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## Mediation of Digital Information: analysis in the context of the National Library of Brazil

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### ABSTRACT

**Introduction:** Technological advancement and the digital information revolution have contributed to the production of digital documents and information. In this sense, libraries act as institutions that assist in the interaction and mediation of information, meeting the user's informational needs and contributing to the access, use and dissemination of information. In this scenario, the question arises: how is the mediation of digital information established in the National Digital Library of Brazil? **Objective:** The general objective of this study is to understand how the mediation of digital information is established in the National Digital Library of Brazil. **Methodology:** This is a qualitative approach, where the methodological path will be developed through a bibliographical review of articles, books, scientific communication databases, recovering the concepts of Digital National Libraries and Mediation of Digital Information. **Results:** Furthermore, an analysis of the National Digital Library website in order to identify the elements relating to information mediation. The results showed that the National Digital Library uses the online catalog to mediate digital information, metadata descriptors in Dublin Core format, cataloging in Marc21 and channels on social networks, such as: Youtube, Instagram, Facebook, which inform users and take doubts. **Conclusion:** National Libraries provide digital libraries that become spaces for social interaction, disseminating information in virtual environments. This information can be accessed through mediatized supports and tools. All of these actions facilitate the dissemination and retrieval of information.

### KEYWORDS

National Library. Information mediation. Digital mediation. National Digital Library.

## Mediação da Informação Digital: análise no contexto da Biblioteca Nacional do Brasil

### RESUMO

**Introdução:** O avanço tecnológico e a revolução da informação digital contribuíram para a produção de documentos e informações digitais. Neste sentido, as bibliotecas atuam como instituições que auxiliam na interação e na mediação da informação, suprimindo as necessidades informacionais do usuário e contribuindo para o acesso, uso e disseminação da informação. Neste cenário, indaga-se: como é estabelecida a mediação da informação digital na Biblioteca Nacional Digital do Brasil? **Objetivo:** Compreender como é estabelecida a mediação da informação digital na Biblioteca Nacional Digital do Brasil.

**Metodologia:** Trata-se de uma abordagem qualitativa, onde o percurso metodológico será desenvolvido através de uma revisão bibliográfica em artigos, livros, bases de dados de comunicação científica, recuperando os conceitos de Bibliotecas Nacionais Digitais e Mediação da Informação Digital. Além disso, uma análise ao site da Biblioteca Nacional Digital a fim de identificar os elementos referente a mediação da informação. **Resultados:** Observou-se que a Biblioteca Nacional Digital utiliza para mediação da informação digital o catálogo online, metadados descritores em formato Dublin Core, catalogação em Marc21 e os canais nas redes sociais, tais como: Youtube, Instagram, Facebook, que informam os usuários e tiram dúvidas. **Conclusão:** As Bibliotecas Nacionais disponibilizam bibliotecas digitais que se tornam espaços de interação social, disseminando as informações nos ambientes virtuais. Essas informações podem ser acessadas através de suportes e ferramentas midiáticas. Todas essas ações facilitam a disseminação e a recuperação da informação

#### **PALAVRAS-CHAVE**

Biblioteca Nacional. Mediação da informação. Mediação digital. Biblioteca Nacional Digital.

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**JITA:** DB. National libraries

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## 1 INTRODUCTION

The digital revolution has profoundly changed the way information is produced, distributed, and accessed around the world. Libraries, as fundamental institutions in the promotion of knowledge, are not immune to these changes. In recent times, the digital information context has gained relevance in national libraries through the implementation of new technological segments, such as the creation of digital libraries and collections. These new formats have brought changes and developments in information media, but they also highlight changes in the way users mediate and appropriate information.

Libraries are considered institutions that preserve human knowledge and provide access to a wide range of resources for research, learning, and cultural enrichment. However, with the evolution of technology, access to information has expanded into the virtual environment, bringing with it a number of challenges and opportunities. Digital information intermediation has become a critical aspect of national library activities to ensure that the public has access to relevant and reliable resources.

It should be noted that information intermediation is a common practice in libraries as they expand access to information for society. In national libraries, this practice is intensified because these institutions are responsible for preserving the entire bibliographic heritage produced in the national territory. In this way, they contribute to the representation of the identity of a community or civilization. In this sense, Farias and Cerveira (2019) state that libraries "are responsible for ensuring interaction with the community to provide access to and use of the information they generate and make available" (Farias and Cerveira, 2019, p. 16).

Digital information intermediation involves a combination of methods and technologies to facilitate access, search, and understanding of information. The use of library management systems, digital databases, online catalogs and advanced search tools play a key role in this process. In addition, the creation of access portals, mobile applications and user-friendly interfaces contribute to a more effective user experience.

In the National Digital Libraries, the information made available by the collections in a virtual environment originated in analog content and gained prominence and space in virtual environments. In this way, this information reaches a higher number of users who can access these collections online from anywhere, simply by having a computer with Internet access. Therefore, these virtual spaces act as mediators between the information and the user.

In this sense, the activity of creating digital collections brings together and organizes documents that are similar in theme or content and stores them in a virtual environment developed by CMS<sup>1</sup>s. In addition, other actions are needed to maintain the integrity and accessibility of this information, such as information architecture, metadata and digital preservation.

In this sense, this article seeks to answer how digital information mediation is established at the National Library of Brazil. With the aim of mediating information so that it can be accessed and understood by the user.

This work takes a qualitative approach, where the methodological approach has been based on the presentation of theoretical reflections in the context of Information Science on digital mediation, establishing an analysis of the National Digital Library of Brazil in interface with the elements that can be considered aids to this mediation. In this process, we have identified the characteristic components of digital preservation that help and consolidate the role of citizen mediator in these collections.

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<sup>1</sup> Content Management System is software that makes it easy to create, edit, collaborate, publish and store the content of your website or web portal, such as WordPress.

## 2 NATIONAL DIGITAL LIBRARY

The advent of the Internet in the 1960s and digital and digitized publications in the 1990s made it easier to access and retrieve information. This change has had a significant impact on libraries. The term "hybrid library" has emerged, referring to the structure and information in both physical and digital environments. In this scenario, digital libraries become an important part of the library infrastructure.

It could be suggested that the goal of national libraries in the digital age is to collect and preserve the national bibliographic heritage, whether produced in physical or digital form. There are several challenges that digital heritage poses for national libraries. According to Campos (2005), national libraries in the digital age face the following questions

Select (or not) digital resources, with or without a physical format, to ensure a national collection of digital resources. Describe and bibliographically process digital resources, creating the metadata needed to describe and retrieve information. Preserve collections of digital and digitized resources. Ensuring access to digital and non-digital collections, managing and controlling the conditions of access, especially regarding copyright (Campos, 2005, p. 21-22).

National Libraries are therefore concerned about the organization and preservation of digital documents produced as a result of the trend towards creating digital collections. To resolve some of these issues, National Digital Libraries have been set up, one example being the BNDigital created in 2002 by the National Library Foundation.

The National Digital Library (BND) was officially launched in February 2002 as a project with an open dimension aimed at "structuring a set of instruments and operations provided by the so-called information and communication technologies" and primarily covering "predictable content usually sought by the community of readers of a national library. This content will thus respond to expectations of access, giving priority above all to so-called documentary sources (Biblioteca Nacional, 2002 p. 12-13).

The creation of digital collections requires selection, research, and metadata creation services. In the selection process, subjects and information are chosen based on their thematic relevance and authorship (with the aim of contributing to the construction of social and collective memory), with qualified and specialized professionals carrying out the task.

Digital preservation is an essential theme for collections in the National Digital Libraries. They guide and standardize digital or digitized documents in a system that guarantees the retrieval of information for reuse. In this way, national and international digital preservation policies must coordinate the management of digital bibliographic heritage.

In addition, digital preservation architecture is a strategy that distinguishes between digital collections and access interfaces. The digital collection is the locus of digital preservation administration, and the digital library is its access interface. When looking at the organization and structuring of a Digital Library, it is important to consider various factors, including digital collections, information architecture, software, among others. Flexibility is one of the most opportune points for the success of this implementation, as Cunha (2009) points out.

Flexibility in the organization of information is one of the main points in the design of a digital library. This organization is where the information architecture comes in to represent the richness and variety of information content, usually in the form of blocks that will make up the system. From a computational perspective, this library is built with simple components, called digital objects - one of the ways of structuring information in digital form. This structure is not trivial, as a simple document can be made up of several parts that have a complex internal structure and relationships with other documents (Cunha, 2009, p. 2).

On the physical media of a digital library, information can be organized and structured into different categories, such as text with Standard Generalized Markup Language (SGML) markup, Web objects, computer programs, images, or digitized music. These formats are standards that categorize information as a set of digital objects. In this sense, Cunha (2009) points out that "the design and architecture of the digital library are essential elements for the future success of this endeavor, allowing an uncomplicated and agile interaction between the user and the information" (Cunha, 2009, p.2).

Digital libraries require the establishment of norms, standards, formats, and protocols that can facilitate the growth of networks in the future. Their importance is highlighted by the fact that they "underpin the rules by which digital objects are described and preserved, where their contents are stored and retrieved, and how their systems communicate with each other" (Cunha, 2009, p.2). Thus, these measures facilitate interoperability among libraries.

The development of digital collections requires selection and acquisition processes that enrich the collection of information. There are computers and networks that can access this collection without having to enter a password or other authentication method. In this sense, it should be noted that libraries have licenses for use and permissions for access. Furthermore, noteworthy is the variety of materials and documents that can be originally digital, such as electronic journals.

In this way, technologies can help preserve and organize information, facilitating access to documentary heritage and memory in the content of digital objects. In addition, the mediatization of digital documents must be considered as an important tool that guarantees access, use, and reuse of information in virtual environments.

### 3 MEDIATION AND INFORMATION MEDIATION

The term mediation comes from the Latin *mediatione*, which denotes the human act of dividing an element into two parts or separating it in two. Thus, in a chronological approach, Raymond Williams (1985) points out that this concept is relatively complex and becomes more comprehensive as it is used as a key term by different systems of modern thought.

Williams (1985) states that the term was first used in English by Chaucer<sup>2</sup> in *The Man of Law's Tale* in 1386, referring to the way in which two adversaries were intercepted to reconcile them.

The concept has various philosophical and idealistic strands, used implicitly and explicitly. In this way, mediation can be understood as the activity of a mediating agent who was at the same time a mediating reality (Pugliesi; Bini, 1977).

In general, mediation in a discursive process is what makes such reasoning possible: in fact, in a discursive process, whether deductive or inductive, concepts or judgments are needed that "mediate" between the starting point and the conclusion (Pugliesi; Bini, 1977, p.252).

In this way, means and professionals are needed to mediate information. Professionals trained and qualified for the task are a fundamental requirement for effective information retrieval. However, there are also technological tools that can perform this task and broaden access to and search for information.

The concept of "information mediation" can be referred to, according to the researcher Oswaldo de Almeida Júnior.

The mediation of information encompasses the entire work of the information professional - from storage to dissemination - and for this reason, it should not be considered secondary within the scope of Information Science, but considered as the very object of study of this field. This is because, according to its perspective,

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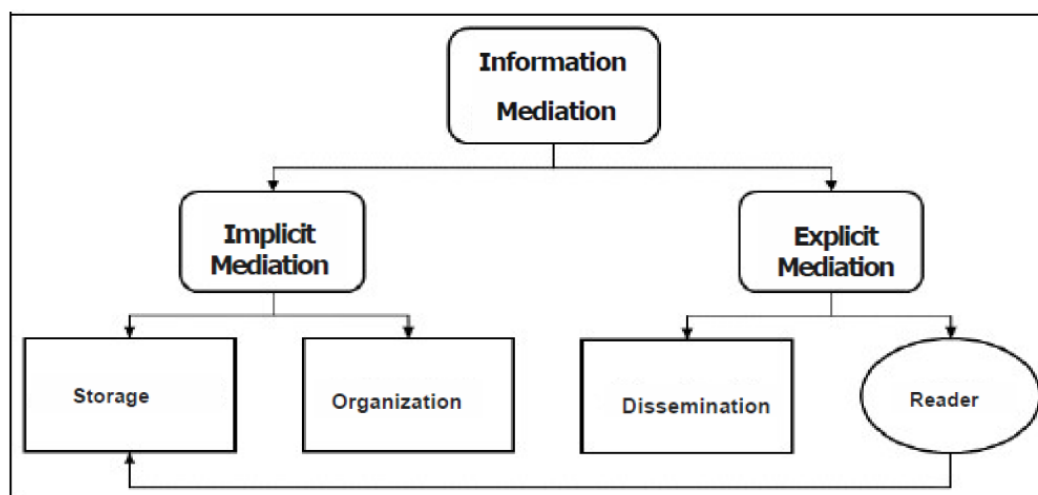
<sup>2</sup> Diplomat in the service of the English court, scholar of literature, medieval Latin and some classics.

information is intangible and does not exist a priori without first undergoing mediation processes (Almeida Júnior, 2008, p.3 apud Martins, 2010, p. 152).

From Almeida Júnior's (2008) perspective, to conceptualize information mediation, it is necessary to synthesize the terms: interference, appropriation, and need for information. Interference is related to mediation activities that are not neutral or impartial, resulting in processes of human or non-human interference. Appropriation is necessary for the effectiveness of the information process and the construction of meaning by the user. Finally, the need for information is related to meeting and satisfying the user's search for information. This last action is the main purpose of information mediation, which requires information professionals or media tools and supports to satisfy the user's need for information.

In addition, Almeida Júnior (2008) highlights mediation in two relevant aspects: explicit mediation and implicit mediation. In the first aspect, explicit mediation generally takes place in computerized spaces where the user's presence is predominant, even if it is not physical. In the second aspect, implicit mediation is the work of information professionals, whose main objective is to satisfy the user's information needs.

Figure 1. Mediation of implicit and explicit information



Source: Based on Almeida Junior (2013)

From the perspective of Oliveira *et al.* (2018), Figure 1 represents the life cycle of information in information spaces from the point of view of mediation, going through storage and organization in the implicit sphere, and dissemination and direct contact with the reader in the explicit sphere. The reader is not a mere receiver, as is usually presented in the traditional communication model, based on a mathematical conception of information; on the contrary, they are an active agent who interferes or should interfere in the construction of the information that they will or will not appropriate.

The act of mediation is made up of activities carried out by information professionals trained for this action, whose process depends on appropriate skills, abilities, and tools to act in a complex system (because it depends on the position of the reader and its context) and uninterrupted (because the mediator mediates the information, not aiming to provide answers, but new questions, generating new information needs and thus new mediations). A mediating environment is characterized by the work done between implicit and explicit mediation, i.e. both complement each other from the moment they are consciously used, from planning and structuring to the services and activities carried out. The unconscious use of mediation is possible, but it makes its broad and targeted application ineffective, due to the very deficiency of its ignorance. (Oliveira *et.al.*, 2018, p. 57)

In this sense, information mediation addresses issues related to the appropriation of information. In today's world, information occupies a central place. From the perspective of Oliveira *et al.* (2018), information needs to be presented in an understandable, communicable and materially independent way.

Almeida Júnior (2007) points out that: "The appropriation of information, to be clear, presupposes a change, a transformation, a modification of knowledge, so it is an action of production and not only of consumption" (Almeida Júnior, 2007, p. 36). Moreover, this action allows the user to transform information into knowledge by assigning meaning and applying it in different social contexts. In this sense, we see the terminology of digital information mediation or digital mediation, actions that can be developed and applied in National Digital Libraries and that we will discuss next.

## 4 DIGITAL MEDIATION

Technological tools can be considered tools in the process of information delivery: Users develop their own learning styles as they choose the path they wish to follow. As technologies are shared among individuals, they also increase the collective intelligence potential of human groups. This is evident in the growth of the Internet, an environment in which a wide variety of information can be shared rapidly. Sharing occurs through connections between people using e-mail, chat rooms, discussion lists, and so on, at any time and from anywhere (Garcia, 2006, p. 2).

In this way, it is emphasized that technological tools are means that can inspire new methodologies and stimulate the interest of the subject by developing autonomy in the search for and access to digital information. Based on these interpretations, Lalueza, Crespo and Campos (2010, p. 51) state that

Technology contributes to guiding human development because it operates in the zone of proximal development of each individual through the internalization of the cognitive skills required by the tool systems corresponding to each historical moment. Thus, each culture is characterized by the generation of contexts of activity mediated by tool systems that promote practices that involve particular ways of thinking and organizing the mind.

Costa *et al.* (2015) believe that "technologies are becoming increasingly ubiquitous in our society" (Costa *et al.*, 2015, p. 606), meaning that technology is everywhere and can be found and used in different places and contexts. The use of these technologies by people in a digital society poses various challenges for information professionals, who act as mediators.

The use of digital technologies for the development of learning to know and learning to do has shown a new symbolic construction of culture through the use of contemporary tools, in a way that affects the subjective constitution of how digital natives learn (Rossato, 2014).

Thus, from the perspective of Freitas (2008), the subject in digital culture has theoretical and practical knowledge of digital technologies, as well as the instruments and tools used to navigate virtual environments, which then become symbolic materials.

Costa *et al.* (2015) point out that new technologies:

They influence and affect the constitution of subjects among potential users of digital technologies, so that learning how to know and how to do permeates access to the Internet. Moreover, the pleasure of discovering, investigating, arousing curiosity, and reconstructing knowledge using digital information and communication technologies (DICTs) as mediating tools implies learning and understanding the process of searching for digital information (Costa *et al.*, 2015, p. 606).

The impact of new document formats brings structural changes to information scenarios. According to Barreto (2009, p. 5):

The changes that these new digital documents make to information acts bring about a structural change because they change the framework of the whole thing. In the past, information scenarios were a flow of successive events in linear, measurable time, directed towards a single information space. With networked information, in real time, access to multidirectional flows is close to zero time, its speed is close to infinity, and the spaces are experiential without requiring presence. In our explanation, we consider two states of consciousness related to the process that mediates the writing of information for knowledge

In this sense, we understand the need to mediate information produced in a virtual environment or migrated to this space. Each digital document is assimilated through hyperlinks or other types of access that guarantee the completeness of this information. The construction of these digital documents allows freedom in the possession of the data that does not require formal and linear compositions<sup>3</sup>. These modifications are established by the digitized network structures imposed on the appropriation of this information.

## 5 DIGITAL MEDIATION IN THE NATIONAL DIGITAL LIBRARY

In National Digital Libraries, the collections made available in these environments can be accessed through media and tools that enable and expand access to information. In addition, there is a team of information professionals who carry out reference service work.

In this sense, the mediation of digital information in national libraries is established through a series of policies and practices aimed at facilitating access to and use of digital resources by users. This includes making content available, such as e-books, online journals, collections and exhibitions, among others, as well as guidance and support in searching, selecting and using this digital data. National digital libraries offer several information practices that mediate the digital information stored in their collections:

Chart 1. Digital mediation practices in National Digital Libraries

Practice	Description
Development of digital collections	National digital libraries select, organize, classify, and store the data and digital resources that make up the digital collection to meet users' information needs. These collections and exhibitions are made available in the virtual environment of the digital library and can be accessed through catalog searches.
Providing a guide to accessing and navigating the digital environment	National Digital Libraries provide guides to facilitate and guide access and navigation within the digital portal. In this sense, the guide appears as a step-by-step guide that allows the user to have a better experience.
Reference services	Libraries generally provide reference services. The main objective is to understand the user's information needs, measuring the search for information and satisfying their information needs.
Remote access	Remote access is a resource used by many digital libraries because it allows any user from anywhere in the world to access the information available in the collections. Expand access to and dissemination of information.

<sup>3</sup> In this sense, formal and linear compositions are understood as production standards for a physical document.



Evaluation and revision of digital resources

This practice is critical to ensure that the digital data provided remains relevant to the information needs of the user. Each school library has its best time frame for monitoring and evaluation.

Source: Elaborado pelas autoras.

Chart 1 shows the practices developed in libraries and digital libraries. It should be noted that the main objective of digital information mediation in national digital libraries is to facilitate and expand access to data and resources for users, promoting autonomy and dissemination of information.

In addition, the National Library of Brazil (BNDigital) uses different tools to support and facilitate digital information mediation. The first information service that facilitates the mediation of digital information at BNDigital is the online catalog, which allows users to search, locate and access digital resources, including books, journals, manuscripts, photographs, and other digital materials.

Figure 2. BNDigital Online Catalog



Source: <https://bndigital.bn.gov.br/acervodigital>

Figure 2 shows BNDigital's online catalog, organized by Quick and Combined Search, with filters for language and date. In addition, author, title and subject can search the fields. There is a Help tab to assist the user with navigation and accessibility for disabled users. All items in the digital collections and exhibitions can be found in the catalog.

Metadata are resources used to describe digital items that help users understand what the content is about by providing relevant information for searching and retrieving information.

Figure 3 - Metadata descriptors of digital documents

	<b>Material</b>	Gravura
	<b>Título</b>	<b>[Georg Wilhelm, Eleitor de Brandemburgo]</b> [Iconográfico]
	<b>Ano</b>	[16--?]
	<b>Assuntos</b>	Georg Wilhelm, Eleitor de Brandemburgo, 1595-1640
	<b>JPG</b>	<a href="http://objdigital.bn.br/objdigital2/acervo_digital/div_iconografia/icon585774/icon585774.jpg">http://objdigital.bn.br/objdigital2/acervo_digital/div_iconografia/icon585774/icon585774.jpg</a>
	<b>HTM</b>	<a href="http://objdigital.bn.br/objdigital2/acervo_digital/div_iconografia/icon585774/icon585774.html">http://objdigital.bn.br/objdigital2/acervo_digital/div_iconografia/icon585774/icon585774.html</a>

Source: <https://bndigital.bn.gov.br/acervodigital>

Figure 3 shows the metadata that facilitates data description and information retrieval. In the case of BNDigital, digital data is described by material, which specifies the type, for example: engravings, paintings, photographs, and books. Document title, year, and subjects related to the document. And finally, two different formats in which the document is made available. In the case of the National Digital Library, the metadata used is in Dublin Core format, with seventeen descriptor fields filled in.

Figure 4. Dublin Core metadata

Dublin Core	
<b>title</b>	Constituição dos Estados Unidos do Brazil : [provas revistas por Rui Barbosa]
<b>contributor</b>	Brasil. Assembleia Constituinte, (1890-1891)
<b>contributor</b>	Barbosa, Rui, 1849-1923
<b>subject</b>	Brasil. [Constituição (1891)]
<b>subject</b>	Assembléias constituintes - Brasil
<b>subject</b>	Constitutional conventions - Brazil
<b>publisher</b>	Rio de Janeiro
<b>date</b>	[1890]
<b>language</b>	por
<b>rights</b>	Biblioteca Nacional (Brasil)
<b>type</b>	Livro
<b>description</b>	Quatro publicações do projeto de Constituição, encadernadas, contendo as iniciais R. B. na capa; consta na lombada: Constituição do Brazil, provas typographicas; Contém assinatura e notas autógrafas de Ruy Barbosa; Consta a anotação: "Provas da Constituição revistas por mim durante a elaboração dela em Conselho de Ministros, 1890"; Em anexo, manuscrito incompleto do decreto nº 510 de 22 de junho de 1890; Doação de Tobias Monteiro em 16/03/1912
<b>description</b>	BNDP - 08/2023
<b>description</b>	22 x 15,50cm
<b>identifier</b>	<a href="http://objdigital.bn.br/objdigital2/acervo_digital/div_manuscritos/mss1595547/mss1595547.pdf">http://objdigital.bn.br/objdigital2/acervo_digital/div_manuscritos/mss1595547/mss1595547.pdf</a>
<b>format</b>	Recurso eletrônico (PDF)
<b>relation</b>	<a href="http://acervo.bndigital.bn.br/sophia/index.asp?codigo_sophia=105628">http://acervo.bndigital.bn.br/sophia/index.asp?codigo_sophia=105628</a>

Source: <https://bndigital.bn.gov.br/acervodigital/>

Figure 4 shows the Dublin Core metadata used to describe the items in BNDigital. Cataloging and indexing are digital resources that organize and categorize digital or non-digital information to facilitate information retrieval and navigation on the portal. These actions are internal to the institution and are performed by the technical processing librarian.

Figure 5. Cataloging in BNDigital

```
MARC tags
000 01023nam a22002174a 4500
001 000105595
005 20230815115613.0
008      por
082 __|a 912.811
092 __|z Cartografia
094 __|a cart168773
095 __|a Mapa
245 0_ |a Planta das barras do Parnahyba |b Compilação dos mappas dos Srs. David Caldas, G. Dodt, J. Jansen e outros, com ligeiras modificações |h Material Cartográfico
260 __|c [191-?]
300 __|a 1 mapa ms |b desenho a tinta |c 20,5 x 28,5 cm em folha 22,8 x 31,5 cm.
500 __|a Inclui legenda indicando as localizações da ilhas menores.
500 __|a Escala gráfica de 30Km [=11,9cm]
500 __|a Doação de Dr. Nogueira da Silva, de acordo com "Livro de Tombo, Acquisições, 3ªSecção, Cartas Geographicas, Bibliotheca Nacional", ano 25 de agosto de 1932, nº146
500 __|a Mapa colado sobre papel cartão
540 __|a Biblioteca Nacional (Brasil)
546 __|a por
651 __|a Parnaíba, Rio (MA e PI)- |x Mapas manuscritos
651 __|a Parnaiba River (Brazil) |x Maps, Manuscript
700 0_ |a Caldas, David Moreira, |d 1835-1879.
700 1_ |a Dodt, Gustavo Luiz Guilherme, |d 1831-1903
700 1_ |a Ferreira, Justo Jansen, |d 1864-1930
856 __|u http://objdigital.bn.br/objdigital2/acervo_digital/div_cartografia/cart168773/cart168773.jpg |y Recurso eletrônico (JPG)
856 __|u http://objdigital.bn.br/objdigital2/acervo_digital/div_cartografia/cart168773/cart168773.html |y Recurso eletrônico (HTML)
856 __|q tiff
990 __|a Mapa
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Source: <https://bndigital.bn.gov.br/acervodigital/>

Figure 5 shows the MARC cataloging of the work "Chart of the bars of the Parnahyba: Compilation of maps by Mr. David Caldas, Mr. G. Dodt, Mr. J. Jansen and others", which is available on BNDigital. MARC is inherently computer-oriented. It is a structured metadata format designed to facilitate cataloging and information retrieval in libraries. It is computer-readable and allows for the efficient creation, storage, and exchange of bibliographic records.

In addition, digital information delivery can include providing remote access to digital resources, allowing users to access materials from anywhere. BNDigital produces a yearly journal of proposals and discussions about the online tools made available to users for remote access. Highlights include the online catalog, dossiers, articles and virtual exhibitions such as Brazilianas, the Luso-Brazilian Digital Library and the Brazilian Virtual Memory Network.

In order for all this information to be accessible and mediated by information professionals, it is necessary to digitally preserve the digital data provided, ensuring its integrity and authenticity. BNDigital uses the National Library's Digital Preservation Policy, which establishes a conceptual framework to support preservation activities that allow sustainable, long-term access to the digital collection.

Finally, another digital information delivery activity implemented by BNDigital is user support. In this scenario, library staff provide support and assistance to users, helping them find information, solve problems, and assess the authenticity of information sources.

Digital information literacy in the context of user assistance is an essential approach to providing interested parties with an enriching experience when accessing digital information and resources. Digital information mediation in the context of the National Digital Library involves various aspects, including assisting users in searching, selecting, evaluating, and using available digital resources.

BNDigital has many tools to help users find information. One of the most important is the online guide to using digital files. Here, users can access a detailed step-by-step guide to navigate the virtual environment. There is also an online Help Center where users can find frequently asked questions and answers.

On YouTube, the National Library's channel hosts online livestreams detailing its information services and, at certain times, a type of question-and-answer session that may arise at that moment, as well as webinars to train users in digital literacy, online research, and effective use of the library's digital resources. In addition, a BNDigital email is available under the "Contacts" tab, allowing users to email questions, problems, or support requests and receive personalized responses.

The library also has accounts on several social networking sites, including Instagram, Facebook, and Twitter. On these social media platforms, the institution receives and answers questions from users, shares tips and updates about available digital resources, and interacts with the community. Finally, on the social networks themselves or on YouTube, users can post feedback on the digital resources and support offered by the team.

In this way, through the digital mediation of information, the National Digital Library enables interested parties to take full advantage of digital resources and promotes a more efficient, productive and satisfying experience when accessing digital information.

Example of a paraphrase where the source is not part of the text: *lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut vulputate tincidunt turpis at tincidunt. Suspendisse aliquam venenatis ipsum (Silva, 2005).*

## 6 FINAL CONSIDERATIONS

Delivering digital information in national libraries is a complex but essential process for meeting the challenges of the digital age. Understanding the methods, challenges, and implications of this process is critical to improving the effectiveness of libraries in today's digital environment. As technologies continue to evolve, libraries must remain agile and innovative to ensure that the delivery of digital information continues to promote access to knowledge in a comprehensive and reliable way for all stakeholders.

This mediation includes activities such as facilitating access to, selection of, and understanding of information in digital format through strategies and resources provided by libraries and information professionals with the aim of providing an effective and valuable experience for users seeking to explore the vast world of digital information.

It can be assumed that the effective mediation of digital information in national libraries brings significant benefits. Users can access a wide range of resources quickly and conveniently, facilitating research and learning. The democratization of knowledge is enhanced, allowing people from different regions and social backgrounds to access valuable information. In addition, inter-library cooperation and knowledge sharing take on new dimensions in the digital environment.

In the National Digital Library, digital information mediation is represented in various information services distributed in digital collection development, reference services, online catalog, user support and online access.

The presence of digital mediation in the National Digital Library not only makes research more accessible and targeted, but also strengthens the importance of cultural institutions as active agents in the digital landscape. It acts as a bridge between the past and the present, between the physical and the virtual, between traditional resources and the new digital frontiers. Through this mediation, BNDigital plays a vital role in enriching the experience of learning, researching, and exploring information in an increasingly digitized world.

Ultimately, this study highlights that the mediation of digital information in BNDigital is an investment in strengthening access to knowledge and empowering users. By adapting to the digital age, the institution is not only honoring its tradition, but also embracing innovation and ensuring a future in which the wealth of information remains accessible to all, regardless

of medium. By providing digital information, BNDigital continues to be not only a repository of the past, but also a beacon for the future.

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