

## Re-engineering of Reference Service

Aparna Rajendra

B M Panage

*The introduction of new information and communication technologies, as well as the emergence and development of new techniques in information processing, storage, and dissemination have changed the role of all types of libraries in information dissemination. This has made libraries to supplement long-established services with online services to users, fulfilling any time and anywhere needs and expectations. The World Wide Web is a new powerful tool for reference librarians. Information which was once only available to large libraries with very high budgets is suddenly available to any library with Internet connections. Reference librarians themselves are participating in the electronic publication trade by creating Web pages and finding aids to assist both themselves and their users to locate information electronically on the World Wide Web. The web which poses a new challenge for librarians, offers major new tools and techniques to provide the powerful services. The present paper tries to focus new aspect of reference service. It also highlights the various efforts undertaken by different types of libraries in this direction.*

**Keywords :** Internet, Re-engineering, Reference- Service, Web Resources, E - reference Service

### 1. Introduction

Librarianship is an expanding profession which offers an immense opportunity to enrich your knowledge while helping readers. It is a fine art of getting right books and providing accurate information as promptly as possible. There can hardly be any profession that facilitates more lively routine work and stimulating contacts with people of different dispositions than that of the librarianship. The traditional work of reference librarians has been greatly impacted by access to electronic publications on the World Wide Web. Reference librarians are also using the Web to create electronic publications for in-library users and Web surfers. By creating HTML documents that provide access to Web and other electronic resources, reference service is extended beyond the physical library and designated reference desk hours, opening the building for 24-hour access.

### 2. Nature and Scope of Reference Service

According to Foskett(1) " reference service is currently a humanism in practice because the aim is to help people, in one way or other, to secure greater happiness through the possession of knowledge." Margaret Hutchins(2) defined it as "a service that includes the direct personal aid within a library to persons in search of information for whatever purpose, and also various library activities especially aimed

at making information as easily available as possible." Whereas Dr. S.R. Ranganathan(3) says "Reference Service is the process of establishing right contact between a reader and his document in a personal way."

These definitions taken together provide both a short and long term views of this phase of library work. These definitions as such , bring into bright relief certain basic facts that of human approach of preparation including collection and organization of materials and the sense of responsibility for the provision of personal assistance to readers is offered directly and asked for and even when not expressed specifically by them. These definitions also indicate the functions of reference service department, which are as follows

- Answering the queries received from users
- Assisting readers in using library tools
- Preparing guides to use the library and its collection
- Preparing reading lists and ad-hoc bibliographies.
- Providing indexing and abstracting services
- Providing CAS and SDI services

The present era is of the Internet. Librarianship has been changed in many fold ways due to the use of Internet. Library professionals are providing different types of services using Internet. There is a radical change in few services. Some of the services are totally changed. Librarians have to think the different ways and modes through which they can modify the nature of present services. To alter these services one should know the philosophy of reengineering.

### **3. Re-engineering**

Re-engineering is "The fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance such as cost, quality, service and speed"(4) This definition highlights the importance of four keywords i.e. fundamental, radical, dramatic and processes. Re-engineering concept cannot be understood properly without knowing the importance of these four keywords.

#### **3.1 Fundamental**

Reengineering begins with no assumptions and no givens; in fact, companies that undertake reengineering must guard against the assumptions that most processes already have embedded in them. To ask "How can we perform customer credit checks more efficiently?" assumes that customer credit must be checked. In many instances, the cost of checking may, in fact, exceed the bad-debt losses that checking

avoids. Reengineering first determines what a company must do, then how to do it. Reengineering takes nothing for granted. It ignores what is and concentrates on what should be.

### **3.2 Radical**

The second key word in the definition is radical, which is derived from the Latin word "radix," meaning root. Radical redesign means getting to the root of things: not making superficial changes or fiddling with what is already in place, but throwing away the old. In reengineering, radical redesign means disregarding all existing structures and procedures and inventing completely new ways of accomplishing work. Reengineering is about business reinvention and not business improvement, business enhancement, or business modification.

### **3.3 Dramatic**

The third key word is dramatic. Reengineering isn't about making marginal or incremental improvements but about achieving quantum leaps in performance. If a company falls 10 percent short of where it should be, if its costs come in 10 percent too high, if its quality is 10 percent too low, if its customer service performance needs a 10-percent boost, that company does not need reengineering. More conventional methods, from exhorting the troops to establishing incremental quality programs, can dig a company out of a 10-percent hole. Reengineering should be brought in only when a need exists for heavy blasting. Marginal improvement

### **3.4 Processes**

The fourth key word in our definition is processes. Although this word is the most important in our definition, it is also the one that gives most corporate managers the greatest difficulty. Most businesspeople are not "process-oriented"; they are focused on tasks, on jobs, on people, on structures, but not on processes. In libraries there are various processes as a collection of activities that takes one or more kinds of input and creates an output that is of value to the users. Because of their presence and importance in libraries, librarians have to understand the necessity of providing reference service using these e-resources.

## **4. Need For the Reference Service**

The expectations of instant service have encouraged a climate of providing new types of services. Libraries have a growing number of virtual reference options. Librarians can provide e-reference service by building a platform from scratch i.e. designing and developing its own website to meet the users' needs. The cost of printed reference sources is increasing every year. It is not possible for every library to

acquire these resources. To provide better reference service within the limited financial budgets the Internet is the best friend of librarians. Now the librarians have to learn how to tap the wide variety of e-resources from the Internet and how to organize them properly to meet the users' requirements.

#### 4.1 Functions of E - reference Service

Based on the abovementioned functions of reference service, the activities of e-reference service can be as follows :

Receiving and answering queries through E-mail

Provision of On-line help

Tapping information through various OPACS

Designing & developing of Library Web site & Web Portal

Constant updating of the same

Provision of FAQ

Manipulation of web based resources in rendering of CAS & SDI

Preparing of Webliographies

Cronin and McKim (5) has stressed out the importance of the web based trade and commerce. The library professionals also have to understand the philosophy underlined by it. If librarians have to survive in this electronic era, they have to market their different services. The underpinning dynamic of the virtual market changes traditional relationships between suppliers and buyers in a number of ways:-

- Shift from push to pull: The Web gives consumers a voice and the option of drilling down into product information.
- Greater choice: The breadth and depth of product range that the Web encourages will translate into greater consumer choice.
- Transparency: The Web creates transparency by facilitating consumer-to-consumer information exchange.
- Disintermediation: The Web has been described as the instantiation of frictionless capitalism.
- Price drivers: Transparency in the market-place makes it harder to fool consumers.
- Convenience: Electronic shopping adds a new dimension to the concept of customer convenience.
- Customer feedback: Vendors will become highly sensitive to the voice of the consumer.
- Impersonality: Some consumers enjoy the sense of anonymity afforded by electronic shopping/trading.

Considering the above mentioned factors, librarians have also understood the importance of web based resources. Many librarians have taken meticulous efforts to design and develop different services using the Internet. One of the most important services is the reference service.

## 5. Overview of few e-reference Services

Some libraries are attempting to answer the unknown by building Web sites that anticipate the needs of both their local users as well as those of any Web surfer around the world. Among these sites to name the few are; the Librarian's Index to the Internet (LII), Cyberstacks(sm), Virginia Commonwealth University's My Library project, and Penn State University's (PSU) Help Yourself: Tell Me Where To Look. There are also few more sites which provides information according to the type of information, which are as dictionary.com, free Internet encyclopedia, the world fact book, biographical dictionaries, findarticles.com etc. If users want a piece of quality information quickly, these guides will point right to it. These quality reference portals definitely ease life of reference librarian.

### 5.1 Librarians' Internet Index ( <http://lii.com>)

Librarians' Internet Index (LII)(6) is a publicly-funded website and weekly newsletter serving California, the nation, and the world is founded by Carole Leita . In October 1994, LII migrated to a website and was renamed Berkeley Public Library Index to the Internet. In late 1996, Carole began working with Roy Tennant at UC Berkeley's Digital Library SunSITE to add a search engine to LII, and develop a content management system to make it easier to add and maintain entries. LII catalogers also began adding Library of Congress Headings to LII items. In March 1997, the Berkeley Public Library Index to the Internet moved to UC Berkeley SunSITE and was renamed the Librarians' Index to the Internet (LII). 1997 was also the first year LII received funding through the Library Services and Technology Act (LSTA), state funds from the Institute for Museum and Library Services, distributed in California by the State Librarian. Some of this funding was used to pay for additional editorial support, and some funding was used to recruit and train volunteer contributors.



In 1998, a mailing list for weekly updates was established. In 2001, founder Carole Leita retired, and Karen G. Schneider came on board as director. At this point, LII's funding was through the Library of California. 2002 featured a number of design improvements, including addition of a spell-checker and search results sorted by relevance ranking. The primary funding source switched back to LSTA, distributed through the California State Library. In 2003, LII began working with Washington State Library on a collaborative project, and partnered with California Digital Library on a content-creation project. In 2004, LII began the development planning to migrate to a new database-driven website. In 2004 we also debuted our RSS subscription option, which was immediately very popular.

In late September 2005, LII moved to a new content management system with many new features inside and out. Our hosting provider and lead development company changed to Community Servers, Inc., a small company based in Glen Ellen, California.

## 5.2 Digital Librarian

A librarian's choice of the best of the web (<http://www.digital-librarian.com/>)

Margaret Vail Anderson's(7) Digital Librarian is an impressive work. Anderson draws on her extensive library experience to offer some 90 categories of Internet sites, all listed because of their high-quality content for teachers and learners. Are you already familiar with her excellent offerings? Simply click on New Listings to see what was recently added to her collection!



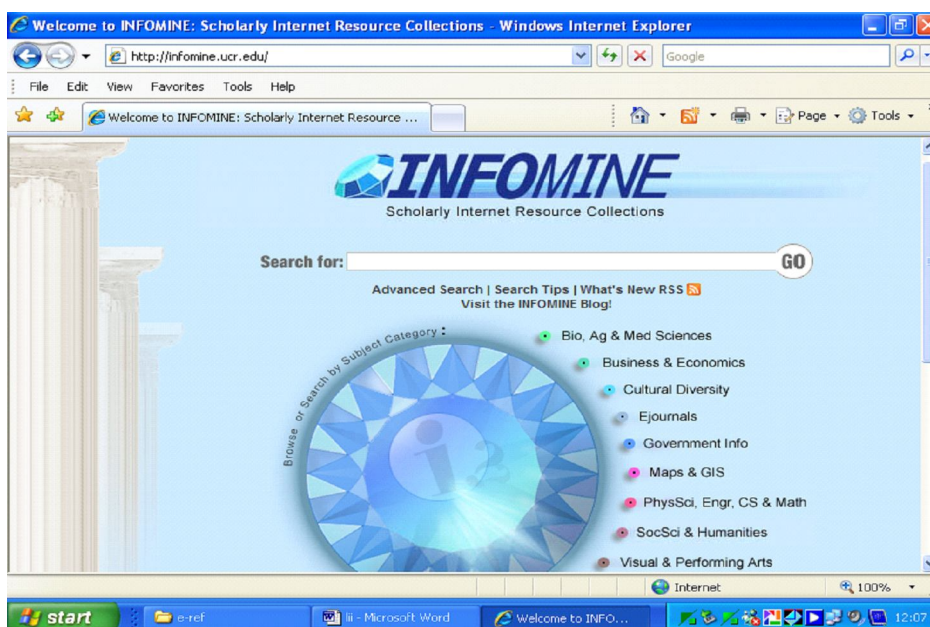
## 5.3 Infomine

Scholarly Internet Resource Collections (<http://infomine.ucr.edu>)

INFOMINE (8) is a virtual library of Internet resources relevant to faculty, students, and research staff at the university level. It contains useful Internet resources such as databases, electronic journals, electronic

## 7<sup>th</sup> Convention PLANNER - 2010

books, bulletin boards, mailing lists, online library card catalogs, articles, directories of researchers, and many other types of information. INFOMINE is librarian built. Librarians from the University of California, Wake Forest University, California State University, the University of Detroit - Mercy, and other universities and colleges have contributed to building INFOMINE.



### 5.4 CyberStacks(sm) (<http://www.loc.gov>)

CyberStacks(sm)(9) is a centralized, integrated, and unified collection of significant World Wide Web (WWW) and other Internet resources categorized using the Library of Congress classification scheme. Resources are organized under one or more relevant Library of Congress class numbers and an associated publication format and subject description. The majority of resources incorporated within its collection are monographic or serial works, files, databases or search services. All of the selected resources in CyberStacks(sm) are full-text, hypertext, or hypermedia, and of a research or scholarly nature. Using an abridged Library of Congress call number, Cyberstacks(sm) allows users to browse through a virtual library stacks to identify potentially relevant information resources. Resources are categorized:

- ⇒ first within a broad classification,
- ⇒ then within narrower subclasses,
- ⇒ and then finally listed under a specific classification range and associated subject description that best characterize the content and coverage of the resource.



For each resource, a brief summary is provided, and when necessary, specific instructions on using the resource are also included. Where appropriate, the mode of access to the resource is noted, as is the subject coverage and scope; notable features, where applicable, are also included.

#### 5.5 Refdesk.com – (<http://www.refdesk.com/index.html>)

Bob Drudge(10) has created yhis comprehensive collection of web links, “rationally indexed”. Since 1995, Refdesk is a free and family-friendly web site that indexes and reviews quality, credible, and current web-based resources. Refdesk has three goals:

- (1) fast access,
- (2) intuitive and easy navigation and
- (3) comprehensive content, rationally indexed.

Refdesk’s database is on three levels: quick, studied and deep. For thumbnail snapshots: Fast Facts, Quick Reference / Research, and Facts Subject Index. For a more studied approach: Newspapers - USA & Worldwide, Search Engine Resources, Internet Help, and Writing Web Documents. For an in-depth exploration: Facts Encyclopedia with over seventy volumes of indexed subjects and Facts Subject Index with twenty-four subject categories.



## 7<sup>th</sup> Convention PLANNER - 2010

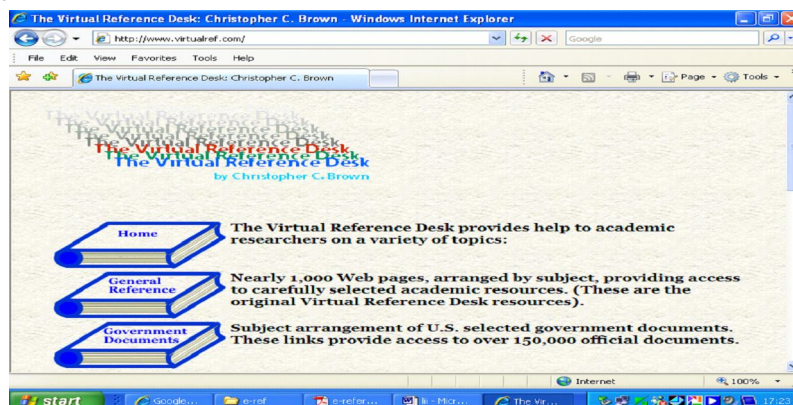


And, since the vast majority of Internet users prefer 'surfing' from one site to another, refdesk presents: Daily Almanac, Indispensable Links, Weather Links, Fast Facts, Select Sites of the Day, Best of the Net, and Windows Operating Systems Resources. For those seeking fun and diversion: Fun Stuff, Free Stuff, My Download Page, and Devices and Gadgets on the Net.

### 5.6 Virtual Reference Desk

The Virtual Reference Desk(11) is produced by Christopher C. Brown, Reference and Government Documents Librarian at the University of Denver, Denver, Colorado, USA

The Virtual Reference Desk has grown out of my work as a reference librarian. Hundreds of Internet sites have been identified for their usefulness in research. Original abstracts are being written for each of these sites to enable users to identify the contents of the site, and so that the Search engine will pick up on words in the abstracts.



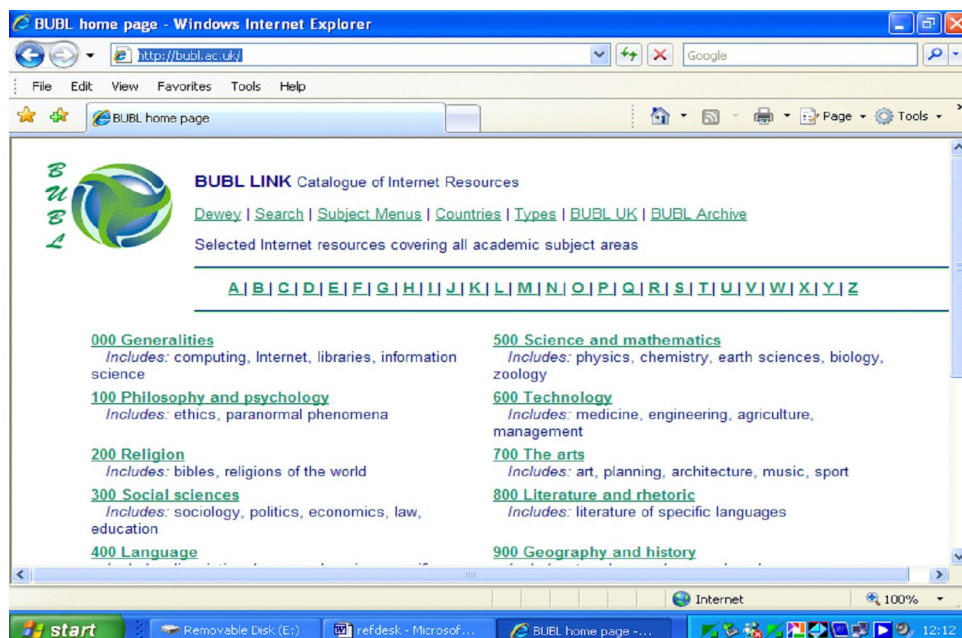
Nearly 1,000 Web pages, arranged by subject, providing access to carefully selected academic resources. (These are the original Virtual Reference Desk resources)

One can browse by subject which is arranged alphabetically

- |                                      |                             |
|--------------------------------------|-----------------------------|
| ⇒ ABBREVIATIONS (2 Entries)          | ⇒ ACCIDENTS (1 Entries)     |
| ⇒ ACCOUNTING (3 Entries)             | ⇒ AFRICA (4 Entries)        |
| ⇒ AFRICAN-AMERICANS (1 Entries)      | ⇒ AGRICULTURE (12 Entries)  |
| ⇒ AMERICAN SIGN LANGUAGE (1 Entries) | ⇒ ANIMALS (3 Entries)       |
| ⇒ ANTHROPOLOGY (3 Entries)           | ⇒ ARCHITECTURE (10 Entries) |

#### 5.7 BUBL link : catalogue of Internet Resources (<http://bubl.ac.uk/link/>)

BUBL LINK(12) is the name of a catalogue of selected Internet resources covering all academic subject areas and catalogued according to DDC (Dewey Decimal Classification). All items are selected, evaluated, catalogued and described. Links are checked and fixed each month. LINK stands for Libraries of Networked Knowledge. It is a searchable national information service for the UK higher education community. Directory of UK organizations and institutions; Archive of LIS, journals, Internet development; abstracts, full text, hundreds of titles of journals; news: jobs, events, surveys, updates; mail: mailing lists and mail archives. BUBL Link may be searched or browsed by Dewey Class, Subject, or at random.



This e-resource is very useful to librarians. Users can retrieve information by subject which is arranged alphabetically. Another feature of this source is that it has provided the facility of searching information by simple search, combined search and advanced search. In advanced search users can locate information by author, title, description, subjects, and Dewey class and resource type. Librarian can use this site to classify the web based resources.

## 6. Conclusion

Even though a number of resources are available on the net that are used by number of people, librarians are still the mediator between them. So librarians can organize the web resources properly. Requirements and needs of users vary from library to library, so the librarian's choice is very important in selecting the web resources in respective library. The success of *E-reference service* depends upon the different competencies the librarian possesses. The entire profession of librarianship has a bright future in the internet era, because to find a piece of information from a large number of resources is a great challenge. The librarians have to accept this challenge by acquiring different skills and competencies of collecting, organizing and disseminating of information. If this becomes reality, then libraries will be flooded with different disposition of people in electronic era.

In the framework of the definition of 'Reengineering' cited above the effort has been made to redesign the process of 'Reference Service' that has been rethought in the context of Internet. The aim here is to provide personalized reference service along with keeping pace with the changing environment.

## References

1. Foskett, D.J. (1952) Assistance to readers in lending libraries. London, James Clarke,
2. Hutchins, Margaret. (1934) Introduction to reference work. Chicago, ALA.; 1944. 214p.
3. Ranganathan, S.R. (1961.) Reference service. Madras, Asia Publishing House.1961. 432p
4. <http://www.businessdictionary.com/definition/reengineering.html> as accessed on 12th August 2009
5. Cronin, Blaise and McKim, Geoffrey. The Internet In The World Information Report ed by Federico Mayor. (Available at <http://unesdoc.unesco.org/images/0010/001062/106215e.pdf> Accessed on 15<sup>th</sup> June 2009).
6. Librarians' Internet Index (Available at <http://lii.com>)(6) Accessed on 5<sup>th</sup> June 2009
7. Digital Librarian: a librarian's choice of the best of the web ((Available at <http://www.digital-librarian.com/>) (7) Accessed on 5<sup>th</sup> June 2009
- 8, Infomine : Scholarly Internet Resource Collections ((Available at <http://infomine.ucr.edu>) (8) Accessed on 9<sup>th</sup> June 2009

9. CyberStacks(sm) ((Available at <http://www.loc.gov>) (9) Accessed on 16<sup>th</sup> June 2009
10. Refdesk.com - (Available at <http://www.refdesk.com/index.html>) (10) Accessed on 12<sup>th</sup> June 2009
11. Virtual Reference Desk((Available at (11) Accessed on 29<sup>th</sup> June 2009.
12. BUBL link : catalogue of Internet Resources ((Available at <http://bubl.ac.uk/link/>)(12) accessed on 10<sup>th</sup> July 2009)

#### **About Authors**

**Dr. Aparna Rajendra**, Deputy Librarian, Jayakar Library, University of Pune, Pune - 411007.

E-mail: [aparna@unipune.ernet.in](mailto:aparna@unipune.ernet.in)

**Dr. B M Panage**, Assistant Librarian, Jayakar Library, University of Pune, Pune - 411007.

E-mail: [bmpange@unipune.ernet.in](mailto:bmpange@unipune.ernet.in)