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### INFORMATION TECHNOLOGY AS A TOOL FOR INTERACTION BETWEEN ARCHIVES AND USERS

#### **ABSTRACT**

The article deals with the main methods of enhancing the interaction of archives and their users in the process of obtaining the necessary information. The aim is to consider the legal basis for such interaction and the fulfillment of socio-legal and thematic requests of users. The main forms of using archival records (the Russian Archives portal, the central fond catalog, guidebooks to Russian archives, electronic inventories of federal archives, online exhibition projects, and electronic services for users) are concerned. The project is presented in the article the Storage Center of Electronic Records of Federal Archives. According to the scope of this project, it is planned to provide online access for users to archival records, including electronic copying. These projects significantly expand the possibilities of users in accessing archives by using modern information technologies

Keywords: information technologies, access to archives, a virtual reading room, interaction of archives and users, usage of archival records

## L'INFORMATICA COME STRUMENTO DI INTERAZIONE TRA ARCHIVI E UTENTI

#### **SINTESI**

L'articolo affronta i principali metodi per migliorare l'interazione degli archivi e dei loro utenti nel processo di ottenimento delle informazioni necessarie. L'obiettivo è considerare la base giuridica di tale interazione e l'adempimento delle richieste socio-giuridiche e tematiche degli utenti. Riguardano le principali forme di utilizzo dei documenti d'archivio (il portale degli archivi russi, il catalogo centrale dei fondi, le guide agli archivi russi, gli inventari elettronici degli archivi federali, i progetti di mostre online ei servizi elettronici per gli utenti). Nell'articolo viene presentato il progetto Centro di archiviazione dei registri elettronici degli archivi federali. Secondo lo scopo di questo progetto, si prevede di fornire agli utenti l'accesso online ai documenti d'archivio, inclusa la copia elettronica. Questi progetti ampliano notevolmente le possibilità degli utenti di accedere agli archivi utilizzando le moderne tecnologie dell'informazione

Parole chiave: tecnologie dell'informazione, accesso agli archivi, una sala di lettura virtuale, interazione di archive ed utenza, uso dei documenti archivistici

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# INFORMACIJSKA TEHNOLOGIJA KOT ORODJE ZA INTERAKCIJO MED ARHIVI IN UPORABNIKI

#### **POVZETEK**

Članek obravnava glavne metode krepitve interakcije arhivov in njihovih uporabnikov v procesu pridobivanja potrebnih informacij. Cilj je preučiti pravno podlago za takšno interakcijo in izpolnjevanje družbeno-pravnih in tematskih zahtev uporabnikov. Gre za glavne oblike uporabe arhivske dokumentacije (portal Ruski arhiv, osrednji katalog fondov, vodniki po ruskih arhivih, elektronski popisi zveznih arhivov, spletni razstavni projekti in elektronske storitve za uporabnike). V članku je predstavljen projekt Skladišče elektronskih zapisov zveznih arhivov. Glede na obseg tega projekta je predvideno, da se uporabnikom omogoči spletni dostop do arhivske dokumentacije, vključno z elektronskim kopiranjem. Ti projekti z uporabo sodobnih informacijskih tehnologij bistveno širijo možnosti uporabnikov pri dostopu do arhivov.

Ključne besede: informacijske tehnologije, dostop do arhivskega gradiva, virtualna čitalnica, interakcija arhiva in uporabnikov, uporaba arhivskega gradiva.

Modern information technologies play the role of a tool that allows us to solve the problem of improving the relationship between archives and the outside world due to the greater openness of archives. Archivists from different countries see in this tool a mean for activating the processes of using archival records for various purposes, thereby increasing the social status of archives and ensuring their functioning as the most valuable information resource of the nation's documentary memory. In this report, we would like to focus on the analysis of a number of information technologies that act as a tool for interaction between archives and its users.

First of all, it should be stated that any archive, addressing the use of information technology, inevitably directs its efforts to turn both archival records and archival finding aids into electronic form. The main tool for such transformation is the so-called digitization (digitalization). Digitizing archival records is the task of the archival services in different countries.

For example, the National Archives and Records Administration (NARA) in its Strategic Plan 2018–2022 (National Archives, 2021) outlined the following goal: to deliver archival records to the public online. In order to achieve this goal, it is planned to digitize 82% of NARA traditional holdings by FY 2021 and to develop an online catalog that will help users find the records they need. By 2024, NARA plans to digitize 500 million pages of records and make them available through the National Archives Catalog.

Archivists from other countries are working in approximately the same direction. For example, the so-called Digital Archive operates in the German Federal Archives (Bundesarchiv, 2022), containing digitized records from various permanent holdings and collections. A similar example can be presented by the UK National Archives (TNA), which also has an archive of electronic records (The National Archives of the United Kingdom, n.d.).

Digitization technology is widely used in the state archives of the Russian Federation. In this context, several directions can be identified:

- digitization of the archival records themselves;
- digitization of the inventories of archival records;
- digitization of the archival finding aids (catalogs, indexes, guidebooks).

In accordance with the digital transformation departmental program of the Federal Archival Agency, by the end of 2023, Rosarchiv plans mainly to provide users with electronic copies of archival records instead of paper originals in the reading rooms of federal archives.

For example, the State Archives of the Russian Federation (GARF) carries out intensive scanning of records. More than 6.5 million digital copies of records consisting more than 48 thousand fully digitized files have been made and are available in the reading room. It does not only greatly facilitate the work of researchers, but also makes it possible to "extend the life" of the archival original records (Bondareva, 2020). The same work is being done by other state archives.

Moreover, until recently, within the framework of the Federal Target Program "Archivy Rossii" (Russian archives) annual budgetary funding was provided for the digitization of archival records both at the federal and regional levels. Digitization of paper records of the Archival Fund of the Russian Federation stored in federal archives is one of the key indicators of the Federal Archival Agency Informatization Program (2011–2020).

However, the preparation of archival records for their use in electronic form is only a part of the problem concerning the interaction between archives and users. Another part of the problem is linked with the development of tools with which the users can

access electronic records. The most important tool is the electronic inventory of archival records. The Federal Archival Agency sets the task to complete the digitalization of all the inventories in federal archives by 01.01.2024 (Decision of the Board of the Federal Archival Agency, 2021). The process of digitizing archival inventories itself started more than a decade ago. However, not all federal archives immediately recognized the need not only to digitize inventories, but also to develop databases with search capabilities on their basis which, naturally, required significant additional efforts of archivists and computer scientists.

In a number of cases, archivists had to face problems of fading of inventory texts, insufficient information content in the description of archival records, and inaccuracies in the description. In these cases, it was necessary to deal with the so-called "improvement" of the archival description to form a full-fledged database. However, these efforts were not taken in vain. Currently, a thematic search against electronic inventories presented in the form of databases is available in almost all federal archives' websites.

For example, users of the State Archives of the Russian Federation can use the information retrieval system "GARF Elektronnye Opisi" (GARF Electronic Inventories), where more than 6.5 million captured file descriptions are stored. Almost 1.5 million Russian and foreign users have applied to this resource since it has been functioning, i.e. over 10 years.

The digitization of the archival finding aids (catalogs, indexes, guidebooks) also plays an important role in the interaction between users and archives. These finding aids are additional, but at the same time they present a very important element of archival information systems. In conjunction with thematic information resources presented on the archive's website, they provide great opportunities for users to access archival information resources.

The state policy of the Russian Federation envisages the creation of organizational, technical and other conditions in order to ensure the provision of services for the remote use of archival records and the finding aids for them on the Internet regardless of the geographical location of both users and archives, and also to balance the level of the so-called "information inequality" of the citizens. The benefits of using archival records remotely are particularly significant in the context defined by a new type of coronavirus.

Regulation of remote access at the federal level will ensure a unified approach to organizing this process in terms of the content and quality of the corresponding service. The implementation of remote use is planned to be solved by putting into operation the state information system for the remote use of archival records and the finding aids for them (GIS UIKAD).

It will be convenient for users that information about all archival holdings of both federal archives and regional and municipal archives integrated with the system, will be available for use on a single portal with a joint search engine and the finding aids. GIS UIKAD will increase the efficiency and quality of information services, expand the range of archival services and user audience by ensuring the centralization and availability of archival information resources on the Internet.

At the same time, such a system will reduce the load on the reading rooms of archives and on their employees, which will allow in the future to reduce the costs of traditional forms of serving citizens in archives. As a perspective direction for the development of GIS UIKAD, it is envisaged to integrate artificial intelligence into archival information search engine. It is planned that as soon as the corresponding data sets are generated, the search for archival information will be able to be carried out directly at the level of archival records (Zulkarnaev, 2021).

There we should mention the characteristics of some other information technologies that are used in Russian archives in the course of interaction between citizens and archives and can serve as a kind of bridges between them. It is known that all archives of the Russian Federation, without exception, are obliged to fulfill social, legal and thematic requests. Federal Law of 27.07.2010 No. 210-FZ on the government and municipal services determines that services are provided at the request of applicants.

The necessary information resources are formed in order to improve the work. For example, the reference and information system "Personnel Records Storage Places Database", which should include information about records stored in state, municipal and departmental archives of the Russian Federation.

This service provides the fulfillment of social and legal requests, received by archives at the personal appeal of citizens, by post, e-mail, through official websites, special portals, electronic channels of interaction with other institutions (the Pension Fund of the Russian Federation (PFR), Multifunctional centers for providing public services, etc.). Their amount has been greatly increased recently. In 2020 the country's archival institutions fulfilled more than 3.5 million social and legal inquiries. In these circumstances archives of all levels take a set of administrative and technological measures to ensure timely and qualitative fulfillment of requests. Manuals, directories, databases, the newest information technologies, mechanisms of cooperation with other organizations, involved in the provision of services, are developed, and work with users via the Internet is introduced.

In order to improve the effectivity of Rosarchiv and the federal archives in this sphere a Reference and information Center of the federal archives was created. The objectives include: information support of the applicants, including information about the places of records storage; fulfillment of requests, received in person, by post, e-mail, facsimile, from public authorities, the Pension Fund of the Russian Federation, multifunctional centers for providing public services, through the Public Services Portal of the Russian Federation (EPGU), Reference center of the Presidential Executive Office of Russia. The necessary information resources are being formed to improve this work. The All-Russian reference and information system "Personnel Records Storage Places Database", including information about the records stored in state, municipal and departmental archives of the Russian Federation, should play an important role in this case. Its creation will provide:

- compliance with all necessary standards, regulating the presentation of data in the system;
- completeness and integrity of data as the information search will be carried out not only within an archive or an entity of the Russian Federation but in all the archives participants of the project;
- opportunity to work with new information system in archives, in which due to the lack of human and material resources, directories are maintained in the form of a simple list of organizations.

Rosarchiv and the Center have already started creating this system, and its software has been developed. Nowadays the combined information base includes data only from the federal archives and contains more than 27 thousand entries. Since 2016 the work on filling the database by the information from the archives of the entities of the Russian Federation has been carrying on. It is planned to put the open part of the database on the storage places of personnel records into the portal "Archivy Rossii" (Russian archives), which will increase the efficiency of work with social and legal inquiries, reduce the quantity of non-profile requests (now it is in average of 20%) and it will greatly help citizens.

In 2015 the Unified automated informational system of registration and control for requests fulfillment (AIS "Requests") was introduced and registered by Rosarchiv for optimization of the work with citizens and organizations. Now it includes all users' requests received by Rosarchiv, the Center and the federal archives located in Moscow. This system allows:

- to establish a single standard service procedure from the receipt of request till its fulfillment;
- to increase efficiency and effectiveness of service provision;
- to ensure openness and "transparency" of the incoming requests fulfillment, the opportunity to control the quality and terms at all stages;
- to monitor activities of Rosarkhiv, the Center, the federal archives concerning the fulfillment social and legal and thematic inquiries;
- to maintain centralized functioning of the system, including its management, information security, modernization;
- to make necessary management decisions promptly.

The transfer of public and municipal services into electronic form leads to improvement of their quality and accessibility. According to the Federal Law "On Archives in the Russian Federation" (2004), users' requests can be received electronically, including via the Internet. The official website of Rosarchiv contains the detailed information about the agency and its activity, including public services provided by the agency and subordinate federal archives. In the special section "Applications of citizens" everyone can fill in an electronic form to apply to Rosarchiv. At present such requests compose more than half of overall amount of requests. Today social and legal requests in electronic form are accepted almost by all archival institutions in the country. They are sent via e-mail, through official websites, or portals of archival institutions and authorities, through the Public Services Portal of the Russian Federation.

Another aspect of the transfer of archives to the provision of services in electronic form is introduction of electronic interaction with the Pension Fund of the Russian Federation, from the territorial offices of which from 30 to 70% of social and legal requests are received by archives. The provision of public and municipal services through multifunctional centers for providing public services is carried out on the basis of appropriate agreements. Such practice is useful for users as it has significantly reduced the time for processing requests by the archives' employees owing to the information technology. Nowadays the municipal archives actively cooperate with multifunctional centers for providing public services. The lists of services provided by various archives through these centers, are substantially different. Cooperation of archival institutions with multifunctional centers is complicated by the absence – in some regions – of electronic interaction between them as well as the electronic interaction between multifunctional centers and different entities of the Russian Federation.

The creation of the Electronic Records Storage Center as a branch of the State Archives of the Russian Federation is also a perspective, innovative and ongoing project that can radically change the quality of interaction between state archives and users. This Center is expected to provide:

- centralized acquisition, storage and use of electronic records from federal ministries, departments and other organizations which transfer their records to state archives;
- centralized storage of digitized copies of inventories and records of the Archival Fund of the Russian Federation stored in federal archives.

It will significantly reduce the financial costs for the acquisition, storage and use of electronic records in comparison with the decentralized storage. In addition, the Center will ensure the development of search systems and provide access to digital resources for all users of archives, including via the Internet, exchange of information between archives on the use of electronic resources, as well as coordination of joint work in the field of informatization carried out by federal archives.

Therefore, the tools, processes and technologies presented in the report significantly expand the opportunities for citizens to interact with archives and create a solid base for providing access to archives using modern information technologies.

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Typology: 1.04 Professional article