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Digitization of Information Resources in University Libraries in Nigeria: Challenges and Way Forward

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Abstract

Libraries, archives, museums, and other memory institutions digitize items to preserve fragile materials and create more access points for patrons. The traditional role of the library as simply a place of storage and preservation of books and other information materials which has changed overwhelmingly since the advent of information and communication technologies (ICTs) Academic libraries are duly bound to acquire, preserve and disseminate information from whatever source, hence there is the need for such sources of information to be kept preserved and made available in a more convenient and accessible format. This calls for digitization which is the process of converting analog (print, carvings, artifacts and so on) materials to digital/electronic format. Digitization of information resources in Nigerian University libraries is still at nascent stage. Digitization projects in academic libraries in Nigeria are confronted by a number of challenges. These are essentially not peculiar to academic libraries in developing countries and Nigeria in particular in the efforts of libraries to contribute data to the global information resource base. First and foremost is inadequate funding. Funding for the purchase and maintenance of modern and state-of–the–art digital equipment remains a major constraint while others follow. There is the need for external funds to be injected into the learning base for digitization. The challenge of funding unearths the need for capacity-building in the area of grant-writing and sourcing for fund. Also, there is the need of digitization project equipment and collaboration between libraries and donor agencies to procure these equipment, train staff and organize seminars, workshops and conferences on digitization sensitization network. It can therefore be recommended that Nigerian government and other stakeholders should make education of her citizen a famous priority which boils down to library as an arm of education. The leaders should also be checked on the issue of corruption in other to ensure that the assigned fund for digitization projects are faithfully used to letter.

Key Words: Digitization, Information Resources, University Libraries, Nigeria

Introduction

Digitization is the process of converting information into a digital (i.e. computer-readable) format. The result is the representation of an object, image, sound, document, or signal (usually an analog signal) obtained by generating a series of numbers that describe a discrete set of points or samples. The result is called digital representation or, more specifically, a digital image, for the object, and digital form, for the signal (Wikipedia, 2022).

In addition, Digitization refers to all the steps involved in the process of making collection of materials that are in analogue format to be in digital format and accessible online. It is the process of converting analogue (paper) materials into computer compatible formats. It can also be defined as a process in which materials are converted from the hard copies to electronic or soft copies (Adogbeji and Akporhonor,2021). A collection of library or archival materials converted to machine-readable format to provide electronic access or for preservation purposes are known as digitalized material. Typically, digital collections are library-created digital copies of original materials presented online and organized to be easily searched. They may offer features such as: full text search, browsing, zooming and panning, side by side comparison of objects, and export for presentation and reuse (Lampert and Vaughan, 2009).

Digitization is of crucial importance to data processing, storage, and transmission, because it allows information resources of all kinds in all formats to be carried with the same efficiency and also intermingled. Though analog data is typically more stable, digital data has the potential to be more easily shared and accessed and, in theory, can be propagated indefinitely without generation loss, provided it is migrated to new, stable formats as needed. This potential

has led to institutional digitization projects designed to improve access and the rapid growth of the digital preservation field (Wikipedia, 2022).

Sometimes digitization and digital preservation are mistaken for the same thing. They are different, but digitization is often a vital first step in digital preservation. Libraries, archives, museums, and other memory institutions digitize items to preserve fragile materials and create more access points for patrons. Doing this creates challenges for information professionals and solutions can be as varied as the institutions that implement them. Some analog materials, such as audio and video tapes, are nearing the end of their life-cycle, and it is important to digitize them before equipment obsolescence and media deterioration makes the data irretrievable. Technological changes can happen often and quickly, so digitization standards are difficult to keep updated. Professionals in the field can attend conferences and join organizations and working groups to keep their knowledge current and add to the conversation (Wikipedia, 2022). Therefore, Adogbeji and Akporhonor,(2021) expressed that the process of digitizing information materials such as texts, images, cards is mainly through capturing such objects (documents) using scanner and converting them into formats such as Hypertext Markup Language (HTML) files.

Ratanya (2010) and Digital library of Georgia (2004) in Adogbeji and Akporhonor, (2021) identified some file formats and deduced that the essence of this format is for the files to be opened using such format. It may be in HTML format that can be accessed using Internet explorer and Mozilla Firefox. They can also be converted into Portable Document Format (PDF) which is a file that can be opened using Acrobat Reader Software. In the same vein, document can be converted into Microsoft Word (DOC) format which can be opened using Microsoft Word. Other documents formats include Graphic Image Format (GIF), Joint Photograph

Enlarged Graphics (JPEG) for photographs. These file formats are used to offer information resources in digital forms. At present, university libraries are compelled to digitize their materials especially their projects, dissertations and theses by some important factors, one of which is the fact that almost everyone that is currently involved in knowledge production process prefers the electronic form.

Academic Libraries and Digitization

Otubelu & Ume, (2015) in Toyo (2017) described the traditional role of the library as simply a place of storage and preservation of books and other information materials which has changed overwhelmingly since the advent of information and communication technologies (ICTs). Academic libraries are duly bound to acquire, preserve and disseminate information from whatever source, hence there is the need for such sources of information to be kept preserved and made available in a more convenient and accessible format. This however calls for digitization which is the process of converting analog (print, carvings, artifacts and so on) materials to digital/electronic format. Thus, Nneji (2018) asserted that it could be agreed that digitization fulfills two of the major objectives of a library:

- Access to available information resources;
- Preservation and conservation of materials for posterity.

Pandey and Misra (2014) added that the proliferation of electronic information; the dwindling budget for acquisition of library stocks; the desire to access materials in remote locations; the quest for collaboration, partnerships and resource sharing; and the ever increasing cost of preserving analogue materials, and so on , are some of the forces that prompted digitization of archives and records.

According Singh, (n.d), information activities have undergone rapid transformation from conventional methods, consequent upon introduction of new technologies. To meet the tremendous information explosion and high demand of information, libraries are now taking the advantage of digital technology available to digitize their information materials. In recent times, universities in Africa have embarked on integration of technology in their operations. This serves as a tool for improvement and development, especially in a situation where attention is drawn to the academic contents and ways of digitizing and preserving them. This effort to digitize the intellectual property of the institution is what is known as digitization (Eke 2011).

Jagboro, Omotayo and Aboyade (2012) therefore observed that libraries worldwide, especially university libraries are increasingly becoming digital conscious. The world over, electronic resources are becoming preferred because of their inherent benefit of wide outreach. As a step forward in making prints in hard copy format available online for our teeming users, it becomes essentially necessary to digitally scan our library materials especially the newspapers, theses and court cases so that many users can gain access to a wide variety of information online. Hundreds of libraries and allied institutions have been launching projects designed to digitize their collections in response to the global information exchange and for wide outreach. However, the process in the developing countries, Nigeria inclusive, has been very challenging. The digitization project has been slow and expensive.

In the world of Information and Communication Technology (ICT) and globalization, digitization of materials is fast becoming the norm among libraries as each seeks to contribute its quota to the world information resource. Libraries embark on the digitization of their materials for various reasons. Digitization makes library's resources available electronically thereby providing a wider access to its collections. In a networked campus, users can access the library's

digitized resources from their offices and halls of residence even when the library is physically closed. Also, as many people as possible can gain access to as much material as needed at any given time (Jagboro, Omotayo and Aboyade, 2012).

Furthermore, digitization offers a solution for theft of items especially in developing countries where libraries have no electronic security systems to prevent theft of their collections. It is also a way of preserving aging materials which could have otherwise gone into extinction. It further allows users to search collections rapidly and comprehensively from anywhere at any time. Northwestern University, Nigeria for instance, uses this to renew and replace on shelf their heavily-used, old and tattered books. The books are digitized, printed, bound and placed back on shelves. And when digitized materials are put on the web, they tend to increase the library's visibility as the users all over the world access the materials. Apart from the machines that act as interfaces, it is now possible to have most library resources stored virtually (Jagboro, Omotayo and Aboyade, 2012). The choice of materials to be digitized depends on the priority of each library but there are widely accepted criteria which are normally applied. These include materials that are on high demand by patrons especially when such materials are available in limited copies or are on restricted access; local and unique materials; items that are of immediate and curricular importance; aging materials that are on high demand by patrons; useful materials that are out of publication; and materials that are difficult to handle (Jagboro, Omotayo and Aboyade 2012).

Yeates, (2002), Koehler, (2004), Byamugisha, (2010) Pandey and Misra (2014), in Adogbeji and Akporhonor, (2021) carried out a research on digitization of library materials in academic libraries. They highlighted the reasons for digitization which include accessibility and preservation. Other reasons for digitization include the changing nature of the library which is

becoming digital rather than analogue; the standard expected of the library is that of online transactions as the developed nations are now doing, so also is information retrieval and metadata system delivery etc. Other reasons are:

- Information retrieval and metadata:

In order to make these resources available online there is the need to digitize retrieval strategies which entails developing metadata for proper indexing and reference purpose electronically. That at present and in the future, information retrieval would be easy with well-developed metadata that clearly describe the collections.

- Higher education needs:

The higher education needs is becoming more digital than analogue. That libraries need to reposition themselves within their institutions in order to continue to ensure access to information, education, people, services, and ICT is paramount. The libraries, especially in Nigeria, have to adapt the needs of higher education sector and opt to digitization as library budgets continue to reduce to build online collection. There are calls for change in the entire systems of higher education in order to meet the demands of users. This is to show that despite budget constraints, African nations must strive to meet with the global need of digitization and metadata creation.

- Technology push:

There is need for technology push in Africa to meet up with the global needs in this era of digitization. There is need of integrating multiple resources for the user into a comprehensive landscape, allowing cross-searching or searching of many databases with one interface. The

reasons for digitization is to let African countries realize that meeting with the global needs of providing information online, there is need for virtual library, there is also need for metadata standard for our digital resources.

Digitization Process: Case of University of Nigeria Library

The digitization project in the University of Nigeria, Nsukka started with a set target of digitizing and uploading of about a total of 500,000 files in the university's website. In 2008, training of staff involved in the project commenced. These include data entry operators, some youth corps members and some library personnel. The first set of documents selected for digitization was PhD theses. These bound materials were first unraveled by library staff in the bindery section and then shifted down to Innovation centre where the digitization exercise is carried out. The digitization of the university's academic heritage as mentioned in the abstract is a collaborative effort of the University library and the Management and Information System (MIS) department of the university. The Innovation Centre is an arm of MIS department (Eke, 2011).

The scanners and computers are housed in the Innovation centre due to lack of space in the library (now the old library) building. Other materials like Masters theses and dissertations, Bachelors degree projects, Inaugural lectures, university newsletters, lecturers' scholarly articles/publications, textbooks, term papers, and many other materials belonging to the university were enlisted in the materials for digitization. These materials (mostly projects, theses/dissertations) are unraveled, scanned and converted to PDF (Portable Document Format) files. Metadata files are obtained through book marking. For the theses, dissertations and projects, the bookmark structure contained the following structure:

Name of authors and registration number;

Preliminary pages;

Chapters; and

Bibliography and appendix

After the book marking, paper capture is done to ensure that the document is searchable. This is otherwise known as rasterization. The rasterization process enables the detection of errors in the scanning process. The stated resolution to be set for the scanning process is 200-300 resolution. If the set is lower, the material cannot be rasterized. Hence, the paper cannot be captured. This may affect the appearance of the material when uploaded on the university website. Sometimes, it cannot be uploaded if not properly scanned (Eke, 2011).

Following the unraveling, scanning, bookmarking and rasterization processes is the checking of the job by professional librarians who go through the various stages of the digitization process, ensuring that the work has been professionally executed searchable through the metadata files. Typographical errors are also checked, after which each material is digitally signed ensuring quality assurance. Afterwards, the document is uploaded and linked to the university website. As at (8th July, 2009), the total of all materials uploaded in the university website is 14, 553 files. These documents comprise Founders Day Lectures, UNN People-biodata, Inaugural lectures – UNN, Miscellaneous, theses/dissertations, projects, scholarly articles. The number of files uploaded x-rays vividly that there is yet a long way to go in this journey of digitizing UNN's resources, as the target is 500,000 files (Eke, 2011).

Requirements and Facilities Needed for Digitization of Information Resources

Byamugisha, (2010), Jagboro, Omotayo and Aboyade (2012), as cited in Adogbeji and Akporhonor,(2021) opined that in digitization, the choice of materials to digitize varies from library to library. In most cases it depends on the priority of the library concerned but there are widely accepted criteria which are normally applied, such as materials of high demand by patrons especially when such materials are available in limited copies or are on restricted access, materials that are of local and unique needs, items that are of immediate and curricular importance, aging materials that are on high demand by patrons, and materials that are difficult to handle as identified.

They further argued that there are notable reasons for digitizing information materials which include historical and cultural value of the materials, increase of access to such resources globally, breaking of distance barriers, the changing nature of the library service that is becoming electronic rather than manual. The different materials to digitize include such library materials as publications, journal articles, theses, dissertations, abstracts. On the basis of the needs, libraries embarking on digitization project do so in selected materials especially those materials which are of great value to the libraries (Adogbeji and Akporhonor, 2021).

Fabunmi, Paris and Fabunmi, (2006) digitization is an essential task in modern day libraries. If a library is to live up to current challenges, it has to go digital, that is, provide online services. This will enable it to preserve endangered library resources, improve the efficiency of information search mechanisms and enhance access to library resources. It is essential for the library management to provide policy guidelines and articulate plans for the exercise. Digital library, otherwise known as virtual library, has grown to a special field of study. Courses of

instruction and research opportunities are now made available in this area of specialization by some university.

Byamugisha, (2010), Eke, (2011) in Adogbeji and Akporhonor, (2021) explained that considering the facilities used in the process of digitization, there are number of equipment needed. Facilities in this context are hardware equipment and software made available and use, for digitization project to be a reality. It is spelt out these facilities to include computer, scanners, digital cameras, cleaning brush, dust protectors, mask, tapes etc. In the same vein, software facilities such as photo essential for editing of scanned documents, Dspace, Fedora, Greenstone, Acrobat Reader and Eprints etc are used for storage, and distribution. Some other Software includes scanning software or driver for the scanner that initializes the scanner for scanning purpose. Photoshop and photo essentials are software for editing the scanned materials.

According to Singh, (n.d) the following machines are needed for digitization of information resources in libraries:

- Flatbed Scanner

Presently this is most popular and common scanner, which have the compatibility with any of the personal computer. These are both quick and economical to use. This is available at quite reasonable rate in the market. Its cost has dramatically come down. The scanner has a glass plate onto which the source document is laid face-down. The Charged Coupled Device (CCD) allows converting analog to digital moves beneath the surface of glass and records the reflected light as an array of pixels. The Flatbed scanners are often bundled with their own scanning software and sometime with Optical Character Recognition (OCR) software.

- Sheet Feeders

This is very useful particularly for the scanning of loose leaves. It has a remarkable speed and one can leave it churning through the documents unattended. 100 pages can be loaded at a time. This is not suitable for oversized documents.

- Drum Scanners

These are known as drum scanner because the source material is actually attached to a glass drum. These offer the highest resolution but not normally affordable by the libraries because of its high cost.

- Digital Camera

Digital camera is very useful for scanning of fragile materials like manuscript, rare book, as these materials cannot bear the any touchable pressure of scanning. Some of the important available in the marker are: Kodak, DC 215, Minolta, Kontran Progress 3012 etc. some of these are being used by the libraries for digitization of their manuscripts, theses, dissertations. Lighting conditions has to be maintained throughout the process. Selection of imaging equipment for digitization is very important, while selecting cost plays much important role. University libraries may use digital camera (ie Nikan DC100, Sony, Minolta) with minimum mega pixel for their manuscript and rare book collection. For other documents flatbed scanner is useful as it is affordable by the libraries. It has a good resolution also.

Benefits of Library Resources Digitization in Academic Libraries

According to Jagboro, Omotayo and Aboyade (2012), the benefits accruable from digitization of library collections cannot be quantified. Aside making the library collections

viewed and accessed at anytime from anywhere, printing is also possible from the web. The library's collection will also be open and made accessible to a much larger user-base within and outside the university community. In addition, users can easily find the required materials quickly and independently with less stress and without having to border the library staff. This ultimately may lead to enhanced usage of the library's collections and facilitate efficient and effective teaching and learning process.

Otubelu and Ume (2015), Thata (2007), Anunobi and Okoye (2008), Musa (2012), in Toyo (2017) noted the benefits of digitizing library resources can be summarized as access, support of preservation activities, collection development, institutional and strategies benefits, research and education. Thus, the obvious benefit of digitization is that it enables greater access to collections of all types. All manner of materials can be digitized and delivered in electronic form. Digital materials can be made available to a broader audience than those who have the resources or ability to travel to see the analogue collections, and thus, access can be expanded to non – traditional audiences such as lifelong learners. Furthermore, in their opinions it was asserted that one major benefits of digitizing library resources can be recorded as institutional and strategic benefits. They opined that providing access to digitized collections can help publicize the materials to other departments and peers, in other institutions around the world and demonstrate the importance of the collections.

Many funding opportunities are contingent on collaborations and partnerships between several institutions, so this can be an excellent opportunity to develop strategic liaisons with other institutions. Also, commenting on the advantages of digitization is of the view that digitization creates accessibility to research findings, improves access to research works, reports and other intellectual content. Digitization makes it easier for researchers to find and share the results of research, through free and unrestricted online availability and provide reliable long

term access to managed digital resources to its designated community, now and in the future in other to achieve optimum development goals of the institution.

In an instance, result from the survey carried out in Kashim Ibrahim Library, Ahmadu Bello University, Zaria, Nigeria revealed that by digitizing information resources in academic libraries, raises the profile of the library and the institution to the top ranks of institutional repositories. The digitization of priceless and valuable collections of the institution brings prestige to the whole institution as it creates visibility not only of the library's (institutions) content, but the scholarly work within the higher institution of learning. Thus, Libraries opt for digitization to enable her preserve it valuable materials from lost or damage especially due to deterioration often associated with paper collection (Mohammed, 2013).

Challenges of Library Resources Digitization in Academic Libraries

Jagboro, Omotayo and Aboyade (2012), asserted that the digitization project can confronted by a number of challenges. These are essentially peculiar to libraries in developing countries and Nigeria in particular in their effort to contribute data science to the global information resource base. First and foremost is inadequate funding. Funding for the purchase and maintenance of modern and state-of–the–art digital equipment remains a major constraint. There is the need for external funds to be injected into their learning base. The challenge of funding unearths the need for capacity-building in the area of grant-writing and sourcing for fund.

Another major challenge is electricity shortage. Computerization and digitization become unrealizable in an environment of epileptic power supply. For instance, the Hezekiah Oluwasanmi Library, Obafemi Awolowo University Ile Ife, Nigeria suffers from acute power

supply disruption from the national grid. This has resulted in constant breakdown of the digitization equipment hence institutions, companies and individuals are forced to procure alternative power supply which has prohibitive initial financial outlay and running cost. The issue of power has become a national calamity in Nigeria, thus it has to be given a priority by any library aspiring to attain global visibility. This issue could also be addressed by cultivating a power saving culture. When purchasing computers for instance, preference has to be given to flat screen monitors because they consume less energy when compared to Cathode Ray Tube (CRT) display units (Jagboro, Omotayo and Aboyade 2012).

Scanning pages of brittle old newspapers, court reports and proceedings, books and theses at high speed without doing damage to them is another problem that calls for urgent attention. Furthermore, storage of the digital information into storage media of choice as well as the preservation of the content of the storage media and the media themselves pose another major challenge. Though major achievement has been recorded in the area of procurement of equipment for digitization in Nigerian University Libraries, getting appropriate content management software to make the digitized information available online to users still remains a major challenge (Jagboro, Omotayo and Aboyade 2012).

Infrastructure is also a major challenge. Digitization of library materials and indeed global visibility require the setting up of computer networks at the local, metropolitan and national levels. Libraries in Nigeria must join the information super highway. Information abounds in the web on digitization and other topics of interest which librarians must be able to access. The UNESCO site, for instance made available the content of Bohemica 1998, a CD-Rom about digitization of rare library materials and is a very rich resource. Being able to access world information resource calls for a national gateway, network of fiber optics among institutions and

libraries and affordable bandwidth. Well, Nigeria though not there yet, is forging ahead in the setting up of these much needed infrastructural layout. The laying of fiber optics by Globacom, an Internet Service Provider and the Nigeria Communications Satellite I (NigComSat-1) recently are steps in the right direction (Jagboro, Omotayo and Aboyade 2012).

Training/capacity building remains a key challenge in digitization as it requires a combination of skills (scanning, photographing etc.) Many librarians lack the basic computer training, not to mention specialized training required in the art of digitization. There is need for continuous training to build library staff capacity in equipment maintenance and software management. In recent times, there have been series of workshops by the Nigerian Library Association and ICT bodies but only few librarians get sponsored to attend while most could not afford to sponsor themselves.

Singh, (n.d) added that the manual system of searching for information and materials in the traditional library does not permit multiple use of the same material by different library users unlike the online library services. It is inefficient and time consuming, hence the need to exploit the advantages of the digital library which enables provision of online library services. However, there are a lot of challenges facing the setting of a digital library or conversion to digital status. Digitization is time consuming and it is also a very expensive endeavour.

According to Bekele (2002) in Fabunmi, Paris and Fabunmi, (2006), there is a persistent shortage of periodicals and other technical literature in research institutions, universities, and technical schools in the developing world. Thus, making students, scientists, administrators and other information seekers to have limited access to innovations made outside their domain. Available local materials may not be relevant in the context of the developed countries. Creating

a digital library is a very good solution to these problems. However, there are a lot of challenges. There is a need to undertake a psychological preparation of the employees, so that they will not resist digitization of the library resources. There is also a need to retrain the workers. Creating a digital library is a very expensive venture which requires adequate planning and monitoring. The major problem is lack of technical-know-how; hence most digitization projects often run into problems. There is a need to design flexible and compatible programs. In addition, the interface should be user-friendly, so that users can search for information with ease. It is not all electronic copies of documents that will suit the application format, hence the need to take this into consideration during conversion or digitization exercises.

Way Forward

Multinational companies, philanthropists and the government could positively impact on the success story in the quest to digitize Nigerian University libraries (Jagboro, Omotayo and Aboyade 2012). Eden, (2001) in Adogbeji and Akporhonor,(2021) asserted that in other to advance in digitization, funds are needed to buy equipment, pay production personnel, preserve, archive, plan and collaborate in order to successfully carry out digitization. All these can be made a reality when there is administrative support from government or university management, among others. The government could support digitization projects through grants as the case in developed nations like America. The availability of such grants could make digitization easier and quicker. The Colorado digitization project in the United States of America was a well-funded effort to create access to digital resources involving historical societies in Colorado.

Eden, (2001) in Adogbeji and Akporhonor,(2021) viewed that as new technologies emerge, librarians and other staff involved in the digitization project should be trained. A train-the-trainer exercise should also be encouraged so that when some group of staff retire, other ones

can pick up from where they dropped. This is also a way of addressing technophobia. Workshops should be organized at local and national level by library associations and interested bodies for the training of library personnel on digitization issues. They may not necessarily wait until the staff handling the project retired. Some efforts have been made in Nigeria to achieve the training of library personnel on digitization issues. An instance is the National Interactive Seminar on Digitization of Library materials: Processes and tools, organized by the National Library of Nigeria from 16th – 20th July, 2007 at the University of Jos Library. Another impressive instance is a workshop being organized by the Information Technology Section of Nigeria Library Association (NLA), to be hosted by Nnamdi Azikiwe Library, University of Nigeria, Nsukka. The workshop which was held from 11th to 16th of October 2009 is tagged: "Managing of digital library resources". Such workshops exposed library personnel to all they needed to develop a digital library for the benefit of users and the society.

Eke (2011) maintained that back-up sources should be provided. In a case where a virus attacks the files and data is lost, there should be a back-up for continuity. An external hard drive of large storage capacity could be purchased for this purpose. The stated solutions will go a long way in strengthening the digitization exercise in the University libraries in Nigeria. Amongst all the reasons for the digitization project, preservation is the main goal. Although preservation of materials is the ultimate goal of all digitization efforts, provision of greater access is another noble reason for digitizing library collections. In Nigeria, for instance, Nnamdi Azikiwe Library, at the University of Nigeria Nsukka has established digital links with the digital collections of the following:

Access to Global Online Research in Agriculture (AGORA); JSTOR; Health Inter Network Access to Research Initiative (HINARI); EBSCOHOST; and E-Grenary Digital Library

(linked June 29, 2009). Despite this effort, there is still need for UNN library to develop a named digital library where all the locally digitized materials could be stored. Presently, the library is making use of Libplus (Lib+) library software, which is an upgrade of X-lib – a software developed at the Raw Materials Research and Development Centre in Abuja, the capital of Nigeria. It is a local library software developed to meet the immediate needs of Nigeria, and Nnamdi Azikiwe Library adopted it for operations. Presently, the lib+ is used to create an OPAC where all the library materials are cataloged and made available to students in the intranet for easy location of such materials. This is still at its infancy state. As earlier stated, there is need to create a named digital library for the institution where all the digitized materials should be stored and some precautions should be taken in order to achieve that aim (Eke, 2011).

Summarily, for libraries in developing countries to be relevant in the digital age, there is an urgent need for collaboration between national and international donor agencies as exemplified by Obafemi Awolowo University, Ile-Ife, Nigeria and the Carnegie Corporation of New York for digitization project. Training and re-training of library staff become very important as well as putting in place necessary infrastructure at the local and national level. Library management also needs to accord high priority to computerization and digitization. It is when this is done that libraries in developing countries of the world can upload their peculiar local content to the world information database (Jagboro, Omotayo and Aboyade 2012).

Conclusion and Recommendation

Digitization of information resources in Nigerian University libraries is still at nascent stage. There is the need of digitization project equipment and collaboration between libraries and donor agencies to procure these equipment, train staff and organize seminars, workshops and conferences on digitization sensitization network. It can therefore be recommended that Nigerian

government and other stakeholders should make education of her citizen a famous priority which boils down to library as an arm of education. Also, the leaders should be checked on the issue of corruption in other to ensure that the assigned fund for digitization projects are faithfully executed to letter.

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