Study of categories for systematization of concepts in knowledge management

Estudo de categorias para sistematização de conceitos em gestão do conhecimento

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Submitted/Recibido: 05 de junho de 2020; Approved/Aceptado: 05 de julho de 2020



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Abstract

Introduction: based on the categorization principles, the study reports on-going research that aims to create a concept-based Taxonomy for the Knowledge Management (KM) domain, the outcome of which may minimize conceptual misunderstanding among experts, promoting better communication and also the growth of the speciality. Method: as a methodological resource of the domain analysis approach, a systematic literature review was necessary in order to identify and define the categories that will compose the classification scheme. Conclusion: as a result, two major categories were created, plus seven corresponding subcategories. The following steps are intended to define the concepts, which will go through a process of systematization in hierarchical chains, thus fulfilling the general objective of the research that is the creation of a taxonomy for the domain of KM.

Keywords: Knowledge Management; Study of Categories; Systematic Review of Literature; Theories of Knowledge Organization; Taxonomy.

Resumo

Introdução: Com base nos princípios de categorização, o estudo relata uma pesquisa em andamento sobre o categorias para sistematização de conceitos em gestão do conhecimento. Objetivo: Objetiva criar uma taxonomia-de-base-em-conceito para o domínio da Gestão do Conhecimento (GC), cujo resultado poderá minimizar a confusão conceitual entre especialistas, promovendo uma melhor comunicação e também o crescimento da especialidade. Metodologia: Como recurso metodológico da abordagem de análise de domínio, uma revisão sistemática de literatura se fez necessária com o objetivo de identificar e definir as categorias que irão compor o referido esquema de classificação. Conclusão: Como resultado, duas grandes categorias foram criadas, além de sete subcategorias correspondentes. Como etapas seguintes, pretende-se definir os conceitos, que passarão por um processo de sistematização em cadeias hierárquicas, cumprindo assim o objetivo geral da pesquisa que é a criação de uma taxonomia para o domínio da GC.

Palavras-chave: Gestão do Conhecimento; Estudo de Categorias; Revisão Sistemática de Literatura; Teorias da Organização do Conhecimento; Taxonomia.

INTRODUCTION

Given the multidisciplinarity of the knowledge management (KM) since its origin, it is possible to find different approches about this thematic on academic literature with a growing production over the last decades, which enables terminological diversity. This diversity impacts directly on the distributuion of terms among its categories in the moment of sistematization of the concepts related to the KM domain, finding in taxonomy a methodological model of organization of these concepts. Thus, the problem that rises is that, in this speciality, which the terminological pattern is an instrument of great importance to the handling of any work (Terra, Schouerl, Vogel, & Franco, 2009), there is still a lack of an instrument that standardizes and systematizes its own concepts.

In contrast, working with concepts that involve the KM is a challenge, because each subarea that forms it compreends them in a way. In that sense, it is necessary to study deeply the principles of categorization (Dahlberg, 1981; Ranganathan, 1937), in order to assist in the comprehension of the concepts that are part of the domain of the Knowledge Management. Categorization is understood as a deductive process of "analysing the domain through conceptual cutouts that allow to determinate the identity of the concepts (categories) that are part of this domain" (Campos & Gomes, 2008, p. 5).

Categories, in turn, are defined by Campos, Gomes, and Oliveira (2013) as essential elements for the elaboration of any taxonomy, because it enables the vision of an area or subject as a system, allowing the identification of the aspects through which this area/subject can be approached. In this conception, the present work is part of an ongoing research that aims to propose a Taxonomy-of basis-in-concept for Knowledge Management in the

area of Information Science (IC), from the delimitation and definition of categories that, a priori, will provide logic for the aforementioned classification scheme.

Thus, in this first moment, it is intended to analyze, categorize and define the different approaches that make up the domain of KM, taking as a foundation that the main authors referenced in the area of IC and their respective original works. For this, a systematic literature review was necessary, defined by Sampaio and Mancini (2007) and Galvão and Pereira (2014) as a retrospective investigation focused on a precise question, whose objective is to identify, select, analyze, and synthesize the relevant evidence available in primary studies on a given topic, using systematic and explicit methods.

As a result of this research, it is intended to contribute to the systematization of concepts in Knowledge Management within the scope of Information Science, serving as a support for theory and practice in the specialty of the KM.

METHOD

Domain Analysis (DA) has found ample space in Knowledge Organization, used for epistemological and theoretical purposes, whose concepts are deepened, generating theoretical framework for that study. On the other hand, as a method, DA is not restricted to it, and can be used to assist in the development of classification tools, whose concepts are applied methodologically to the area of knowledge of the research (Gheno, 2017). In the case, in Knowledge Management.

According to Smiraglia (2011 apud Guimarães, 2014, p. 15), Domain Analysis is defined as a "study of the theoretical aspects of a given environment, usually represented by a literature or community of researchers, constituting a means for generating new knowledge about the interaction of a given scientific community with information. In other words, the domain, object of analysis, is mapped by Guimarães (2014, p. 17) as:

a set of thought communities or discourse communities that make up the social division of labor (Hjorland; Albrechtsen, 1995, p. 401 apud Guimarães, 2014, p. 17); an area of expertise, a body of literature, or a group of people working together in an organization (Mai, 2005, p. 605 apud Guimarães, 2014, or an area of knowledge, activity, interest or application with defined limits (Lloréns et al., 2004 apud Guimarães, 2014, p. 17).

In that sense, according to Guimarães (2014) the domain is the result of applying a principle inherent in the organization of knowledge itself - categorization.

As a methodological resource of domain analysis (Hjørland, 2002), a systematic literature review was necessary in order to identify and define the categories that will compose the Taxonomy-of-basis-in-concept¹ for the domain of Knowledge Management. Initiated in the 1950s as a new research design and consolidated in the health area in the late 1980s (Galvão & Pereira, 2014), Reviews considered as systematic are currently seen as a method applicable in any area of knowledge.

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According to Sampaio and Mancini (2007) and Galvão and Pereira (2014), Unlike conventional narrative reviews (general reviews on a given topic) or integrative reviews (different designs on the same topic), systematic reviews are characterized as a retrospective investigation focused on a precise question, whose objective is to identify, select, analyze, and synthesize the relevant evidence available from primary studies on a given topic, using systematic and explicit methods.

The SRL adopts four phases to achieve its objectives, they are: planning, sampling, analysis and reporting (Garza-Reyes, 2015). In a detailed vision, Sampaio and Mancini (2007) mention that the methods for the

¹The term is considered by the authors to be a noun locution (a set of two or more words that have the function of a noun) and, although the new Orthographic Agreement does not, in general, employ hyphens in locutions, its use was chosen in order to emphasize the type of taxonomy in question (concept-based), considering this term an exception to the rule.

elaboration of systematic reviews foresee: (1) defining the research question; (2) searching for evidence in the literature; (3) reviewing and selecting studies; (4) analyzing the methodological quality of the studies; and (5) presenting the results.

Based on the aforementioned authors, Figure 1 illustrates the stages of SLR and the methods and tools used in this study to support its stages.

	Objetivo	Método	Ferramenta
Planejamento	 Definição da pergunta de pesquisa 	● Pesquisa exploratória	 Principais autores referenciados nos artigos científicos em Ciência da Informação
Amostragem	 Busca de evidências na literatura 	Identificar as bases de dados a serem consultadas Definir as palavras-chave e estratégias de busca Estabelecer os critérios para seleção dos artigos a partir da busca	 BRAPCI Palavra-chave: gestão do conhecimento Período de análise: 2010 a 2018 Filtro de busca: referências Indusão: obras originais que abordem os componentes da GO Exclusão: obras repetidas e/ou de revisão de literatura e/ou de aplicação
Análise	 Revisão e seleção dos estudos Análise da qualidade metodológica dos estudos 	 Aplicar os critérios na seleção dos artigos e justificar possíveis exclusões Analisar criticamente e avaliar todos os estudos incluídos na revisão 	 Planilha no Excel Metassíntese qualitativa
Relato	 Apresentação dos resultados 	 Apresentar um resumo crítico, sintetisando as informações disponibilizadas pelos artigos que foram incluídos na revisão e informando a evidência sobre os efeitos da intervenção 	 Categorização conceitual

Figure 1. Methodological synthesis of the SLR.
Fonte: Own elaboration, based on Sampaio and Mancini (2007) and Garza-Reyes (2015)

In the sampling stage, two strategies were used to search for evidence in the literature. The first was the choice of the Reference Database of Journal Articles in Information Science (BRAPCI) for consultation, which currently² contains 19,255 papers in scientific journals and 2,592 papers in events, which can be considered the main collection of Brazilian publications in IC. The second strategy was to use the keyword "knowledge management" to retrieve references contained in scientific productions published in the period from January 1, 2010 to August 31, 2018³

As criteria for the selection of articles, from the search, original works that addressed the components of the KM were included, such as books (chapters or complete works) and doctoral theses, because they usually bring new knowledge to a given academic area. On the other hand, other undergraduate, specialization, and master's course completion papers were excluded, as well as interviews, blog texts, websites, and materials from participation in events, often disseminated as a literature review and/or application of the KM in different social and organizational contexts.

A The analysis step aimed to review and select the studies according to the inclusion and exclusion criteria 1), followed by the analysis of the methodological quality of the selected studies, by means of the evaluation method called qualitative meta-synthesis, defined by Zimmer (2006, p. 312 apud Lopes and Fracolli, 2008, p. 774) as "a

²Data collected on August 31, 2018.

³The period of analysis considered the interval of continuous growth of scientific publications in Knowledge Management in Information Science, taking as basis the productions in one of its main environments of scientific communication in the area in Brazil - the Annals of the National Meeting of Research in Information Science (ENANCIB) (Duarte, Satur, Lira, Silva, & Lima, 2015).

type of qualitative study that uses data from the findings of other qualitative studies on the same or related topics. Such a method can be applied through relationships between researches, such as comparisons, similarities, and differences. In this study, the methodological quality was analyzed from the very approach adopted by the authors, that is, identifying whether, in fact, the publication brought new knowledge to the domain of the KM.

As part of the fourth and last stage of SRL, the collected information was synthesized and made available through categorization, understood as a "process that requires thinking about a domain deductively, that is, determining the most comprehensive classes within the chosen theme". (Campos & Gomes, 2008, p. 5). Still for the authors, "to apply categorization is to analyze the domain from conceptual clippings that allow to determine the identity of the concepts (categories) that are part of this domain" (Campos & Gomes, 2008, p. 5),

RESULTS

After adopting the search term "knowledge management" in the BRAPCI, using the option "references" as a search filter, 657 references in Portuguese were retrieved. Next, the inclusion and exclusion criteria were adopted 1), using an Excel spreadsheet to support data treatment. In the end, 109 references remained.

To enable the in-depth study of the academic literature referenced in the scientific publications of the BRAPCI, in order to identify the central approach adopted by their respective authors, only the most referenced works, with three or more mentions, were selected for the research. Therefore, 28 national works remained for analysis, according to Chart 1, whose references are ordered by year of publication. It is noteworthy that, in cases of works organized by author(s), the complete works were excluded, regardless of the number of mentions, and the corresponding chapters referenced more than twice were included. Thus, the confluence of different approaches in the same work was avoided.

REFERENCED WORKS	NOF MENTIONS
DRUCKER, P. F. O advento da nova organização. In: HARVARD BUSINESS REVIEW.	7
Gestão do Conhecimento. Rio de Janeiro: Campus, 2000.	
GARVIN; D. A. Construindo a organização que aprende. In: HARVARD BUSINESS	5
REVIEW. Gestão do Conhecimento . Rio de Janeiro: Campus; 2000.	
TERRA, José Cláudio Cyrineu. Gestão do conhecimento: o grande desafio empresarial:	27
uma abordagem baseada no aprendizado e na criatividade. São Paulo: Negócio, 2000.	
STOLLENWERK, Maria Fátima Ludovico. Gestão do conhecimento: conceitos e mod-	4
elos. In: TARAPANOFF, Kira. Inteligência Organizacional e Competitiva. Brasília:	
Editora Universidade de Brasília, 2001.	
BUKOWITZ, W. R.; WILLIAMS, R. L. Manual de gestão do conhecimento: ferramentas	12
e técnicas que criam valor para a empresa. Porto Alegre: Bookman, 2002.	
FLEURY, M. T. L.; OLIVEIRA JR, M. M. Aprendizagem e gestão do conhecimento. In:	3
FLEURY, M. T. L. (Org.). As pessoas na organização. São Paulo: Gente, 2002.	
PROBST, G.; RAUB, S.; ROMHARDT, K. Gestão do conhecimento: os elementos con-	13
strutivos do sucesso. Porto Alegre: Bookman, 2002.	
CIANCONI, Regina de Barros. Gestão do conhecimento: visão de indivíduos e orga-	8
nizações no Brasil. 2003. 297f. Tese (Doutorado) – Programa de Pós-Graduação em	
Ciência da Informação, Instituto Brasileiro de Informação em Ciência e Tecnologia	
(IBICT), Universidade Federal do Rio de Janeiro (UFRJ), Rio de Janeiro, 2003.	
BATISTA, F. Governo que aprende: gestão do conhecimento em organizações do execu-	3
tivo federal. Brasília: IPEA, 2004.	
GUIMARÃES, J. As políticas de Indexação como elemento para a gestão do conheci-	6
mento nas organizações. In: VIDOTTI, S. A. G. (Org.). Tecnologia e conteúdos informa-	
cionais: abordagens teóricas e práticas. São Paulo: Polis, 2004.	
SANTIAGO JUNIOR, J. R. S. Gestão do conhecimento: a chave para o sucesso empre-	3
sarial. São Paulo: Novatec, 2004.	
ALVARENGA NETO, R. C. D. de. Gestão do conhecimento em organizações: proposta	13
de mapeamento conceitual integrativo. 2005. 400f. Tese (Doutorado) - Programa	
de Pós-Graduação em Ciência da Informação, Universidade Federal de Minas Gerais	
(UFMG), Belo Horizonte, 2005.	
CARVALHO, R. B. Intranets, portais corporativos e gestão do conhecimento: análise	3
das experiências de organizações brasileiras e portuguesas. 2006. 281f. Tese	
(Doutorado) – Programa de Pós-Graduação em Ciência da Informação, Universidade	
Federal de Minas Gerais (UFMG), Belo Horizonte, 2006.	

FIALHO, F. A. P.; MACEDO, M.; SANTOS, N. dos; MITIDIERI, T. da C. Gestão do conhecimento e aprendizagem: as estratégias competitivas da sociedade pós-industrial. Florianópolis: Visual Books, 2006.	3
LIMA-MARQUES, Mamede; MACEDO, Flávia Lacerda Oliveira de. Arquitetura da informação: base para a gestão do conhecimento. In: TARAPANOFF, Kira (Org.). Inteligência , informação e conhecimento . Brasília: IBICT, 2006.	3
MCINERNEY, Claire R. Compartilhamento e gestão do conhecimento: profissionais da informação em um ambiente de confiança mútua. In: TARAPANOFF, Kira (Org.). Tradução de Ulf Gregor Baranow. Inteligência, informação e conhecimento. Brasília: IBICT, 2006.	7
ROSINI, M.; PALMISANO, A. Administração de sistemas de informação e a gestão do conhecimento. São Paulo: Pioneira Thomson Learning, 2006	4
WILSON, T. D. A problemática da gestão do conhecimento. In: TARAPANOFF, K. (Org.). Inteligência, informação e conhecimento. Brasília: IBICT, Unesco, 2006.	6
FRESNEDA, P. S. V.; GONÇALVES, S. M. G. A experiência brasileira na formulação de uma proposta de política de gestão do conhecimento para a administração pública federal. Brasília: Câmara dos Deputados, 2007.	3
INNARELLI, Humberto Celeste. Preservação digital e seus Dez Mandamentos. In: SANTOS, Vanderlei Batista dos; INNARELLI, Humberto Celeste; SOUZA, Renato Tarciso Barbosa de. Arquivística: temas contemporâneos: classificação, preservação, gestão do conhecimento. Brasília: SENAC, 2007.	3
SANTOS, Vanderlei Batista dos. A prática arquivística em tempos de gestão do conhecimento. In: SANTOS, Vanderlei Batista dos; INNARELLI, Humberto Celeste; SANTOS, Renato Tarciso Barbosa (Org.). Arquivística: temas contemporâneos: classificação, preservação digital, gestão do conhecimento. Brasília, DF: SENAC, 2007.	5
SOUSA, Renato Tarciso Barbosa de. A classificação como função matricial do que fazer arquivístico. In: SANTOS, Vanderlei Batista dos; INNARELLI, Humberto Celeste; SOUSA, Renato Tarciso Barbosa de (Org.). Arquivística: temas contemporâneos: classificação, preservação digital, gestão do conhecimento. Brasília: SENAC, 2007.	4
NONAKA, Ikujiro. A empresa criadora do conhecimento. In: NONAKA, Ikujiro; TAKEUCHI, Hirotaka. (Org.). Gestão do conhecimento. Porto Alegre: Bookman, 2008.	7
NONAKA, Ikujiro; TAKEUCHI, Hirotaka. Teoria da criação do conhecimento organizacional. In: TAKEUCHI, Hirotaka; NONAKA, Ikujiro. Gestão do conhecimento. Porto Alegre: Bookman, 2008.	3
SILVA, H. M. da; VALENTIM, M. L. P. Modelos de gestão do conhecimento aplicados à ambientes empresariais. In: VALENTIM, M. L. P. (Org.). Gestão da informação e do conhecimento no âmbito da Ciência da Informação. São Paulo: Polis, 2008.	3
SORDI, J. O. de. Administração da informação: fundamentos e práticas para uma nova gestão do conhecimento. São Paulo: Saraiva, 2008.	7
TAKEUCHI, H.; NONAKA, I. Criação e dialética do conhecimento. In: Gestão do conhecimento . Porto Alegre: Bookman, 2008.	3
TERRA, José Claudio Cyrineu; GORDON, Cindy. Portais Corporativos: a revolução na Gestão do Conhecimento. São Paulo: Negócio Editora, 2011.	13

Quadro 1. Most referenced national works in the BRAPCI. **Fonte:** own elaboration, from data collection at the Brapci (2018).

Through systematic review of the referenced works and application of conceptual categorization, considering those accessible for reading, the KM domain was classified into two major categories, namely: Scientific Field and Management System. The approaches that compose the KM Field can be categorized from the Theoretical Foundations and the Disciplinary Approaches that compose it. The KM System can be classified into five subcategories, namely: Program, Projects, Process, Practices and Products.

Para uma melhor compreensão do Quadro 2, destacam-se algumas observações. A primeira é que, apesar de, em sua obra, o autor Batista (2004) identificar Banco de Talentos e Oportunidades (TAO) e Banco de Conhecimentos como práticas de gestão do conhecimento, entende-se que ambos se tratam de produtos, pois os mesmos não remetem à ação, mas geram ou resultam de ações/práticas em GC. A segunda observação é que tais produtos em GC podem ser tecnológicos, especificamente as Tecnologias da Informação e Comunicação (TIC), ou não tecnológicos, quando suportam artefatos tradicionais.

CATEGORY	SUBCATEGORY	AUTHORS	APPROACH
Field	Theoretical Foundations	Wilson (2006)	Scope of Knowledge Management in scientific journals by knowledge areas.
	Disciplinary Approaches	Alvarenga Neto (2005)	Conceptual mapping of Knowledge Management: integration of concepts from various disciplines (Business Administration, Information Science, Computer Science), integration of various activities (Document Management, Competence Mapping, Process Mapping, Creating the enabling context or "ba"), integration of management approaches and tools (Innovation Management, Tacit and Explicit, BSC), and integration of different knowledge areas (HR, Finance, IT, Marketing, Strategy).
System	Program	Terra (2000)	Seven dimensions of managerial practice structured into three interconnected levels, which are: strategic (top management), organizational (human resources policies, organizational culture, and organizational structure), and infrastructure (information systems and measurement of results).
		Stollenwerk (2001)	Generic knowledge management model - Enabling factors: Leadership; Organizational Culture; Mediation and Evaluation; and Information Technology.
		Cianconi (2003)	Facets of Knowledge Management: management of organizational culture, management of talents and internal relationships, management of competencies and organizational learning, management of external relationships, management of organizational processes and best practices, management of collections and information content, management of technology and information systems, and measurement of intangible assets.
		Fresneda; Gonçalves (2007)	Basic premises and guidelines for the implementation of an integrated and inter-organizational Knowledge Management policy, that articulates the various organs of direct administration, creating networks of co-responsibility in relation to the processes of creation, dissemination and sharing of knowledge sharing of knowledge necessary to increase the efficiency of services provided to society by governmental areas. Among the discussions, some relevant issues are highlighted for the formulation of the KM policy: culture, awareness and training for knowledge management; focus on knowledge sharing; and technology.
	Projects	Lima- Marques; Macedo (2006)	A proposed information architecture model that represents the basic processes of the information cycle, overlaid on three levels, namely: metamodeling (analysis of the context of the information environment as a whole and establishment of guidelines), modeling (the models for identification, capture, storage, representation, organization, and communication of the information system's contents are defined), and application (the theories, models, techniques, and technologies devised on the previous levels are applied to the implementation of the information system, with its products and services).
	Process	Stollenwerk (2001)	Generic knowledge management model: - Processes: Identification; Capture; Selection and Validation; Organization and Storage; Sharing: Access and Distribution; Application; and Knowledge Creation.

For a better understanding of Chart 2, a few observations should be highlighted. The first is that, although in his work the author Batista (2004) To identify Talent and Opportunity Bank (TAO) and Knowledge Bank as

	Process	Bukowitz e Williams (2002)	KM process classified into two courses of actions (and their steps) integrated simultaneously into the organization, namely: tactical (get, use, learn, and contribute) and strategic (assess, build / maintain, and dispose) course.
System		Probst, Raub e Romhardt (2002)	Essential knowledge management processes, which are: those related to information flows (knowledge identification, knowledge acquisition, knowledge development, knowledge sharing and distribution, knowledge utilization, and knowledge retention), as well as two strategic constructs (knowledge goals and knowledge assessment).
		McInerney (2006)	Knowledge sharing and the element "trust" as a basic environmental factor for its effectiveness.
		(2000)	Four modes of knowledge conversion for the creation
		Nonaka (2008)	of organizational knowledge: Socialization (tacit » tacit), Combination (explicit » explicit), Internalization (explicit » tacit) and Externalization (tacit » explicit).
		Nonaka; Takeuchi (2008)	Knowledge creation process: Socialization (sharing and creating tacit knowledge through direct experience), Externalization (articulating tacit knowledge through dialogue and reflection), Combination (systematizing and applying explicit knowledge and information), and Internalization (learning and acquiring new tacit knowledge in practice).
	Pratices	Batista (2004)	Knowledge Management practices in institutions, for example: Organizational Knowledge Mapping, Communities of Practice (CoP), Mentoring, Peer Review Groups, Corporate University, Competency-based Staffing.
		Innarelli	Document preservation practice from the ten com-
		(2007) Guimarães (2004)	mandments. Indexing: dimension of information content treatment.
	Products	Batista (2004)	Knowledge Management products in institutions, for example: Talent and Opportunity Bank (TAO) and Knowledge Bank.
		Carvalho (2006)	Information and Communication Technologies (ICT) in supporting the Knowledge Management process. Some examples: Socialization (knowledge map systems and knowledge portals), Externalization (Groupware and Workflow tools, in addition to artificial intelligence-based systems and knowledge portals), Internalization (innovation support tools), and Combination (intranet systems, Electronic Document Management (EDM), Business Intelligence, Competitive Intelligence, and the knowledge portals).
		Terra e Gordon (2011)	Corporate portal as a support platform to the knowledge management process, from a single interface that integrates different information and communication technologies to optimize information flows.

Quadro 2. Analysis of the works and approach of the respective authors. **Source:** Research data (2020).

knowledge management practices, it is understood that both are products, because they do not refer to action, but generate or result from actions/practices in KM. The second observation is that such KM products can be technological, specifically the Information and Communication Technologies (ICT), or non-technological, when they support traditional artifacts.

In search of a better visualization of the categories and their hierarchical relationships, we arrived at the systematization represented in Figure 2.

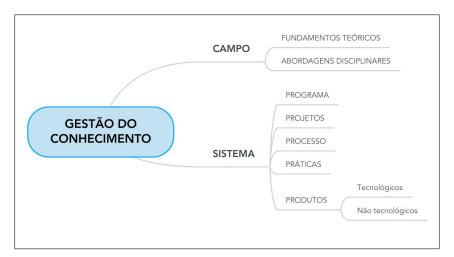


Figure 2. Knowledge Management Categories. **Source:** Elaborated by the tool Mindmeister (2020).

It is important to reinforce that the categories of KM were defined from the analysis of the authors' main approach in their respective works, identifying keywords that explicitly (considering the use of the word in the text) or implicitly (considering the indirect reference to the word from the text) represent such approaches. Here follows the description of each of the categories and their corresponding subcategories:

Campo

Based on Bourdieu (2004), the Science Field is a group of disciplines structured around specific goals and practices and relatively autonomous with respect to other disciplines, integrating a diversity of agents and institutions that produce or disseminate science within each of them. In this sense, the Knowledge Management Field can be approached from a theoretical and practical perspective:

- Theorical foundations: KM is characterized as a multidisciplinary field, that is, composed of the juxtaposition of two or more disciplines, with a focus on proximity, where each discipline contributes within its area of knowledge (Holland, 2008). Therefore, Knowledge Management integrates theories from many other disciplines.
- **Disciplinary approaches:** Just as it can be approached from a theoretical perspective, based on theories from various scientific areas, KM can also be studied as an applied field, with practices, methodologies, concepts and approaches associated with different disciplines (Holland, 2008).

SYSTEM

The ISO 30401 (2018) defines Knowledge Management System as "part of a Management System with respect to knowledge". (ISO, 2018, p. 4), being the main element to be promoted. Management System, in turn, is identified as a set of interdependent elements that operate in an environment or context to establish policies, objectives, and processes to achieve those objectives.

- Program: According to PMBOK (PMI, 2017, p. 8), program is a "group of projects managed in a coordinated way, in order to obtain benefits that, in an isolated way, would not be obtained". In the case of a Knowledge Management Program, it is capable of enabling the management of several KM projects, each with specific objectives related to a single overall objective, requiring the development of management activities (e.g. relationship management, policy management, technology management) and the promotion of enablers (e.g. organizational culture, leadership) for organizational knowledge, whose elements are represented in different organizational models of knowledge management.
- **Project:** According to PMBOK (PMI, 2017, p. 4)) project is a "temporary undertaking with the goal of creating a unique product or service, which can be developed at any level of the organization". Also according to the document, "'temporary' means that each project has a well-defined beginning and end and 'unique' means that the product or service produced is somehow different from all other similar products or services" (PMI, 2000, p. 4). In the case of the KM project, it is noteworthy that the objectives and

goals are related to the performance that the organization intends to achieve and which knowledge gap should be filled.

- Process: It considers the classification of knowledge into two categories: explicit knowledge (objective, formal and codified) and tacit knowledge (subjective, informal and not codified). Based on this classification, it refers to the four modes of knowledge conversion (explicit and tacit), representing the social interaction between individuals as socialization, combination, internalization, and externalization, whose representation is already well known. It also refers to the stages of the knowledge management process, summarized in acquisition/creation, storage, sharing, and use of knowledge, whose stages are represented in different process models in knowledge management.
- Practices: Synonymous with "the act or effect of doing something" (Dicionário Michaelis, 2010), the concept of "practice" can be defined, when applied in the context of Knowledge Management, as an action capable of accomplishing what KM proposes to do in its theory, that is, to promote the knowledge management process to increase effectiveness, improve quality, and promote innovation from an integrated method.
- **Products:** In a knowledge management system, KM products (technological or non-technological) should be understood as those that can be applied to facilitate the promotion of practices in knowledge management, from its process, or can be results of these actions. An example of the first case is the yellow pages, which indicate people with specific knowledge in a certain area, sector or subject matter, and which serve as support for the sharing of knowledge from communities of practice, for example. The second case occurs when communities of practice can generate as a result the lessons learned related to a problem.

CONCLUSIONS

From the systematic literature review, it was possible to delimit the field of knowledge management into two major categories, the first divided into two subcategories and the second into five. The Field category is related to theoretical foundations and disciplinary approaches, that is, it characterizes KM as a multidisciplinary field, composed of a set of theoretical foundations (theories) and disciplinary approaches (methods, practices, and concepts) borrowed from other areas/disciplines. The System category integrates a set of elements applied in a social/organizational context, be it Programs, Projects, Processes, Practices or Products (technological and non-technological).

The result of this research in development will subsidize the composition of the Taxonomy-of-Base-In-Concept for Knowledge Management. As the next steps of this work, it is intended to categorize the concepts based on their differences and similarities. Furthermore, the concepts of each category will go through a process of systematization in hierarchical chains, thus fulfilling the general objective of the research, which is the creation of a taxonomy for Knowledge Management. This result may minimize the conceptual confusion among specialists, promoting better communication and also the growth of this specialty.

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How to cite this article (APA):

Silva, N. B. X. & Sales, L. F. & Santos, J. D. F. (2020). AtoZ: novas práticas em informação e conhecimento, 9(1), 127 - 136. Retrieved from: http://dx.doi.org/10.5380/atoz.v9i1.74363