Planning: A Tool for Sustainability of Digitized Theses and Dissertations in Federal University Libraries in Nigeria

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Abstract

Digitization is a technology that has enriched the preservation, accessibility and utilization of local contents in the Nigerian university libraries. Theses and dissertations (T&D) being a research output of the graduate students in Nigerian universities are digitized for posterity. This study examined the extent in which planning enhances digitization of theses and dissertations in federal university libraries in Nigeria. Five federal university libraries in Nigeria who have digitized their collection of theses and dissertations were used for the study. All 136 professional librarians in these university libraries formed the population/sample of the study. Questionnaire was used to gather data. The data were analyzed using mean and standard while the hypotheses were tested at 0.05 level of significance. The findings for the study revealed that planning highly influences digitization of theses and dissertations in federal university libraries in Nigeria. Among the recommendations made was that there should be digitization committee to plan for digitization of theses and dissertations in federal university libraries in Nigeria.

Keywords: Planning, Digitization, Theses & Dissertation, Academic libraries

1.1 Introduction

In academic libraries, digitization serves as a doorway to information and knowledge which provides indispensable backing for academic activities. It enhances access to theses and dissertations which scholarly researches by graduate students of the university community and play a significant part in showcasing the resources globally. This is fast becoming the standard for the creation and management of information resources in academic libraries as they seek to make the resources of the libraries visible and accessible. Yaya and Adeeko (2016) observed that the digitization project has been slow and expensive and that most libraries in Nigeria are still at the preliminary stage in digitizing their collection. Francis (2008) opined that, the most important idea in the sustainability of digital libraries is to have in place a plan that secures enduring access to useful digital content. Therefore, planning is an essential stage in the digitization of library resources. This is because planning

determines the library's objectives and purpose. Planning being a necessary ingredient is viewed by Bankole (2003) as a rational process of preparing a set of decisions for future actions directed at achieving goals and objectives by optional means. These are estimates of future requirements in terms of money, manpower and equipment. It includes elements of identifying needs, selecting among the documented needs, those of sufficient priority for action. It gives detailed specification of outcomes or an accomplishment to be achieved from each selected needs (Obi, 2001).

Nicholson (1995) observed that as most technologies have a life of three years, a five year plan can be difficult to follow beyond the third year. But Saunders (1995) adds that successful long-range plans will be flexible enough to encompass whatever new technologies are needed by the library without tying the library down to current types of technology. Thus, effective planning is the bedrock upon which management is certain of achieving set down objectives of any organization. This paper seeks to explore the extent of planning for digitization of theses and dissertations in federal university libraries in Nigeria.

1.2 Purpose of the study
The main purpose of this study is to examine the extent to which planning influences the digitization of Theses and Dissertations in federal university libraries in Nigeria.

1.3 Research Question
To what extent has planning influenced the digitization of Theses and Dissertations in federal university libraries in Nigeria

1.4 Hypothesis
There is no significant influence of the extent of planning on digitization of theses and dissertations in federal university libraries in Nigeria.

2.1 Review of Related Literature

2.1 Establishing a Digital Library
Establishing a digital library is cost intensive. Before any library starts digitization of Theses and Dissertations it is assumed that a lot of planning should be done to determine how much will actually be needed for the project. This will involve determining various steps that will be taken in the project; specific functions that will be carried out by certain individuals in the process; determining the period that is expected to be used in implementing the project and the personnel and skills that will be needed to enhance the success of the project. There may be a need for a feasibility study to observe how this project has been implanted elsewhere and the technicalities used to enhance its success.

It has been observed that in planning for digitization, a committee should be formed to plan for its creation and maintenance. The members must be from various library departments, and, if necessary, consultants can be hired. Reddy (2001) stated that planning for digitization include the creation of necessary infrastructure; creating the digital resources; accessing, identifying, processing, repackaging the Web resources for the local users; entering into copyright/intellectual property rights agreements with publishers and content creators; creating the Web site and connecting the Web resources generated electronic resources for wider access over the internet and conducting the staff and user training programs.

Perhaps a proper place to start planning for the digitization of theses and dissertations is by drawing up a strategic plan. A strategic plan explains in a simple but clear statement what the vision of the library is, and step-by-step procedures on how the library

would accomplish the vision. In order for Nigerian university libraries to accomplish the vision, each of the libraries must be able to state where it desires to go and, precisely, how it will get there. This will be like a checklist against which each of the libraries or group of libraries will work and, ultimately reach their destinations. It may be necessary to conduct trainings on strategic planning for librarians from time to time, so that there will always be an understanding of shared vision.

It will also impart skills on how to design strategic plans by all librarians from time to time. Akintunde (2006) observed that some libraries perform well because of good internal strategic management and planning, others barely survive because of inefficiency and misdirected operations. With strategic planning, the top management has a strong vision of where the organization needs to be headed and why they are not afraid to blaze new trails or initiate major changes in the organization's activities. Digitization needs a different modus operandi from that of print-based traditional libraries. Primarily, digital libraries require special attention and maintenance to safeguard the access to data and information. According to Dadzie and Walt (2015) planning for digitization requires on-going financial sustainability in order to enhance technical sustainability of the resources.

2.3 Issues Involved in Planning for Digitization of Theses and Dissertations

In planning for digitization of theses and dissertations in a university library, Francis (2008) advised that each library should articulate a policy to guide the development of digital collections and priority issues. This will describe the objectives of digitization, main principles, materials to be digitized, selection criteria for digitization, methods of accessibility to digitized materials, and standards to be used. The policy represents the set or sets of conditions, rules, terms and regulations governing interaction between the Digital Library and users, whether virtual or real.

The planning for a digitization project in university libraries also involves selection of software. The selection of a suitable system requires carrying out a survey from other libraries to determine the level of functionality of some software and the features of each of the software coupled with the attitude of the vendors which sometimes affect the functionality of the software. The cost of installation maintenance and renewal and upgrading charges should be streamlined with the vendor during the planning stage for the sustenance of the project. The choice of the digitization software at the planning stage is vital because the library digitization software works with the web server in providing various digital library functionalities including creation, organization, maintenance, indexing, search and retrieval. Alhaji (2007) highlighted that in choosing the software, some features should be taken into consideration. These include: support for different document types, support for customized metadata, collection administration, support for standards like Dublin core metadata standard, search and retrieval and multi-lingual support. He noted further that several free digital library software packages are now available which could facilitate the easy creation and sharing of information through digital library collections.

IFLA (2002) observed that university libraries while planning for digitization of the library resources should in their mission or vision statement outline in a single sentence, the long-term benefits to which the project will contribute, specify changes in participants or in their context that will be achieved by the end of the project and identify its users, and what they should be able to do when the work is completed, that they cannot do now. Drucker (1994) further stated that the

mission of each unit should be in agreement with the question: for what reason is this unit in necessary? The question for the librarian to answer is for what reason is digitization of theses and dissertations in university libraries in existence? In the university system, there is always a mission statement, which is followed up with objective. The University Librarian should develop plans to accomplish the mission statements in line with the objectives of the university.

Planning for digitization should consider the issue of copyrights. Copyright means that an author's right to an original work of literature, music and art is legally protected. The time span for copyright depends on when the work was created and can differ between countries (Alhaji, 2007). Copyright gives the owner an exclusive right of disposition over his or her work, in other words to do or to authorize copying and public distribution or performance of any kind. Alhaji further added that the transfer of copyright must be made in written form and signed by the owner of the copyright. To protect institutions from possible litigation where it has proved impossible to identify the copyright holder, it is recommended that access to the digital collection should rely or base on acknowledgement of a copyright disclaimer.

Planning is essential to the successful implementation of any technology based project and particularly one involving digitization. It affects the infrastructure of IT, staff, service delivery and organisational structure of the university library. A holistic overview of the whole lifecycle of the project is important to ensure that the objectives, aims, available resources and the deliverables are complementary. The basic tasks in planning are: assessment of the need for digitization; selection of materials; finding the funds for the project and a feasibility study to determine digitization procedures and benchmarks.

2.2 Statement of the Problem

The traditional method of acquiring and preserving theses and dissertations is inefficient in Nigerian university libraries. This is because these information resources are decaying in library shelves and the libraries need more space for its preservation. Also, there are restrictions in some libraries on accessibility to these resources. Therefore, digitization will preserve these imperiled library resources; improve efficiency of information search mechanisms, and improve access by students and other researchers. It is envisaged that the digitization project if not well planned may not be successful in the libraries. This study seeks to examine the extent in which planning enhances digitization of theses and dissertation in federal university libraries in Nigeria.

3.1 Research Methodology

This study was carried out in federal university libraries in Nigeria. Five federal university libraries: University of Nigeria Nsukka, University of Ife, Ahmadu Bello University, Zaria, University of Jos and University of Uyo each representing a region was selected for the study. One hundred and thirty six (136) professional librarians in these libraries formed the population for the study. The research instrument used was a structured questionnaire. Expost facto research design was employed in the study. Mean and standard deviation was used in analyzing the data.

4.1 Data Presentation and Analysis

Research Question

To what extent does planning enhance digitization of Theses and Dissertations in Federal university libraries in Nigeria?

Table 1: Mean and Standard Deviation of Responses of Professional Librarians on the Extent to Which Planning Enhances Digitization of Theses and Dissertations in Federal University Libraries in Nigeria

SN	Questionnaire Items	X	SD	Decision
1.	Planning has resulted in the provision of enough facilities in our library to support digitization	3.30	0.68	High Extent
2.	The goal of the library projects is considered during planning for digitization	3.21	0.66	High Extent
3.	The policy in our library guides in the execution of digitization project in our library	3.11	0.75	High Extent
4.	The mission statement of the library is considered during planning for projects in our library	3.33	0.66	High Extent
5.	The number of personnel to be involved in digitization is determined during planning	3.16	0.77	High Extent
6.	Our library carries out feasibility study for digitization during planning	3.06	0.84	High Extent
	Overall	**3.20**	**0.50**	**High Extent**

Table 1 shows the Mean and Standard Deviation (SD) responses of professional librarians on the extent to which planning enhances digitization of Theses and Dissertations in federal university libraries in Nigeria. Respondents who indicated that planning has resulted in the provision of enough facilities in their library to support digitization had a mean of 3.30 and Standard Deviation (SD) of 0.68. The goal of the library projects is considered during planning for digitization – mean of 3.21 and SD of 0.66. The policy in their library guides in the execution of digitization project in their library – mean of 3.11 and SD of 0.75. The mission statement of the library is considered during planning for projects in their library – mean of 3.33 and SD of 0.66. The number of personnel to be involved in digitization is determined during planning – mean of 3.16 and SD of 0.77. And those who indicated that their library carries out feasibility study for digitization during planning had a mean score of 3.06 and standard deviation of 0.84.

4.2 Testing of Hypothesis

Ho: There is no significant difference in the mean rating by Librarians in Federal University Libraries on the extent to which planning enhances digitization of theses and dissertations.

Table 2: Summary of ANOVA Table for Planning and Digitization of Theses and Dissertations in federal university libraries in Nigeria

Items	Source	Sum of Squares	Df	Mean Square	F	Sig.	Decision
Librarians		0.614				0.607.	Not Significant

Table 2 shows that F ratio value of 0.614 was not significant at 0.607. The null hypothesis was therefore accepted that there is no significant difference in the mean rating by librarians in federal university libraries on the extent to which planning enhances digitization of theses and dissertations. This study agreed with the fact that responsibility for ensuring success in the digitization project specifications lies with project planners who must have had at the very least a basic understanding of the issues involved in digitization.

5.1 Findings and Discussion

The findings from the study showed that planning had in a high extent enhanced the digitization of theses and dissertations in federal university libraries in Nigeria. It revealed that provision of facilities to be used during the digitization process; considering the goal and the mission statement of the library during the project planning for the attainment of efficiency in service delivery, identifying the number of personnel (librarians and technical staff) so that quick action can be taken wherever required and carrying out the feasibility study from other university libraries that have digitized their theses and dissertations could enhance the digitization of theses and dissertations in federal university libraries in Nigeria. This agrees with Reddy (2001) that planning for digitization includes the provision of necessary infrastructure like hardware, application software, trained manpower, book scanners, Optical Character Recognition (OCR), digital camera, large storage solutions, good network facilities, high bandwidth Internet connectivity, and carrying out a feasibility study. Alhaji (2007) in agreement with this view added that planning mainly involves identifying various tasks related to creating a digital library collection, developing strategies for handling these tasks, identifying required resources, formulating a

timeline for accomplishing these tasks and conducting feasibility study to assess the viability of the project.

Deegan (2001) identified the areas that are involved in planning for digitization as follows: assessment and selection, grant writing and fund raising, feasibility testing, costing 137 and piloting, copyright clearance and rights management, metadata design and creation, workflow processes and long-term preservation. Deegan concluded that, without careful planning for all these elements projects are unlikely to succeed. The analysis of data indicated that the difference in the mean ratings by librarians in federal university libraries on the extent to which planning enhances digitization of theses and dissertations was not significant. This was shown from the summary of ANOVA Table No. 2 which showed that F ratio value of 0.614 was not significant at 0.607.

However planning is an ongoing activity throughout all the phases of the digitization workflow and librarians in all federal university libraries are involved in planning for the project. There may not be any difference in the planning in these university libraries because all the stages are similar. It is not surprising therefore that this study revealed that planning had a high extent in enhancing the digitization of theses and dissertations in federal university libraries in Nigeria.

Conclusion and Recommendations

Digitization has made theses and dissertations in university libraries in Nigeria visible therefore, effective planning will enhance the success of the project in federal university libraries in Nigeria. Proper management of digital libraries would support Scholarly communication within and across the universities. The following recommendations were made from the study:

There should be a digitization

committee in federal university libraries to plan for digitization of theses and dissertations before the actual implementation of the project.

Training of the librarians should be part of the planning for digitization of theses and dissertations in federal university libraries in Nigeria.

Digitization of the library resources should be incorporated into the policies of the universities for effective implementation and management.

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