Abstract: Over the last few decades, our library policies and strategies were mainly focused on including new technologies in current activities, as well as on developing new users’ services. Furthermore, as an academic institution, our library needs to fulfil new and challenging research requirements. The current paper addresses the new public services developed during the past two years in our library. Among these, one could mention the “single search box” and the online requests for publications from the closed stacks. This paper also discusses the discoverability of library collections by integrating local electronic resources, in particular our digital library, into the international system of informational resources, given the benefits, difficulties and limitations of the above mentioned undertaking.

Keywords: information technology, library services, academic libraries, collection discoverability, library portal

1. Introduction

In times of major changes in the roles and functions of contemporary libraries as public institutions and as information providers, they need to adapt and reconfigure the range of library services offered to the public, as well as the structure of own departments in order to effectively comply with users’ information needs. The dynamics of library services is a mandatory desideratum in a digital world. However, systemic problems libraries have to deal with can alter the continuous process of updating the range of library services they offer to the users. Specialized libraries within the academic environment are more affected by this situation, as on the one hand, they are compelled to keep up with the permanently increasing users’ information needs. On the other hand, academic libraries are confronted with a critical decrease in their budgetary resources intended for acquiring publications. In addition, librarian positions and budgetary salary allocations are also diminished, with a negative impact on the work motivation and job satisfaction of academic library professionals.

Besides all these aspects, it is interesting to acknowledge that in our country there are a few regulatory bodies at the highest scientific and academic representation level. Among these, one may refer to ANCS (NASR – National Authority for Scientific Research) and
CNCS (NRC - National Research Council). They are the main regulating bodies involved in establishing the eligibility criteria applied to entities coordinating scientific research programmes, in function of the number of author or co-author main entries identified in international academic databases, as well as in international catalogues like Worldcat and the KVK - Karlsruhe Virtual Catalogue. Unfortunately, these eligibility criteria are being applied without taking into consideration the fact that none of the Romanian libraries, and to be more specific, none of the scientific libraries in Romania has the possibility of integrating its own catalogue into Worldcat or KVK for that matter. This happens either because of high financial costs involved by the accession procedures or simply because of technical problems and other issues that are specific to librarianship and information science.

In this paradoxical context, Lucian Blaga Central University Library has developed and continues to implement a policy focused on users’ information needs and on providing modern information services. At the same time, the institution is trying to reduce the negative impact of budgetary limitations on the quality of its services, as well as on the work motivation of its personnel.

Throughout the past year a series of applications have been launched by our institution, with the full support, dedication and professionalism of library staff. At the same time, we have tried to capitalize all the resources owned by Lucian Blaga Central University Library to the maximum. In what follows we are going to give you a short overview of three new library services our users have been provided with. In a nutshell, we are going to refer to the motivation, evolution, impact and importance of the above mentioned services.

2. EDS – library portal

“Lucian Blaga” Central University Library created its own online catalogue in 1995 using the VUBIS system acquired through a Tempus cooperation and mobility programme. In August 1999, the library system was changed with ALEPH 500 using ORACLE as DBMS (Database Management Systems). The communication of the system is based on TCP/IP and Z39.50 protocols. MARC formats can be used for bibliographic descriptions. Like all academic libraries in Romania, our library uses the UNIMARC format. Given these aspects, the system allows us to connect our online catalogue to national or international catalogues. We also have the possibility to integrate the online catalogue into a unique searching portal in order to retrieve information from all library resources.

In October 1996 our library offered access to Academic Dialog, an international encyclopaedic bibliographic database with abstracts and full-texts. Our institution was the first Romanian library to provide this new public service. Since 1996, we have yearly subscribed to external academic databases and their number continued to increase (e. g. in 2010, our library had 29 databases on subscription). As we all know, each database has a proper interface for information retrieval. Because of this inconvenient, users prefer to turn to the Google search engine for research purposes.

In 2010 we submitted a project application for creating a library portal using the Primo system. Unfortunately, lack of financial resources caused the project to fail in being implemented.

In 2011 we adopted another solution: implementing the EDS - EBSCO Discovery Service as a unique interface for data retrieval from multiple information resources. A subscription model is used for payment operations. First, we had to fill out a questionnaire about the library and the information resources it provides, as well as provide a lookup table with location codes from the online catalogue. The main problem was the UNIMARC format, because EBSCO uses MARC21. For this reason, we had to create a table of correspondence between these two cataloguing formats. We have to mention that there are fields and subfields in UNIMARC without equivalent in MARC21. Another problem is related to item fields (type of material, library, call number, barcodes, etc.). In our system, this type of information is
stored in the administrative database, instead of the bibliographic database. Given these aspects, it is necessary to have a routine to fix the problem when the catalogue is exported. The third problem concerns the authority database which is yet to be solved.

The library portal offers the possibility to search in subscribed databases and in our own online catalogue. Access to full-text is limited on IP restrictions. At first, the portal could only be accessed either from our library or from the building of „Babeş-Bolyai” University where some of our branch libraries are hosted. In March 2012 a script was implemented and the portal was opened to guest users who could search from anywhere on the Internet without access to full-texts.

The next step is to connect the EDS application with the ALEPH system for authenticated users; to be more specific, patrons from the Aleph system must have the possibility to access the full-text from anywhere if they are logged into the EDS system using the same ID and password as in Aleph.

In what other library resources are concerned, we have to integrate the digital library and our own bibliographic databases created by using the ProCite application.

The single search box of the portal allows queries by using keywords, authors and titles. In the advanced search mode, users can combine up to 12 criteria (all text, author, title, subject terms, journal title/source, abstract, ISSN, ISBN) with Boolean operators (AND, OR, NOT). The Visual search mode allows the result lists to be displayed either in block style or in column style. In order to improve the search results, one can use proximity operators, limiters or expanders. In addition, the Autocomplete Search Suggestion and the Run SmartText Search when query returns no results options can be activated by an authenticated user.

Many languages of the interface, including Romanian, as well as the Translating an Article option are very useful for non-English users.

On the other hand, the Creating a Bibliography and Accepting a Shared Folder options help researchers and teaching staff to create documents more easily and to share the list of records on similar subjects.

The specific web 2.0 tools are included in the portal, which compensates for their absence in the library OPAC.

We have noticed that EBSCO provides an application for accessing the EBSCO Discovery Service from iOS (iPhone, iPod Touch and iPad), as well as from Android devices.

All the features mentioned in the present paper and more others make this portal a longed-for tool by any academic institution handling multiple bibliographic databases, as EDS is a very useful tool in the information retrieval process.

3. Improving discoverability of digital collections

We started building our own digital collection in 2008. Since then, our digital library has grown and at this point, it contains more than 21,000 items.

In 2011 we have launched the new digital library page, powered by DSpace and accessible from the library web page. Our users can enjoy the new page and its new features, especially the full-text search option, in four languages, including Romanian.

Since the digital library page was launched, minor improvements were made in order to fulfil our users’ needs.

We included a large variety of sharing buttons which provide end users with a simple and easy way of sharing links to our content, across the social web.

We also constantly share new content on our Facebook and Twitter pages.

For 2012, besides, of course, adding new content, our major goal is to integrate the digital collection of our library into some of the most important catalogues around the world.

The first major catalogue we aim being included in is the OAIster Database, which is a collective catalogue of millions of records standing for open access digital resources. The
database was built by harvesting data from open access collections worldwide using the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH).

Users can search for records within the OAIster Database through the following freely-accessible webpage: http://oaister.worldcat.org. Additionally, OAIster records are fully accessible through WorldCat.org, and will be included in WorldCat.org search results, along with records from thousands of libraries worldwide.

All these have been made possible because the OAIster is managed by OCLC\(^1\) (originally created by the University of Michigan in collaboration with the University of Illinois at Urbana-Champaign).

Let’s see how our metadata could be included in this database.

Our digital library is powered by DSpace which includes an OAI server capable of harvesting or providing data using the OAI-PMH version 2.0 protocol.

To create metadata in DSpace, we take over the information from our library catalogue then we make bundles of XML files which are subsequently imported by the software using batch commands.

The next step is to enable our OAI-compliant repository and prepare the "base OAI url" and the metadata.

OAIster harvesting uses a self-service model, which means we set our own harvesting schedule and customize the metadata map for collections using the WorldCat Digital Collection Gateway.

After setting up our account in the Gateway, metadata is automatically harvested by the OAIster, but since they use MARC21 the DublinCore metadata needs to be converted. Most of the process is automatized but one has the possibility to map one’s own metadata. They offer the possibility to set up the layout of metadata in three different formats.

The last stage involves setting up the synchronization. It is automatically done when users access the database for the first time, but they can subsequently set up an option to configure the synchronization frequency of the existing collection.

Unfortunately, since this is the first time our metadata is exported to another system, we have encountered a series of problems.

One of the major concerns is that even if the OAIster page displays correctly our metadata, they are not searchable if they comprise non-English characters (e.g. ă, ş, á, etc.).

The second problem we have encountered is that the layout of the periodicals collections is not optimal for Worldcat. In the case of our digital library, each journal number is introduced in DSpace as a new item, which makes browsing and searching in our own system very easy, but creates unexpected problems when these items are exported. Since they are structured as separate items, they are all imported in OAIster as such. However, the ideal situation would be when each journal title appears only once.

We have asked for OCLC support about these problems and we hope they can be solved in the nearest future.

Meanwhile, we are trying to find ways to solve these problems. In the case of titles comprising non-English characters we might add an alternative title, replacing Romanian characters with their English equivalents.

The second point at issue concerns periodicals only. We are currently trying to find solutions for this problem, as well.

4. Electronic requests for publications

The third subject we are going to approach in this paper is the updating of the range of services provided to our library users. The updating process is actually focused on the launching of a new library service which enables users to request the publication(s) they want...

\(^1\) OCLC Online Computer Library Center, Inc.
from the closed stacks, by accessing the online catalogue. The reservation option only works in the following conditions: the publications requested by users must have electronic bibliographic descriptions in our library catalogue and users must be authenticated by logging in with their ID and password.

Launching this new more user-friendly option also has other advantages: it reduces time expenditure both for users and for the library personnel engaged in making the connection between items in the closed stacks and their end users. The electronic request of publications also eliminates potential errors that may occur in the process of publication retrieval which was previously done manually. Among these frequent errors one can mention confusions related to the location of items assigned to certain bibliographic descriptions, due to difficulties in understanding users’ illegible handwriting. Other similar flaws refer to inaccuracies in writing down locations of records: users may right other locations than the right ones or simply mix-up numbers or characters.

Coming back to the attitudes towards the new type of request for publications, users’ obvious preference for the electronic reservation option has been noticed from the beginning, due to their constant positive feedback.

The online request for publications was developed as a new operation within the Aleph integrated library system implemented by “Lucian Blaga” Central University Library. The proper function of this new and modern library service is now possible as a result of multiple testing and configuring sessions completed by librarians within the Public Relations Department and by IT engineers within the IT and Digitization Department.

From the point of view of its progressive development, the implementation of the new library service was made in three stages. The first stage occurred in the second half of 2011 and started by a series of interdepartmental testing sessions which focused on the configuring and parameterization of the library integrated system. The second stage was initiated in January 2012 when the application became available for the use of library staff. This second stage was also considered a testing period intended both to prove the functioning of the application and to prevent certain malfunctions in the system. One may consider middle January as the starting point for the third stage of implementation of the new library service. It then became not only advisable for users to access the new application, but it was also mandatory for the publications stored in closed stacks and retrieved by users in the reading rooms from the main building of the library.

Once the new library service was set-up, users were given specific graphical guiding directions. They were ‘strategically’ placed near each workstation in the Catalogues Room. The guiding directions were meant to avoid confusions, as well as to ensure a smoother circulation of publications. At the same time, trained librarians on duty provided guidance and training to users who needed assistance.

From a technical point of view, this new library service works by connecting two components of the integrated library system: the online catalogue and the database comprising the subscribed users owning a valid library card. If we were to give an account of the whole process at a descriptive level, the first step would be accessing the online catalogue, either through the web page of the library (www.bcucluj.ro), if users access it from a remote location, or by simply clicking on the OPAC icon on the workstations intended for public use. After accessing the online catalogue interface, users must authenticate by logging in with an ID and password which actually represent the figures of the barcode on each library card.

Once the user is authenticated, he/she can launch queries based on previously selected criteria. After identifying the publication in the online catalogue, users will click on the item location indicating ‘Central Library’ main building and then on the ‘request’ button on the left side of the screen. This click will launch another window in which users are asked to specify the name of the reading room and the seat number they received. If the user only wants to photocopy a few pages from a publication, he/she will mention ‘xerox’ instead of the seat number and the publication will be delivered to the user at the Front Desk in the Catalogues
Room. Once the electronic request has been launched, printers located in the closed stacks will automatically print a request form comprising the item location and the collection the publication belongs to.

From what we have presented in the present paper, we can infer the system still has its own limits in what this new library service is concerned. As a first restriction one can mention location, as only publications in the closed stacks of the main library can be electronically requested. Unfortunately, the service is not implemented within the branch libraries network but we hope it will be, in the future. A second problem refers to the type of publication, as for the moment, users can not use the electronic request feature to access periodicals, be they newspapers of magazines. A third limitation is related to the collections of the library. Only publications belonging to the Main Collection and to the Legal Deposit collection are subject to the new electronic library service. Last, but not least, the relative small number of publications having an electronic bibliographic description in the online catalogue, in relation with the large number of volumes held by our library is probably the most important problem from the point of view of the amount of work it requires in order to be fixed. The retroactive conversion process is extremely important in our institution’s long term development policy but the matter is not the subject of the present paper.

After making a thorough analysis of the strengths and weaknesses of the new library service, one can certainly assert that its benefits outweigh potential malfunctions or limitations. Moreover, implementing the electronic request for publications is yet another proof of the efficiency automation provides to libraries and we consider it another step towards the modernization and bringing up our library to the standards set forth by western libraries.

5. Conclusions

The automation process of the library is a difficult, but very necessary approach. It must be implemented by adopting international formats and protocols.

Developing public library services by using new technologies in order to access the knowledge databases should be a main concern for all academic libraries.

Integrating local resources at a national level should be a priority for Romanian authorities. Financial support and national expertise are very necessary for all libraries.

Integrating Romanian information resources at an international level increases the visibility of our institutions and the appreciation among foreign academic communities. The whole process must be done in a professional manner, by developing cooperation between libraries, with the full support of authorities.

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