DEALING WITH DIGITAL INFORMATION: A WAY FOR AFRICAN MARINE LIBRARIES TO IMPROVE INFORMATION ACCESS TO THE END USERS.

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ABSTRACT: This paper will discuss the opportunities offered by the digital era to improve the accessibility of marine information particularly for African libraries.

It will focus on how these libraries might take benefits from external digital information and also how they could enhance the visibility and the use of their own resources via digital format.

The presentation concludes with a review of some constraints faced by these libraries in the African context.

KEYWORDS: Digital library; Information technology; digital divide; Africa; Developing countries; Information management; end-users; marine sciences

INTRODUCTION

As the revolution of Information and Communication Technologies (ICT) increases and while information becomes an essential factor of development for our globalized society, inequalities of access to information are sharper ever and the digital divide continues to grow between north and the south.

However, used rationally, ICT could reduce this gap through facilitation of the supply of information to populations of developing countries but also and most importantly through the dissemination of information coming from these populations.

In the perspective of African libraries, support of knowledge for economic and social development of their country should appropriate these new tools to consolidate their role of brokers of information and to move towards a more efficient and effective management of documents.

Along the same lines, African ocean libraries and information centers, whose vocation is to help with a sustainable management of marine resources and coastal areas, should
improve the way they manage information by using intensive and extensive electronic means of communication towards actors of development of this sector (researchers, policy-makers, educators, students, technical workers and extension specialists, stockholders...).

As a matter of fact, end users are increasingly demanding not just high quality information but also easy access to relevant information. Digital technologies do offer today new and real opportunities to meet these needs: electronic full-text databases, information retrieval, and easy and fast diffusion throughout the Internet.

SOME ADVANTAGES OF DEALING WITH DIGITAL INFORMATION IN OUR LIBRARIES:

ACQUISITION OF INFORMATION RESOURCES

- Direct use access to the original full-text documents rather than references, abstracts and tables of contents: E-journal, E-archives;
- Expanding access to the documentation allows end users to obtain better research results.
- Quick access to documents for users: no need for them to wait for a long time before getting documents requested through traditional library systems or by ordering from publishers or organizations with delays in document delivery;
- Quick receipt of documents by downloading thus solving the problem of document delivery delays by postal systems, which include the risk of losing documents during the transaction.
- Low or no cost of document access if systems and programs below are used fully: TEEAL (Essential Electronic Agricultural Library) http://teeal.cornell.edu, PERI (program for the enhancement of research information) http://www.inasp.info/pericountries.html, AGORA http://www.aginternetwork.org etc.

MANAGEMENT OF DIGITAL INFORMATION IN LIBRARIES

From the organisational point of view, numerical management of information means:

- Small spaces for storage (database, CD, etc.) contrary to volumes of hard copy on shelves;
- Low cost of conversions from printed to digital documents;
- Existence of free open-source software for building a digital library such as Greenstone (www.greenstone.org);
- Simplicity of some techniques of conversion for printed documents into digital documents with use of scanners and the possibility of getting several formats (HTML, PDF, etc.) and types of documents (image, text, etc.)
- Preservation and conservation of the document’s quality and integrity by digital technology which could be a solution to problems of conservation for printed documents;
- Backup of library holdings (grey literature or internal production) in a form much more accessible and safe.

DIFFUSION OF DIGITAL INFORMATION

- More visibility of the document production from your own institution particularly of non-conventional literature;
- Greater accessibility of information (grey literature) to end users;
- Access to the digital catalogue of the library even for remote users;
- Facility for diffusion of information via the Internet because of the compatibility and standardisation of formats (PDF, SGML, HTML, XML, etc.).

SOME CONSTRAINTS RELATED TO THE MANAGEMENT OF DIGITAL INFORMATION IN LIBRARY ENVIRONMENT:

- The lack of or low Internet connectivity in most African countries while high speeds are needed to allow the fast remote loading of documents;
- Difficulties in accessing integral documents from some programs or publishers including the problem of copyright which controls the conditions of document use;
- Lack of financial resources for most African libraries which can’t afford e-journal subscriptions when they are not in countries eligible for free access to online resources;
- Choice and reliability of the support of conservation of digital information (databases, CD-ROMs, web sites, etc.);
- Question about durability of access, use and availability of digital documents;
- Selection of relevant search engine or retrieval software for digital libraries;
- Skills, training and real knowledge for the librarian of the techniques of archiving and using adequate tools for management of this kind of information;

CONCLUSIONS AND RECOMMENDATIONS

We need to admit that this technology (for handling digital libraries) is available and bound to remain so. The real question is whether we are willing to play the game and make the most of it or else be marginalized.

Thus, African libraries, particularly those specialised in aquatic and marine sciences, need to participate actively to the process of library capacity building by organising and managing digital information to support aquatic science research and policy development. They need to make full use of existing opportunities provided within projects such as ODINAFRICA and explore various possibilities of partnerships with
digital library initiatives such as the framework of IAMSLIC, IODE and others relevant programs.

Full text digitisation of grey literature and internal production existing in African marine libraries could be the first step towards this new challenge. However, librarians and end users will require extra training, assistance and collaboration to take advantage of this technology.

Furthermore, African librarians will gain more shared experience and expertise from their peers to handle digital libraries.

References:
