
TRAINING OF THE LIBRARY PROFESSIONALS IN DIGITAL ERA: KEY ISSUES

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Abstract

The present paper examines the developments in the Information and Communication Technology and its application to the Library and Information Science. As it developed the library's functions and services, there is a need for training of the library professionals in these applications. The paper briefly explains the role of the library professionals and applications of the Information and Communication Technology applications to the libraries. The applications may be grouped as Basic Computerization, Library Automation, Electronic Services, Strategic Management, Digital Rights Management, Information Systems and Networks, etc. These are identified as key areas in which, present library and information professionals need training and competency development.

Keywords: Digital Libraries; Human Resource Development; ICT; Digital Era

1. Introduction

Information plays an important role in every aspect of life in the modern world. Nothing moves without information and it is believed that information is power and it is an important resource needed to develop other resources. Libraries as storehouses of information must be well equipped to provide right kind of information to right users.

Information and Communication Technology (ICT) has revolutionized the information handling activities in the libraries and information centers during the past few years. The information society demands that all the relevant technologies; that are involved in information processing, consolidation, repackaging, communication system; capable of providing diversified services. Information and Communication Technology involves finding, sharing, restructuring and communicating the information in various forms. 'Information and Communication Technology is a complex and varied set of goods, applications and services used for producing, distributing, processing, transforming information (including) telecoms, TV and radio broadcasting, hardware and software, computer services and electronic media'

It represents a cluster of associated technologies defined by their functional usage in information access and communication, of which one component is the Internet. Internet is truly a global infrastructure for new millennium. It has become an indispensable and essential tool for research scholars, academicians, information professionals and the students. Internet is the network of

networks scattered all over the world... It provides access to communication services and information sources to millions of users around the globe. Internet serves as an encyclopedia giving detailed information on a wide variety of subjects. The Internet has improved the users' access not only to wide variety of information sources, but also to experts in the field. Further, academic users can interact and collaborate jointly for a research project or publication with the global partners and experts².

2. Role of the Library Professionals

Gaddagimath and Others³ stated that Librarianship is caught in the midst of dynamic changes with respect to collection, preservation, control and dissemination of recorded knowledge appear to be at risk in a world where uncertainty, contingency and the transforming nature of information technology impact especially electronic media and Internet are increasingly dominant. As a result, the library managers are encountered with twin challenges of managing print collections and simultaneously developing digital resources and network based information services.

To order to face the technological challenges, continuous professional development is an essential part of modern library and information professionals and it is way to successful career planning and prospects. The library professionals with better managerial, personal, professional and technological competences and skills have greater demand and bright future in the modern libraries. Frequent changes in the Information and Communication Technology in libraries requires immediate improvement of different competences and knowledge among library professionals. Continuous staff Training on emerging technologies is essential to learn, improve and develop various kinds of professional skills and competences

Pinfield⁴ stated the Library Professionals require a wide range of new or enhanced skills, including:

- Professional skills
- Technical and IT skills
- Flexibility
- Ability to work under pressure
- Ability to learn quickly
- Communication skills
- Negotiating skills
- People skills
- Presentation skills
- Teaching skills
- Team working skills
- Customer service skills
- Analytical and evaluative skills
- Subject skills
- Project management skills
- Vision

3. Training Programmes

At present different kinds of training programmes for librarians in India namely, refresher courses, orientation programmes, workshops, conferences, seminars, conventions, symposia and short-term courses are organized. It is noted that orientation programmes are general and theoretical in nature and not able to suit the training needs of the library professionals. Refresher courses, seminars, conferences, conventions and symposia are specialized training programmes, but usually concentrates on the theoretical aspects. Although workshops and short term courses are able to fulfill the training needs of the working library professionals, they are of short duration. Further, they also concentrate on a single micro topic. Hence, they also concentrate on a single micro topic. Hence, there is need to develop a suitable training programme for the working library professionals, which is able to cover the traditional concept with modern technological applications along with theory and practical applications for the library. The training programme designed must consider the latest developments in the Information and Communication Technology.

Key Areas of Training

Based on the Information and Communication Technology developments and its applications to libraries, the following key areas, in which the working library professionals are, needed training:

3.1 Basic Computer and Networking Knowledge

For working library professionals, who does not know about computer and information technology, there is need to know about basics of computers and networking. The course module covers fundamentals of computers, hardware, software, input, output devices, Linux (Red hat), software such as MS-Office, database management systems, Knowledge about LAN, MAN, WAN, INTERNET, Web publishing, Electronic Mail, etc.

3.2 Library Automation

Computerization and automation of the library was started in the 1990s. There are many software packages and library automation packages developed by software vendors. To quote a few libsys, Alice, Librarian, Netlib, Libsoft, SOUL (Software for University Libraries) New Gen Lib etc. It is a problem for library professionals to choose an automation package, which suit the needs of different libraries. For this purpose, there is a need to study these packages and choose the best for their library needs. It is necessary to study the library automation package in detail with applications to different sections/activities/services of the library.

3.3 Strategic Management

Information management is defined as the set of decisions and actions that result in the implementation of plans designed to achieve library objectives. Managing Activities internal to the library in only part of the modern librarians, the modern librarians also must respond to the challenges posed by the library immediate and remote external environments. The immediate external environment includes competitors, suppliers, government agencies (state/central) and their ever more numerous regulations, and information seekers whose preferences often shift inexplicably, the remote external

environment comprises economic and social conditions, management priorities, and technological developments all of which must be anticipated, monitored, assessed and incorporated in the librarians decision making⁵.

4. Digitization and Retrospective Conversion

Now-a-days, many libraries are digitizing their printed collections. Digitization refers to the conversion of an item printed text, manuscript, image, or sound, film and video recording-from one format (usually print or analogue) into digital. The process basically involves taking a physical object and essentially making an 'electronic photograph' of it. An image of the physical object is captured-using a scanner or digital camera-and converted to digital format that can be stored electronically and accessed via a computer.⁶

It is necessary to have knowledge of conversion of documents to digital form, different types of scanners, cameras and processes of digitization for the library professionals.

5. Digital Libraries

Wendy Lougee⁷ describes how libraries are changing, partly in response to new technologies and partly in anticipation of new opportunities for leadership that technology provides. Rather than being defined by its collections or the services that support them.

Digital library is system providing a community of users with coherent access to a large, organized repository of information and knowledge. The digital library is not just one entity, but multiple sources seamlessly integrated. The digital libraries endow with a structural and planned entrance to information stuffing in a dispersed environment and assist users in searching, evaluating and utilizing resources irrespective of their format. Improved information retrieval and enhanced document delivery capabilities are widely acclaimed strength of digital library in a networked environment through internet and internet in library and information center.⁸

The US Association of Research Libraries Identified Five Elements Common to All Definitions of Digital Libraries:

- The digital library is not a single entity;
- The digital library requires technology to link the resources;
- Linkages between digital libraries and information services are transparent;
- Universal access to digital library must be a goal;
- Digital library collections are restricted to document surrogates but include digital artifacts that have no prints equivalent .⁹

It is essential for the library professionals to know about the concept of digital libraries, their architecture, models, digital library software, e-publications, multimedia applications, multimedia packages, portals.

6. Information Systems and Networks

Information systems and networks plying an important role in collection, storage, retrieval communication and sharing of information in a specialized subject discipline. It is essential to know about different information systems and networks for the library professionals, so as to collect the information requirements from the systems through networks and provide the same to the needy users.

7. Information Collection, Storage and Retrieval

The information here refers to the digital information. It is necessary for every library professional to know about collection, storage retrieval, sharing and communication of information. For this purpose, various software formats such as HTML, PDF, XML, TEXT and Images formats are used. Similarly, for accessing the digital documents it is necessary to know software such as Adobe Acrobat Reader, Real Page Plug in HTML, PDF, and Text formats etc.

8. Information Management and Control Techniques

Today, every organization is built and maintaining and managing their own information system for their information needs. Best10 defined Information Management as the economic, efficient and effective co-ordination of the production, control, storage and retrieval and dissemination of information from external and internal sources, in order to improve the performance of the organization.

Information Systems are becoming of greater interest in progressive and dynamic organizations. The need to obtain access conveniently, quickly and economically makes it imperative to devise procedures for the creation, management and utilization of databases in organizations.

It is necessary to know various modern techniques in digital information management such as metadata harvesting, preservation and conservation of the metadata, bar-coding, radio frequency identification devices, smart cards, etc. Smart cards and RFID tags also helps to control the information by enabling security.

9. Organizational Change and related Issues

The organizational change transformed the libraries and digital libraries and there are four areas in which the library professionals should be exploring new developments and opportunities. 'New patterns of library service, organization and management are being required by a number of factors, including: the variety, cost and number of publications; the changing face and the need of the library's clientele; closer scrutiny of library budgets; growing expectations to do more with less; and increasing diversity in our clientele. In fact, technology has been one of the key factors influencing the face of change, often driving change itself while making it possible to do more with less, allowing the distribution of value added services to the users'¹¹.

10. Digital Rights Management

For information management, it is necessary to know different information sources. i.e., printed copyright Acts of different computers. To retrieve, collect, disseminate, share and communicate the information, there is a need to know about of copyright issues pertaining to these materials. Hence, education and knowledge about digital rights and Intellectual Property Rights is essential for library professionals.

11. Electronic Services:

The Information and Communication Technologies (ICT) transformed and developed the library services. These applications have changed application, functions and services of the libraries as under:

- Automation and Mechanization of every function of the libraries;
- Compact Storage of Information, easy accessibility and faster communication;
- Subject databases particularly from academic institutions: Increasing number of institutions, especially academic and research institutes are making databases in their specialized subject made available;
- Automated Library Catalogue: Increasing numbers of libraries are making their Catalogue electronically available over the Internet which may extend the use of library resources.
- List Serves and discussion groups on a wide variety of topics. Participants have the opportunity to exchange and share current information;
- Document Delivery Services may be provided electronically using Internet Technology;
- Electronic Mails allow users to send messages or files to each other;
- Commercial Information databases are available on the internet include, DIALOG, Lexis-Nexis, Dow Jones News/Retrieval and many others;
- Telnet or remote login-allowing users to log into remote sites;
- File Transfer Protocol (FTP) and Hyper Text Transfer Protocol (HTTP) allowing users to access and retrieve files at remote sites;
- Gopher- a text only, non-graphic method to receive internet documents, which have largely been inter-generated into the World Wide Web;
- The World Wide Web allows users to jump from one resource to another in easier way, without going through gopher style menus;
- Video-conferencing and Teleconferencing involves linking more than two users, so that participants from different places over the world can see each other and view presentations;
- The Consortia like UGC-Infonet provides the information through access to a large number of journals to academic libraries all over India. Such services has enabled to economize the services from single platform, to avoid duplication of subscription, to strengthen the services of networking and encouraging research and development by providing information in easy accessible way.

Now, it is necessary for the library professionals to know the different services, which have to be provided in the digital era. For this purpose, there is a need for the training and developmental activities in these areas.

12. Conclusion

To develop and organize the library resources in the revolutionized change in the digital era, there is a need of human resource development activities. Now, different applications of IT in libraries redefined the library services and transformed the library services. Hence, the users of the library are also expecting more mechanized services from the libraries. Further, there is also indication of competition and co-operation among the various libraries for providing advanced services so as to keep the present users with expectation of the new users. For this purpose, every library must have to develop and improve their functions and services according to the technological development. To achieve this, there is a need for training of the library professionals to the key areas stated above.

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