

The Impact of Government Innovation on the Restructuring of Government Institutions in the City of Bandung

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ABSTRACT

Government innovation has become a crucial strategy in responding to the pressures of globalization, rapid digitalization, and rising public expectations for more efficient, transparent, and accountable public services. This study aims to examine how government innovation influences institutional restructuring in Bandung City and its consequences for local governance. Using descriptive qualitative methods, data were collected through document analysis, observation, and in-depth interviews with 16 key informants, including government officials, civil servants, members of the Regional Representative Council (DPRD), and community representatives. Findings indicate that various digital innovations, such as the Sadayana, HAYU, Gampil, and SiBISA applications, as well as the development of the Public Service Mall (MPP), not only improve the quality of public services but also trigger structural and cultural shifts within the bureaucracy. Institutional changes are evident in the establishment of the Regional Development Planning, Research, and Innovation Agency as an innovation center, the repositioning of the Regional Apparatus Organization with the Communication and Information Agency as its digital backbone, and the strengthening of human resource capacity through digital literacy programs. Innovation also strengthens the principles of good governance, particularly transparency and public participation, through mechanisms such as e-budgeting, e-planning, and digital complaint channels. A distinctive contribution of this research lies in highlighting the reciprocal relationship between innovation and institutional restructuring, each serving as a prerequisite and enabler for successful governance transformation. This dynamic points to a paradigm shift from the efficiency-focused New Public Management (NPM) model to digital governance, which prioritizes data integration, cross-sector collaboration, and inclusivity.

Keywords: Government Innovation; Institutional Restructuring; Good Governance; Digital Governance; Bandung City

INTRODUCTION

One of the impacts of COVID-19 and globalization is service innovation in various sectors, including government. Government innovation is now a central issue in the development of governance science, especially in the era of globalization and digitalization, which demands faster, more impactful, and more accountable public services. The increasingly rapid flow of information, technological advances, and global economic integration are pushing governments in various countries, including Indonesia, to continuously adapt. This situation demands significant innovation in the public sector, particularly through the digitization of public services, restructuring institutional structures, and the implementation of technology-based policies (Setiawan & Arti, 2024).

Globalization has opened up opportunities for cross-border collaboration and knowledge exchange, leading many developing countries, including Indonesia, to adopt innovative practices from developed countries, particularly OECD members. This adoption includes digital policies, bureaucratic reform, and the use of technology in public service delivery. In Indonesia, digital transformation has been implemented in population services through various e-government initiatives, particularly digital identity applications. The government is now shifting from paper-based systems to paperless digital services to increase efficiency and accessibility (Iqbal & Mirza,

2024). This digital transformation requires adjustments to institutional structures, such as the formation of dedicated teams for application management, data maintenance, and cybersecurity. In other words, digital innovation drives both structural and cultural change within government.

Innovation practices are also flourishing in archipelagic regions, where sustainable innovation plays a crucial role in economic transformation through the development of environmentally friendly maritime transportation technologies and innovative agricultural solutions to reduce dependence on fossil fuels (Gema Bangsawan, 2024). This type of innovation forces institutional restructuring through adjustments to staff composition, increased human resource capacity, and reorganization of work processes. This aligns with Schwab's (2016) perspective, which emphasizes that competent human resources are a key prerequisite for facing the Fourth Industrial Revolution. In the context of public services, institutional adaptability is crucial for the sustainability of innovation.

Digital-based government innovation significantly strengthens principles of good governance, such as transparency, accountability, and public participation. E-government and e-procurement systems create more open and measurable mechanisms, thereby reducing the scope for corrupt practices (Wanda Aprilla et al., 2024; Delmana, 2019). However, the success of this innovation depends heavily on institutional

restructuring, including the establishment of a system management unit, the development of new standard operating procedures (SOPs), and the strengthening of oversight functions. Thus, innovation and institutional restructuring are two interrelated and mutually supportive processes.

This view is reinforced by Mulgan and Albury (2003), who emphasized that public sector innovation involves more than just the use of new technology, but also reforms to institutional processes and structures. The implementation of e-budgeting, for example, demonstrates that innovation requires a paradigm shift in financial management, a realignment of organizational functions, and increased digital capacity of civil servants (Zarnelly, 2017; Khotimah & Astuti, 2020). Furthermore, knowledge management practices are crucial for innovation to be adopted and replicated in other regions (Banabera, 2019). However, this requires institutional support in the form of a dedicated unit tasked with documenting, evaluating, and disseminating innovative knowledge.

From a regulatory perspective, the Indonesian government has emphasized the importance of innovation through Government Regulation (PP) Number 38 of 2017 concerning Regional Innovation. This regulation states that regional innovation is any innovation in regional governance aimed at improving the quality of public services, community empowerment, and regional competitiveness. This policy is further reinforced by Minister of Administrative and

Bureaucratic Reform Regulation Number 7 of 2021 concerning the Public Service Innovation Competition, which encourages state civil servants (ASN) to develop creative solutions. Both regulations demonstrate that innovation is not only aimed at improving services but also encourages the restructuring of government organizations to align with the demands of digitalization.

Osborne and Brown (2011) emphasize that public sector innovation has the potential to generate systemic change within bureaucratic organizations. The implementation of e-government, e-budgeting, and e-procurement, for example, encourages a shift from a previously hierarchical bureaucracy to a more collaborative model. E-procurement implementation requires rapid cross-sectoral coordination, gradually dismantling the old, sector-based and siloed institutional model. In the employment context, a McKinsey & Company report (2019) estimates that millions of jobs will be lost or created due to technological developments, including ASN positions in regional governments, which ultimately require competency adjustments.

Innovation also encourages the growth of a culture of public entrepreneurship (Karyotakis et al., 2015). Local governments have begun establishing innovation units or innovation laboratories to accommodate creative ideas. This process requires restructuring, such as new recruitment patterns, training, and performance appraisal systems that support innovation. However, a major challenge lies

in changing bureaucratic mindsets. Rigid traditional structures often hinder flexibility, even though innovation demands cross-sector collaboration and a results-oriented approach (Henriyani, 2019). Barriers such as employee resistance, budget constraints, and low motivation indicate that restructuring is not only technical but also affects organizational culture.

The technological infrastructure gap and resistance to digitalization demand a comprehensive restructuring approach. The government needs to build data centers, strengthen cybersecurity systems, provide continuous training for employees, and adapt regulations to technological developments (Kondratenko et al., 2020). From a New Public Management (NPM) perspective, innovation and restructuring aim to achieve more efficient results through performance-based systems and transparency (El Ammar & Profiroiu, 2020). The implementation of such systems allows the government to identify structural weaknesses and adapt organizational forms to development strategies.

The implementation of e-budgeting in various regions is a concrete example of how innovation drives institutional integration. The Regional Development Planning Agency, the City Finance Office, and the Inspectorate are required to work in a more coordinated manner (Khotimah & Astuti, 2020). Despite increasing transparency, this innovation still faces human resource capacity constraints, especially in regions with limited technology.

Therefore, innovation cannot be separated from the institutional restructuring process.

Institutional restructuring also contributes to regional competitiveness. The ability of local governments to respond to global changes through efficient public services and adequate infrastructure will attract investment and drive economic growth (Henriyani, 2019). However, the process of institutional change often triggers resistance. Communication strategies and change management are key to gaining employee and stakeholder support for innovation (Banabera, 2019).

Bandung City serves as a concrete example of government innovation in Indonesia. Through the Smart City initiative and the Bandung Command Center (BCC) program, the city government has launched more than 100 public service innovations since 2018. These programs have triggered institutional restructuring, such as the merger of work units, the establishment of new functions in the digitalization sector, and adjustments to internal governance. This commitment aligns with Government Regulation Number 38 of 2017 concerning Regional Innovation. Various national awards, such as the Top 99 Public Service Innovations and the Digital Government Award at the 2024 SPBE Summit, recognize Bandung's efforts in innovative institutional restructuring.

Some innovations in Bandung include SIMKURING for reporting road damage, the Public Service Outlet (GPP), the Sakedap licensing application, e-SPASI for population

documents, and the Sadayana application, which integrates various public services. The implementation of electronic signatures also improves administrative efficiency and transparency. However, despite national recognition, Bandung still faces challenges such as employee competency gaps, limited infrastructure in outlying areas, and vulnerability to corruption.

Bandung boasts a significant number of innovations and is a critical case in the digital transformation of government in Indonesia. It is the only Indonesian city included in the world's Top 50 Smart Governments and the region with the most advanced level of institutional restructuring, through the establishment of the Development Planning, Research, and Innovation Agency as an innovation incubator, the restructuring of the Communication and Informatics Agency as a digital backbone, and the integration of data centers. Furthermore, pressure from urban communities for innovation makes Bandung a strategic location to examine the cyclical mechanisms between innovation and institutional restructuring, which is the focus of this research. If these mechanisms can be identified in Bandung, the potential for similar patterns to emerge in other cities in Indonesia with innovative characteristics.

This fact shows that government innovation cannot be understood simply as the addition of digital applications, but rather as a process that directly affects organizational structure, work unit roles, and bureaucratic culture. Therefore, political

support, budgetary support, and crosssectoral collaboration are essential to ensure innovation does not stop at short-term projects. Decentralization provides space for local governments to experiment with policies, but the central government remains a crucial role as provider of standards and general regulations.

Based on this description, this study aims to examine the "Impact of Government Innovation on the Restructuring of Government Institutions in Bandung." Bandung was chosen not only because of its significant number of innovations, but also because it represents a critical case in the digital transformation of government in Indonesia. Bandung is the one of Indonesian city ranked among the world's Top 50 Smart Governments and is the region with the most progressive level of institutional restructuring, through the establishment of Local Development Planning, Research, and Innovation Agency as an innovation incubator, the redefinition of the role of the Communication and Information Agency, and the integration of data centers.

Furthermore, the pressure for innovation from urban communities makes Bandung a strategic context for examining the cyclical mechanisms between innovation and institutional restructuring, which is the focus of this study. If these mechanisms can be identified in Bandung, similar mechanisms have the potential to occur in other cities with innovative characteristics in Indonesia. This research is expected to provide an indepth understanding of how digital

innovation triggers institutional restructuring, the supporting and inhibiting factors, and how innovation outcomes contribute to adaptive, transparent, and accountable governance.

METHOD

The researcher chose a qualitative approach with a descriptive design for this study. This design provides an in-depth overview of the impact of government innovation on the restructuring of government institutions in Bandung City. This approach allows researchers to examine the phenomenon holistically and allows for direct interaction with informants and field observations. This method emphasizes meaning, processes, and contextual understanding that cannot be measured quantitatively. The research analysis is based on the insights of several experts, such as Zheng et al. (2019) and Mulgan & Albury (2003), who emphasize the relationship between innovation, institutions, and public services.

Conceptually, this study examines government innovation through three stages: input (technological development, innovation policies, community needs), process (institutional restructuring, organization, apparatus resources, budget), and output (improving the quality of public services and strengthening governance). In this study, the researcher used both primary and secondary data. Primary data were obtained through in-depth interviews and direct observation of local officials involved in

innovation policies and institutional restructuring in Bandung City. Secondary data were obtained from official documents, government archives, activity reports, and relevant online sources. Data collection was conducted through three main techniques: (1) documentation study, to review archives and reports related to government innovation; (2) in-depth interviews with a semi-structured guide, conducted purposively and developed using a snowball technique until data saturation was reached; and (3) direct observation, to observe innovation practices and changes in institutional structures. Informants were determined purposively based on their relevance to the research topic. The key informant was the Head of the Communication and Informatics Office because he has direct authority to implement innovation and institutional restructuring in that office. Other informants included the Regional Secretary of Bandung City, members of the Bandung City Regional People's Representative Council (DPRD), the Head of the Regional Human Resources Development Agency, the Head of the Regional Development Planning Agency, and 16 service recipients.

The author used interactive data analysis following the Creswell model, which includes: (1) data reduction through coding and categorization, (2) data presentation in the form of thematic narratives, and (3) drawing conclusions linked to the theoretical framework and literature review. The analysis process was conducted inductively,

moving from specific themes to a more general understanding, resulting in accurate and contextual interpretations.

RESULTS AND DISCUSSION

The Bandung City Government has made innovation a key strategy for bureaucratic reform in 2020. This is evident in the 2021–2026 Regional Medium-Term Development Plan (RPJMD) and Mayoral Regulation Number 15 of 2020. This local regulation mandates that each Regional Apparatus Organization (OPD) produce at least one innovation annually and also positions innovation as a tool for transforming institutional structures, processes, and culture. This policy aligns with the view of Mulgan & Albury (2003) that institutionalizing public sector innovation is essential to ensure it is not merely a short-term technocratic project. This institutionalization is achieved through a performance assessment system, regulatory support, and transformational leadership.

One of the most prominent digital innovations in Bandung is the SADAYANA app. This application integrates various public services into a single integrated platform, from population administration and tax payments to emergency reports and employment information. The development of this application reflects Bandung City's direction toward digital governance, which emphasizes data integration and system interoperability (Meijer & Bolívar, 2016). The application was installed by more than 10,000 users by 2025, and includes features

such as a chatbot, single sign-on, a citizen forum, and a service directory. The Sadayana application serves as an example of a government platform that facilitates collaboration between the government, the community, and local economic actors, earning it the 2023 detikJabar award.

In addition to Sadayana, several other innovations support the transformation of public services. The HAYU application accelerates the licensing process digitally, Gampil manages queues at the Public Service Mall (MPP) in real time, while SiBISA serves as a digital complaint channel that expands citizen participation. The Bandung City Public Service Mall, inaugurated in 2022, provides 97 types of services from 28 agencies and recorded a Public Satisfaction Index of 92.3 in 2025. The continued improvement in this service index aligns with the findings of Wanda Aprilla et al. (2024) that the digitalization of public services strengthens transparency, process consistency, and administrative accountability.

The city of Bandung has received global recognition by ranking 28th in the Eden Strategy Institute's Top 50 Smart Governments. This makes Bandung the only Indonesian city to make the list. This achievement demonstrates that the innovations developed are not only locally valuable but have reached international standards in digital governance. However, as Osborne & Brown (2011) remind us, innovation is not without challenges; it demands institutional change, new competencies for officials, and organizational

adaptations that are not always easy. In Bandung, this presents a challenge for implementation.

Limited human resource capacity is a major obstacle to implementing government innovation. Many senior employees are still accustomed to manual work systems, as expressed by the Head of the Health Office: "Many senior employees are still comfortable with manual systems. Intensive training and a persuasive approach are needed to change their mindset." This condition reflects the internal digital divide within the bureaucracy. The disparity in digital literacy among civil servants (ASN) indicates a barrier to technological adaptation, often referred to as digital inertia (Kettunen & Kallio, 2021). As a result, the implementation of digital innovation often proceeds faster than the organization's readiness to implement it effectively.

Government innovation has had a tangible impact on institutional restructuring in the city of Bandung. Some of the key changes include: The reform of the Regional Development Planning Agency (BPDP) into the Regional Development Planning, Research, and Innovation Agency (BPDP). This institution serves as a center for thought and an innovation incubator across regional government agencies (OPD), facilitating the integration of innovative ideas and solutions into regional development planning; The changing role of regional government agencies, for example: The Communication and Informatics Office is responsible for managing data centers, server networks, and

data integration between government agencies (OPDs), making it a key axis in the government's digital transformation. This office serves as the digital backbone; There has been a shift in work patterns across several OPDs, such as the transition to a cloud-based system at the Education Office. This shift can increase administrative efficiency by around 40%, reduce reliance on physical documents, and accelerate internal processes.

This study also observed an increase in the budget, which is an indicator of commitment to digitalization. In 2024, the allocation for the digitalization program reached IDR 125 billion, an increase of around 60% compared to 2021.

However, budget distribution remains unequal: technical OPDs receive a large share, while social OPDs receive only around 15%. High digital infrastructure costs and data security issues pose serious challenges. Developing data centers, server networks, and information security systems requires significant investment, as Kondratenko et al. (2020) warns that digital transformation requires a long-term financial commitment. This imbalance in budget allocation has the potential to create an imbalance in innovation capacity across organizational units.

The influence of innovation on institutional change is clearly evident in the creation of the Local Development Planning, Research, and Innovation Agency. This body evolved from the former Local Development Planning Agency, now with an expanded role

as a development think tank and innovation hub. This reorganisation supports Bella's (2018) observation that digital innovation needs an institutional base capable of generating new knowledge, managing data, and coordinating flexibly across sectors. The agency now acts as a central node for innovation across OPDs, bridging community needs, development priorities, and technical capabilities within local government units.

Another major shift is the repositioning of the Communication and Informatics Agency, which now serves as Bandung City's digital backbone. Its responsibilities include managing the city's data centre, integrating data across OPDs, and ensuring information security, effectively making it the city's digital coordination centre. This change reflects a move away from siloed, departmental bureaucracy toward a more connected, networked model of governance, where technology functions as a connector between different work units (Dunleavy et al., 2006).

Institutional change has also reshaped work practices. The Education Office, for instance, shifted its administrative operations to a cloud-based system, boosting efficiency by around 40%. Public service performance has also improved markedly: average waiting times for services fell from 60 minutes to 25 minutes over four years, while the Public Satisfaction Index climbed from 65% in 2020 to 84% in 2024. These figures show that digital innovation creates new public value by speeding up services, improving access to information, and streamlining processes.

Transparency in governance has also strengthened through e-Budgeting and e-Planning systems, which allow the public to view budget plans, activity reports, and development planning documents. Since 2021, requests for public information have tripled, and administrative errors have dropped by 30%. Participation in digital Musrenbang (Local Development Planning Forums) has also grown significantly, rising from 15% to 40%. This evidence supports Lestari & Santoso's (2022) argument that front-end innovations (public service apps) and back-end innovations (planning and budgeting systems) together reinforce core principles of good governance.

Despite these gains, five persistent challenges remain: (1) the digital gap affecting marginalised communities, (2) scattered and unconnected applications across local agencies, (3) uneven staff capability (only 45% of civil servants hold digital skills certification), (4) overdependence on individual leaders to drive innovation, and (5) limited internet infrastructure in suburban areas.

This study's findings show that government innovation in Bandung City is not just about launching digital apps, but involves deep changes in institutional structures, work routines, and local governance. These hurdles highlight that innovation cannot succeed without attention to institutional context and social capacity. In line with Schwab's (2016) view, workforce capability is essential for a lasting shift toward digital governance. Restructuring through the new

planning and innovation agency, redefining OPD roles, increasing digital budgets, and adopting cloud technology all signal a serious commitment to transformation.

Public service innovations like Sadayana, HAYU, Gampil, MPP, and SiBISA have clearly boosted efficiency, transparency, and citizen involvement. Yet these achievements are tempered by ongoing issues such as uneven staff skills, resistance within bureaucratic culture, and fragmented digital systems. For government innovation to be sustainable, it is vital to deepen digital literacy, improve integration between OPDs, and design inclusive policies that reach vulnerable groups.

The findings of this study confirm a two-way, cyclical relationship between innovation and institutional restructuring, as follows:

a. Innovation drives institutional restructuring. This is evident in: 1) The implementation of the *Sadayana* application drives the need for data integration, necessitating the strengthening of the Communication and Informatics Agency. 2) Integrated MPP services require cross-agency collaboration, thus expanding coordination through the establishment of the Local Development Planning, Research, and Innovation Agency. 3) System migration to the cloud requires changes to work procedures, employee competency standards, and the internal organizational structure of regional government agencies.

b. Institutional restructuring strengthens innovation. This is evident in the Local Development Planning, Research, and

Innovation Agency providing a formal space for innovation incubation, ensuring that innovation does not stop at ad-hock projects. Furthermore, the Communication and Informatics Agency, as the digital backbone, facilitates application integration, reduces duplication, and strengthens interoperability. Therefore, the increased digitalization budget allows for the expansion of Sadayana features, the integration of MPP services, and the data security system.

Based on this, it is clear that innovation causes structural change, then the new structure increases innovation capacity, thus giving rise to new innovations, and the new innovations again demand restructuring.

This cycle is consistent with the innovation-institution mutual shaping model emphasized by Zheng et al. (2019), namely that innovation is a mutually shaping process with institutional structures, not a linear, one-way process. In Bandung, this cycle is clearly evident through the relationship between Sadayana, data interoperability, strengthening the Communication and Informatics Agency, and the enhancement of other digital innovations.

Based on the above findings, it is clear that innovation in Bandung City does not exist as a standalone technological product, but has become a transformational force that influences how the government works, coordinates, and makes decisions. Innovation drives changes in structures and processes, while the changing structures in turn create a more conducive ecosystem for subsequent innovation. This is the main characteristic of

digital transformation, which Dunleavy et al. (2006) describe as a shift from a bureaucratic model to digital-era governance.

Discussion of Research Finding

Government innovation in Bandung cannot be understood apart from the broader forces of globalisation and digitalisation, which require public institutions everywhere to become more flexible, efficient, and responsive. As Zheng et al. (2019) point out, globalisation speeds up the cross-border flow of information and technology, making it impossible for governments to stick to traditional, rigid ways of operating. As a major urban centre, Bandung faces growing expectations from its residents for faster, more reliable public services. In response, innovations such as the Sadayana app, the Public Service Mall (MPP), and e-budgeting have emerged as practical answers to the need for more efficient bureaucracy and greater openness in information.

This supports Osborne & Brown's (2011) argument that public sector innovation is not just about adopting new tools, but about driving systemic change within government organisations. Bandung has shown institutional change through the creation of new units, such as the Local Development Planning, Research, and Innovation Agency, closer coordination between OPDs, and a shift in work routines toward digital standards. This shift shows that innovation is not only technical, but also affects the structure and culture of government.

Institutional change driven by digital innovation in Bandung reflects a move away from rigid, top-down bureaucracy toward a more collaborative, networked model. The old siloed approach has proven to slow down data sharing and decision-making. With digital systems like e-planning and e-budgeting, coordination between OPDs has become more open and interconnected.

This idea is consistent with Mulgan & Albury (2003), who stress that public sector innovation goes beyond technology to include reforms in government structures and processes. Bandung's institutional changes support this: the Communication and Informatics Agency now acts as the city's digital backbone, while the MPP functions as a central point for services delivered by multiple agencies.

Within public administration studies, this trend reflects a move toward smart governance (Meijer & Bolívar, 2016), where government, citizens, and private actors interact through digital platforms that promote transparency, participation, and accountability.

Klaus Schwab (2016) notes that a government's ability to thrive in the Industry 4.0 era depends heavily on the adaptability and skills of its workforce. Evidence from Bandung shows that, despite a range of digital tools, civil servant capability remains a key constraint. The gap in digital skills between older, more experienced staff and younger employees highlights the need to revise recruitment, training, and performance management approaches. This

aligns with Ifitri et al. (2024), who argue that workforce competence is crucial for any country aiming to transition into the next industrial phase.

Bandung has started addressing this through digital skills training, dedicated innovation units, and performance-based incentives. Yet, the persistence of a bureaucratic culture that prefers manual systems echoes Henriyani's (2019) observations about the difficulty of shifting entrenched mindsets.

From a good governance standpoint, government innovation in Bandung has strengthened three core principles: transparency, accountability, and citizen involvement. E-procurement and e-budgeting have reduced corruption risks by creating systems that can be digitally audited. At the same time, digital Musrenbang (Local Development Planning Forums) and the SiBISA public complaints app have broadened public input into planning.

This supports Lestari & Santoso's (2022) view that technology-driven innovation improves governance by reducing administrative errors. However, this study's original contribution is showing that innovation not only strengthens good governance, but also drives more adaptive institutional change. In other words, innovation and restructuring are mutually reinforcing: innovation calls for institutional change, and institutional change is necessary for innovation to succeed.

While New Public Management (NPM) focuses on efficiency, results-based

management, and business-like public administration (Hood, 1991), Bandung's digital initiatives clearly reflect NPM ideas, such as using standard indicators and apps to speed up services. Yet this study finds that Bandung's transformation fits better within a digital governance framework. Unlike NPM, which prioritises outcomes, digital governance stresses data integration, openness, collaboration, and digital ecosystems. With Bandung's inclusion in the world's Top 50 Smart Governments, it is clear that the direction of transformation is no longer simply NPM-style efficiency, but rather a more inclusive, collaborative governance approach.

Despite Bandung's significant achievements, several challenges still hamper the sustainability of innovation. First, internal resistance in the form of the unwillingness of some civil servants to abandon manual systems. Second, the digital divide, where marginalized groups (the elderly and low-income communities) have not yet fully benefited from application-based services. Third, dependence on political leadership, which can stall innovation when a mayoral change occurs. According to Banabera (2019), the success of government innovation is largely determined by the sustainability of knowledge management and replication mechanisms. In Bandung, best practices have not been fully documented, making innovation vulnerable to interruption. Thus, the novelty of this research is identifying that the biggest challenge is not in creating innovation, but in

institutionalizing innovation within the bureaucratic structure so that it does not stop as a short-term project.

While previous literature has focused heavily on the effectiveness of technology, this study emphasizes the cyclical interaction between innovation and institutional restructuring as key to bureaucratic transformation. Theoretically, this study enriches the discourse on government innovation by demonstrating that institutional restructuring is an inseparable variable from digital innovation. In short, this study's original contribution lies in showing that the effectiveness of government innovation depends less on launching digital apps and more on embedding innovation into the bureaucracy's institutional framework. Bandung City's experience reflects a shift from a New Public Management (NPM) mindset, focused on efficiency and outputs, toward a more systemic, networked form of digital governance.

From a practical standpoint, Bandung's experience highlights three key strategies that can guide other regions in Indonesia, especially as they implement the national SPBE (Electronic-Based Government System). First, there is a need to build stronger human resource capacity, particularly in digital skills and adaptive leadership. Second, integration between OPDs is essential to avoid fragmented systems and ensure seamless service delivery. Third, innovation must be institutionalised through formal structures, performance incentives, and clear accountability mechanisms, so that it

continues beyond individual leaders or short-term projects. These three strategies offer a useful reference point for local governments aiming to move beyond ad hoc digitalisation toward sustainable, system-wide transformation.

CONCLUSION

This research confirms that government innovation in Bandung City leads to institutional changes that go beyond technical upgrades. The changes are also structural and cultural, reshaping how agencies are organised, how work is done, and how staff relate to technology and citizens. Field data reveal a two-way relationship: digital innovation pushes the government to restructure its institutions, while more flexible, integrated structures in turn support the long-term sustainability of innovation. This reciprocal dynamic is the study's main theoretical insight, adding depth to discussions about the shift from NPM to digital governance.

At the same time, the study uncovers a paradox of innovation: while digital tools improve efficiency and transparency, they also bring new challenges. These include the multiplication of disconnected applications, digital anxiety among staff, and overreliance on political leadership to sustain momentum. This paradox shows that innovation alone does not automatically improve governance. Without deliberate efforts to restructure human resources and embed innovation into institutions, digital initiatives risk becoming short-lived or unevenly implemented.

The main theoretical implication is that government innovation should not be seen merely as a technological product, but as an institutional process. It requires redefining the roles of OPDs, upgrading civil servant competencies, and redesigning organisational structures to support collaboration and adaptability. On the practical side, the findings highlight three priority areas: (1) integrating digital systems across agencies to reduce duplication and improve interoperability, (2) addressing gaps in staff capability through targeted training and career development, and (3) institutionalising innovation so that it becomes routine and resilient to changes in leadership. In this way, the study reinforces the idea that lasting government innovation is only possible when innovation becomes part of the organisation's core DNA, rather than remaining just another digitalisation project.

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