Chapter 77

Trends and Issues in Digital Libraries

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ABSTRACT

The study explored trends and issues in digital libraries with a view to furnish the expected audience with current happenings in this area of operations and service delivery. The chapter is a detailed review of characteristics of digital libraries considering the creation of digital collections which include conversion of retrospective materials, born digital resources and institutional repositories. The paper considered digital collections and copyright issues, benefits and issues of digital libraries, preservation of digital content. It x-rayed trends in information discovery, access and retrieval in a digital library, human-computer interaction, information organization and categorization of digital library services.

INTRODUCTION

Digital libraries are a transformation of the traditional libraries. Earlier, libraries were operated as analogue systems where learning resources (books, journals, magazines, pamphlets and any other information carrying materials) were acquired, organized and made accessible to users via the 3x5 inch catalogue cards that are arranged alphabetically on a card cabinet. The functionality and impact of the traditional library then was limited by its physical environment unlike the digital library that affords remote access to its collections. In essence the old library was characterized by limited access, time consuming search, overcrowded environments, slow pace at which work was done etcetera. This system was predominantly run in the developing nations until the late 20th and early 21st century when the emergence of digitization coupled with increased access to the internet and advancement in technology, brought about the revolution that is on-going in every field of operations including and especially the library. Consequently, there exists a remarkable period in the history of libraries and related activities. For the first time, it has become feasible to build large-scale services where collections of information are stored in electronic formats and retrieved through networks. Thus we have the most advocated digital libraries almost everywhere today and it has become a recognized field for research. In view of the foregoing, the chapter will explore current practices in the operations of digital libraries and discuss issues that borders around same,

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BACKGROUND

According to Yan and ZHA, (2014) a digital library is a distributed system that has the capability to store various electronic resources, which can be easily and conveniently accessed by remote end-users via networks. In the last couple of years, digital libraries have moved away from a strong aspiration to realism and being an extension of physical libraries in the modern information society, whereas a digital library is a collection of information that has associated services delivered to user communities using a variety of technologies (Heradio, Fernandez-Amoros, Cabrerizo, & Herrera-Viedma, 2012). In the same vein, Lesk (2005) opined that it is a collection of information which is both digitized and organized that gives us the power we never had with traditional libraries. Khan and Bhatti (2015) affirmed that today, university libraries worldwide are no longer mere storehouses of print information requiring patrons to be physically present to use information, but are spaces providing digital resources that can be accessed anywhere which makes it virtual.

However, Chang-Ping, Yuan, & Wei-Wei (2014) opined that as a result of rapid developments in internet technology and changing behavior of information users, the functions of the digital library have changed significantly. Thus a digital library is not only a collection of documents in well-organized electronic format but also a platform for users’ communication, e-learning and e-research. Indeed, the digital library provides effective and efficient access to digital information or Electronic Information Resources (EIR) to the academic community e.g. faculty members and students to assist them in examining issues, proffering solutions to problems, making decisions, as well as support learning, teaching, research and much more (Aramide & Bello, 2010).

Apart from the foregoing, digital technology has made it easier to write, publish, save and make accessible everything that has been written. In essence, more information is made available to digital libraries and their users. This renders the ability to find information more important and the possession of it less so. The Web is the substratum for the widespread digital library resources. The Internet makes it possible to access a wide range of information, such as up-to-date research reports, from anywhere in the world and enables scholars and academic institutions to disseminate information to a wider audience around the globe through having web sites and a way to search them and organize the output (Madhusudhan, 2008). Also another aspect of a digital library, which is rendering services to users, has in no small measure been enhanced, such as information services, reference services, multimedia services etcetera. In addition to accessing a wide range of information, digital libraries provide a formal viable platform for knowledge/resource-sharing activities and library consortium (Iroaganachi, Iwu James, & Esse2015; Yan & Davison, 2013).

Running a digital library presupposes that staff development and personnel are the top work place issues for academic librarians, according to a 2011 ACRL survey. Continuing education, professional development, strategic and creative approaches to hiring for vacant or new positions, retooling existing positions, and retraining the employees who are presently occupying those positions are some strategies libraries can employ to develop their workforce. Thus training that is focused on digital resource management and preservation, data curation, assessment, support for faculty instruction and student learning and scholarly communication are areas where new skill sets would be constantly required due to the increasing changes that occur in the digital library environment.

Recently, issues such as knowledge mapping, semantic web, mobile technology, virtual technology, data mining and a host of others have come to the fore, thus there is a rapid evolution in the digital library environment. The term knowledge map or navigation map is a newly evolving interdisciplinary area of