

# Digitalization and collaborative governance in small municipalities: performance gains or administrative overload?

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## Abstract

**Purpose** – Small municipalities face a fundamental governance puzzle: the collaborative arrangements and digital platforms designed to overcome their resource constraints may simultaneously generate the overload that undermines them. This study examines how governance structure and digitalization jointly shape performance in small municipalities through an analysis of a digitally mediated one-stop shop system in the Friuli Venezia Giulia Region, Italy.

**Design/methodology/approach** – A survey of SUAP managers in 153 municipalities with populations under 5,000 was conducted. Data were collected between September and November 2025, yielding 124 valid responses.

**Findings** – Associated governance enables both network and digital performance, yet it can simultaneously weaken the performance benefits of horizontal collaboration, revealing a governance overload dynamic. Digitalization alone does not improve performance; it must be embedded in appropriate governance arrangements.

**Originality/value** – The study shows that governance formalization and digitalization carry inherent boundary conditions in resource-constrained settings. This offers a transferable governance insight for small public organizations facing mandated digital reforms.

**Keywords** One-shop stop, Stakeholders, Local government, Interdependencies, SUAP

**Paper type** Research article

## 1. Introduction

Small municipalities, typically defined as local government units with less than 5,000 inhabitants, still constitute the majority of local public entities worldwide, yet are understudied (UN, 2025). Facing staffing and financial constraints (Cristofaro *et al.*, 2025), they are asked to adopt digital platforms and build collaborative governance arrangements to compensate (Catlaw and Stout, 2016). The central problem this paper addresses is that both solutions may fail: digitalization may remain symbolic and collaboration can generate coordination overload. Understanding when and why these failures occur is both theoretically urgent and practically consequential.

At the core of these issues lies an unresolved debate about technology in public sector management: should digitalization be conceived as a neutral, efficiency-enhancing tool, or as a force reshaping governance by reconfiguring authority, decision rights, and interdependencies among actors (Garlatti *et al.*, 2025; Goldsmith and Eggers, 2004; Iacuzzi and Cagnina, 2024; Koliba *et al.*, 2017)? Recent evidence cautions against technological determinism, showing that local government digitalization is conditioned by institutional and operational contexts, rather than following a linear trajectory (Bisogno *et al.*, 2025).



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In parallel, network-based literature shows that what matters is not whether municipalities collaborate, but how they do it (Cristofaro *et al.*, 2025), specifically the rules, authority flows, and resource dependencies that structure those relationships (Cisi and Sansalvadore, 2022; Koliba *et al.*, 2017; Long *et al.*, 2023; Silva *et al.*, 2023). How digitalization interacts with these governance arrangements to shape performance remains an open question (Bisogno *et al.*, 2025).

These issues are particularly acute for small municipalities: they lack the administrative capacity and financial resources of larger counterparts. Yet, they often face more stringent digitalization mandates, making the question of whether digital network solutions work for them both theoretically consequential and practically urgent.

Digitally enabled one-stop shops, platforms that consolidate administrative procedures across multiple authorities, are a setting in which these dynamics are most explicitly intertwined (Scholta *et al.*, 2019). Within them, digital infrastructures may reshape governance by redistributing decision rights through standardized procedures, constraining discretion through embedded workflows, reinforcing or suppressing authority, and altering accountability by making actions traceable (Koliba *et al.*, 2017). This suggests treating such platforms not simply as service-integration tools, but as institutional arenas in which digitalization and network governance interact to shape authority flows and performance.

Building on these insights, the central research question of this research is: how do digital network solutions impact performance in small municipalities? This question is operationalized through six hypotheses that link authority flows in networks, digitalization levels, and associated management structures, allowing assessing whether and how performance is achieved or frustrated across different governance configurations.

To examine these dynamics empirically, this study adopts a theoretically informed case study of the Italian Sportello Unico per le Attività Produttive (SUAP), a digitally mediated one-stop shop that integrates digital infrastructures, multi-actor coordination, and local governance. As the single digital access point for businesses managing administrative procedures, SUAP centralizes interactions among municipalities and competent authorities within a unified platform. The platform's dual character, horizontal collaboration across municipalities alongside vertical standardization imposed by higher levels, makes it a theoretically productive setting. The analysis focuses on the Friuli Venezia Giulia Region, an early adopter of the system, and draws on a survey of 124 local managers in municipalities with fewer than 5,000 inhabitants.

Conceptually, the analysis extends the authority-flow typology of Koliba *et al.* (2017) to digitally mediated one-stop shop settings, integrating it with the micro-municipal governance framework of Cristofaro *et al.* (2025). Empirically, it offers the first analysis of performance implications of governance configurations in small Italian municipalities managing digitalized business-permit procedures.

The paper is organized as follows: the Literature Overview introduces the conceptual framework and main issues of the study; the subsequent section outlines the methodology, describing the research design, data collection methods, and analytical approach. Findings are then presented, while the discussion section interprets the empirical results. Finally, the conclusion summarizes the main results, reflects on their theoretical and practical implications, and suggests directions for future research.

## 2. Literature overview: main issues and conceptual framework

This study integrates three strands of literature. First, one-stop shops as process management tools that coordinate multi-actor procedures (Ongaro, 2004; Scholta *et al.*, 2019). Second, network governance and its logics of collaboration, hierarchy, and competition (Klijn and Koppenjan, 2012; Koliba *et al.*, 2017). Third, actors and interdependencies in small municipal settings, where resource dependencies and digital infrastructures may shape governance capacity (Catlaw and Stout, 2016; Cristofaro *et al.*, 2025; Bisogno *et al.*, 2025).

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### 2.1 One-stop shops as process management tools

The concept of the one-stop shop has become an enduring feature of public sector reform (Castelnovo *et al.*, 2016) reinvigorated by the introduction of digital solutions (Spagnuolo, 2022).

From a management perspective, it represents a structural reconfiguration of public service delivery, aimed at reorienting fragmented and producer-centric bureaucracies around the needs of users (Ongaro, 2004). A digital one-stop shop is a centralized platform that provides a single access point to services and information delivered by multiple public authorities. Instead of requiring users to interact separately with individual departments, a digital one-stop shop integrates the front-end interface, allowing applications and communications to be submitted through a unified channel. While the front-end may be integrated, back-end systems often remain organizationally distinct, with decision-making authority retained by competent administrations (Scholta *et al.*, 2019). One-stop shops' defining feature lies in the organizational and managerial integration required to coordinate legally autonomous actors (Scholta *et al.*, 2019; West, 2004). They are, therefore, instruments of process integration and simplification (Ongaro, 2004), designed to reduce administrative burdens (Garlatti *et al.*, 2023), by restructuring inter-organizational workflows of administrative procedures that involve multiple public authorities.

From a governance perspective, one-stop shops operate within multi-actor institutional environments in which authority, responsibility, and control are distributed across organizational boundaries (Klijn and Koppenjan, 2012). Rather than replacing sectoral administrations, they function as coordinating hubs within governance networks (Goldsmith and Eggers, 2004). Participating public entities retain substantive regulatory powers, while the one-stop shop is assigned responsibility for managing the overall procedure. Government agencies thus occupy dual roles: they remain principals in their regulatory domains, but act within a coordinated procedural framework structured around shared rules and timelines, reflecting the multi-level and networked nature of contemporary public governance (Piattoni, 2010; Silva *et al.*, 2023). Implementing such arrangements requires adopting a process management approach (Bouckaert and Halachmi, 1995), whereby administrative procedures are treated as end-to-end processes cutting. A designated process owner is made responsible for coordinating actors, monitoring deadlines, and ensuring procedural coherence. Control mechanisms are therefore hybrid in character: hierarchical elements derive from statutory provisions assigning coordinating authority to the one-stop shop (Bouckaert and Halachmi, 1995); horizontal elements stem from negotiated interactions and collaborative management among participating entities (Haug, 2022). The effectiveness of such arrangements thus depends on formal mandates and on relational dynamics and network governance capacity (Koliba *et al.*, 2017). Critically for the present study, digital platforms are not neutral conduits within these arrangements: they facilitate and structure coordination across organizations and levels of government (Scholta *et al.*, 2019). By embedding rules and standardizing workflows, they reconfigure the distribution of discretion, narrowing what individual actors can decide unilaterally and making compliance traceable by higher-level authorities.

In the SUAP context, mandated digitalization meets low administrative capacity: small municipalities may adopt digital tools without the organizational resources to use them effectively. This creates a testable deviation from the standard positive digitalization–performance relationship.

Therefore, the hypothesis to be tested related to one-stop shops is:

- H1. The greater the digitalization level, the better the digitalization-related performance in small municipalities (Spagnuolo, 2022).

### 2.2 Networks and governance logics

Local governments increasingly operate within governance networks, formal and informal exchanges among multiple stakeholders aimed at addressing complex challenges and improving performance (Muraoka and Avellaneda, 2021; Silva *et al.*, 2023).

Although local governance networks are widely recognized as effective mechanisms for policy coordination and democratic engagement, the internal dynamics remain insufficiently explored (Silva *et al.*, 2023). For small municipalities, the need for such networks is especially acute: limited scale and growing decentralization intensify reliance on collaborative arrangements to build capacity and sustain services (Cristofaro *et al.*, 2025; Haug, 2022; Long *et al.*, 2023).

The implementation of institutional arrangements such as one-stop shops exemplifies this networked logic, while introducing vertical governance constraints (Ongaro, 2004; Noda, 2023).

On the horizontal dimension, coordination among interdependent actors who collectively address complex problems that exceed the capacity of any single organization (Klijn, 2008) is often achieved through “associative solutions”, including inter-municipal associations, shared administrative offices, and joint service delivery arrangements (Previtali, 2015). On the one hand, inter-municipal cooperation is especially critical for small municipalities, enabling them to reduce administrative costs, pool scarce resources, and compensate for limited technical and organizational capacity (Giacomini *et al.*, 2018); on the other hand, one-stop shop arrangements allow for horizontal coordination across multiple public authorities with different competencies (Ongaro, 2004). Cooperation and coordination outcomes emerge from ongoing interactions, negotiations, and resource exchanges among multiple actors rather than unilaterally (Klijn and Koppenjan, 2012). The trend towards horizontal governance is aided by ICTs and increasing specialization (Castells, 2000). Associated management arrangements may also facilitate the adoption and effective use of digital infrastructures by allowing municipalities to pool technical expertise, share administrative capacities, and coordinate implementation processes across organizations (Goldsmith and Eggers, 2004). Associated governance, the formal sharing of administrative functions across municipalities, is characterized by several analytically distinct dimensions (Bel and Warner, 2015; Giacomini *et al.*, 2018; Silva *et al.*, 2018), such as: (1) degree of formalization (explicit agreements and shared protocols governing inter-municipal relations); (2) centralization of decision-making (consequential choices made jointly rather than autonomously); (3) procedural layering (accumulated coordination steps and approval requirements); and (4) shared accountability (distributed responsibility for outcomes across organizations). These dimensions shape performance through coordination costs (rising with formalization and procedural layering), decision latency (increasing when multi-party approval is required), and managerial control (diluted when shared accountability diffuses individual steering capacity). For small municipalities specifically, formal integration compensates for individual resource deficits, but excessive procedural layering risks governance overload.

At the same time, one-stop shops operate within vertical governance structures requiring compliance with standards set at higher levels (Klijn, 2008; Piattoni, 2010). These impose uniformity but generate tensions with local informal practices, making the balance between horizontal collaboration and vertical standardization a central governance challenge (Righettini and Martin, 2013; Tosi, 2009).

Taken together, these dynamics suggest that both the level of digitalization and the presence of associated management arrangements influence the performance of small municipalities. The SUAP setting combines conditions rarely studied together: high procedural formalization, low administrative capacity, and mandated digitalization alongside informal coordination practices. Associated governance may compensate for individual capacity deficits in small municipalities, but may also generate coordination costs and decision latency that erode those benefits as formalization deepens.

On this basis, the following hypotheses are developed:

*H2.* Associated governance positively influences network-related performance in small municipalities (Giacomini *et al.*, 2018; Klijn and Koppenjan, 2012).

- H3. Associated governance positively influences digitalization-related performance in small municipalities (Castells, 2000; Goldsmith and Eggers, 2004).
- H4. Associated governance positively moderates the impact of digitalization levels on digitalization-related performance in small municipalities (Castells, 2000; Goldsmith and Eggers, 2004).

### 2.3 Actors and interdependencies in local governance

The dynamics of small municipal administration can be examined through the network-based framework developed by Cristofaro *et al.* (2025), which conceptualizes governance as a set of structured interactions among interdependent actors. The SUAP context includes diverse actors: municipalities acting as administrators, entrepreneurs as service users, sectoral agencies involved in authorization processes, and digital platform providers that enable procedural coordination (Ongaro, 2004; Spagnuolo, 2022).

Interactions among these nodes are defined by varying degrees of interdependence and are characterized by relationship drivers, directional effects (positive, negative, or neutral), and, crucially, the flow of authority that governs compliance and resource exchange (Cristofaro *et al.*, 2025). Following Koliba *et al.* (2017), these authority flows follow four ideal types that coexist within governance networks and often overlap.

First, command-and-control relationships reflect hierarchical authority, where compliance is enforced through formal rules and directives issued by a principal to an agent. In small municipalities, this typically operates through national or regional regulations governing SUAP procedures.

Second, concession-and-compromise reflects negotiated interactions among actors with partially overlapping authority and resources. Rather than relying on hierarchical enforcement, this mode of authority is based on bargaining, incentives, and reciprocal concessions. Within SUAP networks, such dynamics are evident in inter-municipal coordination arrangements or negotiations between municipalities and sectoral agencies, where agreement is achieved through consensus-building rather than formal command.

Third, cooperation-and-collaboration are grounded in mutual trust and shared norms, with compliance arising from social obligations rather than formal authority. These peer-based relationships are particularly salient in small municipalities, where repeated interactions, dense social ties, and institutional proximity foster collaborative practices that reduce transaction costs, limit opportunistic behavior, and support problem-solving through incremental learning (Klijn and Koppenjan, 2012).

Finally, competition reflects dynamics of resource scarcity and self-preservation, in which actors seek advantage through performance, innovation, or efficiency. Although less dominant in traditional municipal administration, competitive mechanisms may surface in SUAP networks through market-oriented tools, such as contracting out digital services or benchmarking administrative performance across municipalities. In small-scale contexts, competition can act as a stimulus for innovation, particularly when digital platforms expose differences in administrative capacity and service quality.

Taken together, these authority flows highlight the hybrid and often tension-prone nature of governance in small municipal settings, which can impact resource sharing, compliance with higher-level standards, and improved administrative performance (Cristofaro *et al.*, 2025; Ongaro, 2004). In resource-sharing arrangements typical of small municipalities, cooperation-and-collaboration, grounded in mutual trust and reciprocity, are essential for pooling scarce administrative capacities and sustaining day-to-day operations. These relational modes underpin inter-municipal cooperation and enable flexible problem-solving within local governance networks. By contrast, the mandates driving the adoption of centralized digital platforms, such as those underpinning one-stop shop systems, often materialize through command-and-control flows, reflecting top-down directives imposed by national or regional

entities, emphasizing hierarchical authority (Castelnuovo *et al.*, 2016; Righettini and Martin, 2013). Digital platforms standardize procedures redistributing decision rights, embed rules in automated workflows constraining discretion, and generate audit trails enhancing traceability and accountability, all of which reinforce hierarchical authority. For small municipalities, this tension is especially consequential: the same platform that imposes hierarchical accountability also constrains the informal, trust-based coordination on which resource-poor actors depend.

Hence, two opposite hypotheses emerge:

- H5a. Non-hierarchical flows of authority positively influence network-related performance in small municipalities (Cristofaro *et al.*, 2025; Ongaro, 2004).
- H5b. Non-hierarchical flows of authority negatively influence network-related performance in small municipalities (Castelnuovo *et al.*, 2016; Righettini and Martin, 2013).

Therefore, the performance of small municipal networks depends on their ability to balance these contrasting governance logics. Governance arrangements that enhance coordination among municipalities, such as intermunicipal cooperation (Giacomini *et al.*, 2018), may play a crucial role in translating network interdependencies into improved network performance. Whether associated governance amplifies or dampens the benefits of non-hierarchical interdependencies is an open question. In small municipalities the outcome is expected to be conditional: when formalization provides a shared infrastructure that compensates for individual capacity deficits, it may strengthen collaboration; when procedural layering generates coordination costs and decision latency that exceed the capacity of resource-constrained organizations, it may dampen those benefits.

This leads to a last hypothesis:

- H6. Associated governance positively moderates the impact of network interdependencies on network-related performance in small municipalities (Giacomini *et al.*, 2018; Klijn and Koppenjan, 2012).

Figure 1 illustrates the hypotheses above and the conceptual framework guiding this study.

**3. Methodology**

This study adopts a quantitative research design to examine how governance configurations, network interdependencies, and levels of digitalization influence perceived performance in

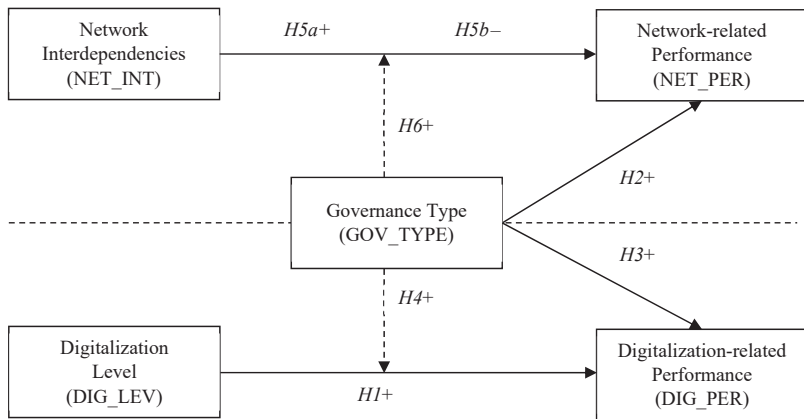


Figure 1. The conceptual models. Source: Authors' own work

SUAP systems. The empirical analysis focuses on small municipalities in the FVG region, characterized by high administrative fragmentation and significant digitalization efforts.

The research design unfolds in three main steps. First, primary data were collected through a structured questionnaire administered to municipal managers responsible for SUAP procedures, to capture information on governance arrangements, inter-organizational authority flows, digitalization levels, and perceived performance outcomes. Second, exploratory factor analyses (EFAs) were conducted to validate the measurement structure of the key performance constructs and assess internal consistency. Third, OLS regression models were estimated to test the hypothesized relationships between governance variables and performance outcomes, as well as the moderating role of governance type.

### 3.1 Contextual background: the evolution of SUAPs in the FVG region

The Italian SUAP provides a suitable empirical setting to examine these governance dynamics. Introduced in 1998 (Legislative Decree 112/1998; Presidential Decree 447/1998), SUAPs were designed to consolidate procedures concerning the establishment, modification, and closure of productive activities within a single access point. The reform marked a departure from a fragmented system in which responsibilities were dispersed across multiple authorities and varied among municipalities, generating significant bureaucratic complexity and transaction costs for firms (Castelnovo *et al.*, 2016).

In line with this governance logic, SUAPs are legally mandated access points for businesses, yet their organizational configuration reflects institutional flexibility. Municipalities are responsible for their establishment but may operate individually, jointly, or delegate management to Chambers of Commerce or other public entities. Subsequent reforms introduced accreditation requirements and mandatory digital standards, requiring non-compliant municipalities to transfer management to Chambers of Commerce. Consequently, SUAPs operate within a nationally standardized legal framework, while exhibiting heterogeneous governance configurations at the local level.

Functionally, the SUAP office acts as the process owner: it receives applications, verifies completeness, transmits documentation to competent authorities, monitors procedural deadlines, and communicates outcomes. Although decisions remain with sectoral administrations, SUAPs are endowed with formal coordination and enforcement instruments, enabling simultaneous interaction among relevant authorities to resolve conflicts and prevent procedural deadlock. SUAPs institutionalize both hierarchical coordination and horizontal collaboration within inter-organizational networks.

The digital evolution of SUAPs further highlights their complexity. The 2008–2010 reform, implemented in connection with the EU Services Directive, mandated electronic document exchange and established the national portal “*impresainungiorno.gov.it*” as the single digital access point. However, development stalled at digitization, i.e. shifting processes from analog to digital forms, rather than achieving full digitalization, that is the use of digital technologies to change processes and create value (Iacuzzi and Cagnina, 2024). More recent measures in 2021 and 2022, under the Next Generation EU National Recovery and Resilience Plan (PNRR), have strengthened interoperability, traceability, and full procedural digitalization, accelerating the transition from e-mail-based procedures to integrated digital ecosystems.

At the regional level, these dynamics have produced differentiated implementation paths. Focusing on a single region ensures institutional and regulatory consistency in governance configurations. FVG represents a suitable case for studying digital transformation in the SUAP system as one of the most technologically advanced areas in North-Eastern Italy (ISTAT, 2023) that has actively implemented digital tools to streamline procedures and improve service accessibility, offering valuable insights into the modernization of local public administration. Early coordination initiatives since 2001 were followed by the activation of a regional SUAP portal in 2011, now used by 91% of municipalities. The portal supports both front-office

interactions, such as applications and communications, and back-office activities, including coordination with third parties. It was designed to comply with standards of usability, accessibility, security, and interoperability with existing IT systems and national and EU regulations. However, the small size and limited administrative capacity of many municipalities initially constrained interoperability and digital integration. In FVG 153 of 215 municipalities have fewer than 5,000 inhabitants and often lack the resources and expertise to adopt innovative solutions. In 2017, an agreement between the FVG Region and the Chambers of Commerce began integrating the regional portal with the national platform “*impresainungiorno.gov.it*”, further standardizing processes and simplifying business–administration interactions, reinforced under PNRR in 2021–2022.

### 3.2 Sample and data collection

This study administered a questionnaire to managers responsible for SUAP procedures in each municipality. The survey was structured into five sections. Part 1 collected general information about the municipality and the respondent’s role. Part 2 focused on the organizational structure of the SUAP, its interdependencies, and governance practices. Part 3 addressed relationships with other institutions involved in service provision. Part 4 explored the use and characteristics of IT systems supporting SUAP operations. Finally, Part 5 included questions on overall perceptions, challenges, and suggestions for improvement.

The final sample comprises all 153 small municipalities in the FVG region, each with fewer than 5,000 inhabitants. These municipalities often face structural constraints, including limited administrative capacity, scarce financial resources, and reduced access to specialized technical expertise, while also required to comply with national digitalization mandates and provide streamlined, user-oriented services. This combination of institutional pressure and organizational vulnerability makes them a relevant setting for examining how digital transformation unfolds in local public administration.

The questionnaire, developed in Italian, was drafted following [Tosi \(2009\)](#) and reviewed with the manager responsible for the FVG regional portal for one-stop shops for productive activities and residential building during a meeting in August 2025. It was subsequently piloted with 10 respondents, resulting in minor revisions based on their feedback.

Data collection was conducted between September and November 2025 using Google Forms. Following an initial telephone contact, respondents were recontacted up to three times. A total of 125 replies were received, with a response rate of 81.70%. After removing one incomplete submission, 124 valid responses remained (see [Table 1](#)). Each questionnaire included a brief description of the study’s purpose, assured respondents of anonymity, and confirmed that data would be used only in aggregate form.

### 3.3 Measures and analysis

In this study, NET\_PER, representing performance from SUAP networking activities, served as the dependent variable in models 1–3 testing [Hypotheses 5, 2, and 6](#), while DIG\_PER, capturing outcomes from SUAP digitalization, served as the dependent variable in models 4–6 testing [Hypotheses 1, 3, and 4](#).

Prior studies show that perceived performance reflects how stakeholders evaluate effectiveness, service quality, responsiveness, and institutional functioning ([Jung and Kim, 2014](#); [Van Ryzin and Charbonneau, 2010](#)). Performance in the public sector is not only an objective output construct but also a socially interpreted and relational phenomenon and relying exclusively on formal indicators is limited and risky, as many relevant dimensions are difficult to quantify and may not be adequately reflected in administrative databases ([De Bruijn, 2002](#)). In the SUAP context, perceived measures capture respondents’ informed evaluations of improvements in coordination, transparency, internal efficiency, and service management resulting from networking and digitalization processes. However, they should not be interpreted as direct measures of objective administrative outcomes. This limitation is addressed in the Conclusion.

**Table 1.** Profile of the sampled municipalities ( $n = 124$ )

Province	Population		SUAP governance		Years of SUAP digitalization		N. Of SUAP procedures per year		
Gorizia	11.29%	0–999	33.87%	Associated	83.87%	<10 YEARS	20.97%	0–100	12.90%
Pordenone	17.74%	1,000–1,999	31.45%	Delegated*	0.81%	10 YEARS	14.52%	101–250	7.26%
Udine	69.35%	2,000–2,999	21.77%	Autonomous	15.32%	5 YEARS	52.42%	251–500	24.19%
Trieste	1.61%	3,000–3,999	8.87%			1 YEAR	8.06%	501–1,000	25.81%
		4,000–4,999	4.03%			N/A	4.03%	>1,000	29.84%

**Note(s):** \*Delegated indicates that SUAP management is fully assigned and managed by another institution (e.g. Chambers of Commerce). It is treated as associated in subsequent analyses

**Source(s):** Authors' own work

The two constructs NET\_PER and DIG\_PER were assessed using measures adapted from the 12-item scale originally developed by Tosi (2009) to appreciate the perceived performance of one-stop shops. All items were administered using a 5-point Likert scale, ranging from “strongly disagree” (scored as 1) to “strongly agree” (scored as 5). EFAs, incorporating the varimax option, were conducted to assess the underlying factor structure.

NET\_PER was represented as a second-order construct with 11 dimensions (cost savings, faster case handling, redundancy removal, specialized staff, staff optimization, easy access, better coordination, stronger user engagement, better service monitoring, increased transparency, improved knowledge sharing) (KMO = 0.800; Sig. = 0.000). Internal consistency reliability was examined, yielding a Cronbach’s alpha of 0.934. DIG\_PER was modeled as an aggregate second-order construct composed of 5 dimensions (faster case handling, redundancy removal, staff optimization, better service monitoring, increased transparency) (KMO = 0.860; Sig. = 0.000). Reliability analysis produced a Cronbach’s alpha of 0.890.

The key explanatory variables are grounded in network governance theory, which conceptualizes public administration as structured by patterns of interdependence among actors and by different flows of authority across ties (Cristofaro *et al.*, 2025; Klijn and Koppenjan, 2012; Koliba *et al.*, 2017). This approach emphasizes that governance outcomes depend not only on formal arrangements but also on the direction, intensity, and normative foundations of interdependencies among actors.

GOV\_TYPE captures the structural dimension of inter-organizational interdependence within which the SUAP function is delivered. It is operationalized as a dummy variable coded 1 for associated governance arrangements, i.e. where municipalities formally share the SUAP function through inter-municipal collaboration and are therefore subject to higher formalization, more centralized joint decision-making, greater procedural layering, and shared accountability, and coded 0 for autonomous governance, i.e. where a single municipality manages SUAP activities independently. Associated governance represents a higher degree of formalized inter-municipal interdependence and interaction complexity, as municipalities rely on shared resources, joint decision-making mechanisms, and coordinated administrative processes through which policy outcomes emerge from interactions across multiple actors and organizations. In contrast, autonomous governance reflects lower structural interdependence, with coordination occurring primarily within the boundaries of a single municipal organization (Klijn and Koppenjan, 2012).

NET\_INT captures the qualitative nature of network interdependencies at the SUAP level by focusing on the prevailing flow of authority across ties (Cristofaro *et al.*, 2025; Koliba *et al.*, 2017). Specifically, it synthesizes, the four types of authority flows (command-and-control relationships, concession-and-compromise, cooperation-and-collaboration, and competition) and distinguishes hierarchical forms (command-and-control, coded as (1) from non-hierarchical ones (concession-and-compromise, cooperation-and-collaboration, and competition, coded as (2)). This operationalization reflects the underlying governance dynamics by differentiating between principal-agent configurations, where authority is vertically structured and compliance is expected, and more horizontal, trust-based, negotiated, or market-oriented interactions, where authority is distributed and coordination emerges through reciprocity, bargaining, or competitive pressures (Cristofaro *et al.*, 2025). However, as a relational variable, NET\_INT is conceptually independent from GOV\_TYPE: a municipality in an associated arrangement may nonetheless experience predominantly hierarchical authority flows at SUAP level, if the network is governed by top-down directives, or predominantly non-hierarchical flows if it operates through consensus and mutual adjustment. This distinction is critical for interpreting the interaction between the two variables.

DIG\_LEV represents the level of SUAP digitalization, coded as 1 when no digitalization is present, 2 when digitalization is available for simple operations, and 3 when it is available for both simple and complex operations (Tosi, 2009). Control variables were included to account for contextual heterogeneity across municipalities. These variables comprised the provinces

within the FVG region, the size of each municipality measured in number of inhabitants, the number of years since SUAP digitalization was implemented, and the number of SUAP procedures carried out in 2024.

Table 2 reports the results for the main variables included in the model. SUAP activities are mostly dealt within associated setups (84.68%), while autonomous management represents a smaller share of the sample (15.32%). NET\_INT are largely non-hierarchical, with cooperation-and-collaboration being the most prevalent governance mode (40.32%), while command-and-control arrangements account for one-third of cases. Levels of digitalization are generally low. Over half of the organizations report no digitalization, and most of the remainder rely on digital tools limited to simple operations. NET\_PER is generally moderate to high, with the strongest evaluations reported for faster case handling (average score 3.91) and access to specialized staff (average score 3.78), indicating that networks are primarily valued for efficiency gains and expertise. DIG\_PER are also positive, with transparency (average score 4.15) and faster case handling (average score 4.00) receiving the strongest evaluations. Overall, the sample reflects predominantly associated governance structures characterized by cooperation-and-collaboration interdependencies and low digital maturity, pointing to a potential gap between governance complexity and digital capability.

**Table 2.** Response rates for primary model variables ( $n = 124$ )

Variables	Items							%
GOV_TYPE (Klijn and Koppenjan, 2012)	Associated							84.68%
	Autonomous							15.32%
NET_INT (Cristofaro et al., 2025; Koliba et al., 2017)	Command-and-control							33.06%
	Concession-and-compromise							0.00%
	Cooperation-and-collaboration							40.32%
	Competition							26.61%
DIG_LEV (Tosi, 2009)	No digitalization is present							51.61%
	Digitalization is available for simple operations							46.77%
	Digitalization is available for both simple and complex operations							1.61%
		Likert scale (1–5)	M	1	2	3	4	5
NET_PER (Tosi, 2009)	Cost savings	3.68	8.87%	1.61%	40.32%	11.29%	37.90%	
	Faster case handling	3.91	6.45%	1.61%	18.55%	41.13%	32.26%	
	Redundancy removal	3.47	5.65%	3.23%	19.19%	22.58%	19.35%	
	Specialized staff	3.78	3.23%	6.45%	18.55%	52.42%	19.35%	
	Staff optimization	3.62	9.68%	2.42%	32.26%	27.42%	28.23%	
	Easy access	3.56	0.81%	8.87%	45.97%	21.77%	22.58%	
	Better coordination	3.75	5.65%	2.42%	36.29%	22.58%	33.06%	
	Stronger user engagement	3.28	1.61%	11.29%	56.45%	18.55%	12.10%	
	Better service monitoring	3.35	12.10%	6.45%	38.71%	19.35%	23.39%	
	Increased transparency	3.74	0.81%	5.65%	36.29%	33.06%	24.19%	
DIG_PER (Tosi, 2009)	Improved knowledge sharing	3.48	6.45%	2.42%	45.97%	27.42%	17.74%	
	Faster case handling	4.00	0.00%	1.67%	31.67%	31.67%	35.00%	
	Redundancy removal	3.87	0.00%	5.00%	33.33%	31.67%	30.00%	
	Staff optimization	3.28	5.00%	3.33%	65.00%	11.67%	15.00%	
	Better service monitoring	3.28	16.67%	0.00%	38.33%	28.33%	16.67%	
	Increased transparency	4.15	0.00%	0.00%	40.00%	5.00%	55.00%	

**Source(s):** Authors' own work

Table 3 reports the bivariate correlations among variables. GOV\_TYPE is positively and significantly correlated with both NET\_PER and DIG\_PER, indicating that governance arrangements are closely associated with network and digital performance. GOV\_TYPE also shows a positive relationship with NET\_INT, suggesting that associated governance is linked to more flexible, participatory, and dynamic network flows. NET\_INT is negatively correlated with DIG\_LEV and DIG\_PER, suggesting that digitally advanced systems rely less on horizontal network integration and more on centralized control mechanisms. In contrast, NET\_PER is positively associated with DIG\_LEV and DIG\_PER, suggesting complementarities between network and digital performance.

Two sets of OLS regression analyses were conducted to examine the determinants of NET\_PER and DIG\_PER, as reported in Table 4. For each dependent variable, three models were estimated. Models 1–3 focus on NET\_PER, while Models 4–6 examine DIG\_PER. In each set, the baseline model includes control variables, the second model adds the main explanatory variables, and the third model introduces the interaction term to test the moderating role of GOV\_TYPE. The variance inflation factor (VIF) and tolerance were examined to assess multicollinearity among the variables in the regression models. The results showed that the VIF values for all variables are below the threshold of 5, indicating that multicollinearity is not a concern.

#### 4. Findings

Regarding network-related performance (NET\_PER), Model 1 shows that the different provinces within the FVG region, the size of each municipality, and the number of years since SUAP digitalization was implemented are negatively and significantly associated with the dependent variable, while the number of SUAP procedures exhibits a weak positive effect. In Model 2, the inclusion of governance type (GOV\_TYPE) and network interdependencies (NET\_INT) does not yield statistically significant effects for either variable. Model 3 incorporates the interaction between them to examine how governance type moderates the effect of network interdependencies on network-related performance. Consistent with the positive view of H5a, emphasized by part of the literature (Cristofaro *et al.*, 2025; Ongaro, 2004), the main effect of network interdependencies is positive and statistically significant ( $\beta = 0.777, p < 0.01$ ), indicating that non-hierarchical flows of authority are generally associated with higher network-related performance in small municipalities. Governance type itself also has a significant positive effect ( $\beta = 1.705, p < 0.001$ ), indicating that associated governance contributes positively to network-related performance. This result is consistent with previous studies (Giacomini *et al.*, 2018; Klijn and Koppenjan, 2012), thus confirming hypothesis H2. Conversely to what is stated in the literature (Giacomini *et al.*, 2018; Klijn and Koppenjan, 2012), when associated governance mechanisms are active, the expected positive influence of network interdependencies on the outcome variable is weakened or even reversed ( $\beta = -0.850, p < 0.01$ ). This suggests that, rather than reinforcing collaborative or synergistic effects within the network, in small municipalities, associated governance may introduce additional coordination demands, decision-making complexity, or institutional frictions that limit the performance advantages associated with more flexible authority flows. Accordingly, hypothesis H6 is not supported.

For digitalization-related performance (DIG\_PER), Model 4 confirms the negative and significant effects of the different provinces within the FVG region and the number of years since SUAP digitalization, while the number of SUAP procedures exhibits a positive association. In Model 5, governance type shows a positive and significant effect on digitalization-related performance ( $\beta = 1.195, p < 0.01$ ), indicating that associated governance mechanisms contribute positively to digitalization outcomes, thus confirming hypothesis H3 (Castells, 2000; Goldsmith and Eggers, 2004), whereas digitalization level (DIG\_LEV) does not have a statistically significant effect. Model 6 incorporates the interaction term between digitalization level and governance type to examine whether governance type moderates the

**Table 3.** Descriptive statistics and correlation matrix

Variables	M	Sd	1	2	3	4	5	6	7	8	9
1 PROVINCE	3.452	0.982	1.000								
2 DIM	2.177	1.119	0.097	1.000							
3 YEAR	2.496	0.929	-0.472***	-0.287**	1.000						
4 NUM_PROC	3.524	1.334	0.302**	-0.417***	-0.019	1.000					
5 GOV_TYPE	0.847	0.362	-0.101	-0.515***	0.219*	0.724***	1.000				
6 NET_INT	1.670	0.470	0.167	-0.042	0.036	0.380***	0.177*	1.000			
7 DIG_LEV	1.500	0.533	-0.031	0.068	-0.354***	-0.086	-0.021	-0.339***	1.000		
8 NET_PER	3.603	0.827	-0.512***	-0.228*	0.075	0.048	0.237**	0.022	0.236**	1.000	
9 DIG_PER	3.803	0.777	-0.592***	-0.190	0.111	0.055	0.338**	-0.420***	0.872	0.168***	1.000

**Note(s):** \*  $p$ -value<0.05; \*\*  $p$ -value<0.01; \*\*\*  $p$ -value<0.001

**Source(s):** Authors' own work

**Table 4.** Results of regression analyses on NET\_PER and DIG\_PER

Variables	NET_PER			DIG_PER		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
PROVINCE	-0.601***	-0.553***	-0.527***	-0.720***	-0.665***	-0.641***
DIM	-0.155**	-0.141**	-0.134**	-0.069	0.036	0.052
YEAR	-0.283***	-0.297***	-0.290***	-0.398***	-0.429***	-0.398***
NUM_PROC	0.095*	-0.017	-0.009	0.102*	-0.163	-0.141
GOV_TYPE		0.463	1.705***		1.195**	1.108**
NET_INT		0.085	0.777**			
NET_INT × GOV_TYPE			-0.850**			
DIG_LEV					0.214	0.229
DIG_LEV × GOV_TYPE						-0.081
Constant	6.401***	6.103***	4.982***	6.954***	6.103***	6.051***
F	19.560***	13.520***	12.950***	20.680***	20.910***	20.120***
R <sup>2</sup>	0.386	0.389	0.415	0.580	0.677	0.678
ΔR <sup>2</sup>		0.003	0.026		0.097	0.001

**Note(s):** \*  $p$ -value<0.05; \*\*  $p$ -value<0.01; \*\*\*  $p$ -value<0.001  
**Source(s):** Authors' own work

effect of the level of digitalization on digitalization results. The interaction is negative but not statistically significant ( $\beta = -0.081$ ). Consistent with the regression results, no empirical support emerges for H1 or for the moderating effect hypothesized in H4. Table 5 summarizes hypotheses' outcomes.

## 5. Discussion

The findings reveal a central governance paradox: the cooperation and digital tools that small municipalities adopt to overcome resource constraints carry a built-in risk of undermining the collaborative dynamics they depend on. This challenges two prevailing assumptions in the literature: that digitalization is inherently performance-enhancing (Bisogno *et al.*, 2025; Garlatti *et al.*, 2023), and that inter-municipal collaboration is always beneficial (Bel and Warner, 2015; Klijn and Koppenjan, 2012; Silva *et al.*, 2018). The contribution of this paper is

**Table 5.** Summary of hypotheses

Hypotheses	Expected sign	Actual sign	Level of support
H1: DIG_LEV positively influences DIG_PER	(+)	(+)	Not significant
H2: GOV_TYPE positively influences NET_PER	(+)	(+)	Supported
H3: GOV_TYPE positively influences DIG_PER	(+)	(+)	Supported
H4: GOV_TYPE positively moderates the relationship between DIG_INT and DIG_PER	(+)	(-)	Not significant
H5a: NET_INT positively influences NET_PER	(+)	(+)	Supported
H5b: NET_INT negatively influences NET_PER	(-)	(+)	Not supported
H6: GOV_TYPE positively moderates the relationship between NET_INT and NET_PER	(+)	(-)	Not supported

**Source(s):** Authors' own work

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to specify the boundary conditions under which each assumption holds, and to explain why resource-constrained contexts are especially vulnerable to governance overload.

The evidence challenges the assumption that digital mandates and collaborative structures are straightforwardly beneficial. Non-hierarchical authority flows, such as cooperation and negotiation among peers, are the primary drivers of network performance, not top-down commands. Digital platforms, however, typically often centralize control that may suppress collaborative dynamics. Yet, for small municipalities, collaboration is not a strategic option but a structural necessity. It is an adaptive response to scarcity: without it individual units lack the minimum capacity to operate complex digital systems since limited administrative capacity compels local actors to rely on trust-based, reciprocal relationships to access expertise, share workloads, and maintain service continuity (Klijn and Koppenjan, 2012). This reveals a key trade-off: centralized SUAP rules may provide standardization and legal certainty, but effective implementation relies on decentralized coordination among constituent municipalities. Network arrangements do not replace hierarchy but coexist with it, creating hybrid governance configurations with an inherent tension between the hierarchical logic of mandated digitalization and the relational logic of effective small-municipality governance.

The moderating role of governance type further deepens this picture and highlights important tensions. While associated governance has a strong positive direct effect on network-related performance (H2), its interaction with network interdependencies is negative and significant (H6). This suggests that formalized inter-municipal arrangements can dampen the benefits of collaborative dynamics within SUAP. Contrary to expectations in the literature (Giacomini *et al.*, 2018), association does not necessarily amplify collaboration; instead, it may introduce additional layers of coordination costs, procedural formalization, or decision-making complexity. For small municipalities, this can translate into higher transaction costs, slower responsiveness, and what can be interpreted as forms of “governance overload” (Garlatti *et al.*, 2023). This finding points to a critical underpinning in network governance: more formal integration, such as in inter-municipal associations, is not necessarily beneficial to network interdependencies at higher level and it may make such collaborations less effective. This specifies a critical threshold for associated governance: it enhances network performance when formalization provides a shared infrastructure compensating for what small municipalities cannot sustain alone, such as pooled staff, shared procedures, and joint technical expertise. It becomes detrimental when procedural layering generates coordination costs, decision latency, and diluted managerial control that collectively offset those benefits. The coexistence of formalized structures and non-hierarchical network practices may generate institutional frictions, role ambiguity, and diluted accountability. From a theoretical perspective, this contributes to the literature on the “dark side” of network governance (Koliba *et al.*, 2017) by showing that the performance effects of collaboration are contingent on the alignment between governance structures and relational dynamics. Resource-constrained contexts appear especially vulnerable to over-institutionalization, where the costs of association outweigh the benefits of coordination.

Therefore, on the one hand, associated governance improves network-related performance directly because it provides a stable institutional infrastructure for coordination especially in low-capacity contexts, some degree of formal integration is beneficial and even necessary. On the other hand, the negative moderating effect of inter-municipal association suggests that once this formal structure is in place, the coexistence of such formal association and informal or horizontal network logics may generate institutional frictions, role ambiguity, or accountability challenges that dampen performance gains, creating a tension that policymakers and managers must actively manage rather than assume away.

Turning to digital performance, the results provide a similarly nuanced and non-linear pattern for digital-era governance and networked government theories. Associated governance has a strong and positive effect on digitalization-related performance (H3), supporting arguments that collective arrangements can facilitate digital transformation by

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pooling investments, standardizing procedures, and spreading technical expertise (Castells, 2000; Goldsmith and Eggers, 2004). In practical terms, association appears to enable small municipalities to overcome scale limitations in digital infrastructure and improve transparency and monitoring capacities. However, the non-significance of other relationships indicates that digitalization may remain largely symbolic or underutilized unless it is embedded in broader organizational and governance changes. This interpretation is consistent with prior studies emphasizing that digital technologies do not automatically translate into performance gains without complementary managerial capabilities and institutional support (Garlatti *et al.*, 2025). This suggests a governance-driven rather than technology-driven pathway to digital performance in small municipalities. In other words, a boundary condition also exists for digitalization: digital tools remain symbolic when the mechanisms through which they are supposed to improve performance, such as redistributing decision rights, constraining discretion through embedded workflows, and making actions traceable, cannot be activated because the organizational arrangements that give those mechanisms meaning are absent. Digitalization becomes substantively transformative when it is embedded in associated governance arrangements that provide the shared expertise, coordinated procedures, and managerial capacity to interpret and act on digitally generated information. For small municipalities, this means that the sequencing matters: governance design and capacity-building must precede or accompany digitalization, not follow it. This supports recent findings that the performance of local government digitalization is strongly conditioned by institutional and operational contexts (Bisogno *et al.*, 2025) and challenges the assumption that digital platforms inherently overcome resource constraints (Scholta *et al.*, 2019). Thus, central as well as local managers should realize that embracing top-down solutions, such as the digitalization of SUAP, may not guarantee on its own improvements for resource-constrained municipalities.

## 6. Conclusion

This research contributes to literature in two ways. First, it shows that the relationship between associated governance and performance is non-monotonic: cooperation enhances performance, but there is a point beyond which coordination costs and decision latency erode its benefits. Second, it demonstrates that digitalization is neither inherently enabling nor inherently neutral: it becomes performance-enhancing only when embedded in appropriate governance arrangements and may remain symbolic otherwise. Together, these findings challenge the assumption that more coordination and more digitalization produce better outcomes. The condition that matters is the fit between governance structure, relational dynamics, and digital capacity. This insight extends beyond the one-stop shop context to any setting where mandated digitalization meets resource-constrained public organizations.

For public managers and policymakers in small municipalities, the findings suggest concrete design guidance across four decisions. First, on choosing between autonomous and associated governance: small municipalities with fewer than 5,000 inhabitants should generally favor associated governance when they lack the minimum staffing and expertise to operate SUAP independently, as the resource-pooling benefits outweigh coordination costs at low-capacity levels. Autonomous governance is preferable only when a municipality has sufficient internal capacity to manage procedures without multi-party approval delays. Second, on designing coordination mechanisms that avoid governance overload: associated arrangements should be designed with explicit limits on procedural layering. Agreements should specify clear individual accountability for identifiable outcomes, rather than diffusing responsibility across all partners, and should establish fast-track decision rules for routine operational choices to minimize decision latency. Third, on sequencing digitalization relative to organizational reform: the findings strongly suggest that governance arrangements should precede or accompany digitalization investment. Introducing digital platforms before establishing shared coordination capacity risks producing the symbolic adoption

documented here, where tools are present but their accountability-enhancing and workflow-standardizing functions are not activated. Fourth, on monitoring and adjusting SUAP performance over time: managers should track both structural indicators, such as participation rates in associated arrangements, staff turnover, and relational ones, such as prevailing authority flow type, frequency of multi-party conflicts, to detect early signs of governance overload before they translate into performance decline.

The results indicate that inter-municipal association is a stronger driver of digital performance than the level of technological sophistication itself. This implies that investments in governance design may yield greater returns than additional spending on digital infrastructure alone. This is a particularly important signal for regional and national policymakers who often design digitalization mandates for small municipalities without accompanying governance support. At the same time, policymakers should resist the temptation to mandate uniform associated governance regardless of context: the negative moderating effect of formal association on network interdependencies shows that more formalization is not always better. Further studies might help identify and distinguish between minimum-capacity thresholds, that trigger mandatory association, and optimal formalization levels beyond which coordination costs exceed coordination benefits.

A significant limitation of this study is its reliance on the perceived performance reported by SUAP managers rather than an objective assessment of administrative outcomes, such as actual processing times or financial cost-benefit analyses. Furthermore, the focus on a single Italian region with a specific technological landscape may limit the generalizability of the findings to other contexts. The relative homogeneity of the national regulatory framework did not allow us to systematically assess regulation as an explanatory factor, and the focus on SUAP limits the generalizability of the findings to other regulated services.

Future research should aim to incorporate objective performance metrics to validate these perceived gains and explore how the continued implementation of national digitalization plans, such as the National Recovery and Resilience Plan, alter these governance dynamics over time. Additionally, comparative studies across different countries and sectors could help determine whether variations in regulatory design influence performance outcomes, and whether these collaborative patterns are common to other small-scale administrations or represent a broader shift in digital-era governance.

In summary, governance in small municipalities functions much like a complex clockwork mechanism: while the digital platform provides the external face of the clock, the invisible gears of cooperation are what truly drive the movement, though adding too many formal structural layers can sometimes cause the machinery to grind.

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### References

- Bel, G. and Warner, M.E. (2015), “Inter-municipal cooperation and costs: expectations and evidence”, *Public Administration*, Vol. 93 No. 1, pp. 52-67, doi: [10.1111/padm.12104](https://doi.org/10.1111/padm.12104).
- Bisogno, M., Cuadrado-Ballesteros, B. and Abate, F. (2025), “The role of institutional and operational factors in the digitalization of large local governments: insights from Italy”, *International Journal of Public Sector Management*, Vol. 38 No. 2, pp. 238-258, doi: [10.1108/ijpsm-10-2023-0291](https://doi.org/10.1108/ijpsm-10-2023-0291).
- Bouckaert, G. and Halachmi, A. (1995), “Reengineering in the public sector”, *International Review of Administrative Sciences*, Vol. 61 No. 3, pp. 329-342, doi: [10.1177/002085239506100301](https://doi.org/10.1177/002085239506100301).

- Castells, M. (2000), *The Rise of the Network Society: Economy, Society and Culture*, Blackwell, Cambridge.
- Castelnovo, W., Sorrentino, M. and De Marco, M. (2016), "Italy's one-stop shop: a case of the emperor's new clothes?", in Rossignoli, C., Gatti, M. and Agrifoglio, R. (Eds), *Organizational Innovation and Change. Lecture Notes in Information Systems and Organisation*, Springer, Cham, Vol. 13, pp. 27-40, doi: [10.1007/978-3-319-22921-8\\_3](https://doi.org/10.1007/978-3-319-22921-8_3).
- Catlaw, T.J. and Stout, M. (2016), "Governing small-town America today: the promise and dilemma of dense networks", *Public Administration Review*, Vol. 76 No. 2, pp. 225-229, doi: [10.1111/puar.12520](https://doi.org/10.1111/puar.12520).
- Cisi, M. and Sansalvadore, F. (2022), "Formalized business networks in SMEs and structural relations for their governance", *Journal of Small Business and Entrepreneurship*, Vol. 34 No. 3, pp. 295-312, doi: [10.1080/08276331.2019.1691317](https://doi.org/10.1080/08276331.2019.1691317).
- Cristofaro, M., Cucari, N., Zannoni, A., Laviola, F., Monda, A., Liberato Lo Conte, D., Schilleci, P., Girma Haylemariam, L. and Mare, S. (2025), "Micro-municipal administration: a review and network-based framework", *International Journal of Public Sector Management*, Vol. 38 No. 4, pp. 448-481, doi: [10.1108/ijpsm-02-2024-0041](https://doi.org/10.1108/ijpsm-02-2024-0041).
- De Bruijn, H. (2002), "Performance measurement in the public sector: strategies to cope with the risks of performance measurement", *International Journal of Public Sector Management*, Vol. 15 No. 7, pp. 578-594, doi: [10.1108/09513550210448607](https://doi.org/10.1108/09513550210448607).
- Garlatti, A., Fedele, P., Iacuzzi, S. and Pauluzzo, R. (2023), "Public sector digitalization: opportunities and paradoxes", *Azienda Pubblica*, Vol. 2, pp. 157-181.
- Garlatti, A., Iacuzzi, S., Pauluzzo, R. and Pericolo, E. (2025), "Assessing the effect of digitalisation on a public 'self-servicing' service", *Journal of Public Budgeting, Accounting and Financial Management*, Vol. 38 No. 1, pp. 111-133, doi: [10.1108/JPBAFM-09-2024-0186](https://doi.org/10.1108/JPBAFM-09-2024-0186).
- Giacomini, D., Sancino, A. and Simonetto, A. (2018), "The introduction of mandatory intermunicipal cooperation in small municipalities: preliminary lessons from Italy", *International Journal of Public Sector Management*, Vol. 31 No. 3, pp. 331-346, doi: [10.1108/ijpsm-03-2017-0071](https://doi.org/10.1108/ijpsm-03-2017-0071).
- Goldsmith, S. and Eggers, W. (2004), *Governing by Network*, Brookings, Washington, DC.
- Haug, A.V. (2022), "Collaborative management in Norwegian municipalities: do middle managers make a difference?", *Scandinavian Journal of Public Administration*, Vol. 26 No. 2, pp. 41-66, doi: [10.58235/sjpa.v26i2.7024](https://doi.org/10.58235/sjpa.v26i2.7024).
- Iacuzzi, S. and Cagnina, M.R. (2024), "Digitalizzazione e co-produzione dei servizi pubblici: cosa prevede la normativa italiana?", *Economia Pubblica*, Vol. 3, pp. 377-406, doi: [10.3280/ep2024-003002](https://doi.org/10.3280/ep2024-003002).
- ISTAT (2023), *Pubblica amministrazione locale e ICT 2022*, Istituto Nazionale di Statistica, Rome.
- Jung, C.S. and Kim, S.E. (2014), "Structure and perceived performance in public organizations", *Public Management Review*, Vol. 16 No. 5, pp. 620-642, doi: [10.1080/14719037.2012.743576](https://doi.org/10.1080/14719037.2012.743576).
- Klijin, E.H. (2008), "Governance and governance networks in Europe", *Public Management Review*, Vol. 10 No. 4, pp. 505-525, doi: [10.1080/14719030802263954](https://doi.org/10.1080/14719030802263954).
- Klijin, E.H. and Koppenjan, J. (2012), "Governance network theory: past, present and future", *Policy and Politics*, Vol. 40 No. 4, pp. 587-606, doi: [10.1332/030557312x655431](https://doi.org/10.1332/030557312x655431).
- Koliba, C.J., Meek, J.W., Zia, A. and Mills, R.W. (2017), *Governance Networks in Public Administration and Public Policy*, Routledge, New York, NY.
- Long, L.A.N., Krause, R.M., Arnold, G., Swanson, R. and Fatemi, S.M. (2023), "The networked micro-decision context: a new lens on transformative urban governance", *Urban Transformations*, Vol. 5 No. 9, doi: [10.1186/s42854-023-00054-y](https://doi.org/10.1186/s42854-023-00054-y).
- Muraoka, T. and Avellaneda, C.N. (2021), "Do the networks of inter-municipal cooperation enhance local government performance?", *Local Government Studies*, Vol. 47 No. 4, pp. 616-636, doi: [10.1080/03003930.2020.1869545](https://doi.org/10.1080/03003930.2020.1869545).

- Noda, Y. (2023), "Intermunicipal cooperation, integration forms, and vertical and horizontal effects in Japan", *Public Administration Review*, Vol. 83 No. 3, pp. 654-678, doi: [10.1111/puar.13569](https://doi.org/10.1111/puar.13569).
- Ongaro, E. (2004), "Process management in the public sector. The experience of one-stop shops in Italy", *International Journal of Public Sector Management*, Vol. 17 No. 1, pp. 81-107, doi: [10.1108/09513550410515592](https://doi.org/10.1108/09513550410515592).
- Piattoni, S. (2010), *The Theory of Multi-Level Governance: Conceptual, Empirical, and Normative Challenges*, Oxford University Press, Oxford, UK.
- Previtali, P. (2015), "The Italian administrative reform of small municipalities: state-of-the-art and perspectives", *Public Administration Quarterly*, Vol. 39 No. 4, pp. 548-568, doi: [10.1177/073491491503900401](https://doi.org/10.1177/073491491503900401).
- Righettini, M.S. and Martin, C. (2013), "La semplificazione: gli sportelli unici dei Comuni in Provincia di Treviso", *Amministrare, Rivista quadrimestrale dell'Istituto per la Scienza dell'Amministrazione pubblica*, Vol. 2, pp. 293-333.
- Scholta, H., Mertens, W., Kowalkiewicz, M. and Becker, J. (2019), "From one-stop shop to no-stop shop: an e-government stage model", *Government Information Quarterly*, Vol. 36 No. 1, pp. 11-26, doi: [10.1016/j.giq.2018.11.010](https://doi.org/10.1016/j.giq.2018.11.010).
- Silva, P., Teles, F. and Ferreira, J. (2018), "Intermunicipal cooperation: the quest for governance capacity?", *International Review of Administrative Sciences*, Vol. 4 No. 4, pp. 619-638, doi: [10.1177/0020852317740411](https://doi.org/10.1177/0020852317740411).
- Silva, P., Mota, L.F., Carneiro, R., Valentim, R. and Teles, F. (2023), "The inner functioning of local governance networks in centralized countries: a 'brave new world'", *Social Sciences*, Vol. 12 No. 5, p. 289, doi: [10.3390/socsci12050289](https://doi.org/10.3390/socsci12050289).
- Spagnuolo, G. (2022), "Il procedimento automatizzato: il caso dello Sportello unico per le attività produttive (Suap)", *Rivista di Digital Politics*, Vol. 2 Nos 1-2, pp. 269-284.
- Tosi, F. (2009), *L'esperienza dei SUAP associati in Toscana*, IRPET - Istituto Regionale Programmazione Economica Toscana, Florence, Italy.
- UN – United Nations (2025), *World Urbanization Prospects 2025: Summary of Results*, United Nations, New York, available at: <https://www.un.org/development/desa/pd/world-urbanization-prospects-2025> (accessed 7 December 2025).
- Van Ryzin, G.G. and Charbonneau, E. (2010), "Public service use and perceived performance: an empirical note on the nature of the relationship", *Public Administration*, Vol. 88 No. 2, pp. 551-563, doi: [10.1111/j.1467-9299.2010.01820.x](https://doi.org/10.1111/j.1467-9299.2010.01820.x).
- West, D.M. (2004), "E-government and the transformation of service delivery and citizen attitudes", *Public Administration Review*, Vol. 64 No. 1, pp. 15-27, doi: [10.1111/j.1540-6210.2004.00343.x](https://doi.org/10.1111/j.1540-6210.2004.00343.x).

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