

## **The IT Laboratory and Its Professionals**

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**Keywords:** Lucian Blaga Central University Library - Cluj-Napoca - Romania; Libraries - Automation - History; Electronic data processing personnel.

### **Abstract**

The paper describes the automation of a big Romanian library, Lucian Blaga Central University Library of Cluj-Napoca (CUL), revealing the initial and later difficulties, emphasising the problems related to the IT specialists. It presents the members of the IT Laboratory starting with the date when it was officially founded – September the 1<sup>st</sup>, 1992 – also trying to point out the responsibilities over the years. The first activities of the IT specialists are briefly presented, as well as the important achievements throughout the 16 years since the IT Laboratory setting up. Computer science courses for librarians held by the IT personnel, on which great emphasis was laid for several years, constituted a premier case in the automation process of Romanian libraries. A paragraph is dedicated to national and international projects and programmes, which by means of personnel mobility had a special role in the change of mentalities. The endowment of IT and communication equipment has become one of the most advanced in comparison with other Romanian libraries; the IT specialists contributed to this achievement by a wide range of activities, starting with a thorough search for financial resources to market analysis, acquisition, implementation and maintenance. The automation of the library led to modern information and documentation tools, such as: the Aleph online catalogue, the library's own bibliographic databases (distributed on CDs and accessible on the Internet), CDs, subscriptions to databases and electronic reviews, and the library's homepage – <http://www.bcucIuj.ro>. In addition to this, the creation of a digital library has begun in 2008. The main problems related to IT specialists emphasises the complexity of their work, the continuous training, user interaction (librarians and readers), salaries as a first form of acknowledgement, and the need of IT specialists in Romanian libraries.

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Trying to reconstruct the road which led to the setting up of the IT Laboratory, I realized once again the real meaning of receiving information in due time and how a man can change other people's fate, who will, in turn, influence the future of many others, thus forming a "spider web" of influences.

After the great step Romania made in December 1989, we suddenly awakened to light and liberty which we had not known before and did not know how to use. Clever, enterprising and well informed people, full of spirit and able to handle large collectives, began to privatize great companies, often creating chaos in formerly stable places of work. Others, mainly intellectuals and professionals, less skilful in changing the world, waited for the great changes to happen or tried to find new and better jobs, hoping for improvement and safety in the future.

Back then, I was employed as a programmer at the IT Centre of the Heavy Industry Group in Cluj, a giant institution which began to fall apart from the first months of 1990. Some big sectors tried to separate and form small enterprises, also taking specialists from the mother company. The IT Centre itself met great problems, its personnel worrying about their future jobs.

At that time, the Library of Mathematics had a Coral 4021 computer belonging to the generation of minicomputers which could work interactively with several terminals simultaneously. It was exactly the computer type I was specialized in.

It was a coincidence that in November 1990, CUL offered new librarian jobs, two of them within the Library of Mathematics. I received this information from the kind-hearted librarian working there at that time, Simion Răchită. The examination consisted of cataloguing, classification, legislation, foreign language, and typewriting. I found this latter part the most difficult and I got the lowest mark, for I had never used such a machine before (an unexpected situation for someone who was used to working with a text editor programme on the computer!).

It was a difficult decision for me to leave the IT Centre, even though I knew the future of the job was uncertain, and I quitted mainly on my husband's and Mr Răchită's advice.

I began to work at the Library of Mathematics, in the Periodical Dpt. on March the 1<sup>st</sup>, 1991. At that time, Miss Lucia Cîmpean who also

had studied automation science worked at the Book Dpt. We attended together the library science courses held in April 1991.

As I became acquainted with the library work, I changed my mind regarding the complexity of this activity and the possibilities of its automation. Library work is generally considered easy, the librarian lending and taking back the books; the idea that, in order to implement an automated system in a library, only a list of books and a list of readers are needed - which should be connected to one another when the loan is made - is completely wrong: the two components imply many aspects which remain hidden at the first sight and require important efforts to respect standards, accuracy and even creativity.

The automation process of Romanian libraries after 1989 was not an issue for the libraries responsible factors in the two ministries, nor was it for other institutions involved in the information communication process throughout the country. The only library that had computer technological equipment in the 1980s was the National Library.

The great university libraries tried from the first years after the Revolution to find financial resources for technological equipment, in order to begin the automation of their specific activities. There was no collaboration at a national level among libraries, each of them trying to be the first to achieve something in this area. Only in March 1995 an automation project for the Romanian libraries was published by Mr. Berceanu, Director of the National Library which, unfortunately, received no answer.

What happened in the Central University Library of Cluj?

In spring 1992, computer training courses were organized in the central building of the library, held by Anita Breland, a US Fulbright Grantee. At the end of the programme, Mrs. Breland donated the ProCite software application, the 1.4 version, used for managing bibliographic databases.

At the suggestion of Mrs. Bob Viorica, librarian in the Documentation Dpt., I paid a visit to Mr. Papahagi, University Professor at the Faculty of Letters, who had an IT laboratory equipped with microcomputers. Following that visit, in the summer of the same year, a group of enthusiastic librarians and I had the chance to implement the ProCite programme and to work, a few hours daily, on the creation of the bibliographic database.

In parallel, we started to investigate the possibilities to set up a Computer Office in the library. A very important moment for the achievement of this goal was the visit that Mrs. Bob and I paid to our

ministry, during which we obtained two important hints from Mr. Chichernea, who worked in the Automation Division. First, we were advised not to ask for new job positions, but to transform the already existing library posts, taken up by IT specialists; the second advice was to choose the name *IT Laboratory* instead of *Computer Office*, as research laboratories were very much “in vogue” at that time.

At this point, I’d like to mention that the documentation we submitted specified that CUL already had a PC (AT 386 DX/ 40 Mhz, 4 MB RAM, HDD 120 MB), a donation from Mr. Karl Noswitz, obtained through the efforts of Mrs. Bob.

Our endeavours were successful, so that on **September the 1<sup>st</sup>, 1992** a new department called *IT Laboratory* was created. As a working place, we received two rooms in the former administrator’s quarters situated in the inner court of the central building of the library.

### **The personnel of the IT Laboratory**

At the beginning of the automation process, the Central University Library fortunately had in its staff a few librarians who had graduated from institutions with IT profile, that were on the staff. Along with Mrs. Bob, they were the first members of the IT Laboratory who started the automation process, having both IT and library experience. The team consisted of:

- **Olimpia Curta**, analyst-programmer/Head of Laboratory, former librarian at the Library of Mathematics
- **Luminița Tomuța**, programmer (until July 1, 1998), former librarian at the Classification Dpt.
- **Lucia Câmpean**, system engineer, former librarian at the Library of Mathematics
- **Viorica Bob**, editor (until March 1, 1993), former librarian at the Documentation Dpt.
- **Mihai Florea**, assistant programmer, former book handler in the closed stacks of the central library.

On October the 20<sup>th</sup>, 1993 **Elena-Angela Abrudan** joined the team as a programmer, as well as some other specialists that left us afterwards:

- **Carmen Nemeti (Istrate)**, assistant programmer, June 1, 1993 – December 1, 1998
- **Florentina Pop Moldovan**, programmer, June 1, 1998 – March 1, 2001
- **Florin Chelaru**, system engineer, November 1, 1998 – March 1, 2004

- *Felician Cistelean*, assistant programmer, system engineer, October 1, 2000 – April 14, 2008
- *Bogdan Trif*, system engineer, March 1, 2004 – February 20, 2006
- *Andras Gyorfi*, system engineer, March 1, 2004 – June 1, 2006.

The coming and going of so many people made the work of the others (the stable and loyal ones) more difficult, not only because they had to take over several activities, but also due to the time necessary for the newcomers to become familiar with library activities, the equipment and the personnel they had to work with.

### **The first activities**

At the beginning, IT specialists were expected to: analyze the library services, get information on library systems, create and implement original applications, offer assistance in creating bibliographical databases in ProCite 1.4, carry on desktop publishing activities, draw up projects and teaching of our librarian colleagues.

The acquisition and implementation of IT equipment had an important role therefore, in **1993**, the first computer network was constructed on bus topology with 10 Mb/s speed, using coaxial cable (a server of GULIPIN PC AT 486/33 Mhz, 16 MB RAM, HDD 420 MB + 3 stations PS/1, with Novell 3.11 network operating system). The conception and implementation were realized by the personnel of the IT Laboratory (Mihai Florea was helped to install the cables by the institution's electrician, Gheorghe Abrudan).

### **Important events**

The automation of library activities began by using the ProCite 1.4 programme for bibliographical databases, first in the central building at the Documentation Dpt., and later on, after the branch libraries have been equipped with computers, it was used to keep a record of their publications; Luminița Tomuța and I were responsible for this.

The lack of an integrated automation system and the insufficient financial resources made us begin to automate the basic library activities (cataloguing and acquisition) by using editors, creating and implementing our own applications, some of them being used until recent years (the acquisition programme until 2007; the programme for international exchange is still running).

As soon as the Laboratory was founded, a personnel-wage system application was implemented for the Human Resources and the

Accounting Dpt.; the application was created by Olimpia and Dumitru Curta before 1992 and adjusted according to library use.

I will herewith mention the important events of the automation process in the Central University Library, emphasizing the ones which had a direct impact on our users:

- **1993** – books and serials registering, catalogue cards editing in WordPerfect 5.1; user access to CD-ROMs on a PS/2 computer installed in the Reference Room;
- **1994** – implementation of the VUBIS library system – cataloguing module; creating an application for international exchange in FoxPro 2.6;
- **1995** – Internet connection by telephone line between CUL and the Technical University of Cluj (integration in RoEduNet);
- **1996** – access to the OPAC – VUBIS *online catalogue*; automated lending; Internet for users with access to the *Academic Dialog database*;
- **1997** – “extended star” network on twisted-pair cable with 100 Mb/s speed;
- **1999** – implementation of the ALEPH 500 integrated library system, web OPAC, connection to the Babeş-Bolyai University through optical fibre;
- **2000** – *Multimedia Room*, access to the subscribed databases: *Info Trac* and *EBSCO*, 12 electronic journals, UNO point, the Regensburg library database, our own bibliographic databases on the Internet (through the Reference Web Poster application);
- **2001** – Internet connection through DNT provider, on a radio antenna;
- **2002** – Internet connection through RDS provider, on optical fibre;
- **2003** – access to the *JSTOR Arts and Science Collection*; the acquisition of the Lex laws database;
- **2004** – access to the *ProQuest* database (subscribed to by a consortium formed by the four central university libraries), CD-ROMs with the bibliographic databases created by the library’s own specialists;
- **2005** – *SpringerLink* database, the Romanian S&T virtual catalogue;
- **2006** – the database of the World Bank, two computers for sightless people;

- **2007** – *EBSCO* database, *SCOPUS*, etc., wireless networks for professors and researchers;
- **2008** – Internet access with personal laptops for students, access to the digital library.

All these activities required much effort from the IT specialists, efforts consisted in keeping up with new information in the IT domain, creativity, dedication, and much patience with their colleagues and with the library users.

### **Courses for librarians**

The members of the IT Laboratory have organized training activities for their librarian colleagues since the first years of the department's activity.

The first courses were organized separately for the different departments, depending on the IT equipment and the activities being under automation process.

Since there was a need for a more general organization, during three years beginning with 1995, courses and seminars were held in September on the following subjects: personal computers, DOS 6.2 operating system, Norton Commander file manager, WP 5.1 word processor, network, ProCite software for bibliographic databases, Windows 3.11 interface, Word 6.0 editor, VUBIS library system – cataloguing and OPAC, CD-ROMs and Internet. The planning of courses was made according to some questionnaires distributed in June and the librarians were grouped for the seminars into beginners and advanced learners.

After 1998, these courses were no longer held, considering the fact that the first class of students graduated from the Library and Information Science College of Babeş-Bolyai University, Cluj-Napoca. During their academic studies, the students attended six courses of information technology, which gave them basic computer skills, automated library activities being especially emphasized.

As I noticed that the personnel of the IT Laboratory have been still too often asked for help in situations requiring basic computer skills, in the period February 13–16, **2001** we resumed the training of librarians within organized courses and seminars. 32 persons attended the courses, organized in 3 groups, and the subjects were: Windows operating system, Norton Commander, Windows Explorer file manager, CorelWp editor, archiving, virus removals, Internet, FoxPro programming language.

The idea that librarians were supposed to keep informed (the younger ones had graduated from the Library and Information Science College, and the others had the occasion to attend courses in the first years) determined us to cease again the training courses. However, in the period September 20–24 **2004**, some courses were held under the form of assistance in the computer room, but the attendance was unplanned and unrestricted. These courses were on: PC identification, network – network maps, computer maintenance (cleaning, optimization, antivirus), removing items from the inventory, exchange payment, Excel – ALEPH statistics, Word, Aleph – parameters setting, information retrieval and bibliographies compiling from Aleph.

As the IT domain is fast developing, I considered that it was necessary to organize courses and seminars not only to teach the librarians, but also to “protect” the few members of the IT Laboratory who, under these conditions, could hardly perform all practical activities, carry on personal instruction and also respond to the multiple interventions required. Thus, in June **2007** questionnaires have been handed out with the following subjects: PC, Windows, Windows Explorer, network, viruses and antivirus programmes, Word, Excel, PowerPoint, CD-ROM and DVD, Internet and Intranet, electronic documents and the Romanian virtual catalogue. There were 93 persons who signed in and attended the training courses during the period September 17–27. They were grouped according to their working place (branch libraries or the central building), as well as according to their field of interest.

During 1995–1999 all the IT specialists of the Laboratory participated in the courses as instructors, whereas in 2001, 2004, and 2007 the courses were held by Olimpia Curta, Lucia Hosu (formerly Cîmpean) and Angela Abrudan who also elaborated textbooks posted in due time on the intranet.

### **Programmes and projects**

From the library staff point of view, the automation process required, besides new information, a change in mentality and behaviour.

An important factor in this change of mentality was the participation in five projects organized at a national level, but also with foreign partners; 24 persons were able to go abroad, due to their participation in these following projects:

- **TEMPUS JEP 3764-92/1** *Upgrading Library and Information Sciences in Romania*, 1992–1995, mobility: 4 persons to



Holland and Belgium; equipment: Pentium DEC server, 4 DEC 486 computer stations, two barcode readers, and the VUBIS v. 3.1 integrated library system for 12 users;

- **TEMPUS JEP 9596** *Restructuration de la gestion des bibliothèques universitaires roumaines*, 1996–1998, 100,000 \$ worth; mobility: 13 persons to France and Spain (64 weeks); equipment: 1 EPSON projector, 1 switch, 1 CD-ROM tower with seven units, 1 barcode printer, 1 digital photo camera, 5 HUBs, 7 modems, 1 network tester, 1 labelling machine, 2 barcode readers, and 800 m twisted-pair cable;
- **Phare – HER RO9601** *Higher Education Reform Programme*, 1996–2001, mobility: 1 person; equipment: 44 computers and 8 modems;
- **Leonardo Da Vinci – RO/2000 PL85185/ex** *Mise a niveau des services pour le public des bibliothèque universitaires, formation des formateurs*, 2000–2001, mobility: 4 persons to Italy;
- **NUSIDOC-S&T** – *Unified national information and scientific and technical documentation system – the unification of library systems*, 2004–2006, mobility: 2 persons (1 to Italy and 1 to the 2005 ICAU Conference in London); equipment: 1 laptop, 25 desktop computers and 1 Z39.50 protocol licence.

The final project outcome was a portal with an interface that enables users to search information in the online catalogues of the participant institutions, search in their subscribed electronic resources, as well as to connect to other information resources through SFX service. After the project conclusion, other libraries were also integrated, the system thus becoming a network of Romanian libraries of science and technology - **Romanian Library Network of Science & Technology** - a genuine Romanian virtual catalogue.

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**Rezultate Căutare Rapidă**

Caută pentru "Subiecte automatizate bibliotecii" în "Bibli. universitare, cercetare (RO)" găsite 111 Răsunare

Afișare în tabel Afișare prescurtată Afișare integrală

Sortare după: Incidentă

1-10 de 68 înregistrări regisrate (reduseste) **MetaCăutare** < Anterior Următor >

Nr.	Relevanță	Autor	Titlu	An	Baza de date	Acțiune
1	100%	DRAGOTA, Joana	A informatiza informare	2004	B.C.U. Cluj	[Icon]
2	100%	SAPP, Gregg	Access services in libraries	1992	B.C.U. Cluj	[Icon]
3	100%	PFSCHEL, Kamin	Anwendungssoftware für Bibliotheken	1996	B.C.U. Cluj	[Icon]
4	100%	DUCHEMIN, Pierre-Yves	Acta informatizării unei biblioteci	1998	B.C.U. Cluj	[Icon]
5	100%	MOLDOVEANU, Maria	Biblioteca milenului trei	1993	B.C.U. Cluj	[Icon]
6	100%	VASILESCU, Emil	Creativitatea și imaginația - determinante ale inovării	1997	B.C.U. Cluj	[Icon]
7	100%	WOOD, Joanna	European directory of software for libraries and information centres	1993	B.C.U. Cluj	[Icon]
8	100%	MATCI, Dan	Informaticarea (și chiar internetizarea) bibliotecilor - cum s-a petrecut o reformă profundă a serviciilor în Biblioteca	1997	B.C.U. Cluj	[Icon]

**Temă**

- Biblioteca (17)
- Librărie (11)
- Biblioteca (9)
- Biblioteca (4)
- Biblioteca (3)

**Date**

- 1992 (2)
- 2006 (2)
- 1992 (3)
- 1998 (5)
- 1997 (3)

We were also offered the opportunity to visit foreign libraries by Dr. Wolfram Neubauer, Director of the ETH Library, Zürich. Thus, in 2003, 8 persons from the Central University Library of Cluj visited some Swiss libraries that had great experience in the automation of library activities, offering important modern services for users.

In addition to the above mentioned projects, our library had individual projects (as an institution) financed by the Soros Foundation, involving different IT and communication equipments endowment:

- *Connection to international communication networks (INTERNET)*, 1995; equipment: 1 Internet server and two modems;
- other projects: 10 computers (4 in the central library building and 6 in the branch libraries), 1 modem, upgrade of the network operating system Novell version 3.11 for 20 users to the 4.1 version for 50 users, licence for FoxPro 2.6 programming language and licence for ProCite v. 2.2 application software.

Of course, concerning the projects achievement, we also had some failures: these hide many wasted weeks of work carried on by the members of the IT Laboratory and by other dedicated librarians, who were hoping for progress, even if the work was voluntarily done. Such a project (still regretted) was conceived in 1995, when we worked up the documentations for a collective catalogue connecting, through optical fibre, all the libraries and research institutes from Cluj. The auction was won by 4 libraries from Timișoara, on the basis that some libraries in

Cluj already had automation library systems (the Central University Library, the Library of Medicine and the County Library).

Returning to the positive aspects, as they arise from above, these projects helped us make contact with other “worlds”, more advanced from the automation point of view, we met open minded people with mentalities different from ours, we who had just recently “met” democracy.

To these benefits, we can add the endowment of hardware and software, which completed (many times even surpassed) the budgetary allocation obtained for IT equipments in those years.

The last few years have brought some changes: the decision making factors realized the importance of modern information and documentation structures, and significantly increased the amount of money allocated to this purpose. Therefore, the CUL obtained 8 billion old Lei in 2007, on the basis of two projects presented to the Ministry of Education, Culture and Youth: **Enter Transylvania** and **Modernizing and extending the automation project**.

### **The present IT endowment**

Due to the great efforts of the IT specialists and the wide possibilities granted by the leadership of the library, the Central University Library of Cluj has become one of the most developed Romanian libraries from the point of view of the IT and communication equipment.

The *hardware* component in the central building of the library consists of: 8 servers, 167 computers/work stations, 26 printers, 9 scanners, 8 barcode readers, 3 copiers and 1 machine for plastic cover wrapping.

The branch libraries mainly serve the faculties of the Babeş-Bolyai University; their equipment consists of: 89 computers belonging to the Central University Library, 55 computers from Babeş-Bolyai University, 31 printers, 38 barcode readers, 18 machines for plastic cover wrapping and 4 copiers.

Only 3 of the library servers are non-name personal computers with modest characteristics, the other 5 being brand servers (1 IBM and 4 DELL) purchased in the last two years, with high characteristics: 2–4 GB RAM, a storing capacity of 1 TB, with Linux (on 6 of them), Windows 2003 and Windows NT operating systems. These are used for the Aleph integrated library system, Aleph back-up, Internet, firewall, bibliographic

databases, electronic documents, FoxPro databases and the library's mailing list.

It is important to mention that, 107 out of the 311 computers are set for public access to the online catalogue, the libraries' own databases and the subscribed databases.

The computers situated in the branch libraries are integrated in the networks of their belonging faculties, and they are connected to the Internet by means of RoEduNet. Due to this fact, sometimes they are difficult to manage, as they are under the restrictions imposed by the system engineers of the Babeş-Bolyai University.

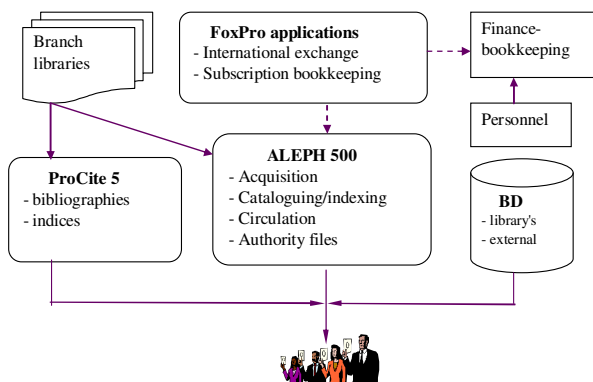
All the computers in the central building are connected in a network and have access to the Internet; the library has *two Internet connections through optical fibre*, one free of charge at RoEduNet, due to the connection through Babeş-Bolyai University and the other with payment, by the RDS provider.

As I have mentioned before, the first computer network constructed in the library was a bus network of 10 Mb/s speed with coaxial cable. This was a nightmare for the IT personnel, as the entire network collapsed in case one of the equipments (computer, connector) was out of order or disconnected. The participation in a second Tempus programme made it possible for us to study other types of networks, so that during 1997–1998 we built a structured, “extended star” network of category 5, with twisted-pair cable of 100 Mb/s speed. Certainly, this change was gradually done, as many segments could not be transferred to the new structure automatically, but only by using network interface cards and hubs of 10/100 Mb/s.

The new network was achieved by the company *MicroInformatica*, but Mihai Florea and Dumitru Curta also participated to the work. The advantage of our IT specialists participating in the project was immense, since they could resolve later problems without external assistance.

The new network type soon proved its efficiency, on the long term also, not only due to the ten times greater speed, but also in localizing and resolving interruptions which occurred mostly at the level of a single station or department.

The *software* component is represented in the following figure:



As the figure shows, the Aleph 500 v. 16.2 integrated library system (with 44 licences for librarians and 36 for the public – web OPAC) is not used to its full extent yet: there are segments “covered” by other applications which implies a weaker relationship between some departments, as well as a more difficult administration from the point of view of the IT specialists. These shortcomings are being resolved by the implementation of all the modules of the Aleph system (by Mrs. Abrudan and myself) and by starting analytical descriptions in the same system, and not in ProCite. Of course, it will not be possible to give up ProCite immediately, because of two reasons at least: we have branch libraries which have the greatest part of their collections in this system, and the databases created in this application can be sorted on six levels and different indices can be added, if a printed form of the bibliographic work is required.

The hardware and software equipment mentioned above allows us to offer our users the following information tools:

- **Aleph online catalogue** (web OPAC), that contains all the publication entries since 1994, to which other records are also added as result of the retroconversion process;
- **internal bibliographic databases** – created in the Documentation Dpt. and the branch libraries since 1992;
- **subscribed databases and electronic journals** – with online access through Internet, a service provided since 1996 (costing 121,081 Euros for 2008);

- **different CD-ROMs and DVDs** (atlases, encyclopaedias, dictionaries, databases etc.) since 1993;
- **library's homepage** – <http://www.bcucluj.ro>.

The first version of the library's webpage was made in **1998** by Mihai Florea after having been in France for a training session; in 2000 the homepage was taken over by Lucia Hosu.

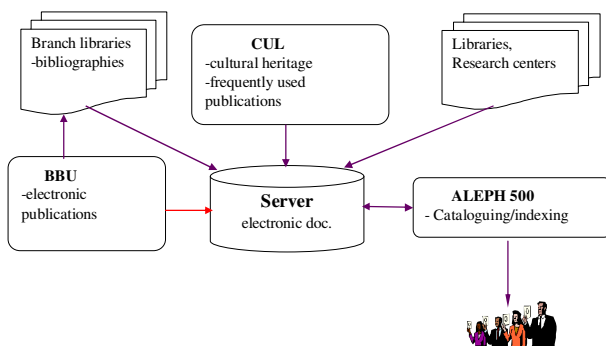
Since 2003, Liana Brânzaș, librarian in the Multimedia Room (with postgraduation studies in this field), has become the library's homepage webmaster. One can also access the branch libraries' web sites through the main page; these homepages were created by the colleagues working in the branch libraries under the supervision of Mrs. Hosu.

In order to better inform our library personnel, Mrs. Hosu created in 2005 **the intranet webpage** containing different kinds of information, especially related to library and information science, or strictly related to our library. The statistics obtained from the Aleph system are monthly uploaded to this webpage.



## The digital library

The analysis of the development tendencies in the world's great libraries and the existence of valuable old document collections in our library, made me include a plan of an **electronic library** in the project for applying as deputy director in November 2004; the plan had the following structure:



The lack of funds prevented us from achieving this objective as we would have wanted at that moment; however, in 2005 we received 2 PS Minolta 3000 scanners and two Pentium 1 computers as a donation from ETH Zürich. Thanks to Mrs. Hosu's efforts, a scanner and a computer were set up to test this new activity. Shortly afterwards we began to digitize the newspaper *Gazeta de Transilvania* with the help of a student, Mihai Țilea, a temporary employee working in the closed stacks.

After scanning a few issues, we were faced with the problem of how to make them accessible to the public by the online library catalogue. I had the idea to connect all the issues and volumes through web pages, and to include a link to the main page in the bibliographic description of the publication from the online catalogue. This idea was easily put into practice, since Mrs. Hosu is a webpage specialist, and the Aleph library system is configured in Unimarc format for bibliographic descriptions (a format agreed by university libraries at a workshop held in Craiova in June 1999). Thus, in the field 856, the publication link (URL of the webpage) is inserted and the user can go, with a single click, directly from the bibliographic description in the catalogue to the electronic version:

BCU Cluj

	Înregistrati-vă	Inchidere sesiune	Cont utilizator	Preferințe	Baze de date	Feedback	Ajutor
	Răsfrire	Căutare	Lista rezultatelor	Căutări anterioare	Coș	E-raft personal	

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Înregistrarea 4 din 4

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Deținător	CUCUCL, Cota: P.2538, Exista: 1838-1843, 1847, 1861-1873, 1876-1946; Serie nouă: an.151(1989)+166(2004), Lipsa: diferite numere
ISSN	1221-0110
Titlu	● <b>Gazeta de Transilvania</b> ... ziar fondat la Brasov-1838
Nr. serial	An.1(1838)-An.109(1946). Serie nouă: An.151,nr.1(1989)-
Localitate	● Brasov
An	1838-
Descriere fizică	; 42 cm.
Limba	rum
Note generale	Completări, la cota Sion P.16 si M.P.326(microfilme)
Note la titlu	● In 1848: <b>Gazeta Transilvania</b> între 1849-1946: <b>Gazeta</b> Transilvaniei. <b>De</b> la nr.40(1943) apare împreună cu: "Foarte pentru minte, inimă : literatură. <b>Seria 2.</b>
Subiect	● <b>Reviste de cultură</b>
Loc publicare	● <b>România Transilvania Brasov</b>
Adresa electronică	● <a href="http://www.gtbov.ro">http://www.gtbov.ro</a> ● <a href="http://www.bcucluj.ro/re/ziare/">http://www.bcucluj.ro/re/ziare/</a> Numere digitizate din anii: 1838,1839, 1841,1843, 1847, 1861, 1862

Address  <http://documente.bcucluj.ro/transilvania/>



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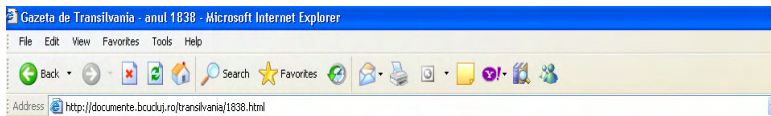


#### Despre Gazeta de Transilvania

ANUL 1838
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# GAZETA DE TRANSILVANIA





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# GAZETA DE TRANSILVANIA

ANUL 1838

JANUARIE	FEBRUARIE	MARTIE	APRILIE	MAI	IUNIE	IULIE	AUGUST	SEPTEMBRIE	OCTOMBRIE	NOIEMBRIE	DECEMBRIE
Nr.1	Nr.4	Nr.10	Nr.13	Nr.1	Nr.1	Nr.6	Nr.10	Nr.14	Nr.19	Nr.24	Nr.25
Nr.2	Nr.5	Nr.11	Nr.14	Nr.2	Nr.2	Nr.7	Nr.11	Nr.15	Nr.20	Nr.25	Nr.26
Nr.3	Nr.6	Nr.12	Nr.15	Nr.3	Nr.3	Nr.8	Nr.12	Nr.16	Nr.21	Nr.22	Nr.23
	Nr.7		Nr.16	Nr.4	Nr.4	Nr.9	Nr.13	Nr.17	Nr.18		
	Nr.8			Nr.5							

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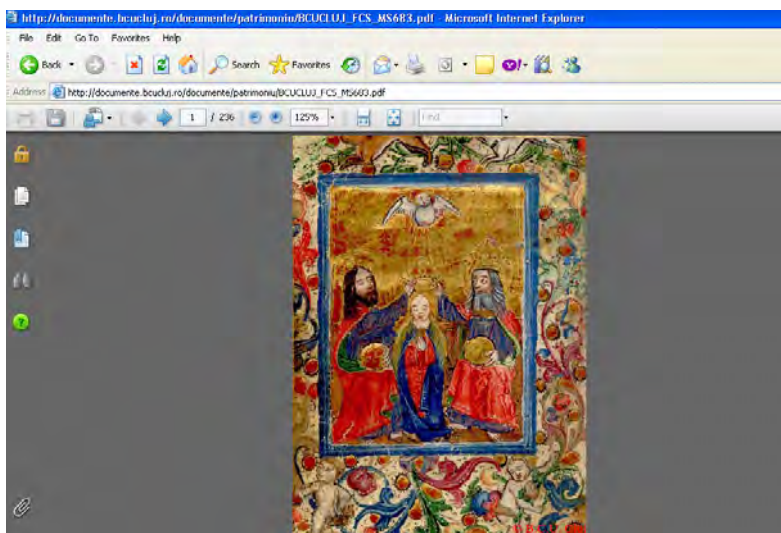


Already since 2005, we started studying the scanning modalities and the possibilities of storing electronic documents. We set up some rules only on the basis of our previous readings in this domain, none of the members of the Laboratory having had a chance before to see how such a process took place.

In parallel, in collaboration with other colleagues from our library, we proposed and elaborated projects for the digitization of some library collections, trying to raise funds for the equipment that was necessary to begin the digitization process.

We had no positive results until the presentation of the two projects I mentioned above to the Ministry of Education, Culture and Youth, in February 2007. With the funds we obtained, we purchased 3 scanners (1 SMA10 scanner of A0 format and 2 Epson 10000 scanners of A3 format) which made it possible for us to begin the digitization process continuously since January 2008.

With these equipments we can produce high quality electronic texts, which will allow us to create some “specialized electronic libraries” (e.g. images of Transylvanian personalities) and to develop new services for researchers in social and human sciences field, as well as for other users.



As I have already mentioned before, the digitized publications can be accessed from the online catalogue through the link to the periodicals webpage, as well as to the PDF files for monographic publications.

However, I considered it necessary to access the digitized publications directly from the library homepage, using the web pages that list them; at present, the electronic documents are placed in two groups, one for the national cultural heritage collection and one for periodicals, to which the electronic web page of the works compiled in the library are added.

The full text of the digital documents can be accessed only from the internal network of the library.



In summer 2008 we started the digitization of the handwritten A5 cards of the old alphabetic catalogue. These will also be accessed by the public through the library webpage in a three-level hierarchic structure (an aspect we are investigating at the time being).

For each digitized document we preserve both the electronic image of every page in TIFF format and also the compact form of a volume/issue in PDF format. The resulted files have a unique name conceived after a French model, but adapted to our needs during the first months of digitization, which allows their storage on the server without the risk of losing them that might occur by overwriting.

The process of storing so many files accessible online and of their preservation as long as possible meant a new challenge for us; we

hope that the solution we have found would be implemented in the autumn of the current year.

Besides these storage issues, some other problems will always occur related to access and security, difficult to be solved considering the activity of so many “enthusiastic” computer viruses creators and hackers, mainly Romanians.

### **IT specialists issue**

The **complexity** of the work carried on by those responsible for the automation of a library lies in the ever changing quality of the IT field, which demands continuous learning as well as skills in the basic library and information science activities. The IT specialist must be permanently learning and improving themselves, and this, unfortunately, must be done through their own efforts since the IT specialists training has never been supported, neither on institutional nor national level.

It must not be forgotten even for a single moment that most library activities depend on the quality and promptness of our work which affects both other library workers, our patrons and the indirect library users. **User interaction** is an additional component of our activity which results in a stress characteristic to working with people.

**The salary** of the IT personnel, as a first form of acknowledgement for their activity, had not been satisfactory at all for a long period of time. For many years, IT specialists had lower salaries than librarians, being considered auxiliary personnel. When the Law No. 334 on Libraries was issued on May 31, 2002, IT specialists were included in the category of auxiliary teaching staff, with the afferent wages increase.

Naturally, besides the financial appreciation, other forms of acknowledgement from the library leadership and colleague librarians were also important, even if only plain statements.

The positive effects of our activity, the satisfaction we derive from the specificity of our work, as well as the consolidation of lasting friendships between colleagues counterbalances the above mentioned inconveniences.

Among the problems related to IT specialists, we should not fail to mention the question whether such professionals **are or are not needed** in a library, mainly in such institutions as the Central University Library of Cluj.

It is a fact that in 1996, at Montpellier, France, there was a single IT specialist for all the university libraries; however his work was

supported by external IT services and librarians skilled in working with the implemented systems.

But which are the problems concerning automation that the Romanian libraries are confronted with? Let us mention some:

- personnel with scarce computer skills and with lack of accuracy in exploiting the library applications;
- automation systems “ready made” by vendors, inadequate to the Romanian circumstances;
- rigid regulations which require inventories and reports that cannot always be automated;
- insufficient financial support which does not allow us to purchase some efficient systems, to pay for their adaptation and maintenance, as well as to finance adequate trainings.

To all these we can also add a precarious national policy and a sporadic collaboration between libraries, with few definite, complete and long-term achievements.

We thus ask ourselves what is the future of these specialists in the library? The answer depends on several factors but, no doubt, a progress can be observed in the libraries which have personnel specialized in this domain.

Coming back to the professionals of the IT Laboratory from CUL, those in charge of the development and maintenance of the IT equipment (both hard and soft) in 2008 are: *Olimpia Curta, Angela Abrudan, Lucia Hosu, Mihai Florea* and our external collaborator *Andrei Dragomir*.

In addition to them, we have colleagues who carry out the digitization process: *Gheorghe Tasnádi, Felix Floca, Robert Getz, and Dana Căprar*. Due to their joint activity, on February the 1<sup>st</sup>, 2008, the department was renamed as: ***IT and Digitization Laboratory***. *Cristina Cătună* was appointed for the digitization of the old catalogue cards in August 2008.

The new name makes it possible to better integrate the digitization component in the automation and modernization process of the library. Obviously, this component will be developed, taking into consideration the present and future strategy of the library, fact that will allow us to create a separate department that will be focused only on the digitization activity. I am convinced that, by then, the new members will become familiar with this complex process and will successfully carry it out, as members of a highly responsible and enthusiastic team, qualities which, I hope, will be taken over by the new organizational form.

As a conclusion, starting from the proverb “*Man blesses the place*” and analyzing the events which have taken place in our library in the past two decades, I consider the following statement justified: *The performance of a modern library (also) depends on its professionals!*