

https://dspace.org/

A PARTNERSHIP THAT UNDERPINS SUSTAINABLE CAPACITY DEVELOPMENT

Wilson, Deborah

2012-06-14
http://hdl.handle.net/10539/11540

Downloaded from a DSpace repository. https://dspace.org/

A PARTNERSHIP THAT UNDERPINS SUSTAINABLE CAPACITY DEVELOPMENT

Deborah Wilson
University of the Witwatersrand, Johannesburg
Deborah.Wilson@wits.ac.za

Presented at the 2nd International Conference on African Digital Libraries and Archives (ICADLA-2), University of Witwatersrand, Johannesburg, South Africa, 14th – 18th November, 2011

Introduction

The digitization of heritage and knowledge sources has been adopted relatively recently in Africa. Digitization has depended largely on external funding through grants from foreign trusts, overseas educational institutions such as universities, and foreign governments; this has yet to be adopted as common practice throughout the continent. Public Private Partnerships (PPP) combining grants and private investment are also widely used. Adoption has been fragmented as some countries have very little ICT infrastructure. Some African governments have introduced digitization in the implementation of large ICT-based projects. The Kenyan Government, an example of this, has published digital versions of parliamentary procedures, national census data and government expenditure data in order to fulfil, among other goals, its constitutional commitment to citizens' rights of access to government information (Kenya Open Data Project, 2011: 6).

Prerequisites

Financing models relating to digitization have followed conventional lines and are applied internationally across European, North American, Australasian and African institutions. This means that, with some exceptions, there is a lack of recognition that many African institutions have not reached the prerequisite level of preparedness in the establishment of digitization infrastructure.

The adoption of digitization and the development of infrastructure and staff hold challenges, but in Africa there are many countries that have to deal with underdeveloped infrastructure and a severe lack of funding. It becomes particularly important in this situation to leverage as much success as possible out of available funding, to not only develop databases of digitized collections but also to succeed in developing efficient and sustainable digitization infrastructure.

In addition partnerships have the potential to provide:

- Knowledge – of standards, databases, information design, processes;
- Funding – from diverse sources, structured to support the goals of the institution;
- Skills – in the optimal use and maintenance of equipment, in cataloguing and description and preparation of material; and

- Leadership and management – business acumen, project management, champions in accessing funding, leading practitioners who prepared provide access to knowledge and support, academics who combine vision and persuasion to convince sceptics and harness active support.

The audit on South African digitization initiatives, prepared with Carnegie Corporation of New York support for the National Research Foundation (NRF) in 2009 states that:

> Where a large quantity of material has been assembled, from within or across institutions, consideration should be given to driving the production of digitized images as a factory-type operation, with attention to appropriate staff skills, production targeting and quality control. These do not often feature in the day-to-day running of libraries and museums and specialist advice may be required (NRF, 2011).

Recommendations include the sharing of skills across institutions and the development of centres of expertise between institutions. These are necessary steps and support:

- The identification and definition of core standards;
- The selection of material based on agreed-upon selection criteria and goals;
- Planning for integrated digital repositories.

One can read a warning in the words "factory-type operation". Experience shows that this requires a different set of skills, attitudes and management methods, very different to the institutional culture. Large quantities of material need high productivity in digitization. Most of the well-resourced institutions choose to outsource the digitization process as in-house digitization centres would have no capacity to deal with day-to-day needs if they are dedicated to high-volume digitization.

The definition of "sustainable capacity" within the context of digitization usually focuses primarily on sustainable creation and use of digitized material. Funding is essential for the initiation of a project. However, where the institution is an entry-level digitizer, funding needs to leave a legacy consisting of knowledge handover at the very least. Ithaka S+R provides this definition:

> Sustainability is the ability to generate or gain access to the resources – financial or otherwise – needed to protect and increase the value of the content or service for those who use it. (Maron & Loy. 2011: 7)

The present paper explores:

- The optimal use of funding in order to not only generate digitized resources, but also for the development of a sustainable technical infrastructure with the cataloguing, descriptive and technical knowledge necessary for digitization of academic and heritage material.
- A hybrid funding model combining features of grants, Public Private Partnerships and development funding to create viable community-based service providers which can

become self-sustaining and provide some of the capacity needed for digitization projects.

An exploration of funding choices

1. Funding with grants

Funding models based on grants have been widely used but these, while filling a gap where a collection needs to be digitized, have limitations in developing future capacity. Funders, aware of the risks involved in misdirected projects, have defined measures that evolve from project management methods to measure progress and reduce the risk of failure. These stipulate specific outputs or deliverables and can include the requirement that digitized material is accessible through a catalogue or website.

- The period for using grants has short-term delivery periods, one or two years;
- The initiation of a project is necessarily rapid, limiting the amount of time for skills development and knowledge transfer;
- The need to digitize a large quantity of material, fairly rapidly, results in some functions, usually the digitization (scanning, photographing, digital recording) being outsourced to a private service provider.

Private service providers may still be needed to fill a lack of capacity to develop computerized access through a website or catalogue. The application of library, archival and museum collection metadata may be idiosyncratic and, combined with a proprietary database, may later create obstacles when integrating with international catalogues and databases.

The conditions for grants need to be negotiated within the context of the institution's situation. A large contract to digitize a collection, with no regard to lack of infrastructure, can result in no enhancement of digitization capacity and a stand-alone digitized collection, an island of digital material, disconnected from the rest of the institution's material.

2. Contracts with private publishers

Private publishers also offer opportunities with often substantial income for the digitization of material.

Publishers have usually analysed their market, and identify important collections for digitization. They may either digitize the material themselves, on the holding institution's premises, if requested, or fund the digitization. The limitations and possibilities vary according to the agreement:

- Limited rights of use of digitized collections for the holding institution; this can limit access and independent publishing of material for several years;
- Public access is limited, sometimes to paying customers only or not available at all to the public;
- No development of digitization capacity is usually provided for;
- Control over metadata and digitization standards by the institution may be limited;
- The catalogue or metadata database may be proprietary ;

- An archival collection of papers and manuscripts may be fragmented, resulting in loss of information and identity within that collection's context.

The degree of support for institutional principles varies. If digitization is undertaken within an overriding commercial imperative, the results can be problematic, with the publishing of material in a predefined format with exclusive rights of use for the publisher. The more positive possibility is that an institution may earn excellent income, with very limited, short-term limitation of rights.

3. National partnerships

In looking forward, it is essential to avoid committing to short-term solutions which create obstacles to future integration with the international knowledge resources. It is also important to recognise regional and local differences and identify areas that can be enhanced with active participation.

When operating in a global environment where other countries have already defined vocabularies, standards and practices, African institutions and African countries need to work co-operatively, research and critically examine international standards to recognise and incorporate that which is African. This will enrich the world view and more correctly provide the view into African culture and heritage.

National bodies for libraries, archives and museums, through a process of consultation with members and through research, should provide leadership in:

- defining metadata and technical standards;
- establishing a national database ;
- identifying and leading digitization projects for newspapers and other items falling within their management scope;
- identifying training requirements and sources for the training;
- lobby for government to acquire funding for ICT infrastructure; and
- develop national strategy and plan for the development of digitization capacity.

4. Mixed funding models – a move in the right direction?

The combination of grant funding and Public Private Partnership (PPP) is defined by Joint Assistance to Support Projects in European Regions (JASPERS) as "grant blending" (JASPERS, 2010: 5). This approach was described for the development of national or regional infrastructure. One task of JASPERS is to offer assistance to what are called new member states, 12 Central and Eastern EU Member States, "to apply EU grant funding to infrastructure projects under a structure".

This type of funding requires a large funder who provides a significant grant and a private funder who provides part of the capital and a significant level of skills, management and the development work. Another incentive is income generated with the utilization of the developed infrastructure. This is essentially a commercial arrangement where the private company earns income from the users of the infrastructure. Examples of this are tolls from a toll road development, levies from governments and other companies who use pipelines, or

income from airport taxes. Such funding also usually involves negotiation at government or national level. Its suitability for assisting the development of sustainable capacity is doubtful. The project would be driven by purely commercial goals, the development of the infrastructure being primarily for earning income. Costs involved in knowledge exchange and training would add to costs of infrastructure development.

5. The extended community model

We need to recognise that the limitations of available funding models need to be tailored to suit and serve the conditions and needs of local economies and institutions. This is not poverty alleviation but rather a meeting of needs between the university and the community. In addition to partnerships with organisations, individuals and companies, who are willing to provide training?

In Africa the opportunity that presents itself can develop community-based service providers. This would provide employment and generate income not only for staff salaries but also for re-investment, maintenance and, incrementally, training and equipment for digitization of a wider range of media.

Digitization is not confined to the holders of academic research, teaching and course material. It is a universal method of making information sources broadly available in electronic format. Health, agriculture, finance and education projects have knowledge transfer as an important feature. The United Nations developmental grants that focus on these areas include "knowledge transfer". (UN, 2011: 9).There are opportunities in this space to develop sustainable capacity using local resources.

Conditions vary considerably across Africa. South African unemployment is at its worst among young adults and more emphasis has to be placed on technical and scientific education. Interest in archival and library science is waning as fewer universities offer studies in information science (Research Focus, 2010: 2).The development of a digitization and capacity building strategy has to be tailored to the prevailing conditions.

Factors that support the engagement of communities:

- There are young people who have attended school, some have attended colleges or perhaps universities and they cannot find work.
- The level of familiarity with technology is high when it comes to social networking, using cell phones and other mobile devices, with exposure or training to basic use of computers.
- In urban areas, despite the lack of infrastructure, entrepreneurs have small shops providing Internet cafes, technical support, cellular sales and services.
- The university or institution has academic staff who teach and/or provide services in library, archival, history and associated fields.
- There are some computer based services in the organisation.

Training and productivity

There is sometimes a misconception that digitization tasks can only be done by those with a tertiary education. The graduate is not equipped to scan paper for hours a day at pre-defined specifications, carefully maintaining sequences and correcting image alignment. There are numerous tasks in the digitization factory that need careful and disciplined attention, but with basic training and supervision high-productivity of good quality digital material can be achieved.

Management of productivity is a business skill. Tasks include estimation, productivity measurement, the definition of key performance indicators, troubleshooting and maintaining consistent output day after day are not the methods and goals commonly used within academic institutions.

Knowledge in partnership

In order to ensure standardized results, the institution itself has to research and identify standards for cataloguing and describing material. Some of these tasks are already carried out in the library. Digitization needs additional standards for encoding of metadata for storage.

The definition of standards provides the bedrock for digitization. Networking with specialists in the library, archives and museum fields can assist in identifying widely accepted standards. Local partnerships provide the input from subject specialists who can highlight where standards need enhancement in order to capture metadata about culture-specific content.

In a partnership with a community, the standards have to be maintained under the authority of the institution. While digitization has many uses in many industries, generic standards, no standards or convenient "standards" developed by the digitizers should not be allowed to creep in. Adapting to international standards in classification and digital publishing assists in merging with national and international databases (in the virtual world of metadata and the Internet) and in providing wider access to local material, reaching a wider audience and contributing material to research and learning.

Training partnerships

Maintaining and applying metadata, description and scanning parameters for access and preservation are the preserve of the institution. Training in these is accessed through partnerships with experienced institutions. A partnership with private service providers can provide training in the use of digitization equipment and the development of processes. Companies and not for profit organisations that provide development opportunities with ICT, digitization guidelines and repositories are also potential partners in training. Their services sometimes extend further and some have adopted standards-based services that offer on-line repositories and access.

Conclusion

On 29 October 2011 the European Commission adopted a Recommendation asking member states to partner the private sector in order to more rapidly increase digitization of European culture (EUBusiness, 2011: 3). This demonstrates the recognition that this task cannot be done without partnership, even with a sophisticated ICT infrastructure.

African countries have significant infrastructure challenges and many do not have the experienced private sector companies and funding channels available in the West. But this does not negate the need to plan and build for the future. Funding remains a critical factor and one has to maximize the utility of available funding, stretching it to contribute towards local capacity development. This necessitates a new look at funding models. Changes in traditional funding, adaptations of the PPS model and inclusion of any partner who provides cost-effective, focused input can provide a more useful model for the development of sustainable digitization capacity. By recognising and developing the citizens of the country, rather than allowing the primary benefit to go to already established foreign companies, there is a wider contribution to local economies.

References

EUbusiness, 2011. *Recommendation on the digitization of cultural material and its preservation online: guide.* Available at http://www.eubusiness.com/topics/culture/online-culture. Accessed on 30 October 2011.

ICT in developing countries. 2006. *Postnote, no.261.March.* Available at http://www.parliament.uk/documents/post/postpn261.pdf. Accessed 27 October 2011.

JASPERS. 2010. *Combining EU Grant Funding with PPP for Infrastructure: Conceptual Models and Case Examples.* Report prepared on the basis of a Consultancy Contract with PricewaterhouseCoopers - Joint Assistance to Support Projects in European RegionS (JASPERS). Available at http://www.jaspers-europa-info.org/attachments/129_JASPERS%20PPP-Grant%20Blending%20-%20Models%20and%20Cases%20-%20Working%20Paper%20Dec%202010.pdf. Accessed 15 October 2011.

Kenya Open Data Project. 2011. Available at http://www.opendata.go.ke/, accessed 27 October 2011.

Maron N. L and Loy, M. 2011. Funding for sustainability: how funders' practices influence the future of digital resources. Available at http://www.ithaka.org/ithaka-s-r/research/funding-for-sustainability. Accessed 30 October 2011

Maron, N.L., Smith, K. K. and Loy M. 2009. Sustaining digital resources: an on-the-ground view of projects today: JISC Strategic Content Alliance. Available at http://www.jisc.ac.uk/media/documents/publications/general/2009/scaithakaprojects todayfundersedition.pdf. Accessed 30 October 2011.

National Research Foundation (NRF). 2011. *An audit of South African digitization initiatives: ongoing and planned.* Pretoria, South Africa. National Research Foundation. Available at http://digi.nrf.ac.za/download/AuditReport.pdf

Research Focus (Pty) Ltd. 2010. *The demand for and supply of skills in library and information services, archival services and records management*. For the Department of Arts and Culture. Final report, 15 March. Available at http://www.dac.gov.za/publications/reports/2010/Final%20Report%2015%20March2010.pdf

United Nations Development Account. 2011. Available at http://www.un.org/esa/devaccount/projects/active/tranche.html Accessed 27 October 2011.