Chapter 8 Findings, Suggestion and CONCLUSIONS
Universities are centers of learning and research. They play a key role in promoting right leadership, tolerance and reasoning. They train competent men and women and support in seeking and cultivating new knowledge. Their main contribution leads to the growth and development of human resources in every sphere of knowledge by offering structured programmes and training courses. All these programmes, in turn, support the advancement of knowledge, which is used for the benefit of the society in general.

Libraries are the core of a university system. They occupy a central place by supplementing and complementing the learning process. Their main contribution is collection, preservation and communication of new knowledge to their users. Due to its important role in learning system, a university library has been recognized as heart of educational system. The place of library in a learning system has been rightly emphasized as; a university cannot function without a library.

Introduction of distance learning has changed the pattern of learning system, wherein the role of a library has come to be of vital importance. The shift from teacher-oriented to scholar-oriented system has made the library's role much more crucial in any learning system. In the contemporary changing environment libraries occupy a central place in supporting the learning system.

The increased responsibilities of the university libraries have been creating pressure to improve their services in order to satisfy their users. To improve the services library are looking for various ways and means and using the modern technology such as, computers, modern systems of communication and automation.

The present study is an attempt to argue in favour of introduction of automation in the University’s Library System. In the process It has been examined in detail the
Various aspects connected with automation. This chapter presents conclusions and/or findings of the present study.

- The universities in India were established more than two thousand years ago. The modern universities came into existence during the second half of the nineteenth century. Calcutta, Bombay and Madras universities were established in 1857. These universities to start with had limited objectives of conducting examinations and awarding degrees as a mark of fitness to recruitment to the civil service in the country during the British rule.

- University was that it was outside the control of British rule, the Gujarat State being an independent princely State in those days. These universities had the distinction of establishing its library in the same year of its establishment i.e. in 1918. Many scholars Contributed to the formation of the library. This university seriously planned to have a separate university library building during 1930's, which shows concern for provision of library services. However, separate building was not ready until 1963, but provision for multi-tier library was made in the historic Arts College building. In addition to university library, every college in this university has its own library to satisfy the immediate needs of its users as well as to provide personal attention. There are departmental libraries, Which are part and parcel of University Library System.

- Presently, a number of distant education institutions are established, Resulting in a new emphasis on self education. Therefore, the librarian's role has become increasingly responsible not only to provide material but also to help in locating the sources and acquiring the subject knowledge.
• University Library collection consists of very valuable Palm leaf manuscripts and non-conventional documents. Its collection covers a large number of subjects in a variety of Indian and foreign languages. For example, there are books in Science, mathematics and medicine in Arabic and Urdu languages. The collection also includes several gift collections and documents Published by UN and its agencies. It offers services to about 13,000 registered members.

• In addition, services (excluding circulation) are also offered to many Potential users. However, one of the prominent services offered by the Libraries in SOUL are circulation of books. Even the inter-library loan is provided to a limited number of users. SOUL also provides Photo copying and reference services.

• The users of SOUL are critical about its services. Some of the problems identified by them are as under:

  • As per the catalogue a book has been acquired by The library, but the book is never to be seen on the Shelves. It is not known whether the book is lost or under Issue. In these circumstances, the library neither acquires Another copy nor is the procured copy made available to the users.

  • The books are selected by the members of the faculty. The selection is based on mere presumption rather than on any practical data. The faculty do not get the actual data useful for the selection of the books. Hence, the selection has become a routine process rather than an objective process.

  • Some teachers borrow books for the use in their projects or for the use of the scholars working with them. But most of them forget about the books that are borrowed by them. No reminders are sent by the library
regularly to the faculty. This situation cause inconvenience to the users who wish to use those books.

- Generally books are not returned by the users within the due date putting ©the/users to inconvenience. It has been felt that regular issue of reminders will regulate the return of books both from the teachers and the students in time.
- Reservation system is existent only for name's sake. Infect, the required books are never made available for months together to the users.
- The university libraries are facing problems due to increase in the number of courses, students and faculty. This naturally results in increased work for the staff and the library is not getting the pro-rata increase of the staff. This adversely affects the efficiency of the staff and services. Introduction of computers will support accurate and faster operations with the existent staff component. Although, automation is admittedly more expensive than manual methods. Its performance and introduction of new services will overweigh the cost component. Existing hardware and software can offer automation of all the library functions. The software is available in modular and integrated forms. It has several added advantages over manual methods.

- Every borrower in the university (except from Arts and Social Sciences) have the opportunity to borrow books from their colleges and the University. These borrowers have to register themselves as a precondition to borrow the materials. At present, the borrower has to register at two places (both college and University). Subsequently, the user has to cancel his registration at both the places. This involves wastage” of users' time, staff time and of stationary. It is also found that the University is facing difficulty in identifying the teaching and
non-teaching staff after lapse of years due to the phenomenal growth of the university.

- To avoid this confusion the university should give a unique number for every staff Member, which can be used both for library and other purposes. The unique number Helps in easy retrieval of borrower information by manipulating the same in automated system.

- The issue policy for members of the faculty is not uniform in all the college libraries. There is no limit on issue of books to the faculty in Law College and College of Education, whereas, the faculty can borrow 20 Books each in College of Commerce and Business Management, 10 books in College of Technology and only six books in Engineering College which is in addition to six books from SOUL. Ironically no such facility exists for the members of the faculty of the College of Arts and Social Sciences, where they can borrow only six books each from OUL. The faculties of Science College have the facility to borrow from the departmental libraries. This is a major defect in the method of lending books which does offer equal services to the entire faculty in University’s. This can be rectified by automating and net working the libraries in OULS and fixing the number of books permitted to borrow by each member of the faculty.

- The issue policy for students and research scholars is also not uniform. The UG student of Engineering College can borrow four books each, those of Law College three books, and two in the College of Technology in addition to two books from the University’s. The UG students of Arts and Social Sciences have no facility to borrow in the college and they have to borrow only two books from University’s.
• Almost a similar situation prevails for PG students and research scholars. There is a need for rationalization and uniformity of issue facilities to all the students and research scholars in the university. Automation can facilitate such rationalization and uniformity. If the libraries are linked, the system permits to borrow the books from any library, wherever, useful books are available to the users.

• At present the libraries in MIS are following the Browne method for the issue of books and this method have several limitations as well as disadvantages. One of them is misplacement of due date slips in other's borrowers' tickets. This system involves more staff and longer time. Automation can streamline the issue system and eliminate defects and can facilitate faster operations.

• Overdue of the books is very common in the libraries of OULS. To control overdoes, the libraries college fine from the users or issue reminders. At present, both are not consistently in operation due to the limitation of staff and resources. However, these libraries have stated that the reminders are issued irregularly. This drawback can be rectified by introducing computers to circulation function, for a prompt issue of reminders and calculation of overdue charges.

• The libraries are finding it very difficult to prepare and update the list of overdue books. It has been furled that the library takes more than two or three days to issue no dues certificate. It is found that no dues certificates have been issued to a few borrowers in spite of the fact that they have yet to return some books. Automation will solve such typical problems by giving the status of the book and the borrower within a few seconds.
• Return of each book consumes about 10 minutes time thereby involving more staff and users' time. Automation can hasten the procedure and record accurate information in loan records.

• Books can be renewed by the borrowers on or before the due date. The library needs to take out the card to renew the books. To facilitate renewal the library insists on physical presentation of the book. Automation sort-out this problem, wherein the details of books issued to a particular reader are easily identifiable and the book can be renewed with or without its physical presentation.

• The users can reserve books in advance and this process involves staff time to search through the loan record. The libraries take two or three days to process reservation of each book, and this delay is mainly due to the work involved in searching for the specific record. In manual methods, the earliest book to be returned is reserved but several times other than the reserved copies are returned earlier than the one reserved. In such cases the user does not get the book reserved by him, due to which the concept of reservation fails. Automation can rectify this lapse by trapping all the copies of the book as and when they are returned. The library can provide the earliest returned copy to the user. Subsequently, the operator can give instruction to the computer for issue of the remaining copies. The returned copy can be supplied to the user and on instruction the computer will allow issue of the remaining books.

• Statistics is an important tool for the evaluation of any activity. The library collects the statistics to evaluate its collection and services. Circulation statistics are collected to assess the use of library materials. The University is able to collect the number of books issued on a particular day. This figure needs further analysis to
assess the use of library collection. Other statistical data are not collected. The libraries need additional staff to collect the necessary data and compile the required statistics. The library suffers due to non-availability of sufficient statistics. Automation can facilitate easy collection of data by incorporating necessary instructions in the software.

- Several times the books acquired are not available on the shelves, and the library finds it difficult to know whether the book is on loan or lost. To search the issue record, the library takes weeks and, in turn, the library is not able to provide access to the book. Automated system can provide easy and quick search of loan record and facilitate the library to take the necessary action.

- The library is not in a position to identify who and how many times a book has been borrowed earlier. Computerized system can provide detailed information in this regard.

- Automation involves two major stages namely Planning and Implementation. Each of these stages can be further divided into several steps. Planning involves mainly preparation for automation, constitution of planning group, defining the objectives, feasibility study of the proposed system, redefining the objectives and design of automated system. The implementation stage can be divided into implementation and evaluation steps. All these steps need to be carefully studied and examined taking into several factors consideration.

- The acceptance of management, staff and users is very essential for an automated project because it will create a right environment to accept the change. Mere acceptance does not solve the problem and
the library has to convince, perceive and lobby for release of necessary finances.

- The project has to be planned by a group viz., "Planning Group". This comprises the representatives of University administration / Library committee, staff Representatives, system analyst, computer professionals, and the librarian. This group should be entrusted with the responsibility of studying the existing system; preparation of the plans; implementation of the project; interaction with the management staff, users, and library and computer professionals. Further, they have to visit the automated libraries to observe their working and understand the problems. It is also essential to study the existing and relevant technology in order to have efficient planning.

- The planning group has to state the primary objectives of the library function proposed to be automated (circulation system). On the basis of primary objectives, specific objectives of the proposed automated system have to be spelt out. These objectives provide guidance to the planning group in planning the proposed automated system.

- Feasibility study has to be made suggesting the possible ways of accomplishing the project objectives. This study can be divided into three phases namely, preliminary study, investigative study and final report. The first phase is to assess the benefits to be gained from the new system in relation to the costs involved. It has been an accepted truth that automation is not economical compared with manual methods. It also involves substantial investment. This phase becomes irrelevant to libraries, as its main emphasis will be on improvement of services.
• The second phase involves a careful study of the methods, operations and activities involved in both manual and automated systems. The study has to be made in relation to the stated objectives. In this phase, an in-depth study has to be made into the factors such as time consumed for each operation, amount of work out-put, staff time and cost involved in each operation. The last phase, preparation of the report has to be made on the basis of the earlier two phases. This report should include items such as estimation of costs; technical aspects; availability of infrastructure; staff training and implementation procedure. Each aspect has to be studied in detail and the changes or modifications that are to be made in procedures, methods, records and forms etc., have to be identified.

• Feasibility report provides insights into the automation project. On the basis of this report the objectives have to be redefined, if necessary. It is the basis of the feasibility report and the stated objectives, that several items such as methods, procedures, physical facilities, forms and records have to be designed. The design should include assessment and study of software and hardware requirements. Even the environment has to be designed to get the benefits from automated system, and this design includes the design of lighting, heating, noise and site planning.

• Generally, the barcode technology is most ideal for the automated circulation system. (The barcode is a machine readable code consisting of bars of varying widths to represent numerical characters). Barcodes have to be designed both for borrowers and documents. The barcode can be read by the light pen quickly and accurately and records the information in loan file. To use barcode technology, the library has to purchase the software and prepare the labels. These labels have to be
affixed on the cover page and secret page to avoid future complications such as mutilation of books.

- As the library is intending to automate only one function, preparation of document file may be optional. The barcode number of the book is recorded in the borrowers' record as and when the book is issued. For full information of the document the library can look into the accession register with the help of the barcode number.

- There is a likelihood of the user creating a problem by stating that the book was not borrowed by him/her. Initially, as a precautionary step the library has to take the signature of the borrower on the book card and these cards can be arranged according to the accession number.

- One of the important aspects of planning is 'time planning'. The timetable for the project has to be prepared carefully. The library finds lead time between ordering the system and its installation and the library has to state the activities such as preparation of computer room and fixing barcode labels, to be undertaken during this period. Several techniques such as Performance Evaluation Review Technique (PERT), Critical Path Method (CPM) and Gantt chart have to be used in time planning.

- Implementation involves project implementation and evaluation of its working. The changeover procedure has to be decided prior to implementation. The procedure should enable economy and provide alternatives in the case of initial failure of the new system. In this study, only one function is to be automated, hence the parallel method is more advantageous, as running both manual and automated system does not cost much. Once the automated system is found to be perfect, then the old system can be abolished.
• Once the equipment is installed, necessary files have to be created. To create the files, data sheets have to be prepared and the information has to be put into the computer. The main file is the borrowers’ file. If the library can afford to prepare the document file, it will be advantageous.

• Retrospective conversion of the loan record is not a major problem, as most of the books are returned with in a month. If the library can manage to wait for two months, only the overdue book record needs to be converted. The input of such record will not be difficult.

• Detailed documentation for use of the Software and hardware is essential. Generally, the vendor provides such documentation. The library should ask the Vendor to provide detailed documentation. This documentation has to be prepared operation-wise to facilitate the Operators. The library should make this detailed Documentation in multiple copies for the use of the staff simultaneously.

• The staff has to be involved in the implementation of the project. Regular and continuous interaction between the staff and the planning group is essential to provide continuous and appropriate communication. The staffs have to be provided the updateInformation by arranging meetings, discussions, and providing news letters. The interaction provides information about ongoing project to the staff. Formal training has to be provided to use the equipment and for its maintenance.

• Evaluation of the installed project is a pre-requisite to make a full use of the new system. The system has to be evaluated in order to identify whether the statedObjectives have been achieved or not and to identify the flaws and errors for necessary corrections. At this stage necessary modifications have to be incorporated.
- Maintenance of the software and hardware is essential and this involves continuing and retaining their use. The library has to make an agreement with the vendor for maintenance, which should include updating the software. This includes provision of modifications, changes and additional facilities by the vendors. The library has to be equipped with the finances necessary for the maintenance of the system.

- Library automation is in its initial stages in this country. The libraries have to face several problems relating to infrastructure; environment; resources; and Professional matters.

These problems can be taken care of by advance and perfect planning. However, it may work out to be expensive for the libraries as their sources are limited and fortunately the university has the support of the university authorities for its automation project.

The library needs a careful examination of every aspect of automation. It can be introduced in stages by using modular software and integrating all the modules in due Course of time. The benefits are immediate and libraries may find difficulty initially but the ultimate outcome will be highly fruitful in building up the image by improving the efficiency of the library.

It has been found difficult by any organization to improve its efficiency unless and until the information technology (IT) is used in its activities and programmes. IT plays a key role in the changing and competitive world. Further, it whelps in achieving the targets and objectives. The situation is not different in the libraries. They are finding it difficult to manage their activities due to increased work-load.
University's libraries in India have initiated automation process only recently. An increased number of software packages are being developed in the country. Hardware has become comfortably cheap and the schools started offering Training programme to cater to the changing needs. At Present, university libraries are looking forward to implement automation to improve their services. INFLIBNET has given a positive support and encouragement for automation of university and college libraries in India, as the programme offers technical, financial and in fractural support.

University's has been selected as one of the ten university libraries for automation during this plan period. The University Grants Commission provides all the support For the project. The SOUL has got a wonderful opportunity to improve its services as well as its image in the changing environment. The library will be in a position to satisfy its users and there is a possibility of supporting increased research activity and scholarship in this part of the country. Getting this project has been a boon for the library and at the same time it needs careful planning for optimum utilization of the library resources with the help of IT.

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