Management of Digitized Knowledge Resources

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Introduction

The global information infrastructure is transforming with the growth in full-text digital resources and fast communication facilities. This is so because institutions, agencies and departments in everywhere are busy capturing, processing, storing and disseminating information in the digital form. It is well established that fast access to desired information can lead to rapid development. While there are controls on this growing information resource, it has global implications and applications and therefore digitization is not a local affair as long as we understand that we can contribute to global information resources and also access its resources for any purpose.

From giving bibliographic and catalogue services in digital form to the users, the libraries are slowly creating full-text digital data with multimedia applications. These applications have already begun to revolutionary methods of research and access to education material. It will further transform life and cultural patterns the world over. The knowledge resources including books, journals, manuscripts, etc. available in libraries, archives, museums and private collections are getting identified through library and information networks and access to them has already made success stories around the world. It is now the turn of full-text multimedia–based digital resources that are becoming essential these days. Several successful experiments have been made in the digitization of full-text works of various types all over the world.

Knowledge Resources

Promoting Infrastructure and Competencies

We holds in our libraries, archives, museums, private collections books stores and information centers millions of books, journals, manuscripts, reports, grey literature, CD-ROMs video-recordings, sound-recordings, including objects of art and historical and archaeological evidence. Several management issues are given as follows:
• **Cooperation**

It is important to promote interest in the digitization of documents among commercial agencies through competitiveness, cooperation methods and the relevance of partnerships for a reasonably profitable business. In order to achieve this result well, it is necessary to create a system for resolving copyright issues.

• **Scope of Content**

The digitization work in the public sector including government organizations is much too large and this needs to be undertaken quickly. To achieve this objective, experiments will have to be made at the national level to promote cooperation and avoid duplication in this work. The central government and state governments could fund foundations to undertake this massive job and develop infrastructure for cooperation with the agencies like publishers that create content in the print form. The whole process demands the creation of a new financing policy so that there are incentives for developing this nation resource.

• **Training**

Training at local, state and national levels will have to be arranged to implement the processes of content creation and achieve a higher degree of competency in content creation.

• **Types of Projects to be Undertaken**

Content creation works in digital form needs to be done by each institution. For instance, courseware needs to be made available by institutions such as the UGC and made available through the internet to students. Since integrated access to knowledge is needed on any subject three is a need to coordinate content creation processes. This will result in a variety of digital learning resources for the users.

In the field of education special attention will have to be given to upgrading the skill of teachers in accessing digital resources, use of digital television, and to the general public in using knowledge in the digital form. This means training on a much larger scale will have to be introduced by private and government agencies, associations and NGOs.

• **Standards**

Efforts will have to be made to introduce standards for Meta information and data security which is at par with global standards.

• **Communication Facilities**

Broadband connectivity at all levels in the country needs to be established to enable data for images and video-conferencing to move fast. This will lead to distribution of varied content and the promotion of electronic transactions and commerce.

This general telecommunication framework and the compulsions for using electronic commerce and full-text digital resources will have international implications. Education and research activities will receive a boost and the public will begin to appreciate the importance of digitization at the national and international levels.

**Management of Digitization Processes**

Management of digitations’ processes would include all kinds of documents. Owing to lack of space, referring only to the management issues concerning printed documents.
The committees

The committees of experts for technical purposes as well as for the selection of documents should be constituted to undertake the selection process.

Selection of Materials for Scanning

- The Principles

The purpose of selecting documents for scanning should be based on the following principles:

a. Digital Document on the Web is a Published Document: A document that is digitized and made available to the users in the world is open for use and comment by any scholar, professional and the general public. It is important to see that whatever has been digitized is a unique publication and carries with it all the characteristics of a published document.

b. Own Copyright of the Document before Digitizing it: In order to execute the right of a publisher without violating copyright, it is important for every institution digitizing a document to own copyright of each document to be digitized.

c. Arrange Financial Resources to Support Preservation of Digital Databases: Digital databases need to be accommodated in new formats and hardware using compatible software from time to time. The financial support will have to be arranged to support the change over so that the users do not start having no access to the document. It is therefore important that the project should have the means of revenue generation or the facility of getting a regular grant for the maintenance of the digital data.

d. To Reduce Costs on Scanning Select the Best: The initial costs on scanning may not be much but coupled with quality control checks, preparation of indexes catalogues and metadata the entire job becomes expensive. It is therefore advisable to select the best documents at the initial stage.

e. For Each Document Create a Well-Researched Documentation: Before scanning is started each document, part by part, should be processed for appropriate captions and completeness of the document. Accompanying material needs to be written to give the necessary context to the document being digitized.

f. Don’t Publish Sensitive Documents on the Web without Consulting the Concerned Officials or Organizations. Every institution has to keep in mind that any sensitive document for a group, society or country should not be digitized unless it is in the interest of the country that such information should reach a wider audience.

g. Undertake a Final Overall Quality Check: The Committee for Selecting Documents for Scanning should undertake a final quality check in terms of the authenticity and accuracy of information both for textual or visual materials and the overall presentation of the digital data on the Web. It has to be kept in mind that the documents to be digitized conform to broader objectives of the institution. Therefore the document should be in perfect condition. If it is not, another copy of the document should be arranged for digitization purpose. Such documents which are tiny or oversize, where the physical condition is bad, or the documents are available on a format like glass or birch bark special techniques need to be used.
• **Basic Selection Methods**

For selecting documents for digitization the following three steps need to be taken into account:

A. Nomination: A meeting of experts, author’s library and information scientists, archivists, etc. should be held to collect names of documents that need to be selected for digitization purposes. While doing so the, following guidelines need to be seriously considered:

a. How much of the collection is well and accurately documented at the item level in reliable and complete indices and finding aids, and where are these well documented items?

b. How much of the collection is in stable or good condition, and where are these stable materials?

c. What portion of the collection is standard and consistently sized, normal contrast, black-and-white and/or printed materials, and where do these materials fall?

d. What materials are easy to provide to researchers because of their size, format, or viewing requirement and where are they in the collection?

e. What percentage of the materials does the institution have the copyrights to or licenses for, and where are the public domain materials?

f. What percentage of the materials has no restrictions or sensitivities of any sort (such as privacy, publicity, defamation, obscenity and sensitivity, or donor restrictions), and where is this restricted and non-sensitive material?

g. What materials are of highest monetary value and well secured, and where are they in the collections?

h. What materials are judged to be at highest risk and why, and where are they located in the collections? Of these, which are stable enough to be scanned without damage or which have already been well photographed?

i. What materials are used most frequently, and where are they located?

j. What materials are unique to the institution, and where are they located?”

• **Evaluation**

The Selection Committee should evaluate the recommendations made and deselect, if found necessary, according to international practices set for this purpose.

• **Prioritization**

The final list prepared for digitization purposes should be ranked in the order of priority keeping in mind the relevance of each document in a historical perspective its use in the present context and its Physical condition. The international norms for prioritization should be considered.
References
5. Retrieved from https://libraries.uky.edu/record.php/lir_id=708
7. Retrieved from http://www.dli.ernet.in/handie/2015/1
10 Retrieved from http://www.jstor.org/