PUBLIC VALUE IN ACTION

Co-Creation Strategies for Sustainable and Inclusive Governance

Edited by
Alessandro Spano
Enrico Guarini

Società Italiana di Ragioneria
e di Economia Aziendale

FrancoAngeli

Collana di Ragioneria ed Economia Aziendale – Open Access

Collana della Società Italiana dei Docenti di Ragioneria e di Economia Aziendale (SIDREA)

SIDREA è l'associazione scientifica dei docenti di Ragioneria e di Economia aziendale inquadrati nel settore scientifico-disciplinare SECS-P/07. L'associazione è stata costituita nel 2005 allo scopo di promuovere lo sviluppo della base scientifica, della cultura economico-aziendale e dei principi di buon governo delle aziende di ogni tipo: dalle imprese alle aziende non-profit; dalle aziende private alle amministrazioni pubbliche; dalle piccole e medie imprese alle grandi imprese; dalle aziende familiari alle reti d'impresa.

La Collana pubblica studi e ricerche realizzati nell'ambito dei Gruppi di Studio SIDREA sulle tematiche di rilevante interesse teorico e applicativo nell'area della Ragioneria e dell'Economia Aziendale. L'obiettivo è quello di sviluppare sia modelli teorici sia applicazioni, in rapporto alle teorie economico-aziendali ed alla prassi delle aziende e della professione, sulle specifiche tematiche di riferimento dei gruppi di studio:

- Bilancio e principi contabili;
- Comunicazione non finanziaria;
- Governance e Controlli interni;
- Linee guida per il Controllo di gestione;
- Contabilità pubblica;
- Valutazione d'azienda;
- Diagnosi precoce della crisi d'impresa;
- Capitale intellettuale, Smart Technologies e Digitalizzazione;
- Studi di Genere.

 ISBN 9788835188551

Copyright © 2026 by FrancoAngeli s.r.l., Milan, Italy. ISBN 9788835188551

PUBLIC VALUE IN ACTION

Co-Creation Strategies for Sustainable and Inclusive Governance

Edited by
Alessandro Spano
Enrico Guarini

Società Italiana di Ragioneria
e di Economia Aziendale

FrancoAngeli

 ISBN 9788835188551

All chapters have undergone a peer review process
that attests to their scientific quality

DOI: 10.3280/oa-1500
Isbn e-book Open Access: 9788835188551

Copyright © 2026 by FrancoAngeli s.r.l., Milan, Italy. ISBN 9788835188551

TABLE OF CONTENTS

10
ENHANCING VALUE CREATION IN INNER AREAS THROUGH DYNAMIC PERFORMANCE GOVERNANCE

Noemi Grippi[*], *Francesco Gennusa*[*]

10.1. Introduction

Inner areas are contexts with rich and diverse cultural heritage and environmental assets (e.g., high-quality agricultural products, natural landscapes, archeological & historical settlements, museums, etc.) but distinct from urban settings because of their low population density and distance from key welfare services like healthcare, education, and transportation (Ottomano et al., 2022) (Ros. Such contexts face numerous challenges (e.g., depopulation, urban decay, aging population, limited job opportunities, outmigration, etc.) that worsen the existing constraints and limitations in their respective environments. These problems have a negative impact on the economic dynamism of these areas, leading to a decrease in public service provisions, external investments, and the overall quality of life and attractiveness of the area (Almeida, 2018). Such problems, referred to as "wicked problems" by Rittel and Webber (1973), have a feedback loop that worsens the already declining conditions of the socioeconomic, cultural, and ecological systems. These exhibit a growing blurriness, stemming from the complex structure of the relationships across different governance levels, making the policy agenda difficult to plan. Addressing such problems requires, on the one side, a long-term perspective that identifies the underlying causes and considers the broader systemic context to produce lasting change, and, on the other, adopting innovative modes of planning (Ansell and Torfing, 2014) to foster public value creation (Osborne, 2021). In this perspective, by adopting ef-

[*] Center for Sustainability and Ecological Transition, University of Palermo, Palermo, Italy.

fective policies, public sector organizations (PSOs) have the potential to profoundly shape society's path.

Based on this, we posit the following. To address the above-mentioned challenges, it is crucial to involve different stakeholders (PSOs, businesses, and civil society) in co-planning, co-designing, co-producing, and co-evaluating holistic policy solutions (Bovaird, 2007) and to manage public programs or assets (Ansell and Gash, 2008) (p. 2).

By collaborating – through formal and informal dialogue – stakeholders jointly create rules and structures guiding their interactions and deliberations, involving shared norms and mutually beneficial interrelationships (Madden, 2015; Thomson et al., 2009; Wood and Gray, 1991) so as to leverage and foster tangible and intangible shared strategic resources (e.g., time, skills, knowledge, values, contacts, etc.) (Bianchi, 2021, 2022).

Such collaboration also implies the need for performance management and governance systems able from the one side to capture the intrinsic dynamic complexity characterizing inner areas and the related wicked problems affecting such contexts, and from the other, to support stakeholders in collaborative initiatives to foster consistency across an organizational, interorganizational and context perspective of sustainable value creation. This requires a suitable method able to cut across different and interconnected viewpoints, i.e., time horizon, accountability, and field (Bianchi and Grippi, 2024).

In this contribution, it will be highlighted that such collaborative initiatives necessitate strong performance management and governance approaches for framing critical strategic resources, drivers, outputs, and outcomes. In line with this, the chapter aims to illustrate how the Dynamic Performance Governance approach (DPG) (Bianchi, 2016, 2021, 2022; Bianchi and Vignieri, 2020; Vignieri, 2022) may effectively enhance collaboration through stakeholder learning, thereby facilitating the creation of public value in inner areas. It will be emphasized how, building on three bodies of knowledge i.e., system dynamics, performance management, and collaborative governance, DPG is able to support the design of performance management and governance systems that help frame trade-offs in time and space (Bianchi and Williams, 2015; Bianchi et al., 2019), so to deal with the intrinsic dynamic complexity of wicked problems affecting inner areas.

In our view, stakeholders could benefit from systems modeling and cause-and-effect models as tools for capturing public value drivers, outputs, and both intermediate and final outcomes, therefore contributing to a discussion on public value creation in collaborative settings.

In line with this, this chapter addresses the following research questions: (1) How can DPG play a role in creating public value in inner areas? (2) Why

can DPG be a methodological guidance to foster stakeholder collaboration? (3) What role could DPG play in fostering inner areas resilience?

To make these questions the thrust of this chapter, we will first frame, in Section 2, inner areas as dynamic and complex systems experiencing a set of interrelated wicked problems and then will delve into how collaboration among different stakeholders could be a powerful tool to deal with the inner areas dynamic complexity and create sustainable value creation. Section 3 will present the Dynamic Performance Governance approach as a suitable method that may help stakeholders create a shared understanding of the feedback structure behind inner areas dynamic complexity. In line with this, the Sicani mountain example will be presented in sub-section 3.1. to better capture the functioning of the proposed method. Section 4, will, then, highlight the benefits of adopting such an approach in the investigated domain. Concluding remarks, implications, and future research are provided at the end of the chapter.

The overall goal of the chapter is to propose an approach that integrates performance management with collaboration through systems thinking to tackle the dynamic complexity of inner areas. In doing so, it aims to fill the gap by introducing the DPG approach as a novel contribution to the discourse on inner areas. It recognizes inner areas as complex ecosystems with interdependent actors whose interactions in co-experiencing and co-producing public services contribute to creating public value (Strokosch and Osborne, 2020). The originality of this chapter lies in proposing the DPG framework to operationalize these principles in the context of inner areas. By combining system dynamics, collaborative governance, and performance management, the DPG approach provides a framework for coordinating stakeholder efforts to solve the dynamic complexity of wicked problems. It emphasizes how a place-based perspective can improve governance system design by facilitating stakeholder learning, framing trade-offs over time and space, and promoting long-term public value creation.

10.2. Dealing with inner areas dynamic complexity through collaboration

Inner areas can be identified as social systems where different actors interact with each other and pursue their own goals (Vignieri, 2022). The interplay among diverse stakeholders, encompassing PSOs, community-based organizations, businesses, and non-profit organizations, influences their respective values, actions, goals, and delays in perceived and reported infor-

mation, as well as variation between the actual and the desired stakeholders' conditions. Such changes drive stakeholders to change their behavior according to the actions undertaken by other stakeholders (Vignieri, 2022). However, stakeholders' actions or other changes in specific governance spheres may have ripple effects across the entire system, resulting in non-linear and frequently unforeseeable results due to the existing delays between the underlying cause-and-effect relationships shaping such systems (Vignieri, 2019, 2022). This can help elucidate the underlying reasons influencing the complexity of managing inner area performance governance as well as address the wicked problems (e.g., demographic decline, lack of economic dynamism, limited public services, social and digital isolation, and unemployment) challenging such contexts. Indeed, inner areas are susceptible to many changes and transformations that may impact their dynamics when viewed through socio-economic lenses. Economic globalization, for instance, has increased the interdependence of the local and global economies, making local communities more vulnerable to changes and competitiveness. The wickedness of such problems requires the horizontal involvement of different organizations (e.g., PSOs, private sector organizations, civil society, and other stakeholders) in designing and implementing collaborative initiatives cutting across different policy fields (Vignieri, 2019, 2022). The quality of institutions and the ability of local governments to formulate and implement effective policies can have a significant impact on the aptitude of local communities to overcome challenges, develop new opportunities, and enhance public value creation thereby fostering place resilience (Vignieri and Grippi, 2024).

Inner areas resilience, as remarked by Ottomano Palmisano and collegues (2022) is "intended as the capacity of social, economic, and environmental systems to cope with changes, both foreseeable trends and unexpected events or disturbances, by responding and reorganizing themselves in ways that maintain their essential function and identity" (Ottomano Palmisano et al., 2022; Knickel et al., 2018) (p. 2).

Inner areas can be conceived as complex, dynamic, and self-organizing ecosystems where organic, natural, and human components both self-organize, adapt, and shape the physical components of such contexts as infrastructure. The non-linear interaction among living and non-living components, whether top-down or bottom-up, gives rise to complex and dynamic patterns that may manifest as networks (Chen et al., 2023; Vignieri, 2022).

The interactions between a complex system's constituent parts determine its behavior, which can result in intricate and unexpected patterns of behavior. The extensive feedback loops, delays, and nonlinear connections make such systems difficult to understand and describe using traditional methods

when faced with such dynamic complexity (Morecroft and Sterman, 2000; Morecroft, 2015). Indeed, such methods may run the risk of a myopic view stemming from the sectoral, static, and input-focused approach to performance measurement. It has been proposed that such methods should be supported by comprehensive conceptual frameworks underlying an integrated and holistic perspective (Ferreira and Otley, 2009).

To address such challenges and needs, new modes of planning and policy innovation (Ansell and Torfing, 2014) are required. Policymakers should consider the pluralistic nature of modern society when public values and private interests collide (Spicer, 2010). Hence, PSOs should balance diversified interests, seek democratic legitimacy, and reconcile value controversy (Cui and Osborne, 2018) by being catalysts, implementers, and orchestrators (Crosby et al., 2017; Rajala et al., 2018, 2020; Peters, 2010) of innovation. In this sense, PSOs can play a catalytic role due to their authority (Crosby and Bryson, 2010) and should act as "local entrepreneurs" (Rhodes, 2017) (p. 84) to foster stakeholder consensus in the policy agenda. To carry out such a role there is the need to foster boundary spanning leadership (Igalla et al., 2021; Satheesh et al., 2022) i.e., "the mechanisms and processes by which policy actors in the public, private, and non-profit sectors transcend organizational and institutional silos in pursuit of public value co-creation" (Conteh and Harding, 2023: 107). This shifts the focus from an organizational perspective to an entrepreneurial spirit devoted to fostering public value creation (Bianchi and Grippi, 2024). Such an interorganizational perspective requires integrative public leadership, which brings different groups and organizations together across sector boundaries to tackle wicked problems and achieve the common good (Crosby and Bryson, 2010).

It is essential for innovative performance governance to foster holistic and pervasive efforts in policymaking aimed at enhancing policy design and consistent implementation to affect an inner area's attractiveness and quality of life (Bouckaert and Halligan, 2007). Through the implementation of policy network governance mechanisms, a PSO can involve multiple community stakeholders in the coordination of a strategic learning initiative. Developing "robust" policies based on an outcome-oriented perspective is made possible through the learning process (Bianchi et al., 2019). This could entail cooperative efforts between various stakeholders that include co-design, co-production, and co-assessment of policies to build community resilience and promote sustainable socioeconomic growth (Bovaird, 2007; Torfing and Ansell, 2017). Involving all the stakeholders in this process enables a holistic understanding of wicked problems (Crosby et al., 2017). This collaboration may also lead to the creation of public value since "value is created by identifying

and exploiting new ways of approaching or representing problems, of combining skills and resources in crafting new solutions, assessing and sharing risks, coordinating actions, or building joint ownership" (Ansell and Torfing, 2014: 229-230).

In this perspective, the value creation concept should be considered as a collaborative and co-evolutionary process, rather than a linear function, that involves networking with partners, allies, suppliers, and customers to share knowledge, resources, and activities. In line with this, the value creation process "is supported or constrained within complex and dynamic ecosystems where multiple actors (e.g. policymakers, organizations from across sectors, activists, communities, and service users) plan, design, deliver and consume public service, and accrue value, through various, nested layers of interactions" (Strokosch and Osborne, 2020: 431). The collaboration among such actors forms "value constellations" that work together to co-produce value (Romero and Molina, 2011). This implies that all these actors, bound by common interests and geographical or social ties (Wenger et al., 2011), act as active value co-creators through the co-experience and the co-construction of public services (Strokosch and Osborne, 2020).

Hence, collaboration among stakeholders is essential for the achievement of shared goals and values, including social inclusion, quality of life, and inner area attractiveness. Such collaborative settings need to be properly framed in terms of public value creation and performance factors to be effective over a longer time horizon.

However, even when collaborative initiatives are carefully planned and implemented, such initiatives may result in failure (Bianchi, 2021, 2022; Bianchi et al., 2019) due to several reasons, such as divergent goals, lack of resources, lack of leadership or coordination, resistance to change, lack of monitoring and evaluation, and environmental or external constraints. These are often associated with the variety of parties engaged and the lack of appropriate models or techniques to handle disagreements, encourage a strategic learning process among the parties concerned, establish confidence and consensus, and foster a common shared view (Bianchi, 2022), to create community outcomes. The community level is a crucial aspect of the value creation process as value creation should look at the overall community and the place itself. In this sense, as highlighted by Sancino (2016) the community level should be regarded as a macro-level of analysis since it includes personal outcomes (micro level) and single organization and network outcomes (meso level). This facilitates the identification of divergent interests and resistance at various levels, which undermines the potential to achieve community outcomes and, consequently, to create public value.

In this sense, to frame the inherent dynamic complexity and enable the identification of such outcome levels there is the need for performance management methods that can "practice for understanding organizational reality […] and systems designed to account for that reality" (Roberts and Scapens, 1985: 444). This is the domain of Dynamic Performance Governance (Bianchi, 2021, 2022, 2023; Bianchi and Vignieri, 2020; Bianchi and Grippi, 2024), as illustrated in the next section.

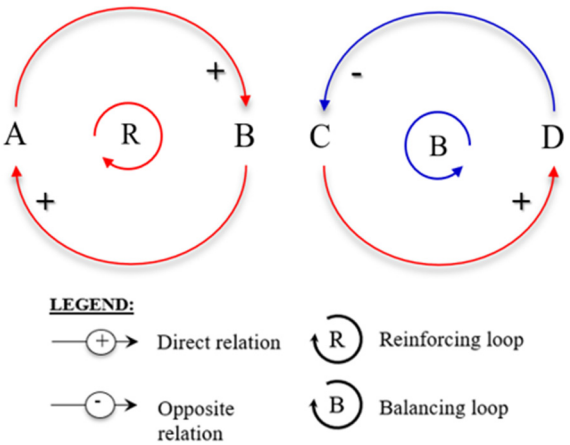
10.3. Dynamic performance governance

DPG fosters a "shift of mind" from a static to a dynamic view by adopting stock-and-flow and feedback modeling (Sterman, 2000), used in System Dynamics (SD), – portrayed in Figure 1 and Figure 2 respectively – and applying them to performance management and governance, thereby contributing to increasing the quality of performance reporting, accountability, governance, and policy development (Bianchi et al., 2019; Xavier and Bianchi, 2020). Such qualitative and 'lean' modeling approach (Bianchi et al., 2018; Bianchi, 2016, 2021, 2022; Vignieri, 2022) contributes to fostering a descriptive and causal perspective in policy analysis. Such causal analysis is based on reinforcing and balancing loops and is portrayed through causal loop diagrams that depict the investigated system structure and related behavior over time. Feedback loop diagrams have a polarity which is portrayed through a symbol located in its center and is detected by multiplying all the signs of the arrows linking the variables in a loop. More in detail, while a positive polarity indicates a reinforcing loop ("R") and defines a self-reinforcing process, a negative one indicates a balancing loop ("B") and represents a goal-seeking behavior (Sterman, 2000; Peters and Bianchi, 2023).

Stock-and-flow modeling (shown in Figure 2) is a powerful technique used in SD to analyze the accumulation and deployment of tangible and intangible strategic resources within a system over time. Quantities or levels that accumulate over time (e.g., the population in a city) are referred to as "stocks". "Flows" refer to the rates at which these quantities change, such as the birth and death rates of a given population. This technique is particularly useful for analyzing complex systems, as it helps to uncover how different components of a system interact, leading to a deeper understanding of cause-and-effect relationships. Additionally, it is helpful in forecasting and scenario planning, enabling the simulation of temporal changes and forecasting future behavior in different circumstances. In policy design and evaluation, stock-and-flow modeling is frequently

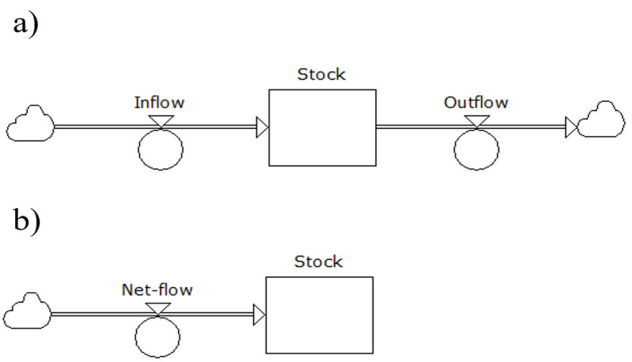
used to analyze the long-term effects of various interventions and to develop effective strategies (Sterman, 2000: 191-193).

Figure 1 – Causal loop diagram showing the cause-and-effect relationships among different variables



Source: adapted from Sterman, 2000. Created by using Powersim Studio

Figure 2 – Illustrations of stock-and-flow structure

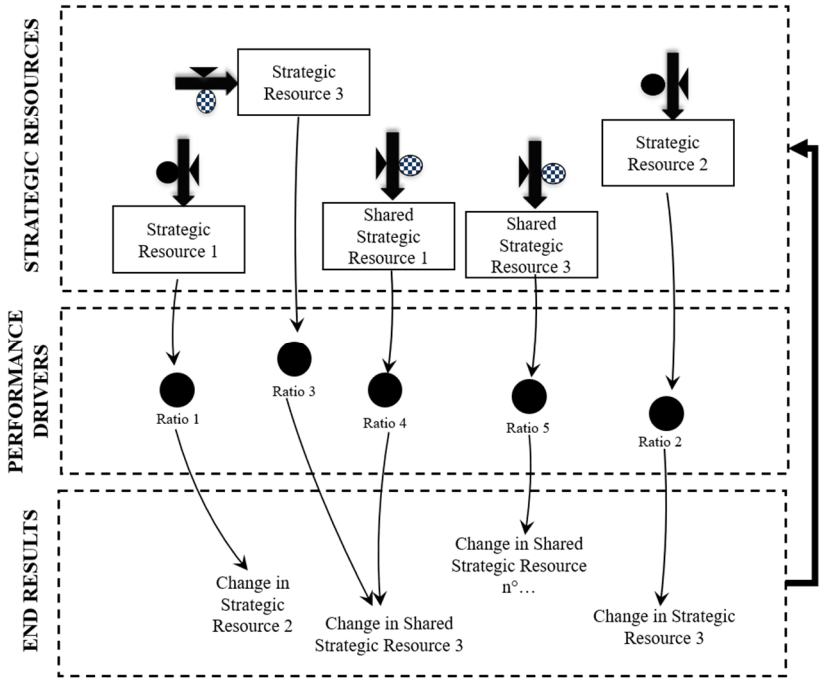


Source: adapted from Sterman, 2000. Generated using Powersim Studio

The DPG approach, by combining the above-mentioned techniques, focuses on promoting stakeholder learning by proving the sustainability of policies through three interconnected layers (Bianchi, 2021, 2022, 2023; Bianchi et al., 2019), i.e., strategic resources, performance drivers, and end results.

The first layer shows the main shared strategic resources (i.e., resilient state measures), a range of tangible and intangible assets that are available to various stakeholders within a specific context and are represented as stocks. These assets can include natural resources, cultural heritage, reputation, expertise, leadership, trust, population, and quality of life (Bianchi, 2023). The level of these assets fluctuates over time due to several reasons, such as the implementation of network governance policies. Stakeholders play a crucial role in influencing community outcomes by effectively utilizing both organizational and shared strategic resources. Within the end-results layer, DPG detects different levels of intermediate outcomes that significantly impact the final outcomes (Bianchi, 2023). For example, the attractiveness of an inner area can be influenced by various factors that measure specific resources that contribute to its attractiveness. These resources may include a skilled workforce, infrastructure, parks, and services for residents and businesses. End results are gauged through flows accumulating into stocks of strategic resources. By deploying such resources, stakeholder policies may affect performance drivers over time. Performance drivers, or transition process measures, the other layer of the DPG chart, are critical success factors and "leading" indicators of future performance (Otley, 2012: 252) that contribute to achieving community outcomes. To effectively address the impact of discontinuity on performance, policymakers must consistently monitor and identify early signs of change and continuously adjust performance measures. Hence, recognizing and tracking performance drivers may indicate the necessity of implementing adjustments by expanding the examined system boundaries – which involves engaging additional stakeholders in policy analysis – to the originally implemented policies so as to mitigate the arising possible adverse effects. This forms the foundation of a feed-forward mechanism that would enhance strategic planning and control in interorganizational settings (Chen et al., 2023). Performance drivers are evaluated by comparing a strategic resource endowment to a benchmark using ratios (Bianchi, 2023). Figure 3 below shows the structure of a general DPG chart, which includes the three layers mentioned above (i.e., strategic resources, performance drivers, and end results) (Bianchi and Grippi, 2024).

Figure 3 – Dynamic Performance Governance Chart Structure



Source: Bianchi (2022: 338). Adapted from Bianchi (2016: 73)

The DPG framework takes a unique approach to performance governance by shifting from the traditional "inside-out" perspective to an "outside-in" point of view (Bianchi, 2016, 2021, 2022, 2023; Bianchi and Vignieri, 2020). Instead of designing policies based on the individual organization's perspective, this methodology emphasizes the importance of considering the local area as a whole (Bianchi, 2022). This allows stakeholders to develop collaborative policies that generate collective strategic resources at the societal level, thereby improving organizational performance and fostering public value creation.

10.4. Applying the DPG approach to inner areas' performance governance

DPG triggers an open discussion of the complex dynamics characterizing inner areas and stakeholder collaboration. This improves a continuous dialogue and promotes a shared understanding of the system, providing a strong

foundation for developing effective policies and gaining insights from how they are implemented.

Such an approach also supports the design of performance management systems by enhancing trade-off analysis in time and space through the detection of performance delays. The first involves weighing the impacts of policies in the near term versus the distant future. The second implies assessing the effects of policies on one subsystem compared to another subsystem (Bianchi and Williams, 2015; Bianchi, 2022).

DPG, furthermore, helps to improve boundary spanning (Craven et al., 2018) in inner areas through early identification of a lack of performance sustainability and policy resistance as these contexts have fluid and open boundaries that are not limited to institutional or administrative clusters. This occurs when policy actions result in feedback from the environment that undermines the policy and sometimes even worsens the initial problem (Ghaffarzadegan et al., 2011: 24).

For example, regional governments may choose to decrease funding allocated for educational and healthcare services in response to the declining population in inner areas. Although this may temporarily stabilize the regional budget, it would ultimately have a negative impact on the quality of life in these areas. This will exacerbate the decline of essential local infrastructure and services, potentially leading to a further migration of residents from inner areas.

This approach also promotes consistency in policy analysis by considering both the inside-out and outside-in views with the goal of achieving holistic and sustainable public value.

Adopting such a holistic and in-depth approach to inner area policy design, implementation, and evaluation may contribute to framing and dealing with the dynamic complexity underlying inner areas' wicked problems by improving the efficiency and effectiveness of public service delivery to individuals, groups, and organizations through stakeholders' engagement and collaboration. In this perspective, policy design and implementation are first about the inner area as a whole, rather than a single organization. This enables stakeholders to design collaborative policies that both create shared strategic resources (common goods) at the community level and strengthen performance at the agency level, to foster quality of life and place attractiveness (Bianchi, 2022). Such an outside-in view carried out by the DPG approach fosters accountability in cross-sector collaboration (Bryson et al., 2006) and enhances trust and consensus among networked and external stakeholders. In this perspective, DPG by encouraging collaboration among stakeholders and fostering trust among them through facilitated learning, promotes the

development of a cohesive community that extends beyond mere compliance with laws and regulations. A community thrives when its citizens are actively involved and contribute to its growth and value creation. The concept refers to a widespread sense of belonging to a group, as felt by individuals in a specific community (Bianchi, 2021, 2022). This sense of belonging is marked by more than just being physically close, following rules, or fulfilling legal obligations. It is also defined by shared objectives, values, and cultural practices. The mentioned condition establishes a moral basis for the practice of civic commitment and loyalty (Cooper et al., 2006; Cooper and Gulick, 1984). The challenge of community lies in the need for ongoing commitment and active involvement. Successfully managing the process of learning together, supporting one another, building upon ideas, creating shared resources, and fostering a supportive learning environment necessitates a significant investment of time and commitment, which require an increasing demand for sustainable and inclusive development (Wenger et al., 2011). Indeed, as communities grapple with complex social, economic, and environmental challenges, the ability to draw upon shared values and resources becomes increasingly critical. Community value serves as a catalyst for collective action, enabling communities to mobilize resources, address common problems, and pursue long-term goals that reflect the aspirations and needs of their members.

By prioritizing the goal of enhancing active citizenship, it positively impacts on societal quality of life. Without active citizenship, collaborative efforts among PSOs, private organizations, individuals, and groups (including volunteers) may not be able to be sustained in the long run. Ansell and Gash (2008) have highlighted the importance of involving the private sector and civil society in policy development and implementation to achieve sustainable community outcomes. Active participation is, therefore, crucial to gather and utilize a wide array of ideas, skills, experiences, capabilities, contacts, and energies that can effectively tackle complex social issues, enhance the appeal of local areas, and improve the overall quality of life (Bianchi, 2021). The DPG approach, through its "outside-in" perspective, can also be useful for evaluating sustainable performance outcomes in relation to the three layers mentioned above. Considerations such as time horizon (short vs. long term), field (social, competitive, and financial), and object (organizations vs. local area) have been explored in various studies (Bianchi, 2016, 2021, 2022; Xavier and Bianchi, 2020). From this perspective, policies that strive to achieve sustainable outcomes must consider both social and competitive aspects while also achieving financial balance.

Such an approach, by cascading community goals at the departmental level and through the continuous monitoring of outputs and outcomes through performance drivers is able to implement a control process that is based on both a feedback mechanisms while maintaining a feedforward logic (Otley, 1999) which implies that problems or opportunities arising from the implementation of policies at the organizational level can contribute to the identification of possible adjustments at the community level. Such feedback and feedforward logic embedded in the DPG approach fosters a strategic performance dialogue between stakeholders at both organizational, interorganizational, and context levels (Bianchi, 2022). For instance, counteracting inner area depopulation requires that municipalities coordinate their policy efforts through collaboration with different stakeholders. A small town in the inner part of Sicily, to counteract such depopulation phenomenon, has enacted a series of interventions aimed at leveraging inert strategic resources, i.e., abandoned housing in the historic center, to counteract the loss of place attractiveness and low quality of life (Ferreri, 2021). Such interventions were aimed at attracting external funding to refurbish such housing so as to attract new residents and possibly attract tourists and reverse the current trend of the inner area. Such interventions cannot be sustained in the long term without consensus and collaboration among the stakeholders in the area.

The illustrated example shows how an outside-in view embedded in an outcome-based performance management & governance approach may enhance the ability to deal with wicked problems embeddedness. This implies that through stakeholders' collaboration, it is possible to balance inner area financial equilibrium, competitiveness, and social inclusion (Bianchi, 2022), thereby contributing to the creation of holistic and sustainable public and community values. The ability of local area stakeholders to achieve such balance may lead to smart growth and sustainable community and organizational outcomes (Bianchi, 2021, 2022; Bianchi et al., 2019).

Thus, the DPG approach has the potential to effectively address the intricate nature of local area performance and improve collaborative governance regimes that focus on developing shared resources and public benefits.

10.4.1. Pursuing value creation by identifying inner area dynamic complexity through DPG: The Sicani Mountains example

The "Sicani Mountains Inner Area" is an example of a region in Sicily that is currently experiencing several wicked issues undermining the resilience of the place leading to public value destruction processes.

Box 1. The Sicani Mountain inner area example.

The Monti Sicani area is located between Palermo and Agrigento in Sicily (Italy) and is distinguished by its biodiversity, cultural richness, and natural beauty. The 18 municipalities of the Monti Sicani are characterized as non-coastal, hilly, or mountainous centers, each with an average population of fewer than 7,000 inhabitants, with a total population of 54,969 as of 2019 (Lino et al., 2022).

Despite its beauty, the Monti Sicani area faces significant challenges. The region is witnessing a significant decline in population attributable to factors such as outmigration, a low birth rate, and an aging population. This trend poses challenges in maintaining essential services for the resident population, including healthcare and educational systems, thereby further diminishing the quality of life in the area. Moreover, the infrastructure system exhibits significant deficiencies that adversely affect both internal connectivity and the links with adjacent areas. Furthermore, there exist concerns regarding hydrogeological instability and the degradation of natural and environmental heritage, which arise from inadequate management, protection, and enhancement of protected areas, landscapes, forests, and trails. Ultimately, these issues result in considerable abandonment and neglect of historic centers, which further diminishes the area's attractiveness (Badami, 2019; Pidalà, 2023; *Strategia Area Interna Sicani*, 2020).

The existing interconnections among these problems pose a risk of generating vicious cycles that adversely impact various dimensions of social and economic life. Beginning with depopulation, which encompasses the most dynamic segments, there will be a deterioration of the socioeconomic fabric and a gradual reduction in the utilized agricultural area, leading to subsequent degradation of landscapes and historic centers. The provision of personal services, encompassing offerings from both private and local public organizations, is anticipated to experience a gradual decline due to diminishing economic viability. This trend is likely to yield adverse consequences for individuals who remain in the area (*Strategia Area Interna Sicani*, 2020).

Ongoing efforts to counteract depopulation are represented by local projects to promote ecotourism and organic farming. Others seek to establish "smart villages", which connect rural communities and increase their appeal to remote workers through the use of technology. However, to make rural living more viable and alluring, significant transformation necessitates a holistic approach that incorporates infrastructure upgrades, financial incentives, and educational opportunities.

Based on the Monti Sicani example, Figure 4 shows valuable insights into how DPG can help stakeholders to frame the cause-and-effect relationships behind wicked problems and provide methodological guidance to foster collaboration and public value creation.

Figure 4 shows how the stock of "Resident Population" impacts the outcome of "Change in Infrastructure and Services" through the performance driver "Population Ratio", which gauges the information on the population present in the area compared to a specific target and the in the past years, and, together with the stock "Public Sector Organizations", the ratio "Allo-

cated Budget for Infrastructure & Services Ratio" which shows the percentage of allocated budget to infrastructure and services for the area compared to others. These causal relationships show the effect that population trends may have on the infrastructure and services pressure and the willingness of public sector organizations at local, regional, and national levels to allocate specific budgets for implementing infrastructure and services in the area. The stock of infrastructure and services can be divided into four stocks, each displaying the different crucial services serving the area, i.e., mobility, healthcare, education, and essential private services. These stocks affect two main outcomes, i.e., "Change in Urban Decay" and "Change in Quality of Life". This causal relationship shows the effect that low infrastructure and services in the area have on urban decay and residents' quality of life. There is a strong connection between urban decay and quality of life and inner area attractiveness as this may lead to the relocation of businesses from decaying areas, leading to higher unemployment rates. This connection is portrayed by the stock "Urban Decay" which impacts the outcomes of "Change in quality of life" and "Change in inner area attractiveness" through the performance driver "Urban decay ratio" which compares the level of decay in the area to other areas.

Moving forward in the DPG in Fig. 4 the stock of "Inner area Attractiveness", through the driver "Attractiveness Ratio" impact on two outcomes, namely "Change in Business Population" and "Change in Resident Population". The presence of fewer businesses in the area results in diminished job opportunities, which subsequently contributes to a decline in the resident population, as individuals may opt to relocate to another city or region in search of employment. The stock of "Business Population" also impacts the outcome of "Change in Soil Abandonment", this relationship specifically illustrates the tendency of agricultural business owners to abandon their land as a reaction to diminishing revenue streams and profitability. When agricultural enterprises encounter persistent financial difficulties, it is more probable that business owners will exit the sector, resulting in a decline in active cultivation and exacerbating the issue of soil abandonment. The soil abandonment leads to an increase in the hydrogeological instability of the area gauged through the performance driver "Soil Degradation Ratio" which indicates the degree and speed at which soil quality deteriorates as a result of various factors, including erosion, nutrient depletion, salinization, and compaction. The higher the ratio, the faster the deterioration of soil health, resulting in decreased crop yields, diminished profitability, and a reduction in land value. This measure is essential as it illustrates the influence on the hydrogeological stability of the area, which further decreases the quality of life in the area.

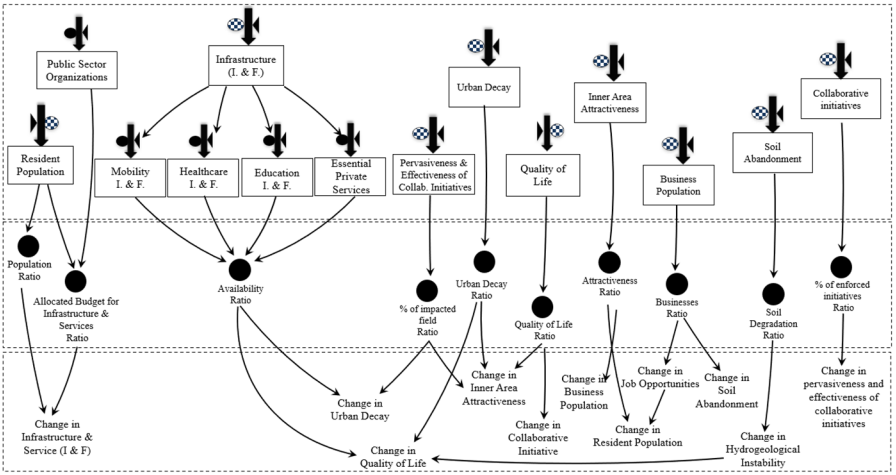
Such a reduction may lead PSOs, non-profit and for-profit organizations, as well as residents to work together to foster a change in the area. Collaborative initiatives facilitate the sharing of skills, labor, financial resources, and knowledge among communities, which would be challenging to amass independently. Furthermore, diminished quality of life engenders a collective motivation to enhance their conditions, fostering solidarity as individuals acknowledge the interrelated nature of the challenges affecting the area, which can be more effectively tackled through collaborative efforts. This causal relationship is portrayed in the DPG chart through the stock "Collaborative Initiatives" that impact the "Change in pervasiveness and effectiveness of collaborative initiatives" through the performance driver "% of enforced initiatives ratio", which measures the percentage of implemented activities and initiatives compared to the target level identified by collaborating stakeholders. Within this specific domain, the focus is not on the sheer number of collaborative initiatives but on the depth and scope of activities undertaken within a specific field, as reflected by the ratio of '% of impacted fields ratio.' This approach is essential, functioning as a method to facilitate transformative changes. Moreover, these two critical indicators are also related to the extent of coordination among the collaborating stakeholders, requiring a continuous and well-organized approach. Indeed, a rise in the intensity and exchange of information and resources will lead to greater benefits for the area.

As a result, the extent to which the implemented activities are delivered and implemented in a widespread manner will have a corresponding impact on the change in urban decay and inner area attractiveness leading to a change in the resident population.

The analysis of the DPG chart illustrates the importance of fostering collaboration among PSOs, non-profit and for-profit organizations, as well as civil society to enhance inner area resilience to wicked problems.

The analysis has been intentionally centered on a particular array of strategic resources, performance drivers, and both intermediate and final outcomes that predominantly influence wicked problems within the Monti Sicani inner area. This chart has been employed to refine the analysis and underscore the benefits associated with the adoption of this approach.

Figure 4 – A Dynamic Performance Governance chart mapping the relationships among outcomes, public value drivers, and associated strategic resources for inner area resilience to wicked problems



10.5. Concluding remarks

This chapter has illustrated the potential of adopting a Dynamic Performance Governance approach to tackle inner-area wicked problems by enabling stakeholder collaboration to foster public value creation, and, therefore, enhance place resilience. In line with this, it was stressed that there is a need to overcome the possible limitations stemming from traditional policymaking and static approaches. Indeed, addressing inner area wicked problems requires engaging with stakeholders to understand their needs and perspectives, as well as involving them in co-planning, co-designing, co-producing, and co-evaluating holistic policy solutions (Torfing and Ansell, 2007; Crosby et al., 2017) and managing public programs or assets (Ansell and Gash, 2008). These collaborative arrangements may contribute to the achievement of shared goals and values such as economic dynamism, quality of life, and inner area attractiveness. To be effective in the long term, such collaborative settings should be supported by proper methods to frame public value creation and performance determinants.

From this perspective, the DPG approach can assist policymakers and stakeholders in designing and implementing alternative solutions aimed at creating public value in an inner area while improving policy outcomes and fostering accountability and legitimacy (Bianchi, 2021, 2022).

In line with this, the provided example has shown how such an approach may support stakeholders in collaborative settings in developing robust cause-and-effect analysis underlying inner area dynamic complexity. This may help collaborating stakeholders to identify the critical strategic resources, performance drivers, and outcomes underlying inner area wicked problems. In the investigated domain, public value refers to the creation of place-based collaborative initiatives that may impact the community. In fact, the Monti Sicani example has shown how identifying the driving forces impacting the area, entails stakeholders' collaboration to effectively affect the provision of infrastructure and services to enhance inner area attractiveness and quality of life.

Through DPG, it is possible to bridge three research fields that often utilize different methods, vocabulary, and tools that have been kept separate, i.e., performance management, governance, and system dynamics, to foster a holistic approach. DPG, by leveraging feedback analysis has the potential to enhance the quality and comprehension of performance reports, accountability, communication processes, policy design, and implementation. This approach is also able to foster a progressive cultural transformation towards performance management and governance that focuses on achieving desired outcomes. In this perspective, DPG may act as methodological guidance able to frame the main cause-and-effect relationships underlying inner areas. It also highlights the main tangible and intangible organizational and shared strategic resources that should be leveraged by collaborating stakeholders to reach the desired sustainable short- and long-term outcomes. In doing so, it emphasizes the crucial role played by performance drivers as key success factors to gauge and dynamically adapt performance information to impact such outcomes. Indeed, by focusing on such drivers stakeholders can understand the effect of their policies and create public value.

We argue that DPG can be a powerful tool for stakeholders who are willing to engage in collaborative initiatives. This requires engaging with stakeholders to understand their needs and perspectives, as well as involving them in the co-creation of solutions (Torfing and Ansell, 2017). In this perspective, DPG supports collective knowledge of local problems, enhances the interaction between service policy and delivery within a specific setting, and combines a public service perspective with an institutional point of view (Bianchi, 2021, 2022).

In this sense, DPG can be regarded as a earning-oriented tool that may help policymakers and stakeholders in collaborative settings to develop a common shared view of wicked problems affecting inner areas to design and implement policies that may foster public value creation. Such a "maieutic

machine" (Busco and Quattrone, 2018; Vignieri and Grippi, 2024) role of DPG enables a continuous questioning of currently adopted logic and assumptions, and established meanings associated with performance information to foster an outside-in view of performance, and, therefore, collaboration among stakeholders.

This contribution aims to be a preliminary phase towards a potential next analysis stage to further improve decision-making and collaborative settings through simulation modeling in specific field studies. More theoretical and empirical efforts will be needed to strengthen the theoretical foundation of such an approach and investigate how it may foster public value creation through stakeholder collaboration while improving policy outcomes, fostering accountability and legitimacy, as well as boosting innovation.

As further research avenues, continuing to investigate stakeholder collaboration as a source of public value creation in inner areas could provide benefits for the resilience of such contexts and the lifelong endurance of the inner area stakeholders.

References

Almeida, M. A. (2018). Fighting depopulation in Portugal: local and central government policies in times of crisis. *Portuguese Journal of Social Science*, 17(3), 289-309.

Ansell, C., Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, 18(4), 543-571.

Ansell, C., Torfing J. (Eds.) (2014). *Public innovation through collaboration and design*. Routledge.

Badami, A. (2019). *Gibellina, la città che visse due volte*. FrancoAngeli.

Bianchi, C. (2016). *Dynamic Performance Management*. Springer International Publishing.

Bianchi, C. (2021). *Fostering sustainable community outcomes through policy networks: A dynamic performance governance approach*. In *Handbook of Collaborative Public Management*. Edward Elgar Publishing.

Bianchi, C. (2022). *Enhancing policy design and sustainable community outcomes through collaborative platforms based on a dynamic performance management and governance approach*. In B. G. Peters, G. Fontaine (Eds.). *Handbook of Policy Design*. Edward Elgar.

Bianchi, C. (2023). *Looking at the impact of collaborative policies on intangibles and outcomes through dynamic performance governance*. In *Building Collaborative Governance in Times of Uncertainty: Pracademic Lessons from the Basque Gipuzkoa Province*, Leuven University Press.

Bianchi, C., Bereciartua, P., Vignieri, V., Cohen, A. (2019). Enhancing urban brownfield regeneration to pursue sustainable community outcomes through dynamic performance governance. *International Journal of Public Administration*, 44(2), 100-114.

Bianchi, C., Grippi, N. (2024). Developing collaborative ecosystem platforms to trigger sustainable "place-based" value creation: a dynamic performance governance approach. *International Journal of Productivity and Performance Management*, ahead-of-print.

Bianchi, C., Tomaselli, S. (2015). A dynamic performance management approach to support local strategic planning. *International Review of Public Administration*, 20(4), 370-385.

Bianchi, C., Vignieri, V. (2020). Dealing with "abnormal" business growth by leveraging local area common goods: An outside-in stakeholder collaboration perspective. *International Journal of Productivity and Performance Management*, 70(3), 613-634.

Bianchi, C., Williams, D.W. (2015). Applying system dynamics modeling to foster a cause-and-effect perspective in dealing with behavioral distortions associated with a city's performance measurement programs. *Public Performance & Management Review*, 38(3), 395-425.

Bianchi, C., Winch, G., Cosenz, F. (2018). Experimenting lean dynamic performance management systems design in SMEs. *International Journal of Productivity and Performance Management*, 67(7), 1234-1251.

Bouckaert, G., Halligan, J. (2007). *Managing Performance: International Comparisons*. Routledge.

Bovaird, T. (2007). Beyond engagement and participation: User and community coproduction of public services. *Public Administration Review*, 67(5), 846-860.

Bryson, J., Crosby, B., Stone, M. (2006). The design and implementation of cross-sector collaborations: Propositions from the literature. *Public Administration Review*, 66(1), 44-55.

Busco, C., Quattrone, P. (2018). Performing business and social innovation through accounting inscriptions: An introduction. *Accounting, Organizations and Society*, 67, 15-19.

Chen, B., Bianchi, C., Yu, J. (2023). Resilient urban governance: adaptation and innovation in the face of the Coronavirus pandemic. *Urban Governance*, 3(1), 1.

Conteh, C., Harding, B. (2023). Boundary-spanning in public value co-creation through the lens of multilevel governance. *Public Management Review*, 25(1), 104-128.

Cooper, T. L., Bryer, T. A., Meek, J. W. (2006). Citizen-centered collaborative public management. *Public Administration Review*, 66, 76-88.

Cooper, T. L., Gulick, L. (1984). Citizenship and professionalism in public administration. *Public Administration Review*, 44, 143-151.

Craven, L., Dickinson, H., Carey, G. (Eds.) (2018). *Crossing boundaries in public policy and management: Tackling the critical challenges*. Routledge.

Crosby, B. C., Bryson, J. M. (2010). Integrative leadership and the creation and maintenance of cross-sector collaborations. *The Leadership Quarterly*, 21(2), 211-230.
Crosby, B. C.,'t Hart, P., Torfing, J. (2017). Public value creation through collaborative innovation. *Public Management Review*, 19(5), 655-669.
Cui, T., Osborne, S. (2018). *Building Public Values through Cross-sector Collaboration: One Possibility of Creating Public Value*.
Ferreira, A., Otley, D. (2009). The design and use of performance management systems: An extended framework for analysis. *Management Accounting Research*, 20(4), 263-282.
Ferreri, F. (2021). *Case a 1 € nei borghi d'Italia. Sambuca di Sicilia: un esempio di successo nel governo del territorio*. Flaccovio Editore.
Ghaffarzadegan, N., Lyneis, J., Richardson, G. P. (2011). How small system dynamics models can help the public policy process. *System Dynamics Review*, 27(1), 22-44.
Igalla, M., Edelenbos, J., van Meerkerk, I. (2021). Institutionalization or interaction: Which organizational factors help community-based initiatives acquire government support? *Public Administration*, 99(4), 803-831.
Knickel K. et al. (2018). Between Aspirations and Reality: Making Farming, Food Systems and Rural Areas More Resilient, Sustainable and Equitable. *Journal of Rural Studies*, 59, 197-210.
Lino, B., Contato, A., Ferrante, M., Frazzica, G., Macaluso, L., Sabatini, F. (2022). Re-Inhabiting Inner Areas Triggering New Regeneration Trajectories: The Case Study of Sicani in Sicily. *Sustainability*, 14, 976.
Madden, J. R. (2015). *The Collaboration Blueprint: Designing and Building Effective Strategies for Innovation and Rejuvenative Collaboration*. Case Western Reserve University.
Morecroft, J. D. W. (2015). *Strategic Modelling and Business Dynamics: A Feedback Systems Approach*. Wiley.
Morecroft, J. D. W., Sterman, J. (2000). *Modeling for Learning Organizations*. Taylor & Francis.
Noto, G., Noto, L. (2019). Local Strategic Planning and Stakeholder Analysis: Suggesting a Dynamic Performance Management Approach. *Public Organization Review*, 19, 292-310.
Osborne, S. P. (2021). *Public Service Logic: Creating Value for Public Service Users, Citizens, and Society through Public Service Delivery*. Routledge.
Otley, D. (1999). Performance management: A framework for management control systems research. *Management Accounting Research*, 10, 363-382.
Otley, D. (2012). Performance management under conditions of uncertainty: Some valedictory reflections. *Pacific Accounting Review*, 24(3), 247-261.
Ottomano Palmisano, G., Sardaro, R., La Sala, P. (2022). Recovery and Resilience of the Inner Areas: Identifying Collective Policy Actions through PROMETHEE II. *Land*, 11(8), 1181.

Peters, B. G. (2010). *Meta-governance and public management*. In S. P. Osborne (Ed.). *The New Public Governance? Emerging Perspectives on the Theory and Practice of Public Governance*, Routledge.
Peters, B. G., Bianchi, C. (2023). Moving away from patronage: A feedback approach. *The American Review of Public Administration*, 53(1), 36-48.
Pidalà, A. M. (2023). *Analisi del contesto Territoriale*. In M. Carta, D. Ronsivalle, B. Lino, A. Contato (Eds.). *Sicani Living Future: Processi di sviluppo incrementale e adattivo nell'orizzonte del 2040*. https://iris.unipa.it/retrieve/eea0ae39-bf14-4301-b571-b3fa05788fac/Sicani_future%20-%20living_lab_WEB-v16a_compressed%20%281%29.pdf.
Rajala, T., Laihonen, H., Haapala, P. (2018). Why is dialogue on performance challenging in the public sector? *Measuring Business Excellence*, 22(2), 117-129.
Rajala, T., Laihonen, H., Vakkuri, J. (2020). Exploring challenges of boundary-crossing performance dialogues in hybrids. *Journal of Management and Governance*, 24, 799-820.
Rhodes, R. A. W. (2017). *Network Governance and the Differentiated Polity*. Vol. 1, Oxford University Press.
Rittel, H. W., Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4(2), 155-169.
Roberts, J., Scapens, R. (1985). Accounting systems and systems of accountability – Understanding accounting practices in their organizational contexts. *Accounting, Organizations and Society*, 10(4), 443–456.
Romero, D., Molina, A. (2011). Collaborative networked organisations and customer communities: Value co-creation and co-innovation in the networking era. *Production Planning & Control*, 22(5-6), 447-472.
Rossitti, M., Dell'Ovo, M., Oppio, A., Torrieri, F. (2021). The Italian National Strategy for Inner Areas (SNAI): A critical analysis of the indicator grid. *Sustainability*, 13, 6927.
Sancino, A. (2016). The meta co-production of community outcomes: Towards a citizens' capabilities approach. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 27, 409-424.
Satheesh, S. A., van Meerkerk, I., Verweij, S., Busscher, T., Arts, J. (2022). Enabling boundary spanners in public-private collaboration: The impact of support and role autonomy on reducing role stress. *Public Administration*.
Spicer, M. W. (2010). *In Defense of Politics in Public Administration: A Value Pluralist Perspective*. University of Alabama Press.
Sterman, J. (2000). *Business Systems Dynamics*, McGraw-Hill.
Strategia Area Interna Sicani (2020). https://www.agenziacoesione.gov.it/wp-content/uploads/2020/12/Sicilia-Strategia-Terre-Sicane-Maggio_2020.pdf.
Strokosch, K., Osborne, S. P. (2020). Co-experience, co-production and co-governance: An ecosystem approach to the analysis of value creation. *Policy and Politics*, 48(3), 425-442.
Thomson, A. M., Perry, J. L., Miller, T. K. (2009). Conceptualizing and measuring collaboration. *Journal of Public Administration Research and Theory*, 19(1), 23-56.

Torfing, J., Ansell, C. (2007). Strengthening political leadership and policy innovation through the expansion of collaborative forms of governance. Public Management ReT. Bovaird, Beyond engagement and participation: User and community coproduction of public services. *Public Administration Review*, 67(5), 846-860.

Torfing, J., Ansell, C. (2017). Strengthening political leadership and policy innovation through the expansion of collaborative forms of governance. *Public Management Review*.

Torfing, J., Ansell, C. (2017). Strengthening political leadership and policy innovation through the expansion of collaborative forms of governance. *Public Management Review*.

Vignieri, V. (2019). Framing the sources of image of a local area through outcome-based dynamic performance management. *Public Organization Review*, 19(2), 249-271.

Vignieri, V. (2022). *Enhancing Performance Regimes to Enable Outcome-based Policy Analysis in Cross-boundary Settings: A Dynamic Performance Management Approach*. Springer International Publishing.

Vignieri, V., Grippi, N. (2024). Fostering the 'performativity' of performance information use by decision-makers through dynamic performance management: Evidence from action research in a local area. *Systems*, 12(4), 115.

Wenger, E., Trayner, B., De Laat, M. (2011). *Promoting and Assessing Value Creation in Communities and Networks: A Conceptual Framework*. https://www.researchgate.net/publication/220040553.

Wood, D., Gray, B. (1991). Towards a comprehensive theory of collaboration. *Journal of Applied Behavioral Science*, 27, 139-162.

Xavier, J. A., Bianchi, C. (2020). An outcome-based dynamic performance management approach to collaborative governance in crime control: Insights from Malaysia. *Journal of Management and Governance*, 24, 1089-1114.