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# **Evolution of Academic Libraries**

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Technical Note

### **Abstract**

The Academic library represents, for more than a century, the main institution that has the purpose to develop an environment suited for innovation and further study of the information. Although the library as an institution has its origins before the first institutions of higher education, however academic libraries, today, are the most advanced institutional forms that deposit info-documentary material. Throughout its evolution, it contributed to the accomplishment of the higher education mission. Libraries provided the basic material for teaching, learning and researching. The present article starts from the question of the importance of academic libraries. Once established the importance of the academic libraries the article aims to capture their evolution in time, more exactly to analyze the ways they manifested this evolution, grouping them into several categories: 1. The Evolution of Collection Evolution of Information Technology Development. The*Implementation* academic/university libraries, (the two will intersect at some point and now are closely linked), 3. The Evolution of Services Provided by the academic/university libraries. The article explores these three types of evolution, providing help to understand the way in which the academic/university library has evolved and is conducting its business today.

## **Rezumat**

Biblioteca universitară reprezintă de mai bine de un secol principala instituție însărcinată cu dezvoltarea unui cadru propice inovării și aprofundării studiului informației. Deși instituția bibliotecii își are originile anterior primelor instituții de învățământ superior, totuși bibliotecile universitare sunt astăzi cele mai avansate forme instituționale ce depozitează material infodocumentar. Prin evoluția lor, ele au contribuit la realizarea misiunii instituțiilor de învățământ superior. Ele au oferit baza materială pentru predare, învățare și cercetare. Prezentul articol pornește de la întrebarea privind importanța bibliotecilor universitare. Odată stabilită importanța bibliotecilor universitare articolul își propune să surpindă evoluția lor în timp, mai exact să analizeze modurile de manifestare a acestei evoluții, grupându-le pe mai multe categorii respectiv: 1. Evoluția dezvoltării colecțiilor, 2. Evoluția adoptării tehnologiei informației în bibliotecile universitare, (cele două intersectându-se la un moment dat și fiind în prezent în strânsă legătură), 3. Evoluția serviciilor oferite de bibliotecile universitare. Articolul explorează aceste trei tipuri de evoluție, oferind asistență în înțelegerea modului în care biblioteca universitară a evoluat și își desfășoară astăzi activitatea.

**Keywords:** academic library, institution, higher education, evolution, importance, Collection development, information technology implementation, services provided

#### 1. Introduction

The present article will use the term 'academic libraries' due to its larger use and view regarding a certain type of libraries also referred to as 'university libraries'. The difference is that an academic library can have a larger range of understanding and does not necessary belong to a certain university.

The first part presents a short description of the main goals that stood at the base of the evolution of collection development, especially the role that is being played by the digital collection in the functioning of libraries.

The second part shows the evolution of information technology implementation, highlighting mainly the impact that OCLC had on the organization of libraries.

The third part describes the evolution of services provided by the academic libraries till today, when the range of services offered is very wide. Also, this last part shows the importance of training to use the information in the academic libraries.

### 2. The Evolution of Collection Development

Starting with the Radcliff Library that belongs to the University of Oxford, academic libraries have acquired not only visual identity, but have seeded the collective mind, as a symbol of quality archiving and study of the info-documentary material. Thus, in the same case as other types of libraries, the development of collections presumed the development of the buildings in the first place.

Richard Harwell in his studies from 1960 concentrated mostly on the development of academic library buildings and noticed how they granted a special attention to the special collections as they evolved.[1] What is fundamental to remember from his research, is that he signals the importance of acknowledging the potential of academic libraries to play a significant role in the education of undergraduates.

It is important to understand the changing nature of the environment of higher education from the last 30-40 years. If for example in the 1950-1960, even the American government, known for its support of the higher education, reduced significantly it's investments in this sector, in contrast to this fact, by the end of the century, the broad social role of the study greatly changes the ethos of higher education.[2]

The libraries without financial resources, even in the 1960-1980, succeeded in growing their revenues and investing hard in modernization, to be able to satisfy the needs of modern users.[3]

The collection development in academic libraries was ignored for a long time by the academic literature. In 1991, Joanne Hill together with other authors drafted the first book dedicated to the analysis of collection development in academic libraries. In the introduction of the study, they

expressed their beliefs that collection development depends largely on the dimension of the academic libraries.[4]

Therefore, understanding the evolution pattern of collection development is strictly related to the expansion of the dimensions of academic library as a building, since the first role of the library is to store info-documentary materials. However, we do not have to forget the special role played by the technical support, therefore the evolution of collection development is closely linked also to the evolution of information technology implementation into the academic libraries.

We need to distinguish thus, between the Legal Deposit – as material, and the Legal Deposit – as digital. If the first one represents, according to art.1, pt.(2), of Law Nr. 111/1995 republished from Romania, the "mobile intangible national heritage fund"[5], which contains all the categories of documents specified at pt.(2), the second one represents a category much broader and more diversified of documents on digital media, than the traditional ones.[6]

Regardless if we address the first one or the second one, an academic library must create the environment to access both, so as its users may benefit of the best services a library can offer, and, because of this fact the evolution of collection development, is in close relationship with the evolution of services provided by the academic libraries.

## 3. The Evolution of Information Technology Implementation

Although some visionary authors could understand the importance of the future role of Information Technology regarding academic libraries, in practice the information technology represented a small interest for academic libraries. In the 1974 issue of "*The Administration of the College Library*" publication (a true manual for the academic librarians), which belonged to Guy Lyle[7], speaks of the potential utilization of IT technology for acquisitions, cataloguing or the simple use in the academic libraries, but this only remains an idea and it does not become applicable in practice, at least not in the near future.

If some authors would have written about the subject in their articles from the '90's, they would have been compelled to incorporate the importance of IT technology in operating the libraries as we mentioned above. The absence of dialogue on this subject does not necessary fall in the academic librarian's responsibility, but rather on their lack of vision, and reflects the striking evolution of IT technologies from the past 30 years.[8] Some would argue that the subject represents an important desideratum without which any discourse of today or the future's evolution of management would be irrelevant.

The academic librarians were not visionary leaders as far as the implementation of new technologies, mainly because of costs, of both the equipment, but also of the implementation of any software, and thus it decreased their interest to promote anything which could have been contrary to the things that they were used to. On the other hand, once developed the IT technologies, the academic librarians embraced any technology which was standardized and easy to implement, both in services provided, but also in the cataloguing services. Maybe the best example in this regard is the implementation of OCLC (Online Computer Library Center).[9][10] It was first implemented at the University of Ohio, and afterwards it extended at a national level in the United States of America in less than one year.[11] The implementation was firstly done in big academic centers which were more than available to finance the implementation of such a

technological breakthrough. Solely the W.K. Kellogg Foundation financed 302 academic libraries in purchasing and implementing of such a service and even the operational costs for the next years. OCLC was the center of operations in libraries and virtually any academic library was part of the OCLC, usually through a regional or state center.[12]

The implementation of OCLC had a profound and immediate effect over library operations (cataloging, acquisitions, interlibrary lending).[13]

A similar model of development took place in the next major stages of technological evolution in what seems to be the functionality of academic libraries, namely: electronic databases and automated systems of libraries. Academic libraries had typically started the process of automation through efforts which consisted of developing their own systems, but the majority of them waited until these types of systems were standardized and sold in a way that could be operational with the help of the simplest technologies available and with low costs.[14]

Although many libraries were using the CD-ROM technology for storing their databases, some tried even creating their own collective databases with the help of networks. The main evolution in this way will be later the use of databases through the Internet.

While the implementation of OCLC had a technical effect on library operations, still nothing had compared with the online databases, which had a decisive impact in the functionality of today's libraries.[15]

If initially libraries took advantage of the possibility of creating some online databases with the help of print-scan technology, some authors estimate that they will give up this process to the detriment of printed periodicals. Practically, academic libraries are subjected today to the *competition* that *online libraries* offer to potential users.

Carol Ann Hughes, a member of Questia[16], talks about a new *competitive space* through which it is showed that academic libraries don't have an exclusive role anymore in collecting and providing information. If academic librarians want to be efficient in supporting the informational undergraduate needs, they need to think beyond the simple idea of providing spaces and collections.[17]

Academic libraries must offer a certain *added value* to their collections and facilities. Such values include reference services and training, both inside the libraries, access to an internal network, unique in meeting the current and specific needs of users.[18]

The main difficulty in the direction previously mentioned consists in persuading academic communities of the value of IT services as well as the potential and importance of spending time to study in these libraries.

### 4. The Evolution of Services Provided

In the last 30 years academic librarians saw how vision over the management of collection and over the development of technologies and economics of libraries had evolved, and the interlibrary lending followed the same road of evolution, initially this being a minor service and used with some rarity, reaching today to be one of the main services provided by a library.

In the last 30 years the exponential and continuous growth of book collections, surprisingly didn't manage to satisfy the increasing user needs for library material. Thus the libraries resorted to *partnerships* through which they borrowed one to the other some collections of library materials depending on the requirements of each. This service has its center of interest in the services of interlibrary lending of periodicals to which libraries are subscribed, both for economic and especially for the need of further research by those who are part of academic environment.[19]

Consequently, even if an academic library aims to put at the user's disposal a specialized collection of specific domains it is very possible that the needs of users give rise to two situations:

- 1. Whether users want to study more in those specific domains, leading to the need of extending the collection, with the immediate solution consisting in interlibrary loan;
- 2. Or users need other areas the library couldn't provide them with the information needed, so it also resorts to the temporary solution of interlibrary loan.

Finally in many countries the interlibrary loan is organized through a national dedicated system.

Of course that a library doesn't limit its services provided just to the one mentioned earlier. The services provided by a library are primarily the core ones: requesting and booking online publications and reading them in the study rooms, access to the Internet and scientific resources, home loan and last but not least the possibility to scan and photocopy of materials.

As we previously noted that academic libraries are designed primarily for scientific research, the specific services of this type of library are: the possibility to online publish digital documents, the possibility to request access to bibliographies and to rent conference halls.

Another core service provided by the academic library is the access to a digital deposit. This represents the essential infrastructure for knowledge, the primary accessed resources in this infrastructure being: articles from journals and periodicals, theses and dissertations, unpublished reports and unpublished projects, proceedings from conferences etc. The Institutional Legal Deposit represents a relatively new product, being a collection of electronic indexed, referenced resources, from the scientific production of research or education communities.

Another important service provided by the academic libraries is defined by the advanced use of information (Information Literacy or IL). This one is characterized by:

- The possibility of determining the measure in which the information is used;
- Accessing the information needed in effective and efficient ways;
- Critical evaluation of information and of its resources;
- Use of selected information in an efficient knowledge base;
- Understanding economic, legal and social aspects related to the use of information.[20]

The starting point of this training is thus the use of information, the subjects of training being the theories and standards of use, and to which the addressability of training is meant, having a wide reach (students, teachers, large audience).

In contrast to Information Literacy, there are unique research aspects of IL which concentrate on the need of scientific research, restricted to a limited category of subjects such as specialized librarians, researchers in information and communication technology or PhD students. The starting point for this kind of training (Research in Information Literacy or RIL) is represented by the superior mastery of the use of information.[21]

Academic libraries have a high number of constant users, this aspect being their strength point, but also since they developed the research in IL, and through the variety of ways that the information can be used, these users don't provide only the quantity, but also the quality necessary for an institution to evolve. Therefore academic libraries set the necessary base for the development and innovation of research information domain.

Regarding the comfort provided by the buildings of academic libraries, this has evolved in time, discovering through the passing of time, the needs of users to deposit their things (designing in this way lockers or different secured compartments), study rooms destined for groups, media rooms and spaces destined for leisure as coffee shops, snack bars etc. Last but not least, every aspect described before concerning the introduction of technology in libraries implied the development of some media rooms that would have to have an interactive role in the presentation of digital materials.[22]

#### 5. Conclusions

The evolution of academic libraries was centered on the role played by this institution in society. It can be seen under three different aspects, each one of them contributing to the efforts of this institution to present a viable alternative to online study or to digital libraries, but this doesn't mean that they exclude them, it involves the presence and education of users into a building with a new management type, since an academic library doesn't have to be a new built library, but it needs to be organized in such a manner to allow the covering of a broad range of functions and specific needs from the era that users live in.

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