E-SEVNTUIR - Digital Research Repository (experience and perspectives)

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Abstract

On May 21, 2009 at the conference "Academic library activity in the context of modernization in higher education" the community of the university libraries adopted the "Declaration of the universities libraries in support of the Ukraine Initiative of the Open Access to Knowledge". In the same year SevNTU library commenced the creation of its own electronic open archive (repository: http://sevntu.com.ua/jspui/). The repository of Sevastopol National Technical University (eSevNTUIR) is created to collect, organize and keep intellectual products of the university community in the electronic form, to provide open access with the help of Internet technologies, to distribute these materials in the medium of the world research and education society, to create a reliable and accessible system accounting research publications of university departments and individual employees. The core of the archive is the collection of scientific papers "SevNTU Bulletin" published by the university. It has 11 series, continuous issue numbering and a documents collection of SevNTU Academic library, which includes bibliographies and materials of the conferences held by the library. Section of the SevNTU scientific archive corresponds to the series of the collection, and the collection - to the number of registration. The main page of the section shows all the collections. The system of open access which was chosen to create the repository is DSpace, developed by the Library of Massachusetts Institute of Technologies and Hewlett Packard Company. To date the library repository contains 15 collections. There are also plans for future: creating collections of theses abstracts, research reports and personal pages of the University faculty. Overall management of eSevNTUIR is executed by the Coordinating Council on the University repository. The Academic library is a coordinator and a main executor of the process of creating the repository.

Open archive of information or the systems of open access became an important part of the world information infrastructure. Reflecting realities of the modern world they came out to be an alternative to printed publications. Aims of the society are to get an access to the information, tasks of the libraries - to provide this access, and the tasks of the information generators are to submit information in accordance with the aims of its generation. All this met on the information field and caused an appearance of the system of open information archives.

The publication technology of Open Access journals was developed and supported within the project of the SPARC (Scholarly Publishing and Academic Resources Coalition) uniting more than 180 university libraries and information services of North America, Great Britain, Ireland and a number of Asian countries. The essence of the technology: after the scientific abstracting the material is paid and then it is available free of charge.

An idea of the open access found its supporters rather soon. Scientists, foundations and the institutions financing scientific developments turned out to be interested in its realization. For example, the Wellcome Trust in Great Britain was the first foundation that started binding to usage of the open access system while publishing results of the scientific researches supported by this foundation. UK’s House of Commons Science and Technology Committee called for support of the Open Access journals and recommended all the British higher education...
establishments and the institutions financed by public research foundations to create free Web institutional repositories.

In 2005 the Verkhovna Rada of Ukraine recommended to make it obligatory to publish in archives of open access the research results fulfilled at state expense. So the creation of available electronic archives came to be one of the most important tasks of the Ukrainian university libraries.

On May 21, 2009 at the conference “University library activity in the context of modernization in higher education» the community of the university libraries adopted "Declaration of the university libraries in support of the Ukraine Initiative of the Open Access to Knowledge».

In the same year SevNTU Library commenced the creation of its own electronic open archive (http://sevntu.com.ua/jspui/). There were following top items:

- Learning experience of Ukrainian libraries in their creation of similar repositories.
- Defining the aims and tasks of the repository.
- Choosing the software.
- Determine common principles of work and the elaboration of controlling documents.

The repository of Sevastopol National Technical University (eSevNTUIR) is created to collect, organize and keep intellectual products of the university community in the electronic form, to provide open access with the help of the Internet technologies, to distribute these materials in the medium of the world research and education society, to create a reliable and accessible accounting system of researches publications of the university departments and the faculty members. The core of the archive is collection of the scientific papers "SevNTU Bulletin" published by the University which comprises 11 series (“Philosophy”, “Political Science”, “Economics and Finance”, “Process and Control Automation”, “Pedagogy”, “Mechanics, Energy, Ecology”, “Informatics, Electronics, Communications”, “Philology”, “Psychology”, "Physics and Mathematics," “Process Optimization”) with continuous issue numbering.

Aims and tasks of eSevNTUIR:

- Provide with the place and the method of centralized and long-term storage of electronic full-text writings.
- To promote growth in the university popularity by presenting its scientific information in the global Internet. Increase citation index of scientific publications of Sevastopol National Technical University faculty members by providing open access to them with the help of the Internet.
- Create a reliable and accessible accounting system of researches publications of the university departments and the faculty members.

The open access system chosen for creating the repository is Dspace which is developed by the Library of Massachusetts Institute of Technologies and Hewlett Packard Company. Dspace is an open source system placed on SourceForge and distributed under BSD licence, all copyright reserved by the HP and MIT. This choice was conditioned by the following criteria:

- support of the Open Archives Initiative’s Protocol for Metadata Harvesting (OAI-PMH);
- opportunity of creating a multidisciplinary archive;
- support of different digital formats;
- flexibility while using metadata;
• comfortable and flexible design;
• authorization functions that make it possible to edit materials and to restrict the access to them;
• opportunity of searching and reviewing and the system of automatic dissemination via Opt-in Emails service;
• access to the above mentioned functions via WEB-interface.

By 2009 in the registration list there were 700 participants representing their resources and using the common resource Dspace. Dspace provide an opportunity to choose: a free available publication or a publication in a restricted mode where just the name, the abstract, the author and some other data are available while the text itself becomes publicly-accessible only in 5 years (www.dspace.org).

The method of data management in Dspace reflects the structure of organization forming the given system. Sections and subsections form a structural hierarchy. This means that the subsection can contain their subsections. At the foot of the hierarchy there are collections. Section of SevNTU electronic repository corresponds to the series of the collection, and the collection - to the number of the issue. The main page of the section shows all the collections.

It was decided to create SEVNTU scientific archive starting with the issues of “SevNTU Bulletin”. The full-text articles are in PDF format, although the system lets work with more than 30 formats of documents.

Nowadays the library archive contains 21 sections, 101 collections and 2587 writings. Now we are creating a collection of thesis abstracts, research reports and personal pages of the University faculty members, and a collection of SevNTU Scientific Library documents which includes materials of the conferences held by the library, bibliographies, etc.

Overall management of eSevNTUIR is executed by the Coordinating Council on the University repository work. The University library is a coordinator and a main operator developing the repository. The technical and programming support is provided by the Centre of computer technologies.

So the electronic archive of the University scientific papers will let publish scientific works of the faculty members rather swiftly. For the purpose of effective usage and promotion the repository is registered on the site OpenDOAR (http://www.opendoar.org), ROAR (http://roar.eprints.org) and in the search system of Ukrainian open archives (http://www.oai.org.ua).

This is also the project “An Electronic Library of Ukraine: Creation of Knowledge Centres in the Ukrainian Universities” that is rather interesting for the cooperation as well. This project is interesting in the context of developing a single resource managing e-resources that are made on the base of different universities of Ukraine.

Bibliography:


4. Мриглод І. Наука України у світовому інформаційному просторі / І.

Univ. of Nottingham. - Electronic data and program. – Nottingham, cop. 2006-2010. - Mode 
of access: http://www.opendoar.org. - Title from a monitor.

6. DSpace Federation Web site [Electronic resource] / Introducing DuraSpace. - 
Electronic data and program. - [S. I., 20--?]. - Mode of access: http://dspace.org. - Title from 
a monitor.

data and program. – [S. I., 20--?]. - Mode of access: http://www.eprints.org/software. - 

8. Title from a monitorRegistry of Open Access Repositories (ROAR) [Electronic 
resource] / Univ. of Southampton. - Electronic data and program. – Southampton, cop. 

Inform. [et al.]. - Electronic data and program. - [S. I., 20--?]. - Mode of access: 
http://www.openarchives.org. - Title from a monitor.

10. Шрайберг Я. Л. Роль библиотек в обеспечении доступа к информации и 
знаниям в информационном веке : ежегод. докл. междунар. конф. «Крым-2007» / Я. Л. 
Шрайберг // Науч. и техн. б-ки. – 2008. – № 1. – С. 7–44.