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### **ARTIGO**

# POLICY MIX AND CAPACITIES FOSTERING THE INNOVATIVE CULTURE? A COMPARATIVE ANALYSIS OF **STATE GOVERNMENTS**

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## GT 2 ANÁLISE DE POLÍTICAS PÚBLICAS

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# Policy mix and capacities fostering the innovative culture? A comparative analysis of state governments

#### WORKING PAPER – PLEASE DO NOT CITE

#### Resumo

O artigo visa contribuir para o avanço do conhecimento sobre inovação em políticas, analisando como os instrumentos de política e a capacidade de governança são empregados nas experiências bem-sucedidas dos governos estaduais. Este artigo analisa as iniciativas de inovação dos governos estaduais premiadas no Concurso Inovação em Gestão Pública (CIGP), promovido pela Escola Nacional de Administração Pública (Enap) do Brasil. Usamos a análise de conteúdo nos relatórios dos vencedores do CIGP para identificar e discutir seus instrumentos de política, objetivos e governança. As principais conclusões são: a abordagem do mix de políticas é uma lente analítica adequada; não existe uma fórmula mágica que indique o caminho para o sucesso; há predominância de iniciativas baseadas na governança em rede; todas as inovações demonstraram a importância da capacidade operacional combinada com competências analítica e/ou política; a agenda da inovação é estratégica para os governos estaduais, revelando também uma fértil agenda de pesquisa.

Palavras-chave: Inovação. Instrumentos de política. Governaça. Governos estaduais. Brasil.

#### **Abstract**

The paper aims to contribute to the advancement of knowledge about policy innovation by analyzing how policy instruments and governance capacity are employed in the successful experiences of state governments. This paper analyzes the state governments' innovation initiatives rewarded in the Public Management Innovation Award (PMIA), promoted by the National School of Public Administration (Enap) in Brazil. We used content analysis on the PMIA winners' reports to identify and discuss their policy instruments, initial goals, and their governance features. The paper's main findings are: the policy mix approach is an appropriate analytical lens; there is no magic formula indicating the path to success; there is a predominance of initiatives based on network governance; all the innovations demonstrated the importance of operational capability combined with analytical and/or political competencies; the innovation agenda is strategic to state governments, also revealing a fertile research agenda.

**Keywords:** innovation; policy instruments; governance; state governments; Brazil.

#### Introduction

In the face of constant social, economic, and technological transformations and the dynamic changes in the relations between public administration, society, and business, policy innovation has become an imperative (OECD, 2015). As ideas implemented in processes, services, products, or communication campaigns generate public value, innovation has also become a strategic agenda in governments worldwide.

Despite the advance of studies, most of the literature focuses on the federal and local levels; however, states are also a dynamic laboratory for creative initiatives that generate positive outputs and outcomes, especially in federative countries, such as Brazil. State governments also have a comprehensive set of attributions within the Brazilian federative arrangement that includes tax collection, regulation, and a prominent role in providing social, law and order, economic, and infrastructure policies.

In this context, the paper aims to contribute to the advancement of knowledge about policy innovation by analyzing how policy instruments and governance capacity are employed in the successful experiences of state governments. What are the policy and instruments chosen and how they combine in order to foster public sector innovation? Which are their goals, rationales and policy capacities used to nurture innovative culture in public organizations? How do these experiences relate

to the governance mechanisms (hierarchy, market, and networks) to become recognized as best practices and achieve public values?

To answer these questions, the article explored the initiatives rewarded in the Public Management Innovation Award (PMIA), promoted since 1996 by the National School of Public Administration (Enap) in Brazil. In the last four editions (2016 to 2020), the award included a section to assess and reward states and the Federal District's innovations. To do so, we used content analysis on the PMIA winners' reports to identify and discuss their policy instruments, initial goals and possible interactions, and their governance features.

The paper's findings are quite interesting in many ways. First, the policy mix approach is an analytical lens since most innovations highlighted the importance of using different instruments in combination to achieve success. Second, there is no magic formula indicating the path to success, as innovation relies on co-production, adaptative and learning processes that change according to organizational characteristics and environment. Third, there is a predominance of initiatives based on network governance, suggesting the complexity of arrangements involving actors from civil society and the business sector. Fourth, all the innovations demonstrated the importance of operational capability combined with analytical and political competencies. Finally, this research confirmed that the innovation agenda is strategic to state governments, also revealing a fertile research agenda.

Besides the introduction, the article includes three other sections. Next, we debate literature of policy instruments and public governance, followed by the analysis of innovative initiatives within this theoretical framework. Lastly, some final remarks and future research agenda are presented.

# **Policy Instruments and Public Governance**

Innovations in the public sector can be analyzed with different focuses, methodological strategies, and theoretical grounds. This variety of approaches may emphasize the distinct types of innovation as the Oslo Manual's taxonomy (OECD/Eurostat, 2018) that classify them into four types (processes, services/products, organizational and communication or marketing). Besides, it may be explored by antecedents, barriers, goals/results, or diffusion's process (De Vries, Tummers & Bekkers, 2016; 2018).

For this paper, we propose an alternative analysis grounded in the instrument-based approach and policy governance concepts. The first presents an objective way to investigate the policy design and implementation by focusing on the instruments employed to face a particular public issue. The definition of policy instruments involves the idea of government accomplishing goals, as Salamon (2002: 19) puts it: "an identifiable method through which collective action is structured to address a public problem." According to Vedung (1998: 21), it is "a set of techniques by which governmental authorities wield their power in attempting to ensure support and affect or prevent social change,"

while Howlett (2000: 415) defines it as "to deliberately affect the nature, types, quantities, and distribution of the goods and services provided in a society."

The taxonomies also vary according to their types (Acciai & Capano 2021). Vedung (1998) divides the policy instruments into regulation, expenditure, and information. Howlett (2011) group them based on their purpose; if the instrument changes the distribution of goods and services, it is classified as substantive. The procedural instruments affect the policy outcomes through their influence in policymaking. On the other hand, Salamon (2002) avoids the typology since the multidimensionality of policy instruments demands further analysis, including views of how the good is delivered, the organization responsible, and rules that define the actors' involvement.

Two crucial dimensions related to are the policy goals desired and the rationales that motivate the actions. The first can have a single focus (economic, social, health, education, etc.) or include more than one if the policy instrument encompasses complex and transversal public issues, such as inequality, development, or sustainability (Ediquist & Borras, 2013). The policy's reasons, especially innovative ones, can originate from fixing market and government failures, coping with social, economic, or technological challenges and changes, or facing wicked problems. Both dimensions, however, are determined by the political process, in the context of adaptive, learning, path dependence, and uncertainty policymaking, that influence which strategy will be employed (Ediquist & Borras, 2013).

In objective terms, the choice of a particular policy instrument is not a trivial task since it reflects the reasons for the government intervention, prioritized goals, political and administrative capacity to design and implement it, and stakeholders' engagement and support. It becomes even more complex to which extent policy instrument is not isolated from other public initiatives or practices (Capano & Howlett, 2020). Generally, policy instruments operate in interaction with other interventions, called policy mix or bundle, i.e., the combination of several policy instruments or the combination of policy goals and means (Rogge, 2018).

Thus, policy mix may reflect coordination among instruments, complementarities, and synergies that increase effectiveness and be innocuous or even generate counterproductive effects (Flanagan *et al.*, 2011). The latter situation can be a consequence, for instance, of tensions among the instruments regarding conflicts of policy rationales, goals, and implementation approaches. In any case, the policy analyst must also be aware of key dimensions of these interactions, including policy subsystem, multi-level governance space, time, and geographical space. Moreover, Flanagan *et al.* (2011) highlight possible interactions of different instruments in the policy mix bundle targeting the same groups, distinct groups in the same process, broader system, or even the 'same' instruments across different dimensions.

To understand how policy instruments are put in practice, a broader context of instrumentation must be considered that they are always embedded in an interactive governance arrangement (Bressers & O'Toole Jr., 2005). It means a set of relational dynamics involving multiple actors interconnected by formal and informal institutions to produce state policy capacities (Capano, Howlett & Ramesh, 2015). In this sense, two other analytical alternatives to investigate innovation policymaking seems essential. The first is to map the inherent governance mechanisms, e.g., hierarchy, market, and networks, in the policy instruments or mix. Secondly, considering that there is no proper conceptual framework or 'one size fits all' manual to build capacities and capabilities seeking innovative initiatives, exploring how the policy entrepreneurs foster and use policy capacity is crucial to comprehend innovative instruments implemented.

Therefore, Wu, Ramesh, and Howlett (2018) define capacity as the set of skills and resources - or competencies and capabilities - necessary to perform public policy functions. Based on this, the authors categorize competencies or skills into three types (analytical, operational, and political), and each includes resources or capabilities at three different levels: individual, organizational and systemic. The authors emphasize the differences in this analytical proposal. First, these competencies and skills cover all stages of the public policy process, from agenda-setting to evaluation. Understanding governance capabilities go beyond the governmental sphere, interacting with various organizations, such as parties, NGOs, private companies, and international organizations. Finally, political capacity as the combination of skills and resources in this taxonomy allows the fitting of models (nested model) of capabilities to ensure that actions are technically sound at the analytical level, implemented in practice at the operational level, and the scope has the necessary support. Table 1 below describes each skill and competence:

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Despite the advance of studies, most of the literature focuses on the federal and local levels; however, states are also a dynamic laboratory for creative initiatives that generate positive outputs and outcomes, especially in federative countries, such as Brazil. State governments also have a comprehensive set of attributions within the Brazilian federative arrangement that includes tax collection, regulation, and a prominent role in providing social, law and order, economic, and infrastructure policies.

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successful experiences of state governments. What are the policy and instruments chosen, and how they combine in order to foster public sector innovation? Which are their goals, rationales, and policy capacities used to nurture innovative culture in public organizations? How do these experiences relate to the governance mechanisms (hierarchy, market, and networks) to become recognized as best practices and achieve public values?

**Table 1 – Policy Capacity** 

| Levels of<br>Resources and | Skills and Competences   |   |   |  |  |
|----------------------------|--|---|---|--|--|
| Capabilities               | Analytical   | Operational   | Political   |  |  |
| Individual                 | Knowledge and skills in analyzing and evaluating public policies.  | Expertise in planning, people management, budgeting, delegation, direction and coordination.  | Knowledge about policymaking and the position of the actors involved (stakeholders); Communication, negotiation and consensus building skills.            |  |  |
| Organizational             | Availability of professionals with analytical capacity; Tools and processes for data collection and analysis; Organizational commitment to evidence-based policy.                  | Organizational commitment to achieve goals; Availability of fiscal resources and personnel; Coordination of internal processes; Performance Management and; Accountability. | Legitimacy of policymaking;<br>Stakeholder engagement;<br>Access to the main<br>policymakers.   |  |  |
| Systemic                   | Information collection and dissemination systems; Access to competitive public policy advisory systems; Political support for rigorous analysis and evaluation of public policies. | Intergovernmental and interagency coordination; Coherence of communities and public policy networks; Clarity in the roles and responsibilities of the agencies.             | Political accountability;<br>Trust in government;<br>Participation of non-state actors<br>in policymaking;<br>Presence of public policy<br>entrepreneurs. |  |  |

| public policies. | Source: Adapted from Wu, Ramesh & Howlett (2018).

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The paper's findings are quite interesting in many ways. First, the policy mix approach is an analytical lens since most innovations highlighted the importance of using different instruments in combination to achieve success. Second, there is no magic formula indicating the path to success, as innovation relies on co-production, adaptative, and learning processes that change according to organizational characteristics and environment. Third, there is a predominance of initiatives based on network governance, suggesting the complexity of arrangements involving actors from civil society and the business sector. Fourth, all the innovations demonstrated the importance of operational

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#### **Innovation in the State Level in Brazil**

#### Data and Method

The empirical analysis and discussions about the characteristics of innovations at the state level in Brazil are primarily based on information from the reports of the award-winning initiatives of the Public Management Innovation Award (PMIA) contest between the years 2016 and 2020. The PMIA, set up in 1996 by the National School of Public Administration, aims to foster and disseminate innovative practices in the Brazilian public sector and reward civil servants to nurture the innovation culture and improve government effectiveness. Besides the public value's goal, PMIA has also provided a comprehensive data source for studies and research to increase knowledge about innovation in public administration.

The award results from the reform movement that Brazil experienced during the 1990s, highly influenced by New Public Management's assumptions (Cavalcante & Santos, 2020), and has a primary focus: public management activities, projects, and programs in a comprehensive set of public organizations. Over the years, PMIA has gone through some modifications and, since 2016, it has included a competition among innovations in the country's states and the Federal District's.

The reports of the winning initiatives are available in an online database that, during the last two decades, has been used by researchers as a secondary source for a variety of studies and publications (Cavalcante & Camões, 2017). On average, over one hundred applications are submitted nationwide to the state-level category. The assessment process is undertaken by members of the judging committee, composed of senior civil servants, scholars and consultants specialized in public sector innovation. The evaluation criteria are based on the following dimensions: Innovations in the public sector can be analyzed with different focuses, methodological strategies, and theoretical grounds. This variety of approaches may emphasize the distinct types of innovation as the Oslo Manual's taxonomy (OECD, 2018) that classify them into four types (processes, services/products, organizational and communication or marketing). Besides, it may be explored by antecedents, barriers, goals/results, or diffusion's process (De Vries, Tummers & Bekkers, 2016; 2018).

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The empirical analysis departs from the theoretical framework previously discussed to identify the innovative features of the 18 initiatives awarded in the last four editions. Based on their reports, we employed content analysis on three steps: (i) construction of categories identified in the literature; (ii) report reading and categorization of each initiative; and (iii) validation between the authors. The classification of the initiatives allowed the creation of a database with dummy variables (binary dichotomous) with a 0 (zero) represent the absence of category in the initiative and one (1) a presence. Then, we discuss the results using descriptive analysis and examples to qualify the findings.

# Policy instruments and Governance in the Public Innovations

The first dimension concerns the type of innovations that are being implemented at the state level. Following the Olso Manual's taxonomy (OECD, 2018), Table 1 shows that organizational type was not identified in any initiative and communication in only one (*Controlling at School*). This innovation fostered community and student engagement in the project's improvements in public, which is also a service innovation. This type, including products, is predominant with 11 cases, or 61%, which indicates a concern in improvement initiatives aimed directly to generate value to citizens in terms of efficiency, effectiveness, celerity, etc. The second most frequent type is process innovation, reflecting the ongoing concerns in making the state apparatus and policies more functional. For instance, the initiative of the Federal District called *Indicator-Based Health Management* won the PMIA 2019 edition by providing an online platform with real-time data of hospital visits, surgeries, materials, costs, and user satisfaction.

Regarding the policy instruments (Accai & Capano, 2020; Verdung, 1998) implemented by the state government, most of the initiatives were classified into more than one category, totaling 26 alternatives, as depicted in Figure 1. It is also worth mentioning that in seven winning projects (39%), two or three policy instruments were identified, indicating that the innovations seek to combine different instruments to increase the effectiveness of the initiative, in alignment with the literature of policy mix (Flanagan *et al.*, 2011).

**Table 2 – Type of innovation** 

| Type            | N  | %   |
|-----------------|----|-----|
| Product/Service | 11 | 61% |
| Process         | 7  | 39% |
| Communication   | 1  | 6%  |

Source: Authors' Elaboration.

The vast majority adopt instruments to improve information quality (11 cases, or 60%), mainly to support the decision-making of the policy implementation and service delivery. One interesting example is the Price Database (*Banco de Preços*) that provides information regarding

various products and services offered in the market to help the government procurement strategies. Half of the innovations also involves management tools, including eight also classified as information instrument. In this case, these initiatives focus on improving information systems or internal control processes, such as the Computerized Ombudsman System (*Sistema Informatizado de Ouvidoria*) from the Federal District. This project was awarded because it provided a stable and user-friendly interface that facilitated citizen complaints, criticisms, and suggestions.

The other two most employed policy instruments with an equal number of awards (four) are regulation and expenditure. The former usually targets efficiency increasing in allocating public resources, as in Low-Cost Orthotics (*Confeccção de Órteses de Baixo Custo*) from a hospital in the state of Bahia. This product innovation that considerably reduced the average length of stay of patients subsequently diminished the health system's costs. The regulation focuses on the standardization of public services innovatively, for instance, the Sustentare Program that promoted adaptation of the environmental legislation for the optimal reuse of electronic devices, sustainable recycling, and rationalization of public resources. Only two initiatives did not fit in any of these policy tools, so they were classified as 'others'.

Another way of analyzing the innovations and their embedded policy instruments is to focus on the original purpose. According to Howlett (2011), the procedural instruments change the actors' behavior involved in the policymaking, while the substantive ones directly affect the production, distribution, and consumption of goods and services. Among the PMIA winners, ten initiatives (56%) fit in the latter substantive category and nine in the former (50%) because one of them, *Controlling at School*, has both purposes.

Regarding policy goals, presented in Figure 2, as expected, some innovations aggregate more than one objective. Although the variety of goals, it is evident that improvements in the public management (10 cases or 56%) are the most recurrent, which may be explained by the fact that often innovation in the public sector depend also on changes in internal processes. The result reinforces that innovative practices are spread in different sector of the state level governments, with a highlight to the public security area (4 cases).

**Figure 1 - Policy instruments** 

Information (61%)

Management (28%)

Expenditure (22%)

Regulation (22%)

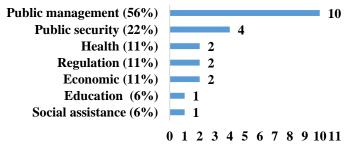
Other (11%)

2

0 5 10 15

Source: Authors' Elaboration.

Figure 2 - Policy goals



Source: Authors' Elaboration.

The rationale behind the policy reflects the reasons (issues, failures, changes, etc.) that motivated the state government to innovate, in other words, the primary activators. This category reveals an even greater complexity of the winning innovative projects, as seven initiatives (39%) were categorized into two simultaneous typologies, while another five (28%) were classified into three types. In addition, the award-winning experiences reveal the dynamism and complexity of innovations concerning the theoretical model, as five initiatives were fit in 'others'.

The most frequent occurrence is the ones seeking to correct government failures, 13 initiatives or 72% of the total of 18 awarded innovations, as shown in Figure 3. Identifying problems inside the organization or related to products and services represents a fundamental step so that improvement efforts can constantly be part of the public administration's prioritized agenda.

Innovations that seek to adapt to technological challenges are in second place, showing the importance of digital solutions in the public sector. Moreover, it is noteworthy that of the thirteen initiatives that addressed government failures, eight of them also involved technological challenges, revealing a strong association between these two categories. The other initiatives were built due to other relevant changes or challenges, such as economic, social, or wicked problems.

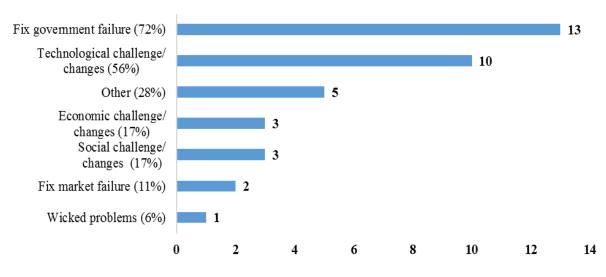


Figure 3 - Policy reasons

Source: Authors' Elaboration.

The two final dimensions are related to the governance arrangement of the innovation. The first involves the mechanisms employed in the policy instruments to reach the expected goal (Capano *et al.*, 2019). As shown in Table 3, the network is presented in almost 80% of the cases, indicating that state governments are also following the trend to work collaboratively with other organizations (Cavalcante & Camoes, 2017), whether from the public sector or corporation and civil society. Since policy changes usually rely on different and complementary measures, the occurrence of hybrid arrangements of governance is a reasonable finding. This is the case of the Enterprises

Accreditation and Traceability System (*Sistema de Credenciamento e Rastreabilidade de Empresas*) awarded in 2020, which employed all three mechanisms in its policymaking. The other five initiatives combined network and market mechanism, while hierarchy was in the same number of innovations.

The second dimension consists of policy capacity, necessary for a governance arrangement to thrive. In all innovations, operational capacity is observed, which indicates the use of competencies and capabilities related to the availability of personnel, organizational and financial resources, and coordination efforts. Such skills are needed not only in formulating but also in implementing policy improvements. Table 4 display these capacities distribution.

**Table 3 – Governance arrangement** 

| Governance | N  | <b>%</b> |  |
|------------|----|----------|--|
| Network    | 14 | 78%      |  |
| Hierarchy  | 5  | 28%      |  |
| Market     | 5  | 28%      |  |

Source: Authors' Elaboration.

Table 4 – Policy capacity

| Policy capacity | N  | N %  |  |
|-----------------|----|------|--|
| Operational     | 18 | 100% |  |
| Polítical       | 14 | 78%  |  |
| Analitical      | 9  | 50%  |  |

Source: Authors' Elaboration.

The political capacity also proved to be important in many initiatives, especially those involving other government actors and those from different sectors. The role of organizational leaders was determinant to engage the staff and grant legitimacy to the initiative, which may have contributed to guaranteeing the participation of external actors. Finally, the analytical capacity was identified in half of the awarded projects, especially in the ones that involve data collection and examination, evidence-based decisions, development of systems to manage the collected data.

It is noteworthy that five winning projects used all three policy capacities, while the other thirteen involved two capacities. In other words, the empirical analysis indicates that practical improvements in the public require the presence of an articulated set of competencies and capabilities instead of the focus on just one.

### Innovation Culture in the Brazilian State Level

The participation of state and the federal district administrations in Enap's award, since 2016, initially reveals an innovative culture being nurtured at this level of government, which is evident by the 244 projects submitted throughout the four editions. The approach of the awarded initiatives proves that the innovations implemented are generated crucial value for public management and services and, therefore, directly to the citizens.

In general, the different approaches employed provide findings that reiterate significant set of innovations fall into more than one category, indicating that innovation is much more complex and requires a policy mix to generate results. Obviously, no magic formula establishes the exact

combination among these features' elements, although it is possible to identify some trends in the awarded initiatives.

It worth noting that all initiatives that adopted the network-based governance mechanism also demonstrated political capacity. This finding reveals the correspondence that exists between these two categories. The search for more excellent articulation with different public and private actors already reveals an essential aspect of designing and implementing innovations. In addition, the winning projects also revealed that for the success of network governance, it is critical that the public sector has the political capacity to promote the engagement of actors in the innovation cycle, as identified by the literature (Cavalcante, 2017; 2019).

The initiatives that did not involve network governance and did not require political capacity aim to improve internal processes and seek to remedy government failures. Although network mechanism was not essential in these cases, as it did not involve partnerships, in all five cases, the importance of analytical and operational capacity was determinant.

In terms of policy instruments, eleven innovations were based on informational strategies, including six highlighting the analytical capacity. Identifying new categories reveals the dynamism of ongoing innovations in state and federal district governments, which requires updating the analytical framework. Most of them show evident concern with improving the services delivery.

### **Final Remarks**

This article aimed to analyze how policy instruments and capacity are employed in the successful experiences of state governments in the governance contexts. This objective is far from simple since innovation is a complex construct. The content analysis demonstrated an interesting combination variety of different mechanisms rather than a single pattern or path to success. It stands out to the need to adapt innovations to each organizational and administrative context, which, in turn, highlights the importance always to strengthen public policy capacities.

The operational capacity was a common feature of the awarded initiative, which reinforces the importance of public managers intensively acting in the innovation cycle, as well as in the execution of organizational functions; the organization has a clear commitment to implementing innovations and achieving results and, in more complex initiatives, the need for coordination of different stakeholders. However, the operational capacity was not present in a lonely way, being combined with the political and/or analytical capacity. Thus, the strengthening of all the factors that make up political capacity is fundamental for advancing innovations.

It was also noticed that the innovations emphasize recognizing the government's failures, which therefore demands self-criticism and analysis of the way processes, products and services are organized, with the need to generate data to trace change strategies. These changes, in many cases,

involved the inclusion of actors from civil society and/or the private sector – in addition to other sectors of the organization itself. Likewise, it essential to articulate with other bodies – a trend towards the development of solutions based on the logic of network governance and open innovation, which, in turn, demands coordination capacity and legitimacy of the public agency vis-à-vis the participants.

In short, this paper contributes to a better explanation of how policy instruments and governance features are undertaken in the innovation context. However, it is worth noting that the research was not exhaustive and not meant to be definitive. On the contrary, given the relevance of this research area, this paper expects that it is only the beginning of a productive research agenda.

Obviously, the inquiry, as any scientific investigation of complex social science phenomenon, faces constraints. First, the empirical basis comes from the reports of initiatives teams that tend to overemphasize positive aspects and underestimate negative ones. Secondly, the content analysis results are fruitful. However, there is not enough quantitative variability to allow more sophisticated statistical analyses. The last aspect that deserves consideration regards the subject of study. Instead of considering innovation based on award's finalists or 'champions' as biased research, we firmly believe that is an investigation choice. We must recognize that award finalists are not the only innovations in government since not all agencies, bureaucrats, and public officials are willing to apply for it for various reasons.

However, following a robust subfield of innovation study that has gone in this direction, Borins (2014) argues that focus on 'champions' may not be the only analysis strategy. Still, it is a fruitful subject of an investigation to better understand innovation in the public sector. Lastly, future inquiries can also investigate how these initiatives deal with the prospect of experimentation and failure in innovations, one of the main barriers to innovation in the public sector.

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