4th National Conference of CGLA
On
Library Vision 2020:
Profession & Education

The 4th National Conference of CGLA on Library Vision 2020: Profession & Education is being organized at a time when there is a felt need to introspect and develop long-term perspective goals that reflect on the needs of scientists and researchers in our institutions. This would have to be done while considering how research, teaching, and service missions of these institutions may be realized through a library that serves as an information center for the campus of 2020. There is already a thought process which visualizes on how the central institutions libraries will impact scientists, research students, faculty, and the infrastructure of information management in the office campus. This process is expected to enable the Libraries to emerge as the leaders in information management the needs of our community at various institutes and research centres.

The opportunities and challenges facing the Libraries in the coming years will be extensions of those it faces today: rapid technological change, evolving expectations of scientists, research student and faculty, buildings designed and built for the 20th Century university community, and new models for scholarly communication emerging from commercial and non-profit organizations. The challenges for the Libraries lies in continually monitoring the changing needs of scientists, faculty and students as they pursue their research and academic programs, and to create and manage collections designed to meet those needs. Also, a major challenge is to improve services such as information and discovery tools. The opportunities emerging in this new century are expected to lead the scientific community in technology and access to information, to enable the institutions to serve as a leading destination for scholars in the country for research and training.

The conference agenda has been so designed to discuss and deliberate on some of the issues confronting the community of institutional libraries, especially those of the central government. It is expected that post-conference outcomes would help build a Library Vision 2020 scenario incorporating a focus on the application of new technologies and space. With the explosion of Internet technology, libraries incorporated a wide array of digital content resources into their offerings; updated the network, wiring, and wireless infrastructures of their buildings; and designed new virtual and in-person services. However, technology has resulted in more modernization than transformation. There is an apparent disconnect between the culture of library organizations and that of Net Gen scientists and research students. It would be one of the earnest endeavours of this conference to explore how libraries might better adapt to the needs of Net Gen scientists, research students and faculty in a number of specific areas.

What are some of the major disconnects between many of today's academic libraries and Net Gen scientists and research students? Library services are often presented in the library organization context rather than in a user-centered mode. Libraries emphasize access to information but generally do not have facilities, software, or support for creation of new information products. All of these disconnects can be remedied if appropriate attention is paid to the following themes of the Conference which are discussed in detail.

Knowledge Management: Knowledge management, in an organizational context, comprises a range of practices used in an organisation to identify, create, represent, distribute and enable adoption of insights and experiences. Such insights and experiences comprise knowledge, either embodied in individuals or embedded in organisational processes or practice. An established discipline since 1991, Knowledge Management includes courses taught in the fields of administration, information systems, management, and library and information sciences. More recently, other fields have started contributing to KM research; these include information and media and computer science.

Metadata: The workshop aims at developing and spreading awareness and knowledge about metadata to support the long term preservation of digital objects, in particular it focuses on the established standards. There is however, a need to evaluate relationship of these established standards with other metadata standards for digital archives with a specific attention on scientific content. For scientists and research scholars, it is the unparalleled scale of these undertakings that holds such promise. But it is likewise the scale of such projects that gives rise to concerns that the quality of the digitized material is inconsistent, and that the files sometimes lack important bibliographic information in their metadata. The primary aim of large-scale digitization projects—to quickly create a critical mass of digitized books—stands in contrast to that of earlier projects, which frequently sought to create fewer, but higher-quality, scans for scholarly use. These changes in scale and quality raise a new challenge: that of maintaining the massive new collections. The point of the large-scale projects—to make content accessible—is interwoven with the question of how one keeps that content, whether digital or print, fit for use over time. The institutional partners, as well as the participating libraries, are investing significant resources in digitization projects. How can we secure—or improve—a long-term return on this investment? Can we strike a better balance between quantity and quality? Our goal is to stimulate discussion among stakeholders and to generate productive thinking about collaborative approaches to enduring access.

Intellectual Property Rights: Intellectual Property Rights is a number of distinct types of legal monopolies over creations of the mind, both scientific and commercial, and the corresponding fields of law. Under intellectual property law, owners are granted certain exclusive rights to a variety of intangible assets, such as scientific discoveries and inventions. The Conference would also focus on discussing this important issue to create an IP culture and enhancing knowledge & competencies in tune with the global environment. This has acquired added importance in view of the revolution in information technology and the ever increasing amounts of information are available in digital form through a network of computers around the globe. When all is available at the click of a mouse, this very technology provides vastly enhanced access and also raises difficult fundamental issues concerning intellectual property. This is because the technology that makes access so easy also greatly aids copying—both legal and illegal. As a result, many of the intellectual property rules and practices that evolved in the world of physical artifacts do not work well in the digital environment. The issues associated with computerization are also amplified by the rise of the Internet and networking.

Networking Techniques and Technologies: Library networked statistics and performance measures are important indicators of the use, uses, and users of networked services that libraries offer their patrons. Access to data that identify what networked services are being used by whom and when can: 1. Enable local library directors to compete for

resources with other local organizations by documenting the range, extent, and impact of library-provided networked services. 2. Assist libraries make a strong case for national, regional, or local community support for technology and information infrastructure by documenting their Internet-based services and resources. 3. Facilitate the transition from traditional library use measures such as circulation, reference transactions, interlibrary loans, etc., to network measures that describe the nature and use of library-based network activities and resources. 4. Assist libraries in administrative, management, and planning activities. 5.

Allow individual libraries, regions, and states to compare effectively themselves to others in terms of Internet development, costs, provision of services, connectivity, and use. 6. Provide libraries a means through which to assess, compare, and make decisions regarding collections resources in general and future collections development decisions in particular.

The conference would endeavour to focus on these factors that provide libraries with the ability to incorporate network usage data into key decision making processes and planning activities. Together, through a systematic approach to the collection and reporting of library network statistics on a local, regional, national, and international scale, these factors can provide significant data regarding use and usage trends throughout libraries that inform policy makers, researchers, and library professionals as to what types of network activities are occurring in libraries and how those uses can lead to library role changes in the networked environment.

Preservation / Conservation Procedures: Libraries are responsible not only for collecting, interpreting, and exhibiting significant materials that document history, but also for the long-term preservation, security, and accessibility of these materials. The Preservation and Conservation Units exist to assure long-term access to the physical and intellectual contents of the Library's collections. These units seek to provide this access with an eye toward maximizing the Library's investment in collections, services, and staff while continually seeking to improve the services. These include Bindery Preparations, Conservation Unit, Digital Preservation, Media Preservation, Environmental Monitoring, Reformatting & Replacement. Preservation planning is a process by which the general and specific needs for the care of collections are determined. Because books differ in value and in the way they are used, it is important to select an appropriate type of rebinding when they become damaged. Library binding, one type of rebinding, is probably chosen for more books than any other type. Library binding is a good choice where economy and durability are the objectives. The Conference would also deliberate on how and why books should be sent to a professional conservator for treatment and preservation.

Semantic Web, Automated information Retrieval: Semantic Web Services, like conventional web services, are the server end of a client-server system for machine-to-machine interaction via the World Wide Web. Semantic services are a component of the semantic web because they use markup which makes data machine-readable in a detailed and sophisticated way (as compared with human-readable HTML which is usually not easily "understood" by computer programs). The semantic Web and Web services technologies have provided both new possibilities and challenges to automatic information processing. There are a lot of researches on applying these new technologies to current personal Web information retrieval systems, but no research addresses the semantic issues from the whole life cycle and architecture point of view. Web services provide a new way for accessing Web resources, but until now, they have been managed separately from conventional Web contents resources. In this paper, we point out new system requirements and propose a

conceptual architecture for a personal semantic Web information retrieval system. It incorporates semantic Web, Web senders, and multi-agent technologies to enable not only precise location of Web resources but also the automatic or semiautomatic integration of hybrid Web contents and Web service resources. It is also proposed to deliberate on Semantic Web markup languages.

Multimedia and Databases: At the conference, a number of data types that can be characterized as multimedia data types would also come up for discussion. These are typically the elements or the building blocks of ore generalized multimedia environments, platforms, or integrating tools. The basic types can be described as: **Text:** The form in which the text can be stored can vary greatly. In addition to ASCII based files, text is typically stored in processor files, spreadsheets, databases and annotations on more general multimedia objects. With availability and proliferation of GUIs, text fonts the job of storing text is becoming complex allowing special effects. **Images:** There is great variance in the quality and size of storage for still images. Digitalized images are sequence of pixels that represents a region in the user's graphical display. The space overhead for still images varies on the basis of resolution, size, complexity, and compression scheme used to store image. The popular image formats are jpg, png, bmp, tiff. **Audio:** An increasingly popular data type being integrated in most of applications is Audio. Its quite space intensive. One minute of sound can take up to 2-3 Mbs of space. Several techniques are used to compress it in suitable format. **Video:** One on the most space consuming multimedia data type is digitalized video. The digitalized videos are stored as sequence of frames. Depending upon its resolution and size a single frame can consume upto 1 MB. Also to have realistic video playback, the transmission, compression, and decompression of digitalized require continuous transfer rate. **Graphic Objects:** These consist of special data structures used to define 2D & 3D shapes through which we can define multimedia objects. These include various formats used by image, video editing applications.

Storage Solutions: Library Storage involves several different storage requirements ranging from books to periodicals, files to binders and multi-media to microfiche. Libraries use cantilever shelving for book storage but also use compact shelving systems for other requirements in libraries and in some cases even for book storage. There is always a continuous need for filing and storage system planning. The different products include High Density Shelving Systems, Stationary Shelving Systems, Vertical Storage Systems and Rotary File Storage Systems.

The Conference would lay stress on discussions on designing and providing efficient storage and retrieval system, while maximising the use of the floor space for storage. Also the discussions would focus on generating systems that include the efficient location of items and security – that can be closed and locked together to prevent unauthorised access.

Information Resources Sharing and consortium in changing scenario: The revolution in scholarly journal publication, subscription, access and delivery mechanism has brought us to e-journals which are electronic equivalents of their print counter parts. These possess many added features and offer a range of potential advantages to libraries and end-users: multiple simultaneous access to the same issue, remote access, in-built searching facilities, multi-media capabilities and reduced storage concerns. Due to dwindling of library budgets, librarians are forced to work together for alternate strategies towards collection enrichment and sharing of resources. Therefore, consortium based library subscriptions to E-journals and electronic full-text Databases is the answer to this problem. Over the past

number of years, more and more national. At the same time Library Consortia not free from problems. The Conference would deliberate on various issues relating to consortia like uninterrupted online access, perpetual access to back issues, pricing, licensing, copyright and archival solutions etc. There is a need to strategically tackle this to get the best out of the consortia.

Libraries and Information Services in new environment: The Conference would examine and discuss the need for integrating digital library resources to the virtual learning environment and subsequent developments towards the integration of digital libraries and virtual learning environments. The deliberations would lay emphasis on collaboration between learning technologists and librarians which has become essential in the present scenario.

LIS Professionals in changing environment: It is from the beginning of the 21st century that library and information professionals working in India are facing various paradigm shifts including 1. transition from paper to electronic media as the dominant form of information, dissemination, storage and retrieval, 2. Increasing demand for accountability along with focus on customer services, 3. performance measurement, bench marking and continuous improvement, 4. Introduction of new forms of work organization such as work teams, job sharing, outsourcing, telework, re-engineering etc. The libraries all over the world are now responding with adaptability, creativity and flexibility. Indian librarians of today serve in a society which is actually in flux, torn by the technological revolution and rapid administrative changes. Librarians and information professionals in India are now experiencing both excitement and anxiety as a result of the sweeping societal changes. In order to deal with the present situation LIS professionals of India will have to play a more 'proactive' rather than 'passive' role. These would be suitably discussed so as to bring about a culture of immediacy, availability and affordability in the new millennium.

Open access initiatives role of LIS Professionals: Publishing of research findings in science and technology has resulted in a large number of journals both in volume and variety. This has led to a growth in literature, on the other hand, it has put severe hindrance on their accessibility. The libraries in developing countries are vexed with the problems of escalating cost and shrinking fund to provide access to literature and act as a true partner of research. Though the scientists and scholars are communicating the fruits of their research through scholarly journals, all are not available to many, if not all. Hence, in recent years to make the public funded research available to wider cross sections of people an array of initiatives have been taken by Libraries through the area of open access. Open access, a philosophy facilitates availability and distribution of scholarly communication freely. One of the Conference themes is Open access which would be discussed to reduce barriers to scholarly communication.

Virtual learning environment: A virtual learning environment (VLE) is a set of interactive tools designed to enhance learning experience by including computers and the Internet in the learning process. VLEs and digital/hybrid libraries are important current developments in e-learning. Their evolution has thus far proceeded along largely separate paths. The Conference would focus on the need for the librarians and information scientists to concentrate on bringing their professional skills to bear in the new electronic environment for bringing people together with the knowledge they are seeking.

With these themes, the Conference organizers hope to generate enough awareness among the librarians and information scientists and professionals about the rapid changing technology with effects on the library profession.