Outline of the Thesis

- Name of the Scholar: Narendra Kumar Sharma
- Title: “Automation in University Libraries of Gujarat State: An Empirical Study”.
- Location: Ten University Libraries in Gujarat State
- Introduction:

Libraries are in the midst of radical changes. These changes are, perhaps, unavoidable and compelling. In the present day context libraries are moving beyond their traditional role as custodians of recorded knowledge and integrating new methods of information storage, retrieval and transmission into their existing services and patterns. They are, at the same time, incorporating the extensive changes that new technologies bring to organizational structures and staff responsibilities. Libraries currently are experiencing technological transition in how services are provided and in what these services are. These changes are attributed in literature to three major phenomena: the information explosion, escalating costs, and the technology revolution. In particular, in the recent past it is the computer and communication technologies which have drastically changed the working of libraries. While the computer technology provided hitherto unavailable power for the organization and manipulation of information, communication technology provided immense scope for the speedy and accurate dissemination of information.

Over the past few years, there have been many developments in computer technology. One of the revolutionary developments has been the advent of comparatively cheap microcomputer systems, with increasingly sophisticated features which can be used for a variety of library applications. As a result, it is not uncommon to find a micro-computer even in a small library in a developing country like India also. Computers in libraries are
used to assist a variety of functions, such as, maintaining and providing access to
catalogue items in the collection, managing the circulation of items, controlling the serial
publications and allowing the retrieval of information from local files, searching external
of information sources for references or for full text of documents and so on.

- **Need of the study:**

After the development of powerful microcomputers at comparatively low cost, libraries
in India have been utilizing computers for their routine as well as other activities. One ca
vividly sees the upsurge of articles/reports in Indian journals and conferences about the
computerization activities in Indian libraries. Some surveys have also been conducted to
study and report the computerization activities in India. It is evident by perusing the
literature that many libraries in India are developing their own indigenous systems rather
than purchasing the commercially available ones. However, a few commercially availa
systems in India are avail be. Some of them are LIBMAN from Kasbah Systems, Madras;
UNILIB from Hindustan Computers Ltd, Bangalore; ARCHIVES from Mina fax Electric
System Bombay; SALIM from Uptturn India Limited, New Delhi; LIBRA from IVY
systems LTD, New Delhi, LIBSYS from Info – Tek consultants Pvt. Ltd, and New Delhi
and so on. But libraries seem to have preferred to develop their own tailor – made
systems. Reasons for this, perhaps, are:

- The cost of commercial systems is high
- They do not suit the local requirements of the libraries
- Ignorance about the availability of the systems
- Apprehensions about the quality and reliability of the systems as no
  comprehensive evaluation of commercial systems have been reported so far.

The literature survey conducted by the investigator before taking up this study indicated
that most of the literature on library automation in India, unfortunately, is not evaluative
in nature and it either tells about successes or what is planned. The reason for such a
tendency is, perhaps, that when an automated system is up and running it is considered as
a sufficient evidence of its success. However, it is needless to say that only evaluation
studies will be able to quantify the goodness of the systems. Further, reporting of problems and/or failure is as important as reporting of successes of system.

So, there was a need for taking up a research project to evaluate the performance of the indigenously developed systems to measure how well the systems are and how much well do they perform. However, systems are implemented to achieve specific purposes and it is important for the development of any organization that new systems are evaluated to check what has been achieved. Evaluations of systems in operation can serve a number of objectives. Firstly, they can demonstrate whether the intended improvements in the activity have been achieved. Secondly, evaluation can show the barriers and difficulties that prevent the full exploitation of the system by its users and may lead to certain action which may ultimately help to remove these barriers. Thirdly, evaluations can provide the evidence upon which future development plans can be built.

Apart from these, as noted in the earlier past of this chapter, evaluation (post – installation evaluation) forms an integral part of any systematic projects. Thus, all systems need to be evaluated. The major benefit of evaluation is that not only will the library using the system know the quality of its systems but it will also help other libraries working on similar projects to be wiser by such evaluation reports. In view of these considerations, the investigator took this study to evaluate the existing automate library systems in certain selected special libraries in South India.

- Title of the study:

  “Automation in University Libraries of Gujarat State: An Empirical Study”
Objectives:

Following are the broad objectives envisaged for the present investigation:

- To study and examine the functional performance ability of the automated housekeeping systems used by certain selected libraries in South India.
- To determine the reasons underlying success or failure of each system covered in the study.
- To explore and suggest areas of improvement for increasing the performance level of the systems.
- To find out common problems faced by the libraries in relation to automated systems.

Hypothesis:

- Association between criteria of automation and the type of university
- Association between the knowledge resources (Printed and non-printed and type of university structure
- Binomial Test
- One Sample Chi Square Test (Online Services of Library)
- One Sample Chi Square Test (Activities/functions of Library)
- One Sample Chi Square Test (Impact of Automation)

Sources of data

To make the study more comprehensive and purposeful data was collected from primary and secondary sources. In this study internal and external source for data collection had been used. In the internal and external sources of data collection these two types of data comes into pictures. In order to achieve the objectives of present study, relevant primary and secondary data was used.
• **Primary sources of Data:**

i) Questionnaire is circulated to the libraries to ascertain the data relevant to their working;

ii) Interviews with the functionaries and beneficiaries in University Libraries;

iii) Interaction with the library professionals involved in library automation in university libraries in the Gujarat state university.

iv) Participative observation of the process of work in the library, especially the circulation function in the University Library and automated university libraries in Gujarat. Such as Sheffield University Library, Bath University Library and Nottingham University Library.

**Secondary Sources of Data:**

- Books; -Journals; articles; -Reports of the Committees and Commissions; and –Annual Reports of the University Library. -magazines, and University Handbook etc. The source of information, already gathered for some other purpose from other sources such data are called secondary data. These data can be available.

There is a need to discuss the problems and approaches to planning with the professionals, who are involved in the planning process and are also working with the systems presently. A discussion cum interview was taken up with the professional involved in this process in the university libraries in the India.
Observation of university library operations in Gujarat setae has helped to understand various aspects of automated circulation system and enabled the study to identify difficulties likely to be experienced by Gujarat state University Library. These problems were discussed with the professionals and have been studied on the basis of experiences of developed countries. An attempt has been made to propose relevant solutions. Every library has its own experience in planning and implementation. It was been felt necessary to visit the libraries to understand the problems encountered by these libraries. Hence visits to some of the university libraries in Gujarat state have been made to observe and discuss the problems with the staff.

The professional education of the researcher in the university’s has helped not only to understand but also to make an in-depth study of the problem. An opportunity to have hands-inexperience in using automated and a detailed study and observation of each automated function in the University proved to be an advantage in making the study. Further it gave real impetus to the study.

Both micro and macro literature has been scanned to identify the relevant documents and this helped in elucidating the experiences of other libraries involved in library automation.

- **Sampling Design:**

A sample design is a definite plan for obtaining a sample from a given Population. If it refers to the technique or the procedure the researcher would adopt in selecting items for
the sample. Sample design may as well lay down the no of items to be included in the sample. The researcher must prepare the Sample design which should be reliable for research study. For collection of primary data, sampling design is prepared.

- **Sampling unit:**

Decision is taken after concerning the sampling unit. Sampling unit is the Professionals and staff working on all the levels in both the universities. i.e.10tnUniversityGujarat state.

1. SardarPatelUniversity, V. V. Nagar
2. M. S. University of Baroda
3. GujaratUniversity, Ahmedabad
4. GujaratAyurvedUniversity, Jamnagar
5. VirNarmadDakshinGujaratUniversity. Library
6. Anand Agricultural University, Anand, University Library
7. BhavnagarUniversity, Bhavnagar. University Library
8. DharmsinhDesaiUniversity, Nadiad
9. SaurashtraUniversity, RajkotUniversity Library
10.NirmaUniversity Library, Ahmedabad

- **Sample size:**

It refers to the no of items selected from the universe to constitute a sample
The size of sample is 580 professionals and staff working on all the levels in Both the universities.

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3. Gujarat University, Ahmedabad
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5. Vir Narmad Dakshin Gujarat University Library
6. Anand Agricultural University, Anand, University Library
7. Bhavnagar University, Bhavnagar, University Library
8. Dharmsinh Desai University, Nadiad
9. Saurashtra University, Rajkot University Library
10. Nirma University Library, Ahmedabad

- **Sampling Plan:**

Target University librarian: The target University librarian of the study was employees in various University libraries in Gujarat. A census of Ten University library of Gujarat was taken. Sampling Technique: A simple random sampling technique was used to select 10 University librarians from selected dairies.

Researcher had also got information for the questionnaire from management of each dairy. Both primary and secondary type data were collected for the study. The researcher has used primary data for gathering details related to the study. The structured questionnaire has been used for the purpose. The use of secondary data from the published sources like annual reports and websites of the University library has been used for gathering the general information of the selected sample University libraries.

- **Simple random sampling:**

It refers to that sampling technique in which each and every unit of the population has an equal opportunity of being selected in the sample. In simple random sampling which items get selected in the sample is just a matter of chance – personal bias of the investigator does not influence the selection.
- **Limitations of Research:**

Libraries around the world work in different environments. Even the university libraries are found to be in varied degrees of development due to the prevailing environment such as attitude of the management, size of the library. The problems encountered by them are of a variegated nature. However, the situation may almost be the same in the university libraries located at a particular region. In this regard, it is assumed that Gujarat state Universities Library. Will be greatly benefited by considering the experiences of other university libraries in Gujarat. But unfortunately the Gujarat is yet to initiate automation. The. M. S. University of Baroda is in the initial stages of automation. Furthermore, the experiences encountered by other libraries may not suit Gujarat state University libraries environment, because each individual university has its own peculiar local and idiosyncratic problems. In this context certain problems peculiar to Gujarat state Uni,lib. May have to be perceived in the right perspective. Right now, lack of automated university libraries in Gujarat is a major limitation to a study of this nature. However, the participant observation of university libraries in the Gujarat has given a broad perspective conceptually and enabled the researcher to suggest a pragmatic model of automation for a Gujarat state University Library.

University libraries in the Gujarat has given a broad perspective conceptually and enabled the researcher to suggest a pragmatic model of automation for a Gujarat state University Library. And I will select only Ten University in Gujarat state.

Literature on automation of university libraries in India is not problem specific. It is descriptive and hypothetical based on the experiences of the developed countries. An attempt has been made to look into the future by using the researcher's professional experience and by consulting the literature published in developed countries.
• Conclusion:

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 favor 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 air-1 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 is part and parcel of University Library System?

iii) 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 1 3,000 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 does 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.