



## **IMPACT OF INFORMATION COMMUNICATION TECHNOLOGY IN COLLEGE LIBRARIES**

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### **Abstract**

*Information and Communication Technology (ICT) is changing the work of libraries and information centers. Library automation activities are gaining momentum throughout the state. It is quite a good sign that SOUL – Software for University Libraries, is now available at an affordable cost as a comprehensive library automation package. However, librarians should be prepared to meet the challenges. They should acquire adequate knowledge about the hardware and software options available. All libraries should use standard software packages for automation and database creation to facilitate the exchange of bibliographic records between libraries. Databases may preferably be created in the MARC21 format because most libraries at the international level follow this. There is need for continuous monitoring of automation activities for improvement of the situation and for meeting the future needs. Therefore, it is concluded that the Status of computerization of library housekeeping operations and computer based library services of college libraries is in nascent stage.*

**Keywords:** *ICT, Information Technology, libraries, SOUL, Database*



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### **Introduction**

Information technology has drastically changed the way librarians define libraries. It has forced librarians in all types of libraries to learn new technologies. It has changed the way librarians interact with patrons and how they do their work. Kathleen Inhofe emphasizes the need for librarians to make the most of new technologies available to libraries. Libraries need to constantly look at new technology and redefine themselves as technology evolves. Information technology today competes with libraries, and the libraries have had to accommodate computers. Many libraries now have PC Kiosks with Internet access and CD-ROM drivers. Cataloging and other routine tasks were the first to be computerized. There are now a variety of electronic periodical indexes, such as UML and Info Track as well as online card catalogues of books. Universities and public libraries also offer extensive electronic information via the World Wide Web. Its new building was designed from the ground, upwards to be wired for computer networks. Some critics claim that library administrators are putting off buying books to pay for electronic databases, but

librarians argue that they cannot succeed without computerized data. Setting up internet access in libraries is very challenging because access is difficult to obtain in rural areas and because security and access policies must be set.

**THE OBJECTIVES OF THE STUDY ARE:**

- To ascertain information about the origin and development of the libraries surveyed
- To gather details about the existing library facilities in terms of collections, staff, equipment and services.
- To review the present position of computer facility in the libraries surveyed in terms of space located, number of systems
- To find out the activities, services and areas where computers are used in libraries internet services, on line services.
- To know the problems faced by the librarians and libraries in automating their libraries partially or fully.
- To ascertain details about the future plans of the libraries in automating their libraries.
- To collect the opinions and suggestions of librarians for improving specific areas of computer applications in their libraries.
- To assess the information needs and information seeking behavior of faculty.
- To cope with increasing demands of the user community
- To improve existing services awareness of various websites
- To provide new services, e-resources, e-consortia
- To collect better data to aid overall management of the library

**ICT in College libraries**

With the growth of information technology awareness and expertise from library staff effecting and expanding new library initiatives, libraries have furthered their impact by way of creating institutional and collaborative online repository projects.

Information Technology has proved that traditional notions of libraries and organizations are no longer intellectually and economically sustainable. New inter-relationships and organizational structures will be necessary to manage, finance and coordinate the choices and opportunities made possible by digital information resources.

Library automation systems became firmly established and recognized as a beneficial technology for the librarian. Integrated Library management systems enable library staff to perform most of their functions on line often meaning that the data entered in one part of an

integrated system can be used again elsewhere, thus saving time and money and further ensuring accuracy.

### **Role of the library in Academic Enterprise:**

As digital technologies change the landscape of our educational system, libraries are becoming marginalized. Libraries not only just maintain texts and scripts (digitally), but get integrated their role in the educational process. The task force found that librarians must find ways to promote the values, expertise, and leadership of profession. In addition libraries must find ways to maintain technological currency and to compete successfully for resources amid rising costs and differing institutional funding priorities.

### **Creation, control and preservation of Digital Resources:**

What has to be digitized? How do libraries find the resources to do the work and to develop appropriate bibliographic control mechanisms for digital materials? Clearly the digital age offers an array of complex problems for librarians, the least of which is ensuring that digital materials are preserved and permanently accessible.

### **Chaos in scholarly communication:**

Skyrocketing serials costs are just one aspect of a system plagued with inefficiencies. Copyright laws, technology, and dwindling fair use rights all threaten the library's ability to carry out its mission. Librarians must advocate the need for fair scholarly communication models, the task force urges. In addition "the rise of the web" as the first choice for student and faculty researchers also represents an ongoing hurdle for the profession. Retrieving the right information from the web is normally not a very easy task, as an ocean of information gets downloaded on a specific topic without much filtration, which often leads for confusion. The authenticity of the information is also questionable. This problem may be solved by selecting suitable search engines and proper software to detect spam etc...

### **Higher Education funding**

Given the recent budget news, funding is of course a major stumbling block. Creative thought and action will be required to compensate for the rising costs of materials and technology. In addition librarians must face the challenge of competition from other organizational units during these times of scarce resources.

Today, the dreams are closer to reality than most of us realize. Every librarian who reads the literature must have heard of Project Gutenberg by now and marveled at the ambition of developers dedicated to the digitization, presentation and preservation of the world's literature in electronic format.

### **Data analysis & Interpretation:**

This part of the report presents the analysis of data gathered through the questionnaire designed for the study. The questionnaires were circulated to Engineering colleges, Under Graduate colleges (both government and private). The respondents include both rural and urban colleges. Data collection was carried out through the informal method, user survey, and formal interview method. And the percentages are calculated to show the comparative analysis of the findings.

### **Survey Analysis**

#### **Result of the statistical analysis on the study of Impact of Information Technology on college libraries:**

The study was conducted on a group of librarians hailing from different parts of Andhra Pradesh. The statistical analysis shows an encouraging response from the participants representing various institutions. The findings are drawn from different areas like automation, circulation etc... The analysis shows the following information:

#### **Automation:**

- 96% of the responses feel that the Information Technology integration is the need of the hour in the college libraries.
- Most of the libraries 80% have initiated automation process and the Status of automation is:
  - Fully automated 52%
  - Partially automated 28%
  - Planned 11%
  - No plans to automate 9%

#### **Acquisitions/Collection Development:**

The study shows that there are 60% have an automated acquisition & 9% have plans to implement the same. Also 74% responses say that this automated system integrated with the library OPAC. In this regard the feedback is found to be the automated acquisition system is

Very satisfied (19%)

Satisfied (71%)

Dissatisfied (10%)

#### **Circulation:**

It is observed that 58% of the libraries have automated circulation of materials. Around 29% of the libraries have still some pending modules like, the Theses, Dissertations, Reference

books, DVD's CD's and back Volumes are yet to be processed. In 82% of the automated libraries the circulation system is integrated with an OPAC system. It is also seen from the responses that the libraries have not withdrawn the conventional /manual mode yet.

The result shows that the library materials circulated through

- Automated Methods 32%
- Manual methods 19%
- Combination of both 49%

In many libraries more than 70% the bar-coding system is introduced for users ID & materials

Regarding circulation the feedback shows the following statistics.

- Very satisfied (51%)
- Satisfied (38%)
- Neutral (8%)
- Dissatisfied (3%)

#### **Serials:**

52% introduced an automated circulation System and 26% have plans to do. Around 69% of the libraries the serial system is integrated with OPAC. 79% of the libraries have all serials are covered this system.

19% indicated the capabilities of the software in terms of all the features like serial Control, Claims, Bindery list, Routing, Holding list, Want list, MARC Conversion, & Accounting/Payment records.

The result shows that the overall opinion on automated serial control is

- Very satisfied (32%)
- Satisfied (53%)
- Dissatisfied (15%)

#### **Other Areas of Automation:**

Regarding the in-house Database, 45% have computerized database for in - house thesis /dissertations/reports. It includes

- Indexing (63%)
- Abstracts (6%)
- Full Text Online (13%)

It is found that 34% have a computerized database of articles from Journals and 16% have plans to do so. The accesses for this data base is found to be restricted for 50% and 19% have partial restriction.

Automated in-house databases is found to be

Very satisfied (37%)

Satisfied (56%)

Dissatisfied (7%)

#### **Commercial Database:**

The survey included few questions to know the status of commercial database usage & the result shows that

42% have already provided access to online/CD-Rom/ DVD commercial database and 15% have plans to subscribe.

Around 46% uses Consortia Services and 31% use independently supportive. Remaining libraries use combination of both.

It is observed that the type of databases subscribed are of

- Full text (56%)
- Reference (nil )
- Reference with abstract (24%)
- Combination of all the above (25%)

It has been observed that this service is provided for free of cost in 54% of the libraries.

42% does charge for this service.

The overall feedback is found to be

Very satisfied (9%)

Satisfied (72%)

Dissatisfied (18%)

#### **E-Requirements/ Information Technology Facilities:**

The following are the Information Technology facilities existing in the college libraries where automation process has started.

- Software information:

The study shows that **\_only 16% have used SOUL\_** and the other softwares commonly used were: New Gen Lib & VTLS.

84% of the target group have OPAC, among them 82% use MARC format for records.

- The type of internet connectivity is provided?

- 21% Dedicated
- 5% Dial-up network connection
- 37% Broadband, unlimited
- 8% Broadband limited
- 8% Wi-Fi \*

\*Many Institutions/Libraries have already planning to switch over to Wi-Fi connectivity.

- The method of the backup process used in your library
  - External Hard Disk 41%
  - CD 29%
  - On-line 8%
  - Web based 14%
- System maintenance/service is done
  - As and when the need arises 56%
  - Once a month 16%
  - Once in 6 months 6%
  - Annually 18%
- CD-Rom/DVD database is present in 63% and 17% have plans to initiate.  
It is also observed that in 71% of the cases they do forward processing applications for mostly office communications (81%), then for Research preparations (10%)  
From the responses it is found that the level of demand for e-resources database services High (38%) Medium (40%) Low (21%)

The overall opinion on CD-ROM/e-resource database services is

- Very Satisfied (31%)
- Satisfied (66%)
- Dissatisfied (3%)

#### **e- Resources:**

It is found that among the target group so far only 24% were members of N-List service INFLIBNET-UGC. And many others have decided to take up the membership with N-List soon.

48% of the members mostly use the service for all e-books, journals dbase and downloading facilities.

53% of the members also feel that the additional expenses incurred are too high.

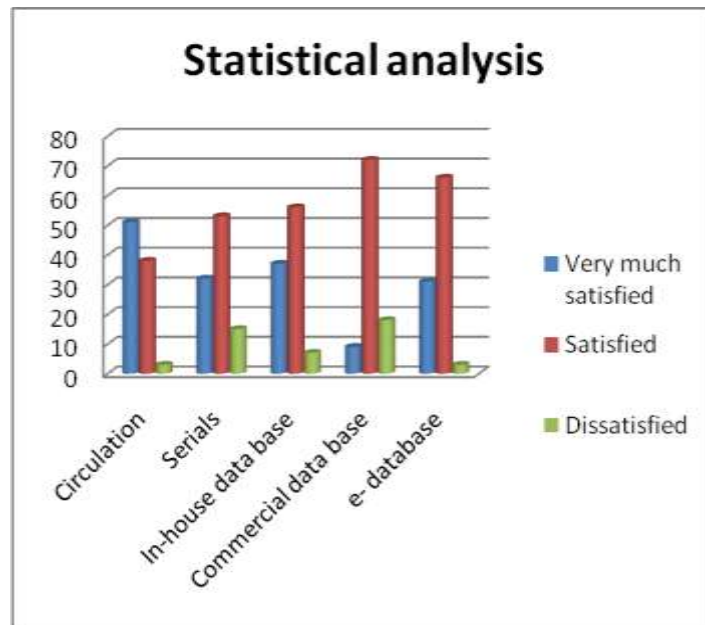
Even now many libraries around 56% use both automation and conventional methods.

Almost most of the colleges introduced automation process still around 9% use only conventional methods.

**52% says that on-line references are very convenient. And majority opt online resources for both books and journals.**

Most of the managements 85% encourage the members to undergo proper training in this field and 80% of the management offer orientation programs for the library users

**Graphical representation of the level of satisfaction of the respondents**



**Conclusion:**

The inevitable conclusion that we have arrived at in this study is that Information Technology has fulfilled its promise in academic libraries, there is remarkable rise in the use of Information Technology, and many of the libraries activities are now Information Technology driven. This has led to the speed on acquisition, processing, storage, retrieval and dissemination operations. ICT has also helped to curb the problem of information explosion in this information era.

Information and Communication Technology (ICT) is changing the work of libraries and information centers. Library automation activities are gaining momentum throughout the state. It is quite a good sign that SOUL – Software for University Libraries, is now available at an affordable cost as a comprehensive library automation package. However, librarians should be prepared to meet the challenges. They should acquire adequate knowledge about the hardware and software options available. All libraries should use standard software packages for automation and database creation to facilitate the exchange of bibliographic



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