The Role of Middle Management in the Public Sector's Innovation Activities

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ABSTRACT

Public sector innovation plays a significant role in both national growth and the welfare of individual residents. However, little is known about how the bureaucracy of management in the public sector shapes the relationship of innovation and performance. In such bureaucracy, middle managers typically serve as the head of a function, team, or office and oversee daily and other operations. This study focuses on the role of middle management in innovation and overall performance in public organizations. By analyzing a dataset of 203 samples collected from middle managers working in public sector in Vietnam, this research has found the mediating role of innovation in the relationship between middle management and overall performance. The moderating effects of middle management roles have been illustrated as a double-edged sword in converting innovation into performance. While synthesizing information and supporting decision-making promotes converting benefits from innovation activities into organizational performance, the role of middle management towards subordinates puts pressure on the relationship between innovation and organizational performance. Understanding how middle management influence the innovation-performance nexus can empower public organizations to optimize their middle management functions and elevate their overall performance.

Keywords: Middle management roles, innovation, public sector.

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1. INTRODUCTION

Governments worldwide have to face many challenges related to waste and ineffective resource allocation resulting from insufficient operational efficiency. Outdated processes, inadequate IT infrastructure, and bureaucratic roadblocks can lead to service delivery delays, wasted resources, and a reduced ability to respond to citizen needs (Zhenbin *et al.*, 2020). Governments recognize that innovation is no longer optional, it is essential for driving national competitiveness and enhancing citizen well-being, creating a more prosperous and equitable future (Buchheim, Krieger and Arndt, 2020). While the public sector might not face the same market pressures as private companies,

the need to deliver efficient, effective, and responsive services is paramount. By embracing innovation, governments can optimize resource allocation, reduce costs, improve decision-making, and enhance transparency and accountability, as suggested by studies on public management innovation (Muhammad Hafiz and Frinaldi, 2023). Innovation in the public sector is gaining increasing attention from politicians, civil servants, and societal organizations, as governments seek to maximize public value and adapt to changing social, economic, and technological trends (De Vries, Bekkers and Tummers, 2016). The increasing focus on innovation in the public sector reflects a growing understanding that governments must adapt and evolve to meet the challenges and opportunities of the 21st century. Research has shown that innovation plays a mediating role in the management-performance relationship, highlighting its impact on organizational success (Buchheim, Krieger and Arndt, 2020). It leads to better public services, addresses societal challenges, and increases citizen engagement through their initiatives.

Despite the clear benefits, public sector innovation faces a number of unique challenges such as risk aversion, siloed structures, and lack of resources or incentives for innovation. The risk-averse culture of many government agencies, rigid bureaucratic structures, and political constraints can all impede the adoption of new, untested ideas. Some argue that middle management is cumbersome to the operations of public sector organizations (Gassner, Gofen and Raaphorst, 2020), hindering the effectiveness of innovation. Middle managers, often separated from first-tier supervisors and are positioned behind senior managers, play a unique role in public organizations. They typically oversee daily operations and serve as the head of a function, team, or office (Rezvani, 2017; Surju, de Metz and Davis, 2020). With the tasks of empowering and supporting, middle managers can unlock significant innovation potential and enhance their ability to address complex societal challenges in their public sector organizations. However, with the requirement of lean operations to shorten work processing time, the role of middle management needs to be considered in organizations. In the public environment, where regulations and resource constraints, and public accountability and transparency are significant factors, the strategic roles of middle management to upward and downward levels must be balanced carefully.

This study examines these pivotal roles of middle management in driving innovation and overall performance within public sector organizations by answering following research questions: what is the impact of middle management roles on innovation activities and overall performance in public sector organizations; what are the moderating effects of upward and downward roles of middle management on the innovation-performance relationship.

By closely investigating the different functional groups of middle managers - upward and downward roles - the study extends management theory on the mechanisms of management's impact on the innovation-performance relationship in the public sector. It reveals that the upward roles—where middle managers synthesize information for senior leadership—are crucial in fostering innovation and enhancing performance, while the downward roles focused on implementation and control may weaken this positive relationship. This finding highlights the need for organizations, especially in the public sector, to carefully balance middle management practices by empowering

employees and simplifying processes to mitigate the disadvantages associated with downward roles.

2. LITERATURE REVIEW

2.1. The role of innovation in the performance of public organizations:

Organizational performance in public sector is defined as the accomplishment and public values that an organization creates. These public values are generated via the process of public administration, the management of the government, providing the public products and services to citizens, and gain the satisfaction of the citizens. Innovation is the process of developing and implementing new ideas, processes, services, or delivery models that create significant positive change within government and public organizations (Buchheim, Krieger and Arndt, 2020; Nguyen, Tran and Trieu, 2024). It is about moving beyond business as usual to find better ways to serve citizens, address societal challenges, and improve the efficiency and effectiveness of public services. Innovation can involve a wide range of activities, from adopting new technologies and streamlining bureaucratic processes to fostering collaborative partnerships and redesigning public services based on user needs (Buchheim, Krieger and Arndt, 2020).

The scholarly literature and emerging practices suggest that there are practical ways to foster a culture of innovation within the public sector. One key factor is the development of supportive systems, processes, and climates that promote and demonstrate innovation and creativity (Oshima and Toma, 2022). Moreover, the scholarly perspectives on public sector innovation have evolved, with a growing recognition that innovation is an open and collaborative process that spans multiple stakeholders and organizations. Empowering public employees to contribute their ideas and participate in the innovation process is also crucial (Choi and Chandler, 2015). Innovation in the public sector often requires cross-boundary collaboration, as government agencies, citizens, and other societal actors work together to co-create new solutions. This participatory approach can foster greater transparency, accountability, and trust between government and the public (Zhenbin *et al.*, 2020; Lee and Azis, 2024).

Innovation activities enhances service delivery, allowing public organizations to design and deliver services that are more responsive, accessible, and tailored to the specific needs of citizens. By embracing new technologies, streamlining processes, and adopting data-driven approaches, public sector organizations can optimize resource allocation, reduce waste, and improve the overall efficiency and effectiveness of their operations, which address root causes and create lasting positive change (Buchheim, Krieger and Arndt, 2020). We propose the hypothesis base on the role of innovation on organizational performance as follow:

H1: Innovation has a positive impact on organizational performance.

2.2. The role of middle management in public organization

Middle managers occupy a crucial position within organizations, serving as the bridge between the overarching strategic vision of senior leadership and the day-to-day operational execution at the frontlines. Recent research suggests that far from being mere obstructers of change, middle managers can play a strategic role in driving organizational transformation (Balogun, 2003; Rouleau and Balogun, 2011). Control is not unilateral, but rather there is a two-way interaction. Middle managers are not only repeating directives from the top when carrying out their duties. They in essence, have a coordinating role in which they arbitrate, bargain, and interpret relationships between the institutional (strategic) and technical (operational) levels of the business. To put it another way, intermediate managers connect groups that are vertically related. These 'linking pins' connect the general direction given by top managers to the day-to-day reality of lower-level staffs. The potential for substantial influence within the organization is established by this mediating role (Wooldridge and Floyd, 1990; Floyd and Wooldridge, 1997).

Strategic roles of middle management to have effective in an organization encompasses championing, synthesizing, facilitation, and implementing. These different roles work together to enable middle management to play a critical bridging function, connecting the strategic intent of top management with the operational realities on the ground (Balogun, 2003). The focus here is on the specific middle management activities that influence organizational strategy, the upward and downward roles of middle management influence activities were categorized in a prior study, along with their relationships to strategy.

Previous research highlighted the many roles that middle management may play in the operational process, supporting the argument that strategy change is best seen as emergent (Wooldridge, Schmid and Floyd, 2008; Huy, Corley and Kraatz, 2014). Middle management typically plays the roles of "championing alternatives" and "synthesizing information" in terms of upward influence. The former is thought to be the result of abrasive notions from executive management theory. Middle managers participate in persistent and convincing communication of strategic options when they "champion alternatives." In the function of the champion, middle managers promote cutting-edge concepts and commercial potential to senior management (Floyd and Wooldridge, 1992). The latter is more integrative since middle managers provide executive management with information about how they perceive and assess information about both internal and external occurrences. Activities for carrying out the synthesizing function include categorizing and combining both strategic and practical knowledge as well as selling issues to upper management (Rezvani, 2017).

Middle management roles to shape strategic decision-making through either "championing alternatives" or "synthesizing information" may be especially important for organizational innovation (Balogun, 2003; Rouleau and Balogun, 2011). Recent studies have highlighted the important role that middle management can play as 'change intermediaries,' facilitating organizational transformation by bridging the gap between executive vision and frontline execution (Neumann, 2021). By connecting top-level strategic goals with frontline realities, middle managers can ensure that innovation initiatives are aligned with organizational objectives and have the necessary support for successful. They are uniquely positioned to recognize emerging threats and

opportunities, and can play a crucial role in translating senior leadership's strategic vision into operational action.

When championing alternatives, middle managers advocate for innovative ideas and strategic options. They identify promising opportunities, develop compelling arguments, and persistently communicate their value to top managers board (Guo, Huy and Xiao, 2017). This upward push for new ideas can challenge the status quo and introduce fresh perspectives into strategic decision-making, ultimately fostering a more innovative organizational culture. Instead of championing innovative ideas, middle managers might suppress or filter information that challenges the status quo or presents risks to their departments, hedging negative consequences to the organization.

Through synthesizing information, middle managers gather insights from both internal and external sources and presenting them to top management in a clear and concise manner (Rouleau and Balogun, 2011; Guo, Huy and Xiao, 2017). This process helps top managers make more informed decisions about innovation investments and strategic direction. By highlighting emerging trends, potential threats, and internal capabilities, middle management roles can shape the top managers' understanding of the innovation landscape and ensure that decisions about innovation are well-informed and strategically aligned. They bridge gaps between different parts of the organization, facilitating communication and collaboration that are essential for successful innovation, which raise organizational performance. We propose these hypotheses:

H2: Upward roles of middle management have a positive impact on innovation.

H3: Upward roles of middle management have a positive impact on organizational performance.

H4: Upward roles of middle management positively moderate the relationship between innovation and organizational performance.

Middle managers 'facilitate adaptability' and 'implement deliberate strategy' in terms of their major role, downward influence, which is the execution of strategy. The former may differ because the middle manager is concerned with fostering adaptation in this situation separate from or occasionally in spite of the plans incorporated into intentional strategy (Floyd and Wooldridge, 1997). The latter is characterized as managerial interventions that harmonize organizational action with strategic aims and is frequently thought of as the primary strategic task of middle managers (Currie and Procter, 2005). Middle management roles foster diverse flexibility to strategy and changes in their facilitation function. They provide information and can direct adaptation, for example, by facilitating proper prioritization of safety objectives and guidance. Middle managers put deliberate strategies or strategic decisions into action. They translate the broad, long-term strategic goals from top managers into personal performance plans and immediate operational goals that are carried out by regional staffs in the field. They inspire, coach, and motivate their subordinates in order to do this (Rezvani, 2017).

Middle managers facilitate adaptability by empowering and encouraging their teams to embrace change and respond effectively to emerging challenges and opportunities (Elliott, Day and Lichtenstein, 2020). They build consensus, address concerns and

provide emotional support to help their teams navigate ambiguity and transition. Middle managers foster a safe space for trying new approaches, learning from failures, and iterating based on real-world experience (Elliott, Day and Lichtenstein, 2020). They empower staffs at lower levels to make decisions related to their areas of expertise, leading to quicker responses and more agile adaptation.

On the other hand, when implementing deliberate strategy, middle managers are more directive, aligning their teams' activities and metrics directly with the organization's strategic priorities and ensuring flawless execution of the strategic plan (McGurk, 2009). Middle managers cascade objectives, translate strategic priorities into concrete action plans, and ensure alignment and accountability across the organization. They serve as the crucial bridge between high-level strategy and on-the-ground execution (Van Rensburg, Davis and Venter, 2014), breaking down abstract innovation objectives into clear, measurable targets for individual teams and employees. They distribute funding, personnel, and other resources strategically to support innovation initiatives. Monitoring progress and providing support is very important for innovation projects with the guidance and removing roadblocks to ensure successful execution (Birken *et al.*, 2018; Gjerde and Alvesson, 2020). Based on this, we propose the following hypotheses:

H5: Downward roles of middle management have a positive impact on innovation.

H6: Downward roles of middle management have a positive impact on organizational performance.

H7: Downward roles of middle management positively moderate the relationship between innovation and organizational performance.

To summarize, middle managers play a crucial role in fostering innovation and performance in the public sector through a combination of upward and downward influence. They are uniquely positioned to identify emerging threats and opportunities, communicate these to senior leadership, and champion innovative solutions. We suggest the conceptual framework as following:

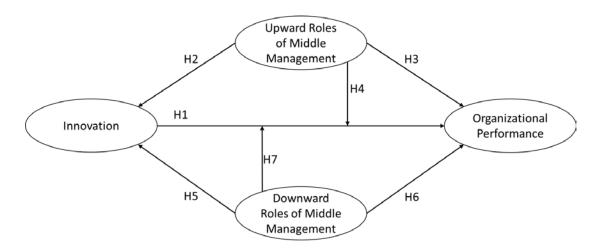


Figure 1. Research model

3. METHODOLOGY

3.1. Data collection

This research employed a two-stage data collection approach targeting middle managers working in non-profit, government-operated organizations within Vietnam. Initially, a pilot survey utilizing Google Forms was disseminated online in January 2024, yielding 21 responses. This pilot phase facilitated questionnaire refinement, ensuring contextual relevance and comprehensiveness. Subsequently, between February and March 2024, a full-scale survey was conducted with the support of managerial and supervisory personnel within the participating organizations. This comprehensive survey yielded 203 complete responses from a distribution pool of 300, representing a response rate of 67.7%. The questionnaire was structured to gather both demographic data (institutional affiliation, experience, political status, e.g.) and subjective evaluations of the research constructs. The respondents' characteristics have been provided in following table.

Table 1: Respondents' characteristics

Gender	Staff	Percent	
Male	91	45%	
Female	112	55%	
Type of organization		Percent	
Party and mass organization	24	120/	
agencies	24	12%	
State administrative agencies	96	47%	
Public service delivery units	58	29%	
Others	25	12%	
Size of organization		Percent	
Under 20 staffs	25	12%	
20 - 50 staffs	67	33%	
51 - 100 staffs	31	15%	
Above 100 staffs	80	40%	
Grand Total	203		

3.2. Measurement scales

The study employed a 5-point Likert scale, ranging from "strongly disagree" to "strongly agree", to measure the constructs of organizational performance, innovation, and the upward and downward middle management roles.

Table 2: Measurement scales

Construct / Sources	Items
Organizational	Our organization is operating very productively

performance	Employees are satisfied with the agency's performance				
Adapted with	Our organization serves well and receives satisfaction from				
minor adjustments	the people				
from Gibson and	Our organization met its annual goals				
Birkinshaw (2004)					
	Our organization completes its mission every year				
Innovation	Our organization has many successful projects based on its				
Adapted with	ability to explore new technologies				
minor adjustments	Our organization has created innovative products or services				
from Sharma,	for the entity.				
Gautam and	Our organization is always looking for new ways to meet the				
Chaudhary (2020);	needs of its citizens				
and Nguyen, Tran	Our organization is constantly trying to address new needs of				
and Trieu (2024)	the people.				
	Our organization aggressively ventures into new solutions.				
	I effectively gather information to assess the viability of new				
	projects.				
	I effectively communicate the activities and perspectives of				
	external stakeholders (e.g., clients, suppliers) to top				
	managers.				
	I actively monitor and analyzes changes in the external				
	environment (e.g., industry trends, regulations) and informs				
Upward roles of	top managers.				
middle	I critically evaluate new action programs, providing insightful				
management	recommendations to top managers.				
Adapted with	I critically evaluate proposals, providing insightful				
minor adjustments	recommendations to top managers.				
from Floyd and	I proactively identify new opportunities for organizational				
Wooldridge (1997)	growth and presents them to top managers.				
	I effectively advocate for promising programs or projects to				
	secure support from top managers.				
	I effectively gather information to assess the viability of new				
	projects.				
	I effectively communicate the activities and perspectives of				
	external stakeholders (e.g., clients, suppliers) to top				
	managers.				
Downward roles	I empower staffs to take initiative and experiment with new				
of middle	approaches to achieve our goals.				

management	I effectively allocate resources (e.g., time, budget, personnel)		
Adapted with	to support the development and testing of new programs.		
minor adjustments	I effectively arrange location to support the development and		
from Floyd and	testing of new programs.		
Wooldridge (1997)	I actively support the implementation of pilot projects,		
	providing guidance and removing obstacles.		
	I foster a culture of open communication and information		
	sharing within my team.		
	I effectively translate organizational goals into clear and		
	actionable plans for my team.		
	I help us understand how our individual work contributes to		
	the overall goals of the organization.		
	I effectively communicate and cascade top managers'		
	initiatives down to the team level.		

3.3. The measurement model assessment

Data analysis was conducted utilizing Partial least squares structural equation modeling (PLS-SEM) to evaluate the proposed research model. In order to evaluate the scale's reliability and validity, the study followed the recommendations of Hair et al. (2014). All reliability criteria were met. The Cronbach's alpha coefficients for all latent variables were higher than the 0.6 threshold, indicating the model has a good degree of internal consistency, and the uni-dimensionality of the scales is reasonable (Hair *et al.*, 2014). Further, the Composite Reliability (CR) of all constructs should exceed 0.7 to ensure internal consistency.

Table 3: Reliability and Convergent Validity

				Average
	Cronbach's Alpha	rho_A	Composite	Variance
			Reliability	Extracted
				(AVE)
Innovation	0.906	0.912	0.930	0.729
Downward roles of MM	0.952	0.959	0.960	0.752
Upward roles of MM	0.956	0.962	0.964	0.793
Org. Performance	0.918	0.920	0.939	0.754

The validity of the structure was evaluated according to two criteria including convergent value, and discriminant validity. The requirement for convergent validity was ideally met, as the AVE for all latent variables exceeded 0.5 (Hair, 2014). All Heterotrait-Monotrait ratio of correlations (HTMT) are below 0.85 indicates the model

satisfies discriminant validity (Table 4).

Table 4: Heterotrait-Monotrait correlation ratio (HTMT)

	Innovation	Downward roles of MM	Upward roles of MM	Org. Performance
Innovation				
Downward roles of MM	0.587			
Upward roles of MM	0.651	0.778		
Org. Performance	0.746	0.493	0.538	

4. EMPIRICAL RESULTS

After confirming the measurement model's reliability and validity, the study investigated the connections between key elements: upward roles of middle management, downward roles of middle management, innovation, and organization performance. This examination was conducted using the structural model assessment and involved a bootstrapping technique with 5,000 samples. An R-squared value of the variation in organizational performance is approximately 52.7%. The results of this analysis, specifically the path coefficients shown in Table 5, were then used to assess the research hypotheses via direct effect and moderating effects.

Table 5. Path analysis

	Path	Coefficients	T Statistics	P Values	
H1	Innovation → Org Performance	0.570	7.961	0.000	
H2	Upward Roles of MM \rightarrow Innovation	0.455	3.685	0.000	
Н3	Upward Roles of MM \rightarrow Org Performance	0.124	1.205	0.228	
H4	Upward Roles of MM * Innovation	0.155	1.880	0.060	
	→ Org Performance	0.133	1.000	0.060	
H5	Downward Roles of $MM \rightarrow Innovation$	0.208	1.652	0.099	
Н6	Downward Roles of $MM \rightarrow Org$	0.061	0.040	0.396	
	Performance	0.061	0.848		
H7	Downward Roles of MM * Innovation	-0.211	2 050	0.004	
-	→ Org Performance	-0.211	2.858	0.004	

Innovation strongly predicts organizational performance (H1) with the positive path coefficient (β = 0.570) with a significant p-value supports this hypothesis. Upward roles of middle management positively influences innovation (H2), which is supported by the positive path coefficient (β = 0.455; p-value = 0.000). However, the influence of upward roles of middle management on organizational performance is not statistically

significant (H3), leading to the rejection of this hypothesis. The empirical evidence is insufficient to support that downward middle management roles have a positive relationship with innovation at the 95% confidence level (H5). Similar to upward roles of middle management, the effect of downward roles of middle management on organizational performance is not statistically significant (H6).

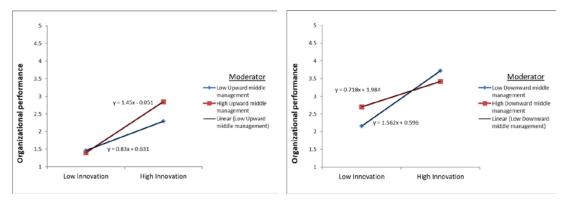


Figure 2: Moderating effect of Upward roles and Downward roles of middle management

The result of moderating effect assessment has confirmed that the influence of innovation on organizational performance is amplified by upward roles of middle management ($\beta = 0.155$; p-value = 0.060), which supports H4. Interestingly, the downward roles of middle management impacts negatively on the relationship between innovation and organizational performance, supported by a significant p-value (0.004).

5. DISCUSSION & IMPLICATION

This research on the impact of middle management on innovation and organizational performance presents the confirmation of innovation as a key driver of organizational performance aligns with a wealth of existing research. This finding reinforces the widely accepted notion that innovation is crucial for organizational growth, adaptability, and long-term success (Nguyen, Tran and Trieu, 2024).

Previous research often highlighted the importance of the roles of middle management in promoting innovation (Wooldridge, Schmid and Floyd, 2008). However, this study goes further by differentiating between upward and downward influences, a distinction not always explicitly made in earlier research. The finding that upward roles of middle management foster innovation and its successful conversion into organizational performance, which is consistent with previous research in middle management (Elliott, Day and Lichtenstein, 2020; Li, Liu and Di, 2023; Yu and Kim, 2023). By effectively communicating top-down goals and facilitating bottom-up feedback, middle managers can ensure alignment and create a conducive environment for innovation to flourish and translate into visible results.

However, the study's findings on downward roles of middle management present a more complex picture. The insufficient evidence to support the relationship between downward roles of middle management to innovation suggests that an overly strong emphasis on control and adherence to existing processes, typical of downward roles of

middle management, might prevent the conversion of innovation to generate public value, echoing concerns about the detrimental effects of excessive control in public sector (Kaufman and Glăveanu, 2019; Zhou *et al.*, 2019). Overcoming bureaucratic hurdles and resistance to change can be a significant obstacle for middle managers pushing for innovative solutions. A desire to minimize disruption and maintain stability might hinder the implementation of radical innovations. The public sector often has a lower tolerance for risk compared to the private sector, which can lead to middle managers being hesitant in embracing innovations. A strong emphasis on existing processes and procedures can lead to resistance against new, untested ideas.

The downward roles of middle management weaken the positive relationship between innovation and performance reveals a new and potentially challenging insight. Public sector organizations are bound by strict rules, regulations, and procedures to ensure fairness, legality, and accountability. Innovative activities often lack predefined steps or guidelines, making them inherently uncertain. Without clear processes, middle managers may struggle to guide their teams effectively, fearing that deviations could lead to non-compliance or failure, which prevent the conversion of innovation to organizational performance.

This study highlights the complex and nuanced role of middle management in innovation. It is not enough to just simply encourage innovation; organizations must carefully consider how different management roles can either facilitate or hinder its success. Public sector organizations often grapple with complex stakeholder needs, bureaucratic structures, and political considerations. Middle managers play a crucial role in navigating this complexity to support innovation. They can effectively connect innovative ideas to broader public value goals, ensuring initiatives address societal needs and garner support for top management. With their expertise in public service delivery, middle managers optimize processes, improve efficiency, and maximize the impact of innovations. However, the study also points out that the limitations of middle management's function towards subordinates can reduce the impact of innovation on organizational performance. Empowering and simplifying processes could be the solution to the shortcomings of bureaucratic systems to encourage innovation in public sector, reducing the pressure on middle managers to be accountable. Public organizations can adopt information technology to create more flexible communication and decision-making mechanisms within departments to minimize the limitations of organizational hierarchy.

6. CONLUSION & FUTURE RESEARCH

Utilizing cross-sectional data based on a survey of 203 middle managers working at public sectors in Vietnam, this study finds that innovation plays a key role in driving organizational performance. While both upward and downward roles of middle management contribute to innovation, their direct effects on performance are not significant. However, the interaction effects highlight the importance of considering both management approaches and innovation simultaneously to understand their combined influence on organizational performance. The findings highlight how different middle management roles can either amplify or hinder the translation of innovative ideas into visible results. The research shows that upward roles of middle management roles, which synthesize the information for upper-level management, also

play a vital role in fostering both innovation and its successful conversion into organizational performance. In contrast, there is insufficient evidence to support that downward roles of middle management (focused on implementation and control lower level) foster innovation, their presence could even weaken the positive relationship between innovation and performance. This duality highlights the need for organizations to carefully consider the practices of upward and downward roles of middle management roles, especially in innovation-driven contexts. Empowering and simplifying processes can limit the disadvantages of downward roles of middle management in public sector.

While this finding highlights the importance of innovation, further research could explore the specific aspects of innovation that are most strongly influenced by upward middle management and have the most significant impact on performance. This could involve examining different dimensions of innovation, such as product, process, or organizational innovation. Further research is also needed to explore the specific mechanisms through which downward middle management might hinder the innovation-performance relationship. This could involve investigating the impact of different leadership styles, organizational structures and performance management systems on the ability of middle managers to effectively balance control and innovation.

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