Library Automation in Academic Libraries in India:
Problems and Prospects

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ABSTRACT

Traces briefly the history of library automation in India. Tries to analyse the various factors that directly or indirectly affect the progress of library automation such as management issues, resources available with the libraries, level of skill of staff, availability of suitable software, geographic location area. Also discusses the areas in which automation has taken place and why. Role of Inflibnet has also been discussed. Concludes that thing are changing for the better as library automation in academic libraries is now being regarded as an urgent need.

KEYWORDS: Library Automation, Academic Libraries, Library Software, Standards and Format

0.   INTRODUCTION

The history of library automation is sufficiently old now. It started in early fifties in the Untied States of America. The landmark was the initiation of MARC project by the Library of Congress. During 1960s some experiments were carried out in India in this field but very sparingly. During late seventies there were some achievements like production of National Union Catalogue of Scientific Serials by INSDOC, production of Union Catalogue of DRDO libraries of Western Region by the Institute of Armament Technology at Pune. Then came eighties and the whole focus of the librarians shifted

towards library automation. A number of seminars were organized on the library automation and still being done so. We graduated from simple library operations to specialized functions including networking. Now we talk about digital libraries and e-journals. We have come a long way. But we are a country where bullock cart and cars are seen on the same road so blocking the fast moving traffic and those bullock carts restrict the speed of the cars to its own speed. To overcome this problem there are only two ways. First, replace the bullock cart with a car, and second, bypass the bullock cart and leave it behind. The state of library automation in our university libraries is more or less the same. We have the libraries like IIT libraries which are highly automated and also totally manual libraries which are really restricting the speed of academic and research in the country.

1. FACTORS RESPONSIBLE FOR AUTOMATION IN ACADEMIC LIBRARIES

There are several reasons which can be cited for this difference. Some of them are :

1.1   Attitude and awareness of the management.

1.2   Attitude and awareness of the Users specially faculty.

1.3   Resources available

1.4 Non-availability of suitable software:

1.5 Level and skill of staff

1.6 Geographical locations

1.1   Attitude and Initiative of the Management:

Attitude and initiative on the part of the management has played major role in library automation in Indian University Libraries. The management here includes both the university management and the librarian as a secretary of the management whose task is to carry out the decisions taken by the executive bodies of the university, such as Syndicate, Executive Council etc. If the Librarian had the initiative then he was able to convince the authorities about this emergent need. In some of the cases, the initiative also came from top and the Librarian was forced (or bypassed) to do it. But the best blend was when the initiative of both the Librarian and University Authorities was synergized. If there was no initiative on both the ends than there was no progress.

1.2   Attitude and Initiative of the Uses

A library may be as smart as its readers. If the readers are smart and well aware they may force the authorities to work towards library automation. If the readers are knowledgeable about the development being taking place in the information technology, they have influenced the use of computers in library to a great extent. This is more true about faculty as they are the people who participate in decision making process. The good examples are the libraries of IITs and other higher engineering educational institutions.

1.3   Resources available

The third important factor is the resources available with the university libraries. The resources include both financial as well as human resources. In most of the universities, the librarians are given funds only for books and journals. Some libraries do not want to or are not allowed the funds received for books and journals to be used for any other purpose, even though the University Grants Commission (UGC) guidelines permit the use of a certain percentage towards such activities (In VIII Plan it was 15% and in IX plan 10%). Most of the libraries depend on the funds provided by the UGC under Inflibnet project. The distribution of the money under this project was not done logically. Big and small libraries were equated at par and as a result while some libraries remained fund starved some were not able to use the funds. Before distributing funds to libraries there should have been a survey of the requirement and certain guidelines laid down. Besides this there are no other financial resources available with the university libraries. In order to save the university libraries from going further down UGC must do something in this direction.

Another very serious problem, may be more serious than the financial one, is the lack of trained manpower. Many of our library science schools have not based their curricula on the automation requirement of the university libraries. Some of them are even

teaching today what was designed thirty or forty years back although that has become totally outdated. Not many library schools produce a candidate who can straight away go the Automation Department of a University Library and can independently work without any further training. The bifurcation of the library science schools from libraries are perhaps the one of the main important reasons for that. As a result our profession became the only profession where practice went far ahead of the teaching. In the country people are talking about digital libraries and web-OPACs and we are teaching fundamental of computers in our library schools. This is the only profession where getting a professional degree does not require any professional training. Can you imagine a doctor without hospital training or an engineer without a training in Industry.

1.4   Non-availability of suitable software

Non-availability of suitable software has also played an important role. Though there are a number of software available for library management but most of them are non standard. The main reason behind is that most of the software have been developed without the help of a qualified librarian. As a result there were a stream of non-standard software. Some of these soft wares have been developed by big corporations like CMC but have not been proved very successful. The software developed by institutions (for example DESIDOC, INSDOC etc.) could not be successful as they were lacking in marketing and after sales service. The librarian is confused as he is not in a position to decide what to select.

1.5   Level of skill of library staff

The level of skill of library staff also played a very important role. In our country there are no standard for level of subordinate staff to be recruited in academic libraries. There educational and professional qualification vary from state to state. In some of the cases the library assistants are recruited with 12th pass and a six months certificate in library science while in Central institutions like IITs and Central Universities it is minimum graduation and degree in library science. The institutions having better stuff went far ahead (though there are exceptions to that). The better qualified staff was better oriented towards progressive thinking which could move the things fast. This point emphasizes the requirement of a uniform qualification policy for the recruitment of staff in academic institutions.

1.6   Geographical Location

Geographical location of an institution also played a very important role. The institutions near to a metro city were benefited by the availability of the resources. They were having better approach to hardware and software market and also the manpower for data entry. They were having approach to better training facilities. Hyderabad is a good example which can be cited.

2.   PRESENT STATUS OF LIBRARY AUTOMATION IN UNIVERSITY LIBRARIES

The real boost in library automation came from the establishment of the INFLIBNET Centre. Before Inflibnet scattered efforts were being made in academic libraries specially in the institutions of special characters like IITs, IIMs etc. INFLIBNET proved a real catalyst. Inflibnet started with scratch. At that time there were no financial assistance available to the University Libraries for automation. For the first time it was established that automation was the need of hour. The finances were allocated for the first time. The standards were established about the data capturing. The format was finalized and the Karvan started. As one estimate at present about 120 university libraries have been using computers in their activities. Some of the University libraries are even establishing digital libraries not only of already available digital resources but are digitizing their own literature. About 50 university libraries have their web pages.

3.   AREAS WHERE COMPUTERS ARE BEING USED

The following are the areas where computer are being used at present.

3.1   Online public access catalogue

3.2   Circulation

3.3   Acquisition

3.4   Serial control

3.5   Intranet

3.6   Internet

3.7   CD-ROM services

3.1   Online Public Access Catalogue(OPACs)

The problem being faced by the users in locating the document was the first to be targeted in the library automation. As a result the work first started in this direction. There was one more reason for this and that was the availability of CDS/ ISIS software which had the facility of catalogue only. It was in contrast of the special libraries where the work first started on providing information services like CD-ROM search. Even today this area of automation has more activity than any other area. It has now graduated to Web-OPAC (web based online public access catalogues) where university libraries have made their databases available on their websites. This has eliminated the need of installation of search software on the user's terminal. One potential which remains unutilized is the use of search data for research purpose as the search history can provide very useful tools for the librarians to formulate their collection development plans.

3.2   Circulation

Circulation is one of the main activities of a university library or any library per say. In university libraries, however, the number of books issued and retuned are more than in special libraries. Therefore, the next area which was taken up was the circulation. In some of the libraries the number of books issued/returned may be more than one thousand per day. We at IIT Roorkee (formerly University of Roorkee) has experience of issuing 1500 books in six working hours. Sometimes there used to be a queue of more than 100 students, since the free hours for all students used to be the same, before automated circulation started. Use of barcodes had made the life very simple due to added accuracy and speed. Besides speeding up the issue/return, printing reports, sending reminders also become very easy. Circulation data also provides a very important insight into the book use pattern. Librarians should try to use this data for research and development purpose.

3.3   Acquisition

Use of computers in acquisition remains a low priority area. Not many libraries are using computers in acquisition. On reason may be the continuously reducing budget for purchase of books. But this area needs to be strengthened. Computerization at the stage can help not only in order processing but also can be a very effective tool in budget control. You can allocate funds to different departments based on a set formula, can send department heads about non availability of funds, can control over ordering and also utilize the data entered at this stage for technical processing and OPAC.

3.4   Serial Control

Idiosyncracies involved in serial control affects the use of computers in serial control and hence the area is not very well represented

at automation scenario. One more reason is the unsuitability of serial control modules available in most of the library Management Softwares. The procedures developed by these softwares are so cumbersome that sometimes it looks easier to use normal method rather than automation. However, this area provides very good stage for use of computers as it can help tracking the missing issues very efficiently and provide the current awareness services and even the SDI services besides budget control.

3.5 Intranet

Making the information available on intranet is also growing popularity as it eliminates the need of installing the software on the users' terminals. Users can access the catalogue through intranet or they can find the status of the books issued to them through web access. CD-ROM resources and other digital resources can be accessed on intranet. The beauty is that one need not be conversant with the software as the web links are available through the web page. Growing installation of campus wide networks is also playing a positive role in this direction.

3.6 Internet

Use of Internet for academic purposes is also increasing day by day. More and more libraries are putting their resources on Internet. Internet is the medium both to access and disseminate information. Internet has emerged as a very big virtual library which has information on practically every subject and in every media may it be text, audio or video. Libraries should use this facility to the best of their capability. They should provide links to similar type of libraries through web pages. One very good use can be designing of e-gates where user can have access to the electronic resources through a common user interface. I would like to mention that a number of free e-journals are available on the Internet. The prominent among library and Information Science are 'D-Lib Magazine', Issues in science and Technology Libraries", "Cybermetrics" etc.

3.7 Digital Libraries:

Digital library has recently become the buzzword for librarians. In the last year most of the seminars and the conferences had 'digital libraries' as their theme. Digital libraries can be of two types i.e. digital libraries of the digital text available in the market such as e-journals, CD-ROM databases, e-books, software etc. or it can be developed from the printed text available in the library. If a library takes a decision to develop a digital library of its collection specially theses, dissertations and old journals, it can solve the problem of space and preservation both. But the decision about creating such decision is taken to be very carefully as it will prove a very costly venture both in terms of money and manpower.

4. PROSPECTS

Having talked about the problems and areas of applications let us talk about future prospects. I can definitely say that the things are changing for the good. Now University authorities are realizing that there is no way to escape library automation. They are finding various ways to finance their library automation projects. Librarians are also realizing that they can not remain indifferent to the change, otherwise they will be labeled outdated. One area of concern is the library science graduates being produced by our library schools It is surprising that UGC is giving responsibility of refresher courses of library science to the library science school and not to the libraries who are established themselves as advanced libraries and uses the technology far ahead than the library science schools. Existing staff is getting rid of the fear of computerization. They are coming forward to learn and make themselves suitable to face the challenges of the new millennium.   Standardization is increasing and the better softwares are available.

BRIEF BIOGRAPHY OF AUTHOR

Dr. Yogendra Singh started his career from Delhi Education Department. He worked as Librarian with Indian Ports Association (Ministry of Shipping and Transport) during 1983-84 before joining DRDO as Scientist in Sep 1984. After serving various institutes of DRDO at Pune, Almora and Delhi he joined University of Roorkee (Now IIT Roorkee) as Librarian in 1996. Dr. Singh has around two decades of experience in Library Automation and Networking. He was a Fulbright Scholar to University of Maryland during 1999-2000 where he worked on Digital Library of Archives. He has published ten papers in various journals and conferences. He has completed a number of automation projects. His main interest lies in Library Automation, Networking, Automatic Indexing and Digital Libraries etc.