Journal of Emerging Technologies and Innovative Research

An International Open Access Journal Peer-reviewed, Refereed Journal

www.jetir.org | editor@jetir.org **An International Scholarly Indexed Journal**

Certificate of Publication

The Board of

Journal of Emerging Technologies and Innovative Research (ISSN : 2349-5162)

Is hereby awarding this certificate to

Dr Vikas Tukaramji Adlok

In recognition of the publication of the paper entitled

Necessity of Transformation of Conventional Library to Digital Library

Published In JETIR (www.jetir.org) ISSN UGC Approved (Journal No: 63975) & 7.95 Impact Factor

Published in Volume 9 Issue 5 , May-2022 | Date of Publication: 2022-05-24

JETIR

Pazie P

EDITOR

Signature

EDITOR IN CHIEF

JETIR2205744   Research Paper Weblink http://www.jetir.org/view?paper=JETIR2205744

Necessity of Transformation of Conventional Library to Digital Library

Dr. Vikas Tukaramji Adlok
Librarian
Late Dattatray Pusadkar Arts College, Nandgaon Peth, Dist. Amravati

Abstract:

Pandemic like corona virus 19 has affected the every working field of human being. It has also affected the educational system. In this situation digital platform helped us to be continued the education. Most of the educational institution, schools and colleges take the advantages of digital platform. In this situation our conventional library was unable to provide its information and study material to the users effectively. Unlike the conventional library helped the users most effectively and could provide information. Since, we came to know the why we must transform our conventional library to the digital library. This paper has discussed about the digital library, need of digital library, its advantages and disadvantages, role of library professionals and challenges.

Keywords : Digital Library, Components of digital library, Role of library professionals

1. Introduction

The Information and Communication Technology (ICT) has changed the life of human being. Advancement of Internet technology brought gigantic changes in the lifestyle and working style of the human beings. Educational field is not also untouched by this Internet technology. It has changed the teaching and learning perspective among the teachers and students. Due to this technology teaching and learning habits of the teachers and students have affected. The telecommunications technology, mobile technology, internet, e-mail, social media have brought radical changes in the process of teaching and learning process. In the age of ICT Users of the library need to services of the library at their fingertips. Users need their information wherever and whenever they want. They don't want to visit library for times and again for the same work. In this ICT age library need to reach to the users and facilitate the users with its services wherever and whenever they want. Because of this library, the most important source of knowledge needs to change its mode of services and communication. ICT technology is made possible to library to bring all these changes in its services and reach to the users. With the help of ICT technology library can distribute its information and organized collections all over the word.

Digital library can play a vital role in the pandemic such as corona 19 where nobody was allow to go out and touch the physical objects from anywhere. In such situation information available in digital form helps the students, teachers in their teaching and learning process. In the pandemic situation most of the users were depend on the digital information when they don't have available physical books and any other

material. In such situation every institution, every library felt the digitization of the library. It becomes necessary to the library if it wants to provide its services effectively to the users.

2. Definition of Digital Library:

A Digital Library generally can be defined as a collection of digital database accessible through the internet network to its users. The American Digital Library Federation has defined the digital library as "Digital libraries are organizations that provide the resources, including the specialized staff, to select, structure, offer intellectual access to, interpret, distribute, preserve the integrity of, and ensure the persistence over time of collection of digital works so that they are readily and economically available for use by a defined community or set of communities." (Deshpnde, 2018) E.A. Fox has defined the digital library as the "New way of carrying out the functions of libraries encompassing new types of information resources, new approaches to classification and cataloguing, intensive use of electronic systems and networks and dramatic shifts in intellectual, organizational and electronic practices." Candela Et.al., has defined a digital library as "an organization which might be virtual, that comprehensively collects , manages and preserves for the long –term rich digital content and offers to its user communities specialized functionality of the content of measurable quality and according to codified policies." (Sen Madhumay, Gaurav Kumar Jain, Ravi Ranjan, 2013) According to Gladney H. M. et. al. (1994) "A digital library service is an assemblage of digital computing, storage and communications machinery together with the software needed to reproduce, emulate and extend the services provided by conventional libraries based on paper and other material means of collecting, storing, cataloguing, finding and disseminating information." (Singh)

3. Aims of Digital Library:

- ➢ To improve the library services
- ➢ To enable the users to access all types of information available in the library in offline and online form.
- ➢ To preserve the original documents and manuscripts
- ➢ To facilitate the users to access information from their devices
- ➢ Qualitative and quantitative resource sharing
- ➢ To satisfy the five laws of library science.

4. Characteristic of Digital library:

- ➢ Information sources in the Digital Library is available in digitised form, they are stored in textual, numeric, audio-visual and in graphic form.
- ➢ Transformation from time consuming to time saving library for users.
- ➢ Digital Library facilitate to users to access the required information on a click.
- ➢ Internet assisted search on any devices with the internet facility
- ➢ Information can be distributed to the whole world in this way individual library can be made universal.
- ➢ Information provides faster and efficient access. (Singh, 2003)

5. Functions of digital library:

Information and Communication Technology brought rapid changes in the life of human beings. ICT changes peoples working process, thought process, as well as learning and teaching process in the educational field. In such circumstances responsibility of library to provide its services and information to the users have been expanded. Digital library provided an opportunity to library to provide its information and services effectively to the users in critical situation such as different pandemic. The role of providing information and its services, library must have the core services such as repository for storing and managing digital information, searching services and a user interface.

Digital Library is the modern library in modern age for modern users. Library has become the smart for the smart users with the help of digitization. Digital library can save the time and space and can reach the vast users community at a time without any interference. Unlike the traditional libraries users of the digital library can access by the users anywhere and anytime as per there requirement. This library not remains only for the institutional library but the universal library. The following are some of the function of digital library: (1) To provide friendly interface to users. (2) To avail network facilities. (3) To support library functions. (4) To enhance advanced search, access and retrieval of information. (5) To improve the library operations. (6) To enable one to perform searches that is not practical manually. (7) To protect owners of information. (8) To preserve unique collection through digitization. (Sun Jie, Yuan Bao-Zhong , 2012)

6. Components of Digital Library:

To regulate its services and provide information to the user successfully digital library required advanced level tools. The most important component of the digital library is open source software, Internet connection etc. Through these open source software library and the information centres regulate functions of digital library. With four steps digital libraries are conduct its functions. 1) User Interface, 2) Repository, 3) Handle system, 4) Search System (Sandip Das, M. Krishnamurty, 2014)

6.1 User Interface

User Interface is a system consists of computers, machines, software application etc. through the users visit and interacts with the library. Its key function is to connect the users with the machines. A digital library must provide a single point of access to a huge quantity of digitized information that is available to a diversity of kind patrons. User interface of a digital library has two roles, one for the end-user and another for the Librarians. The end-users and even a user from remote area will be able to access the same user interface of the library and its collection and another user interface for the librarians and administrators who manage and build the collection.

6.2 Repository

Repository is a storage location and where the information has been preserved of stored. In the digital library, digital content and metadata is stored in the repository which is computerized. The interface to repository is called the Repository Access Protocol (RAP).

6.3 Handle System

Library has its unique technique to locate and retrieve any books or document in the library. With the help of accession number to each document they can locate and retrieve easily the available documents or books in the library. In this same way Handle system is used as an identifier of digital resources. Digital information should have unique locator or identifier to retrieve from the web environment. Handle system consist of two parts: it's naming authority and a unique local name under the naming authority. handle/1989/21 In this 1989 is naming authority and 21 is the item identifier. (Sandip Das, M. Krishnamurty, 2014)

6.4 Search System

As we know that any document is not available for us without search. If someone wants a particular information or document of books he needs to search it on the searching system. Search system is a software system allows us to search for information on the World Wide Web. With the help of search system users can visit any document available in the repository of the library. Digital Library must make available such types of search system which allow the users to search their required information. The types of search services provided by the digital libraries with variety of content formats that should be included in a digital library platform. (Henry, 2012)

7. Advantages of digital library:

1) Unlike to traditional library digital libraries have the capacity to storage much more information in digital form and the huge information can be stored in the limited space.

2) Digital library does not need much more physical space to store the books.

3) There is no need to pay for staff, books, maintenance and copies of books.

4) The cost of maintenance digital library is lower than the traditional library.

5) User can search their required information anywhere and anytime on their own devices.

6) It enables the users to find out their information easily.

7) User needs not to visit library physically.

8) Users from all over the world can access the information.

9) Providing the link of other resources of other digital library integrated resources can be shared. (Mohan Lal Vishwakarma, Nisha Yadav, 2015)

8. Disadvantages of Digital Library:

Though the digital library has its many advantages but it has certain disadvantages as follows: (Sun Jie, Yuan Bao-Zhong , 2012)

1) Creation of digital library is very costly

2) Lack of technology awareness.

3) Issues about the storage media.

4) Dominance of data creators and publishers

5) Lack of technical manpower

6) Security against hacking and storage

9. Limitations of Digital Library:

Though the digital library has its own benefits for the users and the society it has some limitations. The most important limitation of the digital library is the funding. For the successful implementation of the digital library is depended on the involvement of the sponsorship of funding agencies such as the government. It is very expensive to create and maintain and preserve the digital information. Inadequate funding may spoil the concept of digital library. Digital library runs with the help of Internet connection. Without the internet connection digital would not achieve the success. There is no strong connection of Internet network in Indian remote area to run the digital library successfully. Network connection may create the hurdle to provide information to the users. Only the digitization of the library cannot make it universal. To provide information successfully digital library needs proper technology and infrastructure such as powerful server, enough number of high quality computers, various applications and software. Digitization of available material in library is one of the limitations. To convert the huge material such as books, journals, manuscripts etc need more time. Library needs to high quality equipment to capture the exact quality of material. Librarian professional is not a computer expert. He himself cannot solve the technical problem

regarding computers, network issues and infrastructure issues. Lack of computer expert or technician is an issue come before the digital library. Copyright of the material is a major issue in the digital library. Copyright information has some limitations to place it on the digital platform of the library. Digital Library has its own limitations to provide the users such types of copyright information. Apart from this limitations digital library has its benefits for the user, society and users community.

10.   Challenges Created for the Library Professionals:

To run the digital library successfully librarian professionals have to face many challenges. Technical, economic, social, and legal challenges have been created before the library professionals. The users of the digital library want to access his information directly without going to library building. How accurately the library professional provides the users his document is a challenge before him. Librarian professional of the Digital Library needs to maintain the huge collection of books and any other document digitally. He will have to keep his library update with the recent document. For that purpose how he raises the fund it is again the challenge for him. Providing information within the second is another challenge for him. In India there are various problems regarding network availability. Digital library needs high speed of Internet, lack of speed and connectivity is a challenge for the library professional.

11.   Role of Library Professionals:

Role of library professional is the most important part to run a library. Digital Library has created challenges for the library professional of the conventional library. In circumstances like the pandemic i.e. corona virus 19, it becomes more critical and challengeable to provide proper information and satisfy the user's demand. According to Sharma who opined "that library professionals have to change themselves as the information professionals and they have to work with e-information resources in the digital environment." (Roopa E, M. Krishnamurthy)

As Garcia-Marco stated that, "libraries aggregate information retrieval systems, books, journals, reference databases, electronic collections that are not produced by them. As a result, librarians facilitating knowledge transfer through the effective preservation and organization of public documents - public knowledge records - to ensure its social utilization so knowledge is effectively transferred." (Roopa E, M. Krishnamurthy) From the above statement we come to know that in the digital age the role of library professional is going to change according to the demand of the era. He is bound to change his traditional way of working. Library professionals have not only the knowledge of library professional but also he must have the knowledge of new technology adopted by the new library. Through the digitization of individual library is going to become universal and the users of that library not confined only with the institutional users but it is opened to access for the whole world. In this circumstances, librarian professional have made him aware about the digital library system and new technology. He must make him expert to face these situations.

Library professional of the Digital library is not only the book keeper but also the he has an important to perform as a information provider. He will have to preserve the information in digital form as well as physical form for the long time use. In the new digital age he became the knowledge navigator as well as search assistant. He will have to perform all this role as a digital library professional.

Conclusion:

Pandemic Corona Virus 19 has changed the views of the people not only about the life but also changed the working style, thought process. When we think about the education system it could be stopped at all if digital platform was not available. All the working sectors were ceased their work where few sectors were continued their work with the help of available digital platform. Educational field is one of them which continued their work with the help of digital platform. At that time we realized that library, the most prominent part of the educational system must have available in digital form.

Traditional libraries have limitations that users need to visit the library personally where digital library can access by the users by their electronic devices anytime and anywhere they want their required books, information. In this way digital library proves beneficial for the users across the world.

Only digitization is not necessary but it should have internet facilities and all other facilities through the users can visit the information available in the digital library. Since, library professional have their duty towards the library and its users that they must transforms their conventional, traditional library to digital library.

References:

1. Deshpande, Jayant (2018), 'Digital Libraries: An Overview of Standards, Protocol and Formats', International Journal of Library and Information Studies, Vol. 8 (1),

2. Sun, Jie, Yua, Bao-Zhong, (2012), 'Development and Characteristic of Digital Library as a Library Branch', SciVerse ScienceDirect, Procedia IERI Elsevier.

3. Das, Sandip, Krishnamurty, M., (2014), 'Architectural Components of Digital Library: A Practical Example Using DSpace', Trends in Management of Academic Libraries in Digital Environment (TMALDEN), Jain University.

4. Henry, Geneva, (2012), 'Core Infrastructure Considerations for Large Digital Libraries', Council on Library and Information Resources, Washington

5. E., Roopa, Krishnamurthy, M. (), 'Perspective of Digital Library Services: A Review', International Journal of Next Generation Library and Technologies, Vol. 1, No. 1

6. Sigh, Sukhdev, 'Digital Library: Definition to Implimentation', UA Campus Repository, The University of Arizona, University Libraries

7. Vishwakarma, Mohan Lal, Yadav, Nisha (2015), 'Importance of Library and It's Professionals In Digital Scenario', International Journal of Librarianship and Administration, Vol. 6, No. 1.

8. Bamgbade, B. J., Akintola, B. A., Agbenu, D. O., Ayeni, C. O., Fagbami, O. O., Abubakar, H. O., (2015), 'Comparative analysis and benefits of digital library over traditional library', World Scientific News

9. Perdana, Irsa Arma, Prasoja, Lantip Diat, (2019), 'Digital Library Practice in University: Advantages, Challenges, and Its Position', Advances in Social Science, Educational and Humanities Research, Vol. 401, International Conference on Educational Research and Innovation (ICERI 2019), Atlantis Press

10. Sen Madhumay, Jain, Gaurav Kumar, Ranjan, Ravi, (2013), 'Evolution of Digital Libraries, Problems and Prospects', IJLTEMAS, Vol. II, Issue III.