Gyanoday Portal: A Virtual Reference Point for Management Knowledge Repository

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ABSTRACT

Librarians are constantly exploring various ways and means of supporting users in the emerging virtual community. The paper discusses how technological developments in libraries have led to the emergence of new service paradigms. Recent trends in electronic libraries, with particular reference to academic libraries to provide value-added library services to support virtual communities. Paper discusses the dynamic nature of reference services in the context of rapidly changing technologies and heightened quality of service/user expectations, and explores the issues associated with planning virtual reference services in an academic environment. With the usage of this Library Portal, the desktop user's community of IIM Lucknow has been greatly benefited.

Keywords: Gyanoday, knowledge repository, academic libraries, virtual reference services, electronic resources

1. INTRODUCTION

The proliferation of electronic resources in libraries has enabled users to search information without physically entering the library. Full-text databases, digitised library resources, e-books and the web are buzzwords of the times. Librarians are exploring ways of supporting users in the emerging virtual communities. One way in which this is being done is by offering valueadded services, such as online real-time reference (hereafter referred to as ORR) and Web-based instruction to support remote access and navigation of a library's electronic resources.

Various means of offering reference services have their individual advantages and disadvantages. In-person visits, telephone, fax, e-mail and more recently, real-time reference are best seen as being complementary to one another and each suited to different situations. As Tenopir states that "each mode of communication has its own advantages and disadvantages, some questions being better suited for e-mail than for telephone, and vice versa. Multiple options for communication give options to help users more appropriately¹.

Although in-person visits are still the most ideal reference situation for most librarians because the reference interview can be easily conducted in proximity to printed resources, verbal dialog is faster than web chat and other forms of reference, ORR addresses the unmet need of serving remote users.

2. INDIAN INSTITUTE OF MANAGEMENT LUCKNOW

Indian Institute of Management Lucknow (IIML), is situated at the outskirts of the historic and culturally rich city of Lucknow. It was established in 1984, by the Government of India, as a national level school of excellence in management science. IIML's mission is to be a global, socially conscious and integrated school of management, contributing towards management development, both in India and abroad. Towards this, IIML undertakes a diverse range of academic activities and interventions aimed at creation, dissemination, and application of management knowledge and practices. These include: the Post Graduate Programme; the Fellow Programme; the Management Development Programme; Research Programmes; and Consulting Programmes. IIML is also entering into collaborative arrangements with leading business schools and research centres in India, Europe, Canada, South and South-East Asia.

The Institute has the latest state-of-the-art computing and class-room facilities, supported by a well renowned

resource centre comprising collection of books, journals, films, and databases microforms, etc. The sprawling campus of the Institute is spread over 200 acre. The well manicured green lawns, flower beds and rows of trees inspire the body, mind, and soul. Strategically located murals and carefully christened buildings like *Chintan* (the Faculty Block), *Bodhgriha* (the PGP Block), *Manthan* (the MDP Block), *Gyanoday* (Library: The Learning Resource Centre), Computer Centre (with state-of-the-art computing facilities), and *Samadhan* (the Administrative Block) motivate the thought process for concentrating on specific areas of activities as well as integrate the overall process of knowledge generation, application, and dissemination.

3. CHARACTERISTICS OF THE ELECTRONIC LIBRARY SERVICE ENVIRONMENT

The new information environment is characterised by electronic communication, both synchronous and asynchronous: web-based information sources: multimedia information sources; and is uncontrolled largely as a result of the Internet facilitating information creation, distribution and access. Documents with hyperlinks to other related documents/information in various web formats are now typical, and emphasise the fact that any information accessed by a user is a minute segment of a larger body of information on the web. In the electronic environment, a library researcher has the control of browsing the information in whatever direction he/she choose. The 24x7 availability of the web provides users with the opportunity to conduct library research anytime. This has resulted in library users expecting 24x7 access to not only the library's electronic collections, but also online help or other forms of mediation if and when needed. A sampling of typical user expectations in the electronic library environment is listed below (these are verbatim responses of users who were asked about what they expected from their libraries):

- K Everything in full-text and downloadable or printable form;
- ✗ Faster service;
- ℅ Service availability;
- ✗ Easy access;
- % Virtual reference service, librarian available online 24x7;
- ✗ Easy-to-use web resources permitting self-service;
- ℜ A librarian who knows all subjects and all databases;
- ✗ Everything should be in electronic format;
- Several options/alternatives to choose from;

- ✗ A website that works;
- ℅ Ability to conduct all library transactions online (like: library registration, request document delivery and interlibrary loan, renew library items, etc.); and
- X A website search engine that can find what I want.

Many academic libraries are grappling with these users' demands and finding ways of meeting them is increasingly being recognised as a strategic priority in many academic libraries. This has led to the creation of new services as well as service delivery modes. The demand for electronic services in libraries is reinforced by the existance of similar electronic services elsewhere. Library users' experiences with innovative and convenient technology-based services elsewhere, may create an expectation in them for similar/comparable services. For instance, a user who prefers to conduct his/her banking transactions remotely via the web may also prefer to conduct library research remotely. Similarly, a user taking distance education courses online, would need remote access to library resources and services of the institution offering the course, especially if he/she is taking the course from a geographically distant location.

Technology can now support the creation, storage and transmission of large volumes of information in various electronic/digital formats. This has in turn led to changes in information needs of users as they become aware of the capabilities of technology in facilitating access to these various forms of content. Kebede² argues that the unique/distinguishing characteristics of information needs of users in the electronic environment are a result of the differences in the "physical form" or medium of information rather than the "content" because it is the medium that differentiates information in print form from information in electronic form. Therefore, the various media available in an electronic library is a key factor in the determination of user needs and preferences. Users prefer convenient, easy-to-use information media, and technology that is easily available, requiring skills that they currently possess. Library environments with advanced technology infrastructures offer a broader range of electronic media, and their users are generally more technology savvy than those in libraries with limited infrastructures.

In addition to differences in technology skills and competencies, the general profile of library users has also changed significantly. Nowadays academic library users could be local or remote students, traditional or nontraditional students who work full-time and are pursuing their academic programmes via online methods, some could be full-time students located on the college/ university campus, yet others could be full-time but commute for long distances and visit their campus a limited number of days per week. Others could be international students pursuing courses solely via the web. They may even live several time zones away from the campus. The modern electronic library in an academic environment is positioned to cater to the needs of both in-person and virtual users. Emphasis in a typical modern academic library is increasingly shifting to electronic access to resources and services in support of e-learning. Growing numbers of subscription databases and new services such as virtual reference are the current trend.

4. INTRANET-BASED LIBRARY PORTAL

When setting up an Intranet service, consider what aspects of the service could be adapted to an Intranet model and how it differs from a traditional service. Significant is to identify as how to increase the efficiency and the extended hours service would be available to the users. Fine-tuning the contents of Intranet site content is most important. Look at various options for web page design, including doing it yourself and outsourcing the work both within the organisation and externally. Look at the ways of adding value to products such as databases which are delivered via the Internet. Prioritise services to ensure that the most used services are mounted firstthis requires consultation with the users to get it right. The layout of the web pages is also crucial to ensure that they are easy to use. Marketing the new service is also crucial. Involvement of users in the planning and implementation of service makes the service more acceptable. Users may also require training depending upon their familiarity with the new system.

5. FUNCTIONS OF LIBRARY PORTAL

The first thing is to decide is for what it will be used for. A library portal should:

- 𝔅 Bring the library service to user's desktops. 𝔅
- Serve as a vehicle for delivering the library's databases.
- ℜ Reduce the number of routine trips users have to make to the library for things like collecting forms, delivering forms, checking the journal display, etc.
- Provide an alternative to paper newsletters or notices.
- ℜ Reduce paper use.

6. CONTENT MANAGEMENT OF LIBRARY PORTAL

Most libraries' Intranet or Internet sites include information like opening hours, contact details, location,

and library rules, and so on. These can also include library forms, either in a printable form as a Word or PDF document or as interactive forms which users can complete and submit online.

However, Word files can be quite large and slow to download. Another problem is the compatibility with the users' software version. Printable forms can therefore be PDF format to enable the users to print them—it looks like a printed copy. Users should be reminded that they will need a PDF viewer such as Adobe Acrobat to view the documents. It is also pertinent to provide a link to the Adobe site (www.adobe.com) with information about downloading it in case users do not have the Acrobat reader.

7. KNOW YOUR USERS

While designing the Intranet site, it is necessary to know the following about the users:

- ℅ Who they are?
- 𝒥 Where they will use the service?
- ✗ When they will use it?
- ℜ Why they will use it?

Table 1 shows the major stakeholders of the IIML library. Identifying the users is easy if it is an organisation with a discrete staff or client group. It becomes more difficult if it is a public library, or if the site is to be mounted on an Internet site rather than an internal one. In either case, the type of organisation might mean that the users are varied. Where the users will use the service also depends on the nature of the organisation. Workstations might be within the campus area and shared by several stakeholders.

Since Intranets are not available externally efforts should be made to accommodate the habits of the users. Since the institute's and the library's policy did not allow external access to the Intranet, a mirror was mounted on the Internet site and access was made possible by user-IDs and passwords. Why your service will be used reflects the nature of your clients' information- seeking patterns. Based on our knowledge of how our user groups work, we came up with several likely demands for our service:

- % Preparation of course materials.
- 𝒥 Writing research proposals. 𝔅
- ℅ Writing research reports.
- ℜ Proposals preparation for different projects.
- ✗ Consultancy projects.

Stakeholders—Internal	Resources Accessed
Faculty members	Books, periodicals, electronic databases, e-books, dvds, case studies, digital resources, online journals, working papers, occasional papers, corporate reports
Postgraduate programme students	Books, periodicals, electronic databases, e-books, digital resources, online journals,
Fellow programme students	Books, periodicals, electronic databases, e-books, digital resources, online journals,
Research associates	Books, periodicals, electronic databases
Visiting faculty members	Books, periodicals, electronic databases, e-books, dvds, case studies, digital resources, online journals, working papers, occasional papers, corporate reports
Stakeholders—External	Resources Accessed
Members of corporate bodies/industry/Govt bodies/autonomous institutions	Books, periodicals, electronic databases
Members of the NGOs	Books, periodicals, electronic databases
Individuals	Books, periodicals, electronic databases

Table 1. Major stakeholders of the IIML library

Nothing beats asking the users what they would find most useful. Our initial thoughts were that our users would want to see:

- ✗ Links to catalogue.
- ℁ Links to online journals.
- ℅ Library forms.
- 𝒥 Contact details of library staff. 𝔅

We had the content right, but the priorities proved to be different. Our users told us that they need access to:

- ✗ Databases.
- ✗ Full-text journals.
- ℜ Forms, especially an interactive document request form.
- 💥 Journal holdings list.
- ✗ Contact details of staff.

8. PHILOSOPHY OF QUALITY SERVICE

Meg Paul³ has synthesised basic requirements for quality service, especially in terms of the relationship among staff, library or information services management, and senior management in the parent organisation or community. If all stakeholders in the delivery of information can agree to subscribe to what Paul calls 'A Philosophy of Service', the information service is well on its way to succeeding in the provision of quality information to its customers. Keeping in mind the Meg Paul's Philosophy of Quality Service, IIML coined its own Philosophy of Quality Service described in Table 2.

9. MAKING THE SITE EASY-TO-USE

The most important page in a site is the front, or index page. It gives users a first hand impression of the library. It has to be customised:

- ✗ Make your style fit your organisation's image.
- % Keep the same layout between pages.
- ℜ Make your navigation buttons clear.
- Managing links. Links can be made obvious using colours and/or "hovering".
- Make links from site names, not their URLs. It is not really necessary to include the URL in the text of your page at all if you are making an active link to it. Never make a link from a URL without including the title of the linked page. It is meaningless for most users.
- ✗ If you make a link to an external site, it is a courtesy to mail the Webmaster of that site. Should the page's address change, you may be notified.

10. MARKETING THE LIBRARY PORTAL

Marketing your site is the next most important thing after its content. Of all the marketing "Ps", the most

Meg Paul's Philosophy of Quality Service	IIML Library's Philosophy of Quality Service
People come first.	Always give top priority to users both internal and external.
Accurate and reliable information.	Users' satisfaction level—judges the accuracy and reliability of the information.
Serious about our high level of service.	Think and re-think services very seriously.
Cannot afford to give one wrong answer.	Before giving wrong answers to the users, analyse twice and its repercussion in short and long term.
Accessible and easy to approach.	24x7 services through telephone call, personal meet, e-mail, chatting, etc.
Always doers and hard worker.	Work hard to cater the best service.
Keep the staff working for us happy.	Staff motivation programme and job rotation is carried out to break the monotony of work.
Service is a state of mind. People must care and should have a desire to do it right and do it now.	Always on our toes and proactive to respond the best.
The client is always right.	Innovative ideas for effective service.
Everyone must be thinking about how to do his/her job better and more effectively.	Capacity building programmes for the information professionals at all levels.
Enthusiasm and faith are necessary to remove barriers and increase productivity and decrease costs.	Team work and integration in services play an integral role in the entire system.

Table 2. Meg Paul's influence on IIML library

important for a website is promotion. After all, you want your users to know it is there - once they do, all that effort you have put into designing an attractive and easy-to-use site will ensure that they keep coming back to it! Promoting our site was vital for us, as our Intranet site was the only way our users were able to access several core aspects of our service, including our catalogue, newsletter, forms and help sheets. Your site can be promoted by:

- ✗ Using e-mail-sending letters with a brief description of your site, making sure that your users know what is in it for them, and include a hot link to it.
- X Attending meetings and telling participants what your site has to offer them.
- Solution Demonstrate it at the meeting, if possible, but remember to target your audience.
- Sending out and displaying printed flyers or brochures. If you can, use the same graphics or symbols as your site to give users advance visual clues as to what to expect.
- ℜ Grabing people in corridors, the cafeteria, the car park.

11. TRAINING THE USERS

Once you have made them aware of your site, you may well need to train them how to use it. Training people

to use an electronic service has a few surprises in store for the unwary! Periodically training sessions or orientation programmes should be conducted to development awareness as well as making them acquaint to new electronic service environment. How to effective researching using library portal is very important question to be addressed.

12. GYANODAY: THE LEARNING RESOURCE CENTRE

Keeping in view the vision and mission of the IILM, the library has been established "to promote knowledge generation and application through its effective dissemination". The library acts as the main learning resource centre of the Institute and cater services and facilities to meet the requirements of the Institute's teaching, training, research and consultancy programmers. The library of IIM Lucknow characterises what the institute stands for—accessibility, vision and excellence. This spacious 30,000 square feet two-story library is a repository of knowledge, both historical and current. Students can use this 24 h facility to cement the knowledge they have gained by gaining an insight of its implementation. Some of the prime objectives of the IILM library are:

- ✗ To meet knowledge/information needs of the faculty, to support their teaching activities.
- ℜ To meet knowledge/information needs of the faculty and research staff to support their research activities.
- ℜ To respond effectively, where possible, to the knowledge/information needs of the Institute's client systems.

12.1 *Gyanoday* Portal: A Virtual Gateway to Knowledge

Gyanoday has both internal and external users. Any bonafide user, who is registered with the *Gvanodav* is rendered utmost care and service. Looking at the growing demand from the users and frequently changing curriculum and teaching methodology of the faculty members, IILM has not only automated its entire collection, which is available though OPAC and Web-OPAC, but also has developed new innovative e-based services for the users. The entire library is wi-fi enabled allowing bonafide users to use their laptops within the wifi range. With the advent in information and communication technology (ICT) and also to cater valueadded information services to wide range of users, a library portal has been developed to provide the entire collection of resources on the user's desktop (Fig. 1). The resources and services provided through the virtual gateway are shown in Table 3.

13. SERVICE DELIVERY MODEL OF GYANODAY

Taking a leaf from Michael LeBoeuf's⁴ international bestseller book, How to Win Customers and Keep them

for Life, management at IIML library have put together the following facts gathered from various stakeholders to study their expectation levels about the information services:

Develop a user profile: Draw up a clear picture of who the users and what their needs are. This activity will vary from organisation to organisation. Basically the information services staff is looking for demographics, personal characteristics, and the professional interests. Much of this will be discovered as the information services staff attempts to profile the user's information needs for journal routing, the selective dissemination of information, automatic announcements about new purchases, etc. At the same time, however, staff will record or at least take note of personal guirks or requirements or any other information that can be used to make the information interaction flow more smoothly. At IIML, a user profile database based on the requirements of the internal and external users needs and requirements has been developed. Over the years, the library personnel have been trained to judge users' requirements.

Look at the information services unit through the user's eyes: The library professionals of the IIML try to understand the service from the user's point of view to judge their satisfaction levels and expectations levels-like what information the user is looking for? Whether he/she has been provided correct information? The relevancy and timely delivery of the information is must.

Beware of promises and unrealistic expectations: Just spell out the truth to the user. One of our failings, as information services professionals, is that we are frequently prone to offer results that we can not possibly



Figure 1. Gyanoday portal for 24x7 access to resources.

Information Services	E-Resources
WEB-OPAC	E-journals
Current contents	E-books
Current additions	Online databases
Forthcoming conference alerts	Institutional repository
Bibliography and documentation	Video library
News clipping services	Virtual library
Photo gallery	Links to other important resources sites

 Table 3. Information services and e-resources through virtual gateway

deliver. Or, in our enthusiasm, we underestimate the amount of work involved in a commitment to a task. The searcher, for example, who promises a list of citations in a couple of hours forgetting that with one of the utilities usually searched for this particular kind of information there are frequent downtimes, will disappoint the user. In the information interview, the searcher, if he or she wants to change the perceptions of the user, would be advised to offer the search results 'as soon as possible,' in which case, if there is no downtime, the search process looks positively rapid, and if there is a downtime, the user won't be disappointed in his/her expectations.

Use problems as opportunities to demonstrate just how good the information services unit can be: According to LeBoeuf, users judge the quality of service in two basic ways: how well you deliver what you promise and how well you handle exceptions and problems. From the user's point of view, whatever clientele needs, is an 'exception' or a 'problem' that needs to be solved. Truly effective customer services programme rewards, more than anything else, a staff which is able to solve problems. If the user could find the information on his own, without any help, he/she certainly would do so. But for him/her, this information need is an exception to the routine work of his professional life, a problem to be solved, and the successful information services operation is the one that solves it for him. When the user is left to fend for him/her. when the information services unit in his/her organisation cannot find what he needs, as far as he/she is concerned. the information services unit is of no use. IIML identified the problems and took it as a challenge to solve it, and in the process improved the services too.

Develop a unique relationship with your users and treat each one as someone special: One of the reasons we work so hard, in the information services field, to establish an understanding of our users' perceptions and expectations is that we want to know how we can serve them better, what their particular needs are, and how we can address those needs. This attitude is the driving force behind the SDI programmes. User profiles and the other similar techniques are also being used for establishing a rapport with the users. In information services, one cannot know too much about the users' information needs, and as we incorporate this knowledge into the customer services programme we establish for our users, we discover those ways in which we can treat each of the users as 'special.' At IIML since most of the internal users and library service providers stay in the campus, personal attachment and sense of belongingness always exist.

Keep in touch and keep them informed: One of the greatest problems, for many customers in the information services environment, is that they feel 'out of touch'. They inhibit using the information service and about approaching the staff for assistance because they fear appearing ignorant about what services are available in the information services unit. They do not want to disrupt procedures that are already in place but on the other hand do not know what procedures are in place. They generally avoid 'bothering' the information staff with their queries. The best antidote to this attitude (for that's all it is, and nothing more) is a proactive campaign on the part of the information services manager and staff to keep all users informed. The usual vehicles being from the information services unit are the articles and information guidelines on the organisation's house organ, new acquisitions lists, brochures about services available, etc. At the same time, the users can be made to feel special. It is appropriate for the information services staff, as part of its profiling of users, to give them personal 'treatment: telephone them or send a memo (or a photocopy of a title page or an advertisement) if a new product or service has been acquired and might be of use to them in their work. "Keep posted their requirements, at least their requirements", is the clarion call being followed at IIML library.

Large part of good service is showbiz: As part of the work we do, information services professionals not only have to make the users feel 'special' in their interactions with the information services unit, we want to make them feel good as well.

14. CONCLUSION

New roles and new service paradigms and new roles for librarians are emerging as a result of new technologies available for information access, processing, and transmission. Implementation of this library portal in the IIML has brought out a sea change in the way information is being accessed now. But research is going on to bring out more value-added services.

There is also a convergence of roles of librarians within the library; librarians find that they are no longer compartmentalised into limited roles of cataloging, serials, reference, and instruction, etc. Nowadays, a reference librarian plays the role of instructor, and also works closely with online acquisition records to determine what items are currently on order, selects library material for inclusion into the collection, provides reference services, and other related roles. Developments in information access and delivery, reference, instruction and technology facility in electronic libraries will continue to define the new roles for librarians. Advancements in technology will sustain the vitality of libraries in this electronic era and will continue to define the profile of services to come. The planning, development and maintenance of our Intranet site has been an ongoing cooperative effort between us and our users. We have encouraged this, as not only does our site provide the service which our users need, but also they feel that they are part-owners of the service, and its production has become a real team effort. In turn, our service is seen as a central part of our organisation and our profile has been considerably enhanced.

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