MODERN TECHNOLOGY IMPACT ON RECORDS CONVERSION

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ABSTRACT

Microcomputers are making conversion of library records inexpensive and fast. Integrated library system needs to be developed in tune with the growing library automation scene. The greatest potential of the library and information services is capable of tapping the remote databases through network interface using advanced technology. The importance for databse is increasingly attractive as search systems are simplified for easy access to library users. The automation process should in case be delayed as the growing demand may jeopardise the essential library services. Database creation should be a reality using the latest advanced technology through cooperative endeavours to gain the advantages of vast information resources.

INTRODUCTION

Automation usage in library for circulation or online catalogue activity, holdings information needs to be put into a form which can be recognized and used by a computer. In early 1980s most libraries in U.S.A. had their entire collection in machine readable database. In India, most of the academic libraries except a couple of special libraries, seldom possess any form of automated database, despite three decades of valuable time available to apply the technological innovations operative in various parts of the world. Automated database may be used only when complete holdings are listed and then the paper records can be abandoned.

Retrospective conversion of catalogue becomes a necessity to meet the requirements of circulation system and other associated services. In order to have consistency for the retrieval purposes, holdings information needs to be standardized. The practice of libraries in converting data into the database differ and as such the library should have full documentation data. Computers can be used torestructure the data into required format at the time of retrospective conversion. Full documentation is essential as several conversion methods are employed by different libraries at different times and inconsistencies are unavoidable.

CONVERSION ON THE SYSTEM

Creating record is possible on the circulation system. Before creating a copy record, the database is searched for correct bibliographic record. After locating bibliographic record, the call numbers are keyed and then other items of information is entered. Direct entry of information through one terminal of the system is time consuming and this is related to the conversion rate and number of terminals available. Location of terminals outside the library operational areas is not practicable as telecommunication installations are highly costlier and encroach on the budgetary provisions adversely in due course. The records conversion method will have greater speed only when adequate manpower is employed on the terminals which would ensure uniterrupted operation.

PROCESSING TREND

Standardization of various operations and bibliographic records make the database conversion faster and verification of bibliographic data and entires easier. The quality of cataloging polays an important role in modifying the database records. Extensive modifications reduce the cost effectiveness of the conversion of records. The most important consideration being the availability of adequate disk storage space to hold the converted catalogue records and also the records of participating libraries. The automation process since initiated in early 1970s in United States of America and the then available technology was fully exploited to maximise the usage in library and information environment. The federal government since extensively supported the cause of library automation through generous funding. The cooperation of the US libraries is visible in having machine readable databse and copies of the shelf list order printouts available in branch libraries. Copies of the titles available in various branch libraries are labelled and placed on shelves. The printouts of database were

converted at a Central site and occasionally vendors such as Electronic Keyboarding Inc., USA used to be assigned the conversion job. This method of converting records avoids 'terminal bound conversion.

BAR CODE IDENTITY

Some of the US libraries labelled their documents at the time of conversion. Many a library performed their conversion for bibliographic utility with different codes of identification for each branch library. They have developed a copy level conversion of records which proved to be of great promise in those days. In addition to the creation of records, computer generated label numbers are printed to identify the unique item number of the record. This number is the OCR identity number in a barcode and it indicates call number, author, title, year of publication, branch, LC card number. This unique bar code number is affixed on to the physical book and the unlabelled books treated as missing items in the collection. Separate record needs to be generated after consolidating unlabelled items after they are identified at the circulation desk and on the shelves. This process performs an inventory in addition to the conversion of records for the database. Similar procedure is adoptable to convert the records in the university libraries in India. Except the identify and separate input for local language records, most of the data available in English can be converted. The latest automation equipment along with the sóftware be employed for faster processing.

ADOPTABILITY MODE

The labelling item method of conversion is a rapid process and does not limit to the availability of terminals. This is an useful holdings information of the bibliographic records. Creation of one record for one title makes the libraries holdings in perfect order. The barcode labelling reduces the inadvertent conversion dramatically. In the Indian academic libraries the automation process since initiated in the recent past and the retrospective records conversion has made a beginning. Infact this project of retrospective conversion of records needs to be planned most cohesively. Standardization of the input format and conversion of records on cooperative basis through networks saves much of the manpower, disk space and a lot of mistaken duplications. The network processing hastens the retrospective records conversion. The western experience of usage of magnetic tape storage media, the OCLC database availability, the archival tapes availability needs to be evaluated in terms of economic viability for Indian academic libraries adoption of the retrospective conversion. The competence and experience of the processing personnel plays a vital role in the records conversion project. Catalogue record version takes much of the time slot for conversion process.

It is essential that automation intending library should consolidate the records and plan the long term or short term retrospective conversion project. Much of the internal operation depend on the usage methods in creating the basic elements of the database. Any automated library system, whether small or big, essentially needs a database before a book is circulated to the patrons as they can search for titles.

SCANNER TECHNOLOGY

The advanced technology become a resourceful tool to convert the records retrospectively most inexpensively these days. The conventional conversion method since radically changed the catalogue now. Hitherto conversion of catalogue records is dependent on the input of various elements and sequencing through programming in the database. The latest technology available now in the Indian market for record conversion is the "Scanner". The Scanner technology recognises type faces in certain sizes of catalogue cards and sequentially arrange them in a pre-defined format through standard word processors. The basic principle involved in the usage of scanners in the conversion of records is the image processing and then converting the text into defined sequence to create database by means of software like OMNIPAGE and TEXT BRIDGE. As of now, color and mono scanners are available in the trade circles.

1. A4/A0 size flatbed colour scanner / Color Hand Scanner
2. A4/A0 size flatbed mono-scanner / Mono Hand Scanner

The most advantageous among the available scanners is the A4 size flatbed scanner which can read 8 catalogue cards at one time. In addition, hand scanners are also available for imaging pagewise texts. With the advent of technology, the retrospective conversion of records of library document titles became spontaneously advantageous to accomplish the project in a record time. The disadvantage with the scanners is that any spilling of ink or blurring in the entry elements in the card catalogue, the image will appear but some indicator will be given for the matter which was not scanned properly. The scanners presently available can only image English language and other Indian languages are not possible at present. On the financial front,

the scanner technologies are available at reasonable prices worth the equipment and possession by the automating libraries. To illustrate the economics, the equipment costs are indicated hereunder for libraries with holdings over one lakh volumes. The cost of the computer hardware including scanners and software are shown.

The usage of scanners in the library and information environment facilitates (1) Speedier processing of records conversion (2) Saving manpower through higher processing rate of records (3) Minimises expenditure on data processing as multiple catalogue cards are imaged at one time. The aspect of inconsistency in various data element presentations including varied call numbers for the same document by various libraries can be eliminated through coordination efforts for data conversion to avoid unitended duplication. The technological advances applicable to information and liobrary field now available proved to be a boon to the management and also user community as they fecilitate exhaustive information potential availability all over the world through network.

PLANNING HARDWARE & SOFTWARE FOR ONE LAKH VOLUMES

HARDWARE	Rs. (Approx.)
PC AT/80486/66Mhz. 8 MB. RAM SVGA COLOR MONITOR (14") 1.2 MB. & 1.44 MB. FLOPPY DRIVES DOUBLE SPPED CD-ROM DRIVE 50 MB HARD DISK DRIVE	75,000 - 85,000 (Reputed firms sale price) 55,000 - 65,000 (Assemblers sale price)
150 MB. CARTRIDGE TAPE DRIVE	15,000
132 COLUMN PRINTER	15,000
SCANNERS	
A4 SIZE SCANNER (COLOUR)	60,000
SOFTWARE	
OPERATING SYSTEM	
MS. DOS & WINDOWS	2,500
UNIX	50,000
SOFTWARE FOR OFFICE & OTHER OPERATIONS	
WORDSTAR 7.0	2,500
dBASE	10,000
LIBSYS DOS-BASED	40,000
LIBSYS UNIX-BASED	1,20,000
SCANNER SOFTWARE	
OMNIPAGE	50,000
TEXT BRIDGE	18,000

OPTIONAL : TECHLIB+ Library Operations Software with OCR support is being marketed and support by National Informatics Centre. Price Rs. 1.13 lakhs(Approx.)

CONCLUSION

The impact of a variety of microcomputers now available has great capability for total online processing of all library activities and this can be processed into a reality within the budgetary range of academic libraries in India. These in turn can be tagged on to the special and public libraries in India through network system. The Indian automation scenario is crossing over the fourth decade of library automation around the world. In all probability the Indian academic library system is certain to use the latest technology to exploit the information potential. Libraries holdings needs to be put into a machine readable from through the latest innovative technological means especially scanners to hasten the process and to dispense with the paper files. The scanner technology application process is certain to transform the library holding records into a comprehensive database in a short time. The planning and executive bodies of the academic libraries particularly university libraries should turn towards the advances in computer and information technology to synchronise with the powerful impact on the usage through library automation and networks. Integration of the library system through computer capabilities, satisfies the desired level of information requirements of the user community.

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