

Impact of Digital Preservation of Information Resources on Academic Libraries

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ABSTRACT

This paper examines the impact of digital preservation of information resources on academic libraries. An explanatory research design was adopted. The method was to examine information resources available in libraries. The paper highlighted the impact of digital preservation and the nature of information resources in academic libraries. It concludes that since information resources include print and non-print, academic libraries should begin to develop skills and good housekeeping operation for digital preservation that will meet up with the international standard for long-term digital preservation of information resources.

Keywords: Digital Preservation, Information Resources, Academic Libraries.

I. INTRODUCTION

Digital preservation by definition means a process by which digital data is preserved in digital form in order to ensure the usability, durability and intellectual integrity of the information contained in them. digital preservation can be understood as the series of managed activities necessary to ensure continued access to digital materials for as long as necessary (Digital Preservation Coalition, 2008). It involves the planning, resource allocation and application of preservation methods and technologies to ensure that digital information of continuing value remains accessible and usable (Day, 2006). It combines policies, strategies and actions to ensure access to reformatted and born digital content regardless of the challenges of media future and technological change.

The preservation enterprise in the cultural heritage sector now functions largely within an environment of digital technologies, organised digital content and tools to find and use digital information (Conway, 2010). Digital preservation is informed by digital collection building but encompasses the acquisition, ongoing maintenance, periodic transforming and persistent delivery of digital assets.

Atkinson (2005) predicts that the outcome of digital preservation actions will be “new special collections,

which like its traditional counterpart, will be very expensive and will be warranted for only a small, selected subset of publications. Digital preservation is a process and activities which stabilize and protect reformatted and digital authentic records in forms which are retrievable, readable and usable overtime (National Archives & Records service of South Africa, 2006).

In the digital world, preservation must be concerned with entire technological systems, not one or another component such as a film or a storage disk. Digital systems are characterised by multiple subsystems (scanners and transmission devices) (Council on Library and Information Resources, 2014). Preservation must encompass shared goals that leaders and followers elicit together.

II. METHODS AND MATERIAL

Information Resources and Digital Preservation

Information resources constitute a range of materials and equipment gathered by the library in order to meet the information needs of both intended and anticipated users. Aliyu (2006) stated that information resources are made up of a variety of materials which information could be stored, retrieved and disseminated for use. Specifically, information resources include

such things as books, journals, theses; dissertations, technical report and all related materials in print format and Information and Communication Technology (ICT) and related electronic gadgets which store or provide information worldwide without any serious geographical barrier capable of satisfying the diverse information needs of researchers. (Abubakar & Salamatu, 2014). 'Information resources' refers to all physical and digital materials including educational resources that provide information relevant to curricula and research, including infrastructure such as electronic databases, that are made available by a provider to support the higher education objectives of its operations.

In addition to information resources specific to the discipline, providers should make readily available other resources to support academic study in general and resources relevant to cognate areas. The term 'resource' means a source of supply, usually in large quantity. A person is said to be 'resourceful' when he or she is capable of handling difficult situations. Generally, resources are aids to the researcher. They are those materials, strategies, manipulations, apparatuses or consultations that help the researcher to enhance research and development. Information resources therefore include all forms of information carriers that can be used to promote and encourage effective research activities and developmental projects (Chimah & Nwokocha, 2013). Information resources made available should be appropriate to the size and complexity of the provider and the number of students and their enrolment status, as well as the learning.

The growth of information resource according to Uluocha (2014) has become a phenomenon most especially in developing societies, owing to technological advancement in information technology. Academic librarians have a mandate to preserve its unique collections in whatever form they exist when it comes to digital materials, this can be a challenge because they are inherently fragile and can be difficult to maintain in the present while making sure they stay readable and useful for future generations (Willard Marriott Library, n.d).

Many institutions that use CDs as a storage medium are now concerned because information technologist has deemed the medium to be unsuitable for long term use. As a result, institutions are racing to get the data off the

discs as quickly as possible and into a more reliable digital storage environment (Library of Congress Digital Preservation Newsletter, 2014). Frequent use and careless handling of these information resources by clientele and academic librarians causes deterioration, thus, preserving them is a necessary solution. Akporhonor and Azonobi (2015) noted that harsh environmental condition, biological and lack of storage space and facilities are the factors affecting the preservation of information resources in university libraries, hence, preservation should be seen as an integral part of library operations to enhance access and use. Digital preservation has become a common topic in digital library research and development as a result; libraries through transition from research and experimental projects to an important part of the infrastructure for research and teaching. The rapid acceptance of digital technologies and the growth of digital libraries created three primary motivations for investments in digital preservation research and program development, there is an increasing demand for continuing access to the resources that digital libraries make available and this lead to a greater impact on academic libraries as it may be derived from preserved information resource through re-use (Hedstrom n.d).

III. RESULTS AND DISCUSSION

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Digital preservation is an essential and necessary component of digital archiving ensuring longevity of a digital object, but though essential, if applied in isolation from digital archiving, cannot ensure the long term accessibility and comprehension of the digital records that have been preserved (National Archives of Australia, 2006). Digital preservation relies on a good record keeping as it provides access to complete, reliable and authentic records into the future. It is seen as a prohibitive expensive activity and as such the exclusive preservation of large information resource. There is an urgent need to develop simple and scalable digital preservation tools and strategies that can be deployed in any library settings.

The complexity of information resources and the diversity of the user community can present a

considerable challenge to its preservation; therefore it has the following impact;

It ensures visibility of digital collections. It also enables services to be rendered across the globe as information resources can be accessed, interpreted and used for the future.

Adequate resourcing in the framework design and implementation. It encourages structured library processes to be assigned accountably to systems design and development. Standard development in the preservation of information resources is assured e.g. ISO TR – Long term preservation of Electronic Document based information.

It offers librarians the opportunity to develop their skills professionally.

IV.CONCLUSION

Digital Preservation as a common phenomenon should be given desired attention in academic libraries. The modern librarian is faced with serious challenges in terms of dissemination of information resource due to the frequent deterioration of information resources in traditional media. It is critically important that information resources retain their authenticity, accessibility over time, through effective digital preservation. It is the duty of the librarian to preserve and conserve the intellectual content of the documents for the generations to come irrespective of media and technological changes. Therefore, the impact of digital preservation cannot be overstressed as it enables efficiency, productivity, and accessibility of information resource and shared digital repository network.

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