Chapter 22
Digital Preservation Challenges in Nigeria Libraries:
Awareness of Challenges of Digital Preservation in Nigeria Libraries – Librarians' Perspective

Sambo Saliu Atanda
Federal University of Petroleum Resources, Nigeria

ABSTRACT

The population consists of 172 participants that were presence at 2nd Conference of Certified Librarians by Librarians' Registration Council of Nigeria held in Abuja, 2015.The instrument used to generate data is the questionnaire and data generated was analyzed using frequency, bar charts, percentages and mean. The outcome of the study revealed that many librarians do not have training on digital preservation management despite the awareness of digital preservation challenges. The findings revealed major challenges such as hardware and software obsolesces, lack of training, lack of backup/standard, lack of strategy policy, lack of fund and lack of legal right. Recommendations were made to protect and safeguard digital preservation challenges in the libraries. Such as training and retraining of librarians on new technology/ trend in managing library digital content, software and hardware technology should be improved, Nigerian Library Association (NLA) should create a standard policy and ensure compliance by all libraries for them to enjoy increased funding. Among others.

INTRODUCTION

Digital preservation can be understood as a series of managed activities necessary to ensure continued access to digital materials for as long as necessary (DPC, 2008). According to Felicia and Christopher (2012), digital preservationist a series of combined strategies and actions to ensure access to reformatted and born-digital content regardless of the challenges of media failure and technological changes.

DOI: 10.4018/978-1-5225-6921-3.ch022

As a result of advances in information and communication technologies (ICTs), digital information management became the trend in library and information services across the world. This is unconnected with the advantages of digital information and media over physical ones. They guarantee economy of space, timely information access and management, remote access, diverse form of information (multimedia), ease of information sharing and distribution, among others. Libraries are now encouraged to adopt digital information and sources as a result of these benefits and render quality services to users. But, many libraries undertake digitalization projects and e-collection development without adequate knowledge of digital resource management and careful analysis of their choice. (Stewart, 1998, and Giordano, 2007) asserted that, attitude and knowledge of libraries concerning digital preservation has not made much progress. Therefore, serious considerations are needed to tackle digital information management and preservation. Libraries as well as librarians require strong management support, efficient and effective strategy or policy, positive attitude and actions, and adequate knowledge to manage and preserve information and sources. Library and Information Science (LIS) institutions in Nigeria also need to develop robust model and curriculum to impact on students' knowledge about digital preservation challenges in the libraries. However, the concern of this study is preservation challenges in Nigeria libraries.

Despite evidence of increasing concern about digital preservation, there are numerous technical, organizational, legal and economic barriers to a comprehensive infrastructure for protecting and preserving digital assets. According to Cooper, B., Crespo, A. and Garcia-Molina, H. (2000) attested that the most familiar problems in digital preservation are media failure or deterioration and rapid changes in computer hardware and software that make older systems obsolete on a regular basis. Efforts to preserve digital information have always been challenged by the relative instability and short life of most digital storage media. Media failures and undetected deterioration of storage media remain a problem for digital preservation, but the issue of media longevity has moved into the background. There have been significant improvements in the quality and longevity of almost all digital storage media. Although there is no "permanent" digital storage medium that meets standards of longevity and durability established for "permanent paper" or microfilm, improvements in magnetic and optical media reduce the frequency at which digital materials must be copied to new media in order to prevent deterioration or loss. In some cases, transferring older digital information to new media brings additional advantages, such as increased media capacity and faster access which offset the costs of copying. Established repositories and most digital library designers accept the need for systematic maintenance of digital materials and periodic replacement or "refreshing" of the underlying storage media. Some recent research, discussed below, is developing automatic methods for detecting and repairing damage from media failure and deterioration (Cooper, Crespo & Garcia-Molina, 2000). Media deterioration and loss remain a problem when digital materials are not integrated into systematic management and maintenance programs and where there is no adequate system of security and back-up.

In similar opinion by Bearman, D and Rothenberg, J. (1999) confirmed that the problem of dependency on rapidly changing hardware and software seems intractable unless it is broken down into a number of smaller discrete problems and issues. Despite debates in the digital preservation community about the best method for ensuring longevity of digital materials (Bearman & Rothenberg, 1999), most recent progress is the result of a focus on particular aspects of the problem and attempts to find solutions to smaller pieces of the puzzle. This approach also has the advantage of bringing research on high performance mass storage systems, metadata and representation schemes, rights management, and user evaluation to bear on the challenges of longevity of digital materials. At the same time, a number of