in everyday governance.

Bureaucratic culture plays a decisive role in this transformation. While digital literacy programs have been introduced in various departments, not all employees internalize digital logic as part of their professional identity. Some perceive technology as an external imposition rather than a natural evolution of public service ethics. This perception results in fragmented digital awareness and an uneven pace of adaptation across offices. In this context, transformation cannot rely on technology training alone. It requires cultural change one that redefines accountability, trust, and professionalism within a digital framework. Leadership, therefore, must function not only as a policymaker but also as a facilitator of meaning-making, guiding civil servants to see technology not as disruption but as an extension of their service ethos.

Policy support at the municipal level shows an interesting paradox. The mayor's administration articulates a strong commitment to digital reform, framing it as a symbol of modern governance. Yet, at the operational level, implementation remains subject to varied interpretations. Each department translates the policy according to its resources, capacities, and leadership style. As a

result, what appears coherent in strategic plans becomes dispersed in execution. This interpretative fragmentation suggests that effective digital governance requires not only top-down commitment but also horizontal alignment that ensures shared understanding and consistent application across bureaucratic domains.

Table 3. Public Participation and Perceived Accountability

Indicator	Observation	Participant Insights	Analytical Note
Citizen Feedback Mechanisms	Accessible complaint platforms with inconsistent follow-up	“We submit complaints, but sometimes there’s no response for weeks.” (Citizen)	Responsiveness remains procedural rather than interactive, weakening participatory accountability.
Transparency	Online dashboards with limited data granularity	“We can see the reports, but not detailed budgets or project progress.” (NGO representative)	Symbolic transparency risks becoming performative rather than transformative.
Trust and Engagement	Moderate trust among digital users, low among offline citizens	“I like using the app because it saves time, but my parents still go to the office.” (Young entrepreneur)	Digital trust is shaped by familiarity, age, and perceived institutional reliability.

Public participation within the Smart Governance framework demonstrates both empowerment and constraint. On one level, the establishment of online complaint platforms marks a significant step toward participatory governance. Citizens now possess digital avenues to express concerns and seek redress. However, the effectiveness of these mechanisms depends on the quality of institutional response. Many participants expressed frustration over delayed or absent follow-up, revealing that participation, while enabled, is not always reciprocated. When digital engagement becomes unacknowledged, participation turns symbolic rather than substantive. This disconnect underscores the distinction between access and agency a government may grant channels of communication, yet if it fails to act upon them, the democratic potential of digital participation remains unrealized.

Discussion

Transparency initiatives such as digital dashboards also illustrate this tension. Although they present data on governance activities, their content often lacks sufficient granularity to enable meaningful public scrutiny. Citizens and civil society actors can observe general statistics, but details on budget allocation or project progress remain inaccessible. This condition creates a façade of openness that does not necessarily translate into accountability. Scholars have described this as a form of “transparency without clarity,” a practice that satisfies procedural expectations while leaving the core of governance processes opaque. For Makassar, moving from symbolic to substantive transparency requires institutional courage to expose not only achievements but also constraints and failures.

Trust emerges as the emotional and relational axis that connects technology with governance legitimacy (Spraggon & Bodolica, 2015). Younger, digitally literate citizens display moderate confidence in online systems due to their familiarity with digital navigation and faster access to services. In contrast, older or less connected populations continue to prefer face-to-face interactions, perceiving them as more reliable. This divergence illustrates that digital governance is not merely a matter of infrastructure but also of social trust. Trust is cultivated through consistent experience, responsiveness, and a sense of recognition. If technology fails to replicate the relational assurance traditionally provided by direct human interaction, it risks being seen as distant and impersonal. Therefore, cultivating digital trust entails a humanization of technological systems embedding empathy, feedback, and accountability into digital design.

The implementation of Smart Governance in Makassar City reflects a deeper narrative about how local governments in developing contexts attempt to reconcile technological modernization with the enduring structures of bureaucratic culture. The findings of this study illuminate that digital transformation is not a singular policy achievement but an evolving sociotechnical process that reconfigures the way institutions think, act, and relate to their citizens (Scoones et al., 2020). At the heart of this process lies a constant tension between the logic of technology, which demands

speed, standardization, and automation, and the logic of bureaucracy, which privileges stability, procedure, and control. The discussion that follows interprets this tension not as a failure but as a necessary stage in the co-evolution of governance and technology.

From a governance theory perspective, the Makassar experience reveals how digital reform exposes the limits of conventional administrative rationality. Traditional bureaucracies are designed around predictability and vertical accountability, while digital systems depend on interconnectivity and networked collaboration (Pettrakaki, 2018). The introduction of smart platforms, therefore, unsettles the familiar hierarchies of decision-making by redistributing informational power across departments and even toward citizens. This redistribution of power is subtle but significant. It challenges bureaucratic gatekeeping, promotes data-driven transparency, and calls for new modes of administrative learning. However, such shifts cannot occur instantaneously. Institutional behavior, as March and Olsen have long argued, evolves through the slow sedimentation of routines and shared meanings rather than through mere technological substitution. In this light, Makassar's uneven progress represents the ongoing struggle to align inherited bureaucratic norms with emerging digital ethics.

The Smart Governance program also foregrounds the question of institutional adaptability, which extends beyond technical proficiency into the realm of organizational cognition. The effectiveness of digital governance depends not only on the availability of tools but on the capacity of institutions to interpret and internalize their purpose. Many local governments adopt digital systems as compliance measures, perceiving them as indicators of modernity rather than as transformative mechanisms for public accountability. Makassar's case suggests that when technology is introduced without a parallel transformation in organizational mindset, digital reform risks being absorbed into pre-existing bureaucratic logics. Systems that were designed to foster openness may instead reinforce centralization, as data flows remain controlled by established administrative hierarchies. The lesson here is that digital governance is an epistemic shift it requires a change in how institutions conceive knowledge, authority, and public service.

Beyond the institutional domain, the transformation of governance also demands a reimagining of the citizen's role in the digital state. The Smart Governance initiative aspires to strengthen participatory mechanisms, yet participation within digital frameworks is not automatically democratic (Webster & Leleux, 2018; Tomor et al., 2019). Accessibility does not equate to engagement, and communication does not guarantee dialogue. The Makassar experience illustrates that while digital tools expand channels for public expression, they do not necessarily alter the asymmetrical relationship between the state and the citizen unless accompanied by responsive action. Genuine participation requires that governments not only listen but also respond, not only disclose information but also invite collaboration. In this regard, the challenge for Makassar and for similar cities embarking on digital reform is to move from a model of "technological participation" toward a model of "relational governance," where participation is sustained through trust, reciprocity, and a shared sense of agency.

The question of trust thus emerges as a pivotal issue in digital governance. Trust cannot be engineered through software design alone; it must be earned through consistent, transparent, and empathetic institutional behavior. The erosion of trust occurs not because citizens reject technology but because they experience discontinuities between the promise of efficiency and the reality of bureaucratic performance. When applications fail, or when digital complaints go unanswered, the perceived reliability of the system diminishes. In such cases, citizens interpret digital silence as a new form of bureaucratic distance less visible yet equally alienating. To address this, digital governance must embed mechanisms of emotional and relational accountability, acknowledging that the legitimacy of the state in the digital era depends as much on perceived care and responsiveness as on procedural transparency.

Another dimension that emerges from the analysis concerns the politics of digital infrastructure. Technology is often framed as neutral, yet its deployment reflects underlying political and economic arrangements. The distribution of bandwidth, the procurement of platforms, and the design of interfaces all encode decisions about who benefits and who remains marginalized. In Makassar, disparities in system access across departments and districts suggest that digital reform mirrors pre-existing inequalities within the administrative structure. This reinforces the

need to view digital governance not merely as a technical modernization project but as a redistributive one a process of democratizing access to administrative resources, information, and decision-making power. Without addressing these structural imbalances, technology risks entrenching rather than dismantling old hierarchies.

The cultural embeddedness of technology also invites reflection on the symbolic dimension of modernization. In many contexts, digital initiatives serve as performative symbols of progress, signaling governmental competence to external audiences such as national ministries, investors, or international donors. Yet, when the symbolic outweighs the substantive, reform becomes aesthetic rather than structural. The Smart Governance project in Makassar reflects both the genuine aspiration for modernization and the temptation to perform digitality as a sign of innovation. This performative tension does not invalidate the program's achievements but calls attention to the importance of aligning symbolic representation with substantive institutional change. Digital governance should be understood not as a demonstration of progress but as an evolving dialogue between visibility, functionality, and accountability.

At a broader level, the findings from Makassar contribute to the global discourse on the localization of digital governance. Much of the literature on smart cities originates from contexts with advanced infrastructure and relatively homogenous bureaucratic systems. By contrast, the Makassar case underscores how local governments in the Global South must navigate digital transformation amid infrastructural constraints, diverse social landscapes, and complex political ecologies. The interplay between ambition and limitation, between innovation and adaptation, defines the texture of governance reform in such settings (Morgan, 2004). The Makassar experience reminds scholars and policymakers that digital governance cannot be transplanted as a universal model. It must instead be cultivated contextually, through iterative experimentation that respects local culture, institutional capacity, and citizen agency.

Finally, the discussion points toward the conceptual understanding of smart governance as an evolving social contract. In this new digital paradigm, the legitimacy of governance no longer rests solely on the delivery of services but on the quality of relationships between government, technology, and the governed. The success of the Smart Governance initiative will depend on whether digitalization enhances mutual understanding rather than merely automating transactions. A digitally enabled government must not lose sight of its human dimension, for governance, in its essence, is an ethical practice of care, responsibility, and reciprocity. The Makassar case, therefore, is not simply a story of technological progress but a reflection of a city learning to humanize its digital future.

CONCLUSION

The evaluation of Smart Governance in Makassar City demonstrates that digital transformation in public administration is not merely a technological shift but a complex social and institutional process shaped by bureaucratic culture, political dynamics, and public trust. While Makassar has achieved notable progress in improving transparency, accessibility, and service innovation through digital systems, these advances remain constrained by fragmented infrastructure, uneven institutional adaptation, and limited responsiveness. The findings reveal that the true success of digital governance depends less on technological sophistication than on the ethical orientation, inclusivity, and accountability that guide its use. Trust emerges as a central foundation, built not through system design alone but through consistent, sincere, and humane public service practices. Ultimately, Makassar's experience shows that Smart Governance is best understood as an ongoing, context-sensitive process of institutional learning, where digital innovation must evolve into a tool for strengthening democratic values and public empathy rather than merely administrative efficiency.

REFERENCES

Akopian, V., Zakharenko, K., & Zhyzhko, T. (2024). The Postmodern Paradigm: Shaping the Philosophy for the Future Landscape of Public Administration. *Philosophy & Cosmology*, 32. <https://doi.org/10.29202/phil-cosm/32/5>

- Aslam, B., Tariq, U., & Ahmad, O. (2024). Analysis of Factors that Influence the Implementation of Technological Innovation in the Indonesian Public Sector. *Journal of Loomingulus ja Innovatsioon*, 1(6), 266-276. <https://doi.org/10.70177/innovatsioon.vii6.1713>
- Basuki, T. M., Nugroho, H. Y. S. H., Indrajaya, Y., Pramono, I. B., Nugroho, N. P., Supangat, A. B., ... & Simarmata, D. P. (2022). Improvement of integrated watershed management in Indonesia for mitigation and adaptation to climate change: A review. *Sustainability*, 14(16), 9997. <https://doi.org/10.3390/su14169997>
- Cioffi, J. W., Kenney, M. F., & Zysman, J. (2022). Platform power and regulatory politics: Polanyi for the twenty-first century. *New Political Economy*, 27(5), 820-836. <https://doi.org/10.1080/13563467.2022.2027355>
- Das, D. K. (2024). Exploring the symbiotic relationship between digital transformation, infrastructure, service delivery, and governance for smart sustainable cities. *Smart Cities*, 7(2), 806-835.
- Demirel, D., & Mülazımoğlu, M. E. (2022). How the smart governance model shapes cities? Cases from Europe. *Journal of Enterprising Communities: People and Places in the Global Economy*, 16(1), 8-25. <https://doi.org/10.1108/JEC-08-2021-0115>
- Eze, O. I., Chibuzor, C. N., Okafor, J. C., & Osita, J. I. (2024). Leveraging technology to bridge the policy innovation gap in developing countries: Enhancing service delivery and public engagement. *West African Journal of Interdisciplinary Research (ISSN: 3027-1878)*, 2(2).
- Gebrihet, H. G., & Pillay, P. (2021). Emerging challenges and prospects of digital transformation and stakeholders integration in urban land administration in Ethiopia. *Global journal of emerging market economies*, 13(3), 341-356. <https://doi.org/10.1177/09749101211034097>
- Janowski, T., Estevez, E., & Baguma, R. (2018). Platform governance for sustainable development: Reshaping citizen-administration relationships in the digital age. *Government Information Quarterly*, 35(4), S1-S16. <https://doi.org/10.1016/j.giq.2018.09.002>
- Jia, K., & Chen, S. (2022). Global digital governance: paradigm shift and an analytical framework. *Global Public Policy and Governance*, 2(3), 283-305. <https://doi.org/10.1177/09520767231198737>
- Lips, M. (2010). Rethinking citizen-government relationships in the age of digital identity: Insights from research. *Information Polity*, 15(4), 273-289. <https://doi.org/10.3233/IP-2010-0216>
- Morgan, K. (2004). Sustainable regions: governance, innovation and scale. *European Planning Studies*, 12(6), 871-889. <https://doi.org/10.1080/0965431042000251909>
- Nambassa, G., & Nurmandi, A. (2024). EGDI Impact on Control Corruption in Africa: Exploring E-Government Development Index. *Policy & Governance Review*, 8(3), 269-283. <https://doi.org/10.30589/pgr.v8i3.970>
- Narne, S., Adedoja, T., Mohan, M., & Ayyalasomayajula, T. (2024). AI-driven decision support systems in management: enhancing strategic planning and execution. *International journal on recent and innovation trends in computing and communication*, 12(1), 268-276.
- Nastjuk, I., Trang, S., & Papageorgiou, E. I. (2022). Smart cities and smart governance models for future cities: Current research and future directions. *Electronic Markets*, 32(4), 1917-1924. <https://doi.org/10.1007/s12525-022-00609-0>
- Omweri, F. S. (2024). A systematic literature review of e-government implementation in developing countries: examining urban-rural disparities, institutional capacity, and socio-cultural factors in the context of local governance and progress towards SDG

16.6. *International Journal of Research and Innovation in Social Science*, 8(8), 1173-1199. <https://dx.doi.org/10.47772/IJRISS.2024.808088>

- Petrakaki, D. (2018). Re-locating accountability through technology: From bureaucratic to electronic ways of governing public sector work. *International Journal of Public Sector Management*, 31(1), 31-45. <https://doi.org/10.1108/IJPSM-02-2017-0043>
- Przebylłowicz, E., & Cunha, M. A. (2024). Governing in the digital age: The emergence of dynamic smart urban governance modes. *Government Information Quarterly*, 41(1), 101907. <https://doi.org/10.1016/j.giq.2023.101907>
- Scoones, I., Stirling, A., Abrol, D., Atela, J., Charli-Joseph, L., Eakin, H., ... & Yang, L. (2020). Transformations to sustainability: combining structural, systemic and enabling approaches. *Current Opinion in Environmental Sustainability*, 42, 65-75. <https://doi.org/10.1016/j.cosust.2019.12.004>
- Setiawan, I., Hendra, A., Taebenu, M. M., Johannes, A. W., & Sidiq, F. F. (2024). Integrating Local Culture in Smart City: 'Sombere' Based Governance Collaboration in Makassar City, Indonesia. *Jurnal Bina Praja*, 16(3), 541-556. <https://doi.org/10.21787/jbp.16.2024.541-556>
- Spraggon, M., & Bodolica, V. (2015). Trust, authentic pride, and moral reasoning: a unified framework of relational governance and emotional self-regulation. *Business Ethics: A European Review*, 24(3), 297-314. <https://doi.org/10.1111/beer.12086>
- Suyuthi, N. F., Hamid, M., & Saputro, L. E. (2023). Leadership strategies for Technological Advancement in Makassar City Governance. *Journal of Management and Administration Provision*, 3(3), 143-148. <https://doi.org/10.55885/jmap.v3i3.330>
- Tomor, Z., Meijer, A., Michels, A., & Geertman, S. (2019). Smart governance for sustainable cities: Findings from a systematic literature review. *Journal of urban technology*, 26(4), 3-27. <https://doi.org/10.1080/10630732.2019.1651178>
- Trajkovski, G. (2024). Bridging the public administration-AI divide: A skills perspective. *Public Administration and Development*, 44(5), 412-426. <https://doi.org/10.1002/pad.2061>
- Udoh, H. (2024). *E-governance performance in the context of developing countries* (Doctoral dissertation, University of Leicester).
- Webster, C. W. R., & Leleux, C. (2018). Smart governance: Opportunities for technologically-mediated citizen co-production. *Information Polity*, 23(1), 95-110. <https://doi.org/10.3233/IP-170065>
- Wu, S. P. J., Straub, D. W., & Liang, T. P. (2015). How information technology governance mechanisms and strategic alignment influence organizational performance. *MIS quarterly*, 39(2), 497-518.