

marketing of scientific and research organizations New point of view of European Marketing

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Modern library and the promotion of a scientific institution





MODERN LIBRARY AND THE PROMOTION OF A SCIENTIFIC INSTITUTION

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Introduction

Library has for centuries been associated with books arranged systematically on shelves, ubiquitous silence and dust. Despite constant changes taking place in libraries, they are still regarded as outdated, archaic creations. The history of libraries dating back to the third millennium B.C. and the moment of introduction of printing presses (15-16th century) is evidence of very small social coverage. Since the end of the 20th century libraries and library services have been under strong pressure of the development of science and technology, that's why adapting to the surrounding world they are experiencing "a new start"¹. Apart from previous functions: collecting, preparing and granting access to books, they play the role of modern centers of scientific information.

More and more often the issue of marketing of library services and innovative approach to disseminating knowledge through digitalization is discussed. Among the pioneers there are certainly the National Library, the University of Warsaw Library and the Silesian Library. Smaller libraries owned by scientific and research institutions such as the library of the Institute of Aviation and the library of the Institute of Law Studies, which also play a major role in promoting knowledge, are following in their footsteps.

The article will present the methods of applying modern solutions with regard to traditional libraries, as this is the approach expected by the contemporary reader. Responding to the needs of the reader = client, libraries have become a segment of the market. An exceptional part of this sector are scientific libraries. Thus, it is necessary to think how it is possible to use particular knowledge for the promotion of scientific institutions superior to libraries.

The environment of marketing of library services

First, it is necessary to take a look at the target group of marketing of scientific libraries, at its expectations and think how it is possible to satisfy these needs.

Most of the target group are well-educated people or people willing to obtain higher education, who want to expand their knowledge or look for detailed information. The target group includes scientists in the broad meaning of the word and hobbyists, people both from big cities and villages, students as well

^{1 &}quot;New renaissance" - providing access to European cultural heritage on the Internet – report of an analytical group "Comité des Sages".

as professors, seniors. Such a criterion as sex seems to be of no importance at all. The fact that in science men are more numerous than women², doesn't affect the activities of scientific libraries, which are above all supposed to take care of facilitating search for information and accessibility of sources.

Another issue is division of scientific libraries into those which themselves have a status of a scientific institution (eg. the National Library) and those which belong to such institutions (eg. library of the Institute of Aviation). The former type of library has a complex structure, which usually includes a unit responsible for the promotion of the library.

Without any doubt librarians from small scientific libraries face much greater challenges, as they have to work not only as cataloguers and librarians but also as managers. They direct their activities both to the outside and the inside of the institutions, in order to promote access to knowledge among employees. Benefits that can be derived from such approach are often underestimated and after all libraries are a kind of business card and often the only link between the organization and the outside world.

The way readers regard a representative library has an impact on the whole image of the institution, which may be regarded either as a modern research institution or a prehistoric museum of science.

Methods of modernizing libraries and promoting scientific institutions

The contemporary world of modern technologies provides unlimited opportunities for the development of particular areas. The influence of this evolution on such area as library science is inevitable. More and more often libraries undergo internal revolutions, adapt to the dominant norms and standards. Looking at the activities of scientific libraries, it seems that one of the main issues is the disproportion in the development. Some have already reached an advanced stage and following digitalization of catalogues have started the digitalization of their collections and creating digital libraries, whereas others are still working with paper catalogues.

Below the directions of development and promotion of libraries, ranging from those not associated with any costs to very expensive ones, will be presented. The methods of creating a modern center of scientific information is presented step after step.

Managing human resources

A primary goal, which unfortunately in libraries is very often missed out, is managing human resources. First of all, in order to raise the quality of library services it is necessary to train librarians. A vast majority of employees of scientific libraries are people with long work experience without any education in library science and appropriate training. However, these people are also very valuable in terms of practical knowledge. If possible, it is advisable to create a team responsible for implementing innovative solutions such as computerization and digitalization and train people without experience in this respect. Work in such a library should be focused on tasks, allocated depending on skills and predispositions of em-

² According to the data published by the European Union, 39 percent of scientists in Poland are women, in the EU 30 percent of scientists are women. 59 percent of university graduates are women, 45 percent of participants of PhD programs are women (50 percent in Poland). 18-19 percent of professors are women (20 percent in Poland).

ployees. Moreover, it is necessary to pay attention to the diversity of trainings organized by other libraries (The National Library, the University of Warsaw Library – Centrum NUKAT etc.) and commercial organizations. A great example is the National Librarary³, which apart from a broad range of trainings offers participation in an apprenticeship developing practical skills. A well-trained employee will provide high-quality services, which in turn will have a positive impact on the image of the institution in contact with readers, scientists, other scientific institutions or libraries.

Computerization

A trained team can start the modernization of a library through computerization of library processes such as cataloguing, providing library's collection, registration of borrowings, conducting and maintaining a central database of readers, carrying out inventories etc. In Poland computerization started for good in the 1990's and soon the main goal of the process was establishing online catalogues. Easy and fast access to knowledge about library collections certainly attracted many supporters and facilitated cooperation with other libraries. However, practice shows that there are still many libraries, also scientific libraries which haven't started the process of automation yet. The reason? Insufficient competences of librarians and fear of increased costs.

The market of library systems used for computerization is rich and gives the opportunity to adapt expenses to needs. When choosing a library system, it is necessary to pay attention to its functionality, compatibility with the MARC21 format, technical requirements, licensing conditions, distribution, cooperation with Centrum NUKAT⁴ and importing data through the Z39.50 protocol, which serves the purpose of obtaining ready entries from databases of other libraries. An important factor is also the structure of the system, a modular system can be developed gradually along with growing needs and thus spread the costs of purchase over particular stages.

In the table selected library systems are presented. Their prices range from a few to a few hundred thousand. Koha system is an exception, as it is free of charge, however, it is not available in Polish version. A library deciding to take advantage of this solution has to reckon with that it won't receive any technical support. The system is available on the Internet.

Choosing software it is necessary to consider the number of needed licenses, the necessity to pay license fees and possible support from the distributors. Some systems give the opportunity of including book covers in bibliographic descriptions, which has an impact on promoting scientific publications. Particular attention has to be paid to the protection of copyrights, which also involves book covers and lists of contents. Some libraries showing book covers on the Internet (there are no such restrictions in case of a computer catalogue in the library) point to their right to use citations. It is hard to notice any negative effects of such actions, in contrary, this way libraries promote publishers' products free of charge. However, it is a disputable issue and in order to conform with the law it is necessary to receive approval from people or institutions possessing copyrights for a particular publication.

3 http://www.bn.org.pl/

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⁴ NUKAT - central catalogue of Polish scientific and academic libraries created by means of joint cataloguing.

Name	Structure of the system	Description according to the Marc21 format	Protocol Z 39.50	Technical requirements	Remarks
Aleph	Modular	Yes	Yes	Operating systems: SOLARIS version 7 or later, DIGITAL UNIX 4x, AIX version 4.2 or later, HP-UX 10x; PW server	It is possible to buy for example 2 licenses from PW for about PLN50,000, cooperation with NUKAT
Virtua	Modular	Yes	Yes	Server with Unix operating system, Oracle database	Produced by the American company VTLS Inc; in Poland a consortium of VTLS libraries has purchased a license for software; it would be necessary to create a new consortium in order to lower the costs of purchase or try to join an existing one, there is no such consortium in Warsaw, cooperation with NUKAT
Horizon	Modular	Yes	Yes	Database on the server of PAN	This price possible after joining the consortium titled "Porozumienie Instytutów Naukowych PAN" (Agreement of PAN Scientific Institutions), probably over the next five years the system will be changed – Horizon will be withdrawn from the market, cooperation with NUKAT
Libra 2000	Modular	Yes	Yes	Windows environment, SQL server	It is necessary to pay for every license, starting version without the option of providing access to the catalogue on the Internet until it is created, SQL server licenses for 5 units are free of charge, it is possible to buy license for the program with a maintenance agreement or a subscription for the needed number of licenses
Sowa 2	Modular	Yes	Yes	Server in the Linux environment	Software consists of two parts: the utilitary one (remote usage of software installed on the server of Sokrates company – server hosting) and the server part (installing whole software in the library); additional costs of training, installation, annual maintenance fee, administrative and implementation works
Mateusz	Compre- hensive	Yes	Yes	Server in Windows environment	Unlimited number of units of operation and access to OPAC WWW; lack of annual fees; additional costs associated with possible support, constant supervision of system librarian – separate agreement; the possibility to include a text in description of eg. list of contents; interesting graphic design, cooperation with NUKAT
Koha	Modular	Yes	Yes	Operating system from the Linux family, WWW server Apache, database server - MySQL	Lack of Polish version, lack of maintenance and technical support, unattractive graphic design, cooperation with NUKAT

Table. 1. Com	parison of o	omputer s	ystems for	libraries. ⁵
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⁵ Analysis prepared for the Institute of Aviation in 2010.

Picture 1 The result of search for the book "85 lat Instytutu Lotnictwa" in the computer catalogue of the library

of the Institute of Aviation - "Mateusz" system.

85 lat Insty Parall "C "E	tutu Lotnictw of el title.: "85 years Dsiemdziesiąt pię ighty five years o	va = 85 ye Aviation s of the Insti ć lat Instytut f the Institut	ears of the Institute tute of Aviation ". u Lotnictwa " e of Aviation "
EDITORS/ TRANSLATORS:	[leading editor Wojciech Potkański ; cooperation Jerzy Grzegorzewski, Tadeusz Królikiewicz ; ed. Aneta Olejniczak ; translation. Dominika Palmowska].		SO 408 Restructives Instrytutu Lotnictwa
PUBLISHER'S ADRESS:	Warsaw: Scientific Publications of the Institute of Aviation		.105
TAGS:	Institute of Aviation - history – aviation – history - Poland – illustrated publications		years of the Institute of Aviation
DESCRIPTION:	216 pages. : illustrated (including colourful illustrations); 34 cm		
SIGNATURE:	80408 80409		
CODE/ INVENTORY:	990000804084 990000804091	80408 80409	
UDC:	629.7:001.32		
REMARKS: (438)"19/21"	Parallel text, Polish and English		
AVAILABILITY:	OTwo copies are available. The item can be borrowed for 30 days		

NUKAT

Another step following the training of employees and choosing a system is starting cooperation with the central catalogue of Polish scientific and academic libraries NUKAT⁶, which functions based on the rule of joint cataloguing. This is a perfect way of speeding up the process of computerization, as you can avoid multiplying work on book descriptions. Thanks to a growing number of libraries participating in the NUKAT database, over 2 million bibliographic entries and 3 million khw⁷ entries have been created.

There are two types of cooperation: passive and active. The first kind of cooperation involves obtaining from the NUKAT database ready book descriptions to the database of the cooperating library. In exchange the library obtaining descriptions signs with siglum⁸ under the bibliographic entry, leaving information about the possession of a particular book in its collection.

Picture. 2 A view of a bibliographic description obtained from NUKAT to the computer catalogue of the library of the Institute of Aviation – MARC21 format.

	Poland	EU
National libraries	1%	3%
Academic libraries	3%	6%
Public libraries	22%	11%
Special and scientific libraries	3%	9%

⁶ http://centrum.nukat.edu.pl/

⁷ Khw – index of model tags.

⁸ Siglum- a digit and letter symbol which refers to a particular library, for example, the symbol of the library of the Institute of Aviation is WA 136.

	Poland	EU
National libraries	74%	51%
Academic libraries	21%	29%
Public libraries	15%	32%
Special and scientific libraries	55%	47%

Picture. 3 A view of bibliographic description in NUKAT with the signature of the library of the Institute of Aviation – MARC21 format.

Active cooperation is more advanced in character. In such case a library apart from obtaining entries from the database, participates in creating it, entering new descriptions based on particular rules. Both kinds of cooperation are free of charge. The cooperating library has the right to install one VIRTUA client license on one computer in order to use it for cooperation with the central catalogue. Moreover, Centrum NUKAT organizes trainings.

Digitalization

At the beginning of the 21st century libraries entered the digital era called the "new renaissance". In this period the creation of digital libraries through digitalization⁹ of collections started for good. The supreme goal of the digitalization projects is disseminating and protecting cultural and scientific wealth. The importance of this process can be likened to the invention of the printing press. Just as Johannes Gutenberg influenced the dissemination of the written word, the digital version of print stimulated the creation of virtual libraries, museums and archives, which can be used by everybody.

Providing access to works to a broader group of recipients on the Internet is subject to legal regulations defined by:

- The act on protection of databases from 2001,
- The civil code from 1964,
- The act on copyright and associated rights from 1994.

⁹ Digitalization – transforming library materials from the traditional (paper) form into digital form by means of scanning or photographing.

The above legal limitations have influenced the choice of documents for digitalization. Similarly as in case of showing book covers in computer catalogues, there are no limitations on the premises of libraries. However, the situation is slightly different as soon as materials are supposed to be published on the Internet. Libraries are most eager to digitalize works which belong to the public domain. Among them there are works, which are not protected with copyrights, works with expired copyrights and those which are not creative or individual in character and thus do not enjoy copyright protection.¹⁰

Generally speaking, the public domain includes the works of authors who died at least 70 years earlier. In order to provide access to works from outside the public domain, it is necessary to sign a non-exclusive (or exclusive) agreement with the holder of copyrights. In case of orphaned works, where it is impossible to identify the authors, digitalization is not possible.

Scientific institutions which have copyrights can promote their own publications. It seems that the best solution is to disseminate archive materials, which have historical value. The process of digitalization is expensive and requires satisfying the following conditions:

- finding competent staff,
- selecting appropriate materials for digitalization, valuable for generations and complying with legal requirements,
- creating a workshop for digitalization satisfying particular technical requirements (appropriate servers),
- purchasing a system in Poland the most commonly used system is dLibra,
- preparing the process of scanning (purchasing scanners or cooperation with external companies),
- carrying out data archiving,
- constantly obtaining external sources of financing

High costs of digitalization often exceed the capacity of an institution's budget and for this reason it is advisable to obtain external sources of financing. It is advisable to look for financial support in structural funds and EU funds, funds from government programs and in public-private partnership¹¹. External co-financing substantially boosts the pace of the process of scanning and publishing materials on the Internet.

The resources of Polish digital libraries are also included in the European Digital Library called Europeana¹², which is a collection of works of culture and science of the European Union. This fact was very significant for volunteers participating in the Social Workshop of Digitalization of the Silesian Digital Library¹³. A group of seniors who volunteered to participate in the project felt strong satisfaction associated with the scope of their work.

- 11 The subject of a public-private partnership is joint implementation of a venture based on division of tasks and risk between a public entity and a private partner article 1 of the act on public-private partnership from December 19, 2008.
- 12 http://www.europeana.eu/

^{10 &}quot;Procedury prawne i organizacyjne tworzenia bibliotek cyfrowych. Obszary ryzyka w procesach budowania bibliotek cyfrowych" Barbara Szczepańska [in:] Biblioteki Cyfrowe a Prawo Autorskie. L edycja seminarium z cyklu Akademia Prawa Komputerowego, Warsaw 21th of July 2011: Centrum Promocji Informatyki.

¹³ http://www.sbc.org.pl/dlibra/text?id=spd

In course of the Numeri project in the years 2007-2010 a European statistical research was carried out. The research shows that public libraries have digitalized the greatest share of their collections – 22%. Scientific libraries have digitalized only 3% of their resources. In public libraries 74% of whole collections are supposed to be digitalized. In case of scientific libraries 55% of collections are supposed to digitalized.¹⁴

	Poland	EU
National libraries	1%	3%
Academic libraries	3%	6%
Public libraries	22%	11%
Special and scientific libraries	3%	9%

Table 2. The percentage of digitalized collections in relation to the whole collections

Table 3. The percentage of collections, which are supposed to be digitalized to the whole collections

	Poland	EU
National libraries	74%	51%
Academic libraries	21%	29%
Public libraries	15%	32%
Special and scientific libraries	55%	47%

The statistics suggest that scientific libraries have only started the process of digitalization. Among Polish digital libraries¹⁵ there are:

- Academic Digital Library CRACOW text books and scientific literature; established through the merger of two libraries – AGH University of Science and Technology and the Academy of Economics.
- Akademicka Biblioteka Internetowa (ABI) scientific and didactic publications; a project of the Workshop of Multimedia Communication of the Department of Social Sciences of the Adam Mickiewicz University in Poznań.
- Digital Library of Book Studies publications from the area of book studies and scientific information, including texts of employees and partners of the Institute of Scientific Information and Book Studies of the University of Warsaw.
- Biblioteka Cyfrowa Biblioteki Gdańskiej PAN the most interesting and most valuable historical written works collected in the library of PAN in Gdańsk.
- Digital Repository of Scientific Institutes PAN digitalized collections of PAN libraries, together

¹⁴ Polskie biblioteki cyfrowe na tle europejskim, K. Ślaska [in:] Problemy cyfryzacji zasobów muzeów, bibliotek i archiwów, Warsaw 19th of October 2011.: Centrum Promocji Informatyki. 15 Source: http://www.ebib.info/content/view/274/79/

with publications included in the National Library Resources and publications of institutes.

- Digital Library of the Cracow University of Technology books, scripts, monographs, magazines published by the Cracow University of Technology and doctoral theses from the Cracow University of Technology.
- Warsaw University of Technology Digital Library educational resources and scientific publications of employees of the Warsaw University of Technology, including resources from the former Electronic Collection of Own Resources of the Warsaw University of Technology.
- MCS University Digital Library resources of the UMCS library, information system and private collection of scientific employees of UMCS constituting European and regional cultural heritage, copies of academic text books, monographs, scientific articles, doctoral theses, various kinds of publications concerning the region of Lublin.
- Digital Library of the University of Warmia and Mazury publications concerning the history of the region, the history of mathematic and natural sciences as well as didactic materials of the publishing house of the University of Warmia and Mazury.
- Biblioteka Otwartego Uniwersytetu Space source materials for studying various areas of science, original texts and materials translated by volunteers; news from the world of science.
- Polish Virtual Library of Science Mathematical Collection full texts of articles from selected Polish scientific magazines from the area of mathematics and physics.
- National Digital Library Polona (CBN Polona) national collections stored in the National Libary: the most important issues of literary and scientific texts, historical documents, magazines, images, photography, charts and maps.
- University of Warsaw Digital Library special collections of the University of Warsaw Library, archives
 documenting the history of the University of Warsaw, its history, resources concerning the history
 of scientific research, for now concerning mainly historical and legal sciences, the goal is to include
 all areas of science present at the University.
- ICM Virtual Library of Science a system of online access to scientific databases through ICM UW (Interdisciplinary Center for Mathematical and Computational Modelling of the University of Warsaw); paid access to scientific databases, electronic magazines and free access to a few databases, guides; statistics of utilization of databases.
- Books from the area of physics on-line full texts, books from the area of physics in English; Library of the Institute of Molecular Physics of the Polish Academy of Sciences in Poznań.
- Polish Virtual Library Collection of Natural Sciences full texts of articles from selected Polish scientific magazines.
- Pomeranian Digital Library virtual library of books and scientific publications (text books, books, scripts, publications, old prints).
- Special collection of the Jagiellonian Library available on-line special collections of the Jagiellonian University: manuscripts, eSkryptorium project, old prints, graphic images.

Virtual Library of Science deserves particular attention. The library is a network system of provision of scientific databases through ICM¹⁶. Under national licenses financed by the Ministry of Science and Higher Education, the resources of the Virtual Library of Science are available for all academic institutions (collections of magazines of Elsevier, Springer, Nature and Science as well as databases of Web of Knowledge). Such libraries as the library of the Institute of Aviation¹⁷ and the library of The Institute of Law Studies of the Polish Academy of Science¹⁸, promote access to these databases among employees of parent institutions in order to raise the quality of provided services.

Other forms of promotion

By now the issues associated with raising the quality of library services have been discussed. Other marketing activities are supposed to facilitate contact with the reader and encourage him to take advantage of the introduced innovations.

The main tool for promoting a library outside is a well-prepared website. Information presented on the website must be clear and easy to find, it is necessary to pay attention to friendly graphic design and the speed of the server where the website is located. Searching in the library's catalogues should quickly provide accurate results.

Another solution is writing blogs and thematic services. Recently three new blogs targeted mainly at librarians appeared on the website of the National Library:

- Porządek rzeczy blog of the Workshop of Theory and Organization of Book Studies of the National Library¹⁹,
- Babin Analytical Bibliography of Library Sciences and Scientific Information²⁰,
- Fabryka Języka blog of the Workshop of the Language of Thematic Keywords of the National Library²¹.

The most popular website among librarians is EBIB (Electronic Information Bulletin of Librarians)²². Employees of libraries and scientific information use the website for the purpose of exchanging information, gaining knowledge in their areas and searching for job offers. Participation in life of social websites such as Facebook²³ requires a similar approach.

It seems that it doesn't have any impact on the process of building the brand of a scientific institutions, however, this impression is completely wrong. An active librarian is able to promote an institution in his environment. This is reflected in cooperation between libraries and institutes.

Another method of promotion is organizing thematic meetings and scientific-cultural events closely associated with the activities of a particular scientific institution. This helps create the image of an insti-

¹⁶ ICM – Interdisciplinary Center for Mathematical and Computational Modelling; http://www.icm.edu.pl/

¹⁷ http://ilot.edu.pl/biblioteka/

¹⁸ http://www.inp.pan.pl/index.php?a=biblioteka

¹⁹ http://porzadek-rzeczy.bn.org.pl/

²⁰ http://babin.bn.org.pl/

²¹ http://fabryka-jezyka.bn.org.pl/

²² http://www.nowyebib.info/

²³ http://www.facebook.com/

tution open to people from the outside, willing to share its achievements and knowledge.

Conclusion

In the article new strategies of library marketing have been presented. It has been shown that introducing innovative solutions to library services has a positive impact on the image of the scientific institution associated with a library. It is necessary to remember that introducing changes in the structure of libraries requires a thought-out plan, experienced personnel, sufficient financial assets and time. At the end of the 1990's libraries started fighting against the stereotypes concerning libraries common in the society. New, innovative solutions turn libraries into modern cultural and scientific centers. Without this the development of libraries will be slow. Moreover, in order to make this process run properly it is necessary to take measures associated with training and motivating the employees of libraries. Computerization of catalogues, starting cooperation with NUKAT Center and if possible digitalizing collections are very important steps. Attention was also paid to the need of presence of libraries in the digital world through creation of thematic websites and participation in already existing ones. Institutions can also be promoted by means of cultural-scientific events and thematic meetings.

The main traits of libraries, such as peace, dilligence and above all the trust of the society should constitute a pillar of library marketing. It is necessary to remember that scientific library is a kind of a business card of an institution and thus investing in them can have a positive impact on the image of a scientific institution as a whole and builiding its brand and strong position in the commercial and scientific environment.

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