

## BUILDING PARTNERSHIPS FOR AFRICAN DIGITAL LIBRARIES: THE WEST AFRICAN DIGITAL LIBRARY NETWORK (WADiLiN)

Cory Brandt  
West African Research Center, Dakar, Senegal

Mamadou Lamine Ndoye  
Bibliothèque Centrale, St. Louis, Senegal

### Rationale for a West African DL Consortium

Despite a proliferation of cybercafes and other manifestations of Internet culture, the digital divide is increasingly evident in Africa. Imbalance in the distribution of information technologies exacerbates existing north-south economic imbalances and marginalizes educators, researchers and students. While eager to embrace emerging technologies and the promise of digital libraries (DL), West African libraries, archives, and museums face a dual challenge. They are increasingly disconnected from online fee-for-service content, and at the same time, lack the capacity to digitize unique proprietary collections.

The Internet holds potential to reduce geographical barriers to information access. The irony is that most West African institutions are unable to pay for online database content. Many northern institutions negotiate access through consortia as a means of reducing e-subscription costs. Consortia have also proven effective as tools for the germination of DL activity and development of online content. These approaches have yet to be effectively applied in West Africa. In this context, a model is needed for West African DL development and access to online content. This model can be disseminated through, and ultimately strengthen, regional and sub-regional consortia and North-South partnerships.

### Barriers to DL development

Most cultural institutions in the region will not be able to develop viable DL programs in the absence of effective collaborative structures. While diverse with regard to missions and means, they face shared barriers including:

- Severe financial constraints compounded by lack of training in strategic planning and grant writing
- Inadequate facilities infrastructure (i.e. electrical wiring, telephone lines, buildings and grounds etc.)
- Outdated or non-existent hardware, software, and network connectivity
- Need for staff training opportunities and adequate training facilities
- Harsh environmental conditions damaging collections and accelerating equipment depreciation
- Inadequate salaries and difficult working conditions

These are often compounded by factors, common in organizations the world over, such as ill-defined mission and goals, contentious staff/management relations, departmental turf battles, and misdirection of project funds.

### DL Activity in Senegal

Senegal is as rich in history as it is poor in the means to preserve and provide access to its unique historical record. Senegalese libraries, archives, and museums have begun building the expertise

necessary for creation of DL content with assistance from the West African Research Center (WARC), West African Museums Programme (WAMP), and Michigan State University. Partner institutions include the Universite Gaston Berger, the Direction des Archives Nationale du Senegal, the Institut Fondamental de l'Afrique Noire (IFAN), and the Centre de Recherche et de Documentation du Senegal (CRDS).

### Catalyst Institutions

WARC and WAMP act as DL catalysts by providing local training, technical assistance, and fundraising support. Both are regional NGO's with a broad partner base that are working to extend their DL efforts to other countries in the area.

#### West African Research Center

WARC's DL mission is to:

1. Assist West African libraries and archives in the creation of DL's
2. Digitize important documents from private research collections
3. Provide scholarly access to West African DL content

In October 2001, WARC developed a model facility and began digitizing scholarly content from private collections (i.e. colonial reports, photographs, unpublished manuscripts, oral histories). WARC staff launched a DL training program with intensive face-to-face sessions, remote mentoring, and on-site follow-up activities. Topics covered to date include image capture and manipulation, Web development, and DL metadata standards. This training model requires that some equipment and software be in place prior to the beginning of the training process to allow for on-site practice.

All participants had some prior computing experience and were marginally familiar with the Web. None had previously worked with images or created Web sites. At the end of the two-month training period, participants had scanned practice materials from their collections, developed institutional Web content, and selected an archival collection for digitization. WARC is planning to continue offering training and expand the range of topics covered. Advanced training topics will include audio digitization, cataloguing for digital content, and project planning and fundraising.

#### West African Museums Programme

Due to the total absence of computing equipment in most West African museums, WAMP is adopting a staged approach that emphasizes development of computing skills prior to the introduction of equipment and networking. WAMP will provide museums in several West African countries with digital cameras and training in digital image capture. Participants will learn about file transfer (ftp), contract with a local cybercafe for online access, and send images to WAMP for inclusion in an online database. These museums will document their collections and gain valuable computing expertise through the judicious use of private sector resources in their communities. As a result of this effort, follow-up projects to install computing equipment will assume a relatively high degree of prior engagement and computing experience.

### U.S. Partner

MATRIX, Michigan State University, has been working closely with WARC staff to provide critical technical assistance for the project. MSU, recipient of an NSF DL grant, seeks to provide global access to African content. As Senegalese institutions begin digitizing their collections,

they will send files and accompanying metadata to MSU. This will require a database architecture that is sufficiently flexible to allow institutions to tailor metadata based on the type of collections being submitting. The range of field options will be limited to those allowable within the framework established by Dublin Core and METS. The MSU database is nearing completion (v.1).

#### Senegalese Partner Institutions

Senegalese Partner institutions are receiving training and preparing to digitize collections. Each partner was selected for inclusion in the project based on a number of criteria including staff readiness, importance and condition of collections, ability to sustain DL activity, and their potential role in assisting others.

#### Universite Gaston Berger

The Universite Gaston Berger (UGB), St. Louis, is Senegal's second largest university. The UGB library has actively adopted emerging technologies and has received assistance (computers and network infrastructure) from the Italian government and the World Bank. Librarians at UGB are seeking funding to begin digitizing dissertations relating to the Senegal River area. It is anticipated that UGB will serve as a focal point for DL library activity in Northern Senegal and Mauritania by providing locally accessible training facilities and technical assistance.

#### Direction des Archives National du Senegal

As a central repository for the records of both French West Africa and Senegal since independence, the National Archives has a wealth of content relating to the region as a whole. The National Archives allocated funds for the purchase of two digitizing workstations and will begin working with a collection of 3,000 postcards dating from 1900-1950. These images provide a unique perspective on colonial era life, material culture, and the built environment. Faced with rapidly deteriorating records, the National Archives is seeking assistance to broaden the scope of its DL efforts. As with UGB, the National Archives will act as focal point for training and technical assistance required by smaller institutions in Dakar and throughout the country.

#### Institut Fondamental de l'Afrique Noire (IFAN)

IFAN has received a grant from the Canadian development agency, CRDI, to begin digitizing materials from their vast cultural, historical, and scientific holdings. IFAN has begun staff training at WARC and is installing a digitization lab. Once preparations have been completed, IFAN staff will begin digitizing manuscripts from the William Ponty collection.

#### Centre de Recherche et de Documentation du Senegal (CRDS)

CRDS is the museum and archives of St. Louis, former capital of French West Africa. CRDS previously benefited from WAMP funding and training for the conservation, organization, and digitization of photographic collections. Having attended WARC's DL training, archivists at CRDS are poised to begin digitization of 25 rare explorers' tales depicting life along the West African coast between 1644 and the late 19<sup>th</sup> century. Progress at CRDS is currently hampered by a lack of digitization equipment and funding. CRDS is working with both WARC and WAMP to identify funding opportunities for the treatment of its important endangered collections.

### A DL Model for Resource Poor Environments

The benefits of DL development are universally recognized within West African cultural institutions. Real DL activity, however, is just getting under way. The emerging Senegalese model for DL development in resource poor environments is therefore suggestive, rather than being in any way definitive. The model stresses institutional readiness, the role of catalyst institutions, the importance of extra-regional partners, and the need for effective professional networks in support of DL development. There is also recognition that larger institutions, given a viable model for training and technical assistance, can act as institutional mentors providing a focal point for dissemination

### Institutional Readiness

DL projects must begin by assessing institutional readiness with an emphasis on:

- financial capacity and degree of financial accountability
- staff motivation and preparedness
- administrative support
- appropriateness of collections
- existing technical infrastructure and ability to maintain new technical infrastructure
- prior experience with digitization or related projects
- project management and strategic planning capacity
- experience and prior success in fundraising
- track record on previous projects with external funding
- facilities readiness

The results of this assessment will determine an organization's ability to follow through on DL projects, the level and type of external assistance needed, and the potential for sustainability after completion of an initial funding cycle. The differing strategies adopted by WARC and WAMP were developed, in part, as a response to differing general levels of institutional readiness in libraries and archives as opposed to museums.

### Catalyst Institutions

Locally-based catalyst institutions are a critical component of the model providing:

- training and access to training opportunities
- in-house and remote mentoring
- project and strategic planning assistance
- technical assistance including equipment and facilities specifications
- organizational development consultation for administrators
- formative and summative evaluation including clearly stated benchmarks for success
- assistance in fundraising and identification of funding opportunities

Catalyst institutions can also reduce the intimidation factor in DL projects by creating a typology of documents (and objects) so that cataloguers select a document type and are presented with a standardized metadata form. Finally, catalyst institutions can act as intermediaries with extra-regional partner institutions that, both literally and figuratively, may not speak the same language.

### Extra-regional Partners

In West Africa, the level of technical expertise and infrastructure, prior DL experience, and funding has not been sufficient to launch broadly disseminated DL efforts. These conditions can

be ameliorated through North-South partnerships linking institutions and consortia for material and technical assistance. These partners can also provide access to standards compliant database structures until internal expertise is sufficient for local hosting of database content. It is important that this type of linkage be developed with more than one external partner to avoid the pitfalls inherent in over-dependence on a single institution.

The development of a shared database and reliance on extra-regional partners for online delivery raises a plethora of rights issues. Commonly encountered institutional fears about unfettered access and copying of unique content are exacerbated by historical North-South imbalances in the control of information. Are West African institutions to provide free access to their content while paying for access to the content of others? Clear rights statements are a starting point in assuring that extra-regional partners are providing database service without having any claim to ownership of West African content. In addition, fee-for-use systems and/or cooperative agreements providing West African institutions with free access to European and North American content are possibilities that must be explored.

#### Disseminating the Model through WADiLiN

Consortia have proven effective as a means for northern institutions to share experience and expertise, defray DL costs, and seek funding for DL projects. In emulating this tactic in West Africa, it is important to build on existing consortia rather than creating new structures from whole cloth.

West African libraries, archives, and museums have effective mechanisms in place for professional networking. The development of a West African Digital Library Network (WADiLiN) entails building linkages with these existing structures and creating a coordinating body to direct activities within the region. In the case of museums, WAMP acts as regional coordinating body for West Africa having relationships with 146 museums in 17 countries. DL activity within the museums community can be effectively coordinated by WAMP staff with the support of a regional advisory board of museum professionals for West African Museums Online (WAMO), a project currently in the proposal stages.

The picture for libraries and archives is somewhat more complicated. In countries with relatively few libraries, such as Mauritania, there is a national library consortium. In countries with a wider variety of libraries, i.e. Senegal, consortia are in place for each type of library. These networks are coordinated through a national representative body. There are also regional library associations defined along functional lines such as the West African University Library Association. The WADiLiN vision is to have a regional agency for DL development that coordinates activities with both regional and national professional networks. This strategy acknowledges the nested, hierarchical nature of library associations in West Africa. To be successful WADiLiN must also identify additional Northern partners, find funding for network development activities, and help partner organizations find funding for DL development projects.