COMPUTERISATION OF LIBRARIES IN BANGLADESH

S.M. Zabed Ahmed
Md. Nasir Uddin Munshi
Minhaj Uddin Ahmed
Department of Library and Information Science
University of Dhaka
Email: duregstr@bangla.net

ABSTRACT

Examines the state of library computerisation in Bangladesh. Presents efforts made by different bodies and institutions in the country to automate their library operations and discloses problems faced by the libraries, which succeeded in automating some of their functions. Provides suggestions as to how libraries can adopt new computer technologies in order to improve their functions and services to users.

Keywords: Computerisation; Automation; Libraries; Information Centres; Bangladesh

INTRODUCTION

Computers are reshaping the modern world and even in Bangladesh the computer is recognised as an effective tool in different development sectors. Although Bangladesh began using computers for computation and data processing in 1964, very little progress has been observed in the application of computers in libraries and information centers between 1964 and 1997.

This article reviews the extent of computer applications in the libraries in Bangladesh. The main objectives are: to look at the extent of computer use in libraries functions and services; problems hindering library computerisation; and future plans. In addition, the article recommends ways to improve libraries' chances to adopt new computer technologies in order to improve their functions and services to users.

METHODOLOGY

Personal interview and visits to libraries were undertaken to collect data on the extent of computer applications and use in libraries in Bangladesh. In addition, data is also collected from the Department of Public Libraries, Bangladesh Bureau of Educational Information and Statistics (BAN-BEIS) and the University Grants Commission (UGC) to look at the computer uses in public, college and university libraries.

THE USE OF COMPUTERS IN LIBRARIES

Libraries in Bangladesh have realised the value and importance of computerisation in order to improve their services to users. Even though computer systems have been introduced since 1964 to government departments and the private sectors, libra-

ries have only begun to use computers by the beginning of the 1980s. The International Center for Diarrhoeal Disease Research, Bangladesh (ICDDR, B) library and the Agricultural Information Center (AIC) are pioneers in creating bibliographic databases on specialised fields using microcomputers (Khan, 1989). Recently, other libraries have installed microcomputers to automate and manage library activities and functions as well as to create bibliographic databases. Table 1 shows the number of libraries by type and percentages of computer installation in the libraries of Bangladesh.

ASSESSMENT OF FINDINGS

Analysis of the data collected from the field visits to libraries along with data gathered from the Department of Public Libraries, UGC and BANBEIS shows that only 31 libraries in Bangladesh use computers in their operations and these libraries are concentrated mostly in Dhaka, the capital city of the country. Table 1 indicates that 7 government university libraries, 3 private university libraries, 1 public library and 20 special libraries are using computers. The application of computers in these libraries is still limited, less than optimal and at an experimental level. It was also noted that none of the college libraries were automated.

In Bangladesh, computers are used in libraries mainly for creating bibliographic databases and word processing. Table 2 indicates the list of operations automated amongst 31 libraries in Bangladesh.

It should be noted here that most libraries in Bangladesh, which use computers in their operations and services, have been using the IBM PCs or their compatibles and CDS/ISIS (Computerised Documentation System/Integrated Set of Information Systems) software in creating bibliographic databases.

Table 1: Libraries and The Use of Computers in Bangladesh

Type of Library	Total	Installation of Computers	Percentage
University (Public)	11	7	63.63
University (Private)	17	3	17.64
College (Government)	173	0	0.00
Public (Government)	66	1	0.22
Special	125	20	16.00

Table 2: Types of Library Operations
Computerised

Operations	Libraries with Computerised Processes
Serials Control	1
Book Ordering	1
Cataloguing	26
Current Awareness & Selective Dissemination of Information	2
CD-ROM Search	6
E-mail	3

PROBLEMS OF COMPUTERI-SATION OF LIBRARIES

Computerisation of libraries in Bangladesh is still in infancy. A number of problems contribute to the low level of computer utilisation in the libraries in Bangladesh. From the field visits and personal interviews of librarians and information specialists, who had automation related experience, a number of problems were identified. Not all the problems discussed below were mentioned by all individuals interviewed but everything that was mentioned has been included.

(a) Lack of Funds

Lack of funds was the most common cited problem and reflects the difficult financial problems of the country in general and the libraries in particular. The library finances are seen as a mirror of the country's general economy. Bangladesh have an annual per capita income of $230 compared to $3,520 for Malaysia in 1994 (Asian Development Bank, 1995). Consequently the most chronic problem which libraries face is the constant shortage of funds as well as libraries are often excluded in the process of financing for automation. Sometimes the parent organisation allocates funds for the purchase of a computer, but not for its maintenance.

(b) Lack of Technically Trained Staff

Library personnel in Bangladesh in general have inadequate knowledge about the potential of computers and its exploitation in library and information work. The lack of suitably trained library staff in computers and their use in libraries hindered the way of computerisation of the libraries. Some library staff are not professionally trained in library and information science and therefore lacked the knowledge of using computers in libraries due to the unavailability or inaccessibility of computers in library and information science schools.

(c) Psychological Factors

It is acknowledged that there is resistance from the library personnel because they are not aware of library computerisation. There is fear of the unknown and feelings that computer use would result in the retrenchment of a large number of employed staff.

(d) Standardisation Problems

Another major problem hinted at is that computerisation efforts of different libra-

ries appear individualized. Every library approaches the task in its own way and there is lack of co-operation. Bangladesh have no national models or standards for the libraries to follow. Some systems have been created without the essential infrastructure and without due regard to inter-library compatibility.

(h) Under-utilisation

Another problem hinted with computer installations in most libraries is under-utilisation. In some libraries the computer is essentially used in low-level jobs, replacing mainly clerical work. The main causes of under-utilisation are purchasing without proper planning and little consideration to meet both present and future needs.

Some of the problems discussed above revealed a lack of awareness or familiarity with developments in the computer field. The cost of computer system has fallen drastically, its power, speed and capabilities have risen sharply, thus enhancing their cost justification and applications. There are small computer systems currently available for a cost less than the annual cost of one clerical worker (Shell and Damachi, 1984).

FUTURE PLANS

The future plans for library computerisation in Bangladesh are as follows:

(1) Dhaka University Library, which is the largest library in Bangladesh with a collection of more than 500,000 books, is now planning to acquire the Q series TIN-LIB Library Software. The system will be equipped with a "network server" and a number of microcomputers distributed in a local area network (LAN) within the library and faculty buildings of the university. The system will be used for creating bibliographic databases, controlling acquisition, cataloguing and serials, effecting bar-coded circulation, reservation and recall systems, current awareness services (CAS), selective dissemination of information (SDI) services and online literature searches of the national and international databases through CD-ROM and also via the internet. It will also have full management module towards budget control and management information (Alam, 1996).

(2) The Department of Public Libraries which is already computerised revealed its future plans to purchase 17 more PCs for 10 divisional and district level public libraries and to create and maintain a complete list of books available in government public libraries. The libraries at divisional and district levels will be networked with the Central Public Library at Dhaka (Bangladesh, Dept. of Public Libraries, 1997).

(3). The Ministry of Science and Technology, Bangladesh has initiated a project entitled "Automation and networking of Science and Technology Libraries in Bangladesh". The Bangladesh National Scientific and Technical Documentation Center (BANSDOC), an organisation of the Ministry of Science and Technology is the executing agency of the project. The proposed "Bangladesh National Scientific and Library Information Network (BANS-LINK) will be implemented in the following three phases (Rahman, 1994):

Phase 1 (1st year): In this phase, the housekeeping functions of the following libraries and documentation centers in Dhaka will be automated first and these include:

(a) BANSDOC (as the central host)
(b) Dhaka University Library
(c) Bangladesh University of Engineering and Tehnology Library
(d) Bangladesh Council of Scientific and Industrial Research (BCSIR) Library
(e) AEC Library
(f) AIC Library
(g) Institute of Post-graduate Medicine and Research (IPGMR) Library
(h) National Health Library and Documentation Center (NHLDC)

Phase II (2nd Year): In this phase, the above mentioned libraries and documentation centers will be networked.

Phase III (3rd Year): In this phase, the following libraries outside Dhaka will be automated:

(a) Rajshahi University Library, Rajshahi
(b) Chittagong University Library, Chittagong
(c) Bangladesh Agricultural University Library, Mymensing
(d) Jahangirnagar University Library, Savar, Dhaka
(e) Shahjalal Science and Technology University Library, Sylhet and
(f) Khulna University Library, Khulna.

The participating libraries are already provided with computer systems required to participate in the network. BANSDOC has prepared a BANSLINK/CCF data entry form for the participating libraries.

To create technically trained manpower the Department of Library and Information Science of the University of Dhaka has already introduced practical courses in computer applications in libraries from the academic session 1996-97 (University of Dhaka, Dept. of LIS, 1996). At present the Department is equipped with microcomputers and planning to provide a wide range of computer facilities for the students including full-fledged personal computer laboratory with multi-media and Internet facilities. The Department of Library and Information Science of Rajshahi University has also introduced computer training courses to students.

SUGGESTIONS

The following suggestions are put forward for the proper and acceptable use of computers by libraries in Bangladesh.

(1). The government of Bangladesh should allocate sufficient funds to support the purchasing and maintenance of computer systems by libraries. Tax and VAT on computer systems and computer accessories should be withdrawn initially for 5 years if the country wants to encourage greater automation of processes in the next century.

(2). Any computerisation project of the university libraries in Bangladesh should be a joint exercise between the libraries and the computer centres of the respective universities. This is necessary owning to the cost involved and the readily available expertise at the centers.

(3). Library and information science schools should develop special training programmes for library staff on the use of computers in libraries and organise special advanced training courses for professional librarians on the use of computers in libraries.

(4). Librarians should convince administrators at the higher level, in the importance of the use of computers, to develop a level of awareness at the administrators' level sufficient to encourage them to use the computer in libraries and to convince officials that automation will improve the effectiveness of information services and access to information which they need for decision making.

(5). Computerised systems are dynamic rather than static. So it is important in planning for computerisation, that hardware and software be selected which are sufficiently flexible to meet both the present and future needs. The hardware chosen must have the capacity to handle growth of the system for at least three to five years. The software chosen must also be flexible enough to accommodate additions and/ or changes to the system as need arises (Johnson, 1989).

(6). Libraries with the help of software development firms should try to develop software packages for the use of computers in Bangladeshi libraries in general and to make the best use of the available ready -made software for libraries, provided they are capable of solving the local needs. They should also develop a standardised thesaurus in Bengali language for the use of computer system employed in the libraries in Bangladesh.

(7). Libraries should also develop a centralised database to include all documents and sources of information available in the country in order to support scientific research and studies, and to provide decision-makers easy access to needed information. Such a database is needed to be linked with other international networks.

(8). The library associations of Bangladesh should organise seminars and workshops, to create awareness among librarians about the potential advantage of automation and thus encourage more libraries to automate their processes.

CONCLUSION

It is a recognised fact that the coming century is going to rely heavily upon information. The libraries will, therefore, have to play an increasingly important role in functioning as information servers. To play this role more effectively and efficiently in order to meet challenges of the 21st century, modern information technologies must be introduced in their services without any delay. Individual efforts should be replaced by a coordinated and collective national effort. Otherwise uniformity in matters like the use of application software, networking systems, bibliographic descriptions, etc. will become impossible.

REFERENCES

Alam, Fazlul. 1996. *Dhaka University automation of the library (DUAL): an appraisal report and proposals for action.* Dhaka: University of Dhaka.

Asian Development Bank. 1995. *Annual report*. Manila: ADB.

Bangladesh. Department of Public Libraries. 1997. *Official records*. Dhaka.

Jabbar, Mustafa. 1993. Thoughts on computerisation in Bangladesh. *Computing* (May):44-45.

Johnson, Jane S. 1989. *Computerising information systems in developing countries: keys to sustainable development.* Arizona: Tucson.

Khan, M Shamsul Islam. 1989. Developments in new information technologies and their applications and prospects in Bangladesh. *Media Asia*, Vol.16, no.1: 32-40.

Rahman, Lutfur. 1994. Automation and networking of science and technology libraries in Bangladesh. Paper presented in a discussion meeting at BANSDOC on 26 June 1994.

Shell, R L. and Damachi, N.A. 1984. Improving water utility management. *Water Engineering and Management* (February).

University of Dhaka. Department of Library and Information Science. 1996. *Academic Committee report*. Dhaka: University of Dhaka.

44