



Transformation of internal communication in public administration under the influence of digitalization: An investigation into how the transition to digital platforms alters vertical and horizontal communication among employees in municipal administrations

Vanja Stojković

National Employment Service of the Republic of Serbia.

Email: vanjastojkovic988@gmail.com

Abstract

The transformation of public administration through digitalization has been predominantly examined from the perspective of government-to-citizen (G2C) service delivery. This paper redirects attention to the internal dimension of this transformation, investigating how the adoption of digital communication platforms alters the structure, dynamics, and culture of communication within municipal administrations in Serbia. Drawing upon Media Richness Theory, organizational communication theory, and the literature on digital institutional change, we analyse how digital tools — including document management systems, email, institutional portals, and informal messaging applications — reshape both vertical (top-down and bottom-up) and horizontal communication flows among municipal employees. We employ a qualitative research design consisting of 38 semi-structured interviews with department heads and frontline officials across three municipalities of varying size and digital maturity in the Pčinja and Nišava Administrative Districts. Our findings reveal that digitalization produces a paradoxical duality: it formally accelerates and documents communication flows while simultaneously generating new forms of communicative fragmentation, informal workarounds, and resistance. The emergence of unofficial Viber and WhatsApp groups as primary coordination channels represents a particularly significant finding, indicating a structural gap between officially sanctioned digital infrastructure and actual organizational practice. We conclude by discussing the implications of these dynamics for organizational learning, accountability, and democratic oversight within local public administration.

Keywords:

Digitalization
Horizontal communication
Internal communication
Media richness theory
Municipal government
Organizational change
Public administration
Serbia
Vertical communication.

Copyright:

© 2026 by the author. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>)

Publisher:

Scientific Publishing Institute

Received: 7 April 2026

Revised: 19 May 2026

Accepted: 21 May 2026

Published: 5 June 2026

Funding: This study received no specific financial support.

Institutional Review Board Statement: The study involved minimal risk and followed ethical guidelines for social science fieldwork. Formal approval from an Institutional Review Board was not required under the policies of Institute for Research Ethics Committee of the National Employment Service of the Republic of Serbia. Informed verbal consent was obtained from all participants, and all data were anonymized to protect participant confidentiality.

Transparency: The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Competing Interests: The author declares that there are no conflicts of interests regarding the publication of this paper.

1. Introduction

The digitalization of public administration has generated a rich and growing body of research examining how governments deploy digital technologies to enhance service delivery, improve transparency, and reduce bureaucratic friction in their interactions with citizens. Frameworks such as Janowski (2015) stages of digital government evolution and the extensive comparative literature on e-government adoption have substantially advanced our understanding of the external face of administrative digitalization. Yet the internal face of this transformation — how digital technologies alter the way public servants communicate with one another, coordinate their work, and enact organizational authority — has received considerably less systematic scholarly attention.

This asymmetry in research attention is not merely an academic curiosity. It has practical consequences for the success of digital transformation initiatives themselves. Organizations do not transform their external service delivery without simultaneously, and often more profoundly, transforming their internal processes, hierarchies, and cultures. The implementation of a document management system (DMS), an institutional intranet portal, or a unified email architecture does not simply substitute a digital medium for a paper one; it reconfigures the social and organizational relations through which administrative work is accomplished (Fountain, 2001). Understanding these internal transformations is therefore essential both for academic theories of institutional change and for practitioners who must manage the human dimensions of digital reform.

This paper examines the transformation of internal communication in Serbian municipal administrations as digital platforms have been progressively introduced over the past decade. Serbia represents a particularly instructive case for several reasons. The country's public administration has been subject to sustained digital reform pressures associated with EU accession negotiations, resulting in significant institutional investment in e-government infrastructure while institutional cultures and human capital profiles have evolved more slowly (Petrović & Čisar, 2019). The gap between formally adopted digital systems and their actual use in daily organizational life is therefore wide and consequential. Furthermore, the inherited legacies of a hierarchical administrative culture — themselves rooted in the particular history of Yugoslav self-management socialism and post-socialist bureaucratic reorganization — interact with digital technologies in ways that may not be fully captured by theories developed in Western European or North American organizational contexts.

1.1. Research Questions

This paper addresses three interconnected research questions:

1. How does the adoption of digital communication platforms alter the patterns and quality of vertical (Top-down and bottom-up) communication in municipal administrations?
2. How does digitalization affect horizontal communication and cross-departmental coordination, and to what extent does it dissolve or reproduce 'information silos'?
3. What role do informal digital communication channels play in organizational practice, and how do they relate to officially sanctioned digital infrastructures?

2. Theoretical Framework

2.1. Organizational Communication: Vertical and Horizontal Flows

The distinction between vertical and horizontal communication remains foundational in organizational communication theory. Katz and Kahn (1978) conceptualised organizations as open systems constituted by patterned flows of information, resources, and energy. Within this framework, vertical communication encompasses both downward flows — directives, policy instructions, performance feedback, and institutional goals transmitted from senior management to frontline staff — and upward flows — reports, complaints, requests, and informal intelligence conveyed from lower levels of the hierarchy to decision-makers above. Horizontal communication, by contrast, encompasses lateral exchanges between colleagues occupying equivalent positions in the organizational hierarchy, particularly those engaged in coordinated work across functional departments.

Each communication direction serves distinct organizational functions and is vulnerable to characteristic pathologies. Downward communication, when channelled exclusively through formal hierarchical structures, risks information filtering and distortion as messages pass through successive layers of middle management, with each layer selectively retaining, embellishing, or suppressing content according to local interests (Katz & Kahn, 1978). Upward communication is particularly susceptible to suppression, as lower-level employees may have strong incentives to communicate selectively, concealing problems or failures that might reflect negatively on their performance. Horizontal communication is chronically inhibited by departmental boundaries and the functional specialization of bureaucratic organizations, generating what organizational theory terms 'information silos': self-contained epistemic communities that optimize internal information sharing at the expense of cross-functional integration.

Digital communication technologies have the potential to address all three pathologies simultaneously — by accelerating and documenting vertical flows, reducing the filtering capacity of middle management, and creating structural links between previously isolated departments. However, the realization of this potential is

contingent on a range of organizational, cultural, and technical factors that cannot be assumed in advance of empirical investigation.

2.2. Media Richness Theory

Daft and Lengel (1986). Media Richness Theory (MRT) provides a further theoretical resource for understanding how different digital communication channels serve different organizational functions. MRT posits that communication media vary in their 'richness' — defined as the capacity of a medium to convey complex, ambiguous messages effectively — along four dimensions: the ability to handle multiple information cues simultaneously, the immediacy of feedback, the personalisation of language, and the ability to convey emotions and natural language nuances.

In this framework, face-to-face communication is the richest medium, capable of transmitting verbal content, vocal tone, facial expression, and embodied gesture simultaneously, with immediate and reciprocal feedback. At the opposite extreme, formal written documents (memoranda, official circulars) are among the leanest media, capable of conveying precise, unambiguous content but incapable of conveying relational nuance or facilitating rapid interactive clarification. Email, instant messaging, and video conferencing occupy intermediate positions on the richness continuum, each offering a distinct combination of capabilities and limitations.

MRT predicts that organizational communication efficiency is maximised when the richness of the medium is matched to the equivocality of the message: rich media should be used for complex, ambiguous, or relational communication tasks, while lean media are adequate for routine, unambiguous information transmission. Applied to municipal administration, this suggests that digital transformation should ideally result in a rational alignment of channels to tasks — with complex policy negotiations or sensitive personnel matters conducted through richer channels, while routine administrative instructions are handled through lean digital formats. Crucially, however, MRT also implies that inappropriately lean media — such as resolving a complex inter-departmental dispute via a short email chain — will generate communicative failures that are distinct from and potentially more damaging than the failures of the traditional bureaucratic systems they replace.

2.3. Digital Government Evolution and Institutional Change

Janowski (2015) framework of digital government evolution identifies four distinct stages through which governments transition from the digitization of individual administrative procedures to the fundamental transformation of governance structures and intergovernmental relationships. Most Serbian municipalities currently occupy the first or second stage of this continuum — having achieved basic digitization of document processing and online service provision without yet achieving the systemic integration and institutional transformation that characterizes higher stages. This positioning creates a distinctive organizational challenge: the technical infrastructure of digital communication is present, but the institutional norms, skills, and cultural dispositions required to exploit it effectively have not yet fully developed.

Fountain (2001) offers a complementary perspective, emphasising that information technologies are not neutral conduits for organizational processes but are themselves shaped by the institutional contexts into which they are introduced. Her concept of 'enacted technology' — the distinction between the objective characteristics of a technology and the technology as it is actually deployed and used within a particular institutional setting — is especially relevant to the Serbian municipal context, where formally identical digital systems may function very differently across organizations with distinct histories, cultures, and power distributions.

Mergel (2016) analysis of social media adoption in public sector organizations provides a more recent theoretical touchstone for understanding how informal digital communication tools become institutionalized. Her work demonstrates that the adoption of social platforms in government agencies typically follows a 'bottom-up' trajectory in which informal employee use precedes formal institutional policy, creating a persistent tension between emergent organizational practice and official governance frameworks. This dynamic maps closely onto the use of consumer messaging applications in Serbian municipal administrations, as documented in the empirical findings of the present study.

3. Methodology

3.1. Research Design

This study adopts a qualitative research design centred on semi-structured interviews and comparative case analysis. The qualitative approach is warranted by the exploratory and interpretive objectives of the research: understanding how employees at various hierarchical levels experience, describe, and make sense of changes in their communicative environment requires methods capable of capturing subjective meaning, contextual nuance, and organizational specificity that structured quantitative instruments cannot adequately access.

The comparative case study design follows Yin (2018) multi-case methodology, selecting three municipal administrations that vary systematically along dimensions relevant to the research questions: administrative

size, geographic location (urban vs. semi-rural), and degree of digital infrastructure development. This design enables analytical generalization from case-specific findings to theoretical propositions about the mechanisms through which digitalization alters internal communication, without claiming the statistical representativeness of survey research.

3.2. Case Selection

Three municipal administrations were selected for inclusion in the study. Municipality A is a mid-sized urban administration with approximately 180 full-time employees, located in the Nišava Administrative District. It has implemented a document management system (DMS) since 2018 and maintains an internal communication portal. Municipality B is a small semi-rural administration with 62 employees, located in the Pčinja District, which has introduced digital document workflows but relies primarily on email for internal communication. Municipality C is a large urban administration with approximately 320 employees, also in the Nišava District, which has the most advanced digital infrastructure of the three cases, including an integrated enterprise resource planning system for administrative processes. The variation across cases allows examination of how the degree of digital maturity moderates the organizational dynamics identified in each research question.

3.3. Data Collection

Data collection comprised 38 semi-structured interviews conducted between September and November 2024. Interview participants were selected through purposive sampling to ensure representation across hierarchical levels (senior management, middle management, and frontline officers) and functional departments (finance, legal, urban planning, social welfare, general administration). Interviews were conducted in Serbian and ranged in duration from 45 to 90 minutes. With participants' consent, all interviews were audio-recorded and subsequently transcribed verbatim. An interview guide was developed in advance, addressing: daily communication routines, perceived changes in communication quality and quantity since digital adoption, attitudes toward current digital tools, experiences of communication failures, and opinions on the relationship between digitalization and organizational culture. The guide was applied flexibly, with follow-up questions tailored to each participant's specific experiences and institutional context.

In addition to interviews, analysis of institutional documents (Internal procedure manuals, communications policies, training records, and municipal digitalization strategy documents) was conducted to provide contextual data and to triangulate interview findings.

3.4. Analytical Approach

Transcripts were analysed using thematic analysis following [Braun and Clarke \(2006\)](#) framework. An initial cycle of open coding was followed by axial coding to identify relationships among categories, and selective coding to develop overarching themes. The analysis was conducted in parallel by two researchers, with inter-rater reliability confirmed through discussion and reconciliation of divergent interpretations. Theoretical saturation — the point at which additional interviews produced no new thematic insights — was assessed iteratively and judged to have been achieved after the thirty-fourth interview.

4. Findings and Discussion

4.1. Vertical Communication: Acceleration, Bypassing, and the Paradox of Transparency

Across all three case municipalities, informants consistently reported that digital tools had dramatically accelerated the downward transmission of formal instructions and policy directives. Department heads noted that the introduction of email as a primary communication channel had effectively compressed the time between decision-making at the municipal executive level and awareness of those decisions among frontline staff from what had previously been days (in the era of paper memoranda and physical distribution) to hours or even minutes. This acceleration was broadly perceived as a positive development by both managers and staff, reducing ambiguity about current directives and enabling more rapid organizational responses to time-sensitive administrative situations.

However, the acceleration of formal downward communication was accompanied by a less uniformly welcomed development: the effective bypassing of middle management as an informational intermediary. Several middle managers in Municipality A and Municipality C reported experiencing a significant reduction in their perceived organizational authority as senior management increasingly communicated directly with frontline staff through email or internal portal announcements, rendering the traditional role of the department head as information gatekeeper and interpreter functionally obsolete. As one department head in Municipality C stated: 'Before, my signature and my explanation of the directive was the way things reached my staff. Now, they receive the email at the same time I do, and they can read the same thing I read. Sometimes they ask me about it before I have had a chance to think about the implications.'

This bypassing dynamic has ambivalent organizational implications. From a transparency and accountability perspective, direct digital communication reduces the filtration and selective retention of information by middle management, potentially improving organizational effectiveness and reducing the scope

for self-interested information manipulation. However, it simultaneously undermines the interpretive and sense-making functions of middle management: the translation of abstract policy directives into contextually appropriate operational guidance, the management of staff uncertainty during institutional change, and the maintenance of team morale and cohesion — all functions that depend on rich, relational communication for which lean digital media are poorly suited. The net effect on organizational communication quality is therefore not straightforwardly positive; it depends on how the new communication architecture is managed and supplemented.

Upward communication presented a more complex picture. On one hand, digital tools had formally extended opportunities for upward communication by providing additional channels (email, portal feedback mechanisms) through which frontline staff could communicate with senior management. On the other hand, several frontline officers across all three municipalities reported experiencing an intensification of what one informant described as 'the culture of the approved message': the expectation that digital communications, unlike verbal conversations, create permanent written records, producing a chilling effect on honest, candid upward communication. 'If I write an email to say that something is not working,' one social welfare officer in Municipality B explained, 'that email can be used against me. When it was a conversation, it did not exist. Now everything leaves a trace.'

This finding is consistent with theoretical predictions that lean, asynchronous digital media reduce the perceived safety of sensitive upward communication, as the absence of relational cues (tone, facial expression, physical presence) inhibits the trust-building that makes candid disclosure of problems possible. The organizational consequence is that digital communication systems may paradoxically increase the quantity of formal upward communication while decreasing its quality, as staff self-censor honest assessments in favour of formally compliant but organizationally less informative messages.

4.2. Horizontal Communication: Partial Dissolution of Silos and the Persistence of Departmental Identity

The impact of digitalization on horizontal communication revealed a more nuanced pattern than simple silo dissolution or maintenance. In Municipality A and Municipality C, the introduction of shared document repositories and cross-departmental project management tools had created new structural opportunities for inter-departmental coordination, enabling officials in urban planning to access documents produced by the legal department, or finance officials to review submitted social welfare cases simultaneously with social welfare department staff. Several informants reported genuinely improved coordination outcomes attributable to digital tools, particularly in the processing of complex multi-department cases such as building permits requiring simultaneous assessment by urban planning, environmental protection, and finance departments.

However, structural access to shared information did not automatically translate into substantive collaboration. Departmental identity — the deep social and professional affiliations that employees feel toward their immediate work units rather than the organization as a whole — proved remarkably resistant to digitalization. As one urban planner in Municipality A observed: 'We can see the documents from the other departments, yes. But reading their documents and understanding their perspective, and finding the time to coordinate — that is a different matter. The digital system gives us the possibility, but possibility is not the same as practice.'

In Municipality B, with its less developed digital infrastructure, horizontal communication remained predominantly informal and relational — conducted through personal conversations, chance encounters in corridors, and telephone calls rather than through any systematic digital platform. While this municipality lacked the systemic advantages of shared digital repositories, several informants in Municipality B paradoxically described their horizontal communication as more fluid and personally effective than that observed in the more highly digitalized Municipality A, precisely because the absence of formal digital systems maintained the necessity of face-to-face interaction, which Media Richness Theory would predict to be more effective for the complex, often ambiguous coordination challenges that inter-departmental communication typically involves.

This comparison between Municipality A and Municipality B offers empirical support for MRT's core proposition about channel-task fit: where digital tools reduce the richness of horizontal communication without a compensatory investment in rich media for complex coordination tasks, organizational performance may not improve and may even decline relative to less digitalized baseline states. The practical implication is that digital transformation strategies must explicitly address which coordination challenges require rich communication and ensure that digital tools either match that richness requirement (Through, for example, video conferencing or collaborative digital workspaces) or are supplemented by maintained face-to-face interaction norms for the coordination tasks that require them.

4.3. Informal Digital Communication: The Shadow Infrastructure of WhatsApp and Viber

Perhaps the most theoretically and practically significant finding of this study concerns the pervasive use of consumer messaging applications — specifically WhatsApp and Viber — as primary channels of internal organizational communication in all three case municipalities. In all three cases, informal messaging groups — organized by department, by project, or by interpersonal social networks — had emerged as the de facto

coordination infrastructure for day-to-day operational communication, functioning in parallel with and frequently superseding officially sanctioned digital channels.

The reasons cited by informants for preferring informal messaging platforms to official channels were consistent across cases and centred on three perceived advantages: speed, accessibility, and relational richness. Speed is self-explanatory — instant messaging delivers information in real time, with read receipts providing immediate confirmation of receipt, while email in official municipal systems was frequently described as burdened by institutional formalities (formal salutations, structural requirements, archiving obligations) that slow communication for routine operational purposes. Accessibility was also significant: several informants noted that official communication systems were only accessible from designated workstations, while messaging apps were available on personal mobile devices, enabling continuous organizational connectivity outside working hours and physical premises. Finally, several participants described messaging apps as relationally richer than email — supporting voice messages, informal language, immediate question-and-answer exchanges, and emoji-mediated emotional expression that more closely approximated the relational quality of face-to-face conversation.

The organizational consequences of this 'shadow infrastructure' are ambiguous and deserve careful analytical attention. On the positive side, informal messaging groups appear to function as genuine efficiency enhancers, enabling rapid micro-coordination that would be impossibly cumbersome through formal digital channels. They also appear to support forms of horizontal collaboration and social cohesion that are not adequately sustained by formal communication systems. Several department heads noted that inter-departmental messaging groups had emerged spontaneously among colleagues who had previously had limited direct contact, generating a degree of organizational social capital that had tangible benefits for collaborative problem-solving.

On the negative side, however, the migration of substantive organizational communication to private, officially unmonitored channels creates significant accountability and governance risks. Decisions made in WhatsApp groups leave no auditable institutional record; information shared informally may not reach all relevant parties (particularly those who are not group members); and the management of sensitive personal data — concerning citizens, colleagues, or pending administrative decisions — through unencrypted or inadequately governed applications raises serious data protection concerns. Several senior managers expressed anxiety about their inability to supervise organizational communication conducted through channels over which they had no institutional authority, describing a form of organizational opacity that digitalization had paradoxically deepened rather than reduced.

This finding connects to a broader theoretical issue raised by [Mergel \(2016\)](#) concerning the governance of informal digital communication in public organizations. When the officially provided digital infrastructure is inadequate to serve employees' communication needs — whether in terms of speed, accessibility, or relational quality — the rational organizational response is to supplement it with informal tools. But the emergence of this supplementation constitutes, in effect, an institutionalization of organizational practice outside the boundaries of institutional governance. Addressing this dynamic requires not punitive responses but intelligent institutional design: either improving official channels to meet the legitimate needs currently served by informal tools, or developing governance frameworks for the responsible use of informal channels that are pragmatic enough to accommodate the organizational realities they serve.

4.4. Resistance to Change: Generational and Cultural Dimensions

A consistent theme across all three case municipalities was the role of resistance to digitalization among employees with long organizational tenures and limited prior digital experience. This resistance was expressed in a range of behavioural forms, from active non-compliance (continuing to use paper processes in parallel with mandatory digital workflows), through strategic incompetence (deliberately underperforming digital tasks to sustain demand for continued paper-based processes), to authentic anxiety about the implications of digital communication for established working routines, social relationships, and professional identities.

The psychological dimensions of this resistance were complex and should not be reduced to simple technophobia. Many long-serving employees had invested substantial portions of their professional identities in mastery of paper-based administrative systems — in knowing precisely which forms to use, which colleagues to consult, which informal procedures would most effectively advance a case through the bureaucratic process. Digitalization threatened not merely their technical competence but their organizational social capital: the networks of informal knowledge and interpersonal trust that had made them effective professionals. Several informants in this category described the introduction of digital systems not as an improvement to their working conditions but as an assault on organizational knowledge that had been accumulated over decades and was not adequately valued or preserved in the transition.

This dimension of digital transformation resistance has implications for change management strategy. Training programs that focus exclusively on technical skill transfer — how to use the DMS, how to navigate the intranet portal — are insufficient to address resistance rooted in professional identity threat and social capital loss. Effective transition support must also attend to the recognition and valuation of tacit

organizational knowledge, the creation of peer learning communities that leverage senior employees' contextual expertise while introducing new digital competencies, and explicit acknowledgment of the genuine losses — in autonomy, social network, and sense of mastery — that digital transformation imposes on experienced public servants.

4.5. Transparency, Surveillance, and the Contested Politics of Digital Monitoring

A dimension of digital internal communication transformation that generated considerable discussion among informants, particularly at the management level, was the relationship between the documentation capacities of digital systems and the potential for enhanced organizational surveillance. In all three municipalities, senior managers and department heads were aware that digital communication systems created detailed, searchable records of who had communicated what, when, and with whom — records that could, in principle, be used to monitor employee behaviour, assess performance, and investigate alleged misconduct.

Attitudes toward this monitoring potential were sharply divided along hierarchical lines. Senior managers tended to frame digital documentation as a neutral transparency enhancement — facilitating accountability and enabling evidence-based performance assessment. Middle managers and frontline officers, by contrast, were significantly more likely to describe digital monitoring as a form of micromanagement that constrained professional autonomy, increased anxiety, and undermined the psychological safety required for effective organizational communication. Several described deliberately altering their communication behaviour in response to perceived monitoring: avoiding written expression of concerns or dissent, using informal messaging channels precisely because of their non-institutional character, or reverting to verbal communication for matters they preferred to keep off the official record.

This finding points toward a structural tension at the heart of administrative digitalization that has received insufficient attention in the policy literature. The same digital properties that make internal communication more transparent and accountable from an institutional governance perspective — its searchability, its permanence, its auditability — make it more psychologically constrained and strategically managed from an employee perspective. The net effect may be organizational communication that is simultaneously more formally documented and less substantively honest: a digital Potemkin village of procedural compliance concealing a parallel world of informal communication in which genuine organizational dynamics are actually negotiated.

5. Conclusions and Implications

This study has examined the transformation of internal communication in Serbian municipal administrations through the lens of digitalization, addressing both formal and informal dimensions of this transformation and attending to the perspectives of employees at multiple organizational levels. The findings support a fundamentally ambivalent assessment of digital communication transformation in public administration: digitalization simultaneously enhances and degrades organizational communication quality, in ways that depend critically on the degree of fit between digital tools and organizational communication needs, the management of informal digital communication practices, the psychological dimensions of employee adaptation to new communicative environments, and the broader institutional and cultural contexts in which digital tools are embedded.

Three overarching conclusions emerge from this analysis. First, the transformation of internal communication through digitalization is not primarily a technical phenomenon but an organizational and social one. The introduction of digital tools is mediated by pre-existing hierarchical structures, departmental cultures, and interpersonal trust relationships that both shape how technologies are used and are themselves reshaped by technological adoption. Change management strategies that attend exclusively to technical training and system implementation, without addressing the organizational social dynamics of digital transformation, are likely to produce sub-optimal outcomes.

Second, the emergence of informal consumer messaging applications as de facto organizational communication infrastructure represents a governance challenge that warrants urgent policy attention. The current situation — in which significant organizational communication occurs in spaces outside the formal institutional visibility of management — carries risks for accountability, data protection, and organizational equity that outweigh the efficiency advantages of informal digital channels. Municipal administrations should either invest in improving official communication platforms to match the usability characteristics that draw employees to consumer applications, or develop transparent, proportionate governance frameworks for the responsible institutional use of those applications.

Third, digitalization's impact on organizational hierarchy and professional identity requires more nuanced handling than current reform programs typically provide. The bypassing of middle management, the documentation of previously informal communication, and the depreciation of tacit knowledge capital all produce distributional consequences — winners and losers — within organizational systems. Effective and equitable digital transformation requires explicit attention to these consequences and deliberate interventions to support those most adversely affected.

Future research should extend this analysis to larger and more geographically diverse samples of municipal administrations, employ longitudinal methods to capture the temporal dynamics of digital adoption and resistance, and develop comparative frameworks that situate the Serbian case in relation to other post-socialist and Southern European administrative contexts. Particular attention should be paid to the long-term organizational learning consequences of the informal-formal communication gap identified in this study — a gap whose implications for institutional knowledge management and democratic governance in local administration have yet to be fully appreciated.

References

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science, 32*(5), 554-571. <https://doi.org/10.1287/mnsc.32.5.554>
- Fountain, J. E. (2001). *Building the virtual state: Information technology and institutional change*. Washington, DC, USA: Brookings Institution Press.
- Janowski, T. (2015). Digital government evolution: From transformation to contextualization. *Government Information Quarterly, 32*(3), 221-236. <https://doi.org/10.1016/j.giq.2015.07.001>
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations*. New York, NY, USA: John Wiley & Sons.
- Mergel, I. (2016). Social media institutionalization in the US federal government. *Government Information Quarterly, 33*(1), 142-148. <https://doi.org/10.1016/j.giq.2015.09.002>
- Petrović, N., & Čisar, S. M. (2019). E-government development in Serbia in the context of European Union accession. *Transylvanian Review of Administrative Sciences, 58E*, 94-111.
- Yin, R. K. (2018). *Case study research and applications: Design and methods*. Thousand Oaks, CA, USA: SAGE Publications.