

Poland

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A. Users and content

The process of digitisation in Poland, started in 1995, has sped up greatly during the last decade. Now, the majority of the leading archives, libraries and museums run digitisation. Since in recent years there has been a noticeable increase of digitisation initiatives in Poland, there has been a huge rise of amount of digitised cultural material. Now the digitisation activity is run not only by main state and academic archives and libraries, but also by smaller public ones.

Because the coordination on national level is needed, the national strategy of digitisation in Poland is presently being worked out. The strategy will contain a framework for developing of cooperation of all institutions responsible for cultural heritage and will consist of main recommendations concerning common criteria for selection of the material, technical standards of scanning, processing the scanned material, metadata, online access and long-term preservation.

What are the main materials/categories of objects being digitised?

Main categories of documents digitised in Poland are: objects of historical and artistic value (original or rare material that should be protect from handling); actively-used items (important mainly for the intellectual content and being highly demanded).

- In museums: different kinds of museum objects
- In libraries: Polish printed books (the highest priority for digitization is given to the editions of the 19 and 20 c.), Polish journals, photographs, prints and drawings, early printed books, manuscripts, and maps, dissertations and theses, academic textbooks
- In archives: actively-used administrative and legal records from 20 c. (family history, property records), historical sources of particular value, records on users demand

- In sites and monuments protection (archaeology, architecture).

How is the digitised CH content being distributed?

The fundamental requirement is to ensure that all Polish citizens in Poland (and around the world) can easily find the contents that meet their needs. CH content in Poland is distributed first of all in internet portals of the digital libraries (16 digital libraries in Poland). The most important are:

National Digital Library Polona
<<http://www.polona.pl>>

Wielkopolska Digital Library
<<http://www.wbc.poznan.pl/dlibra>>

Kujawsko-Pomorska Digital Library
<<http://kpbc.umk.pl/dlibra>>

Polish Internet Library
<<http://www.pbi.edu.pl>>

Digital Library of Wrocław University
<<http://www.bibliotekacyfrowa.pl/dlibra>>

Śląska Digital Library
<<http://www.sbc.org.pl/dlibra>>

Dolnośląska Digital Library
<<http://www.dbc.wroc.pl/dlibra>>

Podlaska Digital Library
<<http://pbc.biaman.pl/dlibra>>

Archives and museums present their digital objects occasionally:

Archives

<<http://www.polska.pl>,
www.agad.archiwa.gov.pl>

Museums (mainly as virtual exhibitions)

<<http://www.zamek.malbork.pl> www.1944.pl,
www.zamek-krolewski.art.pl>
 <<http://www.wilanow-palac.art.pl>>
 <<http://www.muzeum.wieliczka.pl>>
 <<http://www.muzeumliteratury.pl>>
 <<http://www.book.art.pl>>

Knowledge of existing www pages containing digital resources of cultural and scientific interest is a necessary prerequisite for the realisation of services aiming to make digital resources of cultural and scientific interest available to the Polish citizens.

Are there any eLearning or creative industry uses for the digitised CH material?

The Polish Virtual University (PUW) is a joint project of Maria Curie-Skłodowska University in Lublin and Academy of Humanities and Economics in Łódź, which offers study programs and extension courses over the Internet. Its task is to support traditional lectures and trainings as well as to promote modern teaching methods. It cooperates with Warsaw University (COME – Centre for Open Multimedia Education), Jagiellonian University, University of Warmia and Mazury, European College of Polish and Ukrainian Universities and Interklasa – initiative aimed at computerization of Polish gymnasiums. Students of the Polish Virtual University use first of all digitized textbooks, but also digitized CH materials.

Are there any special issues that deal with the general accessibility of the digitised cultural content?

There are two main problems concerning accessibility of digitised materials:

- restrictions of copyright
- relatively low ratio of access to Internet (ca 40% of Polish citizens).

B. Technologies for digitisation

What common standards are most commonly used in digitisation?

In Poland the digitisation standards are developed to establish the minimum requirements for maintaining records in digital format. They set out the requirements for digitisation and disposal of source documents, and outlines best practice recommendations for digitisation processes. The ultimate purpose of the standards is to ensure that digital objects are maintained for as long as they are required if retained in electronic format.

Metadata standards

In libraries: Dublin Core, MARC

In archives: EAD

Technical standards

Text (master copies): min. 300 ppi, 4 bit or 8 bit greyscale, file format TIFF, JPEG, PDF, DejaVu, lossless compression

Photographs, graphics (master copies): Resolution sufficient to provide – more than 2700 pixels across long dimensions, 8 bit to 24 bit colour, file format TIFF, JPEG, PDF, DejaVu, lossless compression

What technologies and tools are most commonly used in digitisation?

Most of digital libraries in Poland use the same software – dLibra (Multimedia Content Management Tool for Digital Library), written by Poznań Supercomputing and Networking Center. dLibra's aim is to help build and manage IST services like multimedia digital publications and books and other products formed in digital libraries, to make the management of multimedia content, metadata and objects easier. Because this software is not perfect, especially in the field of presenting the digital objects, National Digital Library Polona worked out the new one, which contains elements of dLibra software and in-house software of the National Library – SZZ (System of Digitized Collections).

How is interoperability ensured?

It is of the highest importance that the digital resources produced are as widely interoperable, accessible and secure as possible. For this reason, adoption of technical guidelines and open standards is encouraged to enable the building of e-services that give integrated access to cultural and scientific heritage. The adoption of technical standards can support as well the durability and long term preservation of the digital resources created.

C. Sustainability of content

What funding models and funding sources are most commonly used in digitisation?

Funding for digital projects in Poland is not stable. The most important funding sources identified for libraries, archives and museums digitisation are:

- Central government funding. The Ministry of Culture and National Heritage, as well as Ministry of Internal Affairs and Administration granted direct subsidies for few Polish digitisation projects. Beneficiaries of these subsidies were primarily large Polish cultural heritage institutions that are responsible for unique collections of high quality and value (National Digital Library Polona, Polish Internet Library, National Archives)
- Structural funding. Almost all of the cultural institutions in Poland assign an appropriate amount of money in their internal budget for running digitisation.
- Local authority funding
- Internal funds of the memory institutions
- Special grant funding (Kronenberg Foundation, Robert Bosch Foundation, Lanckoro?scy Foundation)
- EU co-funding - 6th EU framework programme for research and development (i.e. Tel-Me-mor project).

Most memory institutions received their funding from national funding agencies rather than from private or corporate donations. There is a need for new substantial new external funding if digitisation of Polish cultural heritage of national and international importance, is to continue.

Have you any examples of cost-reduction?

In spite of insufficient funding cost-reduction is an important issue in Polish digitization projects. Best practices in cost-reduction are:

- Using software System of Digitized Collections to reduce levels of human intervention in digital conversion and metadata creation (National Digital Library Polona)
- Using DejaVu format (as a OCR tool) – Wielkopolska Digital Library, Śląska Digital Library, Kujawsko-Pomorska Digital Library, Dolnośląska Digital Library etc.

Have you any examples of national competence centres in digitisation of cultural content?

Digitization competences in Poland generally are dispersed. Polish libraries, archives and museums are currently on various levels concerning expertise and digitization practices. There is no official center for digitization, but few libraries and archives – having equipment and techniques for image capture and text conversion, and employing experts with work experience and skills in digitizing – could become very soon competence centers for digitization and digital preservation, especially those, which are ready to share their know-how with others in the form of consulting and training. The most important cultural institutions, which are at the moment unofficial centers for digitization and could apply in the nearest future for the status of competence centers, are: the National Library of Poland, the Central Archive of Historical Records, Poznań Supercomputing and Networking Center, the Kujawsko-Pomorska Digital Library.

D. Digital preservation

In June 2006 Minister of Culture and National Heritage established Committee for Digitization. This assembly, consisting of high quality specialists representing different memory institutions, is responsible for coordinating and governing the process of digitisation in Poland. The task of the Committee is to gather information about current and planned digitisation initiatives

of all kinds of cultural material in different institutions, and to create overviews of such digitisation in order to prevent duplication of efforts and being able to indicate the predictable increase of digitised material in future. Secondly, it develops quantitative and qualitative targets for digitisation, minding that all digitizing efforts

in memory institutions should be purposeful, useful and efficient in order to ensure the preservation of digitized cultural heritage and its use for the benefit of the whole society and each of its members. Important role in the Committee works plays the National Library, which has rich digitisation experience and is the host of the National Digital Library Polona.

E. Monitoring progress

Output indicators	Number of collections / items	Comment
Number of digitised collections	210/910.000	
- musems	80/280.000	
- libraries	60/130.000	
- archives	70/500.000	
Number of digitised collections recorded in a national inventory	70/93.000	
- musems	10/500	
- libraries	35/90.000	
- archives	25/2500	
Number of digitised items per collection type		All digital collections in Poland contain different types of documents (texts, images, objects), so it is very difficult to give exact amounts
- object entries (m/i)		
- text documents (m/i)		
- images (m/i)		
- audio (m/i)		
- moving images (m/i)		

Use indicators

Use	Amount	Comment
Use of web-sites distributing digitised heritage content		
- user sessions	12.500.000	
- average duration of user sessions	0,5 h	
- average page impressions per user session	10	10 publications - ca. 100 pages
Purchase or distribution of CDs / DVDs		
Audiences for streaming, video-casting or broadcasting		

In 2006 no user-need surveys concerning digital content were conducted in Polish memory institutions.

The National Library of Poland plans such survey in the end of 2007.