Databases - Tools for information in scientific research

Gabriela Mailat[1] and Corina Pop[2]

[1]Transilvania University Library of Brasov
[2]Transilvania University Library of Brasov

Abstract: *If it is to talk about the information source in 21-th century, it is definitely the field of virtual information environment, be it website, library, publication, study or article. Nowadays, the information is being created, developed and disseminated in real time, online. The documentation and information are of the greatest importance in order to acquire competencies in scientific research.*

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Keywords: databases, documentation, information, digital library, doctoral school.
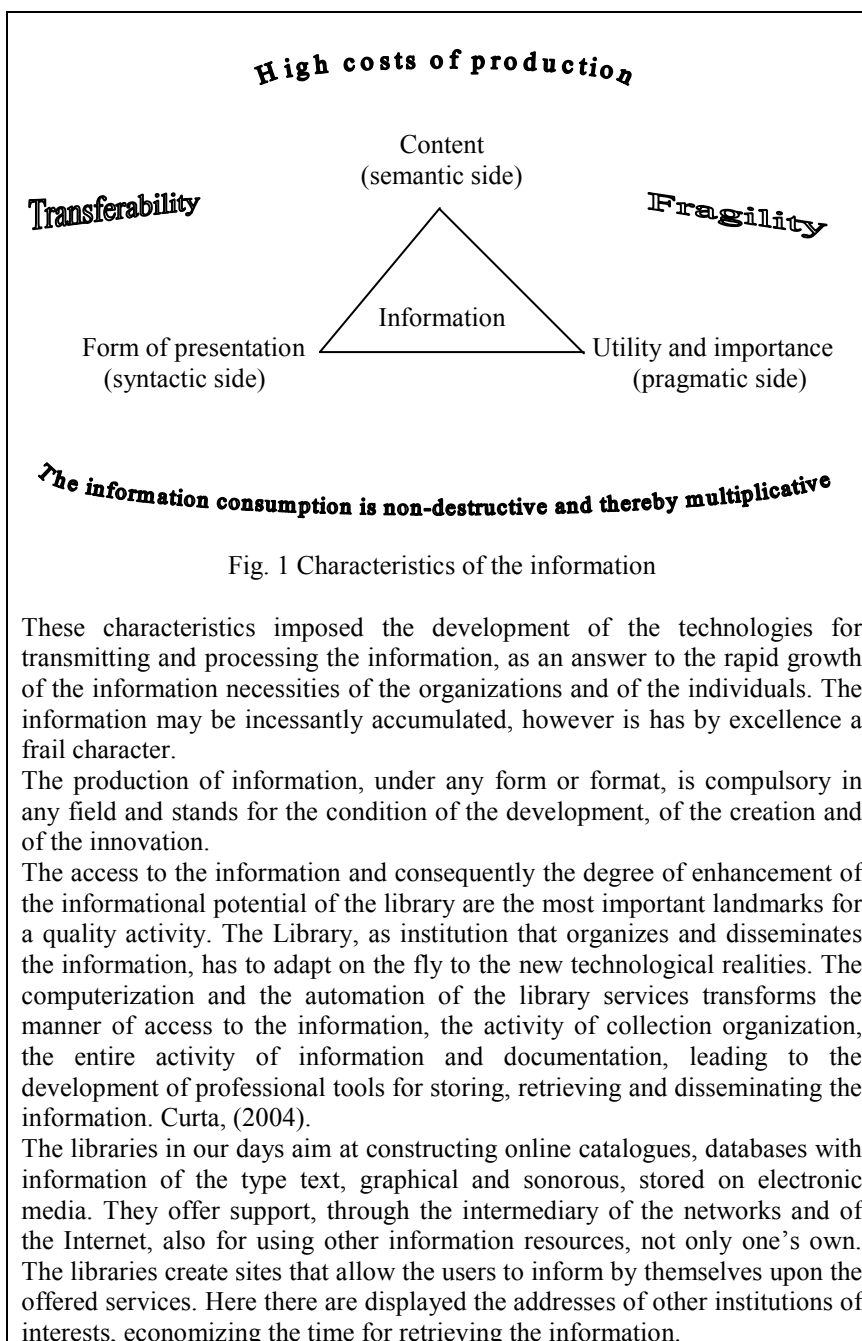
1. Web – means of information

Nowadays, Web is no longer an entertainment for the computer experts. It has gradually turned into an increasingly common means of information, which tends to replace the written media, the radio and even the television.

On the other hand, Web very much suits the informational resources, such as dictionaries, libraries, data banks, different information out of the most variegated fields and so forth. Practically, currently a Website cannot resist unless it offers a certain quantity of information useful for the visitor.

Information means knowledge, power, profit for those who know to retrieve it and to efficiently use it in business, research, education. Information is the basis of the knowledge process, the basis of culture, the force of action of contemporary society.

Information as resources, „being generated through processes of knowledge and innovation, are potentially unlimited, they cumulatively and progressively develop, they have an extremely quick rate of progress; they multiply through dissemination". Tirziman (2000)

Fig. 1 shows the main characteristics of the information: transferability, high costs of production, fragility.

High costs of production

Content
(semantic side)

Transferability

Fragility

Information

Form of presentation
(syntactic side)

Utility and importance
(pragmatic side)

The information consumption is non-destructive and thereby multiplicative

Fig. 1 Characteristics of the information

These characteristics imposed the development of the technologies for transmitting and processing the information, as an answer to the rapid growth of the information necessities of the organizations and of the individuals. The information may be incessantly accumulated, however is has by excellence a frail character.

The production of information, under any form or format, is compulsory in any field and stands for the condition of the development, of the creation and of the innovation.

The access to the information and consequently the degree of enhancement of the informational potential of the library are the most important landmarks for a quality activity. The Library, as institution that organizes and disseminates the information, has to adapt on the fly to the new technological realities. The computerization and the automation of the library services transforms the manner of access to the information, the activity of collection organization, the entire activity of information and documentation, leading to the development of professional tools for storing, retrieving and disseminating the information. Curta, (2004).

The libraries in our days aim at constructing online catalogues, databases with information of the type text, graphical and sonorous, stored on electronic media. They offer support, through the intermediary of the networks and of the Internet, also for using other information resources, not only one's own. The libraries create sites that allow the users to inform by themselves upon the offered services. Here there are displayed the addresses of other institutions of interests, economizing the time for retrieving the information.

The libraries of the days to come will be complex info-documentary structures, which will keep on developing their collections of books and multimedia documents, but which will increasingly appeal to digital resources and to scientific databases that offer to the users full-text documents, to the purpose of information and documentation. Helerea (2008)

In this paper there is analyzed the politics and the management for the access to information at Transilvania University of Braşov, in which the Library of the University plays a key role: - acquisition, organization, tracking, dissemination and enhancement of the information offered by the databases.

2. Databases offered by *Transilvania* University of Braşov
At *Transilvania* University of Braşov, the acquisition policy is declared and approved by the Senate of the University. *Transilvania* University of Braşov is an institution of higher education and research. The databases support both the didactic activity and the research activity.
There are several paths for acquiring databases:
  - through direct acquisition (buying)
  - through partnerships with agencies, institutions, cooperation projects.
The databases subscribed by *Transilvania* University of Braşov are synthetically presented in Table 1.

Table 1. Databases subscribed by *Transilvania* University of Braşov

SpringerLink http://www.springerlink.com	**SpringerLink** is one of the widest used electronic resources of scientific documentation in our country. It comprises more than 1600 specialized magazines, edited by Springer-Verlag, Kluwer Academic Publishers, Urban and Vogel, Steinkopff and Birkhäuser. It comprises online magazines edited by Springer Verlag, Kluwer Academic Publishers, Urban and Vogel, Steinkopff and Birkhäuser. It has 1250 titles of fulltext magazines and about 2500 books.
Oxford Journals http://www.oxfordjournals.org	*Division Oxford Journals* is part of the greatest university publishing houses throughout the world, a publishing house motivated by the quality of its publishing. It contains magazines, summing up *more than 194 titles* (among whom 110 magazines have ISI factor of impact).

		Its collections: *Law, Social Sciences, Humanities, Medicine, Life Sciences, Mathematics & Physical Science,* include many of the reference journals in the respective fields, in online format. It exceeds 180 titles, realized in collaboration with far-reaching universities and research institutes. It includes noteworthy magazines in the fields of the natural sciences, of mathematics, physics, humanistic and social sciences, law, medicine etc.
MathSciNet http://www.ams.org/mathscinet/		MathSciNet offers rapid and easy access to peer-reviews, abstracts and bibliographical information for the mathematical sciences. More than 100.000 new elements are added every year, most of them classified according to the subject. MathSciNet contains more than 2 million articles and more than 1 million direct connections to original articles.
Forest Science Data Base http://www.forestscience.info		Forest Science Database is an important database on the worldwide level, for the researches in the field of forest engineering, forest exploitation and wood industry. Offered by the specialists from CABI, this one currently contains more than 810.000 abstracts and quotations with 30.000 records added every year.
EBSCO Host	**Academic Search Premier** http://www.ebsco.com/home/	Elaborated especially for academic institutions. It is the most comprehensive academic multidisciplinary DB, it contains full text articles from more than 4650 scientific publications. Beside full text articles, it offers indices and abstracts for almost

| **EBSCO Host** | **Academic Search Premier** http://www.ebsco.com/home/ | indices and abstracts for almost 8200 magazines from the collection, from every academic study field, inclusively: education, informatics, engineering, physics, chemistry, linguistics, arts and literature, medical sciences, ethnographical studies etc. |
| | **MEDLINE with Full Text** | The National Library of Medicine from the United States creates it and within it there may be realized the search of the bibliographical notes and of the abstracts from 4800 magazines. |

In tables 2 and 3 there are presented the main characteristics of the databases acquired through collaborations / partnerships projects.

Table 2. Databases offered by INID

| **Thomson ISI** http://isiknowledge.com | Thomson ISI is one of the most important sources of scientific documentation on the worldwide level. The National Institute of Information and Documentation - INID as well as Prior and Books offers the following bibliometric and bibliographical databases Thomson ISI: **Web of Science –** offers access to the abstracts of the articles of more than 9300 important magazines, ISI quoted, from 1990 up to the present, the majority with impact index. **Journal Citation Reports 2007-2008 –** offers quantifiable statistics data that allow the evaluation of the impact of the magazines within the scientific community. **ISI Proceedings 2007-2008 –** Weekly updated, ISI Proceedings offers access to bibliographical information and to the abstracts of the articles presented at |

	various international conferences, symposia, seminaries, colloquia, workshops, conventions in a wide range of disciplines, from anthropology to zoology. **Derwent Innovations Index 2008 -** comprises data upon patent specifications, registered in 41 countries, including Romania
Science Direct http://www.sciencedirect.com	The online platform of scientific magazines with integral text for research Science Direct offers direct access to the integral text of the scientific magazines Elsevier of the year 2004 up to the current number. It covers all scientific areas.
Ovid - Lippincott Williams & Wilkins High Impact Collection http://ovidsp.ovid.com/autologin.html	The medical research platform Ovid - Lippincott Williams & Wilkins High Impact Collection offers a unique collection of 50 noteworthy medical magazines, the essential source of documentaries in journals with ISI index of high impact.

Table 3. Databases offered by CNCSIS:

Scopus http://www.scopus.com	Bibliographical DB with access to more than 16.000 magazines, with impact factor, from more than 4000 publishing houses.
EV-2 Compendex http://www.engineeringvillage.org	Bibliographical DB defining for the literature in the field of engineering. It contains more than 9 million records, dated since 1969 up to the present and covers 175 disciplines in **engineering.**
EV-2 Inspec http://www.engineeringvillage.org	Bibliographical DB with global coverage in ensuring the scientific and technical literature in the field of **physics, electrical engineering, electronics and informatics.**
EMBASE http://www.embase.com	Medical bibliographical database comprising MEDLINE and other few thousands of indexed magazines. It is the intelligent portal in the fields of biomedicine and pharmacology.
PIO http://pio.chadwyck.co.uk	It is an electronic index containing millions of articles electronically

	published in the field of the arts, of the humanistic sciences and of the social sciences across a period of more than 300 years.
LION **(Literature online)** http://lion.chadwyck.co.uk	It contains more than **300 000** full-text works of English poetry, prose and drama, together with the online criticism and reference bookshop; *Literature Online* is the greatest DB for cross search throughout the world in the field of literature and literary criticism.
MLA http://collections.chadwyck.co.uk	It is a classified list with index of the subjects for school books and articles about modern languages, folklore and linguistics that has been compiled by the Association for Modern Languages in America ever since 1926. The electronic version likewise includes the possibility to list the entire bibliography and it momentarily contains more than 2 millions entries. Moreover, *MLA Directory of Periodicals* offers complete information about more than 7100 periodical publications and series of books.

Following the statistics realized for the year 2008, there was noted a more frequent accessing of the database Oxford Journal than of the database Springer link and a users' preference for the pdf. Format
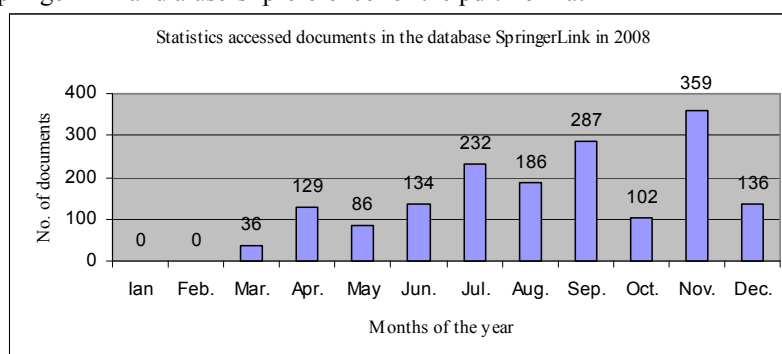

Fig. 2. Access to SpringerLink in the year 2008.

Total accessed documents - 1688 among whom: **1001** in format .htm and **687** in format .pdf.
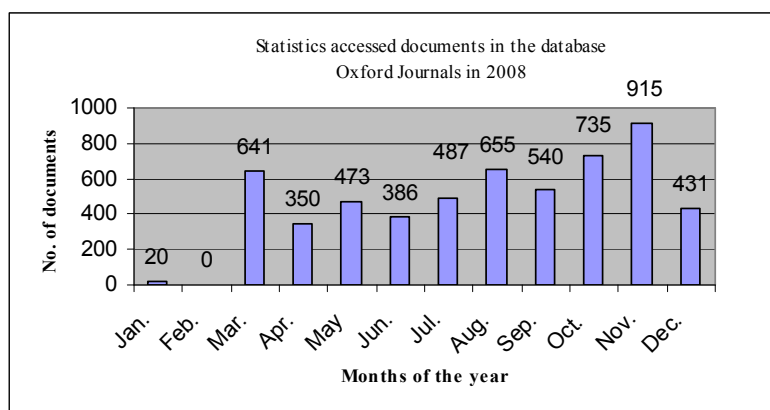
Fig. 3. Access to Oxford Journals in 2008.

Total accessed documents - **5633** among whom: **84** in format .htm and **5549** in format .pdf.

These databases were also presented to the students from *Transilvania* University of Braşov. In the framework of the applications, there were submitted as sources of information and documentation the databases SpringerLink, Oxford Journals, Academic Search Premier (EBSCOHost), and Thomson ISI.

Conclusion
The Library of *Transilvania* University of Braşov is an essential factor in communicating information. The librarian is the mediator between the information sources and the users, plays an active part in the library, finds out the users' information needs, teaches them how to use the search instruments and the electronic equipment, enhances the library resources as well as the online ones, searches for information, offers direct and personalized assistance to the user.

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