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THE DIGITAL READING ROOM: A WINDOW TO THE OUTSIDE WORLD FOR ARCHIVES

Abstract

Purpose: *The aim is to provide users with easy access to various materials from the archive as well as targeted research.*

Approach: *In addition to the theoretical requirements for a modern digital reading room, practical examples from German-speaking countries will be presented.*

Results: *This article is intended to show the implementation of a modern digital reading room.*

Keywords: *digital reading room, archival research, accessible search*

LA SALA DI LETTURA DIGITALE: UNA FINESTRA SUL MONDO ESTERNO PER GLI ARCHIVI

Abstract

Scopo: *l'obiettivo è fornire agli utenti un facile accesso a vari materiali dell'archivio e consentire ricerche mirate.*

Approccio: *oltre ai requisiti teorici per una moderna sala di lettura digitale, saranno presentati esempi pratici provenienti dai paesi di lingua tedesca.*

Risultati: *questo articolo intende illustrare l'implementazione di una moderna sala di lettura digitale.*

Parole chiave: *sala di lettura digitale, ricerca archivistica, ricerca accessibile*

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DIGITALNA ČITALNICA: OKNO V ZUNANJI SVET ZA ARHIVE

Izvleček

Namen: *Namen je uporabnikom omogočiti enostaven dostop do različnih arhivskih gradiv ter ciljno usmerjenih raziskav.*

Pristop: *Poleg teoretičnih zahtev za sodobno digitalno čitalnico bodo predstavljene tudi praktični primeri iz nemško govorečih držav.*

Rezultati: *Prispevek želi prikazati izvedbo sodobne digitalne čitalnice.*

Ključne besede: *digitalna čitalnica, arhivsko raziskovanje, dostopno iskanje*

1. INTRODUCTION

Archives now store a variety of digital data. Early digital copies are mostly retro-digitized. Archives use specialized applications, such as archive information systems, data management systems, or SAP applications, to produce digital data. In addition, there are a number of digital filing systems that have been created by archivists on the one hand and transferred by provenance creators on the other. While analogue estates contain handwritten correspondence, potential donors or testators primarily communicate via email, which must also be included in digital archiving. With the introduction of digital administration, another application is added, whose original digital data worthy of archiving must be taken over by the archives as part of digital archiving. In accordance with the OAIS reference model, access to the digital data and its provision must be ensured. Some archives, such as the Vienna City and State Archives, the Upper Austrian State Archives, and the Lower Austrian State Archives in Austria, will in future also make the metadata from the digital archive accessible via their archive information systems. All this digital data, which originates from different systems, is to be made accessible to the public in accordance with legal requirements.

Most archive information systems (AIS) offer a web solution for online research in the archival records accessed using these products. Depending on the specifications of the respective archive and the possibilities offered by the AIS, either only metadata from analog archive material or also digitized material is released for research. Many archives have digital data on analog archival records from various digitization projects for which no metadata was created due to a lack of time and human resources. This may include written documents as well as audiovisual archival records.

In 2014, the German Federal Archives paved the way for a digital reading room by setting up the First World War portal on the occasion of the 100th anniversary of the start of the First World War, presenting more than 700,000 digitized pages of sources, along with images and audio documents relating to the First World War. The digitized data was also linked to the cataloging units in the archive information system. If they wanted, users could access only the digitized material without knowing its provenance. However, its provenance was evident through the link to the metadata. In a second portal on the Weimar Republic, the German Federal Archives brought together various types of sources virtually. However,

“digitization alone does not create a digital reading room,” as Andrea Hänger recently aptly put it.

The digital reading room should not only make metadata and content on analog and digital archive material accessible via the AIS, but also incorporate data from other source systems and make it searchable. It is therefore a tool that stands above the AIS and other applications and accesses data from them via interfaces. The digital reading room offers archive users possibilities that go beyond the web system of an AIS. Users should be offered thematic entry points and comprehensive search options. Such applications will be presented in this article.

2. THE DIGITAL READING ROOM – REQUIREMENTS

Based on a feasibility study for a digital workflow for archive use, the state archives of Basel-Stadt and St. Gallen in Switzerland have developed and implemented a digital reading room that combines various aspects from the perspective of archive users, archivists, archive operators, and standard requirements. The Swiss Archivists Association has developed a comprehensive catalog of requirements for a digital reading room and made it available on its website.

The German Federal Archives in Berlin have also recently launched a digital reading room, which can be used to provide various types of digital information and will eventually serve as a comprehensive portal for researching and using the Federal Archives’ holdings. The first searchable data available to archive users is a film collection. However, in the future, the digital reading room will map the entire process of using digital archive material online and without media discontinuity.

A digital reading room represents a central interface between archive holdings and users and is intended to offer a wide range of additional functions. The digital reading room acts as a comprehensive portal for researching and using archive material. It provides access to analog and genuinely digital holdings and, via appropriate interfaces, enables the integration of other digitally available sources. Researchers and the public are offered comprehensive access to historical materials. The digital reading room thus enables users to search for a wide variety of information sources with this research tool and promotes efficient, networked work with digital and digitized archive holdings.

2.1. USER GROUP

The digital reading room is accessible to a wide range of user groups from different contexts. On the one hand, it must be available to the archive itself for research purposes and to continuously expand its offerings; on the other hand, it must also be open to a broad user group and meet their varying requirements. It is therefore available not only to the scientific community, but also to the interested public, with access being adapted to the needs of the respective user groups.

Scientists who use the archive material for historical, social, cultural, or legal research purposes require comprehensive search functions as well as precise metadata and citable information in order to make their work well-founded and accurate. Students who use the archive for term papers, projects, or research, on the other hand, need simple introductory aids and understandable explanations of the archive material in order to be able to work with the content quickly and effectively.

For the interested public, including citizens, local historians, and family researchers, low-threshold access is important. This user group needs guidance and possibly also advice in order to find and understand the right information.

Finally, administrative offices, authorities, and legal title seekers also use the digital reading room to search for information to clarify administrative, legal, or historical issues. These users must be able to access specific files in order to efficiently process their matters.

The digital reading room thus offers all these user groups the necessary functions and support to best meet their respective needs.

2.2. INTERACTIVE FUNCTIONS

A modern digital reading room must offer interactive functions that meet the needs of users. Users should be able to create custom collections of documents to organize relevant materials by topic or project. This includes the ability to add notes directly to the document pool compiled for their own research in order to record personal comments and insights. Equally important is the linking of thematically related documents so that users can better grasp complex relationships and make their research more efficient. Of course, this only applies to the user's workspace and not to the archived data itself. A key requirement is the citation function, which enables permanent and unique source references through perma-

links. These interactive tools support researchers in actively using digital archive holdings, structuring them individually, and making their work traceable.

Another interactive function is the support of the description of special holdings by a selected group of users (designated community), which can also be controlled via the digital reading room.

2.3. USER MANAGEMENT

In order to assign appropriate rights to these different user groups, differentiated user management is required. User management encompasses various aspects to control access to the digital reading room and organize its use efficiently. Public users have the option of registering in the system to gain access to the available resources. New users are registered by creating and activating user accounts that are tailored to individual needs and permissions at different levels.

The management of these user rights includes the assignment, modification, and revocation of rights, whereby users also have the option of requesting extensions to their rights. Personalized watch lists and settings are taken into account in order to enable users to enjoy an individualized and customized experience. In addition, it is necessary to regularly deactivate user accounts and delete them for data protection reasons.

System maintenance and technical monitoring are essential to ensure the continuous availability and performance of the digital reading room. This also includes monitoring usage and system performance in order to make adjustments if necessary and ensure a high level of user satisfaction.

2.4. PROVISION AND MAINTENANCE OF CONTENT AND METADATA

The provision and maintenance of content and the management of metadata are central components of archival work. This requires metadata, digitized material, and digitally born data to be checked regularly and either released or blocked as necessary. Protection periods and copyrights must be observed to ensure that only documents that have been checked for legal and content compliance are published. The categorization of archival material plays an important role in ensuring that materials are properly structured and can be easily found. Quality assurance of digital documents and metadata is necessary to ensure that archival holdings are presented without errors.

2.5. SEARCH AND RESEARCH FUNCTIONS IN THE DIGITAL READING ROOM

The search and research functions of the digital reading room play a central role in the efficient use of the archive holdings. They offer a wide range of options for searching for information in a targeted and precise manner. The search functions are designed to be user-friendly and effective for both simple and complex queries.

2.5.1. Basic search functions

The basic search functions include a quick full-text search across all available archive and source holdings. As search terms are entered, the system uses autocompletes and suggestions to display potential hits. These functions facilitate and accelerate the search process and ensure that users quickly find the relevant information.

2.5.2. Advanced search options

For more complex searches, an advanced search function is available that allows you to narrow down your search results precisely. If you want to search for a specific data pool, you can select it separately. Users can search specifically according to various criteria, such as archive holdings or authority, date or specific period, signature or reference number, document type, persons involved, terms, and geographical locations. To further optimize the search process, help texts and search tips are provided to assist users in applying the advanced search functions.

2.5.3. Results display and search convenience

The search results are displayed in a clear hit list that includes both preview images and preview texts. The results are sorted by relevance, with the most relevant hits displayed first. In addition, users are offered the option of displaying context-related suggestions and similar documents in order to deepen and expand their search. These functions help users find information relevant to them quickly and specifically.

2.5.4. Advanced search logic and history

For more precise searches, the digital reading room supports the use of multiple search terms and search operators. This advanced search logic allows users to implement complex queries and search for specific information. In addition, registered users have the option of saving their search history, allowing them to access their previous search queries for a certain period of time and retrieve them again if necessary. The management and reuse of saved search queries ensure that research remains efficient and timesaving.

The search function supports various types of search queries to meet the different needs of users. These include full-text searches, metadata searches, combined search queries, faceted search for dynamic narrowing of results, semantic searches, and searches for specific document types. In addition, users have the option of displaying similar documents for existing hits, which further customizes and refines the search. The integration of AI-generated answers and suggestions further optimizes the search process by providing even more targeted relevant results. Preview images and preview texts make it easier for users to navigate and select the appropriate documents. Overall, the sophisticated search and research function ensures that the digital reading room offers users efficient, user-friendly, and convenient research experience with relevant hits from the source collections.

2.5.5. User support and advice

The digital reading room offers targeted forms of user support and advice to ensure that users can access the information they need quickly and efficiently and receive help when needed. The most important forms of support include:

Contact forms: Users have the option of contacting the digital reading room support team directly to describe specific queries or problems. These forms provide a simple and structured way to contact support and receive a quick response.

Written inquiries: For detailed or more complex issues, users can submit written inquiries via the digital reading room. This allows them to receive targeted information or support, especially for specific questions about the archive material or the use of the system.

User information: This section provides basic information on how to use the digital reading room. Users will find instructions on the available functions, access options, and technical requirements. This information makes it easier to find the way around and helps us to use the digital reading room efficiently.

FAQ (frequently asked questions): Users can find answers to the most frequently asked questions in a comprehensive FAQ section. This covers various topics, from registration and use of the search functions to legal aspects of the archive material. The FAQs offer quick solutions and reduce the need for direct inquiries.

Tutorials and help: Interactive tutorials and step-by-step instructions are provided for more in-depth support. These teach users how to effectively use the digital

reading room's features, such as advanced search, filtering results, and managing user accounts. Such assistance is particularly helpful for new users.

This comprehensive support ensures that all users – regardless of their experience or technical background – receive the help they need and can use the digital reading room effectively.

2.5.6. Ordering and payment functions

Users can order and view both publicly accessible and non-publicly accessible archive material via the digital reading room. Ordering digital archive material allows users to access sources directly for research or personal interests. If users wish to access analogue archive material, they can order it for viewing on site in order to study the original documents in the reading room.

In addition to ordering archive material, various applications can also be submitted. For example, it is possible to apply for a reduction in the retention period in order to gain access to archived materials earlier than originally planned in accordance with legal requirements. Furthermore, users can request access to their own documents if they can prove their party status. Other requests concern the production of reproductions, the loan of archive material, either for the file-creating agency or for the purpose of holding exhibitions, and the publication of archive material, for example for scientific papers or other works to be published. Another component of the digital reading room is a web shop where users can order and download archived materials in various formats. This includes both digital scans/data and physical copies that can be used for research, publications, or private purposes. The web shop offers a user-friendly way to purchase reproduced archive material directly and ensures that users have easy access to the materials they need.

A payment function is also integrated into the digital reading room, enabling users to conveniently pay for various services and orders. This function covers various transactions, such as payment for reproductions of digitally born documents, digitized archive materials, or physical copies of documents. The payment function is also used to settle fees and charges, such as for the reduction of the protection period. Users can make payments securely and easily using various payment methods, such as credit cards, bank transfers, or online payment services. This payment function ensures the smooth processing of all fee-based re-

quests and offers users a user-friendly way to pay for their orders and gain access to the desired archive materials and services.

2.5.7. Platform compatibility and user interface

The digital reading room should be accessible on various devices and operating systems, including desktop PCs, laptops, tablets, and smartphones. The user interface must be intuitive and accessible to facilitate access for all user groups, from scientists to laypeople. A user-friendly interface design that includes clear navigation and fast loading times is crucial for a positive user experience.

3. CONCLUSION

Many archives offer their users virtual access to their archive material, usually via the web tool of their archive information system. The digital reading room extends this service to various digital source systems of an archive. It implements the processes of reading room use in the digital domain, taking into account the legal framework, enables interaction with the archive, offers comprehensive research options with the help of semantic searches and AI support, has an integrated order and web shop function, and enables the creation of evaluations and statistics. The digital reading room thus expands the services offered by archives and enables barrier-free access to various resources. The increased number of search queries at the German Federal Archives since it made over 250,000 film works available via the digital reading room in a first expansion stage shows that this service is also being used.

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Summary

At a time when fake news is becoming increasingly widespread, the role of archives has become increasingly significant. Archives serve as pivotal memory institutions, not only ensuring the preservation of archival material for research purposes but also facilitating public access to these resources to combat disinformation and manipulation. In response to this challenge, archives are adopting diverse approaches to enhance the accessibility and searchability of their content across various applications. The advent of the digital reading room represents a paradigm shift in the realm of public access to knowledge, particularly in the context of the increasing prevalence of freedom of information. With the implementation of a digital reading room, access to analogue and digital, including digitized, archive material is implemented in a contemporary form and on the basis of a defined user process, in compliance with archive regulations and with precisely defined access rights. The present article examines the implementation of the digital reading room in German-speaking countries.

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