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## Transition in Information Services : A Digital Experience

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### Abstract

*Web based resources have become increasingly important to the Academic community where the thrust is on on-going Research, Time bound projects and Consultancy. With information being added at a tremendous rate on the Net it becomes difficult to find the required information easily. The expectations from the users are its services. From the library and the librarian's point of view the services should reflect the users quest for information. Services are the strength of any Library as they are no longer mere store houses. Reference service is one service that still retains its content, glory and importance. Reference service concerns with the internal and external resources through the Internet and other networks. These services are provided not only personally but also through electronic means. Most users go for a Google search still thinking how could the search strategy be better. Most times the answers lie in their Libraries without them knowing. A module E-Ref Desk on the lines of Ask a Librarian is designed to answer such queries.*

**Keywords :** Digital Information Services, Information Services, Digital Libraries

### 0. Introduction

The mission of the libraries i.e., providing excellent information service to patrons has not changed. Libraries are now more known as Information centres while adapting the vagaries of changing technology. Technology has changed the way the librarians serve their users and this change will continue in future also. While continuing to provide many traditional information services, librarians are developing new skills and taking on new roles that are necessary to support technology-based services.

Information Technology has its impact in all areas of library work such as providing user access to digitized resources in the local environment and also remote-access. It is in this context that libraries must develop individual solutions that are appropriate to local circumstances. Many libraries have added electronic materials and services to the traditional items associated with physical space. These resources available via the Web include e-books, online catalogs, licensed databases, e-journals, research guides and finding aids, freely available Web resources and local digital collections.

The need to provide value-added library services In Academic Libraries is all the more to help in Academic and Research pursuits. The user expectations have increased with the proliferation of electronic sources. And this has made them increasingly important in providing reference service to library users. Librarians have to make these information resources accessible on the campus and also link the libraries to other networks away from the campus.

Libraries have to redesign their services on context rather than form and delivered to the users. More so as the Information is available electronically through networks and consortia licensing agreements 24 hours a day. In fact Technological developments and the impact of Information Technology in libraries have led to the emergence of new services.

Reference services also known as Information Services are an important standard service in library and information centres.

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Traditionally it is a one to one service with the user and reference librarian. The user is helped by the sources available to meet his needs. Libraries are a great place to discover answers to many questions. For most people, the best place to start looking is the library of the organization where one is associated with, or people do go to well-maintained public Libraries for consulting and referencing.

Information services are receiving more attention as librarians have taken a proactive role to make the users know what the activities and holdings of the Library are, all the more due to the vast and varied electronic information resources available now. In fact they are venturing out of the library, working with the faculty, computing facilities, telecommunications and campus wide activities. The new learning technologies have provided librarians with greater scope for a larger role in distant education programs also. In fact librarians should provide guidance to remote users to enable them to use information resources.

Many college and university libraries have a general reference desk staffed by a librarian.

However it has been observed that many Libraries abroad have a general reference desk, full-time reference librarians with subject specialties and off-desk responsibilities such as collection development and instruction, and a number of part-time librarians who work reference desk hours only. This type of an environment has to be cultivated in Academic Libraries where the thrust is on imparting education and pursuing Research and Consultancy.

Since the Web and digital libraries are meant for providing direct access to information sources and services without much help of human intermediaries, there is an ongoing thought process as to whether the reference services in digital environment will survive. The present day digital libraries focus more on access, retrieval of digital information, and also provide a number of services such as TOC, Alerts etc., It also includes the online public access catalog, electronic databases (both indexes and full-text databases), and the Internet.

Instruction in the use of library is normally the job of the libraries reference desk, or is available individually as users require the information. The users do get confused by the varied amount of information and so many other formats. There is a need for user-centered method of delivering Reference and Information services in this age when the digital media is gradually replacing the print media. When Library Automation started a few years ago it was felt that computers and related programs would replace the human touch in Libraries. But, this advent of computers and the growth in the electronic information resources by leaps and bounds has made human intervention more necessary than ever. Library Automation has not replaced traditional services, but rather run parallel, in fact requiring additional expenditure and skills. The traditional work of reference librarians has been greatly influenced by the access to electronic publications on the World Wide Web. So much so that the Reference librarians are creating HTML documents that provide access to Web and other electronic resources. The limitations of the physical library timings are extended for 24-hour access.

## **1. Functions of Reference Service**

Samuel Swett Green better known as the father of Reference Services laid down four functions for Reference Librarian.

They are:

- ✍ Instructing the reader in the ways of the library
- ✍ Assisting the reader with his queries

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- ✍ Aiding the reader in the selection of good works, and
  - ✍ Promoting the library within the community.

Even today these four functions remain the core of reference service.

## 2. Present Scenario

Libraries of the present days have undergone a massive facelift although the above functions have remained the same such as

- ✍ Organizing print and electronic resources
- ✍ Directing library users to resources within the library
- ✍ Assisting users with locating the best sources of information
- ✍ Marketing reference services and resources
- ✍ Serving as a public relations representative
- ✍ Online searching
- ✍ Professional activities for professional development and growth.
- ✍ Referral process - forward the enquiry or provide the user with live links to authoritative web sites.

In addition to the print media librarians have now incorporated technology by way of PC's telephone, photocopier, microfilm, fax machine, television, printer, modem, disks, CD-ROMs, scanners, telecommunications, and the Internet. Most Libraries have now become hybrid Libraries. It is needless to say that even with all this the functions of Green holds good.

## 3. Background

Distance education programs and the growth of Departments, Schools, Centres increase in the student intake, at IITB have increased the demands on the Library and Information Services. The size of the electronic holdings have increased mainly because of the expanse of Digitized information sources through the Consortia efforts and also by exploring the Internet for related free digital resources. The emphasis is also on computer based learning which encourages the support of teaching and research by non-traditional means and beyond the walls of the Library.

Adapting to the changing digital environment has required the Library to be innovative, flexible and imaginative in their internal organization and in their relationship with users.

Services and Facilities in making information available directly to end user, to search in an easy manner and also to know what is available within the Library has been an ongoing activity. More emphasis is given to cater to users requirements and their expectations.

- ✍ The Library has a Reference & Information Section and renders traditional Short range and
- ✍ Long-range reference queries.
- ✍ Short Range such as Directional,
- ✍ Long Range such as Literature Search and other information through Machine Readables, CD-Rom's, E-journals, Online and Internet.

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#### 4. Scope / Purpose

This paper looks into these aspects and is providing personalised information services to,

- ✍ Educate users to new resources available freely on the net, or procured by the Library.
- ✍ Continue updating information for the existing resources.
- ✍ Attend to Comments and requests by faculty and students.
- ✍ Observe the User behavior & their changing interests.
- ✍ Find answers from sources within the Library and also those, which are not easily found.

#### 5. Digital Collections at IIT, Mumbai

While the Library has a good collection of standard Reference Tools in the print media

Information Technology has taken roots and over the years the Library has modernized to a vast extent. All in-house operations are computerized and the regular features are the OPAC, E- journals consisting of current, backfiles and perpetual access, ETD, CD-ROM Databases, Audio-Video collection, Access to Internet etc.,

#### 6. Digital Information Services

##### 6.1 Intranet solutions

An intranet is many things together i.e., the network, the web servers, browsers and the databases that supply information to the server. Basically it is an information delivery system designed for use within an organization. It is the latest technology that offers perfect solutions to the growing demands in the electronic environment. Some of the applications are,

##### 6.2 OPAC

- ✍ Database containing information that the users can consult before asking for human intervention. E.g. - In this the Library holdings is already in place along with the lent, claims, fines details of the varied print documents available in the Library. The holdings also contain data of material other than books such as Journals available in print/electronic/perpetual access or as backfiles.
- ✍ Adding links to web resources especially those available freely e.g. PubMedCentral has made available the full-text of the complete volumes of the 'Bulletin of the Medical Library Association' now published as 'Journal of the Medical Library Association' online. The archive begins with Vol.1, 1911. The full text articles are available in .pdf format.
- ✍ Information Gateways, pathfinders, help to organize the reading material from within the Library as well as compiling the relevant resources from the web and make it easier for users to find the information all at one place. It includes www gateways, online reference and educational resources. Gateways in fact serve as a ready reference tool. Similarly pathfinders that give the details of subject holdings in the Library in a nutshell helps the freshers immensely.

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### 6.3 E-mail Reference

- A. Instant messages are circulated to the user community such as trial access to an e-product.
- B. Sending pages to end-users regarding digital resources. E.g. .SD top 10 articles cited The top - 10 of most downloaded articles in your area of interest.
- C. Latest additions of the resources added such as books, Journal issues, standards etc.,
- D. Sending customized news to end-users e.g. Useful articles picked up from popular journals subscribed by the Library and would be of interest to many users.
- E. ILL through a web form. ILL and Document Delivery services are a natural extension of the references process. Reference services provide the user with instruction in the user of bibliographic tools and database searches. Since no one library is likely to own all of the material cited in a library database or index the need to obtain materials from other Libraries is a process, which has to be done by the reference personal that identified them. ILL-uses many of the same databases to verify bibliographical details before submitting requests for loans and copies.
- F. Get material matching User's profiles such as TOC's, Alerts
- G. Any query which could be answered within library resources or needing outside referencing.
- H. Citation Alerts of faculty's latest articles. The need for academic research staff to quote their publications from refereed journals over a period of years along with the impact factor and citation analysis is rising. This involves the help, advice and compiling information by the library staff.

### 6.4 On chat and by telephone

One of the most efficient reference services is to know about the user's problems and demonstrate solutions for easy access. E.g. To make a search on IEL for any IEEE Transactions one need to search under the subject like Antennas and Propagation, IEEE Transactions and not the other way round. Other problems like connectivity, Links to e journals not working, some figures, and graphics are blurred, such queries are being solved by chat messages or by telephone.

### 6.5 E-Ref Desk System

In addition to this a help desk system, E-Ref Desk is designed to answer queries by electronic means. The emphasis is on the local resources that would otherwise be unknown to the users and thus lose their significance.

This module is designed to take care of such queries that do not come under the purview of the above categories. While the Library tries to see that all queries would be answered with the help of modern technologies, in addition to the traditional jobs such as assigning Subject Headings there will still exist some queries that need extra effort on the part of reference staff.

Say for query on Prevention of Food and Adulteration Act there were no books on it, but a full chapter was found in Manual of Central Acts & Important Rules. Maybe the subject heading may not have identified it, as the item was very small. Hence the question has to be assigned a serial or a Docket no. and referred to the classifier or, the reference staff should go out of the way in search of the pertinent information. With the answer ready the user is given specific details as to where he should look up. In simple words this type of query would undergo the process as below.

Query: Any book/journal article/material on Prevention of Food and Adulteration Act — Assign a Docket No.— Pass the query to Classifier / Reference staff. —Get details and post back to the person who asked for it. If not post the query to other Sections to get a satisfying answer. If the answer is satisfactory and to the point the Docket is closed. If not the circle continues again.

In a schematic presentation, In this E-Ref Desk, User can file in queries regarding Book Acquisitions, Technical Processing, Reference, Journals, and Pamphlets, etc.,

User writes his name and contact information in the form and selects a category that relates to his query. User has to describe and prioritize his query as either Low, Normal, High, or Urgent.

User can now add the query to the E-Ref Desk by clicking Add Job!

### E-Ref Desk

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It is Important that you enter appropriate information below, so that we may serve you better

First Name:  Last Name:   
Phone:  Email:  Category:

Short Summary:

Detail:  Priority:

Once the Job is added, User is given a Docket Number. A separate screen displays.

### E-Ref Desk

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Your Query has been Added to Our Job Queue.

Your Docket Number is 4532

It will take us an estimated 1.5 hours to resolve your Query.  
We Shall Get back to You!

Note: For Your Reference, A Copy of the Docket Information and Your Query has been mailed to you.

This Docket number refers to the query that the user has submitted and the user can use this docket number for any future communication relating to this particular query. Depending on the priority set and the number of jobs presently in Queue to resolve, E-Ref Desk will also display an estimated time that the department will take to resolve the added job.

E-Ref Desk also sends a mail to the user that contains:

- ✍ Information added by the user
- ✍ Docket Number
- ✍ Estimated Time

at the email address specified earlier.

E-Ref Desk now sets this docket to the designated section in the department. The designated section gets a docket number depending on the category chosen by the user.

So, With Category set to Reference, the docket would be assigned to reference section and added to that sections Job Queue.

Once the designated section resolves the query, it sends a communication to the user through mail, instant messenger, or phone.

The Communication now includes:

- ✍ Docket Number
- ✍ Answer to the Query
- ✍ Section Head Contact Information

Once a query is resolved and the communication sent to the user, the Docket is closed. If User is satisfied with the answer, he may simply carry on with his work. But if he is still not satisfied by the answer, he can file in another job at E-Ref Desk, with reference to the previous Docket. He may also contact the Section Head for further clarifications on his query.

Since all Dockets are categorized, queries are constantly tracked and statistics maintained by E-Ref Desk. The Library can now generate a report periodically to analyze the queries encountered. Hence, processes can thus be adopted for those queries that are encountered frequently.

## **7. Enquiry Services**

Before sending or asking any question, one needs to check the following important information.

Have you:

- ✍ Checked our FAQ to see if you can find the answer there.
- ✍ Searched our OPAC to find the material you want.
- ✍ Checked the HOMEPAGE for all the options to know whether the answer expected might be there.

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### Types of questions expected

While going through some of the e-mail reference questions received, certain familiar questions arose such as

Library Details /Finding Books /Finding Articles /Finding text books/Reference Tools / Finding Other Research Materials/ Citing Resources /Getting Help Even with library automation one can now easily answer the following

- ✍ Provide the answers to questions on an enormous range of topics and in-house functions.
- ✍ Refer to other possible sources of information.
- ✍ Procure Books and Journal articles from other Libraries.
- ✍ Provide photocopies of articles to other Libraries on cost and reciprocal basis.
- ✍ Check with other Libraries to send our staff and students for referencing.
- ✍ Help users with the Literature Survey.
- ✍ Help in any area of the Library such as Issue /Claims etc.,
- ✍ Locate journal articles on a topic
- ✍ Search if the Library owns a document (periodical, theses, standard etc.,) if not where is it available
- ✍ Find the full-text of an article online.

### 8. Conclusion

In the library of the future customer service will remain as the primary objective. It is said that some believe that Reference is an activity suited to the paper collection of the past. In other words to use Reference Services users had to come to the section. It is a building-centered old style make them come to us model. Librarians should begin to evaluate how consumers need information and tailor information sources to those needs. Librarians have to give the information to the user and not the other way round.

One may mention Dr.S.R.Ranganathan's five laws that still stand the test of changing times and changing media. Also Kuhlthan who identifies five levels of services,

Level 1 – Librarian / library is the organizer of the material

Level 2 – Librarian is the locator or ready reference

Level 3 – Librarian is the identifier, helps user identify tools for the information need

Level 4 – Librarian is the advisor.

Level 5 – Librarian is the counselor

These 5 Levels of service remain valid, even as users have less contact with traditional library support.

This study as stated above by various examples shows that users ask similar questions whether in person or via an e-mail reference service. Academic librarians especially those in charge of Information desks should be well prepared to answer a full range of questions – basic questions to the difficult ones.

Limiting digital reference service to “ready reference” questions alone does not adequately meet users’ needs and may not even be understood by them. The virtual information desk services will become an integrated system to include live chat and telephone sessions for better functioning.

More newer technologies will come into existence. One does not know how long the digital environment would remain as it is, but may change into much more sophistication. In spite of all the hype and use of Information Technology, the human factor is very essential. Libraries may change to Cybraries and Librarians to Cybrarians but the human, personal element will be present always. To quote Samuel Swett Green for promoting the idea of reference service, “The more freely a librarian mingles with the readers, and the greater the amount of assistance he renders them, the more intense does the conviction of citizens, also, become that the library is a useful institution,” is absolutely true.

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