

# Knowledge management in the Brazilian public service: A review under the methodological optics

**Elaine Martins Parreiras**

Programa de Pós-Graduação em Gestão & Organização do Conhecimento, Universidade Federal de Minas Gerais (UFMG), Brazil.

**Email:** elaine.parreiras@yahoo.com.br,

**ORCID:** <https://orcid.org/0009-0001-3105-9270>

**Patrícia Nascimento Silva**

Programa de Pós-Graduação em Gestão & Organização do Conhecimento, Universidade Federal de Minas Gerais (UFMG), Brazil.

**Email:** patricians@ufmg.br,

**ORCID:** <https://orcid.org/0000-0002-2405-8536>

## ABSTRCAT

The field of knowledge management (KM) is situated within the broader domain of information science. It is concerned with the generation and dissemination of knowledge and its role in fostering innovation and competitiveness. In the context of public service, KM refers to the organization and processing of information with the aim of facilitating its sharing with the relevant teams, thereby enhancing institutional productivity and the efficiency of service delivery to citizens. The objective of this study was to conduct a brief bibliographical review of KM in the public sector within the context of information science, with a particular focus on the methodological instruments recently employed in Brazil. This was done with the aim of delineating the methodological approaches used in research on KM in the public sector. Accordingly, a bibliographic research was conducted in the Portal of Periodicals of the Coordination of Higher Education Personnel Training (CAPES) in August 2023, with a time frame encompassing the previous five years (2019–2023). The result was a mapping of 25 works, categorized according to the following methodologies: case/field study, documentary research and literature review, survey, bibliometric research, and use of models in the most diverse public institutions in Brazil. The value of this work lies in its ability to synthesize the diverse methodologies employed in the field of KM within the Brazilian public sector. It provides researchers with a comprehensive overview of the avenues they can pursue in their future studies. As future research

endeavors, it is recommended that the investigation be continued, with a particular focus on the distinctive characteristics of the methodologies in question.

**Keywords:** knowledge management, methodology, public service, information science, Brazil

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## 1. INTRODUCTION

Knowledge management (KM) is a field that falls under the umbrella of information science. As a result, the two fields are related (Lima & Álvares, 2018). In the context of information science, the field of study is dedicated to the examination of the phenomena pertaining to its diffuse object, information. It has its origins as a branch of knowledge related to the generation of documentary products and information services, with a view to the organization of information. This is subject to the use of information retrieval technologies for its availability and access, with the aim of its use (Rabello, 2012). The term “knowledge management” was first introduced by Davenport and Prusak (1998). They define “knowledge” as a dynamic entity comprising practices, values, contextual information, and structured understandings. These elements collectively provide a foundation for evaluating and integrating new experiences and information.

In the view of Takeuchi and Nonaka (2008), KM denotes the manner in which organizations address the generation, dissemination, and utilization of internal knowledge. These authors devised a model that has informed the approach of companies seeking to comprehend and implement effective KM practices. Since that time, KM has become a crucial consideration for organizations striving to distinguish themselves, being perceived as capable of adapting to the dynamic and complex nature of the contemporary environment. In the context of public institutions, the importance of KM is increasing, as it can facilitate innovation and, subsequently, enhance competitiveness. In the context of public service, the objective of KM is to organize and process information in a manner that enables its sharing with the team of servers. This enhances both the institutional productivity and the efficiency of service delivery to citizens (Costa and Castro, 2022).

As asserted by Santana and Pereira (2023), KM is a crucial element in the realm of public service for a multitude of reasons. Primarily, it enhances the efficiency and effectiveness of public services, facilitates the process of continuous improvement, enables individuals and institutions to act in a more intelligent manner, influences and facilitates renewal processes, promotes innovative environments, and makes possible the sustainability of administrative modernization. Similarly, Snoeijer et al. (2019) assert that KM in public spaces should be presented as a policy that encourages the creation, transfer, and application of knowledge, subject to monitoring by the organization.

As Batista (2012) notes, KM models developed for the private sector may not be readily applicable to the public sector. Therefore, there is a need to develop a

generic, holistic, and specific KM model that is tailored to the unique context of Brazilian public administration. The author notes that it is expected to find examples in which authors utilize pre-existing models that were not explicitly designed for public administration. Additionally, Batista (2012) emphasizes that the literature on KM in the public sector is limited and still largely fragmented. Knowledge management can serve as a pathway for institutions seeking to enhance their capacity for knowledge generation and improve their performance in society (Teixeira, 2022).

In light of the aforementioned context and the existing gap, the research question that guided the study was: How are researches on KM in the public service methodologically delineated? The objective of this study was to conduct a concise bibliographic review of KM in the public sector within the context of information science, with a particular focus on the methodological instruments recently employed in Brazil. Accordingly, a bibliographic research was conducted with a time frame encompassing the last five years (2019–2023), with the objective of recovering the most recent studies. The intention is to present a list of the principal research studies conducted in this period within the field of KM in public institutions, with a particular focus on the methodologies employed. This will be achieved through a brief literature review.

## **2. METHODOLOGY**

A bibliographic research project may be considered an initial path to enter a field of study. Its aim is to provide the researcher with more knowledge about the topic in perspective (Mattar, 2012). As posited by Gil (2017), bibliographic research facilitates a more profound

familiarity with the problem at hand, thereby enabling its more explicit articulation and/or the formulation of hypotheses. These definitions align with those put forth by Lakatos and Marconi (2003), who stipulate that bibliographic research is not merely a reiteration of existing discourse on a given subject. Instead, it entails an examination of a topic from a novel perspective, thereby potentially leading to groundbreaking conclusions. Accordingly, an exploratory bibliographic research was conducted for this study, as defined by Boccato (2006) as a review of the literature on the principal theories that inform a scientific inquiry. This approach was undertaken to enhance comprehension through the examination of published theoretical references and the analysis of diverse contributions pertaining to the subject matter.

The methodological procedures were conducted in five stages. The initial stage of the process entailed the selection of the newspaper database and the determination of the search terms. The database selected for the research was the Portal of Periodicals of the Coordination of Higher Education Personnel Training (CAPES), as it integrates several databases, thereby enabling an integrated search across all indexed databases. The search was conducted in August 2023 using the keywords “knowledge management” and “public.” This approach was selected because a search limited to “public service” yielded a minimal number of results. By using the aforementioned descriptors, it was possible to include KM in public service and public administration. With regard to the time frame chosen, the works published in the last five years were selected, that is, in the period from 2019 to 2023.

Furthermore, the selection of these keywords for the search is substantiated by the objective of this study, which

is to examine, in particular, the context of public service and the potential methodologies employed in this field. Subsequently, the search expression was executed, the documents were retrieved, and the material was compiled in an Excel spreadsheet. During this process, the following groups of documents were excluded: those that were duplicated, those published outside the period of interest, and those whose objective was outside the scope of this research.

The third stage of the process involved the initial selection of works for analysis. This was conducted by reading the titles and abstracts of the works in question. The selection was based on the presence of a record of the methodologies employed, as indicated in the title and/or abstract. In the course of this process, papers whose abstracts and/or titles did not provide sufficient data on the methodologies applied or incomplete information on these were subjected to additional analysis in order to ensure a more accurate selection of the sample. Ultimately, the works that did not address the topic of KM in the context of public institutions were excluded from the selection process. It is also important to note that the objective was not to gain a deeper understanding of the discussions presented by each author or group of authors.

In the fourth stage, the selected documents were read and analyzed to identify the research objects and primary methodologies used in the area of public service over the past five years. Finally, in the fifth and last stage, a table was constructed to organize the information from each selected work, including the title, authors, year, objective, methodology, and results and conclusions. This resulted in a comprehensive overview of the methodologies identified in the selected studies.

**Table 1.** Details of analyzed documents.

ID	TITLE	AUTHORS	YEAR	OBJECTIVE
1	Knowledge Management: Analysis of the Maturity Level of a Public Institution	Leandro Alves Martins, Danilo De Melo Costa, Dárlinton Barbosa Feres Carvalho, Cristiana Fernandes De Muylder, and Fabio Corrêa	2023	To analyze the level of KM maturity of a public institution, specifically in the Municipal Government of the city of Contagem, Minas Gerais, Brazil.
2	Model of Knowledge Management: A proposal for the public university context	Wênka Preston Preston Leite Batista Da Costa, Jandeson Dantas Da Silva, Lydia Maria Pinto Brito, and Sérgio Luiz Pedrosa Silva	2023	To provide a KM model for the public university context.
3	Diagnosis of knowledge management: a study in a public interest civil society organization	Ismael De Mendonça Azevedo, Lydia Maria Pinto Brito, Manoel Pereira Da Rocha Neto, and Maria Valéria Pereira Araújo	2020	To diagnose the current level of KM of a Civil Society Organization of Public Interest (OSCIPI) based on the perception of the unit coordinators of the Northeast Citizenship Institute, in Rio Grande do Norte, through the application of the Bukowitz and Williams KM Diagnosis.

METHODOLOGY	RESULTS AND CONCLUSIONS
Survey.	The results showed that the Municipal Government of Contagem is at level three of KM maturity, being incipient, as it seeks to manage knowledge and its critical areas for its success.
Case study.	Based on the data obtained, the objective was achieved by proposing a KM model with pillars centered on the institution's mission, creation of the KM body or sector, and dissemination of the KM policy. The model is structured in four stages, being the first one composed of the acquisition, construction, and socialization of knowledge, followed by the stage where knowledge is codified and stored, then there is the transfer and use of knowledge, and finally, there is the fourth stage represented by the discarding of knowledge.
Case study.	The results reveal that the institute has a high level of KM in thematic and strategic processes. It is concluded, however, that it is necessary to work on some indicators in order to refine the KM process.

(Continued)



**Table 1. Continued**

ID	TITLE	AUTHORS	YEAR	OBJECTIVE
4	The perception of the use of the case method for knowledge management: experience of the Ministério Público de Minas Gerais	Alessandra De Souza Santos and Frederico De Carvalho Figueiredo	2021	To verify the perception of the use of the case method as a potential KM tool within the Ministério Público de Minas Gerais (MPMG), which could serve as a basis for other public administration bodies.
5	Diagnóstico da Gestão do Conhecimento no Setor Público: Estudo de Caso no Corpo de Bombeiros Militar De Alagoas (Diagnosis of Knowledge Management in the Public Sector: Case Study of the Alagoas Military Firefighters Corps)	Luiz Augusto De Medeiros Lira and Ibsen Mateus Bittencourt Santana Pinto	2021	To diagnose the degree of maturity in KM of the Corpo de Bombeiros Militar de Alagoas (CBMAL), identifying strengths and opportunities for improvement.
6	Knowledge Management in the Public University of the Northeastern Semiarid Region	Naeldson Expedito Alves Da Silva, Lydia Maria Pinto Brito, Ahiram Brunni Cartaxo De Castro, Arthur William Pereira Da Silva, and Juliana Carvalho De Sousa	2021	To measure the perception of educational administrators on KM in the thematic and strategic processes of a public university, whose main resource is the knowledge about the Semiarid region of Northeastern Brazil.

METHODOLOGY	RESULTS AND CONCLUSIONS
Qualitative field research, whose data collection was carried out through documentary research, participant observation, and semi-structured interviews.	The study reveals that the case method follows all the stages of the SECI model, indicating its potential as a KM tool. It is concluded that the case method is relevant for KM by correlating it with a recognized model, using data triangulation and practical application of the theory. This highlights its usefulness in organizational management and real application.
The evaluation instrument that integrates the KM Model for the Brazilian Public Administration (MGCAPB) was used.	In view of the results obtained, it found a development gap up to the highest level of KM maturity, which corresponds to the institutionalization stage (...) the self-assessment collaborated in the identification of strong points and opportunities for improvement of KM in the organization, providing a basis for the consolidation of the other stages of the institutionalization process.
Quantitative research, descriptive in nature and with technological characteristics, which was operationalized by means of a survey research.	From the results obtained, the institution seeks to implement the model of learning organizations, no longer relying exclusively on pedagogical projects for management, enabling individuals and partners to address social, environmental, political, and economic challenges in the Semiarid region of Brazil, contributing to state solutions by means of state involvement.

(Continued)

**Table 1. Continued**

ID	TITLE	AUTHORS	YEAR	OBJECTIVE
7	Knowledge Management Applied to Public Policy on Sport and Leisure	Luiz Carlos Pessoa Nery, Pedro Henrique Iglesias Menegaldo, and Temistocles Damasceno Silva	2021	To present KM as an instrument applicable to public policy on sport and leisure, taking into consideration the various stages that make up the policy cycle.
8	Knowledge in Public Administration: An Integrative Review of the Literature	William Koga Silva Filho, Jordana Alves De Aguiar, Geraldo Sadoyama Leal, and Hewerton Renato Fleury Silva	2023	To systematize the knowledge produced about KM in the public sphere.

METHODOLOGY	RESULTS AND CONCLUSIONS
<p>The methodology adopted consisted of the presentation of theoretical assumptions related to the subject, connecting them to the phases of the policy in the sports area: agenda formation, formulation, implementation, and evaluation. This approach made it possible to analyze the management of actions by identifying social indicators, legal and bureaucratic aspects, the participation of various agents, as well as financial, human and material resources, among others.</p>	<p>Given the panorama and reflections presented in the paper, according to the authors, the results point to the institutionalization of KM in public sports management despite recognizing challenges in the governmental environment. Knowledge management is seen as a valuable tool to systematize political knowledge, improve decision-making, and strengthen sports management based on technical evidence.</p>
<p>Integrative literature review (RIL)—four repositories.</p>	<p>Regarding KM, the results identified the importance of intellectual capital, the need for knowledge sharing in organizations, as well as the relevance of socialization and outsourcing processes for knowledge production. The challenges presented in the study were: the need to review the processes themselves in high-performance management/commissioning, the lack of standardization of KM between sectors, the important process of combination, the need for more resources in TCI's and not in people, and high turnover of employees. Knowledge management is important to avoid the centralization of knowledge and the possibility of adapting management tools and models applied in conventional organizations so that they can contribute to the state.</p>

(Continued)

Table 1. Continued

ID	TITLE	AUTHORS	YEAR	OBJECTIVE
9	Agenda Ambiental na Administração Pública (A3P) Aliada à Gestão do Conhecimento: Caso Prático da Ecoliga-Ro	Davisson Lucas Vieira Afonso, Isis Bruna Gomes Pacheco, and Iluska Lobo Braga	2023	To analyze ecoLiga’s sustainability actions based on the theory of KM and the actions of the Environmental Agenda of Public Administration.
10	Gestão do Conhecimento: Diagnóstico Sobre o Perfil de uma Instituição Pública de Ensino Superior	Paula Carolina Empinotti Pereira, Rosângela de Fátima Stankowitz, and Henrique Oliveira da Silva	2023	To analyze the profile of KM at the Federal University of Paraná (UFPR)

METHODOLOGY	RESULTS AND CONCLUSIONS
Case study and descriptive and qualitative research.	The results showed that ecoLiga’s strategic planning follows two pillars of the Environmental Agenda of Public Administration and is related to KM, although the transfer, storage, and application of knowledge are in an initial stage. After applying the model, the need arose to diagnose sustainability and increase the dissemination of actions to analyze the results. The Environmental Agenda provides guidelines for ecoLiga to implement sustainable actions aligned with KM, improving the maturity of knowledge on sustainability in the network.
Case study and descriptive and qualitative research.	In evaluating the results found, the authors identified that 52.8% of the respondents did not identify or recognize KM policies and training strategies, 43.4% do not know how to evaluate the level of KM maturity, and 17.0% believe that KM is in the strategic planning phase. Furthermore, 79.2% disagreed that employees recognize the institution’s KM processes and practices. It was concluded that the Public Institutions of Higher Education (IPES) analyzed the need to institutionalize KM. The university has a more formal structure in relation to knowledge, in which strategies related to the subject are developed at the level of senior management.

(Continued)

**Table 1. Continued**

ID	TITLE	AUTHORS	YEAR	OBJECTIVE
11	Relevant Aspects of the Application of Knowledge Management in Public Administration	Ieda Pelógia Martins Damian, Márcia Cristina De Carvalho Pazin Vitoriano, Marcelo Ricardo Martelo, Meiriellen Cristina Faria Bussadori, and Simone Cristina Ceron Ripoli	2021	To approach KM in the context of public administration from the identification of critical success factors of KM.
12	Knowledge Management at a Federal Public University: The Transformation of Scientific Knowledge into Organizational Knowledge	Patrick Pereira Costa and Biancca Scarpeline De Castro	2022	To understand how KM occurs at the Federal Rural University of Rio de Janeiro, from the transformation of scientific knowledge produced about the institution in the area of administration into organizational knowledge, in order to contribute to university management.
13	Knowledge Management and Remote Work: A Case Study in a Public Distance Education Academic Unit	Jéssica Silva Xavier, Lorena Santos Pattas, Tânia Moura Benevides, and Milena Siqueira Santos Mendonça	2023	To measure KM in the Academic Unit of Distance Education (UNEAD) of the University of the State of Bahia (UNEB) during remote work.

METHODOLOGY	RESULTS AND CONCLUSIONS
Bibliographic review on the topics of KM and public administration, considering works published in the last 10 years.	The results indicate that the implementation of KM in public administration requires consideration of the specific characteristics of the sector, identifying critical success factors such as organizational culture, leadership, strategic public policies, technology, infrastructure, processes, resources, and people management. According to the authors, these factors should be strategically addressed to ensure positive results in the implementation of KM and to improve public management for the benefit of society.
Bibliometric research.	Based on the results obtained, an incipient environment for KM was found, with advances in the valorization of personnel qualification and the use of information and communication technologies, but with few formalized processes that could transform scientific knowledge into organizational knowledge. The authors defend the need to expand research that relates the two types of knowledge (scientific and organizational) and that considers the particularities of HEIs for the promotion of KM.
Literature review, field study, descriptive, quantitative, and quantitative research.	The results show that the respondents attribute value to knowledge in the sense of optimizing organizational performance and responsibility in fulfilling their functions.

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**Table 1. Continued**

ID	TITLE	AUTHORS	YEAR	OBJECTIVE
14	O Método de Casos para a Gestão do Conhecimento no Ministério Público: um manual técnico para a implementação da ferramenta	Alessandra De Souza Santos	2020	To present a technical manual to subsidize implementation processes of the case method as a KM tool within the MPMG, which can serve as a basis for other public administration bodies.
15	Assessment of the Maturity of Knowledge Management in Public Administration	Vanessa Dos Santos and Rogério Cid Bastos	2019	To Assess the maturity of KM in Public Administration in a Catarinense Public Institution
16	Knowledge Management in Public Companies: Practices and Initiatives Adopted by Poupatempo	Ruggero Ruggieri, Marcos Antonio Gaspar, Celia Hatsumi Aihara, and Simone Martins Olivero	2021	To verify which KM practices and initiatives contributed the most to the adoption, operationalization, and management of the KM and Innovation Policy of Decree N. 53.963/2009 (São Paulo, 2009), which instituted the KM and Innovation Policy for public organizations in São Paulo.

METHODOLOGY	RESULTS AND CONCLUSIONS
Data collection was carried out by means of a narrative and systematic literature review, documentary research, and semi-structured interviews.	Analyzing the data collected, the manual, according to the author, consisted of a technical product derived from field research that investigated whether the case writing method could be effectively applied to the creation and dissemination of organizational knowledge by the institutional school of the MPMG. The construction of this manual had the objective of subsidizing the process of writing and construction of cases and presenting the methodology for teacher training in that organization.
Case study, the methodology developed by Helou (2015), which adapted the models proposed by APO (2009), and MGCAPB (Batista, 2012).	The results highlight that the public institution evaluated is at the level of expansion 102 points, indicating awareness of KM. However, the process is still incipient, with isolated practices in some areas, evidenced by the intermediate scores in each dimension.
Qualitative and descriptive research that used a semi-structured interview, direct observation, and documentary analysis of public records.	In summary, the Poupatempo implemented effective practices, including: high hierarchical priority, engagement of top management and middle management, adequate financial resources, real examples of success to convince collaborators, emphasis on KM and information for program quality, use of methodologies for implementing the KM model, and focus on technology, not on management issues or people. The need for a clear KM policy to speed up the institutionalization of the practice in the public administration of the poorest countries is highlighted.

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**Table 1. Continued**

ID	TITLE	AUTHORS	YEAR	OBJECTIVE
17	Adaptation and Validation of the Diagnosis of Knowledge Management for the Brazilian Public University	Wênkyka Preston Preston Leite Batista Da Costa, Jandeson Dantas Da Silva, Lydia Maria Pinto Brito, Ahiram Brunni Cartaxo De Castro, and Walid Abbas El-Aouar	2021	To adapt and validate an instrument for the diagnosis of KM practices originally from the private sector to the context of the public university.
18	The Implementation of Knowledge Management Practices in Public Schools	Caio Pisconti Machado, Arthur Gualberto Bacelar Da Cruz Urpia, Letícia Fleig Dal Forno, and Ely Mitie Massuda	2020	To examine the level of implementation of KM practices of organizational processes in public educational institutions, considering possible implications for the level of school management.
19	Knowledge Management Practices in Public Schools: A Case Study	Marcio Pedro Cabral, Flávio Bortolozzi, Ely Mitie Massuda, and Arthur Gualberto Bacelar Da Cruz Urpia	2019	To recommend KM practices to public school managers in order to consolidate them in their institutions.

METHODOLOGY	RESULTS AND CONCLUSIONS
Survey.	<p>The results of the work include the diagnosis of KM practices in the context of Brazilian public universities, structured with 45 questions. The results also showed that KM is a multidimensional construct that can be evaluated based on the following factors: incentive to the propagation of knowledge, competencies and skills of employees in learning from experience, stimulus to knowledge creation, knowledge enhancement, documentation and sharing of knowledge, management of knowledge for the benefit of society, socialization of knowledge in social interactions, valorization of human capital, and management of knowledge to fulfill the social mission.</p>
Survey.	<p>According to the results, the majority of KM practices in organizational processes are not being taken advantage of. The low perception of these practices can affect the efficiency of institutional management and limit the development of human capital of teachers, students, staff, and school community. It observed the need for the creation of measures that expand these levels of implementation in the school context.</p>
Multiple case studies in schools in Sarandi (PR).	<p>Based on the results, it was verified that the evaluated schools use the analyzed practices but only partially. Based on the results, recommendations were made to managers to strengthen the KM processes in the institutions surveyed.</p>

(Continued)

**Table 1. Continued**

ID	TITLE	AUTHORS	YEAR	OBJECTIVE
20	Social Networks and Their Use as Tools for Knowledge Management Practices: An Analysis of Public Schools in Paraná	Arthur Gualberto Bacelar Da Cruz Urpia, Letícia Fleig Dal Forno, Flávio Bortolozzi, Ely Mitie Massuda, and Tatiana Carla Faccin	2019	To analyze if the networks offer as KM tools for the creation, sharing, and dissemination of knowledge among students and teachers.
21	Qualidade Decisória dos Gestores Públicos: Contribuições da Inteligência e Gestão do Conhecimento	Claudia Melati, Raquel Janissek-Muniz, and Carla Maria Marques Curado	2021	To analyze how public managers apply intelligence and KM aiming at higher decision-making quality
22	Theoretical Formation and Trends in Public Administration Knowledge Management Studies	Marcelo Roger Meneghatti and Roberto Lima Ruas	2020	To analyze the theoretical formation of the subject over time by identifying the latest researched topics in this field of study.
23	Knowledge Management: A Case of a Colombian Public Sector Entity	Diego Armando Jurado-Zambrano and Sandra María Valencia Upegui	2021	To present results of the incorporation of a KM initiative in a Colombian public sector organization, as well as its benefits, organizational facilitators, and difficulties experienced in it

METHODOLOGY	RESULTS AND CONCLUSIONS
Multiple case studies. exploratory and descriptive and quantitative approach.	According to the results, even though there are traces of KM in the institution, it still does not fit into the context of the knowledge society. There are punctual actions of using social networks to create and share knowledge, but there is a lack of balance in investments, infrastructure, content, support, and training. It is necessary to build a sustainable knowledge base for educational innovations requiring effort.
Qualitative and exploratory approach, with literature review, followed by semi- structured interviews with the use of combined techniques for the analysis of the collected data: analysis of the data and qualitative comparative analysis.	The results emphasize the need for effective data and KM for the decision quality of public managers. They also show that the low decision quality is linked to the lack or limited use of KM and intelligence practices in public administration.
Bibliometric research.	From the results obtained, it was possible to identify the main theoretical constructions on KM in the environment of public administration and social management and also the theoretical distribution corresponding to these publications since the beginning of the subject in the base until the last few years.
Case study with a qualitative and descriptive approach.	The results show that the Colombian public entity has made progress in building an organizational culture of KM through its model and tools, although it needs to focus more on leadership and technology as facilitators. KM is still on the rise

(Continued)

**Table 1. Continued**

ID	TITLE	AUTHORS	YEAR	OBJECTIVE
24	Organizational Culture as a Critical Factor in Knowledge Management: Reflections Based on the Case of a Public Industrial Company in Uruguay	Tommy Wittke	2020	To discover and analyze the aspects of the company's organizational culture that favor or limit knowledge sharing.
25	A Framework for Implementing Knowledge Management in Public Banking Institutions in Brazil	Darci de Borba Santos Júnio	2021	To provide a framework for the implementation of KM in public banking institutions in Brazil.

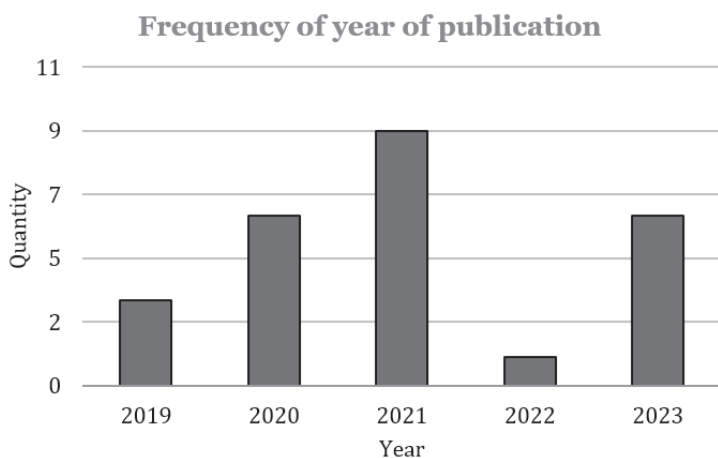
Source: Research data.

METHODOLOGY	RESULTS AND CONCLUSIONS
Case study with a descriptive, qualitative, and quantitative approach.	Based on the evidence collected, the results on the relationships between cultural profile, values and practices, and modalities of exchange and conversion of knowledge are highlighted.
Qualitative research and exploratory and cross-sectional interviews.	The work presented the elaboration of a Framework for Knowledge Management in Financial Institutions (FIGCIF), with 60 factors from the analysis of 10 literary and practical structures in financial institutions. In addition to enriching academic research with new variables, the FIGCIF innovates by suggesting performance measures that adjust to different levels of maturity in the implementation of KM.



### 3. RESULTS

The methodological procedures, conducted in accordance with the prescribed sequence of stages, yielded a total of 34 papers following the completion of the initial and secondary stages. The third methodological stage resulted in the exclusion of nine works, yielding a total of 25 documents, comprising 24 articles and one dissertation. The fourth stage, initiated with the analysis of the 25 selected papers, entailed reading the documents, identifying the research objects and the principal methodologies employed in the field over the previous five years. The fifth methodological stage culminated in the elaboration of a table synthesizing the works, as presented in Table 1.



**Figure 1.** Frequency of year of publication. Source: Authors.

A review of the frequency of publication year (Figure 1) reveals that 2021 was the period with the highest number of publications (nine), followed by 2020 (six) and 2023 (six). These years were identified as the periods with the highest volume of publications related to KM in the

public service within the analyzed sample. Furthermore, it can be observed that between 2019 and 2021, there was a discernible upward trend in research output, followed by a precipitous decline in 2022. However, this decline was short-lived, with a swift recovery evident in 2023. These findings align with the assertion put forth by Câmara and Nunes (2021) that KM is gaining recognition within the academic literature. This assertion is supported by the consistent growth trend observed in this study from 2019 to 2021, which continued even after a notable decline in 2022.

In examining the findings in light of the employed methodologies, they were sorted into five categories: case/field study, documentary research and literature review, survey, bibliometric research, and the MGCAPB, as illustrated in Table 2.

**Table 2.** Most frequent methodologies.

METHODOLOGY	FREQUENCY
Case/field study	10
Documentary research and literature review	8
Survey	4
Bibliometric research	2
MGCAPB	1

Source: Research data.

In works 2, 3, 9, 10, 13, 1, 19, 20, 23, and 24, the case/field study methodology was employed. This approach was employed for a number of purposes, including the proposal of management models, the diagnosis and measurement of the level of KM maturity in organizations, the analysis of

the perception of KM among education administrators, the provision of KM tools and initiatives, and the analysis of aspects of organizational culture. It is noteworthy that this methodology has been employed with greater frequency in the evaluation of KM maturity. The institutions where the method was most frequently applied were public universities (six), city hall (one), industry (one), OSCIP (one), and environmental agency (one).

In works 4, 7, 8, 11, 14, 16, 21, and 25, documentary research and literature review methodologies were employed as research methods. The aforementioned methodologies were employed for a variety of purposes, including the reflection on the applicability of KM in the studied environment, the creation of a technical manual to support the collection process, and the construction of cases with KM tools. Moreover, these methodologies were employed to substantiate KM practices, assess the quality of managerial decisions regarding the applicability of KM, and furnish novel KM tools. The institutions or domains where the method was most frequently utilized were the public ministry (two), a public banking institution (one), public policies on sport and leisure (one), and the remainder pertained to KM in public administration/service (four).

In works 1, 6, 17, and 18, the survey methodology was employed, thereby demonstrating its applicability in assessing the level of maturity and implementation of KM practices, as well as in identifying KM practices in public universities. It was observed that this method was employed by IPES (three) and municipalities (one). The survey, due to its efficacy in gathering comprehensive and representative data, as well as enabling the establishment of relationships between disparate variables (Moreira &

Caleffe, 2008), may be an appropriate means of analyzing KM trends in these public institutions.

In works 12 and 22, the bibliometric research methodology was employed, which was conducted at a public university and in the context of public administration and service. As Teixeira and Zan (2022) observe, bibliometrics, as a field of research within information science, plays a significant role in the evaluation of global scientific output. Its indicators are capable of portraying the behavior and evolution of a field of knowledge. Consequently, given the limited representation of this methodology in this study, there appears to be a need for further work employing this methodology.

In conclusion, with regard to the MGCAPB Public Management Assessment Instrument, an incident occurred in work 5, which was applied to the Military Firefighters Corps of Alagoas, and an adaptation was made in work 15 that was not included in the calculations for this instrument. As defined by Batista (2012), the MGCAPB is a generic, holistic, results-focused, and specific KM MGCAPB designed to assist public organizations in the implementation of KM. The Instrument for Public Management Assessment is a set of guidelines and parameters for management assessment based on the Model of Excellence in Public Management and the concepts and foundations advocated by the National Program for Public Management and Debureaucratization (Brazil, 2009). It is noteworthy that in some studies, multiple methodologies were employed in an integrated manner, whereby different methods were utilized within the same research project. For instance, studies 4, 14, 6, 21, and 25 employed both interview and observation procedures to enhance the research process.

This research has identified a number of public institutions in which KM is applied, as well as studies that have analyzed replicable methodologies for KM. Replication is fundamental for scientific progress, as it enables the comparison of data and the identification of similarities in the results (MacLennan & Avrichir, 2013). This view is supported by some authors who argue that observation, research, experimentation, and comparison with other studies are essential for the development of theories (Morrison et al., 2010).

#### **4. CONCLUSION**

This article presents a concise literature review on KM in the public sector within the context of information science. It considers the methodological tools recently employed in Brazil with a view to elucidating the methodological framework of research on KM in the public service. The research methodology employed enabled the listing of the methodologies used over the last five years. The studies presented a variety of methodologies that can be replicated, thus contributing to future research on the subject. Furthermore, they assist in continuous improvement and provide an understanding of the different contexts of KM.

The objective of this work was to provide a systematic overview of the diverse methodologies employed in the field of KM, offering researchers in this domain a comprehensive perspective on potential avenues for future research in the field of information science. Additionally, it is anticipated that this work will serve as a valuable resource for researchers in KM in Brazil, providing insights into the methods utilized by their peers over the past five years. This will enable them to assess possibilities, identify novel processes, and gain a deeper understanding of the field.

In future studies, it is recommended that the research be continued by deepening the methodologies and evaluating their particular characteristics. This will facilitate a more comprehensive understanding of the limitations and advantages. It is also advised that the reproducibility of the use of each methodology and its results be evaluated, which will allow for the verification of standards and, consequently, the making of comparisons between different departments and public bodies. Furthermore, it is proposed that this study be extended to longer longitudinal periods, such as, for example, the last 10 years.

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