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Modern Tools and Methods of Information Use in the Activities of Dnipro's Libraries, Archives and Museums

Objective. The article is devoted to the study of means and methods of information use, as well as meeting the information needs of remote users in the activities of Dnipro's libraries, archives and museums. **Methods.** The analysis method was used to define the concept of "information", the terms "modern means of information use" and "modern methods of information use", as well as to examine the products and services provided through digital communications, considered as tools of information use and meeting the information needs of remote users of these document and information structures. The methods and the means of information use were also analysed. The synthesis method was used to make conclusions. **Results.** It was determined that the means of information use may include various channels and tools employed for obtaining, collecting, processing, reproducing, disseminating, and perceiving information. The types of digital communications used by libraries, archives, and museums were also examined, including their division into internal and external communications. It is stated that external digital communications can be grouped and contribute to creating and utilizing shared information resources, products, and services with other institutions. They are also effective means of information use and meeting the information needs of remote users. **Conclusions.** Establishing the presence of document and information structures in social networks is a crucial aspect of their activities. Digital communications in social media have become effective tools for engaging new users, providing information, facilitating information use, and meeting the information needs of remote audiences.

Keywords: libraries; archives; museums; digital communications; information use

Introduction

In recent decades, the informatization of society has become an integral component of all spheres of regional activity, including business, science, culture, and education. From the perspective of modern science, economic development, social change, and the overall quality of both public and personal life depend on all types of information resources, products, and services, as well as on who uses the available information, how it is used, and for what purpose (Kobieliev, 2012).

It has also become widely recognized that the development of scientific, technical, and social progress is impossible without the collection, storage, and effective use of information. Information is a driving force for developing all areas of activity. One of its important properties is its ability to provide new data and knowledge through processes of accumulation and processing from specific perspectives. Consequently, in recent years, the number of information resources as a result of the intellectual activity of highly qualified specialists has been growing particularly rapidly.

In the current context of digital transformation, libraries, archives, and museums are changing their ways of interacting with users by implementing new communication formats, electronic services, and remote access to resources. Global trends indicate that the most significant

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shifts in the digital management of cultural institutions occurred during crises, such as the COVID-19 pandemic. Studies by Ashiq, Jabeen, and Mahmood (2022), Murphy, Lewis, McKillop, and Stoeckle (2022), Choi and Kim (2021), Bushey (2023), and Yap, Kamble, Kuah, and Tolkach (2024) demonstrate that libraries, museums, and archives in various countries actively expanded their digital services, redirected communication toward online interaction, and developed new models of digital user experience.

This has led to a global problem of increasing information flows at a rate that exceeds society's ability to process and use them effectively. First of all, this is due to the fact that the human brain remains the main instrument for transforming information. At the current stage, it is both relevant and timely to study the methods and means of information use, as well as ways to meet the information needs of remote users in the activities of document and information structures such as libraries, the State Archive of the Dnipropetrovsk Region, and museums in Dnipro.

The issue of information use as a means of interaction in the context of society's informatization has been considered by T. Mershchii. Today the topic of tools, methods, and models of information use in the activities of various institutions requires separate investigation, as the number of information resources, products, and services within both public and private organizations representing different sectors of the regional digital economy continues growing.

The challenges faced by libraries under conditions of digitalization, the theoretical aspects of developing their resources in the modern information space, as well as issues of fostering intercultural communication and ensuring free access to global resources, have been studied by T. Hranchak, I. Davydova, M. Demchenko, V. Ilhanaieva, O. Karpenko, O. Kobieliiev, K. Lobuzina, O. Mariina, A. Solianyk, S. Shemaiev, and H. Shemaieva.

In particular, the academic understanding of the development of information communications in the digitalization context highlights their role and importance while exploring ways to establish sustainable information exchange mechanisms among different subjects. This includes providing online access to information resources and ensuring that information channels are filled with verified and reliable content. The results of such studies have been presented by domestic researchers such as V. Bondarenko, T. Horenko, S. Horova, V. Horovyi, O. Onyshchenko, M. Slobodianyk, among others.

The issue of digitalization in the activities of libraries, archives, and museums is widely represented in international scholarly literature. Global research provides a comprehensive view of transformations in digital services, communication models, and user behaviour. Ashiq, Jabeen, and Mahmood (2022) conducted a bibliometric and content analysis of publications on changes in library activities during the COVID-19 pandemic, highlighting the growing role of online resources, social media, and remote information services. Another researchers Murphy, Lewis, McKillop, and Stoeckle (2022) examined the transformation of university libraries and archives, which actively expanded digital access formats and developed electronic user support services during pandemic restrictions. In the field of museology, Choi and Kim (2021) analysed new management strategies of museum institutions within the framework of digital transformation, including the development of virtual exhibitions, educational platforms, and multimedia forms of audience interaction. Bushey (2023) explores the development of "participatory archives", focusing on digital practices for engaging the public, collecting online testimonies, and preserving historical memory through social media. The impact of digital museum services on visitor behaviour, noting the increasing importance of online tools, digital educational programs, and communication platforms was presented by Yap, Kamble, Kuah, and Tolkach (2024).

All these studies allow us to identify several common practices relevant for comparison with the experience of Dnipro:

- Rapid scaling of online services and electronic catalogues (Ashiq, Jabeen, & Mahmood, 2022; Murphy, Lewis, McKillop, & Stoeckle, 2022);
- Reorientation of communication strategies toward social media and multimedia content to maintain contact with audiences during quarantine or crisis restrictions (Choi & Kim, 2021);
- Participatory approaches in working with archives and collections to engage communities and preserve oral histories (Bushey, 2023);
- Strengthening the educational function through digital products and interactive formats (Yap, Kamble, Kuah, & Tolkach (2024)).

Overall, international Scopus-indexed publications indicate the universal nature of digital changes in the library, archival, and museum sectors, allowing the comparison of global experiences with the practices of institutions in Dnipro and the identification of common development trends.

Comparing these approaches with the practices of Dnipro institutions shows significant alignment: most libraries and museums in Dnipro have also implemented electronic collections, active social media pages, and virtual exhibitions, confirming that local experience aligns with global trends in digital transformation.

The objective of the article is to examine modern means and methods of information use, as well as the ways of meeting remote users' information needs of libraries, archives and museums under the conditions of martial law and digitalization in Dnipro.

The object of the study is modern means and methods of information use in the activities of libraries, the regional archive and museums.

Methods

The study is based on methods of terminological analysis, synthesis, and comparison. Terminological analysis was used to clarify the definitions of the concepts "information", "information use", "means of information use", and "methods of information use". The synthesis method made it possible to identify the key aspects of information use in the activities of Dnipro's libraries, archives and museums. The comparison method was used to analyse the information resources, products, and services presented on the websites of Dnipro's libraries, archives and museums.

Results and Discussion

The concept of information (derived from the Latin *informatio*, meaning "explanation, idea, or concept", *informare* – "to shape, form, instruct; to think, to imagine") is generally understood as data transmitted orally, in writing, or by other means through conventional signals and technical devices. Information is usually examined in terms of its content, structure, organization, and dynamics, which include processes of creation, transmission, perception, use, and storage (Zakharova, Filipova, Zadorozhnyi, & Tarasenko, 2024, p. 10).

According to T. V. Mershchii (2017), the term information consumption can be defined as the process of satisfying intangible, spiritual, and intellectual needs through portable means of accessing information flows, with the ultimate aim of experiencing existential knowledge. Unlike material consumption, information consumption relies on a cognitive-reflective function activated through the use of technological tools. As a result, individuals can gain access to a broader and more diverse range of experiences than through material consumption alone (Mershchii, 2017).

It is now widely acknowledged that information needs are closely tied to consumers' spheres of activity. The main factors shaping these needs include type of social and professional

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activity, age, field of knowledge and practice, job position, regional context, and the psychological characteristics of the information consumer (Prokopenko, 2015, p. 15).

The means of information consumption encompass a wide variety of channels and tools used for acquiring, collecting, processing, reproducing, disseminating, and perceiving information. Today, these means can generally be divided into two groups: traditional and digital, as summarized in Table 1.

Table 1

Types of information use media

Traditional Media	Digital Media
Television	Internet, websites, blogs, social networks, mobile devices
Radio	Mobile applications
Press	Audio and video platforms

Traditional media contribute to informing the public, disseminating information for education and leisure, and shaping public opinion. At the present stage, digital media are accelerating the dissemination of information and gradually transforming communication processes in society. Digital platforms have changed traditional methods of presenting and distributing information, making it accessible at any time, while video and audio content formats have become the most in demand. At the same time, it is important to note that both traditional and digital media remain significant today, as information consumers include people of all ages.

In the process of creating, distributing, and consuming information, factors such as knowledge of the target audience and their specific information needs, the choice of communication channel, preparation and formatting of information, its transmission, and the assessment of the effectiveness of its dissemination are all important (Zakharova, Filipova, Zadorozhnyi, & Tarasenko, 2024, p. 57).

The methods of information use are processes through which information is perceived, understood, and comprehended. These processes include reading, viewing text, listening, searching for information, analysing, critical thinking, comparing, systematizing, memorizing, discussing, or exchanging ideas and opinions.

Next, we will take a closer look at modern means and methods of information use and meeting the information needs of remote users through digital technologies, using as examples the activities of document and information structures such as libraries, the state archive and museums in the city of Dnipro.

Today, the library system, together with the museum and archival systems, forms an essential component of the regional information infrastructure, ensuring not only the creation, accumulation, and preservation of information but also meeting a wide range of diverse user needs. One of the key factors in the successful development of a region is the accessibility of information resources, products and services for all categories of information consumers.

Even under martial law, libraries continue to expand their traditional role as document repositories, transforming into multifaceted information centres aimed at fully satisfying the needs of different user groups.

The traditional understanding of a library as merely a collection of documents is evolving into the concept of a modern information and communication institution, which not only aggregates external databases but also creates its own, interacts with other structures, provides access to global information resources, and expands the range of services in accordance with contemporary requirements and external circumstances. Innovative processes significantly

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influence the development of the communicative function of libraries, realized through the use of modern automated library information systems and network technologies for information retrieval and processing (Hrybinenko, 2018).

Currently, most libraries in Dnipro have modern websites that provide remote users with access to a variety of resources and services, which should be considered as digital communications. These digital communications can be regarded as a tool for information use within the activities of modern document and information structures.

According to D. Oltarzhevskyi (2023), “digital communications” refer to the exchange of digital content in a networked environment using online technologies, the Internet, and various technological tools that allow information to be processed, stored, and disseminated. This type of network communication is based on the principles of multimedia, online content accessibility, and the use of digital channels, including websites, emails, social media, and others (Oltarzhevskyi, 2023).

Digital communications in modern libraries are divided into internal and external ones. Internal communications include workflows that occur within the electronic network of a library or directly on-site, using appropriate hardware, software, and computer systems. External digital communications, conducted by the library in the Internet environment, are conventionally divided into three groups, which will be described in more detail.

The first group includes information resources and services hosted on library websites (Fig. 1).

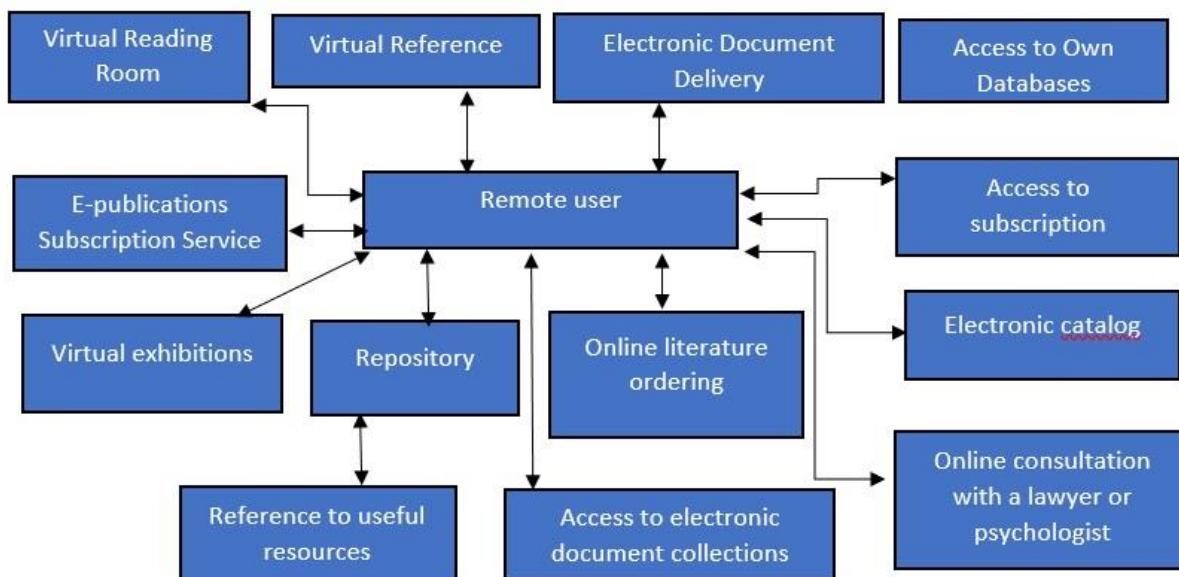


Fig. 1. Electronic library and information resources and services hosted on the library website, which can be considered as external digital communications

The main advantage of library resources available online is providing users with quick and easy access to information, allowing them to search for it or familiarize themselves with it remotely at a convenient time (Koloskova, 2024; Sokolova, 2016).

The range of services offering remote access to documents and information – especially catalogues – is gradually expanding, improving the overall quality of library services. Online services aim to reach a wider audience, foster communication with users, introduce innovative service formats, and maintain the library's presence and visibility on the web (Koloskova, 2020).

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As a means of information use, the types of digital communications available on the websites of Dnipro libraries are considered (Table 2, (Koloskova, 2020).

The data in Table 2 shows that, under martial law, libraries in the region offer remote users a variety of electronic information resources and services, depending on their type and purpose. They include e-libraries, databases, electronic document collections, individual electronic documents, electronic copies of documents, image catalogues, electronic and corporate catalogues, library websites and webpages, periodicals databases, online reading rooms, digital repositories, institutional repositories, virtual exhibitions, virtual reference services, electronic document delivery (EDD), and online book ordering services. Together, these resources form a significant part of the library-information potential of the region in the digital environment (Koloskova, 2020).

Table 2

Types of digital communications on the websites of library institutions in Dnipro

Types of Digital Communications on Dnipro Library Websites	Dnipropetrovsk Regional Universal Scientific Library	Dnipro City Public Libraries	Dnipropetrovsk Regional Children's Library	Dnipropetrovsk Regional Youth Library	Academic Libraries of HEIs	Central Scientific and Technical Library of Mining and Metallurgical Complex of Ukraine	Technical Schools and Colleges libraries	School Libraries
Access to e-library	+	+	—	+	+	—	—	—
Access to electronic document collections	+	+	+	+	+	+	+	+
Access to database	+	+	—	+	+	—	—	—
Access to image catalogue	+	+	—	—	+	+	—	—
Access to electronic catalogue	+	+	+	+	+	+	+	—
Access to corporate catalogue	+	+	+	—	+	—	—	—
Access to library webpage	+	+	+	+	+	+	+	+
Access to own databases	+	+	+	+	+	+	+	—
Access to periodicals database	+	+	+	+	+	+	—	—
Use of online e-reading room	+	—	+	—	+	—	+	—
Virtual reference service	+	+	+	+	+	+	—	—
Electronic document delivery service	+	+	—	—	+	+	—	—
Online book ordering	+	—	—	—	+	+	—	—
Access to licensed information resources	+	—	—	—	+	—	—	—
Online copy request	+	+	—	—	+	—	—	—
QR-code book access service	+	—	—	—	+	—	—	—
Online library registration	+	—	—	—	+	—	—	+
Access to virtual literature exhibitions	+	+	+	+	+	+	+	+

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Access to electronic collections of HEI scientific libraries in Dnipro	+	-	-	-	+	-	-	-
Links to useful resources	+	+	+	-	+	+	-	-
Access to thematic databases of leading world libraries and information centres	+	+	+	+	+	+	-	-
Chat-bot	+	-	-	-	-	-	-	-

Considering the differing technical capacities of the libraries, full-text electronic document collections are primarily created and made available by the Dnipropetrovsk Regional Universal Scientific Library (DRUSL) and the scientific libraries of higher education institutions (HEI), which have the most advanced resources, technological infrastructure, staff expertise and material-technical base. The Dnipropetrovsk Regional Youth Library and the municipal cultural institution “Dnipro City Public Libraries” have only recently begun developing electronic document collections, while electronic repositories exist solely in the libraries of higher education institutions.

Most libraries – except for those of technical schools, colleges, and schools – provide a virtual reference service, while the EDD service is available only at DRUSL, Dnipro city public libraries and certain higher education institution libraries. Recently, school libraries have begun providing students with access to platforms containing digital versions of school textbooks.

The second group of external digital communications of a library institution is represented by its social media strategy, which opens up a wide range of opportunities, such as engaging with the audience, informing users about current events and recent activities, highlighting significant and memorable dates, and promoting information resources, products, and services. The indicators of Dnipro libraries’ presence on social media are presented in Table 3.

Table 3

Presence of Dnipro libraries on social media

Types of social media used by libraries to implement their activity strategy and communicate with the audience	Dnipropetrovsk Regional Universal Scientific Library	Dnipro City Public Libraries	Dnipropetrovsk Regional Children's Library	Dnipropetrovsk Regional Youth Library	Academic Libraries of HEIs	Central Scientific and Technical Library of Mining and Metallurgical Complex of Ukraine	Technical Schools and Colleges	School Libraries
Facebook	+	+	+	+	+	+	+	-
Twitter	+	-	+	+	+	-	-	-
Instagram	-	+	+	+	+	+	-	-
YouTube	+	+	+	+	+	+	-	-
TikTok	-	-	-	+	+	-	-	-
Telegram	+	+	+	+	+	+	+	-

Analysis of Table 3 Indicators shows that most scientific, specialized, and public libraries in Dnipro actively interact with users through social media. Using major platforms such as Facebook, Twitter, Instagram, YouTube, TikTok, and Telegram, these library institutions promote books and reading, their collections, and websites, maintain blogs, and share information with users. Libraries of technical schools and colleges primarily create and manage Facebook pages. Regarding school libraries, it should be noted that only a few have their own websites, and currently, they do not use other social media platforms in their activities.

The third group of external digital communications of a library involves interlibrary digital communications, or direct communication with other institutions, aimed at creating shared resources and services to meet the information needs of remote users. Examples of shared informational resources based on external digital communications include the regional project “Electronic Catalogue” of the Dnipropetrovsk Regional Scientific Library. This project aims to create electronic catalogues of the book collections of public libraries in the region and transition to a corporate cataloguing system, including the formation of a consolidated catalogue of periodical articles, “Dnipropetrovshchyna”, hosted on the library’s website.

Another example of a local history information resource resulting from collaboration with various institutions is the “DniproKultura” portal – a comprehensive local history resource dedicated to the culture of the Dnipropetrovsk region. Articles for the portal, hosted on the Dnipropetrovsk Regional Scientific Library website, are prepared by the library’s leading specialists, as well as by users, partners, researchers, journalists, writers, historians, local historians, representatives of cultural institutions, NGOs, and creative associations (<https://www.libr.dp.ua/>).

In the context of regional digitalization, an increasing number of public and private institutions are using chatbots in their interactions with users. Libraries are no exception and have begun incorporating them into their operations as well. As is well known, chatbots operate using artificial intelligence, and their advantages include round-the-clock availability, fast response times, and the ability to provide timely, accurate, and reliable information. The “IBIS” chatbot of the Dnipropetrovsk Regional Universal Scientific Library (DRUSL) is available on the library’s website and in two messengers – Telegram and Viber. It serves as a helpful tool for consultations, accessing the latest information, obtaining free services, and participating in bonus programs, quizzes and competitions. To access this chatbot in Telegram or Viber, users can follow the links provided on the DRUSL website or scan the QR code (<https://www.libr.dp.ua/>).

The “IBIS” chatbot provides information about the library and a wide range of free services for all user categories. Its main menu includes sections such as: “About the Library”, “Library Services”, “Order Literature”, “Read Online”, “Library Website”, “DniproKultura Portal”, “Interesting Sections”, “Quote of the Day”, “Quizzes”, and “Events Calendar”. Each menu section contains links to the corresponding resources or services available on the DRUSL website. The library offers users a very broad spectrum of services, with the most in-demand ones highlighted in the chatbot menu, including Virtual Reference, Electronic Document Delivery, Educational Courses, Film Screenings and Scanning Services. To select a service, users simply click the corresponding button, which then provides a link to the required resource on the DRUSL website (<https://www.libr.dp.ua/>).

Thus, digital communications and the IBIS chatbot, which provide access to the library’s information resources, products and services, serve as tools for information consumption and meeting the informational needs of remote users of Dnipro libraries.

Next, we examine the means of information consumption offered by the State Archive of Dnipropetrovsk Region and museums in Dnipro. The website of the State Archive of the Dnipropetrovsk Region is a modern informational platform containing the main sections: “Home”,

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“Citizen Requests”, “Legislation”, “Network of Institutions”, “Advisory Bodies”, “For Citizens”, “Regulatory Framework,” “Collections”, “Contacts”, “Announcements”, and “Access to Public Information”. It includes categories such as “About the Archive”, “Regional Archive Institutions”, “Catalogue of Metric Books”, “Scientific-Reference Apparatus” (including catalogues, card indexes, guides, reviews, automated databases and a reference library); Electronic Archive; Registry of Declassified Collections; Initiative Formations; Press Centre; Video Materials; Exhibition Activities; and Exhibition Presentations as it is shown in Table 4.

The data in Table 4 indicate that, in the context of martial law, the website of the State Archive of Dnipropetrovsk Region functions as a powerful digital platform, providing remote users with access to information about archival institutions in the region, the catalogue of metric books, the research and reference apparatus, descriptions of the fonds of the Dnipropetrovsk Regional State Archive, electronic publications of the archive, digitized metric books, information about the Holodomor of 1921–1923, access to the register of declassified fonds, press centre publications (press releases, significant dates of the Dnipropetrovsk region), materials for the 100th anniversary of the State Archive of Dnipropetrovsk Region, video materials, online documentary exhibitions, access to the legal and regulatory framework, and a list of archival cases digitized and available on the FamilySearch platform in Excel tables. Remote users are also provided with the opportunity to submit electronic requests to the State Archive of Dnipropetrovsk Region online (<https://dp.archives.gov.ua/>).

An analysis of the archive’s presence in social media showed that the institution’s specialists maintain pages on platforms such as Facebook, Instagram, and Twitter to inform and engage remote users.

Table 4

Types of digital communications on the website of the Dnipropetrovsk Regional State Archive

Types of Digital Communications on the Website of the State Archive of Dnipropetrovsk Region	Access Available
Information about archival institutions in the region	+
Catalogue of metric books	+
Research and reference apparatus	+
Descriptions of the fonds of the State Archive of Dnipropetrovsk Region	+
Electronic publications of the State Archive of Dnipropetrovsk Region	+
Metric books	+
Holodomor 1921–1923	+
Register of declassified fonds	+
Press centre publications (press releases, significant dates of the Dnipropetrovsk region)	+
Materials for the 100th anniversary of the State Archive of Dnipropetrovsk Region	+

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Video materials	+
Online documentary exhibitions	+
Submission of electronic requests	+
Legal and regulatory framework	+
List of archival cases of the State Archive of Dnipropetrovsk Region digitized and available on the FamilySearch platform in Excel tables	+

Today, museums in Dnipro also have their own websites, where they present their resources and services (Table 5) and inform their audience about upcoming events (<https://www.museum.dp.ua/uk/>; <https://artmuseum.dp.ua/>; <https://midnipro.museum/>; <https://mvr.org.ua/>).

Table 5

Types of digital communications on the websites of Dnipro museums

Museum Name	Partners	Expertise	News	Exhibition Information	For Visitors	3D Tour	Science	Library	Contacts
Dmytro Yavornytskyi National Historical Museum of Dnipro	+	+	+	+	+	+	+	+	+
Dnipro Art Museum	+	+	+	+	+	+	-	-	+
Museum of Dnipro City History	-	-	+	+	+	+	+	+	+
Time Machines Technical Museum	+		+	+	+	-	-	-	+

The data presented in Table 5 shows that museum websites are modern information platforms that provide information about the museum's history, partners, contact details, news, exhibition and display information, event announcements, opening hours, 3D tours, scientific activities and museum libraries. Today, most museums in Dnipro also maintain pages on social media (Table 6).

Table 6

Presence of Dnipro museums on social media

Types of Social Media Used by Dnipro Museums to Implement Their Activity Strategy and Communicate with the Audience	Dmytro Yavornytskyi National Historical Museum of Dnipro	Dnipro Art Museum	Museum of Dnipro City History	Time Machine Technical Museum
Facebook	+	+	+	+

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Twitter	+	+	+	-
Instagram	+	+	+	+
YouTube	+	-	+	-
TikTok	-	-	-	-
Telegram	+	-	-	-

The data, presented in Table 6, show that today the presence of museums on social media is a significant aspect of positioning their information resources and services. It ensures systematic communication about major events, news and activities, as well as represents an important process for organizing and maintaining effective interactions with their target audiences.

Conclusions

The study has shown that the term “information consumption” holds considerable potential for application in library and information theory and practice. Means of information consumption can include a variety of channels and tools used for obtaining, collecting, processing, reproducing, distributing, and perceiving information (Zakharova, Filipova, Zadorozhnyi, & Tarasenko, 2024). Currently, these means are divided into two groups: traditional and digital. Among digital means of information consumption, websites, information resources and services of libraries, the state archive, museums, as well as their external digital communications are considered.

Today, the most powerful and effective means of information consumption are the websites and digital communications of the Dnipropetrovsk Regional Universal Scientific Library and university libraries. The municipal cultural institution “Dnipro City Public Libraries” has begun modernizing its website and creating an electronic library. The Dnipropetrovsk Regional Youth Library and the Dnipropetrovsk Regional Children’s Library are constantly improving their websites, resources, and services. Some technical school and college libraries maintain their own websites and pages on Facebook and Telegram. School libraries have their own websites or pages on the gymnasium or school websites, providing access to textbook collections and links to electronic libraries.

A notable example is the website and digital communications of the State Archive of Dnipropetrovsk Region, which offers a wide range of information resources and services to remote users. Particularly noteworthy are its scientific reference apparatus, electronic collections of metric books, documents covering the 1921–1923 famine, the registry of declassified funds, and online exhibitions accessible remotely.

Regarding the websites and digital communications of Dnipro’s museums, the leading positions are held by the Dmytro Yavornitskyi National Historical Museum of Dnipro (<https://www.museum.dp.ua/uk/>) and the Museum of Dnipro City History (<https://midnipro.museum/>). These institutions provide not only information about their resources, services, events, and activities, but also offer remote users engaging 3-D tours.

An important aspect of the work of libraries, archives, and museums in Dnipro is their presence on social media. This supports the implementation of their organizational strategies, positioning of information resources and services, facilitation of two-way communication, audience growth, and user awareness of key news and events. This is confirmed by the statistics on the viewing of posts by these institutions on social media.

In conclusion, today, websites and external digital communications are effective means of information consumption, the creation of joint information resources, and meeting the

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informational needs of remote users of libraries, museums, and the State Archive of Dnipro Petrovsk Region.

Comparison of the obtained results with international experience, as presented in relevant publications (Ashiq, Jabeen, & Mahmood, 2022; Murphy, Lewis, McKillop, & Stoeckle, 2022; Choi & Kim, 2021; Bushey, 2023; Yap, Kamble, Kuah, & Tolkach (2024)), confirms that the trends argued in this study align with global approaches to the digitalization of the cultural and information sector. International research emphasizes the importance of multimedia formats, integrated online services, social media, personalized services, and virtual spaces – precisely the directions actively implemented by libraries, archives, and museums in Dnipro.

Thus, the activities of institutions in the region fit into the global context of digital transformation, demonstrating the universality of the identified trends. Unlike the cases described in international studies (particularly Ashiq, Jabeen, & Mahmood, 2022; Murphy, Lewis, McKillop, & Stoeckle, 2022), where the mass deployment of digital services was often accompanied by rapid rethinking of staffing and technical resources, Dnipro institutions show a gradual but steady evolution: available services (electronic catalogues, virtual exhibitions) are expanded first, while large infrastructural projects (institutional repositories) develop more slowly due to resource limitations. This corresponds with Murphy, Lewis, McKillop, and Stoeckle's (2022) conclusions regarding the role of local resources in scaling digital services.

Therefore, the results of this study allow positioning the experience of libraries, archives, and museums in Dnipro as part of a broader international process of digital communications development. This provides a foundation for further scholarly research, particularly in the direction of comparative analysis of information consumption models in public and private structures of the Dnipro Petrovsk region, as well as studying the effectiveness of technological solutions applied in cultural and information institutions worldwide.

REFERENCES

Ashiq, M., Jabeen, F., & Mahmood, K. (2022). Transformation of libraries during Covid-19 pandemic: A systematic review. *The Journal of Academic Librarianship*, 48(4), Art. 102534. doi: <https://doi.org/10.1016/j.acalib.2022.102534> (in English)

Bushey, J. (2023). A participatory archives approach to fostering connectivity, increasing empathy, and building resilience during the COVID-19 pandemic. *Heritage*, 6(3), 2379-2393. doi: <https://doi.org/10.3390/heritage6030125> (in English)

Choi, B., & Kim, J. (2021). Changes and challenges in museum management after the COVID-19 pandemic. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(2), Art. 148. doi: <https://doi.org/10.3390/joitmc7020148> (in English)

Hrybinenko, O. (2018). Didzhyalizatsiia ekonomiky v novii paradyhmi tsyfrovoi transformatsii.. *Mizhnarodni Vidnosyny. Seria: Ekonomichni Nauky*, 16, 35-37. Retrieved from http://journals.iir.edu.ua/index.php/ec_n/article/view/3523 (in Ukrainian)

Kobieliev, O. M. (2012). *Informatsiina analityka v strukturni bibliotechnoi diialnosti v Ukrainsi*. Kharkiv: KhDAK. Retrieved from <https://repository.ac.kharkov.ua/handle/123456789/2129> (in Ukrainian)

Koloskova, G. (2020). Bibliotechno-informatsiini komunikatsii yak zasib zabezpechennia informatsiinykh potreb viddalenykh korystuvachiv. [Library and information communications as a means for meeting the information needs of remote users]. *Visnyk Knyzhkovoi Palaty*, 8, 23-30. doi: [https://doi.org/10.36273/2076-9555.2020.8\(289\).23-30](https://doi.org/10.36273/2076-9555.2020.8(289).23-30) (in Ukrainian)

Koloskova, G. (2024). Tsyfrovi komunikatsii yak faktor rozvytku suchasnoi bibliotechnoi ustanovy [Digital communications as a development factor of the modern library institution]. *Strategy Development of Libraries*, 31-35. doi: <https://doi.org/10.20535/2024.306092> (in Ukrainian)

Mershchii, T. V. (2017). Informatsiine spozhyvannia yak zasib interaktsii v umovakh informatyzatsii suspilstva [Information consumption as a means of interaction in setting of society's informatization]. *Proceedings of the State University "Kyiv Aviation Institute". Vol.: Philosophy. Cultural Studies*, 25(1), 110-113. doi: <https://doi.org/10.18372/2412-2157.25.12638> (in Ukrainian)

Murphy, J. E., Lewis, C. J., McKillop, C. A., & Stoeckle, M. (2021). Expanding digital academic library and archive services at the University of Calgary in response to the COVID-19 pandemic. *IFLA Journal*, 48(1), 83-98. doi: <https://doi.org/10.1177/03400352211023067> (in English)

Oltarzhevskyi, D. (2023). *Tsyfrovi komunikatsii: navchalnyi posibnyk iz dystsypliny «Mediavyrobnystvo: promotsiia»*. Kyiv: NNIZh KNU im. T. Shevchenka. Retrieved from <https://ir.library.knu.ua/handle/123456789/3014> (in Ukrainian)

Prokopenko, L. I. (2015). *Informatsiini potreby korystuvachiv oblasnykh universalnykh naukovykh bibliotek Ukrayny*. Kyiv: Lira-K. (in Ukrainian)

Sokolova, Y. (2016). Vykorystannia kompiuternykh tekhnolohii bibliotek v opratsiuvanni vitchyznianykh periodychnykh vydan [Library computer technologies in operation with national periodicals]. *Naukovi pratsi Natsionalnoi biblioteki Ukrayny imeni V. I. Vernadskoho*, 43, 560-583. doi: <https://doi.org/10.15407/np.43.560> (in Ukrainian)

Yap, J. Q. H., Kamble, Z., Kuah, A. T. H., & Tolkach, D. (2024). The impact of digitalisation and digitisation in museums on memory-making. *Current Issues in Tourism*, 27(16), 2538-2560. doi: <https://doi.org/10.1080/13683500.2024.2317912> (in English)

Zakharova, I. V., Filipova, L. Ya., Zadorozhnyi, I. S., & Tarasenko, D. A. (2024). *Osnovy informatsiino-analitychnoi diialnosti* (2nd ed.). Cherkasy: Skhidnoevropeiskiyi universytet imeni Raufa Abliazova. Retrieved from <https://suem.edu.ua/publikaciyi> (in Ukrainian)

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Сучасні засоби та методи інформаційного споживання у діяльності дніпровських бібліотек, архівів і музеїв

Мета. Стаття присвячена дослідженням засобів і методів інформаційного споживання та забезпечення інформаційних потреб віддалених користувачів у діяльності дніпровських бібліотек, архівів та музеїв. **Методика.** Використано методи аналізу та синтезу. Метод аналізу застосовано для визначення поняття «інформація», термінів «сучасні засоби інформаційного споживання» та «сучасні методи інформаційного споживання», а також для дослідження продуктів і сервісів, доступ до яких забезпечується через цифрові комунікації і які розглядаються як засоби інформаційного споживання та забезпечення інформаційних потреб віддалених користувачів цих документно-інформаційних структур. Також проаналізовано методи та засоби інформаційного споживання. **Результати.** Встановлено, що засобами інформаційного споживання можуть бути різноманітні канали та інструменти, які використовуються для отримання, збирання, опрацювання, відтворення, розповсюдження та сприйняття інформації. Розглянуто види цифрових комунікацій бібліотек, архівів і музеїв, включно з їх поділом на внутрішні та зовнішні комунікації. Зовнішні цифрові комунікації можуть об'єднуватися у групи та сприяти створенню й використанню спільних інформаційних ресурсів, продуктів та сервісів з іншими установами. Водночас вони є ефективними засобами інформаційного

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споживання та задоволення інформаційних потреб віддалених користувачів. **Висновки.** У сучасних умовах організація присутності документно-інформаційних структур у соціальних мережах є суттєвим аспектом їхньої діяльності. Цифрові комунікації у соціальних медіа стали ефективними засобами залучення нових користувачів, інформування, інформаційного споживання та задоволення інформаційних потреб віддаленої аудиторії.

Ключові слова: бібліотеки; архіви; музеї; цифрові комунікації; інформаційне споживання

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