

# **JSTOR DIGITIZATION PROJECT IN NIGERIAN UNIVERSITY LIBRARIES: POLICY ISSUES IN BUILDING AND SUSTAINING DIGITAL COLLECTIONS**

**LUKMAN I. DISO  
BAYERO UNIVERSITY, PMB 3011, KANO,  
NIGERIA**


**[lidisoq01@yahoo.com](mailto:lidisoq01@yahoo.com)**


**GSM: +234 (0) 8037053413**

# Introduction

- ❑ ITHAKA (JSTOR) initiated a pilot digitization project in 2010, collaborating with two Nigerian universities, Bayero University, Kano (BUK) and University of Ibadan (UI).
- ❑ The collaboration involves the establishment of a digital lab in each of the university libraries.


- ▶ The sequence of the project involves basically three phases:
  - Planning: strategic meetings, signing of MOU and training
  - Selection and assessment of materials, infrastructure, provision of equipment and hardware, and generation of metadata.
  - Follow-up by Decopod, publishing digital output at institutions, project evaluation, writing preliminary report and submission of final report.


- ❑ December 2011 or before was the expected date of completion with costs not exceeding \$4050 to be borne by ITHAKA.
  - ❑ Both institutions have selected materials and commenced digitization with progress at different rates.
  
  - ❑ Both are well behind schedule.  
BUK's completion target for metadata generation was February end 2013. UI's completion target was June 2013.
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- ❑ What follows after the completion will be guided by the MOU.
  - ❑ This paper aims to examine :
    - The objectives of this project as articulated in the MOU
    - The generation and management of “the selected materials”.
    - The technology system deployed to execute the project
    - The policy issues
    - The institutional capacity building potential of the project .
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# The objective and Key elements of the Project

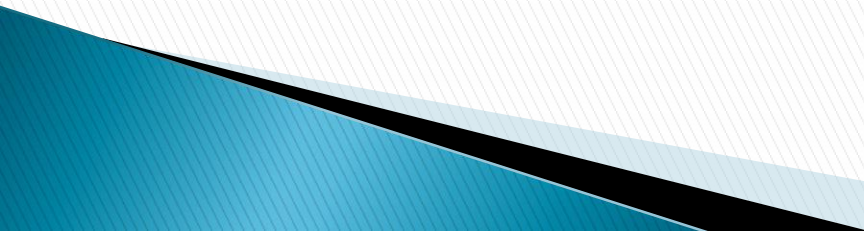
- ❑ The general objective of the project according ITHAKA was:
  - To conduct a pilot digitization project at BUK and UI
  - To make these materials available online for the scholarly community in Africa and worldwide.
  - To enable the libraries digitize and provide metadata for the selected materials.

- ❑ The key element is the MOU that constitutes the understanding of the terms agreed to by the parties.
  - ❑ The MOU defines the purpose of the project, rights and obligations of the parties involved, in terms of:
    - Selection of materials
    - Standard for creating metadata (Dublin Core)
    - Use of guidelines for quality and fidelity
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- Conditions for establishing the digital lab
  - Limit to responsibility for staff salaries
  - Custody of digital materials.
  - Use, reproduction and distribution of materials (by ITHAKA).
  - Ownership of copyright interest in selected and digital materials.
  - Conditions and terms of use of such materials with copyrights .
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- Grant of non-exclusive, worldwide, perpetual, royalty-free license to ITHAKA:
    - To create, archive, distribute the digital material to authorized users of JSTOR for non-profit educational purposes.
    - To make copies for protection against data loss.
    - To modify/adapt digital material without content/context change only as necessary for translation, preservation, delivery technologies.
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- ❑ These issues constitute the terms of the MOU signed by the parties involved.
  - ❑ Two implicit assumptions in the MOU
    - No violation of, or non-compliance with, any terms of the MOU
    - Nothing would warrant any need for amendment to, or review of, the MOU.
    - Relationship based on mutual respect/trust.
    - MOU does not make provision for violation, nor for expansion of its scope.
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# Generation & management of selected materials

- ❑ Each institution's library was:
  - To select materials to be digitized based on historical or cultural significance.
  - To create metadata in a spreadsheet for each batch of documents
- ❑ BUK selected works mostly written as a result of Sokoto (Fulani) Jihad (1804–1810).

- The works, mostly written in Arabic, were on various subjects including:
  - Religious sciences
  - Jurisprudence
  - Politics
  - Economics
  - Philosophy
  - Poetry, etc.

□ The selection decision in the UI was based on materials from:

➤ Influential individuals, prominent historical figures in the nationalist movement, mostly from the south-west.

➤ Old UI's Journals, letters, books dating back to 1950s.

□ In both cases:

➤ many of the materials were fragile and brittle

➤ had to be preserved/treated before digitization.

□ In both cases, staff were designated:

➤ Project managers

➤ Content experts

➤ Translators (Arabic to English) in BUK.

➤ System staff

➤ System Librarians

# The digital laboratory Technology system


- The wisdom in establishing the two labs.
  - BUK to serve Northern Nigeria
  - UI to serve Southern Nigeria
- Requirements to set up the labs:
  - Clean and safe space
  - Access to electricity

## □ The Decapod technology deployed was:

- “Extremely cost-effective”(Decapod)
- Capable of producing a paper- to- digital document solution
- Highly automated
- Of low operator interaction (apart from page turning)



- Problems areas it addresses:
  - Allows camera based capture of bound materials to produce flat, clean page images (as flat bed scanner)
  - No need for extensive operator interaction in the capture process
  - Reduced user intervention in the conversion process.
  - PDF/A outputs visually faithful to original, searchable & widely usable.
  - Allows viewable output on mobile devices with PDF reflow support.
  - No need for deep software, hardware or digitization skills

- No capital cost barriers – consumer grade cameras
  - Reduced operational cost barriers operated with minimal training/commitment.
  - BUK had no existing digitization project.
  - UI had MacArthur–funded project with 100,000 pages already scanned.
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- ❑ Both libraries made provision for the digital lab.
  - Power sources – off the national grid
  - Alternative: inverters, UPS, diesel generators, solar panel arrays.
- ❑ Delivery and set up of equipment
  - Hardware scanning rig.
    - Standard tripod
    - Consumer digital camera (12 megapixels, 300 dpi gray scale)

➤ Work flow software (3–step) drives the application software

- Capturing
- Software editing
- Generating PDF

## □ Equipment application

- The two libraries have digitized their selected materials
- They have made progress in generating metadata

# Policy issues & institutional Capacity Building

- The project's vision
  - Immediate/short-term: digitization of selected materials
  - Long-term: unlimited digitization expansion.
- Dimensions of Long-term expansion
  - Internal dimensions
  - External dimensions

# □ Policy Issues to take the same dimensions:

## ➤ Define the internal dimensions

- New management challenges – sustainability (funding , etc).
- Internally digitizable materials
- Equipment maintenance
- Service delivery

## ➤ Define the external dimensions

- How to extend the Labs capabilities
- What institutions, organizations – public , private?


- Under what conditions, terms
- Types of materials to be involved, etc.

## □ Possible institutions to direct policy instrument


- History and culture bureaus
- Archives and Museums
- Health institutions
- Research institutions
- Universities, other learning institutions (federal, State, Private)

- Government Ministries, departments and Agencies
- Non-governmental organizations (NGOs)
- Organized Private sector.
- Entertainment Industry (Film, Video and Music Producing bodies)
- Publishing Industry
- Electronic Media.
- ☐ The list may not be exhaustive – each Lab sets its Limit



- Details and Specifics of relationship are articulated:
    - On bilateral, case-by-case basis.
    - Within the context of general policy frameworks of each Lab.
  - Development of “Action Instruments” for implementation
    - Information gathering about the institutions/ organizations
    - Information, analysis
    - Consultation
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- Practical need for mechanisms – an institutional committee each:
  - To address implementation
    - Set clear goals/Objectives based on JSTOR's Objectives
    - Draw up strategies to achieve the objectives
- Committees' terms of reference:
  - Identification of Key issues/problems in the Policy environs – institutions, digitization needs, etc.
  - Policy formulation with clear vision, goals, objectives, & strategies for implementation

- Policy implementation – MOU (where applicable).
  - Policy analysis, Monitoring & review.
  - Faithful policy implementation will ensure institutional digital capacity building and sustenance & expansion.
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# Conclusion

- JSTOR's initiatives, supported by MacArthur Foundation had a vision.
  - Short-term to achieve digital capacity in the two institutions.
  - Long-term to achieve digital capacity in Nigeria and beyond.
- Articulated Policy is one best way to ensure sustainability & expansion of the Project.

Thank you!