

# Future of Libraries: Virtual Reality Libraries

Mr. Vinayak Wadhwa\*

S/O Sh. Suresh Wadhwa, B.Tech, M.B.A, B.LISc, M.Lib

**Abstract – Virtual Libraries serves the new or future generation users of the libraries. Virtual libraries are the new vision of libraries of the future. This paper provides an overview of a Virtual Library System and the benefit of implementing virtual reality (VR) or augmented reality (AR) usage. It also narrates purpose, features, functions, design and development of a Virtual Library and Virtual Library Environment.**

**Keywords - E-Learning, Virtual Library, Virtual Reality, Augmented Reality, Knowledge Society.**

-----X-----

## INTRODUCTION

Rapid advances information technologies have revolutionized the role of libraries. As a result, libraries face new challenges, competitors, demands, and expectations. Libraries are redesigning services and information products to add value to their services and to satisfy the changing information needs of the user community. Traditional libraries are still handling largely printed materials that are expensive and bulky. Information seekers are no longer satisfied with only printed materials. They want to supplement the printed information with more dynamic electronic resources. Demands for digital information are increasing.

A Virtual Library has been defined by Gapen (1993) as, "the concept of remote access to the contents and services of libraries and other information resources, combining an on-site collection of current and heavily used materials in both print and electronic form, with an electronic network which provides access to, and delivery from, external worldwide library and commercial information and knowledge sources". The speedy and wide access to current information contents makes virtual libraries a global symbol of the information access paradigm.

Virtual Library is another kind of Digital Library which provides portal to information that is available electronically elsewhere. This is referred so to emphasize that the Library does not itself hold content. Librarians have used this term for a decade or more to denote a Library that provides access to distributed information in electronic format through pointers provided locally.

### What is virtual reality?

Virtual Reality (VR) uses a computer, headset, and sensors to immerse you directly into a three-

dimensional, computer-generated world. Your head, hands, and body movements are tracked to let you interact with what you see via the headset.

### Augmented Reality?

Augmented Reality (AR) means Overlays two-dimensional or three-dimensional digital content onto the real world, which are accessed via mobile devices and apps or AR headsets .

### Purpose of the Virtual Library

In general, the purpose of a Virtual Library is to learning and acquisition of knowledge, to provide a education and to enhance quality of life by digitally available (preferably on-line) books, materials and journals via ICT-based tools. A Virtual Library provides remote (on-line or CD-ROM-based) access to a variety of national and international content (e.g. learning materials, books, journals, magazines, newspapers), services traditionally offered by libraries and other information sources. Virtual Libraries thus combine materials in electronic format with an electronic network which ensures access to and delivery of those materials.

To become an effective educational tool in the public service, it must respond to the needs of and provide affordable access for prospective users - students, teachers, researchers and academics. Emphasis should be given to building up collections that are in the public domain and that are accessible through, e.g., applications of free software on the basis of affordable Internet tariffs.

## DIFFERENTIATING ELEMENTS IN VIRTUAL LIBRARIES

The current static shape of libraries, usually based on the compilation and storage of more or less

fixed documents and indexing diagrams, is now under change. Libraries are now taking a new direction, heading for dynamic virtual libraries which use efficient and flexible mechanisms to locate, organize, accede to and, above all, personalize the content and services they develop.

New distance-learning systems are gradually introducing themselves into academic institutions, and are changing the traditional concept of services conceived of for users located in specific places at specific times. This generalized geographical dispersion, together with this absence of coincidence in time, have brought about the thinking and the design of new library content and services, while at the same time have revolutionized our traditional concept of libraries and documentation centers.

Many are the elements facilitating the creation of virtual libraries. Among them: -

The communications networks which are improving telemetric access in two senses: in the speed of access, and in capacity, all of which favors the inclusion of multimedia materials (text, image, sound, video, etc.).

- The appearance of information management programs, facilitating the creation of databases of documentary resources and the retrieval of information.
- Technology becomes more and more user-friendly.
- The standards and protocols facilitating simultaneous access to databases.
- The information digitalization and creation systems.
- The continuous appearance of more and more powerful languages for the creation of information.

A Virtual Library becomes the gateway that provides integrated access to all sorts of resources and library services both traditional and virtual, and to one's own physical and digital collections, and to resources which can be located on any Internet site, whether public or private. It becomes a uniform interface, understandable to the user, with access to one's own resources and to remote ones. Users obtain access to a great variety of local or remote information, which they can access immediately, whenever they decide they want it.

**ADVANTAGES OF VIRTUAL LIBRARIES**

- Nearly unlimited storage space at a much lower cost

- Re-allocate funds from some staff, collection maintenance, and additional books.
- No physical boundary
- Round the clock availability
- Multiple access
- Enhanced information retrieval.
- Preservation for some print material
- Added value
- Universal accessibility

**ENVIRONMENT OF VIRTUAL LIBRARY**

The Virtual Library Environment virtual communication and the electronic environment are now a reality for the library. Users are able to view and request information resources either from the library Intranet site or over the Internet.

Library services will entirely virtual in nature. Information services differ from traditional information service delivery in the following areas:

- Clients are unable to visit the library to preview resources, collect material or access resources such as databases. All communication must be conducted through e-mail, phone or fax. Information literacy training must be delivered innovatively, as traditional face to face training sessions are no longer possible.
- Information Technology is used to access information resources. As a result, library users often expect technical support from librarians, and queries regarding network and access problems become increasingly common. This means librarians must keep abreast of current technical developments and know when and where to refer clients with problems beyond their knowledge.
- These differences have a number of implications for the virtual library, such as an increased emphasis on value added information. This information should be easy to locate using tools such as the corporate Intranet. This allows users to understand which information is most relevant to their work practices, without the benefit of face to face communication.

**VIRTUAL LIBRARIES IN E-LEARNING**

There has been a huge growth over the last decades of all types of learning in which students, teachers and researchers all share the same virtual

environment. A large number of new tools and access to computer networks are learning systems, teaching models and research, and as a consequence, libraries and documentation centre's.

A new type of library emerges from this situation altering the traditional notion of library. From now on, libraries will cease to be located in a specific place and will no longer act as compilers and stores of mainly physical content, and will become spaces devoid of physical location or content. A new library targeting other types of documents and needing to develop new systems to relate to the user.

In this new model of Library, librarians develop their skills in order to study their environment, to interpret and anticipate changes, and to offer the user a kind of response which uses different patterns.

When applied to the Academic setting, the new Library must make tools, content and traditional service compatible with new functions arising from a new way of learning at university and at other educational centre's.

The new library-documentary model being generated from these premises has been named differently: electronic library, digital library, hybrid library, library without walls, or simply virtual library. We shall refer to this new documentary model as a virtual library, as we refer to that type of library which carries out its function exclusively in a virtual environment - indeed, virtual has made it possible -, and in addition because it uses digital documents (or digital libraries) as a very important part of its assets by which the Library's aims can be achieved.

In the university environment, Virtual Libraries carry out their function from various basic perspectives. Among them, we might highlight as some of the most significant perspectives: on the one hand, that of providing teaching staff with all those elements which may help them develop and guide the various subjects, and on the other, that of making available support elements and documents to students, as a complement to the materials provided for by the lecturers. enables libraries to introduce themselves into teaching and research spaces, and allows them to develop their support action to learning, teaching and research, by offering content and services which differ from traditional ones and are more personalized, and have even been customized adapting to the specific needs of each collective. This new library develops, selects and compiles digital content and virtual services.

## CONCLUSION

The possibilities offered by Virtual Libraries have a great importance in the educational sphere and in all aspects relating to it. Evidently, libraries and documentation centre's are not strange to this new

virtual environment facilitated by the social, economic and, above all, technological change which has made it possible for librarians to gain access to large amounts of information and documentation, allowing them to act as intermediary agents between this new scenario and the use that can be made of it by the different types of users.

## REFERENCES

### Journal Papers:

- [1] Babini, D. (2005) Latin America and the Caribbean Social Science Virtual Libraries Network. (Open access to full-text social science publications from Latin America and the Caribbean: the case of CLACSO's virtual libraries network). In: Proceedings 50th Annual Conference of the Seminar on the Acquisition of Latin American Library Materials (SALALM), Gainesville, Florida (US).
- [2] Ball, D. (2006) Positioning librarians as essential to the new Virtual Learning Environments. In: Proceedings 27th Annual International Association of Technological University Libraries 2006 Conference, Porto (Portugal).
- [3] Chiweza, D.S. (2006). The potential for Virtual library services to promote teaching and research and reduce the digital divide: a case study of the University of Malawi. (Accessed from: <http://www.ascleiden.nl/pdf/elecpublconfchiweza.pdf> on 08.01.2007)
- [4] Gopen, K. G. (1993). The virtual library: Knowledge, society, and the librarian. In: L.M. Saunders (Ed.), *The Virtual Library: Visions and Realities*, pp.1-14. Westport: Meckler.
- [5] Haddad, P. (2001) "From Digitization to Virtual Reality: Is Global Knowledge a Blessing or a Threat?" (Accessed from: <http://www.nla.gov.au/nla/staffpaper/2001/> on 08.01.2007)

---

### Corresponding Author

**Mr. Vinayak Wadhwa\***

S/O Sh. Suresh Wadhwa, B.Tech, M.B.A, B.LISc, M.Lib

[vinayak.wadhwa@gmail.com](mailto:vinayak.wadhwa@gmail.com)