

## PROBLEMS AND PROSPECTS OF DIGITIZATION OF ARABIC MANUSCRIPTS IN NIGERIAN LIBRARIES

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### ABSTRACT

*Inadequacies in the preservation of paper-based materials using traditional methods (storage, filing, fumigation, photocopying etc) in Nigerian libraries justify the need to adopt a more convenient and modern method of Information Management otherwise known as preservation of paper-based materials through digitization. It involves conversion of printed material into a machine-readable format using computer scanner, printer, Uninterrupted Power Supply (UPS) etc. Digitization is associated with numerous problems which include: tedious nature/slow pace of the exercise, epileptic power supply, unskilled manpower, lack of adequate motivation and funding issue. Despite the problems enumerated above, there are several prospects of digitization and they include: creation of database, reduction in manual handling of physical document as computer system is passworded; prolonging the lifespan of original manuscripts, conservation of space thereby solving the problems of accommodation/storage facilities, easy accessibility to information through online Public Access catalogue (OPAC). Having identified the problems and prospects above, it is very crucial to proffer suggestions on how digitization of Arabic Manuscripts in Nigerian libraries can be improved. Some of the suggestions include: Provision for adequate funding; Stand by generating plants, staff development programs for staff involved in the digitization exercises. Others include policy on digitization and the appointment of administrative heads of IT sections to various organizations as well as the use of various motivational techniques and Networking of Nigerian libraries, etc.*

**KEYWORDS:** Digitalization, problem and prospects Nigerian Libraries, Manuscripts, ICT.

### INTRODUCTION

Libraries, depositories and documentation centres since the time immemorial are charged with the responsibilities of acquiring, processing, organizing, storing and disseminate/provide printed documents to the generality of mankind on request. They also serve to preserve these printed documents in anticipation for users' request and consultation. Regardless of the status of library development in any society, libraries perform six roles and they includes conservation, information, education, research, culture and entertainment... Preservation of information resources in libraries was a dormant philosophy of librarianship (Aguolu and Aguolu, 2002). This become crucial owing to the fact that libraries and other documentation centres have been experiencing dwindling budgetary allocation; libraries cater for the information and research needs for both the present and future researchers (Saka, 2010).

It should be noted however that printed documents and of-course traditional printed materials are prone to threats which affects their physical well-being. These threats include human factors (mutilation, wear and tear); natural disasters, excessive environmental factors (temperatures and humidity); biological factors (destructive nature of rodents, insects, microbial activities) as well as chemical factors (Aina, 2004). Traditional methods of preserving printed materials (library and archival materials etc) are adopted in order to preserve information in printed format. These traditional methods includes; storage and handling, hygiene, physical

treatment, maintenance of conducive environmental condition as well as security measures (Saka, 2010).

The traditional methods of preserving paper based-materials seem not to be adequate enough and hence a more recent modern method of preserving paper-based materials known as digitization is used. Digitization is the conversion of traditional/printed library materials, archival materials, manuscripts to electronic form which can be stored and manipulated by a computer (Igbeka, 2008). Equipment used in digitization includes computer, scanner, digital cameras, UPS, printer, etc (Igbeka, 2008) (Ndor, 2004).

Considering the overview of digitization programme in Nigerian institutions, research have shown that out of 14 Federal university libraries surveyed, only 5 institutions have digitization programme. The type of resources digitized by Federal University Libraries includes: abstract of theses, newspapers, manuscripts, African collection. None of the 8 State University Libraries participated in the digitization programme. The Private University Libraries were also surveyed and out of the 4 universities, only 1 digitized newspapers, past question papers. Only 1 National Library indicated to have digitization programme i.e digitization of Newspapers. National Archives were not left out in the study and the one National Archive surveyed neither has digitization programme nor the type of resources being digitized (Fatoki, 2007). Manuscripts can be referred to as paper based materials that are yet to be published.

They include theses, dissertations, archival materials etc. The need to digitized manuscripts in Nigeria libraries arise from the fact that there is high cost of production in publishing houses and there is decline in library budget and in some cases no budget for libraries especially school libraries.

### **Problems of Digitization of manuscripts in Nigerian Libraries**

Several problems are bound to militate against effective digitization of printed materials (Arabic manuscripts inclusive) in libraries, archives or documentation centres. They include lack of preservation policy, inadequate trained staff, funding, digital divide among libraries and archives; erratic power supply, slow pace/tedious nature of digitization, lack of motivation and identification of Arabic manuscripts. However, collaborative research on challenges of digitizing information resources by Imo and Igbo (2011) revealed that inadequacy of funds and lack of written policy guidelines and fear of copyright violation are the identified problems in the ABU, OAU, UI Unijos and UNN Libraries.

#### **1. Preservation Policy**

Libraries, archives and documentation centres in Nigeria lack preservation policy. Policy is a document that explain the objectives and guidelines in carrying out preservation activities. Preservation policy should state some preservation measure prior to the arrival of materials. Lack of preservation policy do not provide result-oriented achievement (Richard, 2009).

#### **2. Lack of skilled/Trained Staff/Adequate Manpower**

Some organizations like libraries and archives lack trained professionals with specialization in digital preservation. In short, some libraries and archives lack professional with ICT background. This problem can be traced back to the ICT training in Nigerian Library Schools. As revealed by Gwarzo (2003) that Nigerian Library Schools are not producing technically sound library and Information Science graduates that are to face challenges in the labour market. This shows that IT training offer by Nigerian Library Schools is not adequate to withstand the challenges in labour market.

The writer of this particular paper was opportuned to visit Innovation Centre, University of Nigeria, Nsukka on 1<sup>st</sup> June 2010 and examined the digitization exercise. It was discovered that few staff are involved in the digitization of thousands of theses/dissertations being piled up at the digitization office.

#### **3. Funding Issue**

Digitization requires a great deal of money to buy digitization equipment; train staff involve in the digitization exercise; hire consultants etc. Libraries generally suffer from inadequate funding (dwindling budget). Computer and other ICTs are expensive.

Inadequate funding affects ICT usage in Nigerian Libraries (Amkpa and Abba, 2009).

#### **4. Digital Divide**

This is inequitable access to the use of ICT hence digital information. It has been observed that federal universities have more access to the use of ICT than the state universities owing to the fact that federal establishments are adequately funded than the state counterparts. As cited in Ani, Esin and Edem (2005), Ahiauzu (2008) stated that Academic libraries have opportunity to access and use ICT than public libraries. The same situation happens to Federal and State Universities. From the survey by Fatoki (2007), it was discovered that federal university libraries in Nigeria highly participated in the digitization exercise which can be attributed to "International funding through grants".

#### **5. Erratic Power Supply**

Digitization cannot be successful without constant supply of electricity. The epileptic power supply hinders the effective digitization of paper-based materials in libraries. Most Universities or University libraries own generating plant. The constant changes from NEPA line to generating plant or vice-versa lead to loss of data, systems errors etc. With the erratic power supply, computerization and digitization cannot be effectively carried out (Bozimo, 2005).

#### **6. Slow pace/Tedious Nature of Digitization**

Since most digitization exercise involves full text, it is usually slow and take longer time to cover require number of digitized documents. Igbeka (2005) revealed that the staff carrying out the digitization exercise in Kenneth Dike Library (University of Ibadan) could not meet up the target of digitizing 100 books per day.

#### **7. Physical well-being of the Information Storage Medium/Alteration of the Digital Information**

The serious problem with digitization or retrospective conversion exercise is that some PCs are faulty – slow, inadequate and constant breakdown (Igbeka, 2005). There are difficulties in digital preservation of information more especially in terms of the lifespan of the physical materials/medium used in the storage of digital information. These physical media include computer, CDs etc are fragile and can easily crack, scratch or broken as they have limited lifespan. Another problem or threat is the alteration of the digital records through the use of new devices, processes and software which replaces the product and method use in the digitization procedures. These may result in the alteration of digital records (Alegbeleye, 2009). The dynamism in the information technology resulting in the replacement of one system with another can negatively affect the information content.

#### **8. Identification of Arabic Characters**

Some of the staff that are involved in the digitization might not be versed in the field of Arabic or its characters and as such identifying the characters becomes a problem. Some of the staff might not be fully knowledgeable in Arabic alphabets/characters.

#### **9. Changes in the Administrative heads of IT Section**

Constant administrative changes affect the polices especially in the administrative heads of IT section affects the digitization exercise. Madu and Adeniran (2005) were of the view that changes in the head of management of an organisation usually affect the policies and programme of information technology.

#### **10. Inadequate Motivation of staff**

Staff involve in the digitization are saddled with their statutory responsibilities. In a situation where adequate motivation (adequate financial incentives, conducive working environment, training, etc) are not provided, staff are likely not contributing positively to the success of the exercise or may eventually withdraw from the exercise. During the retrospective conversion exercise at University of Jos library, it was discovered that despite some forms of incentives, some of the staff did not participated, while some of the participants later withdrew (Etubi and Ikekhai, 2007). This may be that the staff involved are not adequately motivated in terms of monetary incentives, staff development, conducive environment, facilities and working tools, etc

#### **Prospects of Digitization of Arabic manuscripts in Nigerian Libraries**

There are a lot of prospects and of-course benefits of digitization of manuscripts in Nigerian Libraries, among them include the following:

##### **1. Creation of Electronic Databases**

Retrospective conversion of Arabic manuscripts to computerize format would enhance the creation of electronic databases for Arabic literatures in Nigeria Libraries. As cited in Zinkham (2004), Abubakar and Saka (2009) view Electronic databases as "organized collections of information, data or citations stored in electronic format and searchable by the computer" hence they contain information resources that can be found in hardcopy. Whenever databases for manuscripts are created, they are to be found both in on-line and on storage devices and CD-ROM which are to be searched, accessed, downloaded and printed out among several millions of databases. The Electronic databases could be bibliographic or full text databases. The former contains citations and subject headings for publications. They could be bibliographic information about publications such as author, title, publishers, date. The latter contains the full/complete text of publications. Electronic databases can be used for scholarly research in

Nigerian Universities in particular (Abubakar and Saka, 2009) as cited in (Zinkham, 2004).

##### **2. Conservation of Space**

Digitization of manuscripts would help conserve space hence solve the problem of accommodation in some Nigerian libraries. That is to say that thousands of theses/dissertations, textbooks, periodicals etc that are to occupy large amount of space can now be compressed in computer system thereby solving accommodation problem.

##### **3. Minimization of Manual Handling of Information**

Unlike physical materials, digitized materials and of-course manuscripts that are in electronic environment minimizes the direct handling of information as used to be the characteristic of physical documents. Digitized information in computer system can be passworded with code to safeguard against unauthorized access. Thus, Igbeka (2008) stressed that "digitization can reduce manual handling of materials and this can prolong and preserve their life span".

##### **4. On-Line Public Access Catalogue (OPAC)/(Easy Accessibility and use of Information)**

The advent in the Information and Communication Technology (ICT) has made libraries to shift from their traditional methods of providing library and information services to the electronic form thereby making library services more faster and efficient (Okafor and Ukwoma, 2010). With OPAC in Nigerian libraries, users can effectively search, assess, locate and consult information resources (Okafor and Ukwoma, 2010) through any of the access points (author, title, subject etc). It should be noted that the OPAC is the computerized version of the traditional printed catalogues. OPAC enhance easy accessibility to information resources, while some libraries are still working towards creation of databases of their resources (Okafor and Ukwoma, 2010).

##### **5. Prolonging the lifespan of the original documents/manuscripts**

The digitization exercise helps to preserve the original manuscripts thereby prolonging their lifespan hence constant use of printed documents leads to wear and tears and of course depreciates the physical structure of the printed document.

#### **Conclusion and Recommendations**

This paper was able to identify some of the problems and prospects of digitization in Nigerian Libraries. Arising from the problems and prospects of digitization and for Nigerian Libraries to move along the current trend of librarianship or information preservation thereby guaranty easy information accessibility, some recommendations or suggestions are hereby proffer:-

### 1. Manpower Training and Training Programmes

Considering the tedious nature and technicalities involved in the digitization, library staff and indeed staff in various organizations needs to be equipped with necessary skills. This entails organizing series of training programmes for both professional and para-professional staff in the areas of IT, word processing procedures for digitization etc. The training programmes include in-house training, certificate course, workshop, seminar, conferences, in-service and formal professional education (Ifidon and Ifidon, 2007) and as rightly observed by Mohammed (2010) that all the staff development programmes can help keep library personnel abreast in the field.

### 2. Adequate Motivation of staff

Both the facilitators involved in the training programme and the institution staff involve in the retrospective conversion exercise need to be adequately motivated through financial incentives, creation of conducive working environment; provision of adequate working tools, free flow of information, training programme etc.

### 3. Adequate Funding

Digitization requires a great deal of money (procurement of ICTs, training of staff,

logistics, networking of library services etc). There is the need for increase in budgetary allocation to Nigerian Libraries taken cognizance of ICT/digitization programmes. External sources of funding (Ford Foundation, Macaauthar Foundation) should be sought for.

### 4. Policy Statement on Digitization

There should be a laid down policy statement as to the objectives and guidelines of digitization programme etc. It should also include the tenure of appointment of Administrative Head of IT.

### 5. Automatic Stand-by Generating Plant

In order to solve the incessant power failure, Nigerians libraries should device a means of owing their own stand-by generating plant with automatic switching codes which does not affects data on computer whenever there is power failure from NEPA/PHCN.

### 6. Networking of Nigerian Libraries

In order to solve the problems of digital divide existing among State and Federal University Libraries; academic and public libraries; there is the need for aggressive networking of services of Nigerian Libraries. For this to be effectively carried out, adequate funding and experts in the field of ICT are required.

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