Information Professionals in the South Asian Region: The Challenges Ahead

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Information Professionals in a Globalized World

Information professionals working on the Indian subcontinent face many challenges. As libraries in the region struggle to develop new models of service and operation to meet the needs of the current information explosion and the ever increasing cost of information, they face innumerable barriers. In the face of the emerging trend of economic globalization and the information technology (IT) revolution, many Indian and South Asian library professionals recognize the current realities and the need to adopt many of the strategies of their western colleagues in order to provide the information services that will enable their fellow citizens and countries to be competitive on the world stage. The barriers they face range from insufficient technological capacity and antiquated curricula for training library professionals to inexperience with strategies for managing digital collections and the effects of government infrastructures that prohibit or restrict the development of library networks that would otherwise expand user services and resources.

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Global Information Management Trends Come More Slowly to South Asia

Libraries all over the world are now shifting their emphasis. There is obviously a shift from print to digital/electronic collections and services. There is also a visible transition from an operations model of "repository maintenance" to a user-centered approach to library services. In western countries, libraries have moved from a holdings or ownership ideology to an access strategy based on content subscriptions accessed via the Internet. There are many reasons for these changes. Advances in digital content and web-based services have improved the tools for development of digital libraries and repositories as well as enhancing the ability for libraries to form consortia and networks to share resources. But libraries are also moving in these directions because they are trying to meet the expectations and needs of newer highly digital and Internet based user populations. There is also a strong economic incentive to share resources with other libraries and focus on virtual access rather than physical storage.

Many librarians on the Indian subcontinent are aware of these trends and have a sincere desire to transition into new models of information service. But a majority of the libraries in South Asia still give maximum importance to printed documents and are satisfied to remain focused on print collections, only providing services to users that depend mainly on those traditional collections. There are a few institutions of higher education and research establishments, especially in the science and technology fields, that have developed modern information technology-based libraries with

digital collections, but the pace of change is very slow. There are many reasons for this.

Barriers to Change

Lack of IT proficiency. In developing countries, library and information science (LIS) professionals operate at various places on a continuum of primitive to sophisticated services, though wherever they are it is usually a struggle. Library automation activities, using specialized software, are picking up in special, research, university and academic libraries. Many of the libraries in the science and technology and academic sectors are switching from traditional paper-based services to online and e-generated library services. They are beginning to use e-mail, CD-ROMs, LANs and machine-readable catalogues for resource sharing.

However, there are certain specific problems that act as deterrents to the libraries of South Asia region for adopting computerization of services:

- low computer literacy among students of LIS;
- lack of basic knowledge of hardware and software among working professionals; and
- inadequate funds for purchase, installation and working with computers in school, college and public libraries.

Since hardware costs have come down drastically, libraries located in smaller towns are now feeling that computerized services are within their reach. But there are three important aspects that must be considered when planning library automation: hardware and software, communication facilities and manpower. South Asian countries continue to grapple with the problem of communication infrastructure and manpower development for libraries. For example, schools and libraries in the rural areas do not have proper infrastructure (internet connectivity and sometimes power), and they are therefore still working in a traditional mode. The key issue related to manpower is the low computer literacy rate among both students and professionals. Because of inadequate training in LIS schools and poor professional networking and development opportunities in technology for professionals, the pool of librarians skilled in technology is very low. As a result, a large number of libraries have started using computer professionals instead of librarians for many key library functions.

LIS Education. The electronic environment of the 21st century demands a new range of skills from LIS professionals – technology skills. Developing these skills is one of the major challenges for LIS professionals working on the Indian subcontinent. A proper needs-based training program on information technology application in libraries is required for LIS professionals. Unfortunately, most of the library schools follow syllabi developed for traditional libraries. There is little coordination among the employers and the schools of library science to design curricula that produce graduates that meet employers' needs. As a result, some of the jobs that are suitable for LIS professionals are given to others, like computer professionals, who are not familiar with the unique aspects of library functioning.

In the South Asian region, Nepal, Bhutan and the Maldives have a limited provision for LIS education. India, however, has a proliferation of LIS programs, but many of the LIS institutions do not have adequate infrastructure to support their programs. Pakistan, Sri Lanka and Bangladesh also have the same type of difficulties. There is also no system of accreditation of library schools, while there has been a rapid increase in the number of library schools, particularly those operating under distance education program models. But these schools also do not provide the information technology skills development and experience that students need. Only basics such as an introduction to computers and their peripherals, MS Office, WINISIS (Windows-based CDS-ISIS, a software developed by the UNESCO for creation of bibliographic/catalog database) are given to the students. Other important components such as operating systems (Windows, Linux), LAN services, RDBMS, data transfer, FTP, Telnet and housekeeping software are not taught in library schools, partly due to non-availability of qualified teachers.

In fact, higher level training opportunities in ICT application covering topics like the Linux operating system (installation and administration), setting up web servers, web design, HTML, XML, digital library software,

protocols and standards are severely limited due to the non-availability of experts and training infrastructure. Often computer science professionals who are competent to train LIS professionals do not understand their requirements.

Networking, Collaboration and Best Practices. On the Indian subcontinent, there are different groups of libraries such as academic, special (science and technology related) and public libraries just as there are in most regions of the world. However, there is hardly any coordination among them in the use of information and communication technologies. They are managed and financed by different public bodies that have different policies and priorities. As a result, networking of libraries is largely non-existent. The use of open standards would facilitate interoperability and would help in the development of technical resource sharing networks, but such use is limited. Most of the libraries use proprietary software for their day-to-day operations, and such a situation does not encourage a common training program for all LIS professionals.

Another subject that baffles the LIS professionals in the Indian subcontinent is organization, management and preservation of digital contents. In India there is no uniform or standardized practice for digitization of rare manuscripts or reading material, and most of the libraries are taking up digitization projects entirely on their own. Institutions desperately need a set of best practices and user groups that they can work with to develop effective strategies for capturing, managing, distributing and preserving the digital material. These efforts require not only new technological infrastructure, but new policies and procedures as well as core competencies of staff. All of these, at this time, are very weak.

The future lies with initiatives like INFLIBNET [1] and INDEST [2], consortia that have provided access to scholarly journals to a large group of students, researchers and academicians. These networks provide access to resources that benefit library patrons, but documentation about the development of these digital libraries and networks also provides librarians with access to knowledge they themselves can use to improve their skills and opportunities in their own domains.

Credibility. In India libraries and librarians are still the lowest priority in any decision-making process. This lack of participation in the development of the society is part of a vicious cycle that must be broken. Poor credibility is partly a result of inadequate LIS education, particularly in the technology areas which are so critical in the current digital information age. Inadequate education and poor resource allocation for equipment means that many libraries remain unable to serve the needs of modern users in a digital society. Because they can't meet the needs of users, their credibility remains poor and resource allocations for libraries or LIS education are not increased. Libraries can no longer afford to remain institutionalized passive spectators. They must take responsibility for their future and learn and practice so that they can overcome this history of low credibility.

Infrastructure. Limited Internet connectivity and inadequate computer and communication infrastructure make it difficult for universities and institutions to access and download full text databases and other key resources. Regardless of training and practice, it is difficult to overcome these technical barriers without changes in the priority given to libraries and information centers by governments, higher education and the commercial sector.

Steps to the Future

An immediate need exists to integrate the functioning of existing libraries in different sectors such as academic, special and scientific, and public to develop national level networks – both for sharing resources and for sharing knowledge, experience and best practices about all kinds of library and information center development activities. A strong need also exists for improved training and models for development of best practices in the technical and operational management of digital collections.

ASIS&T could provide significant assistance by coordinating local conferences for information sharing, providing more awards that enable South Asian librarians to attend western conferences to learn from their colleagues, and providing direct mentoring to library and information professionals who want to learn how to transition to new models of information service.

Conclusion

The South Asian region represents a wide range of development. In India, particularly, there is a growing population that is coming to expect the type of technology service provided in the West. However, in these developing countries basic infrastructure issues like Internet connectivity often create substantial challenges. For example, *The Economist* recently reported that "India produces more engineering graduates than America. But it has only 24 personal computers for every 1,000 people and fewer than three broadband connections" [3, p. 4]. Many information professionals are ready to transition their information services – they just need more opportunities to connect, learn and share with one another to increase the rate of change. As they gain more practice and experience, the spirit and determination of librarians on the Indian subcontinent will hopefully begin to transform the education programs and government supervision so that they recognize and support the information technology training and resource needs of the field and provide librarians a larger voice as India and its neighbors begin to make their mark in the information society. ■

Resources Mentioned in the Article

[1] INFLIBNET: A Gateway to India's Academic and Research Community (Information and Library Network): www.inflibnet.ac.in/

[2] Indian National Digital Library in Engineering Sciences and Technology: http://indest.iitd.ac.in/

[3] High-tech hopefuls: A special report on technology in India and China. (2007, November 10). *The Economist, 385*(3881).