

Local Policy of Cultural Information Resources Integration

Peter Greenfeld, Tatiana Mersadykova
Alt-Soft. Information and Communication Technologies company

Introduction

This presentation examines the electronic encyclopaedia both as an instrument and as an environment for integrating regional cultural information resources (public libraries, cultural centres, museums and archives).

Many regions actively work on publishing the encyclopaedias, which portray the administrative structure, economy, culture and history of a region. These undertakings help to solve the political, scientific, historical, natural history, and educational tasks as well as tourism informatisation tasks.

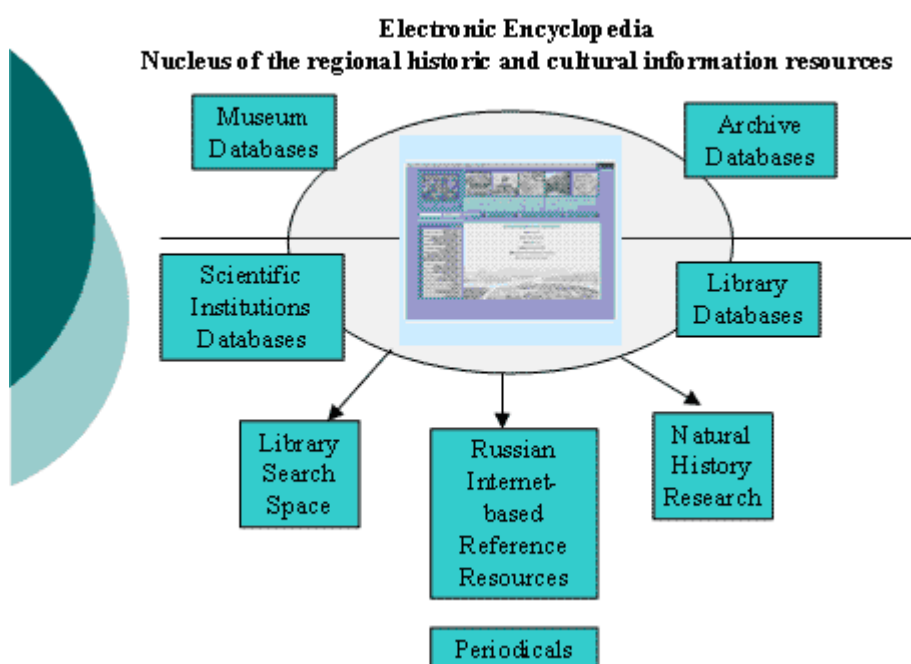
Alt-Soft company developed a program and technological complex KAISA-Encyclopaedia, a methodology of developing multi-language informational resources and a reference book system, which arrange the connections between the information objects and enable effective multi-faceted search through the multi-language search engine.

This technology could be applied both for creating hard-copy encyclopaedia resources and for the developing Internet-based electronic publications as well as CD and DVD versions.

The regional electronic encyclopaedia project offers an opportunity of creating a unified reference space for the information resources and regional authority files developed on the basis of the encyclopaedia's index:

- thematic and word index of the encyclopaedia (the article names sorted by topic provide a comprehensive perspective of all the aspects of region's life and history);
- address (geographical) index, which includes, among others, the region's historic representation on the electronic map;
- modern electronic map of a region;
- cartographic index (maps and charts, including the historic maps and separate geographic objects of a region);
- alphabetical listing;
- subject guide (historic events, organisations, institutions, etc.);
- chronological directory;
- bibliographic index;
- iconographic index.

This system of updated reference guides can serve as a base for coordinating and integrating various regional informational resources, and the electronic encyclopaedia could become a nucleus of cultural information resources, which unifies the databases of archives, museums, libraries, and historic preservation authorities.



Results of Information Resource Integration

The cultural institutions databases enrich the encyclopaedia's content with the information about different collections, which thus become available to a wide circle of users.

Encyclopaedia, in its turn, supplements the reference information to the description of the cultural heritage objects obtained from the cultural

institutions' databases.

The program and technological complex KAISA-Encyclopaedia facilitates the creation and development of the regional electronic encyclopaedia providing the following possibilities:

- Updating the database with the newest reference materials, appending new articles and images to the expandable indexes of the electronic encyclopaedia.
- Supplementing the explications of the databases of museums, archives, and libraries as the electronic encyclopaedia satellites. No other way of integrated representation of the regional cultural values dispersed in various storage facilities of the cultural organisations exists at this time. The rich collections of the regional cultural heritage remain unfamiliar to the world. One of the encyclopaedia's purposes is to fill this informational vacuum.
- Including the electronic encyclopaedia into the all-Russian and international information systems of cultural heritage, including those for the libraries.

The texts and images of the electronic encyclopaedia and its informational satellites, which are interconnected through the reference indexes, represent in aggregate a new type of informational resource. Its search functions bring new knowledge of regional history and culture.

The technological complex KAISA-Encyclopaedia was utilised for creating a unique project for Russia - Saint Petersburg's electronic encyclopaedia^[1].

Saint Petersburg's electronic encyclopaedia was developed by the following participants:

- D.S. Likhachev's International Charity Foundation (project management);
- Petersburg-Leningrad Salvation Charity Foundation (content provision);
- Alt-Soft company (software provision).

Alt-Soft collaboratively with the A.S. Popov Central Network Museum using the unified information and search system ARBIKON, which unifies library consortia, for the first time in the country created a prototype of an informational consortium of libraries, museums, archives, and preservation authorities entitled RUSART (Russian United Space of Art Resources and Technologies.) The results of the experimental project of combining the cultural heritage databases of different types and belonging to different authorities are available online at http://www.arbikon.ru/services/index_ml.asp. In addition to the **bibliographic databases** the search mechanism includes the following cultural heritage databases:

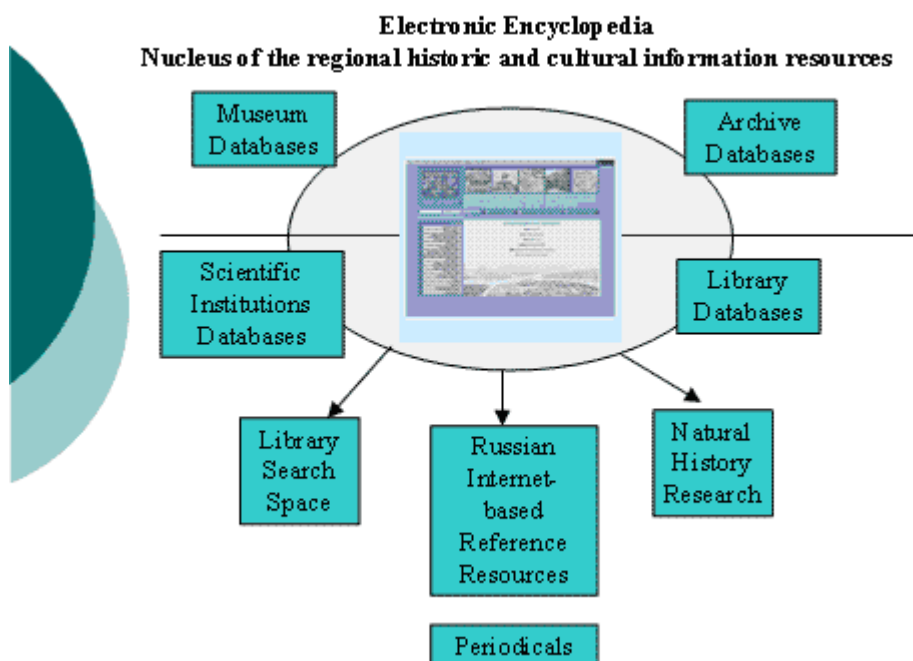
- Database of Saint Petersburg's electronic encyclopaedia;
- Database of Saint Petersburg's Central State Archive of Film and Photographic Documents;
- Database of Pskov Region Cultural and Historic Monument Preservation Scientific Centre.

(One of a number of search queries, which unite the four types of resources, is "Delvig".)

The ZooPARK module server (creation of the scientists of the Trofimuk United Institute of Geology, Geophysics & Mineralogy of the Siberian Branch of Russian Academy of Sciences, Novosibirsk - O.L. Zhizhimov and N.A. Mazov^[2]) provides the modification and usage of different question-answer formats on the basis of the Z39.50 protocol. An abstract CIMI data structure enables the adjustment to various structures of the cultural institutions' databases.

The technology of integrating the regional informational resources in a unified information search environment allows for:

- Synchronising the formats of existing databases of the cultural institutions with the international CIMI standard;
- Performing information search and exchange with other Z-servers (including the library ones) using the z39.50 protocol;
- Presenting the located results in a convenient format, according to the user's demands (MARC, CIMI, XML, GRS, ad others.)



Due to its universal nature, the regional encyclopaedia connected to a single search point completes the crucial functions of supplementing the regional information query results with additional reference information.

This example of information resource cooperation demonstrates that the electronic encyclopaedias can also act as bridges between the regional informational resources of different types.

The new electronic encyclopaedic resources are also under construction: the electronic encyclopaedia of the culture of Leningrad region and Perm Region natural history encyclopaedia.

Our Recommendations

1. Include the creation of the regional and specialised public multilingual electronic encyclopaedias with the extensive system of reference indices into the national and regional electronic strategies as an instrument of information resource integration and as a knowledge formation and provision environment.
2. Support the organisation of the state system of creating and maintaining the authority files - the public regulatory and reference system for adequate information placement into the databases with the use of this system and the relevance information search and query results.
3. Utilise regional encyclopaedias for integrated fully-informed representation of digital collections of museums, archives, libraries, and databases of cultural heritage objects for the purposes of providing comprehensive information regarding the region's cultural heritage, assisting the educational programs, supplying information for tourism, and further advancing natural history research.

The cultural institutions' databases play an important role by enriching the encyclopaedic content with the information concerning the available collections, which, this, become widely accessible to the public. Encyclopaedia, in its turn, supplements the reference information to the cultural heritage objects' description obtained from the cultural institutions' databases. Such mutual benefit and enhancement, which generates new knowledge, is enabled by the use of a unified regulatory and reference system.

[1] <http://www.enc.lfond.spb.ru>, <http://www.encspb.ru/>

[2] <http://z3950.uiggm.nsc.ru>

About authors

Peter Greenfeld - General Director, Alt-Soft. Information and Communication Technologies company

E-mail: altsoft@altsoft.spb.ru

Tatiana Mersadykova - Lead Specialist, Alt-Soft. Information and Communication Technologies company

E-mail: tem@altsoft.spb.ru

© *Peter Greenfeld, Tatiana Mersadykova, 2005*

The publication is based on the paper presented at International Conference "UNESCO between Two Phases of the World Summit on the Information Society" (Saint Petersburg, Russia, 17-19 May 2005)