

Evaluation Of The Implementation Of Digital Transformation Policy In Improving The Quality Of Public Services In Local Government: A Study On The Smart City Program Of Makassar City

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Abstract

Digital transformation has become a primary strategy for local governments to improve the quality of public services, particularly through the implementation of the Smart City program. However, the success of this policy is not solely determined by technology adoption, but also by how the digital transformation policy is implemented in governance practices. This study aims to evaluate the implementation of the digital transformation policy in improving the quality of public services in the Makassar City Government through the Smart City program. This study uses a qualitative approach with a case study design. Data were collected through in-depth interviews, observations, and documentation studies, then analyzed using the interactive model of Miles, Huberman, and Saldaña. The results show that the implementation of the Smart City policy in Makassar City has encouraged increased efficiency and accessibility of public services, but has not yet fully generated optimal public value. The main challenges lie in the limited capacity of human resources of the apparatus, fragmented coordination between regional agencies, and the digital literacy gap in the community. This study confirms that digital transformation in public services is an institutional process that requires policy integration, digital leadership, and an orientation towards public value. Theoretically, this study contributes to the enrichment of public policy implementation studies by integrating the perspectives of e-government, public value, and good governance in the context of Smart City. Practically, the findings of this study provide strategic recommendations for local governments in designing and evaluating more inclusive, accountable, and sustainable digital transformation policies.

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1. INTRODUCTION

Digital transformation in the public sector has become a crucial part of the global governance reform agenda. Governments across the globe are embracing digitalization as a key strategy to improve the efficiency, transparency, and effectiveness of public services, enabling governments to be responsive to citizen needs (Putri & Darma, 2024). The concept of *Smart City* was born in response to the demands of complex urban growth, where information and communication technology (ICT) is integrated into government systems to improve the quality of life and public services (Efendi & Ningsih, 2025).

Digital transformation is not merely the adoption of technology but rather a comprehensive change in the processes, culture, and organizational structure of government related to the provision of public services (Suprianto, 2025). Evaluating the implementation of this policy is important because it is not enough to simply implement technology; it is also necessary to

understand how the technology is used **touch the quality of service, bureaucratic adaptation, and public satisfaction**—especially in the context of Smart City in urban areas like Makassar.

Digital transformation in the public sector has become a strategic agenda for governments in various countries in response to demands for effectiveness, transparency, and quality of public services. International literature emphasizes that the use of digital technology in government is no longer understood solely as administrative modernization, but rather as an instrument for governance change that impacts the relationship between the state and its citizens. In this context, digital-based public services are positioned as a medium for creating public value, which is expected to increase public trust in government institutions, expand access to services, and improve bureaucratic accountability (Meijer & Bekkers, 2019; Cordella & Bonina, 2021). However, several studies also show that the success of digital transformation is largely determined by the policy implementation process, not simply the sophistication of the technology used.

In the context of developing countries, including Indonesia, the digital transformation of government faces more complex challenges because it intersects with bureaucratic capacity, organizational culture, and social inequality. Recent research in public administration shows that the implementation of digital transformation policies often results in uneven outcomes across sectors and regions. Programs, government, and *Smart City*. While digital transformation policies often demonstrate increased service efficiency, they have not fully addressed the inclusiveness and quality of public services substantively (Dunleavy et al., 2019; Nugroho & Prasetyo, 2022). This indicates a gap between digital transformation policy design and implementation practices at the local government level, making policy evaluation crucial for understanding the factors influencing its success and limitations.

At the local level, the implementation of digital transformation policies through Smart City programs in Indonesian local governments, including Makassar City, provides an important platform for empirically examining these dynamics. Several national studies highlight that Smart City is often understood as a technology project, while the policy dimensions, institutional coordination, and public service orientation receive less in-depth attention. Yet, policy implementation literature confirms that policy success is strongly influenced by the interaction between actors, organizational structures, and the local socio-political context (Hill & Hupe, 2014; Winter, 2012). Therefore, a literature review that positions digital transformation as a public policy process—rather than simply a technological innovation—is crucial for developing a more comprehensive analytical framework for evaluating improvements in the quality of public services through the Smart City program in Makassar City.

2. RESEARCH METHODS

2.1. *Research Approach and Type*

This research uses a qualitative approach with a case study design. The qualitative approach was chosen because this research aims to deeply understand the implementation process of digital transformation policies to improve the quality of public services, particularly through the Smart City program in the Makassar City Government. The case study is used to contextually explore the policy dynamics, interactions between actors, and institutional factors that influence the success and limitations of policy implementation at the local government level. This approach allows researchers to capture the empirical reality of policies as they occur in practice, rather than simply measuring the achievement of policy outputs.

2.2. Research Method Flow

Gambar 1. Alur Metodologi Penelitian



Gambar 1. Alur Metodologi Penelitian

2.2. Research Location and Focus

This research was conducted in the Makassar City Government, focusing on the implementation of digital transformation policies within the Smart City program. Makassar City was chosen as the research location because it is one of the major cities in Eastern Indonesia that is actively developing Smart City initiatives as part of its public service improvement strategy. The research focused on aspects of policy implementation, including institutional capacity, coordination between regional agencies, the role of policy actors, and their impact on the quality of public services perceived by the public.

2.3 Data Collection Sources and Techniques

The research data consists of primary and secondary data. Primary data were obtained through in-depth interviews with purposively selected key informants, including local government officials involved in the formulation and implementation of the Smart City program, public service implementers, and community representatives as service users. Interviews were conducted semi-structured to allow for flexible exploration of issues while remaining focused on the research focus. Additionally, observations were conducted of digital-based public service processes to understand the practice of policy implementation directly.

Secondary data was collected through a documentary study of laws and regulations, Smart City policy documents, local government performance reports, and relevant scientific

publications. The use of secondary data aims to strengthen the analysis and provide a comprehensive policy context for evaluating the implementation of digital transformation.

2.4 Data Analysis Techniques

Data analysis was conducted simultaneously from the data collection stage using an interactive analysis model developed by Miles, Huberman, and Saldaña. The analysis process involved three main stages: data condensation, data presentation, and conclusion drawing. Data condensation was accomplished by coding and grouping themes relevant to the research focus. The data was then presented in the form of an analytical narrative and a thematic matrix to facilitate the exploration of patterns and relationships between categories. The final stage of analysis was drawing conclusions, which was conducted iteratively by continuously verifying the findings against the available data.

2.5 Data Validity

To ensure data validity, this study employed triangulation techniques. Source triangulation was conducted by comparing information obtained from various informants, while method triangulation was conducted by comparing the results of interviews, observations, and documentation. In addition, the researcher also conducted *member checking* by confirming preliminary findings with several key informants to ensure the accuracy and credibility of data interpretation. These steps were taken to increase the validity and reliability of the research results.

2.6 Research Ethics

This research was conducted in accordance with ethical research principles. Each informant was given an explanation of the research objectives and guaranteed confidentiality. Informant participation was voluntary, and the data obtained were used solely for academic purposes. Implementing ethical research principles is essential to maintaining the integrity of the research and building trust between researchers and participants.

3. Theoretical Concepts and Definitions

3.1 Digital Transformation and Public Services

Digital transformation is defined as a fundamental change process that utilizes digital technology to redesign service processes, organizational structures, and governance to achieve the goal of more effective, faster, and more responsive service to citizens. This concept differs from simply *digitalization* because it includes innovation in work processes and organizational culture (Mustofa et al., 2025). virtusinterpress.org

Digital transformation in the context of public services is understood as a process of structural and systemic change that utilizes digital technology to reorient the way governments design, manage, and deliver services to the public. Unlike digitalization, which is generally limited to the transfer of manual processes to electronic systems, digital transformation encompasses comprehensive updates to workflows, decision-making mechanisms, and interaction patterns between officials and citizens. Public administration literature emphasizes that digital transformation demands a shift in the mindset of bureaucratic organizations, from a procedural approach to an adaptive, user-centered service orientation (Mustofa et al., 2025).

Furthermore, digital transformation in public services is also closely linked to changes in organizational culture and government institutional capacity. The use of digital technology will only have a significant impact if accompanied by increased competency among civil servants, leadership that supports innovation, and collaborative governance. Several studies have shown that the failure of digital transformation is often caused not by technological limitations but by organizational resistance, institutional fragmentation, and weak integration of public service policies. Therefore, digital transformation needs to be understood as a continuous policy process, positioning technology as an enabler to increase

the effectiveness, speed, and responsiveness of public services to the dynamics of community needs (Mustofa et al., 2025).

3.2 Smart City

Smart City is a multidimensional approach that uses digital technology—including e-government, *big data*, and *IoT*—to improve the effectiveness of public services and the quality of life in cities through *smart governance*, *smart economy*, *smart environment*, and other dimensions. Smart Cities strive to meet the needs of modern society through an integrated, data-driven government system (Efendi & Ningsih, 2025). [ResearchGate](#)

3.3 Evaluation of Policy Implementation

Policy implementation evaluation is an effort to assess the extent to which a planned policy has been implemented consistently and effectively in accordance with its initial objectives. This evaluation includes models such as *CIPP* (Context, Input, Process, Product), which assesses the context, resources, implementation process, and results of the implemented policy (Pakpahan, 2025). [Moestopo International Review](#)

4. Relevant Theories

4.1 E-Government Theory

E-government theory emphasizes the role of technology in interactions between government, citizens, and businesses to improve *accessibility*, efficiency, and transparency of public services. This framework suggests that the success of digitalization depends on: technological infrastructure, bureaucratic readiness, and public participation—not just technology adoption (Agustina et al., 2025). [Daarul Huda Journal](#)

4.2 Public Value Theory

Public Value Theory has become an important foundation in evaluating public policies, including digitalization. This theory emphasizes that public services must create perceived value for the public—for example, through improved quality of life, citizen engagement, accountability, and trust in government (Moore, 1995; mapped in the e-government literature). This dimension of public value has become a new benchmark for evaluating the impact of digital policies (Alvarez & Sun, 2018, in the context of e-government). [ScienceDirect](#)

4.3 Good Governance

In the context of Smart City, *good governance* encompasses the principles of transparency, public participation, accountability, and the rule of law in the implementation of digital policies. The quality of digital governance is an indicator of the success of digital transformation, which has been widely adopted in local government (Wardana et al., 2025). [IPDN E-journal](#)

5. Previous Research Map (2018–2025)

Reviewing previous research is a crucial step in mapping the developments, trends, and limitations of studies on digital transformation, Smart Cities, and public services. The emerging literature from 2018 to 2025 demonstrates the increasing academic attention to government digitalization, both globally and nationally. However, the focus of these studies remains diverse and fragmented, with emphasis on aspects of digital governance, public service innovation, and public satisfaction measurement. Therefore, a systematic mapping of previous research is necessary to position this research within the existing scientific landscape and identify underdeveloped research gaps. The map of previous research presented in the following chart illustrates the development of studies at various levels—from global to local perspectives—and demonstrates the analytical framework that serves as the basis for this research in evaluating the implementation of digital transformation policies through the Smart City program in the Makassar City Government.

Here we present a **summary table of 10 recent studies** which is relevant to the topic of evaluating the implementation of digital transformation in public services and Smart City

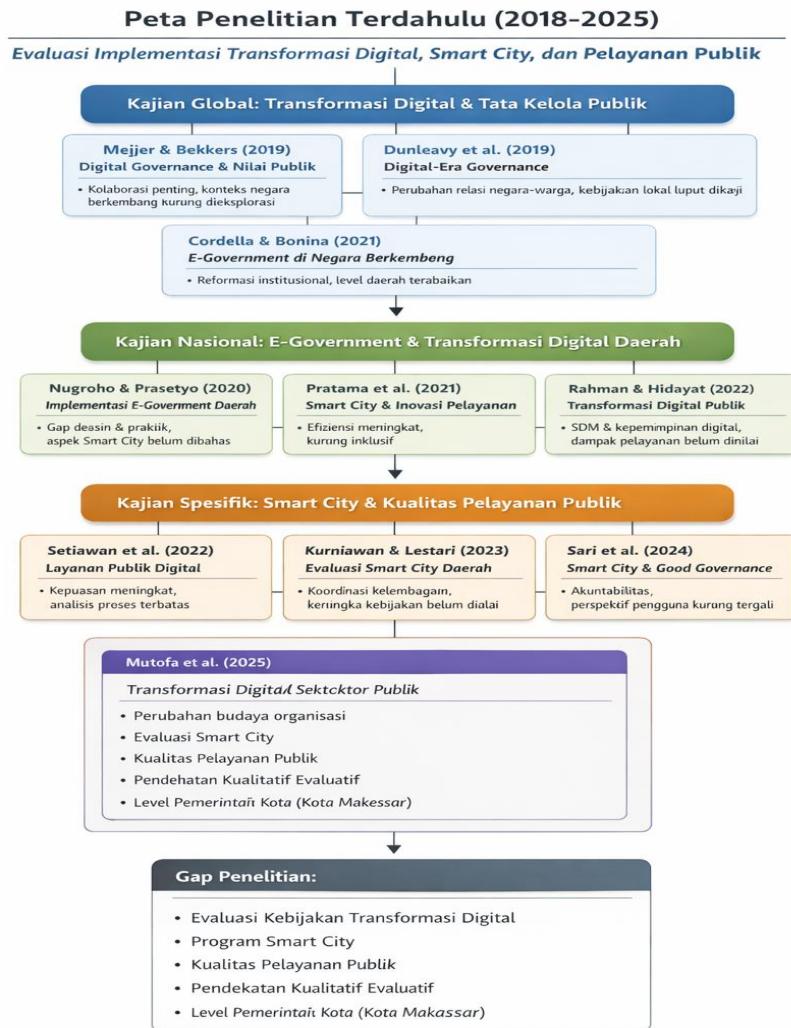


Figure 1. Map of Previous Research Evaluation of Digital Transformation Implementation in Public Services and Smart Cities (2018–2025)

Source: Author's processing, 2025

Previous research has shown that studies on digital transformation and Smart City in public services have progressed significantly, but still leave several conceptual and empirical limitations. At the global level, research tends to place digital transformation within the framework of governance and public value creation, but has not yet linked it to the dynamics of policy implementation at the local government level. Meanwhile, national studies generally focus on e-government development or digital service innovation with an emphasis on technical and administrative aspects, resulting in a less in-depth exploration of the policy implementation process—including interactions between actors, institutional coordination, and the social context—often underexplored.

Furthermore, most previous research still separates the analysis of digital transformation as a technological innovation from the quality of public services as a policy outcome. This approach limits understanding of how Smart City policies are actually translated into daily service practices and the extent to which they generate perceived public value. Studies evaluating Smart Cities also tend to assess success in terms of program outcomes or performance indicators, without

comprehensively examining the policy implementation process and the institutional capacity underlying it.

Based on these conditions, there is a clear research gap regarding the need for studies that integrate the evaluation of digital transformation policy implementation with an analysis of public service quality in the context of Smart Cities. Specifically, there is still limited qualitative research that contextually explores how digital transformation policies are implemented at the city government level, particularly in Eastern Indonesia. Therefore, this study positions itself to fill this gap by evaluating the implementation of digital transformation policies through the Smart City program in Makassar City, emphasizing the link between policy, institutional governance, and public value creation in improving the quality of public services.

6. Critical Analysis and Research Gaps

6.1 Relationship between Theory and Findings

The above studies show that digital transformation through Smart City and e-government has *significant potential* in improving public services (Efendi & Ningsih, 2025; Pakpahan, 2025). **E-government theory** emphasized that technology needs to be accompanied by adequate infrastructure and bureaucratic organizational readiness (Agustina et al., 2025).

Daarul Huda Journal

Meanwhile, **public value theory** highlights that what is most important is not just the adoption of *technology*, but the creation of public value, such as citizen engagement, trust, and responsiveness of public institutions, which are often not optimal in the reality of implementation in a number of Indonesian cities. [ScienceDirect](#)

6.2 Research Gap

From the 2018–2025 peer-review of Indonesian journals, there are several significant research gaps:

1. **Empirical evaluation at the local Smart Governance level:** Many studies focus on *technology output* only or descriptive case studies, not many have holistically evaluated Smart City policies in the context of local governance.
2. **Interaction between policy, bureaucracy, and society:** Previous research tends to be fragmented between technical and social aspects, not yet integrating the two analytically.
3. **Holistic evaluative model:** There is not much research that combines policy evaluation frameworks (e.g., CIPP) with *public value outcomes* in the context of Smart City in Indonesia.
4. **Cultural dimensions of organizations and institutional readiness:** The variations in bureaucratic culture and ASN adaptation to digital transformation are still less explored in depth.

These gaps show that **Research on the contextual evaluation of digital transformation implementation at the city level, such as Makassar is very important and relevant**, particularly to strengthen the literature on policy, governance, and public value in Smart City.

7. Conceptual Model

Based on the theoretical review and empirical findings, the conceptual model of this research is formulated as follows:

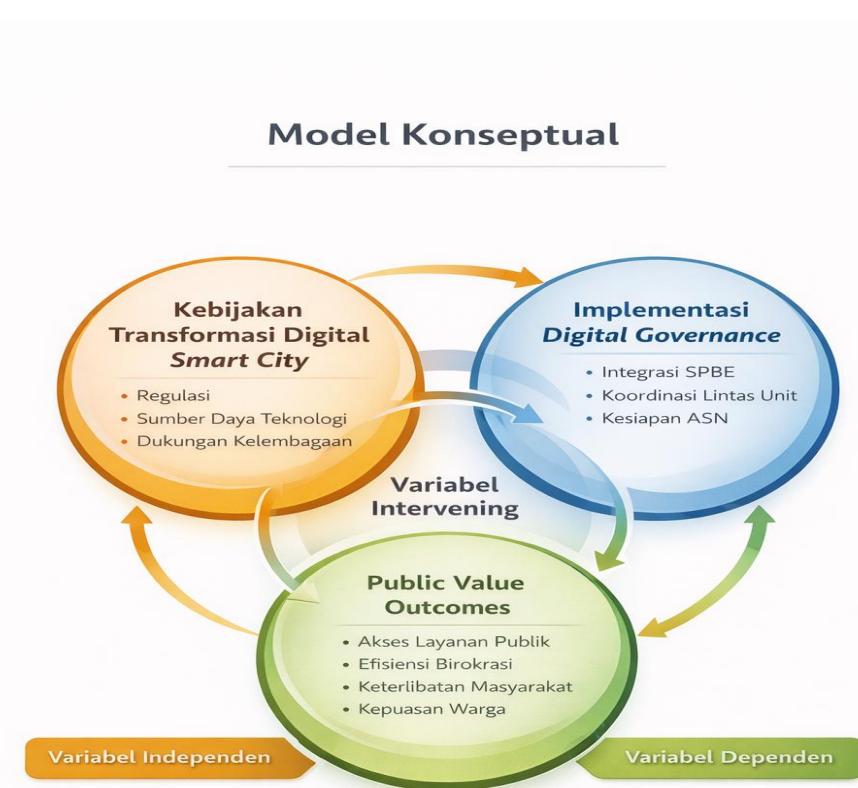
Independent Variables: Digital transformation policy, *Smart City* (including regulations, technological resources, institutional support)

Variable Intervening: Implementation of digital governance (including SPBE integration, cross-unit coordination, ASN readiness)

Dependent Variable: *Public value outcomes* (access to public services, bureaucratic efficiency, community involvement, citizen satisfaction)

This research conceptual model is designed to explain the relationship between Smart City digital transformation policies and the implementation process of *digital governance*, and the achievement of public value in public services. This model is built

on the integration of policy implementation theory, digital governance, and *public value*, and supported by empirical findings showing that the effectiveness of Smart City policies is determined not only by regulations and technology, but also by institutional readiness and the capacity of implementing actors. Therefore, this model is used as an analytical framework to evaluate how digital transformation policies in local governments are translated into implementation practices and produce valuable public service outcomes for the community.



Gambar 2. Model Konseptual Evaluasi Implementasi Transformasi Digital Smart City

This figure depicts the causal relationship between Smart City digital transformation policy as an independent variable, implementation of *digital governance* as an intervening variable, and the achievement of public value (*public value outcomes*) as the dependent variable. Smart City policy includes regulatory aspects, availability of technological resources, and institutional support, which are the initial prerequisites for digital transformation. Implementation of *digital governance* acts as a connecting **mechanism** that translates policies into operational practices through the integration of electronic-based government systems, cross-work unit coordination, and the readiness of civil servants. Furthermore, the effectiveness of this implementation is reflected in the resulting public value, including increased access to public services, bureaucratic efficiency, community engagement, and citizen satisfaction. This model emphasizes that the success of Smart City policies depends heavily on the quality of the implementation process and the ability of local governments to create sustainable public value.

This model shows that **Smart City policies are not fully effective without institutional readiness and public value as evaluation outcomes.**

8. Findings and Discussion.

8.1 Implementation of Digital Transformation Policy from the Perspective of Implementation Theory.

Research findings indicate that the implementation of digital transformation policies through the Smart City program in Makassar City has not been fully consistent and integrated. This condition can be explained through policy implementation theory, which emphasizes the importance of alignment between policy objectives, resources, and the implementation context. Within the Van Meter and Van Horn framework, variations in implementation outcomes across regional agencies reflect differences in organizational capacity, policy communication, and the disposition of policy implementers. This lack of synchronization demonstrates that the existence of regulations and strategic planning is insufficient to guarantee successful implementation without the support of adequate institutional capacity.

In addition, the findings regarding the fragmentation of coordination between regional devices are also in line with the perspective of the approach of *bottom-up* in implementation theory, implementing actors are the primary determinants of policy success. The lack of system integration and weak cross-sector collaboration indicate that implementing actors have not been fully involved in the formulation and development of Smart City policies. This reinforces the argument that digital transformation in public services requires an adaptive and participatory implementation approach, not simply administrative instructions from above.

8.2 Digital Transformation, E-Government, and the Quality of Public Services

In theoretical perspective-*government*, this research's findings confirm that the use of digital technology can indeed improve the efficiency and accessibility of public services. However, this improvement does not automatically translate to overall public service quality of *e-government maturity*. *It is stated* that many local governments have stalled at the service digitization stage, without progressing to the transformation phase, which focuses on service integration and innovation. Findings from Makassar City show a similar pattern, where digital systems are available but not yet fully integrated into a public service ecosystem that is responsive to community needs.

Furthermore, the digital literacy gap identified in this study reinforces criticism of technocratic approaches to digital transformation. Public service theory emphasizes that service quality is measured not only by speed and ease of procedures, but also by equity of access and the ability of services to reach all levels of society. Therefore, digital transformation needs to be understood as a social policy strategy that requires supporting interventions beyond technology, such as digital education and streamlined service procedures.

8.3 Smart City and Public Value Creation

The findings of this study are also relevant to the theory of *public value*, which emphasizes that the success of public policy is measured by the extent to which it creates perceived value for the public. Although the Smart City program in Makassar has improved service efficiency, this study shows that the resulting public value remains partial. This occurs because the orientation of policy implementation is still predominantly focused on achieving program targets, rather than on the experiences and perceptions of service users.

Within the framework, public value Smart City policies should be designed and implemented by positioning citizens as co-creators of public value. Findings regarding limited public participation and minimal user feedback indicate that digital transformation has not fully embraced this principle. Thus, this study confirms the argument in the literature that a sustainable Smart City is not the most technologically advanced city, but rather one that is able to use technology to strengthen the relationship between government and citizens.

8.4 Good Governance and Institutional Challenges

From the perspective of *good governance*, Research findings indicate that digital transformation through Smart Cities has the potential to increase transparency and accountability in public services. However, this potential has not been fully realized due to weak institutional coordination and policy evaluation mechanisms. The theory of good governance emphasizes the importance of accountability, participation, and effectiveness in governance. The limited integration of Smart City policies in Makassar City indicates that these principles have not been optimally internalized in the implementation of digital transformation policies.

Thus, this discussion demonstrates that digital transformation cannot be separated from institutional reform and bureaucratic culture. The research findings reinforce the view that Smart Cities must be understood as a holistic governance strategy, not simply a technology project. Integration between policies, actors, and public values is a key prerequisite for digital transformation to truly contribute to improving the quality of public services at the local government level.

3. CONCLUSION

This study concludes that the implementation of digital transformation policies through the Smart City program in the Makassar City Government has shown progress in increasing the efficiency and accessibility of public services, but has not yet fully resulted in equitable and value-oriented public service quality. The research findings emphasize that the success of digital transformation is not determined solely by the availability of technology, but rather by the policy implementation process, which involves institutional capacity, coordination between actors, and the social readiness of the community as service users.

Furthermore, this study reveals a gap between strategic digital transformation policy design and implementation practices at the operational level. Fragmented coordination between regional government agencies, limited digital competency of civil servants, and weak policy evaluation mechanisms are key factors limiting the optimization of Smart City programs. These conditions indicate that digital transformation in public services is a complex institutional process that requires an integrative and sustainable policy approach.

Theoretically, this research enriches the study of public policy implementation by showing that the integration of policy implementation perspectives, *e-government*, *public value*, and *good governance* is able to provide a more comprehensive understanding of digital transformation at the local government level. This research confirms that an effective Smart City is not simply a representation of technological progress, but rather a manifestation of good governance that creates public value and strengthens the relationship between government and citizens.

4. BIBLIOGRAPHY

Cordella, A., & Bonina, C. M. (2021). A public value perspective for ICT enabled public sector reforms: A theoretical reflection. *Government Information Quarterly*, 38(4), 101579. <https://doi.org/10.1016/j.giq.2021.101579>

Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2019). *Digital era governance: IT corporations, the state, and e-government*. Oxford University Press.

Hill, M., & Hupe, P. (2014). *Implementing public policy: An introduction to the study of operational governance* (3rd ed.). Sage Publications.

Kurniawan, R., & Lestari, E. (2023). Evaluasi implementasi kebijakan Smart City di pemerintah daerah. *Jurnal Administrasi Publik*, 13(2), 145–160.

Meijer, A., & Bekkers, V. (2019). A metatheory of e-government: Creating some order in a fragmented research field. *Government Information Quarterly*, 36(3), 1–9. <https://doi.org/10.1016/j.giq.2019.04.006>

Miles, M. B., Huberman, A. M., & Saldaña, J. (2019). *Qualitative data analysis: A methods sourcebook* (4th ed.). Sage Publications.

Mustofa, A., Rahman, A., & Putri, N. L. (2025). Digital transformation in public sector organizations: Institutional change and organizational culture. *Virtus Interpress Journal of Public Governance*, 7(1), 25–39.

Nugroho, R., & Prasetyo, A. (2020). Implementasi e-government dalam pelayanan publik di pemerintah daerah. *Jurnal Ilmu Administrasi Negara*, 12(1), 1–14.

Pratama, A. B., Suryanto, & Wibowo, T. (2021). Smart City sebagai inovasi pelayanan publik di pemerintah daerah. *Jurnal Kebijakan dan Manajemen Publik*, 9(2), 101–115.

Rahman, F., & Hidayat, M. (2022). Transformasi digital pelayanan publik dan tantangan birokrasi daerah. *Jurnal Administrasi Publik dan Governance*, 4(3), 211–226.

Sari, D. P., Utami, S., & Kurnia, I. (2024). Smart City dan good governance: Studi kualitatif pada kota metropolitan di Indonesia. *Jurnal Tata Kelola Pemerintahan*, 6(1), 55–70.

Setiawan, B., Yuliani, R., & Arifin, M. (2022). Pengaruh pelayanan publik berbasis digital terhadap kepuasan masyarakat. *Jurnal Pelayanan Publik*, 8(2), 89–102.

Van Meter, D. S., & Van Horn, C. E. (1975). The policy implementation process: A conceptual framework. *Administration & Society*, 6(4), 445–488. <https://doi.org/10.1177/009539977500600404>

Winter, S. (2012). Implementation. In B. G. Peters & J. Pierre (Eds.), *The SAGE handbook of public administration* (pp. 265–277). Sage Publications.