

# Selection and Acquisition of Materials for Digitization in Libraries<sup>1</sup>

By

Stephen A. Akintunde, PhD  
Deputy University Librarian (Admin. & Systems)  
University of Jos Library  
Email: [akins@unijos.edu.ng](mailto:akins@unijos.edu.ng)  
[sakintun@gmail.com](mailto:sakintun@gmail.com)  
Tel.: 0803 7031 004

---

<sup>1</sup> Revised paper that was first presented at the National Workshop on Digitization of Library Materials: Processes and Tools, organized by the National Library of Nigeria, and held at the University of Jos, Jos, Plateau State, July 16 ó 20, 2007.

# Selection and Acquisition of Materials for Digitization in Libraries

By

Stephen A. Akintunde, PhD  
Deputy University Librarian (Admin. & Systems)  
University of Jos Library  
Email: [akins@unijos.edu.ng](mailto:akins@unijos.edu.ng)  
[sakintun@gmail.com](mailto:sakintun@gmail.com)  
Tel.: 0803 7031 004

## Introduction

Digitization has been so pronounced in libraries in the last few years that it has become almost a slang. Every library that is seeking to be relevant would want to embark on digitization. In many cases, digitization is substituted for automation in libraries. Whereas these are two different concepts, lack of clarifications and undue assumptions has complicated the terminologies. While it is normal for a library, especially in the developing world, to aspire to be relevant in today's technologically driven world, it is significant that librarians recognize that digitization is one of the processes of automation. According to Abby Smith (1999):

One of the most important qualities of information in digital form is that by its very nature it is not fixed in the way that texts printed on a paper are. Digital texts are neither final nor finite, and are fixed neither in essence nor in form except when a hard copy is printed out, for they can be changed easily and without trace of erasures or emendations. Flexibility is one of the chief assets of digital information and is precisely what we like about text poured into a word processing program. It is easy to edit, to reformat, and to commit to print in a

variety of iterations without the effort required to produce hard copy form a typewriterö (<http://www.clir.org/pubs/reportspub80.html>, 05/07/2007).

Digitization enhances the visibility of a library globally, because materials digitized can easily be accessed by other libraries and research institutions once the compatibility infrastructures such as relevant hardware, and internet network connectivity are put in place.

Digitization therefore, facilitates collaboration and sharing of resources among libraries and information centres. The huge cost associated with digitization projects makes collaboration inevitable. Libraries such as the University of Oregon and University of Tennessee in the United States of America are good examples of libraries that allow access to their digital content by other libraries and institutions. The Image Services Center of the University of Oregon for instance, òwas established in July 2002 to promote preservation and facilitate access to fragile materials. Image Services preserves materials through microfilming, digitization, and photographic replication. We facilitate access by making surrogate copies for reference, study and exhibition.ö

([www.dartmouth.edu/collab/facilities/digital\\_library.html](http://www.dartmouth.edu/collab/facilities/digital_library.html), 30/12/2006). However, digitization is not synonymous with preservation, even though it promotes it. The Database of African Theses and Dissertations (DATAD) project of the Association of African Universities has enabled the aggregation of theses and dissertations of African universities to be made available on the World Wide Web for easy access. Theses and dissertations submitted to the University of Jos can be found at the site ó <http://www.aau.org/datad>. This facility enables research students as well as their lecturers keep pace with directions of research on or about the continent, thereby avoiding unnecessary duplication, and leading to better focus in research.

Digitization, by definition:

refers to the process of translating a piece of information such as a sound recording, picture or video into bits. This digitization process can be accomplished through a variety of existing technologies, and may comprise any or all of the following steps:

1. *creation*: the making of digital copies of analogue objects or the modification of original digital objects for purposes of dissemination
2. *dissemination*: the provision of mechanisms by which the target population of users can gain access to the digitized material in the collection; and
3. *organization*: the provision of search tools and finding aids for the user to access the collection of digitized or conventional objects effectively.

<http://www.collectionscanada.ca/8/3/r3-405-e.html>, 05/7/2007.

Digitization, from the above definition, therefore involves more than converting documents into digital format. It includes both organization of the digital content in a navigable format, and the dissemination of the content to target audiences. It is therefore imperative for us to consider some of the critical factors in selecting and acquiring materials for digitization in libraries. These include digitization policy, copyright, intellectual nature of source material, current and potential users, actual and anticipated nature of use, the format and nature of the digital product, describing, delivering, and retaining the digital product, relationships to other digital efforts and, costs and benefits (Hazen, 1998).

## **Digitization Policy**

Once an institution decides to digitize its materials, before embarking on any form of digitization, it is important to first formulate a digitization policy. This policy will define the purpose of the digitization process, what materials to digitize, priorities for digitization, human resources to involve in digitization, users to benefit from the digitization effort, beginning and ending date of the digitization process, hardware considerations, software considerations, access to digitized content, standards, and funding. Clear digitization policies will enhance the digitization process.

Different institutions have different priorities of the types of materials they prefer to digitize. While some may give rare materials a high priority, others still may give priority to deteriorating rare materials. Some others may prioritize materials in their institutional archives, while others prioritize specific special collections of local history, or of some other significance.

In order to arrive at a cost-benefit decision therefore, it may be necessary to set up a committee to draft the digitization policy and another - project management team to supervise the effective implementation of the policy. The project management team is a group of people working together in various interrelated activities and charged with the responsibility of delivering a project within a stipulated time (Managing Projects, 2006).

## **Copyright**

Copyright is a critical factor in digitization. Permissions must be sought for materials considered for digitization, especially if they are not in the public domain. The

permission must come from the owner(s) of the copyright ó whether it is the institution of which the library is part of, or a publishing house. Necessary copyright fees must be paid where appropriate. Guidance on copyright issues can be sought from the IFLA website: [http://www.ifla.org/Copyright and Intellectual Property Resources](http://www.ifla.org/Copyright%20and%20Intellectual%20Property%20Resources) where current articles and issues on the electronic distribution of intellectual property can be accessed. Ownership rights should always be clearly established and recognized in all digitization projects.

### **The Intellectual Nature of the Source Material**

This is another critical factor to consider before selecting materials for digitization ó the intellectual value. Is it worth any trouble to digitize the material? Hazen, Horrell, and Merrill-Oldham (1998, pp. 6 - 7) have raised some pertinent questions which should be answered before investing in a material to digitize. Every project management team should satisfactorily answer these cardinal questions before embarking on digitization:

1. Does the intellectual quality of the source material warrant the level of access made possible by digitization?
2. Will digitization enhance the intellectual value of the material?
3. Will electronic access to a body of information add significantly to its potential to enlighten, or are the original books, manuscripts, photographs, or paintings sufficient to the task?
4. To what extent will the combination or aggregation of original sources increase their value?

### **Current and Potential Users**

The issue here is whether a material, after being digitized will ease access and attract better patronage. Questions to answer include:

1. Are scholars/target users now consulting the proposed source materials? Are the materials being used as much as they might be?
2. Is current access to the proposed materials so difficult that digitization will create a new audience?
3. Does the physical condition of the original materials limit their use?
4. Are related materials so widely dispersed that they cannot be studied in context?
5. Will the proposed digital files be of manageable size and format?
6. Will digitization address the needs of local students and scholars/patrons?

### **Actual and Anticipated Nature of Use**

The problem addressed here is how format of a digital content can make access and use more effective. So, the following questions need to be answered:

1. How do scholars use the existing source materials? What approach to digitization will facilitate their work?
2. Will digitization increase the utility of the sources materials? Will it enable new kinds of teaching or research? Do scholars agree that the proposed product will be useful?
3. Are there other scholars, librarians, and archivists who can collaborate to create a useful product?

### **The Format and Nature of the Digital Product**

How will the present physical size, nature, and condition of source materials affect the digital product? Will the digital content provide easier navigation for documents such as encyclopedias, maps, and other bulky/multivolume materials? More specific questions to raise are:

1. What critical features of the source material must be captured in the digital product? Are very high resolution copies, accurate rendition of colors, a seamless combination of images and text, or other qualities considered essential?
2. If the original sources are to be retained, can they withstand the digitization process?
3. What type of hardware should be used for conversion?
4. Will digitized sample meet users? If so, how should the sample be constructed, especially of art works?
5. Will the information resources upon which the project is based continue to grow?
6. How will users navigate within and among digital collections?

### **Describing, delivering, and Retaining the Digital Product**

This has to do with the organization, retrieval, and dissemination of digital content, including ephemeral and hitherto deteriorating digital content. Pertinent questions to ask are:



1. How will users know that the digital file exists?
2. How can the digital product best be delivered to users?
3. Who will be authorized to use the digital resources, and under what circumstances?
4. How will the integrity of the digitized data be ensured?
5. Particularly for digital products created to meet local demand, is the existing technology infrastructure adequate? For instance, if the level of technology available to patrons for accessing and making effective use of digitized content is inadequate, then, dissemination of digital content will be seriously handicapped.
6. What are the long-term intentions for the digital file?
7. Is the long-term preservation of deteriorated materials a project goal?

### **Relationship to Other Digital Efforts**

This is an issue of duplication and complementarity. How much will the new digitization effort compliment existing efforts? Or, will it be a duplication of other initiatives? In that case, will it be reasonable to continue with the effort, especially if there is duplication, or to explore collaboration and sharing of resources? More pertinent questions to ask include:

1. Have the materials proposed for digitization already been converted to electronic form?
2. Can cooperative digitization efforts bring together a cohesive body of material that would otherwise remain disassociated?

## Costs and Benefits

The total costs of digitization must be very carefully weighed against expected use of the digitized product. Costs to consider include that of human resources, hardware, time, technology and, maintenance. Questions to ask include:

1. Who will benefit from the proposed digital product?
2. Is the intellectual value of the proposed product commensurate with the expense?
3. Could an acceptable product be created at lower cost?
4. How will the proposed project address the long-term costs associated with digital files?
5. Can external funding be secured to support the proposed project?

From the foregoing, selection of materials for digitization takes a lot of effort and involves a lot of critical factors which must be fully considered before embarking on digitization. Digitization no doubt, has benefits of a more flexible format and access, and better permanence than the hard copy. In a public library approach to digitization, a National Library of Canada study group suggested that: "Decisions to select materials for digitization should also be based on a business-like approach that:

- Identifies target user populations
- Understands the needs and expectations of the users
- Identifiers measurable deliverables that will demonstrate benefits
- Includes a promotion/marketing plan

- Provides itemized costing
- Takes into account the work necessary for obtaining copyright clearance for the material to be digitized.ö <http://www.collectionscanada.ca/8/3/r3-409-e.html>, 05/07/2007

### **Acquisition of Materials for Digitization**

From the discussion above, it is certain that the selection of materials for digitization is a more critical problematic than acquisition. Acquisition of materials for digitization would be considered as a second stage in the digitization process. Unlike what obtains in the hardcover selection and acquisition process, where selection and acquisition are more or else independent of each other, in digitization, acquisition does not necessarily come after selection. Rather, materials that are digitized would usually be those that are already in the collection. Where they are not already in the collection, arrangements are made with an institution that has it digitized for sharing of the required digital content through collaboration.

### **Conclusion**

Digitization of library materials is a growing trend in library and information services today. It has brought about collaboration and access to otherwise inaccessible resources. Though a costly project, Nigerian libraries can latch on to the global trend by carefully studying the catalogue of those institutions that have already digitized their content and seek collaboration, so as not to, as it were, ñre-invent the wheelö. Moreover, it is apparent that, with the present level of funding in Nigerian libraries, most Nigerian libraries cannot

fund digitization projects. And, in terms of skills, many more libraries may not have the necessary skilled human resources to support the technology that digitization requires. It may therefore be more profitable for libraries in Nigeria to focus on access to digitized materials in those libraries that already have digitized, rather than embarking on fresh digitization, except in cases of local history and memorabilia.

## References

Association of African Universities (AAU). DATAD Project. <http://www.aau.org/datad>.

Dartmouth College. "Collaborative facilities".  
[www.dartmouth.edu/collab/facilities/digital\\_library.html](http://www.dartmouth.edu/collab/facilities/digital_library.html), 30/12/2006

Hazen, D., Horrell, J. & Merrill-Oldham, J. (1998) "Selecting research collections for digitization". <http://www.clir.org/pub/reports/pub80-smith/pub80.html>. 05/07/2007.

Library and Archives Canada. <http://www.collectionscanada.ca/8/3/r3-405-e.html>, 05/7/2007.

Managing projects: Expert solutions to everyday challenges (2006). Boston: Harvard Business school Publishing, xi, 100p.

National Library of Canada: Towards a learning nation: the digital contribution. December 31, 1997. <http://www.collectionscanada.ca/8/3/r3-409-e.html>, 05/07/2007

Smith, A. (1999) "Why digitize?" Council on Library and Information Resources. February. <http://www.clir.org/pubs/reportspub80.html>, 05/07/2007.