

Chapter 5. DATABASES

Electronic Resources in Research

Course:
Information Technology
in Research

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1. Databases in Libraries

One of the priority directions of the Library is to make up the information collection necessary for the educational process and for the research carried through within the university. The information collection underlies the informational service provided for the users and its quality determines the level of satisfying their information necessities. The satisfaction of the users' necessities for information entails a higher quality of the informational services.

1. Databases in Libraries

The analysis of the international practice proves that the use of the electronic informational resources stands for one of the main directions in the activity of the contemporary libraries.

The efficiency of the information services provided by the library is being achieved through the new informational technologies, offering access to data banks and databases, to libraries and digital catalogues, to books and magazines stored on varied electronic media.

1. Databases in Libraries

Characteristics:

The databases within the libraries are information and documentation databases, **available for the information users** (from the public area, from research etc.) and that may be accessed through an **online research service** either on local level, or from a distance.

1. Databases in Libraries

Classification:

These databases have as content, bibliographical descriptions, optionally also abstracts or full text.

Analyzing the content and the purpose of these databases, there may be specified:

1. Reference databases and
2. Source databases.

1. Databases in Libraries

Classification of the reference databases:

Reference databases orient the users towards another source and consist in:

Bibliographical bases

Catalogues

Referential databases

1. Databases in Libraries

Classification of the reference databases

- ❑ **Bibliographic databases** include citations or bibliographical references and sometimes abstracts of literature; they show the user: what was written, in what sort of sources they may be located (titles of magazines, conferences), and if they contain abstracts, these latter ones will summarize the original content.

1. Databases in Libraries

Classification of the reference databases :

Catalogues locate the primary documents and bring up the stock (depository) of a certain library or network of libraries. They are constituted as lists of books, titles of magazines and other documents, but do not offer too many information about the content of the documents.

In fact, **catalogues are a category of bibliographical databases.**

1. Databases in Libraries

Classification of the reference databases :

- ❑ **Referential databases** offer references with information or data, as well as names or addresses, data of the directory type etc

1. Databases in Libraries

Classification of the source databases :

2. Source databases contain the original source data, under a format which may be read on the computer (electronic documents).

The advantage for the user is that this one obtains directly the information, without consulting other sources.

1. Databases in Libraries

Classification of the source databases :

They consist in:

- Numerical databases, with statistical data;
- Databases with full-text, consisting in articles of magazines and of newspapers, in technical specifications and software;
- Numerical databases (ex. reports of the companies);
- Multimedia databases.

1. Databases in Libraries

Generally, in libraries, there are:

- ❑ Local databases type ***catalogue*** (online catalogue) that have as purpose the localization of the primary documents existing in the respective library and
- ❑ ***Bibliographical databases*** made on different themes and/or periods, which contain book descriptions and also analytical descriptions (articles in periodicals, chapters from books).

1. Databases in Libraries

To these databases of their own, there may be added

- ***Purchased databases***, on CD-ROM-s or accessible through the Internet.

Generally, these databases contain abstracts and/or full-text of articles in periodicals, sometimes even of books in electronic format.

2. Databases accessible through the Internet, from the network of *Transilvania University Brasov*

2.1. Cambridge Journals <http://www.journals.cambridge.org>

Cambridge University Press has been publishing at present more than 220 academic peer-review magazines grouped in 32 disciplines, among whom 109 magazines are ISI quoted. Comprising the latest researches within a wide range of subjects, the magazines of Cambridge Publishing House are accessible worldwide in print and online format. Cambridge publishes, beside its own magazines, also magazines in collaboration with more than 100 professional and academic companies and institutions, so as to ensure the optimal success of every publication.

2.2. CSA Research Pack

<http://www.csa.com>

This pack of databases has been offering the researchers, efficient instruments in financing the projects and in publishing the articles written by Romanian authors.

The access is done based on the IP for all IP-s of the institution and based on password:

Username: brasov

Password: welcome

2.3 Oxford – Journals

<http://www.oxfordjournals.org>

It offers access to full text for 211 online magazines grouped in 6 fields, whereof 125 magazines are ISI quoted.

It includes prestigious magazines in the fields:

- natural sciences,
- mathematics,
- physics,
- humanities and social sciences,
- law,
- medicine etc.

2.4 Proquest Academic Research Library

<http://www.proquest.com>

It offers access to more than 4070 specialized magazines from all scientific fields, whereof more than 2800 with full text. On a single online platform, you benefit from access to information covering 160 scientific fields: economics, literature, geography, psychology, science, law, magazines and daily papers of general interest, education, religion, health, humanities, computers, etc. from academic publishing houses throughout the world.

2.5. ScienceDirect Journals

<http://www.sciencedirect.com>

The Platform Science Direct offers more than 2000 magazines with full text, with high impact index, issued by ELSEVIER publishing house. They are structured on specialized collections from the humanistic, economic, technical and medical disciplines. The high academic level as well as the wide area of covered specializations have transformed this database into one of the most appreciated on worldwide level.

2.6. Springerlink – Journals

<http://www.springerlink.com/>

SpringerLink offers more than 1600 journals with full text and an archive since 1997 up to the current issue. Through the service Online First™ it offers access to the issues of the magazines much before being published in printed format, benefiting this way more rapidly from important information.

2.7. Wiley-Blackwell – Journals

<http://www.interscience.wiley.com>

The magazines issued by the editorial group Wiley-Blackwell (it groups the publishing houses: John Wiley and Sons, Blackwell Publishing) are available on the platform Wiley Interscience. The subscription to the magazines available on the platform Wiley Interscience offers access to more than 1400 specialized journals with full text, whereof more than 950 are ISI quoted.

2.8. Emerald Publishing Group

<http://www.emeraldinsight.com>

Emerald Management Xtra is the greatest and the most comprehensive collection of peer-review management magazines throughout the world and it submits a new approach for the use of the electronic resources to the purpose of documentation. This way, beside the journal collection, it offers a series of personalized extra resources for: deans, professors, researchers, librarians, students etc. Emerald Management Extra EMX 150 offers access to the full text of 150 online magazines, whereof 35 magazines are ISI quoted.

2.9. Forest Science Database

<http://www.forestscience.info>

Forest Science Database is an important database on worldwide level, for the researches in the field of forest engineering, forest exploitation and wood industry. Offered by the experts from CABI, it currently contains more than 810.000 abstracts and quotations, with 30.000 records added every year.

2.10. MathSciNet

<http://www.ams.org/mathscinet/index.html>

MathSciNet offers rapid and easy access to peer-reviews, abstracts and bibliographic information for mathematic sciences. More than 100.000 new elements are being added annually, most of them classified according to the subject.

MathSciNet contains more than 2 millions articles and more than 1 million direct connections to original articles.

2.11. OVID- Lippincott Williams & Wilkins High Impact Collection

<http://ovidsp.ovid.com/autologin.html>

OVID- Lippincott Williams & Wilkins High Impact Collection is a unique collection of 50 prestigious medical magazines, published by Lippincott Williams & Wilkins, which offer an essential source of documentation with an ISI index of high impact.

2.12. LEGIS

<http://www.softlegislativ.ro>

The informatics application "*LEGIS*" is the most complete documentation upon the normative acts issued since 1837 so far. The informatics system of legislative consultation "*LEGIS*" offers, with the help of the computer, the possibility of being acquainted with the legal provisions in all fields, within the shortest time and with minimal effort.

2.13. Thomson ISI

<http://isiknowledge.com>

Web of Science – access to the abstracts of ISI indexed journals, since 1990 so far, the majority being quoted with ISI impact index.

ISI Proceedings 2007-2008 – access to the content of the papers from international conferences, a basic component of the international academic communication.

Journal Citation Reports 2007-2008 – offers quantifiable statistic data that allow evaluating the impact of the magazines in the scientific community. This database comprises only ISI quoted magazines.

Derwent Innovations Index 2008 – comprises data upon patent specifications recorded within 41 countries, inclusively Romania.

2.14. Scopus

<http://www.scopus.com>

Scopus is a bibliographic and bibliometric database, in online format, comprising scientific magazines. It offers access to the abstracts of the scientific articles from more than 18000 international scientific magazines, issued by more than 5000 international publishing houses. It uses as evaluation tool the Hirsch index, which allows the evaluation of the authors and academic institutions based on the ratio between published articles and the number of quotations.