CHANGING ROLES OF THE LIBRARIANS IN THE VIRTUAL/DIGITAL ERA

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The article deliberates on the changing role of the librarians in the virtual/digital era. Electronic information creates challenges for the library community at its very foundation, moving it away from the traditional paper-and-print format to an ethereal world of circuits and connectivity. Now the concept of the library doesn’t remain as a building or a physical repository that houses information. It has reached beyond the four walls of buildings. Librarians have a long history of adopting technology to enhance services. Librarians have changed themself from using early typewriters to the present internet. We are entering the virtual library phase and librarians have to use the changing technology to provide the best access and service to their patrons. Librarians are professionals trained in the acquisition, organization, retrieval, and dissemination of information. In essence, the practice of librarianship in the virtual library environment will not be very different from that in the traditional print-based library. Virtual library is not the ultimate answer to everyone's information needs. It is merely another step in a dynamic and evolutionary process. The traditional print library and its services will not disappear. Librarians must accept and adapt to the new techniques and systems. They must recognize the enormous potential of the virtual library, address the issues involved in its creation, and take a leadership role in integrating these new systems and services into libraries, for their own good and for the good of users.

KEYWORDS/DESCRIPTORS: Librarian, Digital era, Changing role

1 INTRODUCTION

We are in the age of a networked society where IT, in addition to its use in all spheres of human activity has been used extensively to record, store, and disseminate information in digital form. Electronic information creates challenges for the library community at its very foundation, moving it away from the traditional paper-and-print format to an ethereal world of circuits and connectivity. Now the concept of the library doesn’t remain as a building or a physical repository that houses information. It has reached beyond the four walls of buildings. Librarians have a long history of adopting technology to enhance services. He changed himself from using early typewriters to the present internet. We are entering the virtual library and librarians have to use the changing technology to provide the best access and service to their patrons.

The virtual library is:

1. Organized collection of multimedia and other types of resources;
2. Resources are available in computer processable form;

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The function of acquisition, storage, preservation, retrieval is carried out through the use of digital technology; Access to the entire collection is globally available directly or indirectly across a network; Support users in dealing with information objects; and Helps in the organization and presentation of the above objects via electronic/digital means etc.

Here is a simple Figure to describe the architecture of the open DL/VL.

![Diagram of DL/VL architecture]

2 OBJECTIVES

The objectives of this study are given below:

1. To define and explain the concept of virtual/digital learning environment; and
2. To explore the challenges faced and the changing roles of librarians and various skills expected of librarians to meet the need.

2.1 Objective 1: Virtual/ Digital Library

Michael Schuyler likens the virtual library to a Popsicle, stating that "if the electricity goes off, the cold goes away -and so does the popsicle, leaving a soggy smear on the shelf where something substantial once resided. The virtual library suffers the same vulnerability and the same precarious existence." Waters (1998) describes the phrase 'digital library' as replacing earlier references to 'electronic' and 'virtual' libraries. A few years earlier, Graham (1995) stated that 'virtual library' is companion terms to "digital library" and that up to 1995 both terms were 'used narrowly to define a quantity of databases available for use at a given time'.

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Web is defined a system to access electronic information in a variety of remote locations through a local online catalogue or other gateway such as internet[4] and a directory that contains collections of resources that librarians or other information specialists have carefully chosen and organized in a logical way[5].

Factors demanding adoption of virtual libraries are the limited buying power of libraries, complex nature of recent documents, storage problem. The other factors are:

1. Information explosion;
2. Searching problem in traditional libraries;
3. Low cost of technology;
4. Environmental factor: the use of digital libraries is the cleanest technologies to fulfill the slogan “Burn a CD-ROM save a tree”; and

Significant advantages of virtual/digital libraries are:

- It saves and/or reduces the physical space taken up by library materials;
- Digital libraries can be accessed at any time, 24 hours a day and 365 days of the year;
- The library materials are available at the user's desktop, regardless of where the user is physically located;
- It allows for the inclusion of materials only available on the Internet or in digital format;
- It provides the user with the capability to download text;
- It often allows for multiple, concurrent users;
- It eliminates the problem of a book being missing or off the shelf;
- It is less labor intensive; and
- Digital library provides access to much richer content in a more structured manner (easy navigation) i.e. we can easily move from the catalog to the particular book, then to a particular chapter and so on.

However, they have certain disadvantages like,

- Multiple interfaces - Every product will be having its own distinct user interface;
- DRM - Digitization violates the copyright law as the thought content of one author can be freely transferred by other without his acknowledgement;
- Users need to remember different passwords for different products;
- The scope of coverage and available archives is often limited;
- There are often difficulties with downloading or printing;
- Often there is no cost savings, especially when both the virtual and print products are maintained and the cost of hardware, software; leasing communication circuit is generally very high;
Everything is not available in digital format;

Access to archives - There are restrictions, which vary from vendor to vendor, on how the product can be used;

IT infrastructure - The virtual library relies on power and computer networks in order to be available for use;

Users can’t spread everything out in front of them and use it all at once and comfortable in using books; and

Lack of knowledge in using to access the required information.

2.2 Objective 2: Challenges Faced by Librarians in Virtual Library Environment and the New Skills Required

The most pressing issues and challenges that the librarians face in the present digital era for providing digital information service to the knowledge society are:

i) New generation of learners; ii) Copyright and privacy issues (DRM); iii) Online/Virtual crimes and security; iv) Technology challenges; v) Skilled manpower; vi) Collection of digital e-resources; vii) Organizational structure;

viii) Preservation / archiving of digital e-resources; and
ix) Lack of clarity in vision.

3. Changing Roles of Librarians

Though the digital environment is built as a system, which can be directly used by its end-users from their desktop, the role of librarians cannot be overlooked. The responsibility of the librarian and information scientist has increased in terms of packaging and repackaging of information, electronic publishing, advising users about the strategy to identify relevant electronic sources, etc. In such a new environment it will be very difficult for the librarian to decide what should be organized? How to give citation? How to organize the collection? etc. Thus librarian has to change himself and acquire more skills and additional roles.

3.1 Leadership Role and Managerial Skills

One primary role of librarians is to provide leadership and expertise in the design, development, and ethical management of knowledge-based information systems in order to meet the information needs and obligations of the patrons. He should enrich his management skills for organizing, managing and disseminating e-literacy to users.

3.2 IT Skills as Digital Information Provider

Providing information resources to patrons - regardless of format, it is most necessary to have quality of a virtual librarian. He should be able to satisfy all types of users especially research
scholars and young generation who uses internet frequently for the latest upgradation of the information. He should be able to create his own website as an easier way to share with others what they know. He should gather electronic information and create electronic pathfinders and front-end search tools to help users for accessing the required information. The development of electronic reserve (e-reserve) collections, demonstrates that he is capable of adapting new technologies and deliver services more effectively including adoption of Z39.50 standard to help users simultaneously search across multiple databases.

3.3 An Evaluator of Digital Resources
Evaluating the right information at the right time is the most important factor in virtual library. Batt (1999) observed that there is an increasing diversity of information resources from which to choose the most appropriate vehicle, and that librarians must widen their selection processes in order to decide on the right medium for each situation. Electronic sources of information are excellent for data which must be timely and is subject to frequent change, such as stock market data, weather reports, and population statistics. Evaluating electronic sources of information there is also a distinction to be made between those sources of data which have been digitized for the speed and ease of transportation, and data which is of limited usefulness, volatile and fluid in nature. He should provide links to websites on specific topics and lead patrons to these evaluated sites as a starting point for retrieving related and relevant information.

3.4 Classification of Online Information and Taxonomies
Mason (1998) noted that ‘the more there is on the web, the harder it becomes to find”. It is ironic that organizing vast quantities of information is becoming a demanding issue for those involved in developing the internet and reaping internet resources. This requires keen understanding of the traditional library management issues and the skill of adopting those organising tools in new environment.

3.5 Staff Development Programmes
Information retrieval is the most obvious skill a librarian demonstrates to the public. Adequately skilled staff should be recruited to meet the increased demands of the knowledge society. With a rapidly changing environment both within and outside the library, staff development programs are essential to the continued success of the organization.

3.6 Proactive Information Professional Role
The modern trend is for the role of the librarian to move from that of a passive intermediary role responsible for guiding patrons to appropriate information resources, towards that of a much more proactive professional role which includes analyzing and repackaging information, content information management and institutional digital repository management.

3.7 Information Literacy Programmes
Librarians have to change their role in the e-learning environment by participating in e-learning experiments and becoming involved in universities e-learning centers. A well learned
must teach information literacy to educate future knowledge workers, in traditional ways or via Internet-based instruction modules.

3.8 E-Resource Managers

Academic and research libraries have a major role in ensuring that they and their home institutions remain vital players in the changing terrain of information and education. Faculty may not be aware of copyright issues and do not know what material is electronically available or licensed by the library. Virtual learning systems can be connected to library systems, through the integration of library systems at the backend via the technology components, and through the close liaison and involvement of library staff in VLE development.

4 CONCLUSION

Librarians as professionals trained in acquisition, organization, retrieval, and dissemination of information need to adapt and acquire new skills of digital age. Virtual library is not the ultimate answer to everyone's information needs. It is merely another step in a dynamic and evolutionary process. The traditional print library and traditional library services will not disappear. But, as librarians, we must accept and adapt to the introduction of new techniques and systems. We must recognize the enormous potential of the virtual library, address the issues involved in its creation, and take a leadership role in integrating these new systems and services into our libraries, for our own good and for the good of our users.

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