CAPÍTULO 4

The use of digital platforms to share information and knowledge

Armando Sérgio de Aguiar Filho
Armando Manuel Barreiros Malheiro da Silva
Ana Cristina Marques de Carvalho

Contemporary society has experienced, in recent years, a "multidirectional structural change" based on information and communication technologies, initially emerging in the 1960s. However, as Castells (2005) mentions, technology alone is not capable of promoting such transformation; rather, it is society's utilization of it according to its needs, values, and interests. This reasoning seems to fit well with the phenomenon of the internet. Its impact became significant, most likely due to the first thousands of users who realized the advantages of communicating and exchanging information without the need to be physically together, becoming active agents in content production and dissemination (De Jesus, 2022; Castells, 2005). That said, the process of popularization became growing and inevitable. A recent study conducted in 2022 indicated that the internet is present in the homes of 214.3 million Brazilians, which corresponds to 82% of the population (Brasscom, 2022). Based on advances in information and communication technology, digital communication networks gradually formed, becoming the central

axis of a more flexible, adaptable, and interconnected society, referred to as a network society. Digital platforms emerged within these networks, understood as a digital structure designed to organize and facilitate interactions among end-users, corporate entities, and public organizations (Van Dijck, Poell, & De Waal, 2018).

In recent years, there has been a growing interest and utilization of digital platforms. According to Van Dijck, Poell, and De Waal (2018), we are facing a true "platform society," where the majority of interactions take place via the internet. However, when analyzing the term "platform" in isolation, as an environment facilitating relationships between two or more groups, one concludes that it already existed. Consider shopping malls connecting consumers with merchants or newspapers linking subscribers to advertisers. The shift to digital platforms occurred in the 1990s, driven by the evolution of information technology, reducing the need for physical infrastructure and assets and simplifying the construction and expansion of platforms (Van Alstyne, Geoffrey & Choudary, 2016). Today, we witness the phenomenon of "platformization," the process in which digital platforms are considered key to economic progress and technological innovation, leading to profound changes in organizational structures, various sectors and services of the economy, governmental structures, and societal life (Poell, Nieberg; Van Dijck, 2020). Thanks to this process, new business opportunities, improved business processes, new informational flows, and agility in information sharing have been achieved (Zutshi; Grilo, 2019; Lima, Ferreira & Souza, 2020).

Currently, there is a multitude of digital platforms for sharing information and knowledge, such as social networks, blogs, practice communities, opinion communities, mobile apps, websites, operating systems, discussion forums, digital repositories, search engines, digital encyclopedias, among others. (Rockembach, 2013; Costa; Soares; Souza, 2020; Guarib *et al.*, 2019; Lee-Geiller; Lee, 2019; De Santana; Cabral; Da Nóbrega, 2018; De Jesus, 2022). They have been used for various purposes in different market segments, including health, education, environment, business, food, among others. However, an effective knowledge-sharing process depends not only on technology but primarily on the people who create, share, and use it, along with other related factors such

as trust, culture, favorable organizational climate, and leadership support (Al-Kurdi; El-Haddadeh; Eldabi, 2018; Ipe, 2003).

This study aims to investigate how digital platforms have been used for the sharing of information and knowledge. To achieve this, two dimensions, theoretical and empirical, were adopted. For the theoretical dimension, a literature review was conducted on articles, books, doctoral theses, master's dissertations, and websites. For the empirical dimension, a bibliometric analysis followed by a qualitative analysis was performed. The following question was defined for this study: How has scientific production in the last five years addressed the use of digital platforms for the sharing of information and knowledge? This article is structured in six sections, with the first being this introduction; the second, a literature review; the third, methodological procedures; the fourth, results; the fifth, analyses; and the last, the conclusion.

DEVELOPMENT

Knowledge sharing in organizations

Knowledge has been considered by organizations as a significant corporate asset capable of fostering sustainable development. It consists of "a fluid mix of condensed experience, values, contextual information, and experienced insight, providing a framework for the assessment and incorporation of new experiences and information" (Davenport; Prusak, 1998, p. 6). For organizations to leverage individuals' knowledge, it needs to be shared. Knowledge sharing is understood as the process of making an individual's knowledge available to others within the organization (Ipe, 2003). Supporting this concept, Takeuchi and Nonaka (2008, p.57) mention that by sharing knowledge, the organization "amplifies, organizationally, the knowledge created by individuals and crystallizes it as part of the organization's knowledge network." For knowledge sharing to occur among individuals, it is important to consider that: (a) the provision of knowledge must be a conscious action by the individual who possesses it; (b) the knowledge to be conveyed must be clear so that it can be understood,

absorbed, and used by others; (c) sharing knowledge does not mean relinquishing ownership (Ipe, 2003).

Another aspect highlighted by Takeuchi and Nonaka (2008) is that an organization cannot create knowledge without individuals, and therefore, it needs to create contexts that allow its creation. Ipe (2003) believes that there are interconnected factors influencing the knowledge-sharing process in organizations, such as: (a) the nature of knowledge (explicit and tacit knowledge); (b) motivation to share (both internal and external); (c) opportunities to share (both formal and informal); (d) the workplace culture. Al-kurdi, El-Haddadeh, Eldabi (2018) analyze this aspect more comprehensively, believing there are four main determinants for knowledge sharing: (a) technological; (b) organizational; (c) behavioral and motivational; (d) cultural.

Bellefroid (2013) understands that there are three generations of knowledge sharing. The first constitutes the most traditional form of knowledge sharing, aiming primarily to retain knowledge in the organization, especially in cases of aging employees, outsourcing, geographical distance, and restructuring. In this case, knowledge is seen as an object. The second generation is more related to the social aspect, i.e., how people cooperate and communicate for the sharing of their knowledge. In this case, knowledge sharing can occur more formally, through knowledge-sharing systems and also through brainstorming sessions, lunches, informal face-to-face meetings. The third generation is the most recent. In this generation, knowledge sharing occurs more virtually, surpassing geographical barriers. In this case, employees seek knowledge not only within the company but also externally. Digital platforms, such as discussion forums, social networks, and self-organized networks within companies that emerge and disappear continuously, are used for this purpose, demonstrating their fluid characteristic. Another trait mentioned by the author regarding this generation is the tendency for employees to act more autonomously, identify less with the organization, and more with colleagues performing similar activities. Communities of practice are an example of this tendency. In the following sections, digital platforms will be discussed, followed by their types and functions.

Digital Platforms

The first digital platforms emerged in the 1990s due to the rapid growth of Information and Communication Technologies and the development of the Internet (Ablyazov & Rapgof, 2019). They can be understood as infrastructures existing in the digital environment that enable the interaction of two or more groups (Snircek, 2017). Chiarini (2023, p.7) defines them as "networks orchestrated by a controller, which can be a company or any other organization, such as the state or the academic community." Expanding on this concept, Poell, Nienorg, and Van Dijck (2020, p. 4) associate digital platforms with "reprogrammable digital infrastructures that facilitate and shape personalized interactions between end-users and complementors, organized through systematic data collection, algorithmic processing, monetization, and data circulation."

Based on Bonina *et al.* (2021) and Cusumano *et al.* (2019); Gawer (2011), Hellemans, Porter, and Diriker (2022) present three main characteristics of digital platforms: (a) they are mediated by technology; (b) they enable relationships between groups with diverse characteristics; (c) they allow the performance of activities inherent to these groups. In addition to this, they are not restricted to geographical boundaries (Constantinides; Henfridsson; Parker, 2018). D'Andréa (2020) supports this thinking by mentioning that the factor that highlights the idea of an online platform is the adoption of a robust computational structure based (generally "in the cloud") on connectivity and data exchange. Through digital platforms, knowledge and information are shared for various purposes and in various market segments. Knowledge sharing is understood as the mutual formal or informal exchange of ideas among individuals or groups of diverse cultures in an organization (Zakaria; Ab Rahman Muton, 2022). In the economic segment, for example, they can be useful in discovering business partners; accessing data and information; identifying business opportunities; and obtaining new customer options (De Santana; Cabral; Nóbrega, 2019). In the healthcare sector, they can contribute to improving patient monitoring and services. In education, they enable the exchange of knowledge among researchers and the sharing of knowledge and experiences (De Santana; Cabral; Da Nóbrega, 2019; Corvello *et al.*,

2020). In the government and public services sector, they promote transparency, democratization of information, and transaction execution (Lee-Geiller; Lee, 2019).

Digital Platforms: Main Types and Operating Forms

Consulting the literature reveals various types of digital platforms used for the sharing of information and knowledge, which will be presented below.

Online Communities

Online communities or business networks constitute a collective form of sharing information, collaboration, and specific actions through Internet-based technologies. Such structures have become essential for gaining competitive advantages (Costa; Soares; Souza, 2020). Spagnoletti, Resca, and Lee (2015) present the distinction between the three types of social interaction present in online communities: (a) information sharing; (b) collaboration, and (c) collective action. In information sharing, content is freely made available on the network by the agents themselves, without any formal rules or control mechanisms. This is what happens, for example, on the digital platform Twitter. In the collaboration structure, agents engage in activities that require significant group coordination and governance mechanisms, such as hierarchy and specific guidelines. Wikipedia is an example of a collaboration structure. In the collective action structure, the aim is to reach a consensus and decision-making that represents the group's identity, with shared values and trust. Examples include electronic participation applications used by social movements, political parties, and governments. According to the needs of different user classes, digital platforms can assume a specific architecture, not necessarily encompassing the types of interaction structures mentioned.

Guarib *et al.* (2019) understand that depending on the purpose, there can be various types of online communities, which can be grouped into: online knowledge sharing communities, communities of practice, blog communities, social media, health communities, innovation communities, brand communities, transactional communities and opinion/review communities.

Websites

Websites, a combination of the words "web" and "sites," constitute pages stored on Internet service providers that can be accessed by anyone connected to the network, potentially including information, images, photos, videos, and sounds (Website, 2022). Websites are used by companies for the following purposes: (a) collecting information about their audiences; (b) updating on their activities; (c) providing information to the mass media; (d) offering online services; (e) making products available online (Do Amaral; Guimarães, 2008). In the case of the government, websites, by sharing information, contribute to transparency and citizen engagement (Lee-Geiller; Lee, 2019).

Mobile Applications (APPS)

Applications, or apps, as they are commonly known, are small software programs developed or acquired exclusively for mobile applications, with the aim of meeting a specific need (Aplicativos, 2022). Downloaded from virtual stores, apps emerged with the popularity of smartphones and have been used by various market segments. Their main characteristics are portability and connectivity, as they allow easy access to users, 24 hours a day, anywhere. Not to mention the applications offered through them (Tibes; Dias; Zem-Mascarenhas, 2014; Da Silva, 2018).

Digital Repositories

Digital repositories are online databases that systematically organize the scientific production of a specific institution or thematic area. They may contain files in various formats, democratizing access to information, preserving institutional memory, and contributing to the learning process (Ibict, 2017; Silva; Feliz, 2020).

Podcast Platforms

Podcasts are communication tools capable of attracting public attention and providing access to knowledge in an enjoyable way without requiring significant effort from the listener, as programs are formatted clearly and use variations in voices and styles. Their main advantages include: (a) lightweight files that allow downloading or streaming; (b) mobility for the listener; (c) the ability to pause and listen when convenient; (d) clear and pleasant language, not requiring significant effort from the listener, as programs are formatted clearly and use variations in voices and styles (Figueira; Bevilaqua, 2022; Oliveira, Costa, Da Costa, 2023).

Discussion Forums

Discussion forums are an asynchronous tool that acts as an instrument for interactions, enhancing communication among participant groups in various directions and encouraging collaborative learning. In most forums, the introductory post consists of guiding questions associated with the discussed content (Da Silva Sopeña; De Araujo; Coelho, 2019; Soares *et al.*, 2020).

2.3.7 Wikis

Wiki, derived from the Hawaiian expression wiki-wiki, meaning fast, is a platform conceived in 1995 by programmer Ward Cunningham that promotes collaborative work, collective learning, and social interaction. It consists of a set of hypertext documents that can be freely created and modified by any user who wants to collaborate, expand, and substantiate a theme. Collaborations can be made by simple browsers such as Internet Explorer, Mozilla Firefox, Netscape, and Opera, or by any other software enabled to read HTML language and images. The online encyclopedia Wikipedia, created by the Wikimedia Foundation, is its greatest representative, having been created in 2001. Wikis have been used in various areas for various purposes (Lopes, 2007; Morais, 2019).

Online Learning Platforms (Udemy)

Online learning platforms are virtual environments that allow students to access courses, classes, materials, and videos at any time and place, enabling asynchronous learning. Such platforms are particularly interesting for students with difficulty accessing traditional educational institutions. Some examples of this type of platform are: (a) Khan Academy, a knowledge base for online video learning; (b) "Edx" platform, a base with numerous open online courses; (c) Udemy, one of the most comprehensive and widely represented online learning platforms worldwide; (d) Coursera, an educational technology company that has partnered with the best universities and organizations worldwide to offer online courses that can be watched for free (Massini *et al.*, 2023; Silva, 2014).

Business Collaboration Platforms

Business collaboration platforms are tools used to share information and promote collaboration in projects within organizations. Examples include: (a) Trello, a comprehensive project management platform with various resources and organizational tools; (b) Slack, a collaboration tool developed primarily for teamwork, widely used by companies for organization and forming small workgroups; (c) Google Drive, a kind of "virtual warehouse" that allows the creation of private or public folders and invites users to collaborate, with access control; (Peresta, 2020).

Institutional Repositories

Institutional repositories are tools that provide conditions for storing, preserving, and disseminating the production of a specific community. Their main characteristics are: (a) accepting a wide range of documents; (b) being multidisciplinary; (c) providing transparent access; (d) contributing to memory preservation (Pires; Da Silva, 2013).

METHODOLOGICAL PROCEDURES

This study was conducted through a qualitative-quantitative approach (Cervo; Bervian, 2002). Regarding its objectives, the research is classified as exploratory and descriptive (Cervo; Bervian, 2002), and concerning its nature, it is considered basic research (Zucatto; Freitas; Marzzoni, 2020). It involves a qualitative analysis associated with a bibliometric study aimed at analyzing the productivity and impact of scientific research and the researcher, through measurement based on various metadata from scientific publications (Grácio, 2020).

Initially, a search was conducted in the CAPES database to gather the number of scientific articles published on the topic in the last five years. Subsequently, a qualitative research was carried out, based on content analysis, to select the articles to be used as the study's object. For this purpose, the Protocolo de Dresch, Lacerda, Antunes Jr. (2015) protocol was used, adapted as presented in Table 1.

The CAPES database was chosen for data collection as it is considered relevant, indexing a significant number of important scientific articles, as presented by Silva *et al.* (2022). Therefore, it tends to provide bibliographic scientific material suitable for the purposes of this study.

The research resulting from the application of the Protocol (Table 1) was analyzed in two stages. Initially, the abstracts were read to identify whether they addressed the sharing of information and knowledge through digital platforms. In a second stage, content analysis techniques were employed (MORAES, 1999). For this analysis, scientific articles not discarded in the first stage were read in full to identify how the sharing of information and knowledge through digital platforms occurs. Microsoft Excel was used for data tabulation.

The search for scientific articles in the CAPES database from 01 to 09/12/2023 returned 150 research results from the intersection of the keywords used. 118 searches were disregarded, with 64 due to exclusion criterion C1, 15 due to exclusion criterion C3, 8 due to exclusion criterion C4, and 31 due to exclusion criterion C5. After the screening stage, 32 eligible elements were considered, and their abstracts were read, as this metadata is provided in the searched databases. It

is noteworthy that no articles were located when using the descriptors "information sharing," "knowledge sharing," "digital platforms," and "virtual teams."

The articles located through advanced search and term identification in the texts total 32 documents that fit within the defined scope. In the next section, a bibliometric and qualitative analysis of the collected material will be presented.

Table 1 — Protocol for article selection

Protocol	Description
Conceptual Framework	A digital platform is understood as an architecture designed to organize interactions between end-users, corporate entities, and public bodies (Van Dijck, Poell, And De Waal, 2018). Knowledge sharing is understood as the formal or informal mutual exchange of ideas between individuals or groups from diverse cultures within an organization (Zakaria; Muton, 2022).
Context	The first author is proposing a doctoral thesis research on the use of digital platforms for sharing information and knowledge in virtual teams. It is known that virtual teams use digital platforms for this sharing, which is why it is important to identify the types of information and knowledge shared through digital platforms.
Scope	Articles published in the last 5 years.
Languages	Portuguese and English e inglês.
Exclusion Criteria	CE1. Studies whose keywords do not match the descriptors of the search strategy; CE2. Studies other than scientific articles (e.g., conference proceedings, book chapters, others); CE3. Studies that do not focus on sharing information and knowledge through digital platforms; CE4. Duplicate studies; CE5. Studies unavailable for download.
Descriptors (search terms)	"Plataformas digitais"; "ambientes digitais"; "Ba digital"; "compartilhamento da informação"; "compartilhamento de conhecimento"; "digital platforms"; "digital environment"; "digital ba"; information sharing; knowledge sharing"; "equipes virtuais"; "virtual teams"
Search sources	CAPES

Source: Adapted from: Dresch, Lacerda, Antunes Jr. (2015, p.142).

ANALYSIS AND DISCUSSION OF RESULTS

The bibliographic survey conducted in the CAPES database resulted in an intentional probabilistic sample of 32 scientific articles covering the period from 2018 to 2023. Table 2 presents the selected articles with the following data: authors' names, article title, journal name, and year of publication.

Table 2 — Scientific articles selected to compose the scope of the research

Authors	Title	Journal	Qualis	Year
Costa; Soares; De Sousa	Industrial business associations improving the internationalisation of SMEs with digital platforms: A design science research approach	International Journal of Information Management	A1	2020
Zutshi; Grilo	The emergence of digital platforms: A conceptual platform architecture and impact on industrial engineering	Computers & Industrial Engineering	A1	2019
Kusumastuti *et al.*	Analyzing the factors that influence the seeking and sharing of information on the smart city digital platform: Empirical evidence from Indonesia	Technology in Society	A1	2022
Møller *et al.*	Participation through place-based e-tools: A valuable resource for urban green infrastructure governance?	Urban Forestry & Urban Greening	A1	2019
Lee-Geiller; Lee	Using government websites to enhance democratic E-governance: A conceptual model for evaluation	Government Information Quarterly	A1	2019
Zhong *et al.*	Modeling and Analysis of E-Consults in Primary-Specialty Care Referrals	IEEE Transactions on Automation Science and Engineering,	A1	2020
Hellemans; Porter; Diriker	Harnessing digitalization for sustainable development: Understanding how interactions on sustainability- oriented digital platforms manage tensions and paradoxes	Business Strategy and the Environment	A1	2022

Authors	Title	Journal	Qualis	Year
Ben Arfi; Hikkerova	Corporate entrepreneurship, product innovation, and knowledge conversion: the role of digital platforms	Small Business Economics,	A1	2021
WANG *et al.*	Different roles, different strokes: How to leverage two types of digital platform capabilities to fuel service innovation	Journal of business research	A1	2022
Keselman *et al.*	Factors influencing willingness to share health misinformation videos on the Internet: Web-based survey	Journal of medical Internet research	A1	2021
Gharib *et al.*	Trust and reciprocity effect on electronic word-of-mouth in online review communities	Journal of Enterprise Information Management	A1	2020
Dias; Aguiar Filho	Análise webmétrica do compartilhamento de informação e conhecimento gastronômico via youtube®	Encontros Bibli	A2	2020
Sousa *et al.*	Em busca de categorias de mansplaining: pesquisadoras compartilhando informações sobre violências sofridas	Liinc em Revista	A2	2019
Parsons *et al.*	Digital informed consent: modernising information sharing in surgery to empower patients	World Journal of Surgery	A2	2023
Peral *et al.*	Using visualization to build transparency in a healthcare blockchain application	Sustainability	A2	2020
Joshi *et al.*	Assessing effectiveness of humanitarian activities against Covid-19 disruption: The role of blockchain-enabled digital humanitarian network (BT-DHN)	Sustainability,	A2	2022

Authors	Title	Journal	Qualis	Year
Yaqub; Alsabban	Knowledge Sharing through Social Media Platforms in the Silicon Age	Sustainability	A2	2023
Chakraborty; Persis; Mahroof	Exploring the Academic–Industry Collaboration in Knowledge Sharing for Supplier Selection: Digitalizing the OEM	IEEE Transactions on Engineering Management	A2	2023
Marchegiani; Brunetta; Annosi	Faraway, not so close: The conditions that hindered knowledge sharing and open innovation in an online business social network	IEEE Transactions on Engineering Management	A2	2020
Feo *et al.*	Shedding light into the need of knowledge sharing in H2020 thematic networks for the agriculture and forestry innovation	Sustainability	A2	2022
Corvello *et al.*	An investigation on the use by academic researchers of knowledge from scientific social networking sites	Sustainability	A2	2020
Pinheiro; Paixão; Barroso	Avaliação do uso do twitter no sistema de bibliotecas da Universidade Federal de Sergipe: estratégias de marketing digital	Revista digital e Biblioteconomia e Ciência da Informação	A3	2020
De Morais; Da Silva Brito; Dos Santos Garcia	Metodologias ativas e ágeis na escola e em redes sociais como forma de conscientização e prevenção ao uso de drogas	Revista Intersaberes	A3	2020
Mezhuyev *et al.*	Evaluation of the likelihood of friend request acceptance in online social networks	IEEE Access	A3	2019
De Bernardi; Bertello; Venuti	Online and on-site interactions within alternative food networks: Sustainability impact of knowledge-sharing practices	Sustainability	A3	2019

Authors	Title	Journal	Qualis	Year
De Santana; Cabral; Da Nóbrega	Novas tecnologias de informação e comunicação e o caso específico do blog: contribuição para o sistema educacional escolar	Esferas	A4	2018
Macedo *et al.*	O uso do aplicativo whatsapp nas práticas de gestão do conhecimento: O caso de uma comunidade virtual informal de profissionais na área de tecnologia	Perspectivas em Gestão & Conhecimento	A4	2018
Lima; Ferreira; De Souza	Direito ao esquecimento e desindexação da Informação: ambivalências e desafios no ambiente digital	Logeion—Filosofia da informação	A4	2020
Vallefuoco *et al.*	A multidisciplinary telerehabilitation approach for supporting social interaction in autism spectrum disorder families: an Italian digital platform in response to Covid-19	Brain Sciences	B2	2021
Yoshimoto *et al.*	The impact of interprofessional communication through ICT on health outcomes of older adults receiving home care in Japan–A retrospective cohort study	Journal of General and Family Medicine	B3	2022
Lin *et al.*	Social Welfare Analysis under Different Levels of Consumers' Privacy Regulation	Journal of Theoretical and Applied Electronic Commerce Research	B4	2021
Amin; Ali; Smeaton	Visual selective attention system to intervene user attention in sharing Covid-19 misinformation	ArXiv	C	2021

Source: Research data (2023)

The highest concentration of works was recorded in the year 2020 (n=10). It was observed that in the years 2019, 2021, and 2022, the production was more or less homogeneous, ranging from 15.6% (n=5) to 18.8% (n=6). However, in 2018, the production was significantly reduced, with only 2 studies, representing 6.25%. The increase in the number of publications in 2020 is explained by the phenomenon of virtualization that intensified with the advent of the Coronavirus pandemic, consequently generating greater scientific interest in publication. The reduced number of articles in 2023 can possibly be explained by the fact that the data collection was conducted in the first semester of the year, a period during which some studies are still being analyzed by the journal's peer review team.

Analyzing the affiliation of the researchers, it is evident that it is quite diverse. The majority of studies are from Brazilian, Chinese, and Italian researchers.

Consulting the source of the collected materials, it is observed that the scientific articles were published in journals from various fields, suggesting that the topic has been approached in an interdisciplinary manner by the academic community. Most of the articles were published in the fields of library science and information science (25%, n = 8); environmental, cultural, economic, and social sustainability (25%, n = 8).

Deepening the issue of using digital platforms for information and knowledge sharing, the main focus of this study, it was found that the following digital platforms were used for this purpose: (a) online communities such as social networks, blogs, business networks, collaborative crowdsourcing platforms, and online review communities; (b) websites; (c) apps; (d) B2B interaction operating systems. The most used digital platforms were online communities, with a focus on social networks and other networks (business, humanitarian, food, thematic, crowdsourcing platform). Digital platforms are used in various fields, with a focus on health and sustainability.

Regarding social networks, it is observed that they were widely used for sharing information and knowledge in different areas, namely: gastronomy, academic environment, technology, social, health, education, environment, business. The following tools are used: Youtube, Twitter, WhatsApp, school

social network, online social network of smart cities, online business social network, academic social network.

Regarding blogs, it was noticed that they were used for information and knowledge sharing in a more discreet manner. The areas that utilized them were social and educational. Other online communities, such as business networks, online evaluation networks, and crowdsourcing platforms, were also widely used for sharing information and knowledge in the following areas of activity: business, health, sustainability, agricultural/forestry.

It was found that websites were used in essential areas for the population: health, sustainability, and public service. The latter, in particular, contributed to the democratization of government services. Apps were used for the sharing of information and knowledge in the fields of health and sustainability. In the first area, where usage was predominant, it was directed towards improving patient care. For the sharing of information and knowledge, B2B interaction operating systems were used in the following different areas: industrial engineering, health, automotive, and health.

FINAL CONSIDERATIONS

In this research, a qualitative-quantitative approach was adopted through a bibliometric study, which proved to be suitable as it provided not only data on academic-scientific production on the subject but also detailed information on how digital platforms are being used for the sharing of information and knowledge. In terms of academic-scientific analysis and based on the temporal cut and the researched information source, it was found that the year 2020 recorded the highest number of studies, a fact justified by the phenomenon of virtualization that intensified with the advent of the Coronavirus pandemic, consequently generating greater scientific interest in publication. The theme has been discussed in an interdisciplinary manner by researchers from various countries; however, Brazil had the highest number of studies, followed by China and Italy, demonstrating the increasing use of digital platforms for the sharing of information and knowledge. Studies have been predominantly published in high-impact journals both abroad and in Brazil (Qualis A1 and A2 abroad and

Qualis A3 and A4 in Brazil), which may indicate that the studies are considered relevant, innovative, and of high quality in the scientific community.

In qualitative terms, it was evident that online communities were the most used digital platforms for sharing information and knowledge, with a focus on social networks and other similar platforms. Another noteworthy aspect is the breadth of areas in which digital platforms have been used for the sharing of information and knowledge. The health and sustainability sectors are the ones that have most utilized digital platforms, justified by their direct impact on individuals' lives and the planet, a topic discussed worldwide. A limitation of the research is that it was conducted only on one database (CAPES) and used Portuguese and English as language filters. Another important limitation is the fact that no articles were found when using the descriptors "information sharing," "knowledge sharing," "digital platforms," and "virtual teams" together. On one hand, this is positive as it highlights that the study conducted in the doctoral thesis by the first author on "information and knowledge sharing using digital platforms by virtual teams" is unique and represents a relevant research opportunity.

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