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# **User Oriented Quality Services in 21<sup>st</sup> Century Libraries**

## **Editors**

Ms. Rhoda Bharucha

Mr. Bansidhar Bhatt

Ms. Shweta Shroff

## **SEMINAR ORGANISED JOINTLY BY**

Ahmedabad Library Network (ADINET)

Information and Library Network Centre (INFLIBNET)

Ahmedabad Management Association (AMA)

**on**

**11<sup>th</sup> August, 2012**

**at**

**Ahmedabad Management Association**

**Ahmedabad**



**AHMEDABAD LIBRARY NETWORK (ADINET)**

**C/o. INFLIBNET Centre**

**Opp. Gujarat University Guest House,**

**Navrangpura, Ahmedabad – 380009**

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## PREFACE

Each year ADINET celebrates the birth anniversary of Dr. S.R. Ranganathan. Besides being the Father of Library & Information Science, he was an educator, mathematician and a philosopher. As part of the celebration, a seminar is held on an important current topic. The seminar helps the Library & Information Science Professionals to know about the latest Information and Communication Technology used in libraries, to interact with each other and to discuss important current developments.

The theme of this year's Seminar is "User Oriented Quality Services in 21<sup>st</sup> Century Libraries". This Book of Papers contains the full text of the following eleven papers:

1. Enhancing LIS Skills
2. Research to Enhance LIS Skills
3. Enhancing Quality of School Library Services: Application of Kaizen
4. Essential Skills for Academic Librarians in 21<sup>st</sup> Century
5. Emerging Trends in ICT (Cloud and Mobile) for Library and Information Science I
6. Information Literacy: An Overview of Information Literacy Programs at IPR
7. Initiatives for Innovative Information Services
8. Digital Information Literacy: An Overview
9. A Study on Measuring the Customer Service Quality in University Libraries: Based on SERVQUAL Model
10. IIM Library Consortium: do we have a success story to tell?
11. Smart Partnership – Collaborative Initiative

Since a few decades Libraries have been functioning with the help of information technology. Even very small Libraries have now reconciled to the fact that they have to use a multitude of technological tools for collection development, management and for providing user oriented quality services. There are many new and rapid developments in the field of Information & Communication Technology. For example Lib 2.0 and Web 2.0 are being used to provide quality services, they also have an impact on library websites. Mobiles enable users to have libraries in their pockets. Cloud computing, discovery tools, open content, open source software and new social networking tools are some of the most important technological changes.

It is imperative that quality services be provided to library clientele, after ascertaining their needs. Also these services need to be periodically evaluated, by using various evaluation methods. Now the question is, in this present scenario, how can a medium sized library with limited resources provide quality services, whereby, library users are drawn to the library? Several issues involved are: LIS Skills, Emerging Trends, Information Literacy, Innovative Services and Collaborative Initiatives. The authors have covered these topics in their papers.

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## Ahmedabad Library Network (ADINET)

**ADINET is a Network of Libraries and Information Centers in Gujarat.** It was established in 1994 with an initial grant for a few years from National Information System for Science and Technology (NISSAT), Department of Science and Industrial Research, Government of India. **It caters to all types of Libraries:** school, college, universities, institutional libraries and even public libraries. Hence, **access is provided to hundreds of libraries**, librarians and organizations through the ADINET Network.

The main **vision of ADINET** is to join Libraries, to enable them to achieve what cannot be done by one library alone. This will help them to harness their limited resources and collective strengths so that Libraries can continue to play their historic role as society's portal to information. ADINET therefore promotes sharing of resources and disseminates information among Libraries by networking them.

### Objectives

- To **integrate the economic, scientific and technical information systems** into an effective network
- To **co-ordinate with** other regional and national networks, Libraries & Information Centers by providing links especially to OPAC's of Libraries. This will provide seamless connection & universal electronic access to the collective collection of Libraries, together with web-based material.
- To provide **Library Consultancy Services** like creation of Website, Institutional Repositories, etc. This will be of great help to small libraries.
- To develop **Databases of AV materials & Institutions.**
- To prepare **products & services** for the Library profession.
- To help Library & Information Center users & also individuals who practice different professions in **getting specialized information** of their interest.

### Services & Activities

- a ADINET is maintaining a **Database of over 5500 Current Periodicals** received by over 140 libraries in & around Ahmedabad.
- b **Document Delivery & Inter-library Loan:-** ADINET enables users to locate periodicals/books/reports, so that these can be borrowed on inter-library loan.
- c **Content Pages** of Library & Information Science journals are regularly supplied to all members. Full texts of selected articles from content pages are supplied.
- d **Supply of Photocopies** from journals published by more than 19 major publishers which cover over five thousand journals.
- e **Manpower development programs.**
- f **Completion of backlog** of any work of library & information centers.
- g **Digitization work.**
- h An **Electronic Discussion List** has been started with the help of INFLIBNET. This List helps to **build online relationships** & share information.
- i **Quarterly Seminars on Current Trends in Libraries**
- j **Ranganathan's Day celebration:-**  
Each year ADINET celebrates the birth anniversary of Dr.S.R.Ranganathan as Librarians' Day, by conducting a Seminar on an important current topic.

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k **ADINET Website has been redesigned with vital links to important databases:-**

The following useful information is available on the website:-

- 1 Directory of Libraries & Information Centers
- 2 Union List of 5540 Journal Titles
- 3 Directory of Librarians
- 4 Open Access Resources
- 5 CUCOLIS
- 6 ADINET Newsletters
- 7 Power Point Presentations of Lectures and Seminars

**Publications of ADINET**

1. **ADINET Newsletter** is published quarterly.
2. '**Directory of Institutions and Colleges**, in Ahmedabad and Gandhinagar and Universities in Gujarat', 2010.
3. **Union List of 5540 Current Journals.**
4. **CURRENT CONTENTS for Library and Information Science (CUCOLIS)**
5. **Book of Papers of Seminars** held each year.
6. **Course Materials** of Workshops & Training Programs

**Membership of ADINET**

All Institutions, Libraries and Information Centers, LIS professionals and students are invited to become members of ADINET and avail professional services. Membership fees are:-

- |   |              |
|---|--------------|
| 1. Institutional Member:                                | Rs. 10,000/- |
| 2. Associate Institutional Member                       | Rs. 5,000/-  |
| 3. Associate Academic Member:<br>(Colleges and Schools) | Rs. 2,000/-  |
| 4. Individual Member:<br>Life Membership                | Rs. 1,200/-  |

**Administration of ADINET**

The apex body of ADINET is the Governing Council which is headed by a Chairman. The day to day administration of ADINET is looked after by an Executive Committee, which consists of Chairman, Director and Secretary.

***For more information please contact***

Smt. Rhoda Bharucha

Hon. Director, ADINET

C/o, INFLIBNET Center, Opp. Gujarat Univ. Guest House,  
Navrangpura, Ahmedabad-380009.

**Tel: (079)- 26305630, 26300368 E-mail: alibnet@gmail.com**

Visit ADINET Website : <http://www.alibnet.org>

for latest news & activities of ADINET



# Ahmedabad Library Network

(An Information Network of Libraries in Gujarat)  
Sharing Knowledge with Society



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- Directory
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## Forthcoming Events : Librarians day Seminar 2012

**Smt. Rhoda Bharucha**  
Hon. Director, ADINET

### ADINET at a Glance

- Colleges in Gujarat : 406
- Librarian Directory : 380
- Newsletters Published : 68
- CUCOLIS Published : 45
- Book of Papers Published : 20
- Events : 11
- Lectures : 49
- Current Trends : 6
- Seminars : 20
- Publications : 147
- Assignments : 7



Inauguration

### Welcome to ADINET

Libraries are slowly turning into an information exchange hub of an organization, rather than earlier role of a "store house" of knowledge. Knowledge stored in the form of invaluable books, journals, other information materials and the latest e-resources is showcased in the library for its users. Boundaries of the libraries are expanding beyond four walls and library professionals are gearing up to take up the challenge of using it in disseminating authentic, latest and right kind of information to users.

With the rapidly growing advancements in every field, more and more documents are becoming available the world over, in both printed and electronic format. no library can afford to stock every necessary document in the area of its users' interests, but it certainly can provide a 'link' to the user to locate desired information. Networking and resource sharing thus assumes a great importance at this juncture and such a solution is being effectively provided by ADINET to the users and librarians specializing in any discipline of knowledge and available anywhere in the world.

### Useful Links @ ADINET

- GujCat
- IndCat
- INFLIBNET Centre
- INFOPORT
- Job Vacancies
- LIS Links
- N-LIST
- Open Access Journals Search Engine (OAJSE)
- Shodhganga
- ShodhGangotri
- [more links](#)

### INFLIBNET Centre



### SOUL 2.0

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- Unicode, Standards, Catalogues, NCIP 2.0, Multiplatform

#### MODULES:

- Copy catalogue, Templates, Reports, Transactions, Administration

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I like intellectual reading. It's to my mind what fiber is to my body - Grey Livingston

### Developed By Bhavesh Patel, Project Officer(CS)

NQT Division, INFLIBNET Centre, Ahmedabad  
Feel free to improve website as well as web content.  
bhavesh.bece.13@gmail.com (+91 9377253160)

#### Site Map

- Privacy Policy
- Disclaimer

#### Feedback

- About ADINET
- Bhavesh Patel

### Ahmedabad Library Network (ADINET)

C/o. INFLIBNET Centre,  
Near Gujarat University Guest House,  
Post Box No. 4116, Navrangpura, Ahmedabad-380009

copyright@adinet.org, Ahmedabad

## ADINET's New Website

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## About INFLIBNET

### 1. Introduction

The Information and Library Network (INFLIBNET) Centre was established in May 1996 as an independent, autonomous Inter-University Centre (IUC) of the University Grants Commission (UGC). Major activities and services of the Centre include automation of academic libraries and information centres, creation of union databases of resources available in academic libraries, promote resource sharing among academic libraries, promote information access and transfer, support scholarship, learning and academic pursuits. The Centre acts as a nodal agency for networking of libraries and information centres in universities, institutions of higher learning and R & D institutions in India with an aim to promote scholarly communication.

### 2. Scientific and Technical Activities

**2.1. IndCat:** IndCat is unified online catalogues of books, theses and journals available in major university libraries in India. The union database contains bibliographic description, location and holdings information for books, journals and theses in all subject areas available in more than 148 university libraries across the country. The union catalogue of books has two subsets namely GujCat and NERCat that are separately designed on demand of the concerned regions. The number of records available in the IndCat database is as follows:

- ☞ Books: 1,24,51,931 records from 148 university libraries with 70.42 lakhs unique records
- ☞ Theses: 2,46,200 records of theses from 272 Indian universities / institutions
- ☞ Serials: 50,164 holding information from participating university libraries including 16,842 unique records
- ☞ Current Serials: 35,209 journal titles including journals from the UGC-Infonet Digital Library Consortium
- ☞ CEC's Video Database: 15,000 records of educational video programmes produced by the CEC and its 17 EMMRCs.

**2.2. Soul 2.0:** The SOUL 2.0 is state-of-the-art integrated library management software designed and developed by the INFLIBNET Centre. It is user-friendly software developed to work under client-server environment. The software is compliant to international standards such as MARC 21, Unicode, SIP and N-SIP, FRBR, etc. The software has 2586 installations across the country.

**2.3. UGC-Infonet Connectivity Programme:** The UGC took-up the task of networking university campuses with the state-of-the-art campus wide networks under the UGC-Infonet Connectivity Programme. Under this scheme, 10 Mbps (1:1) Internet bandwidth was being provided to more than 180 universities on fiber-optic leased line with BSNL as service provider. With launch of the National Knowledge Network (NKN) and National Mission on Education through ICT (NME-ICT) that provides 1 Gbps connectivity to all universities, almost all universities have migrated to NKN / NME-ICT connectivity programme and are availing higher network bandwidth. Universities that have not yet migrated to NKN / NME-ICT have been advised to either join NKN / NME-ICT or alternatively continue to get Internet bandwidth through BSNL on rates negotiated by the INFLIBNET Centre. The UGC-Infonet Connectivity Programme, in its current format, stands winded-up with effect from 1st April, 2012. Instead, new format is proposed to the UGC for better utilization of NKN by beneficiary universities.

**2.4. UGC-Infonet Digital Library Consortium:** The Consortium provides current as well as archival access to more than 7,500 core and peer-reviewed electronic journals and eleven bibliographic databases from 28 publishers including university presses, scholarly societies, commercial publishers and aggregators in different disciplines. 181 Universities and 14 National Law Schools/ Universities including all the IUCs of the UGC are being provided differential

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access to subscribed e-resources. The Associate Membership Programme of the Consortium was launched in 2009 with an aim to extend access to e-resources subscribed under the Consortium to private universities and other research institutions. More than 118 private universities and other institutions have already joined the Consortium as its Associate Members.

- 2.5. N-LIST:** The N-LIST programmes, funded by the MHRD under the National Mission of Education through ICT, provides online access to 3,800 e-journals and 80,000 e-books to Govt.-aided and non-aided colleges. As on date, 2,619 colleges had registered, including 2,397 eligible colleges that are already getting access to resources subscribed under the N-LIST programme. Log-in IDs and passwords have been issued to more than 3,22,511 faculty members, students and researchers after obtaining list of authorized users from the eligible colleges. Registered users can access e-resources through proxy server installed at the INFLIBNET Centre. The project was honoured with Skoch Digital Inclusion Awards 2011 in Technology in Education Category.
- 2.6. Shodhganga:** Shodhganga is a National Repository set-up for submission of electronic version of theses and dissertations by students/research scholars in universities and make them available in open access mode. Students from different universities have started submitting electronic version of their theses into the repository. So far, reserchers from 55 universities have submitted their theses into the repository and 63 universities have signed MoU with the INFLIBNET Centre. Total number of theses submitted into the repository has grown to 3,380.
- 2.7. ShodhGangotri:** Shodhgangotri is a new initiative that compliments "ShodhGanga". While "ShodhGanga" is a repository of full-text theses submitted to universities in India, Shodhgangotri hosts synopsis of research topic submitted to the universities in India by research scholars for registering themselves for the Ph.D programme.
- 2.8. Open Journal Access System (OJAS):** The OJAS at INFLIBNET Centre uses Open Journal System (OJS), an open source solution. The initiative encourages universities and institutions that are publishing journals in print format to use the OJAS @INFLIBNET for hosting electronic version of their journals free-of-cost on servers at the INFLIBNET Centre. The initiative also encourages faculty in universities to start their own open access journals using the platform offered by the INFLIBNET Centre. Journals hosted on OJAS @ INFLIBNET are accessible to all users world-wide without any restrictions. Currently, Open Journal Access System @ INFLIBNET hosts fourteen journals.
- 2.9. IR @ INFLIBNET:** The Centre has established an institutional repository called IR@INFLIBNET using DSpace, open source software accessible at <http://iam.inflibnet.ac.in:8080/dxml/>. The papers published in the proceedings of the CALIBER and PLANNER, are uploaded into the repository in PDF format. The repository also includes course materials, newspaper clippings, etc. The repository has 1,262 full-text articles.
- 2.10. Shibboleth-based Access Management System:** The INFLIBNET Access Management Federation (INFED) is designed to protect the privacy of users while giving both Service Providers and User Organisations sufficient assurance that requirements such as licenses and acceptable use policies can be enforced. The Shibboleth architecture chosen for the INFED is designed to protect user privacy; however the measures it provides can only be effective if they are used and respected by User Organisations, Identity Providers and Service Providers. The federation and its website ([parichay.inflibnet.ac.in](http://parichay.inflibnet.ac.in)) has been created with all documentation Identity provider has been created for NLIST user and has been successfully tested with few publishers. Centre is also planning to shift entire federated access management system to external web hosting provider for better stability and access.
- 3. Human Resource Development and Consultancy:** Imparting training to manpower working in the university and college libraries in the use of IT is an important objective of the Centre

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and has been given due priority. 510 training programmes, workshops and seminars focusing on the library automation and networking have so far been conducted benefitting 39,617 participants. INFLIBNET Regional Training Programme for Library Automation (IRTPLA) and User Awareness Training Programme were conducted across the country in collaboration with the universities. National and International Conventions called PLANNER in North-eastern regions and International CALIBER in various states in India are being organized annually / biannually as part of the human resource development activities. The Centre has also conducted 104 Training Programmes on SOUL Installation and Operations for Libraries.

4. **Publications of the Centre**

- i) INFLIBNET Newsletter (Quarterly)
- ii) Guidelines for Data Capturing: User Manual
- iii) SOUL Guidelines for Data Capturing: User Manual
- iv) Proceedings of the CALIBER (Biannual)
- v) Proceedings of the PLANNER (Biannual)
- vi) Information Brochures on INFLIBNET
- vii) Annual Report
- viii) INFLIBNET Diary with Directory of Indian Universities

5. **Physical Infrastructure for the INFLIBNET Centre:** The INFLIBNET Centre is located in the Gujarat University Campus since its inception. Three buildings of residential blocks of the Gujarat University are hired on lease for accommodating INFLIBNET offices and laboratories. The Centre has started constructing its own Institutional Building on land measuring 10,000 sq. mtrs (approx. 2.5 acres) allotted to the Centre by the Govt. of Gujarat free-of-cost. The land is located in the Infocity, Gandhinagar amidst reputed educational institutions such as NID, DAIIT and NIFT. The Centre has hired services of M/s Vastu Shilpa Consultants as its Architect for designing and constructing the building; M/s. Katira Construction, civil contractor for constructing the building and M/s. Ananjiwala Consultants, Project Management Consultants for quality control and for supervising the construction activity. Most of the physical construction of academic and administrative block of the building has been completed from basement to 7<sup>th</sup> floors. It is expected that the academic and administrative blocks of the building will be completed in all respect by the end of August, 2012. The construction of Residential Block of the building was started by M/s Malani Constructors in October 2011. The work of construction of two floors of the building has been completed including basement and PCC footing. The construction work of Residential Block of the building is going on satisfactorily. The Residential Block of the building is expected to be completed by October, 2012.

For Further Information Please Contact

**Dr Jagdish Arora, Director**

INFLIBNET Centre

Gujarat University Campus, Post Box No. 4116

Navrangpura, Ahmedabad – 380 009 (Gujarat) India

Tel. Nos. : +91-079-26308528, 26305971, 26304695

Fax Nos : +91-079-26300990, 26307816

E-mail : jarora@inflibnet.ac.in,director@inflibnet.ac.in

URL: <http://www.inflibnet.ac.in>

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## Enhancing LIS Skills

Shyama Rajaram\*

### Abstract

*With the tremendous growth of information and Information Technology, libraries are confronted with untold challenges and opportunities. The challenge is to learn new skills and at the same time retain the traditional skills to manage the complex library systems of the modern world. LIS schools world over and in India as well, have responded well to meet the emerging challenges so that the profession can flourish continuously. The major part of this paper discusses eleven skills that can enhance the functioning of LIS professionals. The paper concludes that in a country like India, libraries can be viewed as places of opportunity as they can provide the world of information to the rich and the poor alike. Such a vital and significant institution of the society needs information professionals who are skilled in information handling activities.*

### Introduction

The explosive growth of Information Technology has been ubiquitous. It has had a tremendous impact on the library and information profession as well. Each and every area of library activity - be it acquisition, collection, organization, storage, retrieval or dissemination of information has been influenced by the Information and Communication Technology (ICT). The electronic environment has brought about hitherto unseen changes in the information landscape. Libraries which are basically engaged in the process of information transfer are confronted with untold challenges and opportunities. The challenge is to learn new skills and at the same time retain the traditional skills and of course unlearn a few redundant ones.

As library systems have become complex in the modern world, the tasks of librarians have consequently become more complex and their performance requirements are tough. The needs of users have become complex and their expectations are growing manifold. So, for library and information professionals, there is a constant need to improve and enhance their skills. Multiple skills are required today as Librarians are expected to deal with print as well as electronic resources. The use of web 2.0 applications to library services has become imperative in modern libraries. Thus, it is essential that those dealing with information enhance their information management and dissemination skills.

### LIS Education

Advances in information technology have greatly impacted the operations of Library and Information Science (LIS) schools globally. To sustain and thrive in today's knowledge society LIS schools world over and in India as well, have responded adequately to meet the changing needs of the market. They are definitely dynamic and have initiated an array of changes in their curricula. During 1990s "library schools adopted a new paradigm in which the curriculum is information-centered and not library-centered" (Greer, Grover, & Fowler, 2007). There is a dire need to apply theory to practice. According to Greer, Grover, & Fowler (2007) "a shift from a focus on collections to a focus on people"

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\*Dr. Shyama Rajaram, Associate Professor, Department of LIS, Faculty of Arts, The Maharaja Sayajirao University of Baroda, Vadodara, email: shyama.rajaram@gmail.com

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is necessary. In their book *Introduction to the Library and Information Professions* the authors have offered the reader with a toolbox of theories to serve as a framework for practice in the information professions. The authors state that, "Still today, there are information professionals more devoted to acquisition, storage, retrieval, and preservation than they are devoted to people and to service". So application of theory to practice is very important. Now one may ask 'what is a theory'? Theory is a generalization, "a statement that explains, describes, or predicts a possible outcome of an event or circumstance" (Greer, Grover, & Fowler, 2007). Theory is a vital part of professional work as it is in our personal lives. For example, we go for a morning jog everyday because we believe that it would keep us healthy as we have learnt it from our doctors, parents, teachers, friends or books. We carry out this act of jogging as we have formed a general idea in our minds that jogging or walking would keep us healthy. The point is that, it is not that we start jogging first and then realize that it keeps us healthy. Unfortunately many people undermine the significance of theory. According to Greer, Grover, & Fowler (2007):

Theory is an essential part of professional work. The primary function of any professional is diagnosis. A professional diagnoses need, i.e., a physician diagnoses a patient's ailment, an accountant diagnoses accounting issues of a company, or an information professional diagnoses the information need of a client or group of clients. It is necessary to apply theory in this process to have an accurate diagnosis. Diagnostic theory primarily comes from psychology, the study of human behavior. ... Unless theory is applied to diagnosis, an information professional is functioning as a technician.

LIS schools are basically interested in the theoretical aspect of information profession and their teaching and research focuses a great deal on this aspect. Many LIS schools are vibrant and doing a wonderful job in preparing their students to help others in the use of information effectively and efficiently. The basic objective of any LIS school is to develop information professionals with critical thinking and problem solving abilities. Although traditionally librarians focused a great deal on the organization and storage of printed books and non-book materials; now they are equally concentrating on servicing electronic resources through digital libraries, the Internet and virtual Libraries. Hence, LIS schools are also attempting to develop information professionals who can combine the traditional tasks with the new ones requiring the efficient use of technology. Nevertheless, let us consider how the LIS skills can be enhanced further both among potential and practicing library and information professionals. The remaining part of this paper would discuss eleven skills that can enhance the functioning of LIS professionals.

## **1. Training in Library Ethics**

In the first place in any profession to become a truthful and respectable professional one must follow the ethics of that profession. Many professions set a standard of ethics for themselves. The practitioners of that profession are generally expected to conduct themselves within the boundaries of that code of ethics. For example, doctors do historically take Hippocratic Oath to practice medicine ethically. Sadly though, in our country today, female feticide is rampant along with numerous other unethical practices by medical practitioners. Ethics goes for a toss here and we read and accept such news daily along with our daily dose of morning tea! This is happening in a profession where code of ethics is clearly charted out!

IFLA's website lists 38 countries giving code of ethics for librarians; strangely India does not figure in that list, though countries like Malaysia and Sri Lanka find a place there. The websites of national

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level library associations in our country like, ILA and IASLIC are silent about code of ethics! However, honestly speaking, if our heart is in the right place, how can our concepts of right and wrong behaviour go awry? Here, I would like to quote Bolton (1922) "The librarian has ever been a scholar, and usually he has been allied with the ceremonials of religion. Ethics, therefore, have been inherent in his profession even when not expressed in a code." So just because codes are not charted out does not make them less binding. Here, I am consolidating and summarizing the ethics of librarianship that were being evolved and articulated by many dedicated librarians in the U.S. nearly a century ago. Bolton (1922) writes how librarians like Mary Wright Plummer, Genevieve M Walton and Sam Walter Foss articulated ethics for librarians. Dignity and humility are extremely important characteristics that librarians should cultivate. As librarians are looked upon as teachers they should realize their individual limitations and be willing to learn before teaching others. As librarians are in a profession where they help others in finding information they should look upon their work one of humanity. Hence they should be ready to help in 'pressing cases' without rigidly holding to ones work hours which may smack of the 'trade union'. They must possess esprit de corps for the overall success of the library. Ostentation should be avoided and one must believe in working quietly. Toleration is needed in a librarian to make him/her judicial and at the same time enthusiasm is needed to make him/her human. A librarian should be more of a public than a private person; someone who constantly assess the needs of users. Today we can also add that any under the table dealings should be shunned.

## **2. Communication Skills**

As librarians have to model themselves as public persons, good communication skills are essential. India being a multilingual country, librarians here should be able to reach out to people of different cultural and linguistic background. Therefore, in India, librarians should have good communication skills preferably in multiple languages and should not be monolingual. In the electronic environment, especially on the Internet and online subject databases, as more information is available in the English language than in the Indian languages, good command over the English language would be greatly helpful. Librarians need good technical writing skills as they have to frequently engage in written communication through letters, e-mails, blogs, websites, bulletin boards, newsletters, annual reports etc.

## **3. Human Relations Skills**

Libraries are social institutions where the recorded human knowledge is stored for dissemination and usage by individuals in the society. This process of communication is achieved by a complex system of information psychology, information sociology, information management and information engineering (Greer, Grover, & Fowler, 2007). Professionals working in the libraries have to carry on their functions through communications at numerous levels and in diverse directions, where effective human relations are very important. Many believe that the library "... profession is at a crucial stage in maintaining human relations. While the process of professionalism has technologically advanced, its human side (the humane outlook) is neglected and hence probably leading to dehumanisation of the role of librarianship in the society" (Taher, 1996).

Potential Librarians should be taught that they should conduct themselves in a humane way when they interact with the users who enter their libraries. "Libraries exist for the sake of the users. Therefore, all libraries must deal carefully, cordially and intelligently with their users to ensure maximum

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utilization of their collection as well as to satisfy the needs of the users” (Shyama Rajaram, 2004). It is also important to maintain a cordial as well as ethically and morally correct relationship while interacting in the outside environment like with publishers, book dealers, consortia partners, other libraries etc. In case of large libraries which function with the help of a large number of people, various issues regarding human relations among them become very important. For instance, relationship between super-ordinates and subordinates, relationships among peers, relationships in job performances, evaluation of conflict between norms and humanitarian considerations and problems by gender are certain issues that require delicate and careful handling.

#### **4. Reading Skills**

Only when librarians themselves read a lot they would be able to display an amount of scholarship and expertise which is essential to inspire a young student. Way back in 1952 Foskett emphasized that apart from good technique there cannot be a satisfactory contact between the reader and librarian without some degree of shared knowledge. It means librarians cannot be totally ignorant of the collection that they handle. Especially in academic libraries, where senior library professionals enjoy academic status, there is a need for more dynamic approach which involves reaching out to the users. An intimate and expert knowledge of both the print and digital collection would not only help the librarian in providing effective service to the users but also in inspiring users to read more. When librarians do not understand the terms and phrases used in different subjects, it becomes very difficult for them to provide any meaningful service. Users tend to respect those librarians who have the ability to understand their research problems and who talk the same language as the users do.

#### **5. Analytical Skills**

Along with myriad other skills the ability to think critically and logically helps in solving simple as well as complex problems. Analytical skills may be defined as the ability to envisage, express and solve complex problems. As information professionals gather information and analyse their content for organizing as well as retrieving and disseminating them; analytical skills are crucial for successful and effective rendering of services. The absence of analytical skills in a technician may be acceptable but a professional is expected to possess such skills. For example, while preparing a library catalogue a data entry operator may mechanically enter the data from a data sheet; it is information professional who would know the number of databases needed for the library and data elements in each record that would be sufficient or not for library users. The onus of choosing the right classification scheme for the library and the subject heading list to be consulted to construct the specific subject headings, rests on the shoulders of the information professional. Demonstration of such skills would help in proving better service to the users and also in moving up in one’s career.

#### **6. Soft Skills**

According to Ramesh and Ramesh (2011) “... soft skills are those skills- \_ over and above the technical knowledge and expertise in the chosen field \_ required for an individual to relate to and survive and succeed in his or her environment”. This is an open ended definition. So we can say that soft skills are good communication skills, the ability to listen and negotiate intelligently, having a positive outlook to life and things around and overall good behavioural skills that are needed to succeed in today’s competitive environment. Soft skills play a very important role in enhancing professional success in any field of work. Hard skills are the basics that an employer needs, but he looks for those candidates

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who possess the soft skills as well. Especially in case of libraries where face-to-face interaction with users is a daily routine, the importance of soft skills cannot be undermined.

### **7. Knowledge Organization and Processing Skills**

Knowledge organization and processing are the basic skills in which an information professional ought to be sound. The ability to classify documents in more than one species of classification scheme is essential. A good training in understanding the subject of the document; rendering the documents the right class number; assigning an appropriate book number are vital for the proper organization of the documents in the library. A proper knowledge of the catalogue codes like AACR 2 and the subsequent developments like RDA, FRBR and the formats like MARC 21 etc. would not only help in understanding and appreciating the OPACs, but would also help in improving them. The popular culture that is prevalent in many libraries for ease and speed to resort to copy cataloguing from large bibliographic utilities have made many young professionals to erroneously assume that the knowledge of classifying documents with the help of a classification schedule or the knowledge of AACR 2 or ISBD are redundant. It is akin to thinking, just because there are fast food joints to satiate our hunger quickly, we can run our houses without a kitchen!

### **8. Computer and Information Technology Skills**

The basics of computers like the ability to identify the hardware components, differentiating between hardware and software, and recognizing the typical features of an application window are the basic skills that one expects from a potential or practicing librarian. A good understanding of the computer operations, the hardware and software aspects of the computer leading to the use of this technology to manipulate, create, store and retrieve information to express thoughts and communicate with others is necessary to be an efficient information professional today. Working with word processing, graphics, multimedia, spreadsheets, databases and any Library Management Software are vital skills needed now in modern libraries. Moreover, skills are needed to create and update online databases, design and update library websites, create library blogs and design and maintain digital libraries. A librarian should also know how to use and handle Internet, Intranet and other library networks. In the modern times an efficient librarian is expected to use instant messaging for reference service, RSS feeds for current awareness service, streaming media for library instruction, blog for discussion, SMS or e-mails for communication with the users.

### **9. Information Retrieval Skills**

Libraries have existed in all ages along the corridors of time as essential part of social milieu. Only the writing materials have undergone changes from papyrus to papers and punch cards to personal computers. Libraries have been accepting all recorded thoughts of human endeavours irrespective of the media in which they are stored. Information retrieval and its dissemination is the basic goal of contemporary libraries irrespective of the fact whether that information is in ink or on the Internet. Users walk into the libraries both with the pen and the pen drive. Retrieving information from the traditional print resources through the bibliographic tools like the library catalogues; different types of indexes or abstracting journals are skills that generally librarians possess. The retrieval skills can be enhanced by learning how to search on the Internet and World Wide Web. An average user searches the Internet through Google. Besides various search engines, searching the Internet through Meta search engines and more importantly, through web directories and subject specific online

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databases are vital skills that an information professional needs to acquire. The information professional is also expected to be familiar with the features of the online databases that the library subscribes, so that s/he can help the users in information retrieval.

### **10. Managerial Skills**

In case of large libraries, librarians have to manage staff, budget and other facilities. This requires skills relating to financial management and human resource management. Planning, organizing, decision making, leading, motivating are related skills that need to be sharpened. Time management and quality management skills would help in improving the library services. However, majority of the libraries in our country are managed by solo librarians where human resource management skills would hardly come into use. If it does come into use, the librarian should be congratulated, because it means the library is enriched by one more staff!

### **11. Preservation Skills**

Generally in libraries, besides stacking of books in the shelves and periodically dusting and binding the damaged books, not much is done for preservation. One of the reasons could be that historically resources for preservation have been scarce. An average library in India does not do much to store collection in any controlled environment. Libraries that store manuscripts or rare collection do go for fumigation and lamination of fragile documents. Now digitization of such collection is a growing trend. Hence, skills in planning and undertaking digitization projects would help in preserving valuable intellectual assets of the library. Here, it must be stressed that preserving the digital collection is much more challenging than the print collection. Librarian should have the skills to handle the technology obsolescence and medium decay. 'Refreshing' the backups; taking care to preserve the intellectual content; and more importantly, migrating to new technologies to preserve information are the only answers; it means information professionals should be constantly prepared to learn new technologies and change accordingly.

### **Conclusion**

Libraries are essential for the educational process at all levels and are institutions that strengthen democracy by providing different kinds of information so that citizens can make an informed decision. In a country like India, libraries can be viewed as places of opportunity as they can provide the world of information to the rich and the poor alike. Such a vital and significant institution of the society needs information professionals who are skilled in information handling activities. Further, this digital age demands information professionals who are comfortable and creative with technology. The skills discussed above may not be exhaustive; but those who would be equipped with such skills would definitely become excellent information professionals.

### **References**

1. Bolton, C. K. (1922). The ethics of librarianship: A proposal for a revised code. The Annals of the American Academy of Political and Social Science, 101, 138-146. Retrieved from <http://www.jstor.org/stable/1014600>
2. Foskett, D. J. (1952). Assistance to readers in lending libraries. London. James Clarke

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- 
3. Greer, R. C., Grover, R. J., & Fowler, S. G. (2007). Introduction to the Library and Information Professions. Westport, Connecticut: Libraries Unlimited.
  4. Ramesh, Gopaldaswamy, & Ramesh, Mahadevan. (2011). The Ace of Soft Skills: Attitude, Communication and Etiquette for Success. Delhi: Pearson.
  5. Shyama Rajaram. (2004). Human relations in librarianship: Pertinent issues. In C.N. Rawal & U.A. Thaker. (Eds.), New vistas in library and information science (pp. 27-36). Vallabh Vidyanagar: Department of Library and Information Science.
  6. Taher, Mohamed. (1996). Conference Proceedings: XLI-All India Conference Vijayawada,
  7. 7-10 January, 1996. ILA Bulletin, 31, 54-68.

To read a book for the first time is to make an acquaintance with a new friend; to read it for a second time is to meet an old one.

**- Anonymous, Chinese saying**

Some books are to be tasted, others to be swallowed, and some few to be chewed and digested.

**- Francis BACON (1561-1626)**

The reflections and histories of men and women throughout the world are contained in books.... America's greatness is not only recorded in books, but it is also dependent upon each and every citizen being able to utilize public libraries.

**- Terence COOKE (1921-1983)**

My lifelong love affair with books and reading continues unaffected by automation, computers, and all other forms of the twentieth-century gadgetry.

**- Robert DOWNS (1903-)**

Two forces are successfully influencing the education of a cultivated man: art and science. Both are united in the book.

**- Maksim GORKY (1868-1936)**

A library book...is not, then, an article of mere consumption but fairly of capital, and often in the case of professional men, setting out in life, is their only capital.

**- Thomas JEFFERSON (1743-1826)**

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## Research to Enhance LIS Skills

Nishtha Anilkumar\*

### Introduction

The rapid developments in information and communication technology have greatly changed the methods of information handling so as to provide the relevant information to the right user at the right time. The advent of internet has accelerated the use of online information resources to a great extent. Users now expect value added services, easy to use interface and want tailored information relevant to their needs and willing to use the various information resources available in electronic form through a single click.

These user expectations have resulted in many occupational changes. Digital era needs not only a traditional Librarian but it also needs a Knowledge Manager, Information Expert or Resource Manager. Many such roles have to be donned by the Librarian. LIS Schools thus have to play a dynamic role in providing efficient workforce as per contemporary needs of the digital era.

In today's knowledge society, knowledge managers have to have the domain knowledge of their specific subject. For that we need to make effort to gain basic information about the specific subjects our library handles and also keep pace with the developments in information technology. However, we should not ignore the core library subjects and our role in the knowledge generation-supply-use chain. It is the duty of the library school student or young professionals to learn by themselves all these by continuous efforts. It is better if the library schools provide a basic frame and motivation rather than teaching all necessary subjects. It is impossible too as the library schools may not have that much subject expertise.

The situation of most of our library schools is far from satisfactory in grooming capable library professionals. If some professionals coming out from the schools are performing well, it may be because they have put in extra efforts to learn. We can go ahead only when we learn that we know less and there is so much more to learn! (There are ample opportunities for self learning anything - from swimming to driving to making furniture for home - using self -instructional manuals available on the Internet. Library professionals should use such opportunities. Learning any computer application is not at all a difficult thing now days as was in the past).

Thus there is a need to keep one self updated about the technological developments as well as domain specific subjects. These can be adopted in the library environment so that we run the libraries at a higher level of efficiency. In addition there is also the need to keep abreast of latest research happening in the library field. We need to add to the knowledge corpus in our field by carrying out research in the areas we work in. Only then we will be able to contribute meaningfully to our profession and command respect from our users and peers alike.

### Why is research important?

Research helps to develop the field. It confirms or contradicts the theory. It explores new vistas and strengthens the interconnection amongst the related fields. Research and development is a backbone of any profession and teaching – learning programme.

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\*Dr. Nishtha Anilkumar, Librarian, PRL, Ahmedabad, email: nishtha@prl.res.in

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Research word is composed of two words -'re' and 'search' which means to search again. The concept of research took the shape of social and scientific investigation during the medieval times and developed into a full body of intellectual exercise only in the modern age. Research is a systematic investigation designed to develop or contribute to generalize the observed phenomenon. Whenever traditional theory is found lacking in explaining the existing phenomena and a novel situation is faced, research originates. Research rejects either old theories or modifies them or suggests new theories. Thus research is a matter of raising a question and then trying to get an answer. Adding new knowledge to the existing corpus is the obvious function of any research. It inculcates scientific and inductive thinking and it promotes the development of rational thought process. It enables finding of solutions to problems and to resolving conflict in society.

The Webster's International Dictionary (1986) defines research as "a careful, critical enquiry or examination in seeking facts or principles, diligent investigation in order to ascertain something."

International Encyclopaedia of Social Sciences (2007) defines research as "the manipulation of things, concepts or symbols for purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids construction of theory or in the practice of an art".

Times Higher Education (THE) report states that in India there is an absence of commitment towards research. Knowledge Consortium of Gujarat (KCG) has taken a step to remedy this situation by organizing a string of workshops across the State which will help in building the research culture in Gujarat. The tentative deliverables of this workshops are :

- Participants of the workshop should be able to prepare Research Proposals and conduct Research studies
- Participants of the workshop should be able to talk about research and mentor others at District and Cluster level.
- Participants should publish at least one research paper per semester.

### **Research Programmes in LIS in India**

The term associated with a research programme is dissertation or thesis. Thesis is a document submitted in support of candidature for a degree or professional qualification presenting the author's research and findings. Boyer (1973) describes it as "the capstone to a formal academic training process." Though the doctorate has existed since the Middle Ages, it was only at the beginning of the 19<sup>th</sup> century that the Ph. D. degree became a diploma associated to the production of original scientific research and the training of new researchers (Lariviere, 2008). Barry (1997) adds that successful doctoral students tend to be "comprehensive and up to date in reviewing the literature." Consequently, their dissertations provide a large amount of bibliographic information useful not only to other researchers but to librarians as well. It gives a pointer to the collection being used by the doctoral students.

University of Delhi was the first university to institute the doctoral programme leading to Ph.D. in Library Science in 1951. D.B. Krishna Rao was the first recipient of Ph.D. in Library Science in India in 1958 from University of Delhi, under the guidance of Dr. S. R. Ranganathan. His topic was "Facet Analysis and Depth Classification". However, the second Ph. D. degree in Library Science was awarded to S K Pandey by Punjab University in 1977 after 19 years of first Ph.D. awarded.

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University of Delhi has the credit of starting the M.Phil Programme for the first time in the country in 1976. There are nearly 15 universities in the country which offer both M.Phil and Ph.D. programme where as about 40 universities offer Ph.D. Programme only.

Dr Patibha Gokhale (2010) has given a broad subject wise analysis of the topics undertaken for Ph.D. in LIS. The research topics reflecting the changing needs of the profession are shown in the table below.

<b>Decade</b>	<b>Subjects undertaken</b>
1950's – 1970's	Types of Libraries (public, academic), facet analysis, history of librarianship, universe of knowledge and topics depicting classical approach to librarianship.
1970 – 1980	Library services, documentation, users' surveys, needs identification, technical processing, cataloguing, resource sharing.
1980's – 2000	Bibliometric studies, computer applications, children's literature, bibliographic data bases, patent literature, collection development.
1990's – 2000	Networks and networking, Internet, non-book material, preservation, distance and continuing education, Total Quality Management, Library automation, Systems approach, Library software.
2000- onwards (Secondary Stage)	Grey Literature, institutional repositories, open archives, consortia, content management, knowledge management, ontology, metadata

[Source: Pratibha Gokhale (2010)]

It is evident from the table that the ICT based applications to library work are reflected in the current research areas and the LIS schools in India have risen up to the challenges of the 21<sup>st</sup> century.

### **Zeroing on the topic**

Once you decide to undertake research, it becomes imperative to read the published literature on similar topics. This will bring clarity in concepts, use of methodology, use of tools, etc. It will also help in writing the thesis proposal. Thesis proposal acts like a beacon of light and helps one to navigate through the multiple cross roads one comes across during the course of research. Thesis proposal is generally written in the present and future tense and a thesis on the other hand is always written in past tense.

One very good book to start with is "The proposal cookbook: A step by step guide to thesis proposal writing" by J Bruce Francis, but it is out of print. However, some of its suggestions have been summarized by Dr Wendy Carter as follows:

- First formulate the research question
- Restate the question in the form of a statement
- State the significance of the problem

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- Purpose of the study – to interpret, understand, evaluate or analyze the problem
  - Benefit of the study
  - Methodology – List three research methodologies you could use and describe why each might be appropriate and feasible. Select the most viable.
  - Literature Review - Locate and briefly describe those studies that support and oppose your approach to the problem. In other words place the proposed study in context through critical analysis of selected research reports.
  - Hypotheses – State clearly and succinctly what you expect the results of your study to show.
  - Definition of Terms – Describe the exact meaning of all terms used in the problem, purpose and methodology sections. State the clearest definition of each term using synonyms, analogies, descriptions examples, etc. Define the terms as they are defined by the proponents of the theory you are using.
  - Assumptions – Describe untested and untestable positions, basic values, world views, or beliefs that are assumed in your study.
  - Scope and Limitations – Disclose any conceptual and methodological limitations. Use the following question to identify the limitations of your study “What kind of design, sampling, measurement and analysis would be used in the best of all possible worlds? How far from these ideals is your study likely to be?
  - Procedure – Describe in detail all the steps you will carry out to choose subjects, construct variables, develop hypotheses, gather and present data, such that another researcher could replicate your work. Remember presentation of data never speaks for itself, it must be interpreted.
  - Long range consequences – Imagine 3 years after the completion of your thesis, what are the consequences of your having done the study or not done the study. If you carry out the study successfully, the results will either confirm your hypotheses or contradict the hypothesis.

Do not forget to give references at the end of the thesis proposal. These are very important part of any scholarly writing. It gives the indication of breadth of your reading and knowledge about the subject besides acknowledging the authors of the papers you have consulted.

Adhering to these pointers helped me a great deal during the course of my doctoral research. The path towards attaining the doctoral degree was indeed a joy to tread and I owe it to my guide Dr Shyama Rajaram. Her emphasis on perfection always led to better results.

For students planning to undertake research in LIS, Arthur W. Hafner (2010) has given the probable sources for getting ideas about research topics like

- Professional organizations often post their Research Agenda on their Web site.
- Read the suggestions for further research at the end of most scholarly articles
- Check search engines such as Google, using terms such as academic, library, research, agenda.

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He has also compiled a list of topics on which research can be carried out. A select list of twenty topics is mentioned below.

- Advances in search engine technology and their impacts on libraries
- Challenges and opportunities in migrating to Web-based information services
- Changing nature of library space requirements to meet student and collection requirements
- Copyright issues with interlibrary loan and electronic reserves
- Core technology and/or emerging technology trends in the library environment
- Digitization of local collections and its impact on scholarship in the library
- Effective budgeting strategies linked to outcomes
- Impact of demographic and cultural changes on library services
- Impact of full-text databases on interlibrary loan services
- Measuring the quality of library services
- Metrics for evaluating library performance and services
- Mobile library services (problems, challenges, opportunities, technology)
- Models of library service through the use of computers, networks, and the Internet
- Open-access data/collections and its value for providing context to local collections
- Outsourcing of services (cataloging, janitorial, reference, serial check-in, etc.)
- Renovating the library specifically to enrich its atmosphere to attract students
- Role of consortium membership for expanding access and resources
- Search engines: making the library's web pages more friendly for indexing and retrieval by Google and Yahoo!
- Significance and strategic value of written procedures and standard operating procedures (SOP) for library operations
- Virtual reference: what it is, how to do it, examples, types of questions

## References

1. Barry, C. A. (1997). Information skills for an electronic world : training doctoral research students. *Journal of Information Science*, 23(3), 225-238.
2. Boyer, C J (1973), *The doctoral dissertation as information source: A study of science information flow*. London: New Scarecrow Press.

- 
3. Gokhale, P. (2010), Role of Library Science Schools for meeting future challenges, Book of Papers, ADINET Seminar, 2010
  4. Chandrasekhara, M. and Ramasesh, C. P., (2009), Proceedings of Asia-Pacific Conference on Library & Information Education & Practice, 530-537
  5. Haffner, A W (2010), available at <http://www.bsu.edu/libraries/ahafner/awh-th-researchtopics.htm>
  6. International Encyclopedia of the Social Sciences, (2007). *Michigan: Macmillan Reference USA.*
  7. Larviere, V., Zuccala, A., et al. (2008). Declining scientific impact of theses: Implications for electronic thesis and dissertation repositories and graduate studies. *Scientometrics*, 74(1), 109-121.
  8. Thaker, U A. (2010), LIS Education in 21<sup>st</sup> Century: Trends, Challenges and Expectations, Book of Papers, ADINET Seminar, 2010, 1-9
  9. Webster's Third New International Dictionary. (1986). Massachusetts: Merriam-Webster Inc.

A house without books is like a room without windows. No man has a right to bring up children without surrounding them with books.... Children learn to read being in the presence of books.

**- Horace MANN (1796-1859)**

**St. Paul wrote to his son Timothy:**

*When you come, bring the cloak that I left with Carpus at Troas, also the books, and above all the parchments. (2 Timothy 4:13)*

In an 1863 sermon, "Paul — His Cloak and His Books"; C.H. Spurgeon said of Paul:

*"He was inspired, and yet he wants books!*

*He had been preaching for thirty years, and yet he wants books!*

*He had seen the Lord, and yet he wants books!*

*He had a wider experience than most men do, and yet he wants books!*

*He had been caught up into the third heaven, and had heard things that it was not lawful for a man to utter, and yet he wants books!*

*He had written a major part of the New Testament, and yet he wants books!"*

Let books be your dining table, And you shall be full of delights

Let them be your mattress And you shall sleep restful nights

**- St. EPHREM the Syrian (303-373)**

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# Enhancing Quality of School Library Services: Application of Kaizen

Rashmi T Kumbar\*

## Introduction

The 21<sup>st</sup> century education scenario demands that the school libraries too, take a proactive role in the dynamic information landscape. Also, the librarian has an essential role to play in fulfilling the present day schools visions and missions. The school librarian dons the hat of a mentor, a guide, a friend who connects the students and resources, in the context of adding new dimensions to the students' academic achievement and holistic development.

Transformation of school library services is truly possible, if the library can be the hub of all the scholastic and co-scholastic activities and events and provide all possible resource support.

When quality of library services is being discussed, one needs to take into account not just the kind of reading material in the library but also the availability of reading rooms, appropriate furniture, defined library schedules, circulation of all types of reading material, developing reading as a virtue, etc. A systematic and structured approach towards the library services will result in the library being the focal point of academics and centre of holistic education of the students. A brief description of certain guidelines for initiating user oriented services is addressed next.

## 1. User Oriented Services

While introducing the user oriented services, one needs to consider a set of guidelines to frame these services. First and foremost, the objective of the user oriented services is to provide the information needed by the students and teachers who are the primary users. Their needs should be anticipated and met by the services designed. Whatever may be the reference and information services that a library provides, the point to be kept in mind are the school's mission and goals. They should align with the same. Information Literacy is an essential component of school libraries in the western world while it is still in the nascent stage in India. The school libraries should compulsorily design services that provide instructions for the efficient and effective use of the reading material available in the library. Students by nature are inquisitive but appropriate aids guide students to identify relevant resources. All kinds of services designed and developed by the library need to be advertised and promoted extensively so that optimum utilization of the resources takes place. ALA guidelines for information services, suggests that 'The library should survey and assess the information needs of its community and create local information products to fulfil those needs not met by existing materials'.<sup>1</sup> Keeping in mind the local variations and the multicultural outlook of our society, it would be beneficial to develop information products in local languages too. School libraries should develop policy statements for the services that they provide so that there is no transgression of professional ethics.

## 2. Assessment of Innovative Services

If designing and developing innovative library services to understand and fulfil the needs of the 21<sup>st</sup> century digital native students is one face of the coin, then assessing and accounting for the success

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\*Mrs. Rashmi T Kumbar, Librarian, Adani Vidya Mandir, Ahmedabad,  
email: rashmi\_kumbar@rediffmail.com

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of these services is the other important face of the same coin. Librarians need to demonstrate the value they provide to both user and also to the institution and need to think creatively to provide innovative services. Concepts like best practices and benchmarking are often used to evaluate the services and set a trend for others.

Usually it's a universal practice to assess the quality of the resources, the physical environment, the staff, the library operations, the systems, the services and the usage. Many a times, we try to mix up quality and best practices but Anne Wilson and Leeanne Pitman note that best practices and quality are not used synonymously; however, they also note that best practices emerge in "the pursuit of world class performance. It is the way in which the most successful organizations manage and organize their operations. It is a moving target. As the leading organizations continue to improve the "best practice" goalposts are constantly moving. The concept of continuous improvement is integral to the achievement of best practice." Kaizen is all about continuous improvement.

Another noteworthy thing is when institutions want to improve their quality; they compare and measure their policies, practices, philosophies, and performance against those of successful institutions all around the world, which is technically known as benchmarking. Holly J Muir, has said "Benchmarking is a Total Quality tool used to measure and compare your library's work processes with those in other libraries. The goal of benchmarking is to increase your library's performance by adopting the best practices of your library benchmarking partners. Since best library practices are always evolving, benchmarking should be applied at least annually". With benchmarking one actually measure a work process or procedure in one's library. The ultimate goal of measuring is to improve the process to make it better, to meet the needs of library users, library staff and management and to improve its efficiency and its effectiveness. <sup>2</sup>

One such effort to improve efficiency and its effectiveness and to assess the value of innovative services is being experimented in the author's library. Keeping in mind basic factors like the students' background, their lack of English language skills, and lack of parental support to very specific issues like lack of sound backing of application of technology for library usage, lack of manpower in the library, a model based on Kaizen – a Japanese management technique has been tried to improvise the services. To understand the context, the background of the school and the library is briefly shared in the next section.

### **3. Adani Vidya Mandir**

Adani Vidya Mandir is a school affiliated to the Central Board for Secondary Education (CBSE) in India and has now five hundred and forty students studying in classes' third to eleventh. The school selects eighty students every year and provides free education as well as free transport facility, food, uniform, stationery. The students are selected to class three on the basis of an entrance test conducted by the school. The school is situated on a sprawling 26256 sq.mt, and has a wonderful infrastructure ranging from state-of-the-art classrooms, laboratories, libraries, to sports ground, arts centre, etc. Facilities like counselling, medical checkups, specialized sports coaching, etc are provided to the students in order to give them holistic development.

There are two libraries namely Junior Library and Senior Library for the use of students and staff. The junior library caters to the needs of the students of classes III to VII and has a collection of 3500 books. The students of classes VIII to XI and teachers use the senior library and the collection is around 2500 books, 32 periodicals, 6 newspapers –

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(3 in English and 3 in Gujarati language), 175 CDs, maps, charts, globes, etc. Every class gets two library periods in a week. In one period the students are issued books and in the second period they are taught library and information skills. In order to optimise the usage of the resources, best practices like Structured Library Period (SLP) wherein all the students of a particular class issue the same kind of book be it science, folk tales, biographies, etc every week in their issue return period and the last week, free choice is given to them to choose a book of their choice. By doing this, students are exposed to various types of resources and this enables them to read a wide genre of books and use them for their academics. The concept of Multiple Intelligence (MI) theory is taught to the students to choose the right book, Open Access Sources (OAS) are compiled regularly and put up in the library for the students to use in the computer laboratory for their assignments, projects, etc. Simple research techniques using the basic reference sources called DEATY (Dictionary, Encyclopedia, Atlas, Thesaurus, Yearbook) are used. Focus Group Discussions (FGD) are held regularly to get their opinion of various services, to add relevant collection, etc. Every month a new author is introduced to the students and the author's work is promoted. Displays are done on a monthly theme basis apart from the regular New Arrivals display. The process of automation using SOUL (SOft for University Libraries) software has begun and now the holdings of the library are available online. As the students are from various backgrounds, the library is a getaway for some who come from disturbing social backgrounds and the concept of 'Bibliotherapy' is practised for their emotional healing.<sup>3</sup> Having had an insight of the various services of the library, the concept of Kaizen is introduced in the next section.

#### **4. Overview of Kaizen**

Kaizen in Japan is a system of improvement that includes both personal and professional life. It is a concept that is applied in every aspect of an individual's life. The word Kaizen means "continuous improvement". It comes from the Japanese words ("kai") which means "change" or "to correct" and ("zen") which means "good". In the context of an academic institution, it is a system of continuous improvement in quality, processes, institution culture, achievement, safety and leadership. It is a system of incremental innovation, where employees are encouraged to make small changes in their work area on an ongoing basis. The cumulative effect of these many small changes over time can be quite significant, provided, all the employees within an institution and the head are committed to kaizen. Compared to Kaizen which is gradual, innovation is more radical. But the foundation of both Kaizen and innovation is creative ways of looking at one's job and one's workspace, with an intention to reduce waste, eliminate steps that don't add value and create new value.

The five main elements of Kaizen are

- Teamwork
- Personal discipline
- Improved morale
- Quality circles
- Suggestions for improvement <sup>4</sup>

Having made an attempt to understand the basics of kaizen, the initiative of implementing it in libraries is explored in the next section.

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## 5. Kaizen in Libraries

As librarians, it is important for us to learn innovative principles from other disciplines even if we do not have much in common. Whatever principles we can pick from other disciplines, it is essential to adapt them and modify them for application in our libraries. Most of the management principles can be utilized in library environment to improve the efficiency of our services and create better/ effective systems. Some of the benefits of adopting kaizen are examined here.

- Kaizen Improves space utilization, which is a major concern for libraries, especially for academic libraries where the addition of resources is dynamic in nature. Owing to kaizen, weeding out the unused resources may become much convenient, thus making way for new collection to be accommodated. Owing to continuous improvement of the system, the rearrangement of the furniture to provide comfort to the user to sit and read will also result in better space utilization.
- The users are attracted to the library if the quality of the collection is maintained. Since the process of kaizen involves all the stakeholders be it the teaching staff, the students who make most use of the resources and the librarian who comes across the latest editions of the resources or alternative resources – all are engaged in evaluating the worth of the resources and constant feedback and suggestions will help in maintaining the quality of the collection and simultaneously will be assured that the collection is made best use of.
- The yo-yoing of the library budget is quite disturbing for a librarian especially of a school library. Issues like change of leadership, addition of new infrastructure to the school building, addition of higher classes, etc can have an impact on the library budget! Since kaizen emphasizes on careful analysis, it would be justified to maintain a decent budget allocated to the library.
- Adopting kaizen will ensure effective communication between the head, the management and the librarian. As the observations of the library working will be done on a continuous basis, the justification and explanation by the librarian to the authorities will be productive. Also the librarian will find it easy to communicate with the users more objectively as the suggestions for any kind of improvement will be addressed, analysed and implemented at the earliest.
- The biggest advantage of kaizen is, it focuses on “What is wrong” and not “Who is wrong” which fosters team work and personal discipline. Since library staff needs to observe a great deal of self discipline whether it is as simple as being punctual regarding the opening hours or exceeding the limit of borrowing privilege for self benefit, sticking to principles is extremely important instead of focusing on the position of the staff.
- Apart from the benefits to the institution, the staff will find that their work is much smoother and more rewarding. They feel less stressful and will have more job satisfaction also.<sup>5</sup>
- Most of us lag behind when it comes to framing realistic mission statements for ourselves and our libraries. However small or negligible our library might be, it’s very crucial that the library’s mission statement should align with the parent institution’s mission. Kaizen helps us in setting realistic and achievable goals and objectives, and constantly update the same.

This introspection makes one realize that there is scope for improvement for librarians in the areas of user services and kaizen can be utilized as the tool to make incremental changes in the chosen areas.

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## 6. Implementing Kaizen

Certain guidelines are to be kept in mind when implementing Kaizen. The same have been examined below.

- Kaizen needs to become something all employees do because they want to, and because they know it is good for them and the organization. In the context of library services, the staff should have an innate desire to be a part of the reformation process and not just follow it under some external pressure.
- Training and communication is important. Along with that, direct involvement of the management is critical. Every library professional needs to get trained periodically. Be it automating the library operations, learning to digitise the library resources, or picking up soft skills needed for handling the students continual training in various areas should be encouraged and the communication channel should be kept open. The management, the head of the institution, the library committee too should be a part of the process.
- Suggestions should not be implemented very late but immediately. The moment a service is being observed and shortcomings are noticed and suggestions for improvement are collected, the discussion process and approval should be followed by the implementation of the solution. For example, if it is noticed that the collection of the library is falling short of particular works of certain authors, then immediately the process to acquire them should begin in the right direction.
- In Kaizen, problems are considered as opportunities to improve. One would like to find, report, and fix problems. Kaizen encourages and rewards the identification of problems by all stakeholders. Say the teaching faculty, suggests that the lending service could be extended during the lunch hours for the benefit of students, the library staff can immediately work out a strategy, follow it up with the library committee, carefully analyse the repercussions it may have on the other areas of work, and implement it instead of finding hundred and one reasons to avoid it.
- Suggestions should be welcomed with a open mind. It may not be possible to accommodate all the suggestions but those which are feasible can be taken up one at a time and worked upon. Also more important than that is the involvement of the stakeholders and their active participation in the process, that should be encouraged. In the case of a school library, if a parent brings it to the notice that the children do carry the books home but do not read, then the library staff need to look into ways and means to keep a tab on their reading and devise methods to collect review and report of the books read.
- It should be remembered that Kaizen is about action. Taking action to generate suggestions, and taking action to implement those suggestions immediately is crucial. Taking current awareness service as an example, if the head of the institution points out that the display of new arrivals has to be made at various places in the campus, then the library staff need to look into innovative ways of displaying the new resources without physically having the same resource in different places at the same time. The same can be discussed with the library committee and once the approval is bagged one can swing into action immediately.
- Kaizen is based on making little changes on a regular basis: always improving performance, increasing efficiency and effectiveness while reducing waste. Whether it is the precise

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arrangement of the books according to the call numbers, innovative resource suggestion forms for staff, collecting library usage statistics or similar such routines.<sup>6</sup>

Such simple and small improvements compound to major achievements and end up in enhanced student performance, learning teaching process for the staff, less time consumption, etc. The proposal for initiating kaizen in the library is given below.

## **7. Proposed Title of the Initiative: Kaizen @ AVM Library**

### **Objectives**

- Identify ideas to initiate innovative services for the users
- Encourage librarians and libraries to take proactive steps to improve services
- To constantly assess the innovative services
- Identify ways and means to measure quality of the services
- Meaningful effort to create a system to involve the staff in the assessment of the library services.
- Focused effort to bring attention to all areas of the library, continually.
- Overall noticeable improvement of the various departments of the library.
- Achieving the mission of the library, in a lesser duration and with excellence.

### **Dynamics:** In order for the system to work

- Library committee with the librarian as coordinator will look into the working of the initiative.
- After careful introspection, a list of services will be identified for assessment.
- All members of the staff will be eligible to suggest their observations, shortcomings, solutions, etc about the library service with a positive attitude.
- Every week, one particular service will be announced on the library notice board with the focus points on which suggestions are sought.
- A suggestion box along with the suggestion slips will be put up in that area for suggesting the observations.
- At the end of the week, the suggestions will be collected by the librarian and discussed with the library committee and worthy suggestions will be put up to the management for approval and implemented immediately.
- The process of improvement, the changes made will be documented for further reference.

### **Outcomes**

- Overall performance of the library gets enhanced.
- Each service that is observed and improved becomes a standard service.

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- Personal involvement of all the stakeholders will result in greater satisfaction amongst all and utilization of resources and participation in library activities will increase.
  - Such initiatives can be documented and can be considered as best practices in the field of school libraries.

### **8. Limitations**

Any kind of participatory initiative is reciprocal in nature. If one expects the teaching faculty to involve in such initiatives, then the library staff also need to lend their hands in the other activities of the institution. Respect for one another and mutual understanding in the institution will make such initiatives to succeed. But we need to observe certain limitations that one may have to face.

- Since all the stakeholders of the school are involved, time factor may be a great hindrance. Reaching consensus on certain decisions may become difficult. A lot of time may be utilized to reach certain conclusions.
- While innovative services are expected to be radical and large scope changes, Kaizen is a gradual, small continuous change demanded daily. This may work as a deterrent at times if the institution is attached to a corporate which expects big changes in small time.
- Commitment of all those involved may not be the same and at times, suggestions, changes and implementation may be biased or may work in favour of one group alone.

### **Conclusion**

The library is the major success factor in students' achievements in schools. A sincere effort to improve the quality of library services goes a long way in moulding the personality of the young students. All that is required is the right attitude and focussed zeal by the library staff. Assessing the library services constantly proves that by simply adopting new techniques and carrying out professional duties with certain stress on ethics, one can go beyond the walls of the library and be a major stakeholder in achieving the school's mission and assist in building a nation of responsible citizens.

### **References**

1. <http://www.ala.org/rusa/resources/guidelines/guidelinesinformation> (As accessed on 14th July'12)
2. <http://govinfo.library.unt.edu/npr/initiati/benchmk/index.htm> (As accessed on 19th July'12)
3. Kumbar, Rashmi. Discovering New Horizons: an Indian School Librarian's Experience. World Library and Information Congress: 78<sup>th</sup> IFLA General Conference and Assembly, Helsinki, August 2012 (<http://www.enssib.fr/agenda/libraries-young-people-breaking-through-boundaries>)
4. <http://en.wikipedia.org/wiki/Kaizen> (As accessed on 19th July'12)
5. <http://www.graphicproducts.com/tutorials/kaizen/index.php> (As accessed on 14th July'12)
6. <http://findarticles.com> 'Kaizen meets dewey: applying the principles of The Toyota Way in your library'

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# Essential Skills for Academic Librarians in 21<sup>st</sup> Century

Mangesh W. Wagde\*

## Abstract

*This paper highlights skills required by librarians in the 21<sup>st</sup> century. It discusses different types of competencies required by librarians to respond effectively to 21<sup>st</sup> century challenges.*

## Introduction

Librarianship today is a profession that works as much with multimedia sources as with print material. Librarianship has become a multifaceted field that requires skills such as critical thinking, information retrieval and information technology. The readily available information on internet and progressive changes in information technology has changed the way information is retrieved. Due to tremendous changes in the world of technology and information, the concept of conventional librarianship as custodian has changed. Now library professionals are engaged in different sectors as Information Scientist, Cyberian, Consultant, Facilitator, Knowledge Manager etc. In the global village of internet, libraries have shifted from document centered to information centered system and paper based documents are transferred into digital documents. The LIS professionals also have to face these changes and develop new working environment. To fulfill the objective of the library and deal with emerging situations, LIS professionals must get continuous exposure to new technologies by regularly updating their knowledge. With new modern technologies, libraries of the world are shifting their systems and services to multifaceted role in different activities of the library.

Modern LIS professionals should develop professional and personal skills to serve the potential users of the libraries. And for doing this, they may have to play different roles like consultant, guide / teacher, intermediary, knowledge manager, administrator etc.

## Core Competencies of Library Professionals

Since the dawn of 21<sup>st</sup> century, libraries are facing serious transitions from paper to electronic media and document-centered to customer-centred services. To deal with these changes, it has become essential for library professionals to develop competencies, skills and regularly update their professional knowledge. The basic role of librarians has always been to provide access to information to those who need it. However, the electronic environment of the 21<sup>st</sup> century will demand a variety of professional, personal, technological and higher level competencies.

### 1. Professional Competencies

- 1. Information technology skills:** Handling hardware/ software systems, scanning techniques, database creation, internet skills, library automation etc.
- 2. Network Skills:** Online database search, content development, digitization, use of web-based resources, virtual learning etc.

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\*Prof. Mangesh W. Wagde, Librarian, NTVS, College of Education, Nandurbar(MS),  
email:dostraj@rediffmail.com

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3. **Administrative Skills:** Communication, [computing](#), [organizing](#), [planning](#), [scheduling](#), [staffing](#), etc.
  4. **Leadership Skills:** Library management especially in a large libraries is team work. Hence it is required to have leadership skills to manage and guide the team from time to time.
  5. **Negotiating Skills:** These skills are required on special occasions such as handling bulk purchases, specialized subscriptions with vendors etc.
  6. **Writing Skills:** Librarians need to submit and at times are asked to help in writing research proposal/business proposal/project report, which requires good writing skills.
  7. **Presentation Skills:** Presentation skills are required for library committee meetings and even in daily work of overall library management.
  8. **Teaching Skills:** This is essential for orienting new users and also in case of new services introduced such as online database searching.
  9. **Decision Making Skills:** These skills are required at all stages like planning, organizing, leading, controlling etc.
  10. **Communication Skills:** A good command over regional, national and English language help improve the communication and this in turn helps in understanding people and improving self confidence.
  11. **Time Management Skills:** Time is money and therefore, they both need to be managed wisely.
  12. **Interpersonal Skills:** Librarians have to deal with management, users, colleagues, researchers, vendors etc. and to deal with each one on them effectively, they require interpersonal skills.

## 2. Personal Competencies

1. Ability to adopt environmental changes
2. Enthusiasm for life-long learning
3. Work collaboratively and critical thinking
4. Develop self-confidence, problem solving and analytical skills
5. Local and global thinking.
6. Commitment to service excellence

## 3. Basic Technological Competencies

1. **Ability to embrace change:** With changing information requirements of users and technological advancements, librarians need to be able to look at how to change the strategies

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to serve the users. Librarians should try their best to provide new and improved services to their patrons.

- 2. Comfort in the online medium:** Librarians need to do so much online work these days which is way beyond basic catalog and database searching (which sure isn't easy either). Librarians have to be able to use search engines and use them efficiently. They need to be able to find quality online resources. They need to be able to troubleshoot problems which users are facing while accessing online library resources.
- 3. Ability to troubleshoot new technological devices:** For example, use of scanner, fix the printer and troubleshoot any other technological problems they may face especially when they get new computers, printers, scanners, etc.
- 4. Ability to easily learn new technologies:** There are so many new technological tools in libraries that librarians have to acquire the ability to use them independently with ease.
- 5. Ability to keep up with new ideas in technology and librarianship (enthusiasm for learning):** Librarians need to be able to keep up with what's new in technology and how best they can be used for new and improved services. Reading professional literature, browsing blogs, attending a webcast etc. may help librarians in this effort.

#### **4. Higher Level Competencies**

- 1. Project management skills:** Librarians need to develop project management skills too. In corporate sector librarians are part of some project teams many times and assigned specialized jobs such as knowledge management or management of digital institutional repository.
- 2. Ability to question and evaluate library services:** Librarians should have the ability to question and evaluate library services and policies. It is important to keep asking why certain things are done in certain ways and how they affect the patrons.
- 3. Ability to evaluate the needs of all stakeholders:** Librarians need to understand how any changes in the services will affect the patrons. Sometimes changes that will benefit one group will not benefit another. Periodic information assessments are essential.
- 4. Vision to translate traditional library services into the online medium:** With the growth of distance learning programs and the fact that so many patrons access the library from the Internet, it is important that librarians start translating traditional library services into the online medium. This includes readers' advisory, reference and instruction services. Librarians should also start services for patrons who only access the library online. Knowledge of HTML, blogs, wikis, screencasting, IM, etc. can help in this process.
- 5. Critical of technologies and ability to compare technologies:** Librarians need to be able to compare different versions of the same type of software to figure out which will best meet their patrons' needs. Librarians should think realistically about which technologies are appropriate for their libraries.

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- 6. Ability to sell ideas/library services:** It is essential to have serious marketing skills and salesmanship to be a librarian. Information services and products often need to be promoted and "sold" to various categories of patrons.

### **Conclusion**

Librarians need to acquire new technologies. A librarian has to face different kinds of problems, so they must develop skills for solving the problems and adapt to rapid changes. Librarians have been playing a versatile role beyond their traditional job. Librarians with talent and training will be able to meet future demands and this will help users to easily obtain pin pointed information on time.

### **References**

1. Chandwani, Anita 2010, 'Changing role of LIS Professionals in Information Technology Era: An Overview' paper presented to the State Level Conference on Role of College Librarians in the Information Network Era, V.M.V. Commerce J.M.T. Arts & J.J.P. Science College, Nagpur, 6 Sep., pp.32.
2. Hate, Vibharati B., 2010, 'Communication Skill and there effectiveness and Library service' National seminar on Innovative practices in Management of Library & Information services, B.P. National Institute of Social Work, Nagpur, 9 -10 Oct. pp.24-25.
3. Wankhede, Kiran 2010 'Communication skills for effective Library Services'. National seminar on Innovative practices in Management of Library & Information services, B.P. National Institute of Social Work, Nagpur 9-10 Oct. pp.18-20.
4. Williams, Anita, Skills librarians need (viewed 25 May, 2012) <http://archivemediapartners.com/AMPed/wp-content/uploads/2009/10/Skills->
5. <http://www.businessdictionary.com/definition/skill>. (Viewed 25 May, 2012)

A library represents the mind of its collector, his fancies and foibles, his strength and weakness, his prejudices and preferences. Particularly is this the case if to the character of a collector he adds - or tries to add- the qualities of a student who wishes to know the books and the lives of the men who wrote them. The friendships of his life, the phases of his growth, the vagaries of his mind, all are represented.

**- Sir William Osler, 1919**

Libraries are as the shrines where all the relics of the ancient saints, full of true virtue, and that without delusion or imposture, are preserved and reposed.

**Francis BACON (1561-1626)**

A library is not a luxury but one of the necessities of life.

**- Henry Ward BEECHER**

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# Emerging Trends in ICT (Cloud and Mobile) for Library and Information Science

Yatrik Patel\*

## Abstract

*ICT (Information and Communication Technology – or Technologies) refers to all the digital devices that play a role in the creation of new media modes of interaction between people. The move from the term IT to ICT exemplifies the increasing degree to which communication between people, rather than mere information storage and retrieval, has come to define the world of new media technology.. ICTs are often spoken of in a particular context, such as ICTs in education, health care, or libraries. This paper covers two ICT trends; cloud computing technologies and mobile devices which can be used very effectively to provide library services.*

## Introduction

ICT enables society to create, collect, consolidate, communicate, manage and process information in multimedia and various digital formats for different purposes i.e. computing and telecommunications technologies like the personal computer, tablets, Digital TV, cellular phones and the Internet. Developments in ICT have brought about the merger of the computing, information, communications, entertainment, and mass media industries thereby providing a means of exchanging information anytime, anywhere in the digital format used by computers.

The shift from print to digital information has a high impact on libraries, information centers and other institutions directly involved in processing information. This shift is generally attributed to the merging of computing, telecommunications technologies and other industries. Computers have pervaded society because of their ability to perform high volume error-free repetitive tasks at speeds much faster than human beings, while recent and emerging developments in the area of computing; telecommunications, networking and resource sharing made access to information anytime, anywhere possible.

Although there are number of aspects of ICT which have effects causing paradigm shift in services related to Library and Information Science area, it has been attempted to give some glimpse on the impact of Cloud Computing and Mobile Devices on Library Service.

## 1. The Cloud Computing

In generic terms Cloud Computing can be defined as “A model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.” (NIST)

As far as a user is concerned, a cloud is a service that satisfies all of the following conditions:

- it is delivered over a telecommunications network

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\*Mr. Yatrik Patel, Scientist D (CS), INFLIBNET Centre, Ahmedabad,  
email: yatrik@inflibnet.ac.in

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- users place reliance on the service for data access and/or data processing
  - the data is under the legal control of the user
  - some of the resources on which the service depends are virtualised, i.e. the user doesn't need any technical awareness about which server is running or which host is delivering the service, nor where the hosting device is located
  - the service is acquired under a relatively flexible contractual arrangement

### **Essential Characteristics of Cloud**

- On-demand self-service (i.e. automated response by servers to direct requests by clients)
- Broad network access (i.e. from anywhere, using any device)
- Resource pooling (i.e. the provider allocates resources according to demand, rather than assigning resources to particular clients)
- Rapid elasticity (i.e. resources are scalable according to demand)
- Measured service (i.e. resource usage is metered)

## **1.1 Cloud Service Models**

### **Software as a Service (SaaS)**

The applications are accessible from various client devices through a thin client interface such as a web browser (e.g., web-based email). The user does not manage or control the underlying cloud infrastructure including network, servers, operating systems, storage, or even individual application capabilities, with the possible exception of limited user-specific application configuration settings.

### **Platform as a Service (PaaS)**

PaaS provides an application platform, or middleware, as a service on which developers can build and deploy custom applications. Common solutions provided in this tier range from APIs and tools to database and business process management systems to security integration, allowing developers to build applications and run them on the infrastructure that the cloud vendor owns and maintains.

### **Infrastructure as a Service (IaaS)**

It is the capability provided to the user to enable processing, storage, networks, and other fundamental computing resources where the user is able to deploy and run arbitrary software, which can include operating systems and applications. The user does not manage or control the underlying cloud infrastructure but has control over operating systems, storage, deployed applications, and possibly limited control of select networking components.

## **1.2 Advantages of Cloud Computing**

There are a number of advantages of cloud computing, though it depends on case to case bases, following are the general benefits

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- Assured maximum availability of your data, application and infrastructure
  - Need to pay only for what has been used (i.e. Bandwidth, Resources)
  - Relieves burden of IT staff within organization, as routine jobs are being handled by service providers
  - Easily scalable as per requirement of organization

General disadvantages of cloud are dependency upon network connectivity, security, legal issues (ownership of data), latency etc. which needs to be carefully reviewed.

### **1.3 Cloud Computing and IT based Library Services**

Most common library services can be scoped in to following three categories.

**Data:** Bibliographic, Technical, Access, Licence

**Content:** Collection, Subscription, Digital, Print, Publishing.

**Services:** Library as a place, content-access, content-creation, research, preservation

As libraries have service-oriented mission they are in a position to adopt cloud computing. Libraries (or librarians) are in constant search of finding proper solution within limited resources; moreover the outreach of service is quite dependent on support of external or internal computing (IT) support staff. It may be also noted that there are very few libraries which are having IT support staff with expertise on advance IT management. This situation makes SaaS, PaaS or IaaS approach tempting to move towards cloud computing for providing better library services.

Libraries have been adopting cloud-based solutions services like electronic journal access management, statistics tracking, digital library hosting and now trend is coming up for hosted library management systems.

The use of SaaS in libraries dates back to early 2000 with the establishment of companies like SerialsSolutions (<http://serialssolutions.com>). There are also examples of availability of hosting platforms like INFLIBNET's OJAS (Open Journal Academic System) available at <http://www.inflibnet.ac.in/ojs/>, For Institutional repositories there is <http://duracloud.org/>, for open publishing <http://www.biomedcentral.com/> is a well-known platform.

In the IaaS, one of the pioneer i.e Amazon Elastic Computing Cloud (EC2) offers IT infrastructure with differently sized servers using a choice of operating systems, including several flavours of Linux and Windows. EC2 provides organizations with unlimited storage using Simple Storage Service(S3), the ability to take snapshots of both data and servers, and the ability to include EC2 servers in an organization's private network. A full catalogue of EC2 features is available on the EC2 website (<http://aws.amazon.com/ec2/>).

By using cloud technologies, library services can be made online without worrying about correct versions of platforms or the underlying technology. It also gives facility to induce new applications quickly without having to focus on identifying available server space or configuration and IT-based library services can be delivered much more quickly than when using locally-based hardware or software.

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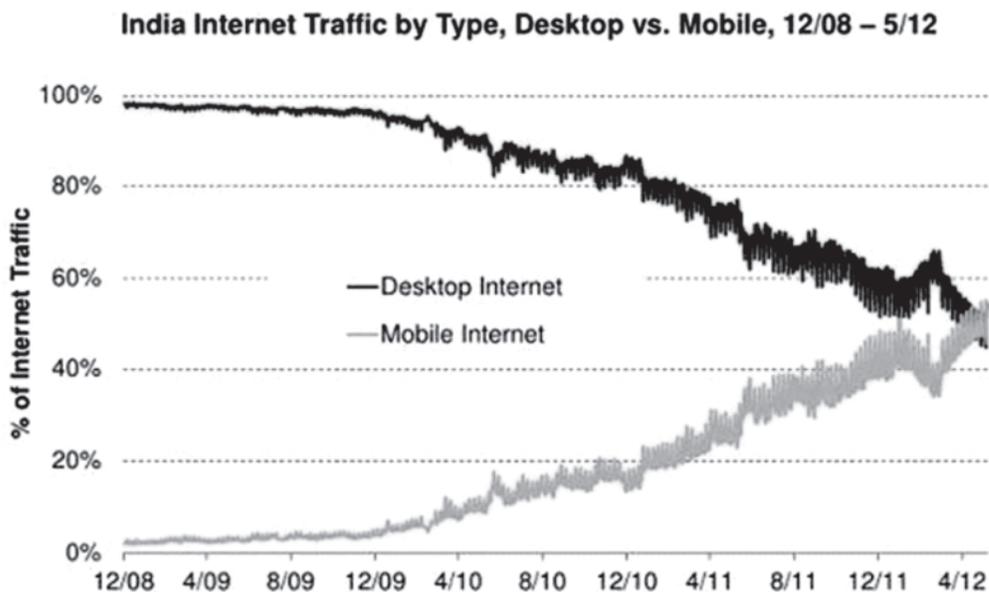
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Libraries can make choices about the allocation of resources and to offer better service than would be possible if relying on in-house solutions.

## 2. Mobile Devices and Library Services

Mobile communication has been in existence since the mid-twentieth century. Early devices appeared in the form of two-way radio transmitters - the first official mobile phone was used in Sweden by the Swedish police in 1946. The devices were inefficient and cumbersome with very limited coverage. In 1983, Motorola unveiled the first truly portable cellular phone and by the early 1990's cellular phones were considered as being second generation (2G) and they were able to work on mobile phone systems. Digital mobile phone networks were in use in the United States in 1990 and in Europe the following year. These days, the 3G era, most laptops and personal digital assistants have wireless cards or Bluetooth interfaces built into them for convenient mobile internet access. This has led to increase in the adoption of mobile internet and expansion of the use of portable devices involving computer, media player and cell phone.

As per recent survey by Kleiner Perkins Caufield & Byers (KPCB) on internet trends Rapidly Growing Mobile Internet Usage Surpassed More Highly Monetized Desktop Internet Usage in May, 2012, in India.



(Source :<http://www.kpcb.com>)

More over as per a survey conducted by Flurry ([www.flurry.com](http://www.flurry.com)) India is the 3rd fastest growing app market in the world. There are 6 million Android & iOS devices which have downloaded 300 million apps in 2011 As per same survey, Indian user spends 52 minutes per day using mobile apps where as US users spend more time on mobile apps then on PC-Mobile web, 94 minutes versus 72 minutes per day.

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Libraries and information services have to engage even more technologically sophisticated users. It is essential that these information services are able to provide academic scholarly content in formats and to devices that are the users' preferred means of reception.(JISC)

It is high time for the Libraries and academic institutions to gear up and start delivering their services on mobile devices, following is the list of services which can be delivered/being delivered on mobile devices.

## **2.1 Mobile online public access catalogs (OPACs)**

Libraries are providing access to their OPACs via mobile-optimized websites. These include The Cambridge University Library (<http://www.lib.cam.ac.uk/mob/>) The New York Public Library Mobile (<http://m.nypl.org/>) which supports a mobile OPAC and allows users to browse library locations and hours.

- Mobile applications—Some libraries have developed mobile applications for smartphones. The District of Columbia Public Library, for example, has developed an iPhone application that includes a mobile OPAC and the ability to place items on hold, and also provides information on hours and locations of local libraries (see <http://dclibrarylabs.org/projects/iphone/>).
- Mobile collections—Third-party content providers are partnering with libraries to deliver audiobooks, e-books, audio language courses, streaming music, films, images, and other multimedia that can be used on mobile devices. The Overdrive service is supported on numerous mobile devices and has developed an application for BlackBerry smartphones (see <http://www.overdrive.com>). Duke University has created a free iPhone application called DukeMobile, containing a wealth of information on digital library resources, including extensive access to the library's digital photo archive and other collections (see <http://itunes.apple.com/app/dukemobile/id306796270?mt=8>).
- Mobile library instruction—Some libraries are offering library instructional materials and resources via mobile platforms. For example, East Carolina University's "Research First Aid" is a series of podcasts for library researchers on the go (see <http://www.ecu.edu/cs-dhs/laupuslibrary/researchfirstaid.cfm>).
- Mobile databases—PubMed for Handhelds is a mobile web portal for the National Library of Medicine (see <http://pubmedhh.nlm.nih.gov/>).
- Library Short Message Service (SMS) notifications—Many libraries use SMS for a variety of purposes, including notification for items available for pickup, due date reminders, information on availability of library materials, provision of call numbers and locations, and others (see <http://cpl.org/?q=node/12258>).
- SMS Reference—Some libraries are offering "text-a-librarian" services which is ideal for simple questions that can be answered with a brief response (see <http://www.library.yale.edu/science/textmsg.html>)

## **2.2 Features of Mobile Library Service**

Analysis of Library Mobile sites reveals that, they provide following features :

- Mobile library catalog plus loan-related services

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- Information about opening hours
  - Directions to the library
  - Information on how to contact the library via multiple channels (chat/SMS/phone/e-mail)
  - Links to mobile-enabled databases
  - Links to mobile-enabled Web 2.0 accounts, such as Twitter, Flickr, YouTube, and Facebook
  - Floor maps
  - Information on availability of computers and group discussion rooms
  - A webcam so users can check on congestion in the library
  - News about library events
  - Content for download on podcasts, videos

For more information on examples and listing of library sites, which are offering services on mobile along with service description and Listing of publishers who offer their content on mobile etc. please visit M-Libraries, Library Success: A Best Practices Wiki (<http://www.libsuccess.org/index.php?title=M-Libraries>) which is having good source of information.

## **Conclusion**

Libraries and librarians must cope with the demands of an information society. Librarians must have the knowledge, skills and tools in handling digital information to be efficient creators, collectors, consolidators and communicators of information. Librarians with the knowledge, skills and tools required by information professionals in an information society will constitute the key success factor in enabling the library to perform its role as an information support system for society.

Technology alone is not the solution to efficient and effective information delivery, although it is the major contributor to the development of multimedia information and networks. The basic library education acquired in school is more important than the tools but the tools will make information creation, acquisition, consolidation and communication more efficient. ICTs are powerful tools that can only be used effectively if the users – administrators, librarians, and patrons in this case - have acquired adequate knowledge and skills and a certain level of competency according to their needs.

**Seed for Thought: Services on the cloud, access on the mobile , what about the library ?**



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## References (Last Accessed on 12/07/2012)

1. Cloud Computing and Its Impact on Library Services : Patel, Yatrik, INFLIBNET News Letter Vol 18, No 1, ISSN 0971-9849 ([http://www.inflibnet.ac.in/publication/newsletter/Vol.18,No.1\(Jan-Mar2011\).pdf](http://www.inflibnet.ac.in/publication/newsletter/Vol.18,No.1(Jan-Mar2011).pdf))
2. Mitchell, Eric, Ph.D.: Using cloud services for library IT infrastructure : Code4Lib Journal (<http://journal.code4lib.org/articles/2510>).
3. Cloud computing : Wikipedia Article ([http://en.wikipedia.org/wiki/Cloud\\_computing](http://en.wikipedia.org/wiki/Cloud_computing))
4. NIST cloud computing program (<http://www.nist.gov/itl/cloud/index.cfm>)
5. What Are Mobile Friendly Library Sites Offering? A Survey: Tay, Aron, Musing about Librarianship blog, April 24, 2010, (<http://musingsaboutlibrarianship.blogspot.com/2010/04/comparison-of-40-mobile-library-sites.html>)
6. Mobile Infrastructure for Libraries: JISC Projects Program and Services ([http://www.jisc.ac.uk/whatwedo/programmes/di\\_informationandlibraries/emergingopportunities/Mobile%20Infrastructure%20for%20Libraries.aspx](http://www.jisc.ac.uk/whatwedo/programmes/di_informationandlibraries/emergingopportunities/Mobile%20Infrastructure%20for%20Libraries.aspx))
7. Libraries and Mobile Technology:An Introduction to Public Policy Considerations : Vollmer Timothy, ALA office for Information Technology Policy , Policy Brief No. 3, June 2010 (<http://www.ala.org/offices/sites/ala.org.offices/files/content/oitp/publications/policybriefs/mobiledevices.pdf>)
8. Standards informing design of library service delivery to mobile devices and nomadic learners: Saravani ,Sarah-Jane, Waikato Institute of Technology ([http://www.vala.org.au/vala2010/papers2010/VALA2010\\_39\\_Saravani\\_Final.pdf](http://www.vala.org.au/vala2010/papers2010/VALA2010_39_Saravani_Final.pdf))
9. Internet Trends 2012, D10 Conference , Published May 2012 by Mary Meeker and Liang Wu (<http://www.kpcb.com/insights/2012-internet-trends>)
10. Mobile Apps Usage in India 2012 available at (<http://www.wirelessduniya.com/2012/03/14/mobile-apps-usage-in-india-2012/>)

The library is not a shrine for the worship of books. It is not a temple where literary incense must be burned or where one's devotion to the bound book is expressed in ritual. A library, to modify the famous metaphor of Socrates, should be the delivery room for the birth of ideas - a place where history comes to life.

**- Norman COUSINS (1915-)**

A great library contains the diary of the human race.

**- George Mercer DAWSON (1849-1901)**

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## **Information Literacy: An Overview of Information Literacy Programs at IPR**

**Pragnya J. Pathak\* and S. Shravan Kumar\*\***

### **Abstract**

*Information Literacy aspects, and its need and importance at every stage of life is discussed. Benefits of information literacy among students community, citizens and literacy skills approach for worker at workplace is desirable to prove the survival of the fittest principle. This article has also highlighted major initiatives taken by Government of India to make its citizens information literate. Models of Information literacy explains the ability in a literate person to understand the need of information, gather, interpret the information to solve problems, create new ideas, manage the data and present knowledge effectively. Experiences of information literacy programmes carried out at IPR Library are covered as they could benefit other libraries to start organizing such programmes at their workplace. It is individual's responsibility to become information literate, as it is an important element for future success.*

### **Introduction**

Information Literacy requires a set of abilities in individuals to "understand and recognize when an information is required and which type of information is needed, and should possess the ability to find the required information. They should be able to evaluate available information resources, and use effectively and efficiently the needed information". In present technological era, concept of Information Literacy is very important, because there is sudden growth in complexity of information resources, also individuals come across with varied, profuse information choices – in their academics, workplace, and in their personal lives.

### **1. Definition of Information Literacy**

In the year 1974, the word 'Information Literacy' first appeared in a report of National Commission on Libraries and Information Science by Paul G. Zurkowski, the phrase Information Literacy was used to describe the "techniques and skills" known by the information literate for utilizing the wide range of information tools as well as primary sources in molding information solutions to their problems.

In the year 1989, American Library Association (ALA), defined the term "Information Literacy", as follows: "To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information".

C.S. Doyle in 1992, described an information literate person as one who "recognizes the need for information, recognizes that accurate and complete information is the basis for intelligent decision making, identifies potential sources of information, develops successful search strategies, accesses sources of information, including computer-based and other technologies, evaluates information, organizes information for practical application, integrates new information into an existing body of knowledge, and uses information in critical thinking and problem solving".

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\* Mrs. Pragnya J. Pathak, Librarian – SG and \*\*Mr. S. Shravan Kumar,  
Institute for Plasma Research, Bhat, Gandhinagar email: pragnya@ipr.res.in, shravan@ipr.res.in

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Chartered Institute of Library and Information Professionals (CILIP), in year 2004, defined Information Literacy as, “knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner. This definition implies several skills that are required by an information literate to understand need of information, the resources available, how to find information, the need to evaluate results, how to work with or make use of results, ethics and responsibility of use, how to communicate or share your findings, and how to manage your findings for future use by an individual”.

## **2. Importance of Information Literacy**

The need and importance of Information Literacy crops up as a result of ‘Data Smog’, the term coined by David Shenk, data smog refers to the concept that large amount of information produced creates a barrier in individuals lives, the speed at which it comes to us from all directions, and the feeling of nervousness that we are making decisions without having all the information that is available or that we need. Information Literacy is a key to data smog, it enables us to cope by giving us the skills to know when we need information and where to locate it effectively and efficiently, it includes technological skills needed to use the modern library as a gateway to information, it helps us to analyze and evaluate the information we find, thus giving us assurance in using that information to take decision or generate a product.

The United Nations’ (UN) celebrates International Literacy Day every year on 8<sup>th</sup> September, to raise people’s awareness of and concern for literacy issues in the World. United Nations Educational, Scientific and Cultural Organization (UNESCO), declared year 1990 as ‘International Literacy Year’ and organized conferences on the theme ‘Education for All’ in various countries. In year 1993, an Education for All Summit of Nine high-population countries was organized at New Delhi.

## **3. Impact/Benefit of Information Literacy**

Advantages of Information literacy can be observed in the literate society, where individuals use literacy skills in day to day activities, at studies in colleges and universities, at workplace where problem based learning system is adopted, and they frequently use thinking skills to become skilled users, thereby increasing their responsibility for their own learning.

### **i) For Student Community:**

- Scholars learn to find, evaluate and create information by developing significant thinking skills which hopefully leads to better research
- Outcome of better research leads to more success in studies, and also increases the preservation of more information for future generation
- Skills developed by students here are transferable to their ultimate workplace making students more marketable

### **ii) For Citizens:**

- Identify most useful information when making decisions like where to establish a business, how to vote, by evaluating newscasts, advertisements, and political speeches, use of statistics to support only one aspect of a complex issue.

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- Understand the value and power of information, the need for information to address problems and questions in their own lives, in their communities, and in society.
  - Prepared to be lifelong learners because they know how to learn themselves.

iii) For Workers at workplace:

- Demand for a new kind of worker or information literate is increased in the marketplace, where a worker can be talented to gather, sort, evaluate, synthesize, interpret and apply cascade of information.
- Workplace has become a place of drastic change and provides innumerable opportunities for individual workers. As a result of this fast changing environment, it results in multiple career and job changes.
- Information literacy helps workers to see change in nature of job at workplace as transitional and not distressing

#### **4. Application of Information Literacy**

Information Literacy is a prerequisite for Lifelong Learning, and is common to all learning environments, to all disciplines, to all levels of education and for all age groups

Lifelong Learning is a process of acquiring the information literacy skills to update the knowledge throughout the journey of life. Lifelong learning helps learners to take on critically the information provided in the content and widen their investigations and become more self- directed and achieve better control over their studies. Lifelong learning begins at childhood, from home, followed by traditional education system at primary, secondary schooling, higher education, university education – both regular and distance mode, e-learning available in most of the universities and learning centers, self-learning by using a variety of resources and tools including online applications.

Flexible Learning is a system where learners are provided with more choice, and conveniences to suit the learners interest, i.e., custom made learning. This is possible using technological tools such as Virtual Learning Environments (VLE's) or Learning Management Systems (LMS's), chatting rooms, discussion boards, online debates, blogs, etc. The processing speed has increased rapidly in digital mobile devices, resulting in rapid increase in use of mobile devices like iPods, Personal Digital Assistants (PDA's) etc. which support flexible learning.

#### **5. Core Model of Information Literacy for Higher Education in Universities: SCONUL**

Society of College, National and University Libraries (SCONUL) was founded in 1950 as the Standing Conference of National and University Libraries. In 2001, it changed its name as SCONUL. SCONUL promotes quality in library services in higher education and national libraries across the UK and Ireland. SCONUL came up with a core model of Seven Pillars of Information Literacy, which explains the information handling, information skills, data curation and data organization. The seven pillars are:

- Identify: ability to identify a personal need for information, identify lack of knowledge in a subject area and get expressive knowledge on that subject area.

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- Scope: can review current knowledge and identify gaps, identify the best suitable information to meet the need and show the ability to use the new tools as and when they are available. Information may be available in different formats, identify them.
  - Plan: can make strategies for locating information and data, range of searching techniques for finding required information, use appropriate search tools
  - Gather: can trace and access the information and data they need, by understanding issues involved in collection development, use of appropriate retrieval tools.
  - Evaluate: can review the information collected and evaluate it and compare it with the need of information and maintain consistency in data collection.
  - Manage: can arrange information efficiently and ethically, need to maintain regular records, implement data handling methods, use suitable data management software and techniques to administer the information.
  - Present: can apply the knowledge gained, synthesis of old and new information to create new knowledge and distribute it in variety of ways, scrutinize and present data appropriately, communicate effectively in words.

## **6. Initiatives taken by Central Government and State Governments in India**

In the present age, information literacy is an essential requirement at every stage of an individual's life, beginning from school education to higher education, from social life to professional life. Government has taken appropriate steps to sustain economic growth, escalating information infrastructure and generating opportunity for employment. The Government of India established:

1. National Knowledge Commission (NKC) in year 2005, with following aims:
  - Build excellence in the educational system to meet the knowledge challenges of the 21st century and increase India's competitive advantage in fields of knowledge.
  - Promote creation of knowledge in S&T laboratories.
  - Improve the management of institutions engaged in intellectual property rights.
  - Promote knowledge applications in agriculture and industry.
  - Promote the use of knowledge capabilities in making government an effective, transparent and accountable service provider to the citizen and promote widespread sharing of knowledge to maximize public benefit.
2. Right to Information Act (2005) assures timely response to citizen request for government information. RTI is an initiative taken by department of Personnel and Training, Ministry of Personnel, Public Grievances and Pensions.
3. Rashtriya Computer Literacy Drive is an initiative to make India 100% computer literate
4. National Knowledge Network (NKN) helped in upgradation of NICNET at 40 locations all over India in 2008, used minimum infrastructure to connect more than 1500 institutions

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5. National Digital Library: Department of Information Technology supported Digital Library initiatives with aim of setting up mega centers and scanning centers in collaboration with IISc, Bangaluru and Carnegie Melon University, USA. The digital data generated by these scanning centres under this activity is web enabled on " Digital Library of India" web site <http://www.new.dli.ernet.in>
  6. Village Knowledge Centre (VKC) is a place to render distant services from a single window point to rural masses especially in remote areas of the country through modern Information and Communication Technology. The knowledge centre will be connected to a central studio using technologies viz WiMax/VSAT/leased line sponsored by central Government of India.
  7. National Portal of India developed with an objective to enable a single window access to information and services being provided by the various Indian Government entities. The content in this Portal is the result of a collaborative effort of various Indian Government Ministries and Departments, at the Central/State/District level. This Portal is Mission Mode Project under the National E-Governance Plan, designed and maintained by National Informatics Centre (NIC), DIT, MoCIT, Government of India.
  8. E-Choupal, the unique web based initiative of ITC's Agri Business Division, offers the Farmers of India all the information, products and services they need to enhance farm productivity, improve farm-gate price realization and cut transaction costs. Farmers can access latest local and global information on weather, scientific farming practices as well as market prices at the village itself through this web portal in regional languages. Choupal also facilitates supply of high quality farm inputs as well as purchase of commodities at their doorstep.
  9. Gujarat State Wide Area Network (GSWAN) is an initiative started by Gujarat Government in year 2001-02, with an aim to modernize the intra-governmental communication setup, to improve administrative effectiveness and efficiency, to facilitate improvements in the Quality of Public services and provides connectivity to all 26 districts and 225 taluka centers.
  10. Sachivalaya Integrated Communication Network (SICN) owned by Government of Gujarat for their voice communication needs. SICN network is spread over Gandhinagar connecting all Government Boards and Corporations Offices.
  11. Gujarat IT Policy features compulsory computer education would be introduced in all schools from class-V onwards, provide internet connectivity to all schools in the state, creation of State Library Networks and promotion of Gujarati on computer.
  12. Akshaya, an innovative project implemented in the State of Kerala by state government aimed at bridging the digital divide, addresses the issues of ICT access, basic skill sets and availability of relevant content. Likewise, Maharashtra Knowledge Corporation Limited (MKCL) a major initiative by Maharashtra Government helped citizens to become IT literate. MKCL registered more than 5.4 million learners.
  13. Bhoomi an initiative Project of Karnataka Government for computerization of land records. Bhoomi has computerized 20 million records of land ownership of 6.7 million farmers in the state.

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14. Many other projects like Gyandoot, Pravana, Drishtee, Warana Wired Village, SRISTI, NaiDisha, INVITE etc are the successful projects taken up by Government.

## **7. Role of Librarians in Information Literacy**

Christopher (2004) identified four roles that librarians play in Information Literacy:

- a. *Teacher and Consultant*– one who designs instruction; one who collaborates with teachers in the planning and implementation of lessons; one who has a grasp of the curriculum able to match and fill the needs of clients.
- b. *Instructional Technologists* – a provider of different technology for teaching and learning processes as well as resources of varied formats.
- c. *Manager of computing services* – a creator of databases and knowledge resources.
- d. *Manager of learning resources collection* – content managers of information systems that facilitates the efficient and effective storage, retrieval, use and communication of learning resources and instructional media

IPR Library conducted a survey among the local educational and research institute libraries and found that all librarians believe that libraries and librarians play an important role in promoting information literacy. All librarians also conveyed that government, libraries, librarians and individual users should take initiatives and develop information literacy skill for lifelong learning. Couple of librarians gave their opinion that, though government takes initiatives and provides budget to set up the information literacy initiatives at state or national level, without involving librarians in the information literacy programmes, then the scheduled schemes objectives won't be successfully achieved. The responsibility or control to promote and encourage information literacy is with libraries and librarians.

## **8. Experiences of Information Literacy Programs at Institute for Plasma Research (IPR) Library**

IPR Library started providing information literacy skills to its users from its inception in year 1982, in a traditional way, without having much awareness about information literacy and with limited available infrastructure and limited resources. Later at the advent of ICT Tools like computers with low bandwidth network connectivity, preference was given to senior scientists and administrators to use these tools. Research scholars, junior staff and library were at next level of priority to use these tools with limited access to Internet in slot timings. More users were depending on library and library staff, to perform database searching from offline resources available on CD-ROM format, the databases mostly used and searched were from INSPEC, and INIS database, McGraw-Hill Encyclopedia of Science and Technology etc. Search was done on behalf of users and required information was provided to them and additionally, bibliographies were compiled on different subjects which are of interest to our users.

Simultaneously, started giving training to users, on how to search a database and install search interface software in their PC to perform searches in various databases independently. This process benefited them to learn how to formulate a search query and search database on their own. This practice developed user skill to formulate the specific query to search database and retrieve most relevant information and simultaneously saved their precious time.

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As a part of information literacy programme, library started giving awareness about the availability of e-resources to users through library webpage, which is considered as gateway of information. Details of various subject wise databases are listed, list of useful websites along with free online available resources were gathered and indexed on library webpage. Internal publications like thesis, reprints, technical reports, research reports and bibliographies of senior scientists are digitized and full text access is provided through library webpage to users, these resources are accessible with in campus on intranet.

Procured Scientific Software, which can process data which is available in code and generate reports, give simulations of experimental readings etc., also purchased translating software to translate foreign language articles in German, Russian and French language to English language.

Purchased more computers and servers to provide access to additional resources to users, and give better services to users. Now, the Internet connectivity is available round the clock in the campus and with adequate numbers of terminals. Library Automation helped to perform housekeeping functions, acquisition, cataloguing, circulation, periodicals management etc., through Library Management software, which also facilitates catalogue search through OPAC and WebOPAC using simple, advanced and federated search to retrieve information. Orientation is given to users as and when required, and information is given to them about library and its services, which has resulted increase in library usage, and reduced the hesitation approach in a new user to visit the library.

Current Contents Service, the Table of Contents of subscribed journals at IPR is provided to users and various universities departments' heads on demand in both print and electronic media through email. Current Contents link is provided on library webpage, subscribing to Netvibes.com a social media monitoring, analytics and alerts dashboard, which provides information about the arrival of new issues and its contents of journals subscribed online.

Global approach to teach information access to users, publishers and vendors were invited to offer detailed demo of usage of new databases and software to our users and library staff. IPR Library organized such demonstrations at IPR by inviting publishers to explain the benefits and usage of databases like AIP Online journals, ScienceDirect, SCOPUS, E-village for Engineers, E-Standards for Engineers, and recently a demo was given to users on usage of database 'Web of Knowledge', to obtain required citations of their publications and h-index of the authors and, also to know where similar kind of research is done, by which author, at which university / research institution to avoid duplication of work, and provide a platform to discuss the issues among themselves for getting better result of their research. Quiz programmes are conducted for users to encourage them to use effectively the databases available in the library.

IPR library organized demonstration of new technology equipments such as Multifunction Devices (MFD), CD Mirror Server (CDM Servers), Barcode technology, Kindles (ebook reader), Radio-Frequency Identification (RFID), Security Systems, Closed-circuit Television (CCTV), etc., to create awareness among library staff and users to use new innovative tools. These technologies help to attain modernization and simplify library work. It also helps to provide better and fast services to users.

Simultaneously, under User Education Program, IPR library arranged lectures on various aspects for the benefit of library staff as well as users by inviting professionals and subject experts to IPR and requested them to deliver the lecture in the area of Knowledge Management, Usage of Multimedia, User Services and Marketing of Information and Need of Library Consortia. All library staff also tried

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to update themselves about the latest development in the field of library publications technology, ICT, software usage, and sharing information using CDM technology. IPR library staff is actively interacting with publishers, vendors, senior library professionals and have become members of library professional associations, whereby they keep themselves update to provide best services to users.

Users were taught to search and retrieve information independently, by providing Library Guide, Library Virtual Tour (a short video film), and Library brochure which contains the information about the library, its services with locations of resources, and working hours of library with contact details of library staff etc., Library tutorials are prepared for using databases, WebOPAC, OPAC, and usage of online journals.

Users are provided alert services to users, by displaying the information on notice boards, and flashing the news on library webpage frequently. The information is related to recent developments in the field of Plasma Physics and Fusion Technology.

User's forum is formed to know the need of users, and library requests regular feedback from them to improve library services efficiently.

Book Exhibitions are organized at IPR regularly, which enables users to see the content of the newly published books and recommend useful books for library collection development.

IPR Library encourages various Universities Library Science Department Students pursuing B.LISc. and M.LISc. degree to visit the library every year, and teach them the practical approach of library services provided to its users.

## **Conclusion**

In present digital era, information literacy is very important for each and every field, especially for libraries and library professionals. All library professionals should be aware of information needs, information sources, new technologies and tools to use these information sources for the benefit of their users. For providing better services to the users all library professionals should also be updated with new information skills. IPR library staff never waited for any special training or well equipped infrastructure etc., whatever limited resources were available, we started using them and updated ourselves, and whatever we learnt we tried to implement in our library and as a result, our users are very satisfied with library services. As a proof we can quote our Director's statement "IPR Library is a World Class Library". Our Dean commented about IPR Library webpage that, it is an excellent library webpage, where one can access maximum required information.

## **References**

1. Definitions of Information Literacy <http://www.plattsburgh.edu/library/instruction/informationliteracydefinition.php>
2. Information Literacy Competency Standards for Higher Education <http://www.ala.org/acrl/standards/informationliteracycompetency>
3. Information Literacy: definitions and models <http://dis.shef.ac.uk/literacy/definitions.htm>
4. Information literacy [http://en.wikipedia.org/wiki/Information\\_literacy](http://en.wikipedia.org/wiki/Information_literacy)

- 
- 
5. IL definitions - Models <http://www.informationliteracy.org.uk/information-literacy-definitions/>
  6. What is Information Literacy? <http://skil.stanford.edu/intro/research.html>
  7. World Library and Information Congress: 70th IFLA General Conference and Council <http://archive.ifla.org/IV/ifla70/papers/059e-Campbell.pdf>
  8. Information literacy: definition <http://www.cilip.org.uk/get-involved/advocacy/information-literacy/pages/definition.aspx>
  9. Introduction to Information Literacy <http://www.ala.org/acrl/issues/infolit/overview/intro/>
  10. Communication and Information <http://www.unesco.org/new/en/communication-and-information/capacity-building-tools/media-and-information-literacy/mil-indicators/development-of-the-media-and-information-literacy-indicators/>
  11. Global Strategies at the Regional Level in the 1980s <http://www.unesco.org/education/educprog/50y/brochure/tle/126.htm>
  12. Information literacy: the skills <http://www.cilip.org.uk/get-involved/advocacy/information-literacy/pages/skills.aspx>
  13. Information literacy benefits, <http://library.lakeheadu.ca/?pg=728>
  14. Information Literacy for Lifelong Learning. ERIC Digest.<http://www.ericdigests.org/1993/lifelong.htm>
  15. What are the benefits of information literacy partnerships? <http://library.austincc.edu/presentations/CommunityPartnerships/adv.html>
  16. Information Literacy: Government Policies and Initiatives in India by Shirish M Deshpande and P S Dakhole <http://ir.inflibnet.ac.in/dxml/bitstream/handle/1944/1634/42.pdf?sequence=1>
  17. Information Literacy initiatives in India with special reference to emerging knowledge economy S. B. Ghosh and Anup Kumar Das [http://drtc.isibang.ac.in/xmlui/bitstream/handle/1849/289/InformationLiteracyICIL06\\_P\\_aper\\_full.pdf?sequence=1](http://drtc.isibang.ac.in/xmlui/bitstream/handle/1849/289/InformationLiteracyICIL06_P_aper_full.pdf?sequence=1)
  18. National Knowledge Commission, <http://www.knowledgecommission.gov.in/>
  19. Right to Information Act, <http://www.righttoinformation.gov.in/>
  20. Rashtriya Computer Literacy Drive, <http://www.rclid.org/>
  21. National Knowledge Network, <http://www.nkn.in/>
  22. National Digital Library, <http://mit.gov.in/content/national-digital-library>
  23. Village Knowledge Centres, <http://india.gov.in/govt/viewscheme.php?schemeid=862>
  24. Government of India Portal, <http://www.india.gov.in/>
  25. National Portal of India, <http://www.india.gov.in/>
  26. e-Choupal, <http://www.echoupal.com/>
- 
-

- 
- 
27. Akshaya, <http://www.akshaya.kerala.gov.in/>
  28. MKCL- Maharashtra Knowledge Corporation Limited, <http://www.mkcl.org/>
  29. Bhoomi Project, <http://www.bhoomi.karnataka.gov.in/>
  30. Gujarat State Wide Area Network (GSWAN), <http://www.gil.gujarat.gov.in/gswan.html>
  31. Blooming knowledge society and information literacy in India <http://www.cmb.ac.lk/academic/institutes/nilis/reports/karisiddappa.pdf>
  32. Lifelong learning, [http://en.wikipedia.org/wiki/Lifelong\\_learning](http://en.wikipedia.org/wiki/Lifelong_learning)
  33. The SCONUL Seven Pillars of Information Literacy Core Model for Higher Education [http://www.sconul.ac.uk/groups/information\\_literacy/publications/coremodel.pdf](http://www.sconul.ac.uk/groups/information_literacy/publications/coremodel.pdf)
  34. Introduction: The Importance of Information Literacy by Ilene F. Rockman [http://media.wiley.com/product\\_data/excerpt/78/07879652/0787965278.pdf](http://media.wiley.com/product_data/excerpt/78/07879652/0787965278.pdf)
  35. Role of Librarian in Information Literacy <http://lovealibrarian.blogspot.in/2005/11/role-of-librarian-in-information.html>

A good library is a place, a palace where the lofty spirits of all nations and generations meet.

**- Samuel NIGER (1883-1956)**

New Laws of Librarianship:

- Libraries serve humanity.
- Respect all forms by which knowledge is communicated.
- Use technology intelligently to enhance service.
- Protect free access to knowledge.
- Honor the past & create the future.

**- Michael GORMAN (American Libraries 9/95)**

Ranganathan's Five Laws:

Books are for use.

Books are for all; or Every reader his book.

Every book its reader.

Save the time of the reader.

A library is a growing organism.

**- Shiyali Ramamrita RANGANATHAN (1892-1972)**

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## Initiatives for Innovative Information Services

Shweta Shroff\*

### Abstract

*New technologies continue to emerge and quickly find their place in the library and information centres. This has led libraries to a continual state of strategic planning, implementation, evaluation and re-evaluation of innovative services. This paper intends to make the librarians aware about the prominent initiatives already in existence for innovative library and information services from across the globe.*

### Introduction

Libraries have a long and illustrious tradition of providing rich and significant information services to their users. The mission of the libraries has always been connecting users with the required information and they have been playing a role of a learning space in the society. However, popularity of Internet has forced librarians to look for new ways to satisfy the expectations of their users and this, in turn, has encouraged the creation of many innovative services that combine new technologies with traditional information services.

According to Wikipedia, Innovation is the creation of better or more effective products, processes, services, technologies, or ideas that are readily available to markets, governments, and society. Innovation differs from invention in that innovation refers to the use of better and, as a result, novel idea or method, whereas invention refers more directly to the creation of the idea or method itself. Innovation differs from improvement in that innovation refers to the notion of doing something different rather than doing the same thing better.<sup>1</sup>

The main objective of service innovation is to achieve greater user satisfaction. However, other important factors to be kept in mind are cost-effectiveness, time-effectiveness and increased efficiency in the service delivery. Any information service, to sustain itself for longer period, needs constant evaluation especially to ensure

- Whether the service is up-to-date, appealing and contemporary
- Whether the precautions have been taken to avoid obsolescence

Sustainability of service is also closely related to the quality of the idea, uniqueness and knowledge of users. Information services that are known today as traditional services viz. inter-library loan, current awareness, selective dissemination of information, indexing, abstracting etc. are the result of the brilliant ideas and innovativeness of the library professionals. These services have been found so useful that they have become an integral part of most of the libraries in the world for decades now.

We observe that new technologies continue to emerge and quickly find their place in the library and information centres. Librarians must accept the reality that today nearly all information needs are easily and quickly satisfied on the web. The exponential growth of Google, Wikipedia, YouTube and social networking sites like Facebook and Twitter has challenged the library and its information services. Internet as the reference and information tool has been so influential that there is no way libraries can escape from introduction of the corresponding transformation and restructuring of information services. This has led libraries to a continual state of strategic planning, implementation, evaluation and re-evaluation of innovative services.

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\*Ms.Shweta Shroff, email: shwetapandya@yahoo.com

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Some new information services, because of their evident benefits, that are quickly getting implemented by libraries in this digital era are online catalogue search, online reservation service, email and instant messaging alerts and reminders, virtual reference service or online information desk, Ask a Librarian service, 24/7 service, services through social networks, knowledge management and institutional repositories, union catalogues, access to online databases, access to scholarly information through e-journal consortium, resource sharing via information networks, online discussion forums, eBooks lending, automated self check-in and check-out, online homework help, online teachers' resources, online parents' resources, online book clubs, book mobiles etc.

Information on some of the prominent initiatives for innovative library and information services is given below:

### **1. eBooks lending service**

Many libraries in USA have started lending eBooks to its users. The Bloomington Public Library in USA is also one of them. It offers eBooks from

- *My Media Mall*: It brings to users a selection of popular fiction, classic and children's literature, mysteries, romance, and nonfiction such as cooking, biographies, business and more.
- *LearningExpress Library*: It provides career guides, study aides, and test-preparation books to help people prepare for high-stakes tests; to pass licensing, certification, or competitive entry-level exams; or to advance in school or professionally.
- *eBooks from EBSCO (formerly NetLibrary)*: It gives complete text and graphics of well-known reference books such as the "Idiot" guides. Search from hundreds of titles. eBooks can be read online, or checked out for a period of 1-3 weeks.
- *Safari Books Online*: It is the premier on-demand digital library providing over 9,800 technology, digital media and business books and videos online.<sup>2</sup>

Although American libraries have started lending eBooks to their users, a majority of Americans do not know that this service is provided by their local library. According to a new study from the Pew Internet and American Life project, only 12% of readers borrowed an eBook from the library in the past year.<sup>3</sup>

This calls for rigorous efforts from the libraries to make their users aware about this information service. The Bloomington Public Library conducts regular sessions for its users to teach them how to get these free downloads onto their device. It also offers separate classes based upon whether users have a Nook or a Kindle.

### **2. teenZone**

A new trend has started, in the public libraries in USA, to offer services targeting their young adult users. Within the walls of the Bloomington Public Library (USA), there is a nook only for young adult members called teenZone. It not only has teen books, magazines and DVDs, but, it is a digital wonderland, filled with flat screen TV's, Xbox 360's, Playstation 3 and free music downloads. Over and above the regular weekly and monthly events, a popular event called the BN Gamefest is organised periodically which offers additional consoles and games that are not usually offered in the teenZone. This is an effort to build a positive experience among teens with the hope that they will continue to support the library when they are older.<sup>4</sup>

### **3. Copies Direct Service**

The Copies Direct service is designed to assist in ordering material directly from the National Library of Australia. It provides a single entry point for users requesting a copy of any item in the Library's

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collections. Copies form books, journals, newspapers, pictures, manuscripts, oral history transcripts, maps, tapes and recordings etc. can be availed of by paying certain charges. Any individual or library can order copies from the National Library's collection using this service and requested copies can be provided under the fair use provisions of the Copyright Act.<sup>5</sup>

Charles Sturt University Library blog has listed some worldwide innovations under its section - Innovation & Libraries - on January 19, 2011. <sup>6</sup>

- Sweden has individual ergonomic workstations.
- Public libraries in Scandinavia allow dogs with the users in the library.
- Norway has book boats to bring the libraries to those living on islands.
- Within selected Hong Kong libraries reside bookstores, so that users have the option to purchase the ones they like.
- Singapore National Library uses RFID and color coding to sort and shelve books. This takes only 7 minutes to get the book back to the shelf in the right place.
- Hon Kong uses over-the-head book return conveyer belt system.

#### **4. New Services Models (NSM) Program**

The New Service Models (NSM) program was launched during 2007 to address strategic challenges and operational concerns faced by the University Library at the University of Illinois at Urbana Champaign, USA. The NSM program was designed to address the question of how to sustain the Illinois tradition of excellence in library services while navigating transformations in academic libraries and scholarly communication. Confronted by rapidly escalating economic challenges to the traditional model of departmental library service, as well as by sea changes in the way that scholarly information is created, disseminated, used, and stewarded for the future, the Library undertook a broad and inclusive approach to identifying opportunities for strategic investment in resources, collections, facilities, and information technology, as well as opportunities to engage its users in far ranging discussions of the future of Library services.

The several significant changes have resulted so far from the NSM program, including the transition of the Labor & Industrial Relations Library and the Library & Information Science Library to "embedded librarian" service models, and the integration of the Afro Americana Library Unit, the City Planning & Landscape Architecture Library, and the Physics & Astronomy Library into complementary service units. Other outcomes include enhancing access to scholarly resources, print and digital, changes to the Library organization of services, and investments in collection management that have resulted in enhanced access to thousands of previously unprocessed materials. This program has supported the design and development of innovative service programs outlined in the University Library's Strategic Plan, including the establishment of the Scholarly Commons and a Library wide approach to health information services.<sup>7</sup>

Report on this program can be obtained from <http://www.library.illinois.edu/nsm/> in which descriptions of proposed programs, as well as several others completed to date have been provided.

#### **5. EIFL-PLIP: Public Library Innovation Program**

EIFL is an international not-for-profit organization based in Europe with a global network of partners. It runs a wide range of programs and events designed to increase access to knowledge. Founded in 1999, EIFL began by advocating for affordable access to commercial e-journals for academic and research libraries in Central and Eastern Europe. Today, EIFL partners with libraries and library

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consortia in more than 60 developing and transition countries in Africa, Asia, Europe, and Latin America. The work has been expanded to include other programs designed to enable access to knowledge for education, learning, research and sustainable community development.<sup>8</sup>

EIFL announces Innovation Awards for public and community libraries under its Public Library Innovation Program (PLIP). Awards have been announced for this year by EIFL-PLIP in the areas of Economic wellbeing, Health, Social inclusion and Open government.

Information on some other similar initiatives is as follows:

- **Rethinking Resource Sharing Innovation Awards**

The Rethinking Resource Sharing (RRS) Innovation Awards recognizes and honors an individual or institution for changes they made to improve users' access to information through resource sharing in their library, consortium, state or country with the hope that the award will encourage libraries and librarians to make changes in how they do resource sharing to improve service to users.<sup>9</sup>

- **Jim Crawford Award for Innovation in Libraries**

The Jim Crawford Award for Innovation in Libraries is available to individuals or groups working in, or associated with, public libraries eligible for funding by the Libraries Board of South Australia. The intention of the award is to reward those people making a significant contribution to South Australia's public libraries and to encourage and drive further innovation.<sup>10</sup>

- **Marketing Innovation Awards**

The annual Marketing Innovation Awards recognize and reward marketing innovation in libraries and information services in Wales.<sup>11</sup>

- **3M Award for Innovation in Libraries (discontinued from 2012)**

The 3M Award for Innovation was launched in 1996 and has been offered to LIANZA (Library and Information Association of New Zealand Aotearoa) members for 15 years. The Award was established to showcase and celebrate an innovation or entrepreneurial approach to business in libraries.<sup>12</sup>

## **Conclusion**

The incorporation of new information technology has essentially become the means for transforming libraries into a more critical and significant intellectual center of the society. The librarians need to learn how to learn in order to meet the fast growing requirements of the information society. There is no limit to what librarians can innovate. Right around the world, libraries are creating amazing programs to encourage new users and to inspire current users to new heights. Organizations from different corners of the globe have come forward too to encourage such efforts and initiatives and various awards have been announced as well. However, there are no strong efforts evident from the Library Associations or the Government of India with regard to provide reward or some sort of encouragement to those who make significant contributions in the area of Library and Information Science. Some leading Library associations do appreciate and give rewards to librarians for their achievements but, hardly anything has been documented on what innovative services fetched those awards to those librarians. Hence, the author of this paper strongly recommends to ADINET, INFLIBNET and other leading library associations in India to introduce some concrete measures to document as well as to reward the initiatives for innovative library and information services in India.

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## References

1. <http://en.wikipedia.org/wiki/Innovation>
2. [http://turing.bloomingtonlibrary.org/books\\_movies\\_more/ebooks\\_&\\_more/](http://turing.bloomingtonlibrary.org/books_movies_more/ebooks_&_more/)
3. <http://libraries.pewinternet.org/2012/06/22/libraries-patrons-and-e-books/>
4. <http://turing.bloomingtonlibrary.org/teenZone/>
5. <https://copiesdirect.nla.gov.au/>
6. [http://yourlibrarycsu.blogspot.in/2011\\_01\\_01\\_archive.html](http://yourlibrarycsu.blogspot.in/2011_01_01_archive.html)
7. [http://www.library.illinois.edu/nsm/actionplan/NSM\\_Report\\_09.pdf](http://www.library.illinois.edu/nsm/actionplan/NSM_Report_09.pdf)
8. [www.efil.net](http://www.efil.net)
9. <http://rethinkingresourcesharing.org/innovation.html>
10. [http://www.lga.sa.gov.au/webdata/resources/files/Jim\\_Crawford\\_Award\\_Nomination\\_Information\\_-\\_2012.pdf](http://www.lga.sa.gov.au/webdata/resources/files/Jim_Crawford_Award_Nomination_Information_-_2012.pdf)
11. <http://librarywales.org/innovation-awards-2009-2010/>
12. <http://www.lianza.org.nz/awards/scholarships-awards/3m-award>

Librarians are almost always very helpful and often almost absurdly knowledgeable. Their skills are probably very underestimated and largely underemployed.

**- Charles MEDAWAR**

Believers and doers are what we need — faithful librarians who are humble in the presence of books.... To be in a library is one of the purest of all experiences. This awareness of library's unique, even sacred nature, is what should be instilled in our neophytes.

**- Lawrence Clark POWELL (1906-)**

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## **Digital Information Literacy: An Overview**

**Mohammad Hafiz Iqbal Chauhan \***

### **Abstract**

*Information is a backbone of the society and is required for life-long learning at each and every stage of life. Today most of the information is available in digital form. Here author discusses various aspects of Digital Information Literacy (DIL) which is very essential to retrieve information from World Wide Web (WWW) and internet. Information literacy is the ability to recognize, when information is needed to identify, locate, evaluate, organize and use it effectively. User as well as the information caterer is required to develop his/her skills to retrieve right information in right time using digital resources. This paper describes different elements of DIL, advantages & disadvantages and its need. The author has shown different types of digital resources viz. e-books, e-paper, e-journals, e-databases, multimedia resources, subject or information gateway etc. DIL describes a person's ability to understand, evaluate and create information in multiple formats via computer and internet. The author has elaborated various digital information literacy requirements like Training, Conference, Seminar, Orientation program, Lectures etc. Basic skills required for DIL are also mentioned in detail.*

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\*Mohammad Hafiz Iqbal Chauhan, MLISc Student,  
Department of Library and Information Science  
Hemchandracharya North Gujarat University, Patan

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# A Study on Measuring the Customer Service Quality in University Libraries: Based on SERVQUAL Model

D.Konappa\*

## Introduction

Libraries are competing with many profitable and non profitable services to provide access to academic information. In a highly competitive environment, providing excellent, personalized service can be a relatively low-cost way of gaining a competitive advantage. For this reason, among others, many libraries are paying more attention to customer service.

While libraries have traditionally been evaluated using tangible indicators such as size and quality of their collections, customer satisfaction as a measure of quality is relatively unfamiliar. Libraries have had tools to assist them in decision making on the basis of these tangible measures, but, in contrast to the retail and commercial service industries, there have been few sophisticated tools developed for libraries to monitor and measure customer satisfaction and customer service delivery. One tool that has been used, is the SERVQUAL customer service instrument.

This study relates the authors' experiences with using SERVQUAL in an academic library setting and compares those results with the ones obtained with our own revised and shortened version of the instrument. Results are presented for nine university libraries in Andhra Pradesh.

## Review of Literature

**Parasuraman, Zeithaml, and Berry (1998)** developed a multiple-item scale called SERVQUAL for measuring the five dimensions of service quality (i.e. Reliability, Responsiveness, Assurance, Empathy, and Tangibles). A score for the quality of service is calculated by computing the differences between the ratings that customers assign to paired expectation and perception of each of twenty-two statements. This instrument has been designed and validated for use in a variety of service encounters.

The study conducted by **Cook and Thompson (2000)** to explore the reliability and validity of SERVQUAL scores used to evaluate perceptions of library service quality and history of SERVQUAL along with its library setting, methodology, results, discussion and implications of library service evaluations.

**Sureshchandar et al (2001)** discussed an empirical research on service quality and satisfaction has an unearthed multitudinous archetypes by various researchers across the world. However, all of them have been primarily built on the SERVQUAL instrument, a 22-item scale that measures services quality. The efficacy of SERVQUAL in measuring service quality has been criticized by different authors for diverse reasons, such as the operationalization of expectations, the reliability and validity of the instrument's difference score formulations and the scale's dimensionality across disparate industrial settings. In spite of these, there is a universal conformity that, the 22 items are reasonably good predictors of service quality in its entirety. This paper endeavors to unearth and unravel such critical constituents of service quality which, hitherto, have been untouched in the literature, and advances

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\*Dr. D. Konappa, Librarian, P.V.K.K Institute of Technology,  
Anantapur, Anadhra Pradesh, e-mail: konappad@gmail.com

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a framework that could form the bedrock for a better understanding of customer perceived service quality and its determinants.

**Manjunatha and Shivalingaiah (2004)** conclude in a study, the customer satisfaction and perceptions of quality depends on the extent to which customer expectations are matched by products/ services delivered by the library. Customers attach top priority to reliability of the service and responsiveness from service personnel. They also expect that the library should be equipped with good resources and consistent services. Understanding customers' preferences along service quality dimensions reveal their priorities and addressing the same would reduce the gaps in service quality. Good words of appreciation from satisfied customers will bring more loyal users to the library.

**Sherikar, Jange and Sangam (2006)** conducted a study on "Performance Measurement of quality services in academic and research libraries in India". A total of 1200 questionnaires were distributed to the user community of ten university libraries of Karnataka, India, of which 768 (64%) were duly received from students, research scholars and faculty members. The quality dimensions in the light of SERVQUAL viz., Reliability, Responsiveness, Assurance, Access, Communication, Tangibles, Empathy and Security have been applied and the results indicate that the service quality dimensions of reliability, responsiveness, assurance, access, communication and tangibles applied to university libraries in Karnataka have are found to be satisfactory to a little extent based on the scale techniques. The study suggests several areas for future research and for collaboration among library managers, educational administrators, scholars and measurement theorists towards improving the performance of library and information system in India to meet the high standards of service quality in libraries to serve the users with utmost care and diligence.

**Hong and Bassham (2007)**<sup>142</sup> explore the concept of customer service and outline the practices and conditions required to provide excellent customer service in libraries. The three-dimension approach to service management is introduced with practical advice on how this approach is applied to libraries. A customer service self-assessment provides a practical guide and a useful source of information for libraries planning to set up customer service programs or to improve their customer service efforts.

## **SERVQUAL**

Parasuraman, Zeithaml, and Berry developed a multiple-item scale called SERVQUAL for measuring the five dimensions of service quality (**RATER** i.e. **R**eliability, **A**ccess, **T**angibles, **E**mpathy and **R**esponsiveness). A score for the quality of service is calculated by computing the differences between the ratings that customers assign to paired expectation and perception of each of twenty-two statements. This instrument has been designed and validated for use in a variety of service encounters. In addition, many investigators have adapted the SERVQUAL measures to evaluate the service quality of libraries.

To measure the quality in the university libraries, the investigator used eight important dimensions in SERVQUAL viz., Reliability, Responsiveness, Assurance, Access, Communication, Tangibles, Empathy and Security and the same has been incorporated in the user's questionnaire. Further the questionnaire has been bifurcated according to these eight dimensions to measure the quality effectiveness of the university libraries of Andhra Pradesh. The WAM (Weighted Arithmetic Mean) and Standard deviation pertaining to various questions as grouped under these eight dimensions has been computed.

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The service quality dimensions of Reliability in Library and Information Services (LIS) of various university libraries in Andhra Pradesh have been analysed by 5 point scale technique using parameters as "Not at all", "Little Extent", "Some Extent", "Large Extent" and "Full Extent".

### **Statement of the Problem**

For the every purpose, it was felt to undertake and conduct a thorough study on new modern measuring techniques namely SERVQUAL and its applications in higher education institutes like Universities. Therefore, the present study entitled 'A study on Measuring the Customer Service in University Libraries: based on SERVQUAL model' is undertaken.

### **Objectives**

- To elucidate the modern management techniques in Library and Information Services
- To determine whether the SERVQUAL model as previously tested in our library gave comparable results, especially with regard to its expectation scale, in other university libraries
- To test the comparability of the results of SERVQUAL in the same setting

### **Scope and Limitations of the Study**

At present there are 43 universities which cover various subjects and which were established from 1918 onwards. Owing to the age and importance the following University Libraries were undertaken for this study, as they are deemed well established.

**Table 1 Category wise List of Universities in Andhra Pradesh under study**

<b>Category</b>	<b>Sr.No.</b>	<b>Name of the University</b>	<b>Year of Establishment</b>
Old Universities	1	Osmania University	1918
	2	Andhra University	1927
	3	Sri Venkateswara University	1954
Young Universities	4	Kakatiya University	1976
	5	Nagarjuna University	1976
	6	Sri Krishnadevaraya University	1976
Special Universities	7	University of Hyderabad	1974
	8	Rasthriya Sanskrit Vidya Peetha	1961
	9	Acharya N.G. Ranga Agricultural University	1982
	10	Sri Padmavathi Mahila Viswavidyalayam	1983

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## Methodology

As stated earlier, the present study is confined only to ten universities of Andhra Pradesh, survey method is adopted to collect data for the present study.

A structured questionnaire was designed and distributed among users in the university libraries. Due to shortage of time questionnaires were distributed among the users of different Universities of Andhra Pradesh. Out of 4000 researchers 3058 (76.25%) returned the questionnaires.

## Pilot study

The pilot study was conducted with a sample of 150 Users in different university libraries. Based on the study and results, the questionnaire was further modified and developed to suit the stated objectives. Accordingly, the revised questionnaire was finally administered.

## Data Analysis

The data collected from the questionnaires has been analysed to fulfill the stated objectives. For this purpose, Statistical Package for the Social Science (SPSS) software package has been used. Statistical analysis techniques such as WAM Analysis and Standard Deviation have been employed depending on the nature of the data collected from the respondents.

## Summary and Findings

### Reliability with reference to information services:

Based on the WAM values from the **Quality Management in Library and Information Services: Reliability among Users Vs Universities**, the first 5 rankings for Reliability are as follows:

Rank 1	Books	(844.93)
Rank 2	Reference sources	(823.27)
Rank 3	Internet	(802.93)
Rank 4	Periodicals	(801.33)
Rank 5	Thesis/dissertations	(764.67)

Standard Deviation value ranges between 1.00 and 1.39

### Reliability with reference to information services:

Based on the WAM values from the **Quality Management in Library and Information Services: Reliability among Users Vs Universities**, the first 5 rankings for Reliability are as follows:

Rank 1	Internet	(823.00)
Rank 2	Indexing and Abstracting	(808.93)
Rank 3	The library classification and cataloguing of library materials are consonant	(807.53)

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Rank 4	Bibliographic	(787.13)
Rank 5	Provide correct answers to my queries	(759.33)

Standard Deviation value ranges between 1.00 and 1.39.

**Responsiveness:**

Based on the WAM values from the **Quality Management in Library and Information Services: Responsiveness among Users Vs Universities**, the first 3 rankings for Responsiveness are as follows:

Rank 1	The library is well served by the qualified and knowledgeable staff at service sections in the library	(836.33)
Rank 2	The library staff attend to my request promptly	(798.27)
Rank 3	The library materials are in good conditioned	(797.27)

Standard Deviation value ranges between 1.02 and 1.32.

**Assurance:**

Based on the WAM values from the **Quality Management in Library and Information Services: Assurance among Users Vs Universities**, the first 3 rankings for Assurance are as follows:

Rank 1	The library staff are efficient in providing relevant materials from the library collection	(795.27)
Rank 2	The library staff are near and inviting to the readers	(793.27)
Rank 3	Understand and grasp easily the information, I am seeking	(754.73)

Standard Deviation value ranges between 1.05 and 1.26.

**Access:**

Based on the WAM values from the **Quality Management in Library and Information Services: Access Among Users Vs Universities**, the first 4 rankings for Access are as follows:

Rank 1	The library opening/closing hours are convenient and ideal	(834.67)
Rank 2	The printed catalogue is available for searching and getting the reliable information	(827.87)
Rank 3	The library staff is adequate	(825.33)
Rank 4	Circulation service	(817.80)

Standard Deviation value is ranges between 1.05 and 1.27.

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**Communication:**

Based on the WAM values from the **Quality Management in Library and Information Services: Communication-among Users Vs Universities**, the first 3 rankings for Communication are as follows:

Rank 1	The library facilities and services available in the library are known to me	(815.93)
Rank 2	Directional signs/guides in the library are clear, helpful and meaningful	(812.87)
Rank 3	The communication skill of library staff providing services	(775.80)

Standard Deviation value is ranges between 1.00 and 1.26.

**Tangibles:**

Based on the WAM values from the **Quality Management in Library and Information Services: Tangibles among Users Vs Universities** the first 5 rankings for Tangibles are as follows:

Rank 1	The library furniture is convenient and comfortable	(819.93)
Rank 2	There is sufficient lighting and ventilation in library to carry out my work comfortably	(812.80)
Rank 3	The library materials are in good condition	(797.27)
Rank 4	The study halls are silent enough to enable me to work peacefully	(789.67)
Rank 5	Good working condition of photocopier	(775.40)

Standard Deviation value is ranges between 1.06 and 1.44.

**Empathy and Security:**

Based on the WAM values from the **Quality Management in Library and Information Services: Empathy and Security-among Users Vs Universities**, the first and second rankings for Empathy and Security are as follows:

Rank 1	The library staff take personal interest when I approach them for information	(741.80)
Rank 2	I feel safe in the library building	(824.07)

Standard Deviation value is ranges between 1.06 and 1.28.

**Conclusion**

The customer satisfaction and perceptions of quality depend on the extent to which customer expectations are matched by products/services delivered by the library. Customers attach top priority to reliability of the service and responsiveness from service personnel. They also expect that the library should be equipped with good resources and consistent services. Understanding customers'

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preferences along with service quality dimensions reveal their priorities and addressing the same would reduce the gaps in service quality. Good words of appreciation from satisfied customers will bring more loyal users to the library. This requires service providers' sincerity, self interest and commitment to serve the customers. Periodic customer surveys will give insights into the areas that require more attention.

However, the WAM scores in the SERVQUAL model do suggest that additional research needs to be done to verify its results. Some possible avenues include replicating the survey methodology in the same service area to confirm the results, restoring the seven-point Likert scale to increase the level of discrimination and to see if the results are more consistent with SERVQUAL, and using the survey to measure customer satisfaction in another service area entirely.

The service quality dimensions of reliability, responsiveness, assurance, access, communication and tangibles applied to university libraries in Andhra Pradesh are found to be satisfactory as there is not much deviation found among the respondents.

### References

1. Jon E. Crossno and et al. (2001). Assessment of Customer Service in Academic Health Care Libraries (ACSAHL): an instrument for measuring customer service. *Bulletin of Medical Library Association*, Vol.89, No.2: p.170-176.
2. Parasuraman, A., Berry, L.L. and Zeithaml, V.A. (1988). SERVQUAL: a multiple item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, Vol.64, No.1: p.12-40.
3. Parasuraman, A., Zeithaml, V.A and Berry, L.L. (1988). SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, Vol.64, No.1: p.12-40.
4. Konappa, D. (2012). Total Quality Management (TQM) and its application in university libraries of Andhra Pradesh: A study. Ph.D Thesis submitted to Sri Venkateswara University, Tirupati (unpublished). Research Supervisor Dr.D.Chandran.
5. Cook, Colleen and Thompson, Bruce. (2000). Reliability and Validity of SERVQUAL Scores Used to Evaluate Perceptions of Library Service Quality. *Journal of Academic Librarianship*, Vol. 26, No. 4: p. 248.
6. Suresh Chandar and et al. (2001). Customer perceptions of service quality: A critique. *Total Quality Management*, Vol. 12, No. 1: p.111.
7. Manjunatha. K and Shivalingaiah. D (2004). Customer's perception of service quality in libraries. *Annals of Library and Information Studies*, Vol.51, No.4: p.145-151.
8. Sherikar, A., Jange, S and Sangam, S.L. (2006). Performance Measurement of quality services in academic and research libraries in India. In C. Khoo, D. Singh & A.S. Chaudhry (Eds.), *Proceedings of the Asia-Pacific Conference on Library & Information Education & Practice 2006 (A-LIEP 2006), Singapore, 3-6 April 2006* (pp. 61-67). Singapore: School of Communication & Information, Nanyang Technological University.
9. Konappa, D and Chandran, D. (2011). Service Quality in Public Library at Kadapa (AP): An Evidence of District Central Library. *Proceedings of the 56th Indian Library Conference on Public Libraries of the Future: opportunities and challenges*, Global Jindal University, July 21-23, Sonapat, 2011

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- 
10. Hong M., and Bassham, M.W. (2007). Embracing customer service in libraries. *Library Management*, Vol.28, No.1/2: p.53-61.
  11. Cronin JJ, Taylor SA. Measuring service quality: a reexamination and extension. *J Market.* 1992. Jul; 56(3):55-68.
  12. Nitecki DA. (1995). An assessment of the applicability of SERVQUAL dimensions as customer-based criteria for evaluating quality of services in an academic library. Baltimore, MD: University of Maryland.
  13. White MD, Abels EG. Measuring service quality in special libraries: lessons from service marketing. *Spec Libr.* 1995. Winter; 86(1):36-45.

The best of my education has come from the public library ... my tuition fee is a bus fare and once in a while, five cents a day for an overdue book. You don't need to know very much to start with, if you know the way to the public library.

**Lesley Conger**

If information is the currency of democracy, then libraries are its banks.

**Wendell H. Ford, U.S. Senator, Kentucky, 1974-1998.**

If we didn't have libraries, many people thirsty for knowledge would dehydrate.

**Megan Jo Tetrick**

Libraries are reservoirs of strength, grace and wit, reminders of order, calm and continuity, lakes of mental energy, neither warm nor cold, light nor dark. The pleasure they give is steady, unorgastic, reliable, deep and long-lasting. In any library in the world, I am at home, unselfconscious, still and absorbed.

**Germaine Greer**

Libraries are starting places for the adventure of learning that can go on whatever one's vocation and location in life. Reading is an adventure like that of discovery itself. Libraries are our base camp.

**James H. Billington**

Libraries, which are as the shrines where all the relics of the ancient saints, full of true virtue, and that without delusion or imposture, are preserved and reposed.

**Francis Bacon**

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## IIM Library Consortium: do we have a success story to tell?

Mallikarjun Dora\* and H. Anil Kumar\*\*

### Abstract

*Consortium is a group of libraries that cooperate with each other for mutual benefit. The paper analyzes the different types of consortium in India. The main objective of the paper is to review the IIM consortium, which was formed in the year 2000, to benefit the IIM libraries in developing their collection and enhancing the services provided to their users. The paper describes the IIM Library Consortium Model, cost benefit analysis and discusses the future direction of the same*

### Introduction

Consortia formation is an important outcome of library cooperation and play a major role in negotiation and licensing of electronic resources providing the participant institutions a great relief in saving the cost of the acquisition of resources which otherwise seems unaffordable in light of budget constraints. They also contribute to sharing of resources on ILL, cross linking OPAC and collaboration in different projects by sharing of expertise. In recent times consortia has become important as many institutions are impacted by budget cuts or limited budgets.

According to Busby(2011) the positive outcome of group acquisition include:

- Lower cost of goods and services
- Increased access to existing and new resources
- More quantity of resources
- Reduced/shared risk to gain common/shared rewards
- Shared negotiations, the ability to draw on expertise not available in one's own library

Wade (1999) studied 11 different consortia of academic libraries from five countries and found that "many of the consortia surveyed undertake a limited range of activities of the type that can exist within an informal arrangement. These include reciprocal borrowing, interlibrary loan agreements, negotiating database licenses and seminars."

While studying different models of consortia in academic library segment, Allen and Hirshon(1998) found that "there is no specific model for consortia, they are highly decentralized one to highly centralized consortia. Each Model promises upon different values, objectives, and political realities of its membership. Consortia can also be evolving from one model to another as their members become more comfortable with each other to develop a collective agenda."

There are a number of consortia working in various countries working on different models. The research by Reinhardt and Boekhorst (2001) on Germany, Jokic(2001) on Croatia, Hormia-poutanen

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\* Mr.Mallikarjun Dora, Professional Assistant \*\*Dr. H. Anil Kumar, Librarian  
Indian Institute of Management, Ahmedabad, email: anilkumar@iimahd.ernet.in,  
dora.mallikarjun@gmail.com

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(2006) on four different European countries of Greece, Russia, United Kingdom and Finland, Borm and Dujardin (2001) on Belgium , Ossai (2010) on Nigeria, Xu (2010) on China and Bostick(2001) on USA study different library consortia and their models.

It can be said that consortia models vary across nations and contexts and are mainly need based. The main character of a consortium is determined by the participating members and evolves to serve the changing needs of the member institutions.

### Consortia in India

In India there have been studies that have been undertaken on different library consortia and their models. Arora and Trivedi (2010) discuss the governing structure, participating institutions, subscribed resources and negotiation on licensing terms and conditions in INDEST and UGC INFONET consortia. Ghosh, Biswas and Jeevan(2006) discuss different models and methods available in Indian consortia. Singh and Rao (2008) have provided an overview of list of consortia in India. The table 1 below lists the various consortia that exist in India and their governing model.

**Table 1: Consortia in India**

<b>Consortia Name</b>	<b>Established on</b>	<b>Sources of Fund</b>	<b>E Resources covered</b>	<b>Members</b>
INDEST-AICTE Consortium	2003	Ministry of Human Resource Development, India	34	57 Core member 60 AICTE supported 1245 Self supported
UGC- INFONET consortium	2004	University Grant Commission, India	29	320
National knowledge Resource Consortia (earlier CSIR consortium)	2001 (named NKRC in 2009)	Govt. Funded	33	39 CSIR 24 DST
Forum for Resource Sharing in Astronomy (FORSA)	1981	Voluntary	10	12 members
Consortium for e-Resources in Agriculture	2007	NAIP Project	9	126 members
Health Science Library and Information Network	2003	Shared funding	11	666 members

Electronic Resources in Medicine (ERMED) Consortium	2008	Director General of Health Service	9	98 Members
IIM Library Consortia	2001	Shared funding	3	6 Old7 new

### **IIM Library Consortia: History**

The idea of IIM Library Consortium was initiated in 2000 by the librarians of IIMs with the objective of resource sharing of CD-ROM/Digital databases that were being regularly subscribed by IIM Libraries. The formal approval for the same came from the All IIM Directors meeting held at Indian Institute of Management, Kozhikode. August 2001. For further strengthening the consortium arrangement, the second meeting of IIM librarians was held at Indian Institute of Management, Bangalore during September 2001. In the same meeting 15 vendors/publishers/agents of databases and e-journals were invited for presentation of their products along with special consortia pricing offer. The IIM librarians held detailed discussion and based on the consensus derived, the following outcomes were arrived at:

1. It was found that, it is of utmost importance that all IIMs reach a consensus on:
  - Retaining the current journals subscription for the respective publishers
  - Bearing equally the additional costs for taking the advantage cross sharing
  - Exploring the other possibilities of cooperative acquisition of journals, e.g., subscription to multiple copies of same journals at a discounted price.
2. This meeting also provided the scope for examining various repackaged information services on India. As such information was not readily available on foreign industry information sources and therefore it was recommended that, in addition to the existing subscribed Indian sources, the following could also be subscribed to by all six IIMs at Consortia rates:
  - CAPITALINE
  - EQUITY RESEARCH STATION
  - INDIA INFORMER
  - CRISIL
3. It was also realized that during the initial stages of the consortia formation, it was possible to increase the information resource base by spending the same money or maybe marginally more. This is mainly because of the high costs of databases and a very small number of participating members in the consortia.
4. Some of the databases, which were currently being subscribed to by one or more IIMs, and hence proved the relevance to the IIM community, were negotiated for consortia offering. The negotiations yielded good results with the prices being drastically reduced for the same resources. For example

the discounts offered were up to 40 to 45% in some cases. The following databases were offered on discounted prices:

- ABI/INFORM Global Fulltext
- Business Sources Premier
- Gale Products (business and company resource center) suite
- Global Marketing Information Database (Euromonitor)

Though the meeting enabled the IIM Librarians to elicit better pricing offers for the databases, it actually turned out to be that the e-journals subscription which gave the consortium the real look. Under the IIM Library Consortium, shared access to Taylor and Francis, Kluwer online journals and John Wiley online journals was possible and the participating libraries paid marginal additional costs (Jambhekar, etal, 2003) for the additional access.

### **IIM Library Consortia: Current status**

**Table 2: IIM Library Consortia Model**

Organizer	All IIMs
Sources of Funds	No source funds
Consortia Model	Voluntary (restricted to IIMs only)
Consortia structure	Decentralized
Electronic Resources	Wiley, Springer and Taylor and Francis Journals

**Table 3: List of Old IIMs in the Consortia**

<b>Sr. No</b>	<b>Name</b>	<b>Short Name</b>	<b>Established</b>	<b>City /Town</b>	<b>State /UT</b>	<b>Website</b>
1	Indian Institute of Management Calcutta	IIM-C	1961	Kolkata	West Bengal	iimcal.ac.in
2	Indian Institute of Management Ahmedabad	IIM-A	1961	Ahmedabad	Gujarat	iimahd.ernet.in
3	Indian Institute of Management Bangalore	IIMB	1973	Bengaluru	Karnataka	iimb.ernet.in
4	Indian Institute of Management Lucknow	IIML	1984	Lucknow	Uttar Pradesh	iiml.ac.in

5	Indian Institute of Management Kozhikode	IIMK	1996	Kozhikode	Kerala	iimk.ac.in
6	Indian Institute of Management Indore	IIMI	1998	Indore	Madhya Pradesh	iimidr.ac.in

**Table 4: List of New IIMs, the potential group can be added to the consortia**

Sr. No	Name	Short Name	Established	City /Town	State /UT	Website
1	Indian Institute of Management Shillong	IIMS	2007	Shillong	Meghalaya	iimshillong.in
2	Indian Institute of Management Rohtak	IIM-R	2010	Rohtak	Haryana	iimrohtak.ac.in
3	Indian Institute of Management Raipur	IIM-Rp	2010	Raipur	Chhattisgarh	iimraipur.ac.in
4	Indian Institute of Management Ranchi	IIM-Ra	2010	Ranchi	Jharkhand	iimranchi.ac.in
5	Indian Institute of Management Tiruchirappalli	IIMT	2011	Trichy	Tamil Nadu	iimtrichy.ac.in
6	Indian Institute of Management Udaipur	IIMU	2011	Udaipur	Rajasthan	iimu.ac.in
7	Indian Institute of Management Kashipur	IIM-Kp	2011	Kashipur	Uttarakhand	iimkashipur.ac.in

### Licensing Policy

License agreement which include terms and conditions is an important document in electronic resource acquisition. The consortium considers issues like walk-in users access to the content; provision of generating copies of interlibrary loan, perpetual access and archival rights to the subscribed content, campus wide/ IP based unlimited access, remote log in access, permission to include subscribed resources into course packs, price rise, price cap, and so on.

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With regard to ILL sharing, few publishers do have restrictions and for example, Taylor and Francis clearly states in their license restricting provision of content to other libraries on ILL. Some of the publishers permit the provision of hard copy of the papers on ILL and restrict the use of soft copy for ILL. In case walk-in users, some publishers clearly mention in their terms and conditions that walk-in users cannot be allowed to access the subscribed resource. The members need to thoroughly understand the license agreement and negotiate with the publishers to make provisions to protect the participating libraries interests and also to avoid breaking the terms mentioned in the agreements.

### **Negotiation**

There is no one-size fit-all model that can be adopted while negotiating with vendors or publishers. The IIM Library consortium always negotiated with each vendor or publisher separately as the needs were different for each resource. Negotiation was done on different aspects like price, content, access, service and above all license agreement terms and conditions. License agreements were discussed and deliberated as already mentioned in the licensing policy section above. IIM Library consortium has presently subscriptions from Wiley, Springer and Taylor and Francis. The procedure that was decided in IIM librarians meeting of all participating libraries was to list out all the journals (of these three publishers) subscribed by each IIM. It was also decided to go with e-only subscriptions to all the journals and this plays an important role in standardizing the model for negotiation with publisher. Some participating libraries insisted in retaining print subscriptions and it was left to the individual libraries to decide. However the additional pricing for print was negotiated by the consortium.

The listing that was compiled became the basis for the proposal which was discussed with the publisher. The proposal was to seek access to all unique titles from the list to all members of the consortium. This implied that the consortia resources would be shared by all the IIM libraries by paying an additional cross sharing access fee for the online access. In the early years, negotiation was mainly for cross sharing and was based on the principle of retaining the print subscriptions by the member libraries. The problem with this model was that members who had large subscriptions had to pay more for the same access, this was in a sense inequitable.

There was a need to improve the efficiency of the model and the issues to be addressed were:

1. Equal cost for equal content principle to be adopted.
2. Perpetual rights to subscribed content to be provided.
3. As more members join the consortium, benefits should accrue to both the publisher and the members.

In the coming years negotiations yielded better results. Firstly perpetual access right to the content (subscribed year) was pursued with the publishers and this was adopted in the model. Later on the perpetual access right from 1997 onwards to the subscribed content was negotiated and this was accepted by one publisher. Negotiations also bore fruit in issues that included price rise and price cap, switching titles and adding more journals in the same price band. It can be said that the negotiation process evolved over the years and centred round the simple principle of equal access and equal cost to all members for each publisher and benefit to both the members and publishers with increase in membership to the consortium. One more issue was addressed in this model where-in new members were not burdened with high costs of accessing resources that were decided by the

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older members. Therefore the model provided for almost no cost in the first year to gradually increasing the individual member cost to equal the older members cost over 2 to 3 years. It gave time for the institution also to grow to the level of older IIMs in terms of programmes, faculty and students. The publishers also gracefully accepted this to help new IIM libraries to develop.

### **Salient features of IIM Library Consortia**

- Presently there are three publishers in current consortia that include Wiley, Springer and Taylor and Francis.
- The start point of the negotiations was the existing print subscriptions and negotiations were done with each publisher individually and in some cases with their representatives.
- Cross sharing of existing all journal subscriptions across IIM libraries.
- Invoicing was through vendors who represented the publishers.
- Negotiation could be beyond price and extend to enhanced access, archival access, perpetual rights and license agreements.
- Consortium adopted a flexible model wherein there was no restriction on adding or removing titles from the core subscription but could be done at the start of the year or when the consortium agreement is renewed. This was mainly because addition or deletion had implications on the total value.
- With the increase in number of members, the offer should benefit existing members in addition to providing new customers to the publisher.
- In addition to negotiation on procurement of e-resources the members shared:
  - Issues, concerns and solutions to managing IIM Libraries
  - Best practices
  - IT application experiences
  - Strengthening of ILL processes
  - Extending access to students and faculty of various IIMs to other IIM Libraries
  - Exchange of working papers
  - Cross connecting staff of IIM libraries in an informal manner.
  - Discuss the larger INDEST consortium interests of IIM libraries
  - Compiling union catalogue of e-resources across IIM libraries

### **Conclusion**

Allen and Hirshon (1998) suggest that though consortia members may come together to reduce common costs (such as purchase of databases), these new consortia are not simply purchasing clubs. The most successful consortia develop institutional strategic alliances in which a heightened level of resource sharing binds the member institution together. The very idea of the above is that consortia should evolve from its usual role of not only bargaining for better price but come out with different strategies for collaboration in higher level like sharing on ILL, interchanging staff, creating a repository of institutional knowledge, etc.

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IIM library consortium is growing with more members being added with the formation of new IIMs across the country. The consortium is evolving into an effective facilitator to enhance library services in various IIM libraries. To a large extent, the success of IIM library consortium depends on the role of the directors and library committee chairpersons of the IIMs. There seems to be a great potential to take the IIM library consortium to the next level with the larger objective of promoting research and enhance learning experience of the IIM academic community.

## References

1. Wade, R. (1999). The very model of a modern library consortium. *Library Consortium Management: An International Journal*, 1(1/2), 5–18. doi:10.1108/14662769910284230
2. Jambhekar, A., Pandian, P., Gupta, Dinesh K.(2003). *Partnership for success : A case of IIMs Libraries Consortia Model*. Retrieved from <http://www.tifr.res.in/~libws/paul-paper1.htm>
3. Allen, B. M., & Hirshon, A. (1998). Hanging Together To Avoid Hanging Separately: Opportunities for Academic Libraries and Consortia. *Information Technology and Libraries*, 17(1), 36–44.
4. Reinhardt, W., & Boekhorst, P. te. (2001). Library consortia in Germany. *Liber Quarterly*; 11 [1], 2001. Retrieved from <http://igitur-archive.library.uu.nl/DARLIN/2005-0520-200052/UUindex.html>
5. Jokic, M. (2001). Library consortia in Croatia. *Liber Quarterly*; 11[1], 2001. Retrieved from <http://liber.library.uu.nl/publish/articles/000407/article.pdf>
6. Hormia-Poutanen, K., Xenidou-Dervou, C., Kupryte, R., Stange, K., Kuznetsov, A. V., & Woodward, H. M. (2006). Consortia in Europe: Describing the Various Solutions through Four Country Examples. *Library Trends*, 54(3), 359–381.
7. Borm, J. van, & Dujardin, M. (Marianne). (2001). Consortia for Electronic Library Provision in Belgium. *LIBER Quarterly; Volume 11 (2001) / No 1*. Retrieved from <http://igitur-archive.library.uu.nl/DARLIN/2005-0511-200119/UUindex.html>
8. Ossai, N. B. (2010). Consortia Building among Libraries in Africa, and the Nigerian Experience. *Collaborative Librarianship*, 2(2), 74–85.
9. Xu, D. (2010). CALIS, CASHL and Library Consortium Trend in China. *Library Management*, 31(8/9), 690–701. doi:10.1108/01435121011093450
10. Bostick, S. L. (2001). Academic Library Consortia in the United States: an introduction. *Liber Quarterly*; 11[1], 200. Retrieved from <http://cdigital.uv.mx/handle/123456789/5931>
11. Arora, J., & Trivedi, K. (2010). INDEST-AICTE Consortium: Present Services and Future Endeavours. *DESIDOC Journal of Library & Information Technology*, 30(2), 79–91.
12. Arora, J., & Trivedi, K. (2010). UGC-INFONET Digital Library Consortium: Present Services and Future Endeavours. *DESIDOC Journal of Library & Information Technology*, 30(2), 15–25.
13. Ghosh, M., Biswas, S.C., Jeevan, V.K.J. (2006). Strategic cooperation and consortia building for Indian libraries: models and methods. *Library Review*, Vol. 55 Iss: 9 pp. 608 – 620
14. Kumar, B. V., & Murthy, A. O. (2008, November 6). Consortium for Medical Libraries in India and Abroad: A Study. Article. Retrieved July 6, 2012, from <http://ir.inflibnet.ac.in/dxml/handle/1944/1119>

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## Smart Partnership – Collaborative Initiative

Jitendra B. Parmar\*

### Abstract

*The aim of this paper is to discuss and highlight collaborative efforts made by libraries. There are many initiatives by librarians and other information professionals that are planned and executed with the purpose of enhancing their knowledge and skills and increasing awareness among library users. This paper is prepared to answer two basic questions in the context of smart partnership. The first question is what are the smart partnership initiatives by libraries and the second question is what are the challenges and opportunities faced by libraries with regards to smart partnership. Smart partnership allows libraries to be involved in an intellectual collaboration as well as giving them opportunities to share and save resources.*

### Introduction

India has a large educational system comprising thousands of colleges and hundreds of universities along-with several institutes of higher education. The college and university libraries, being the nerve centre of the higher education and learning, play a vital role in supporting many activities, such as teaching, research and publication. Our higher education system is passing through a lot of challenges due to economic recession and cost-recovery initiatives. The college and university libraries in India are also facing the challenges to meet the user requirements due to various reasons such as exponential growth of knowledge, price escalation and budget restrictions. The increasing growth in the enrolment of students and researchers and lack of adequate infrastructure facilities have further aggravated the problems for the college and university libraries. The situation demands for serious thinking on the capabilities to compensate for reduced budgets. In this time, collaborative initiatives are necessary in all related fields of library.

### What is Resource Sharing?

Resource sharing in libraries is defined as a mode of operation whereby resources are shared in common by a number of libraries. Resource sharing entails reciprocity and employing partnership in which each member has something useful to contribute to others willingly. The term 'Resource' is used for any or all of the materials, functions, services and the expertise of the professional and non professional staff. The term 'Sharing' implies apportioning, allotting or contributing something that is owned to benefit others. It implies partnership for mutual benefit.

### Growth of Information

The growth of the information and communication technology changed the entire library activities from traditional to digital and printed documents to e-resources. Modern libraries are adopting various electronic resources for their collection development and the users are accessing these resources on their fingertips as and when they require. However, to provide better electronic resources in this

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\*Mr.Jitendra B. Parmar, Librarian, Shree Narayana College of Commerce, Ahmedabad,  
email: italiya\_jitendra@yahoo.co.in

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digital environment, there is a need to select, evaluate and organize e-resource in the best possible way to provide maximum use, both to the users and the staff.

### **Importance of Resource Sharing**

In present times, libraries play a vital role in the dissemination of knowledge and information and are an important element of the foundation of knowledge economy. No library can afford to house all the documents that are published in the area of its specialization. Libraries have been procuring journals and other literature in print format to meet their knowledge needs. However, with the advent of internet facilities and advancement of web technology, almost all reputed journals are now available on-line and can be easily accessed by the scientists/teachers over the network or through the Consortium. This has resulted in tremendous savings of time of library professionals and the users.

### **Smart Partnership**

Smart partnership is an initiative that would benefit many users, libraries and other information agencies that are keen to work with each other. Shimada and Wasserstrom (2010) explained how collaborations allow two libraries from two different regions to work together in preservation and digitization that would later add up to the collections of both libraries. McMenemy (2010) suggested that library practitioners should work closely with academia to encourage the research culture among them that would later lead to better development of library and information field. Smart partnership is very useful in governments, organizations and people for collaborating, sharing experiences and wisdom for long-term mutual gains. Libraries and information providers all over the world have been involved in smart partnership in one way or another for a very long time. Library cooperation may just be for inter-library loan or it could be extended to full resource sharing or smart partnership that goes beyond resource sharing, where members are working and collaborating together to achieve common goals and objectives either between two or more libraries locally, regionally or world-wide. The collaboration between libraries could be done through members working together in some form of ad-hoc projects or it could occur through a formal and official bond by signing Memorandum of Understanding (MoU) or Memorandum of Collaboration (MoC).

### **Conclusion**

As smart partnership is not a onetime project, there is lot that could be done. The future development plans could ensure on going collaborations among libraries. As there are a lot of opportunities to strengthen smart partnership, current collaboration should encompass other areas of knowledge as well as knowledge enhancement through trainings, workshops etc.. The initiatives that are already in place should be continued because the benefits are evident to all participating organizations. Digitization of materials need to be enhanced to increase accessibility and to ensure efficient and effective knowledge sharing. As digitization could reduce cost and redundancy, libraries could save more money if cooperation between agencies in sharing their digital resources is made possible. Moreover, digitization could assist small libraries that cannot afford to buy many resources on their own, if they are given the chance to get digital copies at lesser price or free of charge. Thus, smart partnership is one of the potential ways to develop and enhance fruitful and effective resource and knowledge sharing.

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## References

1. Marketing information products and services: a primer for librarians and information professionals by Jain Abhinandan k. 1999.
2. Kumar,P.S.G.' Quality in Library services' National conference on innovative Best practice in library and information services, Akola
3. 'Library Progress (International journal Jan-Jun 2010.Editor by Dr. A.k. Sharma.
4. Girja kumar defining the concept of information needs New Delhi.
5. National conference on Agricultural Librarians and user community (NCALUC)-2011(17-19 November-2011)

The library is a temple of learning, and learning has liberated more people than all the wars of history.

**Carl Rowan**

The Library is the Heart of the University.

**Charles W. Eliot**

The library profession is ... a profession that is informed, illuminated, radiated by a fierce and beautiful love of books. A love so overwhelming that it engulfs community after community and makes the culture of our time distinctive, individual, creative and truly of the spirit.

**Frances Clark Sayers**

Our libraries are not cloisters for an elite. They are for the people, and if they are not used, the fault belongs to those who do not take advantage of their wealth.

**Louis Dearborn L'Amour**

The richest person in the world - in fact all the riches in the world - couldn't provide you with anything like the endless, incredible loot available at your local library. You can measure the awareness, the breadth and the wisdom of a civilization, a nation, a people by the priority given to preserving these repositories of all that we are, all that we were, or will be. Our libraries are being eroded alarmingly by inflation. It behooves us - all of us - to stop the rot by the application of that prime preserver - money.

**Malcolm Forbes**

There was one place where I could find out who I was and what I was going to become. And that was the Public Library.

**Jerzy Kosinski**

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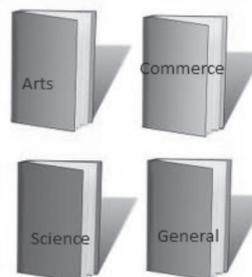


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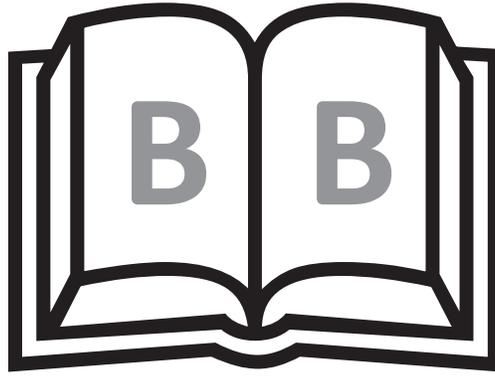
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