LIBRARY NETWORKS, CONSORTIA AND THE CHANGING ROLE OF INFORMATION PROFESSIONALS

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Introduction

The way and pace at which information is generated, organised and used is witnessing rapid strides in recent times, hence the discipline of LIS meant to manage and provide information serivce may not be taught effectively and practiced perfectly through a framed curriculum in the formal education stream alone. Driven by the market demands and user needs, the discipline is embracing other disciplines like computers, communication technology, cognition research etc., to continuously monitor and augment their skills to arrive at 'pinpointed information from the deluge'. Manual means of tackling information will not help the user/professional to solve emerging problems in the actual research setup and also the present day researchers expect a faster response to their information needs. Information management and servicing is a highly matured and skill intensive activity and it requires people with different educational backgrounds. Electronic access is increasingly providing a large proportion of current information instead of print and allowing access through a variety of platforms on a twenty-four hour basis. As the traditional custodians of information, librarians need to be aware of the implications of these changes and develop technological and managerial skills that will enable them to make effective use of information to meet their organization and changing needs. However, many librarians lack confidence to learn and master the skills required in adopting the increasingly sophisticated technology. It is vital that they must be kept in touch with modern developments and maintain a proactive approach to work in an ever-changing information world. Professional profiles are changing so rapidly and very radically these days impacting the librarian's portfolio, since libraries are becoming knowledge management organizations with librarians as their active agents. Barbara Allen and Arnold Hirshon have indicated that "perhaps the most important development for libraries during the current decade has been the move from organizational self-sufficiency to a collaborative survival mode as personified by the growth of library consortia. Information technology is now enabling a level of cooperation that is much broader and deeper than ever before" 1.

According to a study, more than 60% of library employees' job duties changed between 1995 and 1996 and 75% of those surveyed said their job duties had changed during the last three years^a. The changes in profession are affected by the attributes of the globalization of the information society. The attributes are characterized by mechanization as against the manual system of doing things (speed, coverage and convenience). High technology is contributing immensely to the development of the library profession. Information and Communication Technology (ICT) integrated within the activities in the library to provide an appropriate convergence between information and communication. ICT user-friendly equipment continuously used for creating databases, the storage and retrieval of information, create book catalogues and union catalogues as well as co-operative cataloguing. The Internet and cooperative technologies have been successfully used for effective information exchange, to develop library consortia and to access library resources through networks. Information sources on the stand alone mode has been largely given way to networked information on intranet and Internet, and it is always required for the library professional to acquire the relevant skills to track and serve networked information. New forms of information services such as compilation of bibliographic sources, the use of CD-ROMs, the creation of Web pages and access of electronic journals have been introduced in libraries. Ability to manage change is now the fundamental skill required for librarians.

Present Status and the future

A librarian's role has traditionally been more of the builder and maintainer of library collections Church Doug discussed in his article about the most relevant roles of the "information professionals" in today's world, stated that "the designation 'Librarian' [is often] meaningless"². He listed the relevant roles for

information professionals are as consultant, analyst, facilitator/trainer, Intranet content manager, product planner and marketer, corporate knowledge manager etc. Lois Buttlar and Rosemary Du Mont identified fifty-nine separate competencies of which the very essential ones are: knowledge of sources in all formats; collection management skills; effective communication in writing reports, proposals, procedural manuals, correspondence, etc.; application of critical thinking skills to library problems; effective human relations skills in group processes; selection and evaluation of print and nonprint materials; application of appropriate principles to weed and inventory materials and equipment; and oral communication skills to make presentations. It does not matter what we are called but we have to acquire those skills and inclination

to satisfy the end users. Even though there are yet few schools dedicated to produce the hybrid professionals in demand, there are many networks and consortia management jobs available and they are being filled by workers with a variety of backgrounds. The most intriguing new knowledge jobs, however are as, knowledge integrators, synthesizers, and editors. The nature of library collections in digital environments is changing; furthermore access is changing in most fundamental ways. As more and more libraries set up comprehensive networks, there becomes an increasing demand for librarians who have an understanding of HTML, as well as other types of Internet programming skills such as Java-script, XML, SQL, CGI, ASP, etc. The role of librarians in developing networks and consortia and provide information in the 21st century are firmly intertwined. It behooves any librarian working today to understand not only how to find things on the network, but to have a basic understanding of how it works. Librarians will be called on to become information architects, to be able to create Web sites, share and manage content with clearly stated goals, that are aesthetically pleasing and filled with relevant content and functionality. The diverse modes of non-print information delivery stipulate the library profession to relearn their skills in the right perspective as per the changing environment which will in turn surely raise the status of library professionals.

The Internet presents an interesting dilemma for librarians. When a Web page is published, it has been uploaded to a server somewhere. There are no guidelines; anyone can publish—and does? Also nobody knows how long a web site or its pages may be active. Librarians can play an important role in weeding through the dross and establish annotated lists of links that patrons can feel confident about using. The boundless resources found on the Internet benefit from a librarian's expertise in such areas as indexing and cataloging, as well as search techniques; there will be an increased demand for this type of skill as users demand more value for the refined searches they conduct. The question is, who will maintain the technology necessary to support these activities? More and more libraries are felt of the need to hire a System librarian. A holistic approach integrating customer service, complex technology and fiscal planning is necessary to achieve successful delivery of services on the campus libraries and beyond the walls of the libraries. Librarians need to be managers of information access, designers of systems in conjunction with programmers and technicians, and service providers when working with users. Anne Goulding et al. suggest that the attributes traditionally considered necessary for a successful career in information work le.g., order, attention to detail) are not now those most needed by the profession and that others (e.g., leadership, flexibility) are essential for the workplace of the future 10.

A pre-conference seminar of the 1997 European Business Information Conference identified the following characteristics of the information professional of the 21st century:

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Skills	Experience	Attributes	Behavior
Information: collection,structuring retrieval, filtering, analyzing design.	Information Technology	Business focus	confidence
Communication: Written, presentation	Communication	Team approac	ch Influencing
Skills transfer: Training, coaching	General management	Value ethos	Sharing
Value added	Information management	User focus	Skill transfer
	Strategic	Leadership	Risk taking
	planning	Innovative,	Identification
	Operations planning	understand- ing of the	with the business
		potential of IT	[or institutional aims]
		Flexibility, Adaptability	Listening skills
		Recognition of opportunity	Understanding the issues and ability to judge relevance, quality and reliability
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Today, in the digital age, librarians can no longer be simply information providers or the 'keepers of knowledge'. Digital information is changing the role of librarians from a person whom users ask for assistance in finding information in a place called a library to someone who needs to provide services and instruction regardless of place, time or format. The process of

evaluating books and purchasing books is still vital in building a quality library collection. But how do we make important and valid information available to our faculty and students that may appear on the Web tomorrow? Or how do we make available documents that are no longer being printed but are only available on the Web?

In order to cope with these challenges, the role of the librarian must change to conform to the state-of the art. This can be achieved only through re/training and by also cultivating the art of creativity.

Training for the professionals-the need of the hour

Most library schools offer courses in computers and information science along with traditional librarianship training. The traditional method of performing functions such as acquisition, processing, circulation, storage and dissemination of information/ activities and mode of service-delivery in the library have tremendously changed. During the training period the librarian would have to understand modern approaches to information systems analysis, design, implementation and management. The information professionals should also have understanding and practical skills in a wide range of relevant computer applications, including in-depth knowledge of bibliographic software and an exposure to modern developments in library-related planning and management skills. Management, communication and I.T. skills are now just as essential for all levels of the library and information jobs as the "traditional" core units that were taught in most library and information schools up to the late 1980's. We have to learn new skills such as data mining, digital reference services, web site design and evaluation, network basics, LAN interfaces, electronic resources access, e-mail and a variety of other skills related to digital information handling and networking.

Training programs need to be arranged either in-house for example institution having computer or IT departments can train the library personnel or training maybe external by allowing the staff to attend training program, acquire further qualifications to suit the new requirements.

Indian Scenario

It would be difficult to summarize all events on professional training on new technology skills, as most of the events are conducted either infrequently or information pertaining to such events was not widely disseminated. There has also been a thick of such events as short-term courses, workshops, tutorials, conferences etc. in recent times. Some of the events which has come to our notice are listed to illustrate their diversity and what is to expect in future:

NISSAT supported professional bodies in organising short training courses as part of continuing education programs. Several other organizations such as NCSI, INSDOC (now NISCAIR), SAARC Documentation center (SDC), New-Delhi, INFLIBNET, NASSDOC, DELNET, IIMt, Lucknow, ILA and University departments are organizing the short term or continuing education programs. Further, several universities are also offering Post-MLISc Diplomas..

√lssues & challenges

The limitations of most of the programs highlighted above are: they are of short duration, generally infrequent, claiming comparatively high fees, professionals unable to get sponsorship from their institution, and often involves travel to far off destinations hampering regular work. Most of the topics dealt needs considerable elaboration and numerous hands on trials to inculcate the requisite skills, and could be difficult to achieve completely in a short-term course. But there is scope to realize most of these objectives in a long-term distance education venture as some of these limitations can be overcome by entrusting Open Universities and Distance/Correspondence Education Centres of other Universities this activity.

The crucial issue as we move from library focus to direct electronic user focus is the definition of the role of the librarian and information professional. Historically it is clear that two professions of IT and library have a very different working style. While the traditional librarian allegedly seeks stability/perfect standards with scant regard for time, the IT specialist's approach emphasizes speed and efficiency; it is imperative that as we proceed further, we need to marry efficiency and flexibility with risk taking and vision.

Are librarians to be archival museum keepers, Internet subject content facilitators, webmasters, meta-data creators, virtual university content providers, electronic publishers or entrepreneurs? The technologies we now use are an outgrowth of early, computerized information retrieval programs. However, if we are to be truly into the technologies of the present and future, we need to have many more technologies in our toolkit. It's not just the Web: It's data files, traditional online databases, chat groups, even books and the telephone.

For librarians and information professionals the networks and consortia management brings a need for a constant update of their professional knowledge and competencies. Among the changes foreseen include:

Increased use of campus network- and/or Internet-delivery of information and information services such as e-books, e-journals,

- electronic shelving, electronic reserves, inter-library loan, reference and bibliographic instruction;
- Shift in emphasis from ownership of sources of library-based information to delivery and access of shared or licensed resources;
- Librarians "re/packaging" information for distribution to users;
- Shared collection development, increased acquisition of "non-print" materials, and greater emphasis on the development of archives for non-digitized material;
- Academic librarians "partnering" with faculty to improve the academic community's information literacy, as well as enhancing the quality of acquisitions and services;
- The increased use of paraprofessionals to accomplish tasks which once were solely the function of professional librarians;
- Adapting to the distributed environment made possible by the new technologies and made necessary by internet enabled information delivery and the increasing use of distance education;

Rise in number of distance education courses in LIS without judging their utility and efficacy in the present situation. Inability to adopt fully IT oriented and competency based curricula and non-availability of necessary infrastructural facilities, even in the case of some regular departments.

Recommendations

The information professionals need to assess their new role and acquire new skills to cope with the ever-changing technological environment. Librarians, for one, are faced to make decisions on future library services that match users' need and behavior. Internet is a flourishing medium for communication and influencing the practice of librarianship throughout the world. Today libraries are pursuing their old mission (Library cooperation) with a new face (Consortia); those attempting to fulfill their mission by traditional way in changing times, find themselves confronting old obstacles: stagnant (or declining) resources, increasing output of publications, rising expectations by their clienteles, and relatively inflexible structures within which to work. Librarians should know the principles of setting up an efficient information resource. A shift in paradigm of working styles, meshing traditional librarianship and IT approaches to information provision, has occurred. The

appointment of e-Director (Sept 2001) in British library, (the national library of UK) is a step towards this direction.

It is the service we provide which is more important not our status as a profession nor our qualifications. Libraries are extremely poor in evaluating service output except in a generic sense and staff both individually and collectively will need to provide evaluative frameworks in the electronic environment. The best way to effectively deliver goods in one's profession in the present day is through introspection, and by adopting an attitude to correct whatever is wrong, change whatever that can be improved, and counter what is bad.

Presently what we need is a hybrid form of information professional: someone who possesses both content management and technology skills, some one who can acquire the latest computer service proficiency without hampering the virtues of the old librianship such as classification, subject arrangement and indexing. The change in roles is obvious from job description (advertisement) published in several professional journals and newspapers which includes position of chief content officers, data managers, web content specialist etc. The new roles for information and knowledge workers require people with ambition and drive, with business understanding and insight, with in-depth knowledge of IT applications and developments, as well as the more traditional skills of information management. Advertisements for positions in the university and other Government libraries in our country during the last few years expressed a clear need for IT and associated skills though the selection criteria and work environment both in terms of knowledge and abilities remained to a large extent "traditional". Although everybody seems to agree that a change is required this random selection of job advertisements did not reflect this in reality.

In order to achieve the expertise in managing library consortia and networking, the following recommendations may be considered:

- Necessary modifications, innovations and changes have to be brought into the existing syllabus in Universities to generate better relevance and quality of education.
- It is also recommended that traditional methods of teaching should be replaced by IT based teaching.
- Practical sessions of library science courses should be converted as learning by doing in the actual professional work setup rather than a mere simulation of the same in classroom.

- It is essential to make mandatory for students of library and information science to serve few months of internship in a modern library
- AICTE provide grants under MODROBS (Modernization and removal of obsolescence) projects to the technological institutes, similar grants are available from MHRD (MOD), UGC (COSIST, SAS); a fraction of this grant may be permissible to spend on staff training/development.
- Deputing professionals to national and international professional events to apprise them of the state of the art in IT enabled librarianship and information servicing.
- Encourage libraries and librarians to enter into collaborations across libraries to form consortia and to strike good deals and value for money in terms of collection development and information access.
- Use computer and allied technologies to preserve class lectures so that student can refer back the same in self-study, the same could also be used for distance learning.
- Expertise of faculty and practicing librarians should be shared across institutions through formal and informal arrangements to provide their expertise to learners in different institutions.
- The practice of offering conventional courses on the distance mode was stretched beyond limits now and their experience in providing conventional education in numbers and spread could be utilized for training working professionals.
- Some of these courses can be conducted on a modular basis facilitating
 the participants to pick those of interest. Apart from teaching faculty,
 expert librarians and information scientists would also be involved in
 these programs to bridge the gap between preach and practice.

Conclusion

Librarians are the most appropriate professionals to lead the team of people in finding the answers to the challenges we are facing in the digital environments of electronic information and the Internet. We have always been the experts at teaching people how to use the tools to locate information regardless of format. We are the most effective searchers and researchers and our basic role of teaching those skills has not changed. The technology and varied format of information is changing and making new demands on

our profession. We are aware of the attempts at library networking and automation and what are our strengths and weaknesses. Resource sharing attempts in the country has received a major thrust in recent times due to several attempts at consortia based subscription and access of costly information sources. To cope with each of these developments, constant monitoring and consistent renewal of professional skills are very essential, which could be very difficult to realize immediately through formal educational channels. Thus various professional entities are offering short courses, workshops, and tutorials in emerging areas to working professionals. Efficient co-ordination of all the major players in the field will go a long way in fruitfully bridging the gap between skills required and skills present. In this fast-paced world it is most important that we change with the changing roles and adapt to the challenges.

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