# **3.** The Future of Academic Libraries in the Digital Age

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# Introduction

Academic libraries are faced with managing hybrid resources (print and electronic) and are challenged to acquire the necessary skills. Furthermore, electronic information is eroding the monopoly of academic libraries as the sole access point to information. Nevertheless, academic libraries can maintain their place by serving as an access point to both print and electronic resources. Digital technologies are used for accessing, processing, gathering, manipulating and presenting or communicating information. The application of modern Digital Technology in the academic libraries is providing the library professional with new opportunities to improve their sources and services. Information is now published both electronically and by print making it accessible to users according to their demands. It is important to access the Digital technology applications in library and information centres in the context of changing user needs. The world is undergoing a transition from paper economy to digital economy. The concept of library automation in India is not new, but the situation is still not levelled with developed nations. Academic libraries have a close relationship with learning and research and have influenced these things as well.

### Academic Libraries in the Digital Age

A well established library is essential for any academic institution. As a focal point for teaching, learning, and research, it is expected to provide standard information resources. Today, academic libraries are struggling to keep their place as the major source of inquiry in the face of emerging digital technology. Digital technology has revolutionized not only the way information is packaged, processed, stored, and disseminated, but also how users seek and access information. Academic libraries no longer restrict themselves to print services such as collection development, cataloguing and classification, circulation and reference services, current awareness, selective dissemination, and other bibliographic services, but have extended their efforts to interdisciplinary concepts and computer software and hardware and telecommunication engineering and technology. Academic libraries presently are faced with not only the decision on

what books and journals to acquire to satisfy faculty and students but also on how to remain relevant in the digital era, mindful of low budgets and resentment on the part of institutional administrators. There is also the issue of library users opting for alternate, more convenient, and "qualitative" sources of information (the Internet)., digitized finding aids, digital repositories of articles, online access to newspapers, etc. Libraries also struggle with when, how, who, and where to begin digitization efforts, while keeping in mind that hesitation in the digitization of institutional archives will.

# Vision of Future Libraries in Digital Age

To meet the challenges in future, academic libraries must make strategic choices in four distinct dimensions, each consisting of a continuum of choices lying between two extremes. Collectively, the choices a library makes along the four dimensions create a vision that it believes will enable it to best serve its patrons and its community.

#### A .Virtual Library

The most realistic step of digital age is , end of the physical to virtual continuum is physical library that has added a Web presence to its substantial physical facilities and a careful selection of virtual media to its extensive physical media holdings, which will probably have become a primarily off-site collection held jointly with other libraries This virtual library's patrons meet their needs—finding and acquiring media, obtaining answers to questions, participating in meetings—by accessing the library's Web presence from anywhere via the Internet.

## **B.** User Friendly Libraries

User friendly system is defined as that in which relatively untrained users can interact easily. It refers to an atmosphere which is congenial, and healthy. It is so designed that it fits most types of users in a friendly environment. It also connotes as a library which is easy to use, attractive, warm and comforting place which welcomes to use the resources. It is, in other words, providing personalized or in-person help to users of a library. To view this in its correct perspective, it is appropriate to see the existing practices, and make a self-appriasal of professionalism. It will also show, where libraries stand with the onslaught of IT and Internet -- the two virtual competitors, and alternative information providers. C.Collection to Creation Libraries Creation library is define as, which has extended its role and become a place where media conveying information, knowledge, art, and entertainment are created.

### **Barriers in Implementation of Digital Technology in Academic Libraries**

The significant obstacles and the factors that are affecting the use of Digital technology in Academic libraries of India are

- Inadequate Finance
- Inadequate Hardware
- Lack of effective planning for Digital technology activitie
- Inadequate Management support
- Lack of IT trained staff
- Lack of willingness of staff
- Lack of consultancy service for Digital technology
- Lack of well accepted standard of Library Management Software
- Lack of less expensive standard of software
- Lack of upgradation of basic infrastructure
- Lack of Training facility
- Lack of control over Library Staff
- Delay in retrospective conversion of documents
- Erratic power supply
- Lack of awareness/hesitation in users of Digital technology
- Low priority to Digital technology
- Frequently change in Information Technology

### **Digital Future of the Academic Libraries**

Today almost all the academic institutions, universities and college libraries have been automated by library software and have become connected with Internet, intranet and extranet facilities and through which they mare providing access to relevant e-journals and e-books by proxy-server based networks. So the future of the academic library services may be changed accordingly to fulfill the needs of the patrons in the e-learning environment. E-learning is a means of becoming literate, involving new mechanisms for communication, such as computer networks, multimedia, content portals, search engines, electronic libraries, distance learning, and web-enabled classrooms. Different web based applications such as email, real-time conference, Web Cam, etc. are being used as important tools in the process of e-learning. E-Learning is a catch-all term that covers a wide range of instructional material that can be delivered on CD-ROM or DVD, over a local area network (LAN), or on the Internet. It includes Computer-Based Training (CBT), Web-Based Training (WBT), Electronic Performance Support Systems (EPSS), distance or online learning and online tutorials. The major advantage to students is its easy access. So, providing access to online e-journals and e-books through networks will enhance the self-learning knowledge

#### **Future Libraries**

- 1. University and college libraries will be increasingly expected to open their resources to visiting students and scholars, in the process increasing the need for sensitivity to cultural differences.
- Librarians must continually assess their current services against the new breed of student they will serve, re- examining how and what they teach students about using libraries while providing a variety of learning experiences through various media.
- 3. To meet the learning styles of future students, libraries will have to rethink existing and future facilities to include a variety of spaces for consultation, collaboration, and instruction to foster varied learning needs. As the demand for more experiential learning grows libraries must invent and present to their communities spaces and facilities that invite, inspire, and support a culture of intellectual engagement and exchange, becoming studios and laboratories for faculty and students to engage in learning activities.
- 4. Libraries will need to respond to the growing interest in interdisciplinary program by improving communication with participants and becoming flexible in supporting program resource needs.
- 5. As college campuses become more "green," libraries will also have to infuse sustainability into their planning and operation.
- 6. As libraries shift their centers of gravity from storage and physical collections in central spaces, they must establish settings for a mix of social and academic activity that encourage and support "high energy" learning by providing spaces for communities of learning to happen.

# **Future Trends**

- 1. Closing the gap between biology & technology
- 2. International Wireless Network
- 3. Artificial Intelligence
- 4. Increasing Entrepreneurial/Flex work force
- 5. Increased free time
- 6. Virtual Education
- 7. Prosumers rather than Consumers (producersconsumers)
- 8. Project-based workforce

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