

Entrepreneurship and Innovation in Public Management

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Abstract

Entrepreneurship is defined as the generation of a “new or innovative idea”. Innovation is the energy that drives productivity. It is the purpose or reason for any adaptation, improvement or invention, and when successfully applied, is able to transform scarce resources into results. It is known that an entrepreneurial culture in public organizations raises the level of management. The objective of this article is to evaluate the current Brazilian scenario regarding studies that investigate whether entrepreneurship and innovation are capable of transforming the public sector. The methodology used included the search for articles on the Capes journal portal. The results demonstrated the importance of an entrepreneurial profile with the capacity to innovate, with more flexible and creative behavior. They show how leaders can create market opportunities and are able to perfect their actions. It finds that an entrepreneurial culture in public organizations raises the level of management. It was found that in the public sector, at all levels of policy and services there are different forms of innovation including, conceptual, systemic, political, administrative/organizational, in-service products and in service.

Keywords: entrepreneurship, innovation, public management

1. Introduction

Companies seek to differentiate themselves from each other by offering unique and personalized experiences to customers. The same perspective can be applied to public sector institutions, as they seek to provide optimized services in exchange for taxes paid by taxpayers (Lins & Miron, 2009).

From this perspective, Public Administration assumes new roles in collaboration, incentivizing, providing regulation and control, to protect not only the production of goods and services, but also the national interest itself. These new conditions not only call into question the validity of the most recent achievements and innovations, but also sharpen the tradition of seeking more applicable and relevant forms of management (Motta, 2013).

The concept of the public requires new organizational formats that effectively guarantee the publication of the state's *modus operandi*, civil society organizations and companies themselves, since, as was said, the public needs to buy into a shared value, more than an institutional location (Keinert, 2000). Change management, in the context of the public sector, refers to the transition from traditional approaches to modern and dynamic processes and how they should be conducted in the context of the continuous evolution of the challenges and demands faced by citizens (Lins & Miron, 2009).

Innovation is the energy that drives productivity. It is the purpose or reason for any adaptation, improvement or invention, and when successfully applied, is able to transform scarce resources into results.

Entrepreneurship is defined as the generation of a “new or innovative idea”. Public sector entrepreneurship occurs whenever a political or governmental actor is alert and acts on potential opportunities for political profit, thus balancing the political subsystem, in which the actor is inserted and moves him to a new level of equilibrium (Shockley, Stough, Haynes, & Frank, 2016).

For public entrepreneurship to happen, actions must be provided by the institution in which managers can consciously choose where to allocate public resources, taking advantage of opportunities and seeking new resources, employing

them in innovative ideas that can expand and improve the quality of public services (Borges, Romaniello, & Brito, 2018).

The entrepreneurial vision leads innovation and the managerial vision to the development of solid, effective and efficient management (Arana & Silva, 2016). Entrepreneurship in public service represents, for society, an innovative role, in which it can help the implementation of improved public policies, seeking the best quality of life for the population (Silva, Serio, & Bezerra, 2019).

In this sense, these characteristics should be observed in the Brazilian public administration, but where unfortunately, the aversion to entrepreneurship stands out. There is clearly low innovation in the form of management and conflicts between what is necessary and the actions taken by the government which generate discontinuity. Thus, studying entrepreneurship in public management is regarded as necessary and quite challenging.

Thus, the objective was to evaluate the current Brazilian scenario of the studies that investigate entrepreneurship and innovation in public management.

The article is divided into 5 parts: an introduction, with an exposition of the theme, the topic, problem, hypothesis, justification and objective; the literature review where the main concepts and definitions are presented; the methodology where the search procedures for the articles are described; the results and discussion that explain the deepening of the studies on the issue with a) bibliometric analysis and b) experiences of entrepreneurship and innovation. Finally, the conclusion and references.

2. Literature Review

2.1 Public Management

The Federal Constitution, in its article 37, establishes that the direct and indirect public administration of any of the Powers of the Union, the States, the Federal District and the Municipalities will obey the principles of legality, impersonality, reasonableness, morality, publicity and efficiency (Brasil, 1988).

In its article 219-A (Brasil, 1988), it also establishes that the Union, the States, the Federal District and the Municipalities may enter into cooperation instruments with public bodies and entities and with private entities, for the sharing of specialized human resources and installed capacity, for the execution of research, scientific and technological development and innovation projects, through financial or non-financial consideration assumed by the beneficiary,

A hybrid management model, in which patrimonial, bureaucratic and managerial practices coexist, marks the Public Administration leading to a need for the adaptation of entrepreneurship. It is a risky activity, but its innovative value produces positive actions for municipal finances and public policies, constituting an important force for institutional and socioeconomic development.

Public policies refer to “an articulated and structured set of actions and incentives, which seek to change a reality, in response to the demands and interests of the actors involved” (Martins & Marini, 2007). It addresses political-administrative mobilization, to articulate and allocate resources and efforts, to try to solve a given collective problem (Procopiuck, 2013).

Discussing public policies requires careful observation of the agents involved and the power resources of each one. Therefore, the basic premise reiterated throughout the text is that these can only be properly understood in the light of the broader context of politics. There is no argument that the State (or government, which makes and implements public policies or other institutions involved in the decision-making process) only reflects the pressure of interest groups, as the simplified version of pluralism would say (Souza, 2006).

For Corbari and Macedo (2011), public administration is the instrument available to the State to put public policies into practice.

2.2 Entrepreneurship

The interest in entrepreneurship is growing widely not only in Brazil, but also globally (Ladeira & Machado, 2014). Institutional theory has been widely applied to the study of entrepreneurship (Sarfati, 2019).

Entrepreneurship in the Public Sector is not well established in its reflective character. A hybrid management model, in which patrimonial, bureaucratic and managerial practices coexist, marks Public Administration leading to a need for the adaptation of entrepreneurship.

Public sector entrepreneurship can be defined as: innovative public policy initiatives that aim to generate greater economic prosperity by transforming a *status quo* economic environment into one that is more conducive to economic units engaging in creative activities in the face of uncertainty (Leyden & Link, 2015).

Kim (2010) points out that the main point behind public entrepreneurship is not to make a business government or one that understands the market, instead, rather the idea is to increase opportunities to put innovative ideas into practice and find ways to offer public benefits and providing quality services.

There is also a clear aversion to entrepreneurship, with the influence of the organizational culture of public organizations, since they are a reflection of the national culture, personalization, paternalism, formalism, underhand ways, that mark the style of management and managers. Identifying a manager profile is hampered by the political-institutional relationship, as there are two different bodies within the public arena, career public servants and those with elective and commissioned positions that differ in style of administration and personal culture (Arana & Silva, 2016).

For Silva et al. (2018), entrepreneurial behavioral characteristics in public management incur, on the one hand, more risks, but on the other, greater innovative potential, which can produce positive externalities for municipal finances and public policies, constituting an important force for institutional and socioeconomic development.

2.3 Innovation

The new legal framework for innovation, known as the Code of Science, Technology and Innovation (C,T&I), was approved on January 11, 2016, as Law No. 13.243/2016 (Brasil, 2016).

The generation of innovations in the public sector must consider the variety of actions and interventions of the State in society. It is important, that they evaluate them, that these actions must have characteristics and capacity for capillarity, only thus is it possible to consider that there is not a single act of innovation in the public sector, but a variety of actions (Oliveira, 2014).

For reasons that may justify the introduction and mobilization for innovation in the public sector (ISP), such as: mitigating social problems and inequalities; improving the quality of public services in the city; replacing traditional ways of dealing with public issues, which do not bring good results, with more efficient and effective ones, such as meeting repressed demands in the municipality or region, etc. (Emmendoerfer, 2019).

Innovation in public management is also inefficient in encouraging and managing. It is generally accepted that innovation management is an essential theme for any organizational system. Public policy makers can use *the insights* provided on innovation and entrepreneurship to create environments more favorable to new initiatives and expand existing ones (Silva et al., 2022).

Innovation goes through stages (Table 1) and, after the diagnosis and definition of the public problem to be faced, one must analyze the innovative alternatives available to discover the most appropriate one (Emmendoerfer, 2019).

Table 1. Generic solutions and their variations as possibilities of Innovation for the Public sector

Solution	Variations
Regulations	Prohibit something. Detail legislation. Develop clearer and more precise rules. Determine prices, quantities, information standards (mandatory labels). Increase penalty for infraction. Expand audience susceptible to punishment or reward. Improve reward for good behavior.
Deregulation.	Liberalize something. Simplify legislation. Extinguish inefficient rules and processes (de-bureaucratization). Liberalize prices, quantities and patterns of information. Decrease penalty for infraction. Restrict the public susceptible to punishment or reward. Decrease reward for good behavior.
Law enforcement	Train or increase the number of the inspection force. Create a specialized unit or involve the population in the inspection efforts. Increase or decrease the frequency and the strictness of punishment. Increase or decrease the frequency of rewards. Increase or decrease the scope of the target public for inspection. Facilitate or hinder the chances for offenders to appeal the punishments. Facilitate or hinder the reward regime. Create automatic <i>fire alarms</i> .
Taxes and rates	Create or abolish a tax or fee. Change the rate. Change the calculation basis. Change the scope of the paying public. Improve the mechanisms for collecting a tax or fee.
Loan, subsidies and tax incentives	Create or abolish a loan, subsidy or tax incentive. Change the value or percentage. Change the basis for calculating the incentive. Change the scope of beneficiaries. Improve the mechanisms for providing the loan, subsidy or tax incentive.
Direct public service provision	Create a new service, work or public agency. Expand an existing service, work or body. Increase the public budget for the service, work or body. Focus on the performance of public services or agencies. Join services, works and agencies in a centralized unit. Improve public access to the service, work or public body

Source: Emmendoerfer, 2019.

Most public innovation policies are short-sighted and general for example, lending measures and criteria for assessing the context of the largest companies in a unique way that ultimately cannot be applied to most small companies and local contexts. At a practical level, public policy makers must adapt these actions aimed at providing the country's socioeconomic development (Silva, Serio, & Bezerra, 2019).

Halvorsen, Hauknes, Miles and Røste (2005) as adapted by Telles and Andrade (2020) systematized the different motivations that lead public and private organizations to innovate. These perspectives are summarized in Table 2.

Table 2. Motivations to innovate in the private sector and the public sector

Perspectives	Private Sector	Public sector
Main organizations	Profit, stability and revenue growth	Execute public policies
Organizational structure	Companies of various sizes, without barriers to entry	Complex system of organizations with different purposes.
Performance measurement	Return on the investment	Various Performance Indicators
Management Issues	High material rewards and incentive promotion	Lower rewards and political control
Relationship with end-user	The market return usually demonstrates the effectiveness of innovation	The target audience is the citizen, who, in general, does not buy the products or services offered
Logistics chain	Companies are part of large logistics chains	The public sector generally relies on the private sector to meet its demands.

Source: Halvorsen, Hauknes, Miles and Røste (2005) adapted by Telles and Andrade (2020).

The incorporation of the basic principles of public administration in innovation plans and actions in the public sector can stimulate the promotion of and strengthen public actions.

3. Methodology

The methodology of this article consisted of qualitative and quantitative research, of the exploratory type where the integrative review method was applied. It is a method that aims to synthesize results obtained in research on a topic or issue, in a systematic, orderly and comprehensive way. It is called integrative because it provides broader information on a subject/problem, thus constituting a body of knowledge.

For the construction of the integrative review, it was necessary to go through six distinct stages, namely: 1) the identification of the theme and selection of the research question; 2) establishment of criteria for inclusion and exclusion of studies/sampling or literature search; 3) definition of the information to be extracted from the selected studies/ categorization of the studies; 4) evaluation of the included studies; 5) interpretation of the results; and 6) presentation of the review/synthesis of knowledge (Ercole, Melo, & Alcoforado, 2014).

The question of interest was - *What is the current scenario regarding the studies that investigate entrepreneurship and innovation and their application in the public sector?* To answer this question, a search was carried out in September 2022 on the Capes platform, a virtual library that gathers more than 30,000 journal titles, including Web of Science, SciELO, Scopus, among others.

For the localization of articles, the following combination of keywords linked by Boolean operators "AND" was used: (Entrepreneurship) AND (Innovation) AND (Public Sector) and "AND": (Entrepreneurship) AND (Innovation) AND (Public Sector). The combination of keywords, Boolean operators, quotation marks and parentheses were used as a search process in order to limit information and ensure greater search accuracy.

The PVO strategy used to determine the inclusion criteria was applied: P (Problem): "Public Administration", V (Conflict): "Entrepreneurship and Innovation", O (*Outcomes*): "How to undertake and innovate in public policies?" (Moretti, 2021). A Microsoft Excel spreadsheet was prepared for data extraction and organization of information.

It used as inclusion criteria the articles that answered the guiding question, with available online and full abstracts, with experiences on public policies, innovation and entrepreneurship. As for the exclusion criteria, articles that were not available in full text in PDF format. After the initial screening, the articles were read in full, which allowed other studies to be excluded as well.

4. Results and Discussion

4.1 Bibliometric Analyses

Through the descriptors in Portuguese and English, 3027 articles were identified, of which only 31 were selected after the inclusion and exclusion criteria was applied, for the elaboration of this article (Figure 1).

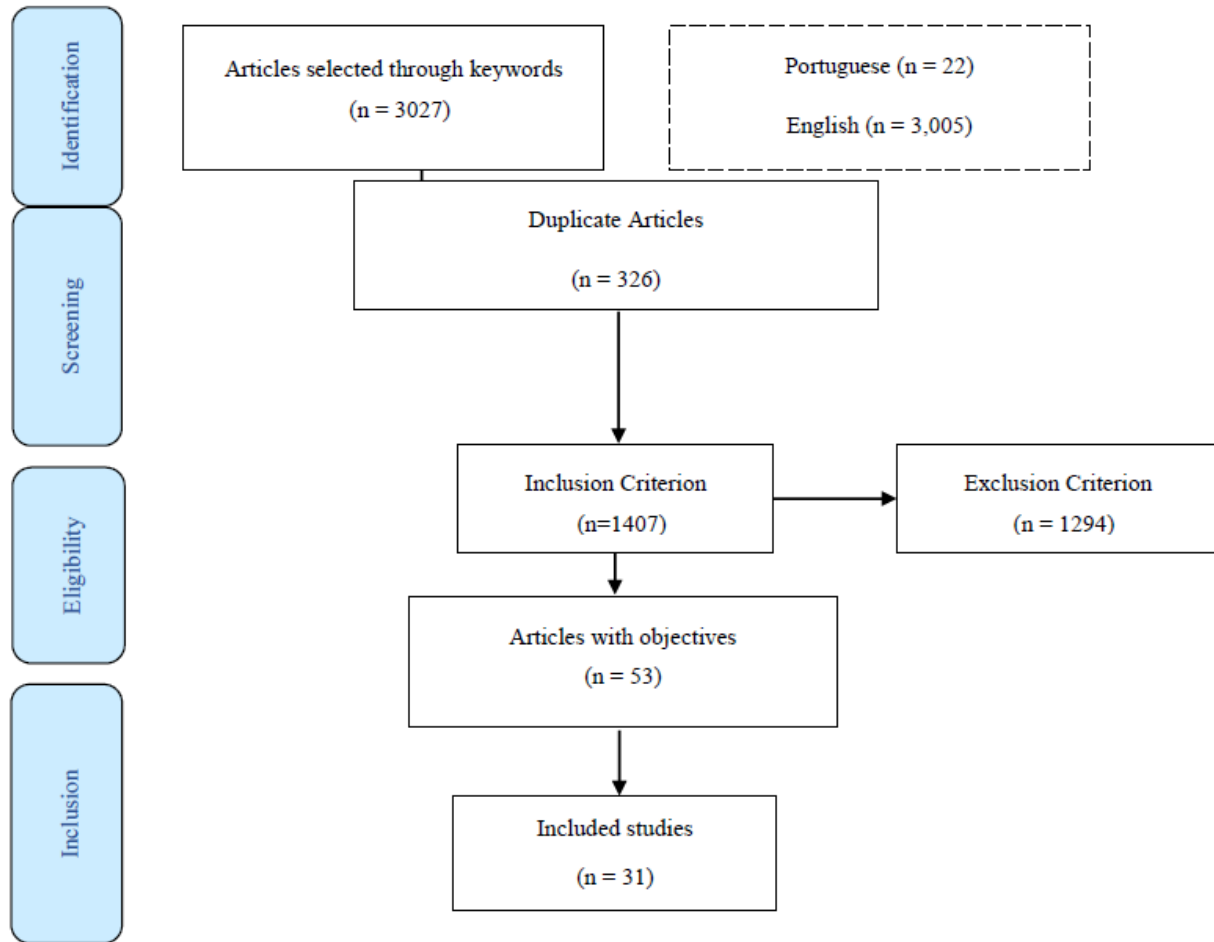


Figure 1. Flowchart of selection of articles on entrepreneurship and innovation in public management, in Capes journals

Source: Authors (2022)

The main topic found in the publications was innovation, with 29% of the articles, followed by entrepreneurship 24%. Chart 1 shows the articles included in the evaluation process, according to the question asked in the research.

Chart 1. List of selected and evaluated articles on Entrepreneurship and Innovation in Public Management, 2022

Year	Authors	Title	Periodic
2022	Gicheva, D.; Link, A. N.	Public sector entrepreneurship, politics, and innovation.	Small business economics
2022	Morais da Silva, R. L; Segatto, A. P; Justen, G. S.; Bezerra de Sousa, I. G.; de Carli, E.	The social innovation process: exploring the specificities in a developing context.	Business Process Management Journal
2022	Manaresi, F.; Menon, C.; Santoleri, P.	Supporting innovative entrepreneurship: an evaluation of the Italian “Start-up Act”.	Industrial and corporate change
2022	Grimm, H. M.; Bock, C. L.	Entrepreneurship in public administration and public policy programs in Germany and the	Curriculum Design in Public Administration Education: Challenges

		United States.	and Perspectives
2021	Frederickson, H. G.	Public Management and Authentic Innovation.	Perspectives on public management and governance
2020	Ferraris, A.; Santoro, G.; Pellicelli, A. C.	Openness of public governments in smart cities: removing the barriers to innovation and entrepreneurship.	International entrepreneurship and management journal
2020	Haque, M. S.	Entrepreneurship - driven public management reforms in Southeast Asia: Critical implications for public accountability.	Public administration and development
2020	Melo, S.; de Waele, L.; Polzer, T.	The role of Post-New Public Management in shaping innovation: The case of a public hospital.	International review of administrative sciences
2020	Veiga, P. M.; Teixeira, S. J.; Figueiredo, R.; Fernandes, C. I.	Entrepreneurship, innovation and competitiveness: A public institution love triangle.	Journals Socio-economic planning sciences
2020	Zidonis, Z.; Bilinskyi, D.; Nazyrov, K.	Management innovation practices to public sector organizations.	Problems and perspectives in management
2019	Cheah, S. L.; Yoneyama, S.; Ho, Y.	Performance management of public-private collaboration in innovation.	Creativity and innovation management
2019	Sarfati, G.	Entrepreneurship and the Face of Janus of Institutions: Stimulus Policies for High-Impact Entrepreneurs in Brazil and Russia.	Theory and Practice in Administration
2019	Silva, G; Serio, L. C. D; Bezerra, É. D.	Public Policies on Innovation and Small Businesses in a Swinging Economy.	Brazilian Administration Review
2019	Sucupira, G.; Saab, F.; Demo, G.; Bermejo, P. H.	Innovation in public administration: Itineraries of Brazilian scientific production and new research possibilities.	Innovation & Management Review
2018	Gicheva, D.; Link, A. N.	Public sector entrepreneurship, politics, and innovation.	Small Bus Econ
2018	Ribeiro, A. W. A.; Fernandes, A. J.; Costa, R. F. R.	Innovation Practices in the Public Sector: A theoretical discussion.	Revista de Administração de Roraima-UFRR
2017	Cândido, A. C.; Magro, D.; Roczanski, C. R. M.; Jamil, G. L.	Efforts to build a culture of innovation in the Brazilian energy sector.	Journal of Innovation Management
2016	Fernando, L.	Entrepreneurship in Public Management: The Case of Sri Lanka Administrative Service.	Chinese Public Administration Review
2016	Leyden, D. P.	Public-sector entrepreneurship and the creation of a sustainable	Small business economics

		innovative economy.	
2016	Shockley, G. E.; Stough, R. R.; Haynes, K. E.; Frank, P. M.	Toward a theory of public sector entrepreneurship.	International journal of entrepreneurship and innovation management
2016	Chowdhury, A.; Shil, N. C.	Innovation in Public Sector Management Control Systems in the Context of New Public Management: A Case of an Australian Public Sector Organization.	Journal of entrepreneurship, management and innovation
2015	Phillips, W.; Lee, H.; Ghobadian, A.; O'Regan, N.; James, P.; Hillenbrand, C.; Ghobadian, A.; Money, K.	Social Innovation and Social Entrepreneurship: A Systematic Review.	Group & organization management
2015	Valadares, J. L.; Emmendoerfer, M. L.	The incorporation of entrepreneurship in the public sector: reflections based on Brazilian context.	Journal of Administration Sciences
2015	Sindakis, S.; Depeige, A.; Anoyrkati, E.	Customer-centered knowledge management: challenges and implications for knowledge-based innovation in the public transport sector.	Journal of knowledge management
2014	Ladeira, F. M. B.; Machado, H. V.	Social Entrepreneurship: A Reflection for Adopting Public Policies that Support the Third Sector in Brazil.	Tourism & Management Studies
2013	Hartley, J. Sørensen, E.; Torfing, J.	Collaborative Innovation: A Viable Alternative to Market Competition and Organizational Entrepreneurship.	Public Administration Review
2012	Borins, S. F.	Making Narrative Count: A Narratological Approach to Public Management Innovation.	Journal of public administration research and theory
2010	Lenderink, B.; Halman, J. I. M.; Boes, J.; Voordijk, H.; Dorée, A. G.	Procurement and innovation risk management: How a public client managed to realize a radical green innovation in a civil engineering project.	Journal of procurement and supply management
2007	Bernier, L.; Hafsi, T.	The Changing Nature of Public Entrepreneurship.	Public Administration Review
2007	Hess, M.; Adam, D.	Innovation in Public Management: The role and function of community knowledge.	The Innovation Journal: The Public Sector Innovation Journal
1994	Berry, F. S.	Innovation in Public Management: The Adoption of Strategic Planning.	Public administration review

Articles emerged from research between 1994 and 2022, with the largest number of publications in 2016 and 2020, 5 for each year. Of the 32 articles analyzed, the word 'innovation' is present in 21 of the titles. The journal that most addressed the topic was the Public Administration Review with three publications.

4.2 Entrepreneurship and Innovation Experiences

Entrepreneurship in the Public Sector is not yet well established, as assessed in the literature, and it is only possible due to the innovative attitudes of its actors. It is known that the entrepreneur needs to participate and know the demands, because entrepreneurial actions only occur when the agent can modify the services offered and provided to society, adding value and quality.

According to studies evaluated, entrepreneurship in the public sector is not to increase opportunities, but to put innovative ideas into practice and find ways to offer public benefits, providing quality services.

The public sector does not passively imitate or adopt innovations developed in the private sector, without, of course, evaluating their pertinence. In addition, often it is the very engine of innovation. As innovation is an activity focused on the problem, therefore, the daily exercise allows the public official to innovate to deal with the issues that require solution. Studies show us that this is possible.

Complementary Law 182/2021 brought novelties in public-private communication, with predictability in improving the provision of public services and promoting the business environment, increasing the supply of capital for innovative entrepreneurship, through bidding and contracting innovative solutions for Public Administration (Brasil, 2021).

The incorporation of the basic principles of public administration in innovation plans and actions in the public sector can stimulate the promotion of and strengthen public actions.

From the studies evaluated, innovative projects were found in several sectors as described in Table 3.

Table 3. List of selected articles with practical examples of innovation in Public Management, 2022

Year	Authors	Title	Innovation
2022	Manaresi, F.; Menon, C.; Santoleri, P.	Supporting innovative entrepreneurship: an evaluation of the Italian “Start-up Act”.	“Start-up Act”, a policy intervention aimed at supporting innovative start-ups in Italy.
2019	Sarfati, G.	Entrepreneurship and the Face of Janus of Institutions: Stimulus Policies for High-Impact Entrepreneurs in Brazil and Russia.	In Brazil, the INNOVATION program of the Financier of Studies and Projects (FINEP) and in Russia the Skolkovo Foundation.
2017	Cândido, A. C.; Magro, D.; Roczanski, C. R. M.; Jamil, G. L.	Efforts to build a culture of innovation in the Brazilian energy sector.	Electric Energy Production Aneel.
2016	Chowdhury, A.; Shil, N. C.	Innovation in Public Sector Management Control Systems in the Context of New Public Management: A Case of an Australian Public Sector Organization.	Management control in the context of New Public Management (NPM) initiatives.
2015	Sindakis, S.; Depeige, A.; Anoyrkati, E.	Customer-centered knowledge management: challenges and implications for knowledge-based innovation in the public transport sector.	Innovative practices in public transport sector.
2010	Lenderink, B.; Halman, J. I. M.; Boes, J.; Voordijk, H.; Dorée, A. G.	Procurement and innovation risk management: How a public client managed to realize a radical green innovation in a civil engineering project.	Acquisition and contracting of civil engineering projects.

The experiences analyzed show successful innovation in several sectors of public administration. Melo, de Waele and Polzer (2020) highlight that innovation is a multilevel organizational phenomenon that depends substantially on the interaction of three factors: (1) professional autonomy based on trust at the individual level; (2) an intra-organizational collaborative approach to innovation (re) design at the team level; and (3) team involvement/commitment to strategy in implementing innovations at the organizational level. In addition, formal and informal interconnected processes that reinforce each other facilitate innovation.

Manaresi, Menon and Santoleri (2021) completed a comprehensive evaluation of public policy intervention in support of innovative *start-ups* in Italy. The results show that the policy induces a significant increase in various company results, while no effect is detected on the propensity to patent or on chances of survival. They also documented that the policy alleviates the financial frictions that characterize innovative start-ups, through the granting of tax credits for equity and a public guarantee scheme that, respectively, trigger an increase in the probability of receiving and accessing bank credit.

As an example, in the electricity sector, values and facts related to the Brazilian innovation investment program were evaluated, along with data from related projects. They presented results that indicated: (a) Investments were made in a mandatory manner, not following strategic policies; (b) Expressive investments were also made in basic and applied research, not offering fair perspectives on more qualified or value-added innovations and; (c) that this type of program is opportune to sponsor and promote innovation actions in this important economic sector (Cândido, Magro, Roczansky, & Jamil, 2017).

In public transport, the results show that the development of sustainable innovations and technologies in the transport sector requires knowledge management practices, which allow access to the needs of users, mapping and evaluation and the promotion of innovation, through collective approaches, as well as the acquisition and integration of new knowledge (Sindakis, Depeige, & Anoyrkati, 2015).

In a study conducted in Australia, researchers evaluated innovative management control systems in the context of New Public Management (NPM) initiatives. NPM initiatives have created changes in the structure and processes of public sector organizations with the aim of making them work better. A government department in the Australian Capital Territory (ACT) was selected as the field of investigation and found that these management control tools adopted forced the organization being researched to perform better, supporting the logic of adopting New Public Management practices (Chowdhury & Shil, 2016).

In relation to entrepreneurship in public management, the projects were focused on management issues, in an attempt to deliver fair services, with a better price and greater use of human capital, as shown in Table 4.

Table 4. List of selected articles with practical examples of innovation in Public Management, 2022

Year	Authors	Title	Entrepreneurship
2022	Grimm, H. M.; Bock C. L.	Entrepreneurship in public administration and public policy programs in Germany and the United States.	Environmental policy.
2020	Ferraris, A.; Santoro, G.; Pellicelli, A. C.	Openness of public governments in smart cities: removing the barriers to innovation and entrepreneurship.	Smart City.
2020	Haque, M. S.	Entrepreneurship - driven public management reforms in Southeast Asia: Critical implications for public accountability.	Public sector accountability.
2016	Fernando, L.	Entrepreneurship in Public Management: The Case of Sri Lanka Administrative Service.	Training of public managers in Sri Lanka.
2007	Hess, M.; Adam, D.	Innovation in Public Management: The role and function of community knowledge.	Community-oriented tools and community-based knowledge on which they depend Public Policies and Management.

Studies carried out by Borges, Romaniello and Brito (2016) analyzed the relationship between organizational-structural, administrative, cultural and environmental characteristics, with public entrepreneurship to understand how they can influence these actions. The results show that the characteristics actually influence public entrepreneurship, with a positive relationship for the presence of the hierarchy of factors, formality, flexibility, autonomy, rewards, specialization, accountability, the multiplicity of objectives, orientation to results, legal responsibility, and competition, and a negative relationship for the presence of the factors of participation and political influence

What these articles show us is that the higher the perception of quality of public institutions, the higher the level of variables applied to entrepreneurship, innovation and competitiveness.

Another point observed is that public policy makers can and should use *the insights* provided on innovation and entrepreneurship to create new initiatives and expand existing ones aimed at public administration.

The concept of response to management ideas refers to situations in which public sector leaders, who have limited knowledge and do not explore management ideas, must appropriate them, disseminate them among their subordinates and in the organization they command. In general, the behavior is different. First, quite often, the response is defensive, as public sector leaders use a narrative of their experiences, which is the same or very similar to the idea of management found. Second, a negative answer rests on the “it was not invented here”. The third negative answer is on the “maturity level” thesis, where they claim that organizations are not mature enough to embrace such an idea of management. Thus, its implementation would be very difficult, or even impossible (Zidonis, Bilinskyi, & Nazyrov, 2020).

The main barriers that may hinder, raised in the literature, were: a) lack of rules; b) maintenance of the *status quo* of all other tasks and responsibilities; c) scarce integrated vision of planning; d) lack of adequacy of administrative styles and coordination of interdepartmental communication; e) risk adversity; f) availability of data; g) disincentives and non-flexible public procurement rules; h) lack of resources; i) lack of technological capacity.

Being a transforming agent, both of society and of the economy, makes the entrepreneur an innovator, the one who breaks the paradigms, leading the nation to economic development, through the identification of new opportunities and making them new ventures (Arana & Silva, 2016).

Therefore, entrepreneurship and innovation walk hand in hand and should be implemented and encouraged in public management.

5. Conclusion

Thus, the objective was to evaluate the current Brazilian scenario of the studies that have investigated entrepreneurship and innovation in public management. It is believed that an entrepreneurial culture in public organizations raises the level of management.

Therefore, the change in thinking by inserting the entrepreneurship and innovation aspect into public management needs to undergo a structural cultural transformation in organized society.

The incorporation of the basic principles of public administration in innovation plans and actions in the public sector can stimulate the promotion of and strengthen public actions.

It can be seen that an entrepreneurial profile is necessary, one with the capacity to innovate, with a more flexible and creative attitude. Leaders who can create market opportunities and are able to perfect their actions.

The public sector can and should be a driver of innovation and, in many cases, can be a reference to private initiative, with good examples.

It is recommended to implement centers of entrepreneurship and innovation in the spheres of public power, as an effective public management strategy.

As limitations found for the studies, mention is made of the lack of successful cases within Brazil, a portrait of the precariousness of public policies aimed at innovation and entrepreneurship.

Future research can analyze the main public policies aimed at entrepreneurship and innovation by region within Brazil, so there will be a mapping of the main programs and their investors and should also contain the area that is covered by each program.

By uniting theory and practice, it will allow a better understanding of the size and scope of each program and thus, it is possible to understand the phenomenon of entrepreneurship and its impact on society.

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