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CHALLENGES TO BUILDING AN EFFECTIVE DIGITAL LIBRARY – CORPORATE LIBRARY PERSPECTIVE



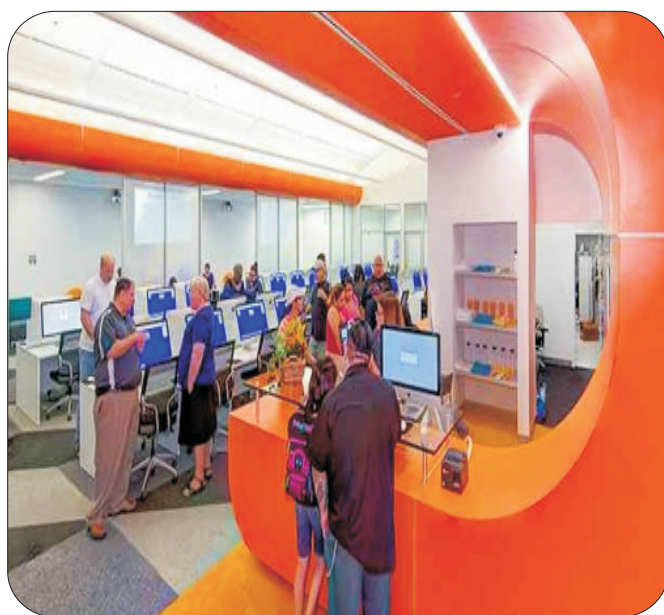
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ABSTRACT

This article describes the major challenges of library professionals in corporate digital library. Library professionals' roles vary from the custodian of knowledge resources to providers of various knowledge resources and the major activities ranging from acquisition, classification, cataloguing, circulation and archive. Revolution in Information and Communication Technology (ICT) has triggered the importance of digital library. Digital resources have become one of the important and essential components of the libraries and knowledge centres in corporate sector across India.

KEYWORDS :Corporate digital library, Corporate multi-national company, Digital library challenges, Copyright.

INTRODUCTION

What do we mean by the term "library" and how does it differ from a digital library? Traditionally a "library is a place in which books, manuscripts, or other literary and artistic materials are kept for use but not for sale". In effect, it is an organization or institution oriented towards collections and custody, where people may make use of the facilities. Whereas a digital library is a computer-based system for acquiring, storing, organising, searching and distributing digital materials for end user access. It is not network-based but designed to be capable of being attached to a network. A digital

library is not just a collection of material in electronic form; it includes a browser interface and perhaps a virtual space and society. It requires less space and the data can be made available through communication networks to anyone anywhere, while facilitating searches with speed. The digital library is not a single entity and as such it is linked to the resources of many such collections.

According to Collins Dictionary (2007), “digital library is a library in which collections are stored in digital formats and accessible via computers”. According to Greenstein and Thorin (2002), “digital library is an organized collection of digitized material such as text, images, video and audio clippings accessible entirely from a computer, over a network”

The word “corporate” is related to a large company or group of companies. These companies are authorized to act as a single entity and recognized as such in law. It is a form of business operation that declares the business as a separate, legal entity guided by a group of people known as the Board of Directors (Merriam-Webster's online dictionary, 2012).

The corporate digital libraries have been distinguished by their collections specific to the corporate company needs. The Information and Communication Technology (ICT) and digital technology tools have dramatically changed the way corporate company libraries function. Corporate digital libraries are of great importance in business, as the level of research, design, process, product development, marketing and quality control demands it. This is of special importance in the field of technologies, where librarians or information specialists keep an eagle eye on competitors and customers, in order to keep a pace with trends and examine the needs, demands and requirements of users.

According to Association of Research Libraries, a digital library has the following common elements:

- + The digital library is not a single entity
- + The digital library requires networking technology to connect many entities
- + All linkages are transparent to end-users
- + Universal access to digital content and information is a goal
- + Digital library collections are not limited to documents surrogates, but can include digital artifacts not extant in traditional formats

CHALLENGES TO BUILD AN EFFECTIVE DIGITAL LIBRARY

After the industrial revolution, human life has witnessed reforms in all spheres of life. From the days of papyrus to the digital libraries, libraries are undergoing tremendous developments. Last few decades of 20th century saw the emergence of new technologies such as computer, CD Rom, DVD rom, e-mail, e-commerce, e-book, Internet, bar coding, fibre optics etc. Now-a-days, there are various types of libraries like: traditional, automated, electronic, digital, virtual and mobile libraries. The major objectives of digital libraries are: to collect, store, organize and retrieve digital information; to provide effective and efficient digital information services; to minimize massive storage and space problem in libraries; to share the networked information; and to perform the various library activities economically. The major issues of digital libraries which require particular consideration of library and information professionals are; intellectual property rights, cost of regular knowledge resources, networking, technological obsolescence, preservation digital resources and pricing.

This article derives from practical experiences of key challenges confronted by corporate company libraries those are actively investing in digital resources and online collections and services. Return on investment is common questions asked by top level management and evaluate the value associated with organizational expenditures.

There are so many challenges before the digital library development. A few of them are given below;

- + Lack of sufficient library budget
- + Exorbitant subscription or procurement cost charged to Corporate libraries compared to academic or educational institutes
- + Copyright and intellectual property rights legal issues
- + Copyright licensing and subscription or procurement related issues
- + Technological obsolescence will affect the longevity of digital information
- + Hardware and software compatibility
- + Migration of digital information
- + Media fragility
- + Periodic transfer of digital material from one hardware or software configuration to another or from one generation of computer technology to a subsequent generation
- + Digital content format – There are so many digital formats such as PDF, TIFF, JPEG, GIF, DOCX, PPTX, MP3, MP4 etc. Choosing either of the digital formats throws problems of its own kinds.
- + Problems related to security aspects. Issuing the password itself is a serious concern to allow the legal access to the information.

Like many other academic or educational or public libraries, the corporate library faces multiple challenges in the effort to build digital collections and provide access to information resources needed to support the diverse programs of research and development. Adequate information and communication technology infrastructure within the organisation is a prerequisite for establishing digital libraries. But not all libraries can afford to sustain expenditure on establishing and maintaining wide range of services and facilities.

Intellectual property denotes knowledge or information with a commercial value. Intellectual Property Rights (IPR) can be defined as a mix of ideas, inventions and creations on which society is willing to bestow the status of property. One of the important constituent of IPR is the Copyrights. IPR is a general term that covers copyright, patents, design registrations and trademarks. Digital information can be distributed across the globe through e-mail, bulletin boards and networks. Documents available digitally can be easily downloaded and tampered without the knowledge of its rightful owner. How to deal with these issues will be another challenge for library and information science professionals. There is an increasing unease among library professionals that copyright changes will adversely affect the ability of libraries to provide digital collections and services.

There are three major and basic constrain or challenges during acquisition of digital resources in a corporate library environment. They are;

- + Budget
- + Copyright and license
- + IT infrastructure

RESEARCH METHODOLOGY

As a part of the doctoral research work undertaken for copyright in corporate digital libraries in India, a sample survey has been conducted at national level. The survey was focused on library professionals and library in-charge of selected corporate libraries. The selected corporate libraries are further segregated based on the companies act registration. The collected data were analyzed. The

questionnaire was distributed two or more times depend on the answer pattern of the previous questionnaire. The questionnaires are designed to focus on problems, opportunities, solutions and forecasts. All the responses were subjected for statistical analysis using chi square test and standard deviation.

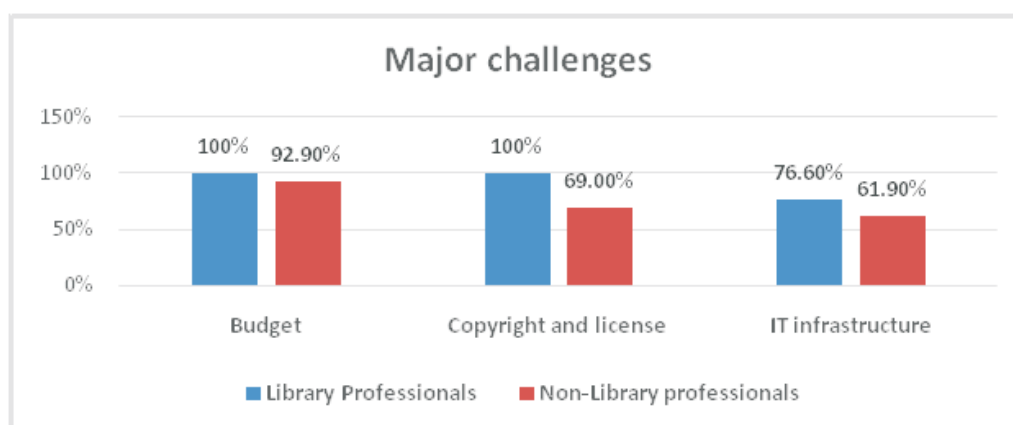
DATA ANALYSIS AND DISCUSSION

89 corporate library professionals, including library in-charge were participated in this survey across the country. The one main questions being asked and their responses are analysed below;

Sl. No	Question
1	<p>Name the three most important challenges that the library faces during acquisition of digital resources</p> <p>Budget <input type="checkbox"/> Copyright and license <input type="checkbox"/> IT Infrastructure <input type="checkbox"/></p> <p>Any others specify.....</p>

Challenges faced during acquisition of digital resources (Professional-wise)

Position	Major challenges			Total
	Budget	Copyright and license	IT infrastructure	
Library professional	47 (100.00%)	47 (100.00%)	36 (76.60%)	47
Non-library professional	39 (92.90%)	29 (69.00%)	26 (61.90%)	42
Total	86 (96.60%)	76 (85.40%)	62 (69.70%)	89
Mean	43 (96.40%)	38.0 (84.50%)	31.0 (69.30%)	
S.D.+/-	5.7 (5.10%)	12.7 (21.90%)	7.1 (10.40%)	



All library professionals and 92.90 percent non-library professionals' opined budget was the most important challenge that the library faces in its provision e-resources. For the same, all library professionals and 69 percent non-library professionals opined that copyright and license hurdles were the most important challenge. 76.60 percent and 61.90 percent library and non-library professionals opined that IT infrastructure is the most important challenge.

Challenges faced during acquisition of digital resources (Organization-wise)

Organization Type	Major challenges			Total
	Budget	Copyright and License	IT infrastructure	
Foreign multi-national company	32 (91.40%)	28 (80.00%)	22 (62.90%)	35
Indian multi-national company	31 (100.00%)	27 (87.10%)	22 (71.00%)	31
Indian private sector company	16 (100.00%)	14 (87.50%)	12 (75.00%)	16
Indian public sector company	7 (100.00%)	7 (100.00%)	6 (85.70%)	7
Total	86 (96.60%)	76 (85.40%)	62 (69.70%)	89
Mean	21.5 (97.90%)	19.0 (88.60%)	15.5 (73.60%)	
S.D. +/-	12.1 (4.30%)	10.2 (8.30%)	7.9 (9.50%)	

Professionals who opined that budget was an important challenge were all from Indian multi-national company, Indian private sector and Indian public sector corporate libraries. Significantly lowest i.e. 91.40 percent professionals from foreign multi-national company opined budget was an important challenge that library faces in its provision of electronic resources. All professionals from Indian public sector followed by 87.50 percent Indian private sector, 87.10 percent from Indian multi-national company libraries opined that copyright and license hurdles were important challenges. Professionals from foreign multi-national company (80%) significantly lowest to opine that copyright and license hurdles were major challenge. IT Infrastructure as major challenge was opined by lesser number of professionals. Among these, 85.70 percent were from Indian public sector followed by 75 percent from Indian private sector, 71 percent from Indian multi-national company and 62.90 percent from foreign multi-national company corporate libraries.

In the table shows that, among the three important challenges, budget (97.90%) were the most important challenge followed by Copyright and license hurdles (88.60%) and IT infrastructure (73.60%) that libraries face in its provision of digital resources.

FINDINGS, SUGGESTION AND CONCLUSION

Today's society is called as 'Information Society'. It is also an established fact the information society expect the right information be provided as and when it is needed and in the form it is needed without which no individual, or a business firm, or a corporate organisation, or government would be able to achieve the targeted goals. Realizing this fact, the present day society advocates for the establishment of digital libraries, which is capable of delivering right information to right user at right time in form it is needed. The problem of copyright related issues in the virtual environment,

decreasing funds or budgets, lack of IT infrastructure experienced by corporate company libraries should be looked into, to foster digital library development in corporate or private company or organizations.

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