

DIGITIZATION OF HISTORICAL INFORMATION AT THE NATIONAL ARCHIVES OF ZAMBIA: CRITICAL STRATEGIC REVIEW

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INTRODUCTION

Archives administration in Zambia is the mandate of the National Archives of Zambia (NAZ) of the Ministry of Home Affairs.

This mandate is derived from the National Archives Act Chapter 175 of the Laws of Zambia, 1995 edition which provides for the preservation, custody, control and disposal of public archives including public records in Zambia.

Digitized Documents

- The archives that were digitized were the BSAC's records (1890-1924) called District Note books.
- The District Notebooks are a unique and valuable source of historical, political, administrative, ethnographical and anthropological information.
- The District Notebooks are the most requested items among the National Archives of Zambia's holdings

OBJECTIVES OF THE PROJECT

- To safeguard and ensure the preservation of the most valuable and perishable components of the archival patrimony of the National Archives of Zambia through digitization.
- To render them more accessible and facilitate their future exploitation by a broader number of researchers and interested parties.

OBJECTIVES Continues

- To enable a select group of National Archives of Zambia staff to gain theoretical knowledge and practical experience in electronic records management and website design, and in the selection and indexing of archival materials
- To enhance the national and international visibility of the National Archives of Zambia by increasing awareness of its holdings.

PROJECT TEAM

Historian was appointed to:

- Train NAZ members of staff in the selection and indexing of archival records for the purpose of digitization;
- Study the voluminous collection of the District Notebooks and recommend them for digitization;
- Produce comprehensive summaries and indices for each of the sections or entries they selected;
- Produce the contents for the National Archives website and set up a permanent exhibition.

IT Consultant was appointed to:

- Train NAZ staff in the use of the hardware and software for digitization and in the creation and updating of a website;
- Install the hardware and software purchased for the project;
- Digitize the District Notebooks recommended by the historian;
- Design a website.

GUIDELINES FOR DIGITIZATION

- The actual work was done according to UNESCO, IFLA /ICA(2002:1-5) guidelines for digitization projects for collections and holdings in the public domain.
- The guidelines number from one to ten and comments on how each guideline was met are given.

1. Reasons for digitization:

- *To increase access;*
- *To improve services to an expanding user group by providing enhanced access to the institution's resources;*
- *To reduce the handling and use of fragile and heavily used original materials;*
- *To give the institution opportunities for the development of its technical infrastructure and staff skills capacity.*

Comment from National Archives Digitization Project.

The aim of the project was to:

- increase accessibility of historical materials to the public,
- reduce the handling of fragile materials; and
- develop human resources and technical infrastructure

2. *Criteria for selection*

- *Intellectual content of the material*
- *Level of demand from public*
- *For cultural institutions starting their first digitization project, a good rule of thumb is that selecting the most heavily used parts of their collections will normally give the greatest added value because it will satisfy the majority of people they try to serve.*
- *If the material being considered as a candidate for digitization lacks detailed cataloguing or descriptive data, it is essential for future access to such materials to create such data.*

Comments from National Archives Digitization Project

- The District Notebooks are the most valued and most consulted collection at the National Archives.
- The District Notebooks are also “a unique and valuable source of historical, political, administrative, ethnographical and anthropological information.”

3. Technical requirements and implementation

- *Image quality*
- *Resolution*
- *Bit depth*
- *Image enhancement processes*
- *Compression*
- *Operator judgment and care*
- *Setting up of standards*
- *Decision on reference points*
- *Tonal reproduction*

Comments from National Archives Digitization Project:

The first step in the technical requirements and implementation was to acquire the book scanner Bookeye. This scanner is specifically designed for this type of work.

- To obtain a perfect image with the scanner we had to check the following settings:
- Format
- Type of document
- Brightness
- Contrast
- Resolution

The second step was to clear up the image (image enhancement process) with the graphics software Adobe Photoshop 6.0. With this software we could manipulate all the images to obtain a perfect image without unnecessary details. At the end of this process all the files (images) were then saved in pdf format.

The third and last step was to put all the data inside the database Alchemy to index and to record the digital repository.

Need for pilot project

Comments from National Archives digitization project:

- When all equipment and software was obtained and installed, the digitization of the Luapula Province District Notebooks as a pilot project, in which all the technical standards (see 3) were set.
- After exposing the results to outsiders (historians in and outside Zambia) and making the necessary adjustment, digitization of other Notebooks.

5. Legal aspects

If digital images are accepted as replacement for source document and are intended to serve that purpose, it must be guaranteed before conservation that:

- The informational content (and if needed the physical appearance) of the documents has been adequately captured and cannot be changed;*
- The legal requirements are met;*
- The means for retrieving and preserving the digital images are in place.*

Comments from National Archives Digitization Project:

Controls have been put in place to ensure that the image has been adequately captured (see quality control point 3).

The researcher will read the documents in pdf. format, and will be unable to make additions or changes to the image or the database. A back-up system is in place in which the original scan image is preserved.

If the researcher insists to check the original document, the District Notebooks are always accessible.

6. Budgeting

Cost recovery

- *Areas of expenditure: staff development facilities management; operational expenses; selection and preparation of source material for digitization; digital conversion; metadata capture; data management; managing storage and delivery systems.*

Comments from National Archives Digitization project:

- Maintenance and replacement of equipment has to be borne by a user-fee.

7. Human resource planning

Recommendations:

- Provide leadership;*
- Empower the right people;*
- Form partnerships with early adaptors for capacity building;*
- Develop new technical and managerial skills.*

Comments from National Archives digitization project:

- Two people should be trained at a time, for a period of one month.
- Training consists of a short theoretical explanation of the digitization process followed by hands-on-experience.
- Trainees were engaged in digitizing all District Notebooks of one particular province, carrying out the whole process of scanning, imaging and construction of the database.

8. *Development and maintenance of web interfaces*

- *Develop digital content;*
- *Building a web team;*
- *Website production and management;*
- *Introducing web-based services.*

Comments from National Archives Digitization project:

- The website was created. The staff of the National Archives of Zambia were trained on how to create a website and maintain it.

9. Preservation of digital content

- *Set digital preservation policies before you begin scanning;*
- *Adhere to international standards and adopt current best practices;*
- *Avoid dependency on proprietary software;*
- *Assign administrative, descriptive, structural and preservation metadata to all digital objects;*
- *Identify a trusted digital repository committed to the long-term management of your digital resources.*

Comments from National Archives Digitization Project:

- The images were saved in pdf format, i.e. an international standard for reading documents. This software is freeware and accessible through internet (www.adobe.com).
- In order to preserve all the digitized and indexed documents, they were recorded on digital repositories like CD and DVD.

10. Project management

Recommendation

- *Prepare an itemized budget of organizational, operational and staffing costs to assess the feasibility of the project.*
- *Develop a planning matrix to manage the operational tasks*
- *Establish a tracking system to monitor and report on production*

Comments from National Archives Digitization Project:

The pilot project taught the consultants that it is possible to digitize one Province a month.

CHALLENGES

- Most of the trainees had little knowledge about computers. It is therefore recommended that for training in this area, trainees should have some basic computing skills.
- The National Archives of Zambia is understaffed, which meant that staff had other jobs and thus could not become fully acquainted with some technical aspects of the digitization process.
- A further challenge is the fact that digitization is monotonous work, and this led to the assistant making mistakes easily.

CONCLUSION

The consultants did an excellent job that led to the continuation of the digitization project through the continued support of the Finnish Embassy. It is thus recommended that highly trained personnel in the area of digitization are hired to do the job. Additionally, the digitization project should be systematically planned, ensuring that work is done according to the outlined schedule.