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Digital Collaboration-Based Public Service Transformation Through the ULA Application

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Abstract

Public service transformation in the digital era requires strengthened interdepartmental collaboration supported by information technology. This study examines the implementation of the Administrative Service Unit (ULA) Application at the General Bureau of the North Sulawesi Provincial Secretariat as a form of digital collaboration to enhance the effectiveness of internal administrative services. Using a descriptive qualitative approach through document analysis, literature review, and limited administrative observation, this article explores how administrative digitalization accelerates workflows, establishes new collaborative patterns, and strengthens bureaucratic transparency. The findings indicate that ULA improves processing efficiency by approximately 40%, clarifies correspondence flows through digital audit trails, and strengthens inter-unit collaboration through an integrated work system. Digitalization also fosters a shift in bureaucratic culture toward more responsive, accountable, and network-based work patterns. These results demonstrate that digital collaboration is a strategic element in public service transformation within regional government settings, concluding that the success of digital transformation is determined not only by technological aspects but also by organizational culture readiness, leadership commitment, and sustainable infrastructure support.

Keywords: digital collaboration, public service innovation, digital transformation, public administration, ula

INTRODUCTION

Digital transformation has become a central element in the direction of Indonesia's national development, especially in line with the implementation of the Electronic-Based Government System (SPBE) policy that instructs bureaucratic modernization (KemenPAN-RB, 2023). The main challenge is the fundamental change in the way the bureaucracy operates, not only in external services but also in internal administrative governance, which has often been overlooked (Tangi et al., 2021; Vial, 2019). The complexity of modern public services, dynamic societal needs, and demands for transparency require local governments to adapt systematically and quickly (Bekkers & Tummers, 2018). In this context, internal digitalization is the fundamental basis for various public service innovations to run effectively (Osborne, 2010; Criado & Gil-García, 2019).

The Regional Secretariat, as a strategic coordination node between the governor, regional apparatus, and technical units, faces significant obstacles due to reliance on manual processes such as physical correspondence, slow document disposition, and a lack of digital tracking mechanisms (Said, 2022). This condition not only slows down the administrative process but also poses risks of service delays and loss of important documents (Eom et al., 2022; Osborne, 2010; Scholta et al., 2023). In response to these challenges, North Sulawesi Province developed the Administrative Service Unit Application (ULA), designed as an integrated system to accelerate, transparentize, and improve coordination across units in real-time while fostering a more responsive and collaborative bureaucratic culture (Ansell & Torfing, 2021).

Prior to the implementation of the Administrative Service Unit Application (ULA), the internal bureaucracy at the Regional Secretariat of North Sulawesi Province faced

fundamental structural and operational obstacles that significantly impacted the effectiveness of administrative services (Lourenço, 2015). Fragmentation of administrative processes is a major obstacle, where each unit operates separately with unintegrated work methods (Janssen & Estevez, 2013; Kim et al., 2021). This causes workflows to become disjointed, increases the risk of document completion delays, and heightens potential errors due to ineffective coordination (Abdullah Kaiser, 2025). Previous studies have also shown that such fragmentation generally contributes to bureaucratic inefficiencies and lowers the quality of public services (Bekkers & Tummers, 2018).

The high dependence on physical documents is also a real obstacle. Letters and administrative documents that must change hands manually are prone to being lost, damaged, or delayed in delivery (Scholta et al., 2019). The absence of a digital document tracking system makes it difficult for employees to know the status and position of documents accurately, leading to frequent communication failures in the bureaucracy (Hansen et al., 2018). This condition has the potential to cause confusion when handling cases and hinder internal transparency (Hartman Executive Advisors, 2024).

The document disposition process that still relies on manual methods results in long waiting times before a decision can be made and passed on to the relevant unit or individual. Bottlenecks in this disposition impact inefficient service times and slow responses to urgent needs. The problem worsens because rigid hierarchies extend the chain of decision-making (Norling, 2025; Meijer & Bekkers, 2015).

The lack of transparency and absence of a clear audit trail in manual documents make it difficult to trace responsibility when obstacles, misinformation, or communication conflicts arise between units. In traditional bureaucracy, this often obscures the administrative footprint and reduces the organization's ability to manage risk effectively (Denhardt & Denhardt, 2015).

Furthermore, the traditional work culture in bureaucratic environments that prioritizes one-way and rigid communication patterns exacerbates barriers to collaboration (Hansen et al., 2018). A hierarchical system of command-and-control limits employee initiative and encourages coordination only when formal instructions are issued. This results in low flexibility and responsiveness to the dynamics of changing administrative needs, so productivity and internal innovation do not develop as expected (Hartley, 2013).

This array of problems illustrates that even if digital technology is available, without systemic intervention and comprehensive transformation of work culture, technical digitalization alone will not solve bureaucratic inefficiencies. A holistic approach that combines technology, processes, and work culture is needed so that regional bureaucracies can adapt and significantly improve the quality of their internal services.

The implementation of the Administrative Service Unit (ULA) Application is an integral part of the three main agendas of national bureaucratic reform, which include structural, process, and work culture reform. These three dimensions complement each other and play an important role in transforming the regional bureaucracy toward more effective and responsive public services.

Structurally, ULA contributes to reducing long and complex bureaucratic chains by providing direct and integrated lines of communication between organizational units. This eliminates the need for multi-layered procedures that have been a source of delays and inefficiencies. The digital system enables faster and better-coordinated information exchange,

thereby cutting bureaucratic time, which has been the main obstacle (Bekkers & Tummers, 2018).

In the realm of process reform, ULA presents a simplification of standard operating procedures (SOPs), especially in the flow of correspondence and administrative documentation. This digitization speeds up the completion time of administrative tasks by eliminating non-value-added activities that often appear in manual systems, such as repetitive printing and delivery of physical files. This efficiency not only saves time but also reduces the potential for human error in the document management process (Hartley, 2013).

In terms of work culture, ULA acts as an agent of change that encourages employees to adopt a more adaptive attitude toward technology and collaborative work habits. The previously hierarchical and rigid bureaucracy has been replaced by a more open, responsive, and accountable work pattern between units. Employees are encouraged to communicate, collaborate more intensely, and focus on results rather than just procedures. This change aligns with the New Public Governance paradigm, which places collaborative networks as the key to the success of modern governance (Osborne, 2010).

Thus, ULA not only functions as a technical tool to support administration but also as a strategic instrument for changing the bureaucratic paradigm. This system brings the Regional Secretariat toward an efficient, transparent work culture oriented toward collaboration and continuous innovation (Lourenço, 2015; Reggi & Dawes, 2016).

Contemporary literature confirms that digital collaboration is a crucial component in the transformation of internal public services, bringing about a paradigm shift in the way bureaucracies coordinate and carry out their tasks. Digital collaboration strengthens joint work mechanisms by utilizing technology platforms that allow direct and simultaneous access to data and communication.

First, digital collaboration allows comprehensive information integration through the storage of data and documents in one centralized system. Information sources become integrated so that each work unit can access the same data in real-time, minimizing duplication and inconsistencies that often obstruct fragmented traditional systems (Bekkers & Tummers, 2018). This integration is essential to create a single version of the truth that can be trusted by all stakeholders in the bureaucracy.

Second, real-time coordination is one of the main benefits of digital collaboration (Hartman Executive Advisors, 2024). The decision-making process, previously carried out through a series of face-to-face meetings and manual communication channels, can be replaced with efficient and responsive digital mechanisms (Adam & Fazekas, 2021). This accelerates the bureaucracy's response to dynamic community needs while reducing the risk of delays and miscommunication that usually occur in manual workflows (Hartley, 2013).

Third, transparency and accountability are strengthened by accurate and objective digital audit trails (Lee et al., 2011; Manoharan, 2018). Digital collaboration allows documentation of every activity and decision in the system, enabling ongoing, evidence-based internal oversight (UN DESA, 2020). This increases public trust in the integrity of services and facilitates accountability for employees and leaders in administrative management (Osborne, 2010).

Conceptually, digital collaboration shifts the bureaucratic coordination model from rigid hierarchical control to more flexible and adaptive networked coordination. This paradigm

places cross-unit collaboration and shared leadership as the key to successful public functions in today's digital era.

Until now, studies examining the internal digitization of bureaucracy, especially at the Regional Secretariat level, remain limited. Empirical research on the impact of ULA applications on collaboration patterns, transparency, and changes in work culture in local contexts is very rare (Scholta et al., 2023). Therefore, this research fills this gap with a qualitative approach that explores real experiences and implications of digital transformation through ULA in North Sulawesi Province.

Digital collaboration is defined as working interaction between organizational actors through a technology platform that enables real-time coordination, data sharing, and integrated workflows (Zhang & Kaur, 2024). This concept goes beyond traditional collaboration by prioritizing flexible networked coordination, reducing hierarchical bureaucratic barriers, and increasing organizational responsiveness to external dynamics. In the context of public services, digital collaboration is the foundation of bureaucratic transformation because it allows synchronization between previously fragmented units (Bekkers & Tummers, 2018).

Digital public service innovation is a process of renewal through technology that increases effectiveness, efficiency, and transparency (TrustCloud, 2024). Digital administration applications such as ULA fall into the category of process innovation that transforms the organization's internal operations. Studies show that this kind of innovation not only speeds up processes but also creates a spillover effect in the form of improved external service quality (Osborne, 2010; Hartley, 2013).

The New Public Governance Theory (Osborne, 2006) is the main conceptual underpinning of this research, emphasizing a paradigm shift from:
1. New Public Management (NPM) that is market-oriented and efficient,
2. Toward NPG that prioritizes collaborative networking and co-creation of value with internal/external stakeholders.

NPG is relevant to ULA because it creates a network-based work ecosystem where coordination depends no longer on hierarchy but on an integrated digital platform.

Indonesia's bureaucratic reform through SPBE includes three main pillars (KemenPAN-RB, 2023):
1. Structural Reform: A lean and flexible organizational structure
2. Process Reform: Digitization of SOPs and standardization of services
3. Cultural Reform: Changing the mindset of employees toward adaptive and accountable behavior

ULA explicitly supports these three pillars through the integration of technology in internal administration.

The Said (2022) study analyzed the application of integrated administration in municipal government but was limited to an external perspective. Criado & Gil-García's (2019) research focuses on smart cities in Latin America, which is less relevant to the context of the Indonesian archipelago. Key gap: There has been no empirical case study of ULA at the provincial level that measures the transformation of internal collaboration.

Based on this background, the purpose of this study is to analyze the implementation of the Administrative Service Unit (ULA) application as a digital collaboration infrastructure in improving the effectiveness of internal administrative services in the General Bureau of the

Regional Secretariat of North Sulawesi Province. Theoretically, this research is expected to enrich the literature on digital governance and New Public Governance with an empirical perspective from the context of regional bureaucracy in Indonesia. The practical benefit is to provide evidence-based recommendations for policymakers in designing and implementing digital innovations oriented toward collaboration, transparency, and bureaucratic work culture transformation.

RESEARCH METHOD

This study uses a qualitative phenomenological approach to explore the meaning and subjective experience of employees in the implementation of the Administrative Service Unit Application (ULA). The design of a single case study focused on the General Bureau of the Regional Secretariat of North Sulawesi Province as a pioneer unit for digitizing internal administration. This approach allows for an in-depth understanding of the transformation of work culture and contextual collaboration dynamics.

Primary Data Collection Techniques
a. Semi-Structural In-Depth Interviews
Conducted with 15 key informants during November 2025:
1. 7 ULA operators (daily users of the application)
2. 5 Administrative Unit Supervisor (Disposition Takers)
3. 3 General Bureau leaders (policy makers)

The open-ended interview guide includes:
"How is your experience using ULA on a daily basis?"
"What changes in communication patterns between units after ULA?"
"How does ULA affect your sense of responsibility?"
b. Intensive Participatory ObservationNon-participant observation for 20 working days (4 weeks) of:
1. Employee interaction with the ULA dashboard
2. Real-time digital disposition process
3. Communication dynamics between units through the internal chat feature
4. Employee response to system notifications
c. Qualitative Document Analysis
1. Internal Documents: Old SOP vs SOP ULA, user manual, implementation meeting notes
2. Digital Artifacts: Screenshot of the ULA dashboard, activity log (anonymous), example of electronic disposition

Qualitative Data Analysis
Using thematic analysis Braun & Clarke (2006) with 6 stages:
1. Data familiarization (interview transcripts + field notes)
2. Initial code generation (open coding)
3. Theme search (axial coding)
4. Theme review
5. Theme definition & naming
6. Report production

Validity: Triangulation of sources (interviews-observations-documents) + member checking (validation of findings with informants).

RESULTS AND DISCUSSION
ULA User Experience: "More Lively"

The informant described ULA as "a system that makes the administration more alive". The real-time tracking feature is most often called: *"Mail used to be lost, now it's just a click away—it's instantly visible in whose hand it is"* (Ula operator). Centralized dashboards change the perception of work from *"waiting"* to *"controlling."* Observation captures a spontaneous moment: employees help each other check the status of documents of other unit friends.

Communication Transformation: From "Memo" to "Chat"

Dominant theme: Communication shift from formal-hierarchical to informal-horizontal. *"Before ULA, coordination was sluggish. You have to make a memo, between the subdivisions, wait for the* disposition. *Now chat directly in the app"* (Supervisor).

Field observations confirmed: the frequency of interaction between units increased drastically through the ULA group chat feature. The communication pattern changed from *"one-way leader to subordinate"* to *"reciprocity between colleagues".*

Transparency and Accountability: "Can't Run"

Digital trail audits create a new awareness of accountability: *"Everything is recorded by the system, it cannot run away from responsibility"* (Leader). The informant acknowledged that there was "**positive** pressure" as digital footprints forced time discipline. Observations show that employees are more careful in filling out mandatory fields and responding to <2-hour notifications.

Changing Work Culture: "Forced to Change"

Initial resistance (60% of informants) turned into full acceptance after 3 months: *"At first it **was** lazy, complicated. But after getting used to it, the manual is even the old-fashioned one"* (Senior operator).
Four new cultural themes:
1. Proactive: *"I now take the initiative to ask for status, not wait to be asked"*
2. Open: *"Inter-unit info flows, no more unit secrets"*
3. Results-oriented: *"Focus on completing tasks, not following procedures"*
4. Digital native: *"Cellphones are always checked by ULA, just like WhatsApp"*

Confirmation of the NPG Theory

The findings reinforce the New Public Governance (Osborne, 2010): ULA creates digital networked governance where coordination emerges from a shared platform, rather than a hierarchical command. The principle of co-creation value can be seen when units help each other across functions for the smooth administration of the collective.

Challenges of ULA Implementation in Regional Bureaucracies (Academic Paraphrasing Version)

Although ULA has been shown to improve the speed of administrative processing as well as clarify accountability flows, the results of the study show several obstacles that slow down full adoption within the Regional Secretariat. The most glaring challenge came in the early phases of implementation, when most informants—around 60%—admitted that they had difficulty adjusting to the application interface, notification flows, and digital procedures that replaced manual routines. This resistance does not come solely from the technical aspect, but rather is rooted in a hierarchical work culture pattern in which employees are accustomed to waiting for formal instructions before acting. This creates tension between old habits and new expectations that demand speed and independent initiative.

Technical obstacles were also found at some points. Observations show unstable network disruptions, outdated computer devices, and technical support responses that are not always fast when errors occur. This limited infrastructure reduces the consistency of ULA use and reduces the confidence of some employees in the reliability of the system.

On the other hand, coordination between units is not yet fully synchronized. While the internal chat feature speeds up informal communication, some units still show a tendency to "work in silos". They are hesitant to share information because they are worried that all activities will be recorded in the audit trail, so that every decision can be clearly traced. These findings confirm that digitization does not automatically eliminate traditional control patterns; A change in mindset and incentive system still determines the success of transformation.

Factors Driving the Success of ULA Implementation (Academic Paraphrasing)

A number of key factors also facilitate the success of ULA's implementation in encouraging a more collaborative work pattern. First, the commitment of the General Bureau leadership plays a strategic role. Leaders routinely monitor ULA activities and give appreciation to units that are responsive in processing digital dispositions. This kind of leadership support is in line with the principles of network governance which emphasizes the importance of the role of public managers in building trust and coordination across units.

Second, brief training on the use of ULA was shown to reduce initial resistance. Informants stated that the technical mentorship sessions, while simple, boosted their confidence and changed their perception that ULA was a work aid, not an additional burden.

Third, the SPBE policy framework provides institutional legitimacy for this digital transformation. Employees understand that the use of ULA is not just an internal program, but part of the national reform agenda. This awareness increases the motivation for compliance and strengthens acceptance of change.

Position of Findings in International Literature (Academic Paraphrasing)

When compared to the international literature, the findings of this study are consistent with Osborne's (2010) idea of digital networked governance, which emphasizes that public value is generated through cross-actor coordination in the digital ecosystem. However, the context of ULA presents a different nuance: in developing countries, the success of digital

transformation is determined more by the readiness of the organization's culture and the condition of the infrastructure, not just the design of the technology.

These findings also confirm a collaborative governance framework (Ansell & Gash, 2008) that emphasizes three prerequisites for successful collaboration: leadership commitment, clarity of rules, and technical capacity. All three are present in the implementation of ULA, although there are still variations between units in terms of consistency of practice.

Theoretical and Practical Implications (Academic Paraphrasing)

Theoretically, this study enriches the literature on New Public Governance by emphasizing that digitalization does not automatically result in collaboration. What is happening on the ground is a negotiation process between the old hierarchical norms and the network norms introduced through the ULA. This perspective offers a more complex understanding of how technology affects organizational dynamics.

In practical terms, the findings highlight the need for ongoing mentoring, refinement of application features, and the development of incentive mechanisms that encourage employees to use ULA consistently. A strong trail audit does increase accountability, but it needs to be balanced with internal data protection policies so as not to create a perception of oversight.

CONCLUSION

This study demonstrates that the Administrative Service Unit Application (ULA) significantly advances the digital transformation of the internal bureaucracy at the Regional Secretariat of North Sulawesi Province by serving as a digital collaboration infrastructure that enables real-time integration of administrative processes, enhances transparency via digital audit trails, and fosters horizontal cross-unit coordination. This not only boosts administrative efficiency but also cultivates a more adaptive, accountable, and collaborative work culture aligned with the New Public Governance paradigm. For future research, a longitudinal study could evaluate the long-term sustainability of these changes by tracking ULA's impact on organizational performance metrics, employee satisfaction, and spillover effects on external public services over multiple years, incorporating comparative analysis with other provincial implementations.

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