

Impact of library Automation Services in Government First Grade College Libraries in Kolar District: A Survey

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Abstract

To investigate the impact of Library automation services in Government First Grade college libraries in kolar district. The investigators used a questionnaire and interviews. They chose samples on the basis of a stratified sampling method and administered the questionnaire according to a random method for collecting the data. In this study revealed that 7 of 8 libraries are completely automated. Seventy per cent of librarians believe that automation has improved their library's services, while 85 per cent of users believe that an automated library system is better than the traditional manual system. Of the eight libraries, one library has a shortage of general staff to deal with automation services. The investigators could only select all the institutions for his study. Although so many studies of the same kind have already been conducted on library automation services in different areas of world, this paper revealed the current status of library automation services in Government First grade college libraries in kolar district.

Keywords: Library automation; Government First grade college libraries in kolar district.

INTRODUCTION

In the data processor generation, information must be careful and ingrained in the practice of learning, but the adulthood and intricacy of technical message in all lozenges of science and technology catarrh a problem in the amassment, storage and dissemination of information. With the introduction of computers and message and

communication technology drive, libraries are on the outset of automation.

According to the Webster's online dictionary, automation is the manner or system of operant or controlling a process by highly automaton like means, as by electronic devices, reducing earthborn interposition to a minimum. At Government First grade colleges in kolar harsh academic institutions, such as the Research and Development Organization, have taken the direction in library automation.

When computer and information technology are used in library operations, such as for acquisition, cataloguing, circulation and serial control, it is considered an automated library¹ (Ahmad and Iqbal, 2009). Library automation is rapidly becoming an essential tool in support of effective customer services, stock management and management of services offered by libraries⁶ (Rai and Kumar, 2011).

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ACADEMIC INSTITUTES IN THE STUDY

For this study, the investigators have selected eight academic institutes because these institutes are the only ones to have taken some initiatives regarding automation at government college libraries.

Government First Grade College, Kolar

The government first grade college, kolar was established the 1948. The GFGC, Kolar Library has a collection of approximately 1,50,000 books on Science, Commerce and Humanities topics, and the library subscribes to prominent national and international journals. The GFGC, Kolar Library uses Easy Lib automation software, providing the various automation services.

Government College for women, Kolar

Established in 1984, the Govt.College for women, Kolar (GWCK) amassed a large collection of information Science,Commerce and Humanities topics 68,650. The GWCK adopted the EASYLIB software for library automation. In addition, the institute subscribes to national and international journals and newsletters related to technology, computers and many other significant subjects.

Government First Grade College, Bangarpet

GFGC Bangarpet Library caters to the needs of Under Graduate students and Staff. The Library building is allocated a total area of 1200sq.ft.

The College library has a 27707 of books, it subscribes to 20 periodicals in various disciplines of Arts, Commerce and Management and science streams

The College has got a Library with a good collection of Books, Journals and E-resources to facilitate learning and research activities of students as well as teachers. The Library of the college has been active in conducting many activities like Book Review Competition, Best Library User Award etc., to attract and encourage the reading habit among the students.The GFGCB is using E-Granthalaya free library software for the smooth functioning of the library.

Government First Grade College, Malur

Govt. First Grade College, Malur (GFGCM) Library is the heart of any institution and it is the place where knowledge resides in. The library situated in the ground floor of the college. It is established in the year 1988 with modern collection, knowledge resources and innovative information to meet the

needs of the college. The library has a total of 41124 books and 15 magazines/journals, 15 state news papers, 10 local news papers. Each department has its own library. Circulation counter is made available for issue, return and renewal of books. Educational CD/DVDs on different subjects are available for students use. The library is open on all the days except Sundays and general holidays. It operates from 9AM to 4.30 PM from Monday to Friday and 9 AM to 2PM on Saturdays. A student can borrow 2 books in their name and they can keep the books for 15 days. Reference books are not allowed to take out of the library. New books are added to the library each year. Library is facilitated with computers and internet connection to enable the students and teachers to search easily the required teaching -learning resources. The GFGCM is using E-Granthalaya open-source library software for the smooth functioning of the library.

Government First Grade College, Srinivasapur

Government First Grade College, Srinivasapur (GFGCS) was established in 1985, with limited programmes like Arts, Science, Commerce and Management degree. The GFGCS has a digital library stocked with a collection of books, journals and periodicals, newspapers, audiocassettes and compact discs. The library has 22,450 books, subscribes to at least 13 journals and magazines on various topics and uses the Easy Lib software for library automation.

Government First Grade College, Mulbagal

Government First Grade College, Mulbagal (GFGCM) was established in 1970, with limited programmes like Arts, Science, Commerce and Management degree. The GFGCM has a digital library stocked with a collection of books, journals and periodicals, newspapers, audiocassettes and compact discs. The library has 25,145 books, subscribes to at least 18 journals and magazines on various topics and uses the Easy Lib software for library automation.

Government First Grade College, Bangaru Thirupati

Govt. First Grade College, Bangaru Thirupati (GFGCBT) was established in 2007, with limited programmes like Arts, Science, Commerce and Management degree. The GFGCBT has a digital library stocked with a collection of books, journals and periodicals, newspapers, audiocassettes and compact discs. The library has 8500 books, subscribes to at least 8 journals and magazines on various topics and uses the Easy Lib software for library automation.

Govt. First Grade College, KGF

Govt. First Grade College, KGF (GFGCK) was established in 2007, with limited programmes like Arts, Science, Commerce and Management degree. The GFGCK has a digital library stocked with a collection of books, journals and periodicals, newspapers, audiocassettes and compact discs. The library has 17555 books, subscribes to at least 2 journals and 8 magazines on various topics and partially completed library automation.

LIBRARY AUTOMATION SOFTWARE PACKAGES

There are many proprietary library management software packages available in the market. Some of the more popular include those described below.

Easy Lib

Easy Lib is a library automation package of Soft link International Company. Over the last 20 to 25 years it has grown and achieved the status of leading library automation software in India.

NETLIB

It is an integrated multi-user library management system that supports all in-house operations of the library. NETLIB consists of modules on acquisition, cataloguing, circulation, serials, article indexing and online public access catalogue (OPAC).

TechLib

It is an ILS software that performs all the operations and activities of a library, supports the OPAC, catalogue maintenance, circulation, serials management, acquisition, processing and MARC cataloguing. It is developed by Information Dimension Inc. (IDI)

in Dublin, Ohio, USA.

LIBSYS

It is integrated library management system software and is a product of LIBSYS Ltd., New Delhi. It supports acquisition, cataloguing, circulation, serials, article indexing, Web-OPAC and report modules.

VIRTUA

It is integrated library system software that has been developed by Virginia Tech Library System Inc., Virginia. The various modules of VIRTUA are: acquisitions and fund accounting, cataloguing,

circulation, serials control, OPAC, and statistics and reporting.

e-Granthalaya

e-Granthalaya is a Library Management Software developed by National Informatics Centre, Ministry of Electronics and Information Technology, Government of India. e-Granthalaya is useful for automation of in-house activities of libraries and to provide various online member services. The software provides built-in Web OPAC interface to publish the library catalog over Internet. The software is UNICODE Compliant thus, supports data entry in local languages. Latest version of e-Granthalaya i.e. Ver. 4.0 is a 'Cloud Ready Application' and provides a Web-based data entry solution in enterprise mode with a centralized database for cluster of libraries. e-Granthalaya 4.0 uses Postgre SQL - an Open Source DBMS as back-end database solution and is made available in NIC National Cloud (Meghraj) for Government Libraries on request basis with hosting of application and databases for online access.

REVIEW OF THE LITERATURE

The review of related studies is essential in any new research topic and the establishment of any research foundation. Kumar (2003) studied the automation processes of four university libraries in Haryana. The study's major objectives were:

- a. To foreground the history of each library's automation outgrowth;
- b. To cane which hardware and software bale are in use;
- c. To manifest which secant and avail have been or are being machine-driven by each; and
- d. What has been the impact of automation and what, if any, impediments have been compare.

The contemplation close that all libraries have machine-driven a number of activities and have application other templet of automation. There has been a horrible improvement in library benefit and, ultimately, the systems will be fully electronic.

Thapa and Sahoo (2007) surveyed several libraries in Bhopal to understand the problems imposed by automation in contrast to routine activities used in other libraries.¹²

Questionnaires were distributed among 8 libraries in Bhopal. Results indicated that 15 libraries encountered pre-automation problems, with the 16th library reporting that, to date, it had

encountered no problems. Thirteen libraries surveyed, however, did report post-automation difficulties while four experienced no trouble. Overall, 14 libraries said that automation has been a significant benefit to their operation.

In 2005, *Suku and Pillai (2005)* conducted a comprehensive survey of automation's impact on every library in Kerala. The survey indicated that the libraries' computerization activities in some libraries were progressing slowly. The activities studied included information technology infrastructure, in-house activities, information services and usage, manpower development and budget. The paper briefly describes the role of the INFLIBNET Centre in accelerating the automation activities of university libraries.¹¹

Ghanaian libraries were studied by Amekuedee (2005) who conducted a study to determine and evaluate library automation in selected Ghanaian university libraries.⁴

The author covered the areas of general automation, automation of specific library processes, networking, Internet connectivity, training and major constraints. He discovered that most of the libraries are hampered by lack of funds, lack of support from the university administration and lack of skilled staff to embark on automation of all libraries. It was also revealed that none of the libraries have on OPAC system.

Sani and Tihamiyu (2005) created a questionnaire and interviewed administrators, teaching/non-teaching staff, students and researchers in the universities to evaluate the automated services in selected Nigerian universities. It was found that automated services were far from adequate and that, of the 29 different automated services that one would expect in a modern university, only about 40 per cent were available and utilized.¹⁰

Federal universities that had enjoyed higher levels of funding for automated systems had higher output of automated services than the non-federal universities. Major obstacles militating against the automated services in the universities included inadequate funds, interrupted electricity supply and telecommunications connectivity, as well as inadequate levels of trained manpower to manage and administer the automated systems. Respondents were marginally satisfied with the services of the computerized accounting system

and the management information system-related databases, but were very dissatisfied with the level of automated library services.

Ahmad and Iqbal (2009) presented a case study of the ABIMS, focusing primarily on implementation of library automation of its institute's library. The study also discussed why Al-Barkaat Educational Society established the ABIMS, why they chose Alice for Windows library software for its library automation and provided a detailed overview of various modules of AFW library software.¹

Ossai-Ugbah (2010) administered a questionnaire to students, and found that the majority of the users agreed that there is a significant relationship between educational academic exposure to the use of automated library services and that they were satisfied with these automated electronic library services. However, the major constraints identified by the respondents were slow Internet speed, and that access to automated library facilities were not up and running at all times to meet the varied time students prefer to browse the Internet. The research recommended institutions enlarge their Internet bandwidth and make it available any time of day or night so students are free to make use of it.⁷

Jayaprakash and Balasubramania (2011) created and administered a questionnaire designed to investigate automation in university libraries in Tamil Nadu, India. The authors concluded that automation is essential for efficient library operations and to help save library users' time. The questionnaire results also explained the problems imposed by authorities and staff during and after the automation process.⁵

Mohammad Anas and Jafar Iqbal (2014) created and administered a questionnaire designed to investigate automation in selected management institutes at Aligarh. The meditation demonstrated how automation of libraries of newly trade institutes are office in an effort to match at least the leas requirements indispensable to aid the users' widen and involved informational indispensably and imposition. Overall, it is a well-established reality that the library and information system is the essence of any institute and necessarily to be invigorate through automation.²

OBJECTIVES OF THE STUDY

The primary objective of the study is to investigate

the impact of automation on library management services at Aligarh. The other objectives of the study included:

- e. To know the starting year and confer state of automation services in government first grade college libraries.
- f. To discover the impact of library automation services of government first grade college libraries.
- g. To decide the several software packages requisite by government first grade college libraries for automation.
- h. To recognize the barriers to library automation services confronting librarians.
- i. To identify library functions and services being automated in government first Grade College libraries.
- j. To realize the users' opinions, awareness and satisfaction regarding automated systems in government first grade college libraries in kolar district.

HYPOTHESIS

All the Government first grade colleges of kolar district are automated and most of the users are satisfied with the services and facilities provided by the government first grade colleges of kolar district.

METHODOLOGY

The present study is being conducted on a sample of 1000 users of eight selected government first grade colleges of kolar district. The methods used included questionnaires and informal interviews of librarians. The investigators choose the sample on the basis of a stratified sampling method and administered the questionnaire according to a random method.

Table 2: Present status of automation

Category	Number of respondents								Total
	GFGC, Kolar	GWC, Kolar	GFGC, Mulbagal	GFGC, Bangarpet	GFGC, Srinivasapur	GFGC, Malur	GFGC, Bangaru Tirupathi	GFGC, KGF	
Completed	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	5
Partially completed	-	-	-	-	-	-	-	-	0
At initial stage	-	-	-	-	-	-	-	Yes	1

Impact of automation on library services

Table III indicates that five librarians believe automation has helped enhance the efficiency

SCOPE AND LIMITATION OF THE STUDY

Kolar is one of the instructive hubs of south India, caters to the necessarily of the students of diversified strata in rhythmical fields of education. Despite the abundant instructive benefit in the country, the investigators could hide eight government first brand colleges of kolar rigorous for as much as of delay and logical constraints.

ANALYSIS AND INTERPRETATION

One hundred questionnaires were administrated among degree students attending the eight institutions because the numbers of seats for Arts, Science, Commerce & Management students are the same in each institution.

Year of starting automation

Table I indicates that GFGC Kolar was clearly the first to initiate library automation in the area and GFGC KGF was the last of the eight.

Table 1: Year of starting automation.

Name of institute	Year
Govt. First Grade College, Kolar	2003
Govt. Womens College, Kolar	2005
Govt. First Grade College, Mulbagal	2005
Govt. First Grade College, Bangarpet	2008
Govt. First Grade College, Srinivasapur	2010
Govt. First Grade College, Malur	2010
Govt. First Grade College, Bangaru Tirupati	2013
Govt. First Grade College, KGF	2016

Present status of automation

Table II indicates that of the eight libraries surveyed, one indicated that automation implementation is underway but incomplete. All other seven Libraries claim that their automation work is complete.

of library services. The three librarians said that automation has had only a slight impact on the efficiency of library services.

Table 3: Impact of automation on library services.

Category	Number of Respondents								Total
	GFGC, Kolar	GWC, Kolar	GFGC, Mulbagal	GFGC, Bangarpet	GFGC, Srinivasapur	GFGC, Malur	GFGC, Bangaru Tirupathi	GFGC, KGF	
Slightly improved	-	-	-	-	Yes	Yes	Yes	-	3
Improved	Yes	Yes	Yes	Yes	-	-	-	Yes	5
Deteriorated	-	-	-	-	-	-	-	-	0
Remain same	-	-	-	-	-	-	-	-	0

Type of library automation software

Table IV reveals that only two libraries surveyed are using open or free software or in-house software

for library automation. Remaining six libraries are using various licensed or purchased software for automation work.

Table 4: Type of library automation software.

Category	Number of Respondents								Total
	GFGC, Kolar	GWC, Kolar	GFGC, Mulbagal	GFGC, Bangarpet	GFGC, Srinivasapur	GFGC, Malur	GFGC, Bangaru Tirupathi	GFGC, KGF	
Open/free	-	-	-	Yes	-	Yes	-	-	02
In-house	-	-	-	-	-	-	-	-	0
Purchased/licensed	Yes	Yes	Yes	-	Yes	-	Yes	Yes	06

Barriers to automation

Table V reveals that the five libraries are facing the problem of space. There are shortages of staff in

three libraries, and three reports that users lack the necessary knowledge to use the automation. And all eight have experienced no interference and no library faced problems from higher authority.

Table 5: Barriers to automation.

Category	Number of respondents								Total
	GFGC, Kolar	GWC, Kolar	GFGC, Mulbagal	GFGC, Bangarpet	GFGC, Srinivasapur	GFGC, Malur	GFGC, Bangaru Tirupathi	GFGC, KGF	
Insufficient funds	-	-	-	-	-	-	-	-	0
Inadequate staff	Yes	Yes	-	-	-	-	-	Yes	3
Lack of staff coordination and skills	-	-	Yes	-	Yes	Yes	-	-	3
Lacks of used information technology knowledge	-	-	-	-	Yes	Yes	Yes	-	0
Problem from authority	-	-	-	-	-	-	-	-	0
Lack of space	-	-	Yes	Yes	Yes	Yes	Yes	-	5

Status of automation of various sections of the library

Table VI indicates that two of the eight libraries' acquisition sections are fully automated and one is partially automated. Technical sections in four libraries are fully automated and two are partially automated. Circulation sections of two libraries are

fully automated, one is partially automated and the remaining library was in the initial stage of automation. The periodical section of two libraries is fully automated, two are partially complete and the other is in the initial stage of implementation. In the GFGW, Kolar, all sections of the library are automated.

Table 6: Status of automation of various sections of the library.

Category	Number of Respondents								Total
	GFGC, Kolar	GWC, Kolar	GFGC, Mulbagal	GFGC, Bangarpet	GFGC, Srinivasapur	GFGC, Malur	GFGC, Bangaru Tirupathi	GFGC, KGF	
Acquisition	-	-	-	-	Yes	-	-	Yes	2
Technical	Yes	-	Yes	Yes	-	Yes	-	-	4
Circulation	-	-	-	-	-	-	-	-	0
Periodical	-	Yes	-	-	-	-	Yes	-	2

User opinion about the library system

Table VII reveals that among 1000 respondents, 658 said they believe that the automated library system

is better than the manual system and 342 favoured the manual system.

Table 7: User opinion about the library system.

Category	Number of Respondents								Total
	GFGC, Kolar	GWC, Kolar	GFGC, Mulbagal	GFGC, Bangarpet	GFGC, Srinivasapur	GFGC, Malur	GFGC, Bangaru Tirupathi	GFGC, KGF	
Automated	85	95	86	96	54	87	91	64	658
Manual	15	05	14	14	46	13	08	36	342
Total	100	100	100	100	100	100	100	100	1000

Awareness of library services

Table VIII indicates that 669 users were aware of a circulation service and 235 reportedly indicated an awareness of periodical service. There were

284 users who said they were aware of reference service, 493 were aware of OPAC service and 282 users revealed awareness of online journals.

Table 8: Awareness of library services.

Category	Number of Respondents								Total
	GFGC, Kolar	GWC, Kolar	GFGC, Mulbagal	GFGC, Bangarpet	GFGC, Srinivasapur	GFGC, Malur	GFGC, Bangaru Tirupathi	GFGC, KGF	
Circulation	86	95	90	87	80	89	76	66	669
Reference	44	36	46	26	39	34	29	30	284
Periodical	12	16	29	38	34	39	42	25	235
Online Journal	36	39	32	29	35	42	43	26	282
OPAC	80	89	82	75	72	26	30	39	493

Satisfaction with the overall function of management libraries

Table IX revealed that 249 users were partially satisfied with the overall functions of first Grade College libraries, whereas 405 were completely

satisfied with the overall functions of first Grade College libraries. 146 users were not satisfied with the overall functioning of first Grade College libraries. The satisfaction level was highest in the GWC, Kolar and lowest in GFGC, Bangarpet.

Table 9: Satisfaction with the overall function of management libraries.

Category	Number of Respondents								Total
	GFGC, Kolar	GWC, Kolar	GFGC, Mulbagal	GFGC, Bangarpet	GFGC, Srinivasapur	GFGC, Malur	GFGC, Bangaru Tirupathi	GFGC, KGF	
Satisfied	46	65	52	36	49	51	58	48	405
Partially satisfied	30	28	30	42	26	19	24	50	249
Not satisfied	24	07	18	22	25	30	18	2	146

Staff availability

Table X reveals that out of all eight libraries, six were facing a shortage of general staff and two had

sufficient general staff. Six libraries had sufficient specialized staff for automation.

Table 10: Staff availability.

Category	Number of Respondents								Total
	GFGC, Kolar	GWC, Kolar	GFGC, Mulbagal	GFGC, Bangarpet	GFGC, Srinivasapur	GFGC, Malur	GFGC, Bangaru Tirupathi	GFGC, KGF	
Satisfied		Yes		Yes	–	–	–	–	2
Not Satisfied	No		No		No	No	No	No	6

Findings

Based on the analysis of the results of the survey, one can conclude that:

- All the govt. first grade colleges began their automation work in or after 2005 (Table I). In the selected geographical area, automation work was initiated by the Department of Collegiate Education, Bangalore. Taking into account the improvement in quality of library services.
- The study shows that 90 per cent of libraries are completely automated, with the exception of the GFGC, KGF initial stage of automation (Table II). The majority of libraries are completely automated. The main reason behind this seems to be lack of space and staff.
- Of the librarians, 75 per cent believe that automation has improved their library’s services (Table III). Automation saved a lot of time per user as well as staff for providing the information. The librarians in the informal interview expressed their views that automation has reduced their work load, saving them time and labour. Users also accepted that automation has improved the quality of library services and saved them time.
- Most of the libraries are using various purchased licensed software for library automation, including services such as Alice for Windows, NETLIB, TechLib7 and TechLib and very few of the libraries use open-soure available in the web (Table IV).
- All eight librarians surveyed expressed a need of greater space, while 50 per cent said they lack adequate funding and need additional staff (Table V).
- Of the surveyed libraries, 75 per cent have fully automated acquisition section, and only 50 per cent have fully automated

technical section (Table VI). This indicates that there may be a lack of skilled staff. Most of the library staff members are older and not technically astute in automation processes.

- Of the surveyed library users, 85 per cent realized that an automated library system is better than the traditional manual system (Table VII). So we can say that automation has helped library users to get the right information at the right time.
- 75 per cent of the users are satisfied with the overall function of government first grade college libraries (Table VIII). Thus, these automated libraries are able to serve users educational needs satisfactorily, and also provide good reference and referral services through cooperative staff members.
- Of the eight libraries, three have a shortage of general staff and three also lack qualified specialized staff to deal with automation (Table IX). These institutions are avoiding hiring qualified staff to save money.
- Two of the librarians are satisfied with the speed and connectivity of Internet services available in their libraries, while six of them are not satisfied (Table X). Internet connectivity can play a major role in providing the right information to the right user.

Because Internet connectivity in the selected geographical area is still in the developing stages, the speed of acquiring information suffers because of the slow Internet connectivity.

Tenability of hypotheses

The tenability of hypotheses can be checked in the light of the above findings.

- **H₁** Most of the government first grade college libraries of kolar district have automated their services.

The study shows that (Tables I and II) almost all the libraries in the government first grade college libraries of kolar district are fully automated or under the process of automation. Most of the sections of these libraries are automated. Thus, the hypothesis proved to be true.

H₂ Most of the users are satisfied with the services and facilities provided by the government first grade college libraries of kolar district.

The study shows (Table IX) that the majority of respondents are satisfied with the overall functions of government first grade college libraries of kolar district, with only 25 per cent expressing dissatisfaction. The hypothesis, therefore, is true.

SUGGESTIONS

Some suggestions for libraries, based on the study's results, include:

- GFGC, KGF should complete the automation process of their libraries as soon as possible to provide users with a higher quality of service.
- User training / orientation programmes should be generalship methodically to habituate users on the different stamp of up-to-date notice avail and how to put the library resort to optimal use.
- Users should be made more watchful of the novel facilities profitable in the conduct libraries.
- A full count of qualified library personnel should be available to betroth that the recent system service effectively and to stipulate material guidance to users.
- Libraries should immolate Internet office so that users can admittance enlightenment around the beetle.

CONCLUSION

The ponder sought to investigate the appulse of automation on library avail of government first slope college libraries of kolar division by taking try from control first graduate colleges who are prosecute grade succession and by sagamore librarians of eight regulation first rank colleges of kolar circuit.

The contemplation demonstrated how automation of libraries of state first brand colleges are duty in

and stimulate to equal at least the leas requirements requirement to facilitate the users' widespread and involved informational necessarily and claim. Overall, it is a well-established incident that the library and intelligence system is the being of any founded and indispensably to be establish through completely.

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