A Study of Aautomation in College Libraries of Delhi University: Special reference to Kamala Nehru College and Lady Shri Ram College for Women

Md. Zubair Ahmad
Ph. D. Research Scholar, Research and Development Centre,
Bharathiar University, Coimbatore – 641046, (T N)

Dr. Gorantla Siva Prasad
Senior Grade Lecturer, M.V.G.R.R Degree College,
Bhattiprolu, Guntur (Dt.) – 522256 (A.P)

Abstract:

The present study is discusses the numerous reasons for automation and tries to analyze the various factors that directly or indirectly affect the progress of library automation such as acquisition, collection development, level of skill of library staff, availability of suitable library automation software and also management issues with special reference to Kamala Nehru College and Ladi Shri Rama College for Women of Delhi University. The study is also carried out to reveal the importance of automation to acquisition and collection development, the best way of circulation and Online Public Access Catalogue (OPAC). In addition to these, the present study made all out efforts to highlight the barriers militating against successful College libraries automation, like financial problems, attitudinal problems of staff members, lack of cooperation among the University and College authorities, computer hardware and software problems. The survey method was adopted and used the questionnaire to gather necessary data from the Librarians and the Users of both the colleges
Keywords: Library Automation, Library Automation Software Package, NETLIB, LYBSIS, OPAC, Delhi University, Kamala Nehru College, Lady Shri Ram College for Women, etc.

1. Introduction:

Information is essential for each and every human activity in the world. It plays a key role in the overall development of any nation. Libraries are universally recognized is important social institutions for diffusion of knowledge and

information. No community, institution or organization is considered complete without the support of library and its services. The gradually spread of the concept of democracy, extension or education, intensification of research activities, rapid industrialization, continuous increase in production of recorded knowledge both in print and non print media, and advancement in information transfer, computer and communication technologies have contributed to the growth of the libraries and information centers as well as to the development of user oriented services.

Rangnathan's fundamental law of library science stipulated that the documents of the library should be fully exploited by the maximum number of users. With the introduction of fast emerging information technologies in libraries there has been tremendous improvement in the services offered to a libraries user. The application of these modern technologies such as microcomputers, networking in a library environment resulted in the saving of time for the staff and the users also.

Thus libraries to increase the efficiency and effectiveness of their operation and services use computers. Library professionals in India had also realized the necessity and impact of computers. Several special libraries have already started using computers for various library operations. University and College libraries are seriously planning to automate their libraries with the availability of new technology and facilities.

2. Purpose of the study:

The basic purpose of the study is to know about the Library Automation. What type of Library Automation Software Package available in the market? What are the problems faced by the library and library professionals in library automation? What are the facilities available in Library Software? What is the cost of Library Software? What are the problems faced by library in maintenance of Library Software? and suggestions for use of appropriate technology in the form of conclusion.

3. Scopes and limitation of study:

The scope of this present study is primarily confines to the present state and trend of library automation prevailing in the college libraries in Delhi University. However, the present study has the following limitations:

- This study considers the present status and trend of library automation if any of exclusively the college libraries of Delhi University, namely *Kamala Nehru College and Lady Shri Ram College for Women* but not other college libraries include in the survey.
- The present study considers the status, problems, and prospects of automation of only these college libraries functioning in the Delhi University namely *Kamala Nehru College and Lady Shri Ram College for Women* but not the state of automation of college library of other University College libraries.

- This study does not consider any specific activity or services/operations of the concerned college library included in the survey, but consider only service or activity that has gone partly or fully under the umbrella of automation/ computerization.

4. Aims and objectives:

The main objective of the study among other things is to analyze and evaluate the present state of automation in the College Libraries of Delhi University namely *Kamala Nehru College and Lady Shri Ram College for Women*, along with their problems, prospects, and constraints which mostly remained unexplored yet. Some of the vital aims and objectives of the present study are as under:

- To ascertain the present state of automation computerization in the college libraries of Delhi University.
- To identify the areas in which both the libraries have been automated.
- To find out the most preferred library activities to undergo automated and to ascertain their degree of priorities assigned in these libraries.
- To identify the factors that influences the positive attitudes of college library professionals towards the usefulness of library automation.
- To identify the problems, constraints and fears if any, that prevent the college libraries from automation/computerization their numerous library activities and services.
- To suggest appropriate measures or solutions of these problems for automation of these library.

5. Hypothesis:

Formulation of a hypothesis in any social research gives a definite point to the inquiry, aids in establishing direction in which to proceed and helps to delimit the field of enquiry by singling out the pertinent facts on which to concentrate and by determining which facts should be set aside at least for time being. A hypothesis, as a provisional central idea becomes the basis for fruitful investigation in social research of any magnitude. On the basis of both observation and experience, the investigator has, therefore; initially formulate the following hypothesis so as to prevent the possibilities of blind search.

To begin with the investigation, the following hypotheses were formulated:
- The state of automation in most of the college libraries in Delhi University are just at the threshold of automation and as such as yet to open their account;
- Lack of encouraging and favorable attitude of library science professionals working in both college library towards library automation and paucity of funds, perhaps are the two vital forces that prevent these libraries from automation of their various activities and services;
- The extent of automation in these college library is primarily limited to housekeeping operation storage and retrieval related activities;

- The larger the strength of users, the greater would be the circulation of books in the library; and
- With the increase of users, the workforce does not increase in a library.

6. Methodology:

The term "*Methodology*" in broad sense refers to the processes, principles, and seeks answers. In the social research, the term applies to how one conducts research. The present study is confined to the two college libraries of Delhi University. Thus, a sample of two respondents has been studied with the help of a well structured Questionnaire followed with telephonic calls and interview with of the respondents in order to observe their work environment and attitudes towards automation. Based on the scope of the study, it was felt necessary to adopt the survey research technique.

The survey method was adopted and the questionnaire was framed with following facets so as to gather necessary data from the librarians of these libraries and the users of these libraries included in the study:

a) General Information
b) Physical Infrastructure of library
c) Working hours of library
d) Library staffs and Budget
e) Library collection and other resources
f) Library services and resource utilization
g) Library automation / computerization
h) State of problems and constraints encountered in automation
i) Future plan of the library.

7. Profiles of the Colleges:

7.1 Kamala Nehru College:

History is not a more register of dates and events diachronically recorded. It is also a report of the human effort, struggle and in this case the ultimate success of an institution that had to grapple with several adverse circumstances before if became known as a center of excellence.

Therefore, when I say that **KAMALA NEHRU COLLEGE** is in its 50th years of existence (**20 July 1964 - 2014**), the College is not giving mere dates and figures but it also alluding to the hard work of its constituents, which helped the institution to reach its present heights. The College will turn in GOLDEN in 2014 for this reason the year 2014 has been planned meticulously to be celebrated in a grand way. Many academic and cultural activities will be interspersed all through the year with focus on the Golden theme where in the inaugural program scheduled from January 2014 and closing of the yearlong celebration on the 15th January 2015.

What began as *Government College for Women* in Defence Colony, New Delhi in 1964 with 457 Students evolved into *Modern College for Women* with 1600 Students,   Dr. (Ms) K. K. Gorowara (21.07.1964 - 10.07.1986) was the founder

Principal of the College. A new campus on Siri Fort Road followed, for which the foundation stone was laid by Shri V. V. Giri, the then President of India. It was renamed **KAMALA NEHRU COLLEGE**, The building was inaugurated by the then Prime Minister of India Shrimati Indira Gandhi and started functioning here from 1975.

At present College have 1750 Students enrolled and the college have also a large three storied Library Building which houses the latest editions and publications 85,000 Books and Journals. A comfortable reading rooms to seat 300 students at a time. College also has boasted of a computer lab where we offer students and staffs facilities to remain connected to the new world with use of Internet.

7.1.1 KNC Library:

College have a large three storied Library Building with comfortable reading rooms to

seat 300 students and teaching staffs and non-teaching staffs at a time. College Library also has a Library office, library stack, Circulation Counter, and Property Counter separate. The college has fully computerized library having one server and eight clients personal computers connected with (LAN) Local Area Network. The Library has added more than 1266 books during the one academic year and the total collection of books is now 85,000 in addition, 105 Current Journals National and International are being subscribed for the benefit of the students and staff.

The Library has systematically arranged the stack hall on the ground floor, and reading rooms (including staff cubicles) on the first and second floors, with a capacity of 300, for the use of the students and staff. A research space for teacher is also being planned with Computer and Internet facilities.

7.2 Lady Shri Ram College for Women:

Lady Shri Ram College for Women has long been recognizing as a premier institution of higher learning for women in India. A center for academic excellence and achievement, it is today one of the finest institutions for Social Science, Humanities and Commerce, while also offering a B. Sc. Programme in Statistics. Professional courses like Elementary Education and Journalism are among its strengths. Located at the cutting edge of knowledge, Lady Shri Ram College has not just kept pace with the changing world, but has been the pioneering spirit behind many innovations in the field of education.

Lady Shri Ram College established in July 1956 in New Delhi by the Late Sir Shri Ram in memory of his wife, the college had its modest beginnings in a school building in Daryaganj, Central Delhi, with 243 students, 09 faculty, 04 support staff and 03 distinct courses of study. The aim of the institution was to provide access to higher education of quality to women. Lady Shri Ram College is a testimony to the farsighted vision of its founder and his indefatigable enthusiasm to actualize his dream.

Lady Shri Ram College celebrates its Golden Jubilee in July 2005-06. 50 years ago, while speaking at Lady Shri Ram College inaugural function on 31st July 1956. The founder Sir Shri Ram urged the students and teachers to "Set for themselves a standard of behavior and start good traditions". Lady Shri Ram has indeed helped all its students maintain a balance between excellence and social responsibility. Nobel Peace Prize winner, **Aung Sang Suu Kyi** and many more known academics, civil servants, social workers, artists, filmmakers, authors, educationalists and lawyer comprise Lady Shri Ram College Alumna hall of fame.

At present college is located in a beautiful 15-acre campus, with girl's hostels and canteen. College has approximately 2000 students enrolled over 150 faculty members 17 under graduate and post graduate and also some certificate courses. Collage has separate Library Building connected with class rooms and other offices which houses latest editions and publications over one Lakh Books and Bound Periodicals. A comfortable reading rooms to seat 200 students at time. College also has boast of a computer lab where offer students and staff facilities to remain connected to the new world with use of INTERNET.

7.2.1 LSRC Library:

Lady Shri Ram College superbly equipped, expertly maintained library with a computerized user-friendly data filing system functions as an invaluable aid to every aspiring scholar. The college library has fully computerized library have one server and clients personal computers connected with Local Area Network (LAN). The library employs the LIBSYS computerized library automation software package for automation purpose and also provides several terminals are provided for students and faculty to search for books / research material online.

It boasts of an impressive stock of over one Lakh books and bound periodicals. It also subscribes to arrange of more than 150 national and international journals making it one of the largest collections in University of Delhi. The general library with its open rack system, spacious reading room and reference section provides an atmosphere conducive to the exhilaration of mental discovery. Students are encouraged to because sagacious users of the library. The library offers audio and video facilities and attempts to cater to the needs of visually challenged students as well.

The ever-efficient library staffs are available to assist students to find material for their projects and research. The library, as a final year student puts it, is really well equipped with all kinds of books, may it be novels, and course books magazines or newspapers. Internet access is provided free of cost to all students and faculty by the library at web junction. Recently library added several terminals in the general and reference sections to provide Internet access and connect to the Delhi University Network with access to the Delhi University library databases.

8. Analysis and Interpretation of Data:

Analysis of data refers to seeing the data in the light of hypothesis or research

questions and prevailing theories and drawing conclusion that are as amenable to theory formation as possible.

A social analyst primarily assumes that behind his accumulated data there is something more important and revealing than the facts and figures themselves. He assumes further that carefully thought out, well marshaled facts and figures, when related to the whole body of data, have significant general meaning from which valid generalizations can be drawn.

The crucial task before the investigator is, therefore, to determine the size of the sample to be investigated and the methodology to be employed for collecting data. The study population surveyed in the instant investigation covers the problems and prospects of automation of Kamala Nehru College Library and Lady Shri Ram College Library having myriad disciplines and structural compositions. However the analysis proceeded on the research data collected from Kamala Nehru College Library and Lady Shri Ram College Library under different variables, and having a response rate of 100 percent which is very significant.

For the purpose of collecting data a Questionnaire was circulated to both Kamala Nehru College Library and Lady Shri Ram College Library. We also conduct telephonic call and interview with of these respondents in order to observe their work environment and attitudes towards automation / computerization. We received response from both libraries. We also conduct user survey "User survey of Delhi University college libraries automation" for this purpose we circulate 75 Questionnaire to the users / students of these college library. We received response from 67 users / students of theses college libraries.

8.1 Analysis of Questionnaire (For Librarian)

Here we first analyze the questionnaire received from Librarian of both the library:

8.1.1 General Information:

Lady Shri Ram College celebrate Golden jubilee of its establishment in the year 2006 and Kamala Nehru College celebrate its Golen jubilee to its establishment in this year 2014. Both the library has insufficient number of library staff. It is the most important drawback of both the libraries. Both colleges are extended so the number of students / users is over 1500. Lady Shri Ram College has a girl hostels. Kamala Nehru College has 15 academic departments, and Lady Shri Ram College have 17 academic departments. Both colleges have under graduate and post graduate and professional courses in Arts, Commerce and B.Sc. in Statistics. The detail data is presented in Table 8.1.1

Table 8.1.1: General Information of College

Name of the College	Year of Establishment	No. of Library Staff	Academic Departments	Hostels	No. of Students	Courses UG/PG

						/Prof
Kamala Nehru College	1964	08	15	No	1750	Yes
Lady Shri Ram College	1956	13	17	Yes	2000	Yes

8.1.2 Physical facilities of library:

Both the libraries had their separate library building. It is a good trend, showing realization on the part of library authorities that library building has to be constructed specifically which may commensurate to the achievement of its objectives. Both libraries have main Circulation counter, Reserve Book Section, Text Book Section and Reading Rooms. Libraries have also Property Counter. The detail data is presented in Table 8.1.2.

Table 8.1.2: Physical facilities of library

Name of the College	Separate Library Building	No. of Floors	Circulation Counter	Reserve Book/Text Book Section	No. of Seats in Reading Room	New Arrival display Section	No. of average reader per day
Kamala Nehru College	Yes	03	Yes	Yes	300	Yes	500
Lady Shri Ram College	No	02	Yes	Yes	200	Yes	600

8.1.3 Working Hours of Library:

Kamala Nehru College Library open in during working days is from 9.00 A.M. to 5.30 P.M. and during the vacations from 9.30 A.M. to 4.30 P.M. Lady Shri Ram College Library is open in two sections General Section 8.00 A.M. to 4.30 P.M. and Reference Section open from 8.00 A.M. to 8.00 A.M. The working hours of Circulation Counter of both libraries are 9.00 A.M. to 2.00 P.M. both the libraries open in five days in a week from Monday to Friday. Lady Shri Ram College Library open for hostels students only Reference section up to 8.00 P.M. The data is presented in Table 8.1.3.

Table 8.1.3: Working Hours of Library

Name of the College	Working Hours	Working Hours Circulation Counter	Library Open Saturday, Sunday	Library Open during

				Exam
Kamala Nehru College	9.00 - 5.30	9.00 - 2.00	No	Yes
Lady Shri Ram College	8.00 – 4.30 (General) 8.00 – 8.00 (Reference)	9.00 - 2.00	Saturday	Yes

8.1.4 Library Staff and Budget:

Total number of professional staff in Kamala Nehru College Library is 08. Total number of professional staff in Lady Shri Ram College Library is 10. Kamala Nehru College Library Annual Budget during the year 2014-15 is 7,00,000 and Lady Shri Ram College Library Annual Budget during the year 2014-15 is 10,00,000 the details of data is presented in Table 8.1.4.

Table 8.1.4: Library Staff and Budget

Name of the College	No. of Staff	Staff Deputed form Office	Annual Budget	Recurring Grants	Non Recurring Grants	Any other Grants
Kamala Nehru College	08	No	7,00,000	7,00,000	No	No
Lady Shri Ram College	13	No	10,00,000	10,00,000	No	No

8.1.5 Library Collection:

Library collection is a sum of total library materials that make up the holdings of a library. Total number of books as on 31st March 2006 in Kamala Nehru College Library is 75,000. Lady Shri Ram College Library have total number of books is over 1, 00,000. Kamala Nehru College Library purchases 91 current journals and Lady Shri Ram College Library purchase 150 National and International current journals. Over years, number of collections may swell in an old, much of old collections becomes useless. Besides general books, the other types of collections were at a great variance in these College Libraries. The detail of data is presented in Table 8.1.5.

Table 8.1.5: Library Collection

Name of the College	Total Collections	Gifted Books	Book Bank Students fund Book	Bound Periodical	Current Journal	No. of News Paper
Kamala	85,000	4,500	535	2,950	91	09

Nehru College						
Lady Shri Ram College	1,10,000	5,000	2000	5,000	150	08

8.1.6 Library Services:

The college libraries are considered as service agencies. The faculty members, non-teaching staffs and students are offered different library services. College Library was organized on functional department basis rather than subject department basis as the sections were named after their functions, such as, Acquisition, Reference, Circulation, etc. Both the libraries give the facilities of Access of books to its users are open access Circulation method is computerized. Both the libraries give the books reservation facility. Table 8.1.6 gives the list of services offered by these libraries.

Table 8.1.6: Library Services

Name of the College	Circulation method	No. of books issued	Loan privilege	Book Reservation	Reference Service	CAS / SDI
Kamala Nehru College	Automated	Teacher 25 Staff 05 Students 04	Teacher 30 Staff 30 Students 07	Yes	Yes	No
Lady Shri Ram College	Automated	Teacher 20 Staff 04 Students 06	Teacher 30 Staff 30 Students 07	Yes	Yes	No

8.1.7 Library Automation:

Library Automation / Computerization improvement in quality, minimization of repetitive tasks and introduction of new services were considered as main reasons for automation of all the libraries. Heavy workload an additional reasons for automation. Both libraries completed its automation work, and start it services automated. These libraries have purchased different types of computer hardware and accessories depending upon their requirements and resources at their command. Kamala Nehru College Library has 09 personnel computers and 01 server and Lady Shri Ram College Library have 10 Personnel computers and 01 server.

Software is required to put hardware into use. It is the real technology that has tremendous impact on library services. Both libraries have MS-DOS, Windows Operating Systems. MS Office work is available both the library for office work. Kamala Nehru College Library acquired NETLIB Library Automation Software Package, and Lady Shri Ram College Library acquired LIBSYS Automation Software Package for its Library Automation purpose. Both the libraries give OPAC facility to its user to database search and also give books reservation facility. Lady Shri Ram College Library also gives Internet facility to its users free of cost. The detail of data is presented in Table 8.1.7.

Table 8.1.7: Library Automation

Name of the College	No of Computers	Library Software	Networking (LAN)	Internet	OPAC	Inter Library Loan
Kamala Nehru College	09	NETLIB	Yes	No	Yes	Yes
Lady Shri Ram College	10	LIBSYS	Yes	Yes	Yes	Yes

8.1.8 Impact of Library Automation:
Improvement in quality of services and library facilities, saving in times, and introduction of new services are the major impacts felt by all the libraries. Greater co-operation in future is another impact, which these libraries are likely to achieve.

8.1.9 Suggestions:
A few points are suggested to improve and fasten the automation activities in these libraries.
- Both the libraries are at different stages of automation. Interaction between the staff, which is almost absent, can be beneficial to speed up the automation activities and for consistency in their jobs.
- More infrastructures are needed in majority of these libraries to strengthen and improve their services.
- Training of Library Staff is required in both the libraries time to time for give the better output with the help of Automation.

8.2 Analysis of Questionnaire (User survey):
For the improvement of library automation we conduct a user survey titled "User survey of Delhi University College Libraries Automation". For this purpose the questionnaire method has been employed to collect the data for the present study and to select the sample population. Random sampling method has been used.

The sample was random in the sense that the sample of the present study consisted of users of the library selected randomly from the college under study. At least 10 respondents were randomly selected from each branch of study in the college. A well-structured questionnaire (User survey) was used to collect the data. The data thus collected were tabulated and analyzed by using simple statistical technique i.e. percentage.
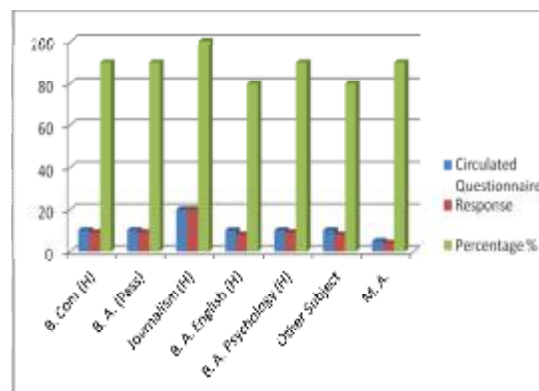
We circulate 75 Questionnaire to the users after fill up I receive 67 questionnaire back so the response of the users are 89.33 percents. All categories of users are giving the same response. Users fill up the questionnaire neat and clean and also give the full details given in questionnaire. The entire user gives the suggestion of improvement of library automation / computerization and also the improvement of library services. Details of questionnaire step by step given under:

8.2.1 General / Bio data:

We circulate 75 questionnaires out of 75 questionnaire 67 users give the response the percentage of response is 89.33%. Circulate the questionnaire out of 75, we distribute 10 B. Com. (H) students, 10 B. A. (Programme), 20 Journalism (H), 10 B. A. English (H), 10 Psychology (H), 10 other subjects and 05 M. A. students giving the response and percentage of response of data present in Table/Graph 8.2.1.

Table/Graph 8.2.1: General / Bio data

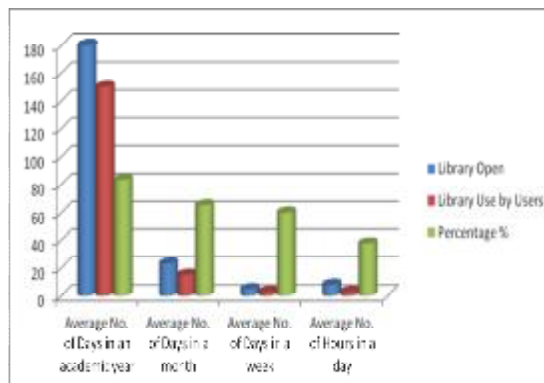| Name of Course	Circulated Questionnaire	Response	Per. %
B. Com (H)	10	09	90
B. A. (Pass)	10	09	90
Journalism (H)	20	20	100
B. A. English (H)	10	08	80
B. A. Psycho. (H)	10	09	90
Other Subject	10	08	80
M. A.	05	04	90

8.2.2 Use of Library:

Out of the 180 working days of the library most of the users use the library approximately 150 days in an academic year. So that the percentage use of the library by the users in a year per user is 83.33%. The percentage of the use of library is very good. Detail data presented in Table/Graph 8.2.2.

Table/Graph 8.2.2: Use of Library

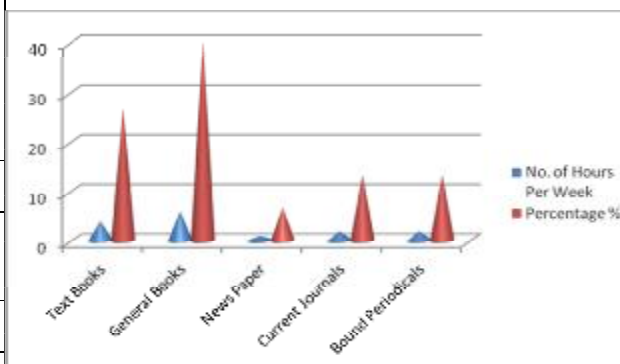| Use of Library	Library Open	Library Use by Users	Percentage %
Average No. of Days in an academic year	180	150	83.33
Average No. of Days in a month	23	15	65.21
Average No. of Days in a week	05	03	60.00
Average No. of Hours in a day	08	03	37.50

8.2.3 Reading habits and types of publication use:

The reading habits by the users are also very good most of these users use library approximately 02 to 03 hours per day. Users use different type of library materials, like general books, text books, reference books, current journals and also bound periodicals. Mostly users interested in use the Text Books and Reference Books because of the academic requirement and also for the purpose of assignment given by the teachers. The data presented in Table/Graph 8.2.3.

Table/Graph 8.2.3: Reading habits and types of publication use

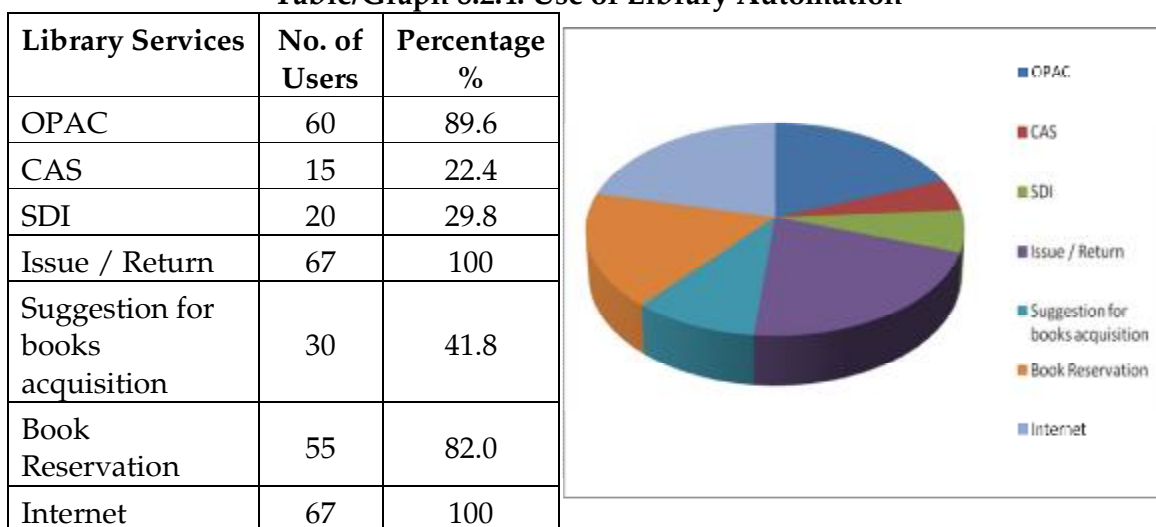| Library Sources Use by Users	No. of Hours Per Week	Percentage %
Text Books	04	26.66
General Books	06	40.00
News Paper	01	06.66
Current Journals	02	13.33
Bound	02	13.33

Periodicals		

8.2.4 Use of Library Automation:

Library automation consists of a process through which all the housekeeping operation such as Acquisition, Cataloguing, Serial Control, Circulation, Inter Library Loan and OPAC. Here most of these libraries give its users to use OPAC facility for database search and also the Internet facility. Libraries also provide the Circulation services through automation to users. Some library provides book reservation facility, CAS, SDI, and also the suggestion for book acquisition for its users. Most of these users are satisfy form library automation services given by the library. Some suggestions also came out from users. Most of the users want Internet facility in a library and library will also Air-conditioned. The data presented in Table/Graph 8.2.4.

Table/Graph 8.2.4: Use of Library Automation

Library Services	No. of Users	Percentage %
OPAC	60	89.6
CAS	15	22.4
SDI	20	29.8
Issue / Return	67	100
Suggestion for books acquisition	30	41.8
Book Reservation	55	82.0
Internet	67	100

8.2.5 Suggestions about library automation services given by the users are:
- Library being in more sophisticated by making use of technology;
- Internet facility should be provided to students free cost;
- Library will Air-conditioned; and
- Library provide new and better books, number of books issued may be increased, days of loan privilege also increased.

9. Findings and Discussions:

Resources of a library consist of both book materials and non-book materials. The study has made clear that the Kamala Nehru College Library and Lady Shri Ram College Library College Library are rich in books materials as compared to non-book materials for which they need more funds to acquire non-book materials for

their respective libraries. Libraries are providing open access to their library resources except manuscripts and rare books and other reference materials which is otherwise essential for preservation of these types of materials for cultural posterity and future use, besides proving invaluable resource for future.

Though mere numerical value of the collection is not the decisive factor to judge the standard of a college library, but the efficiency and effectiveness of a library depends largely both on quantity and quality of its collection book materials and non-book materials. In regard to the book materials, 1,95,000 books and subscribe to 241current journals and 17 newspapers, thus collectively have acquired a collection of 1,95,258 volumes in total thereby, each of the college libraries, on an average, posses a collection of 85,000 volumes, which seems to be good average collection of a college library.

The status of automation in both Kamala Nehru College Library and Lady Shri Ram College Library in Delhi University is very encouraging. Both libraries are fully automated. The use of standardized technical tools in these libraries is also a positive sign, as for automation and networking, the standardization of technical tools becomes imminent. Both the libraries under study have good infrastructure for automation also have computers with server, etc.

In order to make the users familiar to the use of computers and computerized services, these libraries have adopted the methods of short-term trainings, staff involvement and instructional charts that provide a good dividend of computer knowledge for the users. The librarians are satisfied with the available hardware and software but are not satisfied with the services being provided by the software companies.

Regarding evaluation of software being used in both libraries under survey it was found that, the facility of data modification is easier in LIBSYS than NETLIB but NETLIB is better with respect to facilities like database storage, indexing / sorting and backup files creation. LIBSYS is better regarding ease of database creation and ability to handle numerical data, where as NETLIB is better with respect to repeatable fields, indexing / sorting and help facility. Regarding evaluation of modules of the library-oriented software being used in both libraries under survey it was found that in case of serials LIBSYS is preferred over NETLIB. Library functionaries feel that LIBSYS is better software for handling Journals.

The effects or impact of automation is positive and encouraging as it is enhancing the use of library resources, user's visits, and the users satisfied with computerized services, libraries have experienced positive impact of automation.

10. Conclusion and Suggestions:

Library of twenty first century have to extend their services beyond the doors of one building. The new technology has been used to reduce the cost and enhance the value of information service to the parent organization. These will be providing immediate access to a wide variety of print and electronic information resources when the users need them. The library of the future will be less a place where

information is kept than a postal through which students, teachers, researcher scholars, and decision makers will access the vast information resources of the world.

The automation saves time, money and manpower. It eliminates mistakes and duplication of tasks. It is economically feasible and technologically desirable in modern libraries to provide accurate and instant information and to cope with the demand of learned clientele, specially the creator of new knowledge i.e. researchers and scientists, philosophers, etc. The enormous increase in the growth of documents, their storage problems, dissemination and retrieval of information will enforce the libraries to use the automatic or semi-automatic devices.

The present study, discusses the myriad reasons for automation, areas of application and problems as well as prospects associated with automation with special reference to college libraries. In addition to these, the present study made all out efforts to highlight the barriers militating against successful college library automation, like financial problems, attitudinal problems, lack of cooperation among college libraries, hardware and software problems and problems relating to personnel. Recommendations for the improvement of automation in college libraries are also made. These include evaluation of existing systems.

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