LIBRARY AUTOMATION IN ORDER TO DESIGN LIBRARIES FOR THE NEEDS OF FUTURE USERS

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ABSTRACT This paper explains that 'Library Automation in Order to Design Libraries for the Needs of Future Users'. The Integrity of Digitized Information Content The notion of 'content' as text is familiar to all information users and information professionals. But it also necessarily includes material submerged in the text, such as page numbers, chapter headings and footers. The content of images and sound is more problematical because less inherently understood. Colour is an element, as is shape and form in the case of images, while tonality can be significant for sound. High resolution during scanning is essential for rich colour register; this means a larger file size and more expensive storage, as well as slower transmission across a network. Library Systems In this fast changing world information technology and information management are going to play an important role. Information has already been recognised as one of the basic resources for the socio-economic development of a country. Information has now rather acquired the status of the most sought after resource of the resources. The newly emerging 'high tech' disciplines such as computers, telecommunications, biotechnology, etc... are given importance because they store, generate, manipulate, communicate information.

Document Imaging Process Space is not the only concern. How do you protect these documents? They are vulnerable to fire, flood, insects or mice, or even simply the effects of time. They are also vulnerable to theft, or to being seen by unauthorized eyes. The more documents you have, the more difficult it is to keep them safe.

KEYWORDS : Digitized Information- Digital Resource- Digital Library-Automation.

Introduction

The Integrity of Digitized Information The central goal of any project should be to preserved the integrity of the information being digitized by defining and preserving those features of the objects that distinguish it as a whole and singular work — including: Content Fixity Reference Provenance Context. The Integrity of Digitized Information Content The notion of 'content' as text is familiar to all information users and information professionals. But it also necessarily includes material submerged in the text, such as page numbers, chapter headings and footers. The content of images and sound is more problematical because less inherently understood. Colour is an element, as is shape and form in the case of images, while tonality can be significant for sound. High resolution during scanning is essential for rich colour register; this means a larger file size and more expensive storage, as well as slower transmission across a network. Where the costs of a digitization project are a significant factor, compromises may have to e made as to what is an essential level of 'content' for a particular information object as opposed to what would be ideal. The Integrity of Digitized Information Fixity ' Fixity' is the relationship of the object and its content to other objects and to the outside world. Library and information professionals are accustomed to the concept of fixity in published and other works; a book may go through several editions; business records, invoices for example, relate to a particular transaction which is fixed and located in time.

Purpose of a Resource Center Primary purpose is to improve teaching and learning. It consists of dependent component, resources, management, activities and programs. Resources Activities Management Programs Developing a Digital Resource Center Info " IN ORDER TO DESIGN LIBRARIES FOR THE NEEDS OF FUTURE USERS, WE NEED TO EXAMINE THE VARIED ELEMENTS INVOLVED IN THE COMPLEX RANGE OF LIBRARIES WE HAVE TODAY" Is there any one among us today who does not believe that education and learning are lifelong pursuits? Education and learning can be the huge market for digital libraries when distributed digital resource center and information work technologies are available to content creators. Distributed digital resource center also have the potential to revolutionize education and learning, so there is a healthy symbiotic relationship among education and learning and digital resource center, a relationship that is in its infancy. School resource center varied greatly. Some IRC appeared to be healthy, stimulating and active learning environments, however, these were very rare indeed. More significant is the issue that even though nearly all the IRC that I visited had no students in them library staff did not identify this as a problem.

Building a Digital Resource Center is a daunting challenge, involving a wide variety of technological, social and policy issues. The library and resource center of the future will be digital and have the following features: Constrain all recorded knowledge online; Distributed,

maintained globally; Accessible by: any person in any language any time anywhere on earth via the Internet Act as the information resource for the 21 st century.

Characteristics of Digital Library Major Characteristics of Digital Library Based on Chowdury GG and Chowdury S (2003) foIlowing major characteristics have been jotted down: Variety of digital information sour des Digital Libraries reduce the need for physical space Users at remote Users may build their own personal collections by the facilities provided by digital library Provide access to distributed information resources Some information resource can be shared by many at the same time Paradigm shift both in use and ownership Collection developpement be based on potential usefulness and appropriate filtering mechanism be followed to negotiate the problem of plenty Ability to handle multilingual content. What is Resource Center? School resource center is specifically designed and located at any school for specific purpose. General objectives may be listed as follows: to serve the needs of the school community (teachers and students) to provide reference materials at appropriate levels to provide study areas for users to provide a lending service appropriate to the different types of users

MANAGEMENT OF A DIGITAL RESOURCE CENTER

The process of change continues. To understand that process, and to understand how to improve school resource center. In effect we ask, What problems are school resource center meant to solve? Because the situation is complex, the problems we discover depend in part on what we choose to look for. Different types of libraries have evolved in response to different kind of problems. Info Managers do things right: leaders do right things. (Riggs and Sykes, 1993)

Introduction Info It has become a truism to say that human resources are an organization's most valuable asset. Library and information professionals are in well placed position to make a strong contribution to the development of the global information infrastructure, by ensuring that much of what already exist in print format finds it way on the information superhighway. However, there seem to be a general lack of adequate skills that would enable them work in electronic information environments.

- Goals and Objectives of DRC Fact Information is a precondition for identifying choices, reducing uncertainty about their implications and facilitating their implementation. (UN.CTC, 1983, p.34) Librarians and other information specialists must grapple with the problem of redefining themselves and the importance of their proper knowledge in an information environment that continues to change out of all recognition. Objectives of DRC are: To provide library resources available in full-text online, including electronic journals, full-text databases, digitised collections, e-books, etc. that are accessibleanywhere

and anytime (reduces constraints for time and space). To have effective and expedient document delivery services if students are to access resources that are not available in full-text online. To provide 'point of need' assistance — in any of the forms: virtual reference, online tutorials, e-mail or telephone communication with librarians, and other instructive resources that enhance students' information literacy experiences.

- Roles and Functions Digital Resource Centre serving a scattered student population can provide sophisticated distance learning programmes. The widespread access of the Internet into the homes of students ensures the success of these schemes and enables the libraries to provide course materials and other documents electronically to students scattered over wide areas, particularly rural areas. A number of models have been applied to the various ways in which the Web can be used as part of the student learning experience: The 'OPEN RESOURCE MODEL' Where the Web is accessed to retrieve information from diverse sources which may, or may not, be educationally-based. The `LEARNING MATERIALS MODEL' Where the Web contains specific resources for students such as background reading recommended by teachers.

- Roles and Functions The **'TEACHING MATERIALS MODEL' -** Which contains information provided by teachers and related to a particular course of study and may contain brief summaries of lectures and be a replacement for paper-based handouts. The `DIRECTED LEARNING MODEL' Containing the complete set of learning materials for a course. The 'COMPUTER ASSISTED LEARNING MODEL' Involving computer-based training for self-study by students. The 'COMMUNICATION MODEL' - Where students discuss and collaborate on their studies through facilities such as computer conferencing.

- Instructional Technology/Material It is all concerned with improving the process of human learning. They are concerned with identifying objectives,`designing strategies to achieve those objectives, applying a system. Approach reacting positively to innovation, ensuring feedback and evaluation. The major role of IT suggested by Ellington is to improve efficiency in the teaching / learning process: Increaing quality of learning or the degree of mastery. Decreasing the time taken for learners to attained desired goals. Increasing the capacity of the teachers in terms of the number of learners taught, without reducing the quality of learning. Reducing cost without affecting quality.

DIGITAL AND ONLINE APPLICATIONS:
The documents or resources in the digital collection will be of very varied nature, as indeed are physical documents. A digital resource centre collection, which may be logically defined as a s space, may be less formally understood as a set of digital objects, with the following characteristics: Unique : they should be identifiable as the same resource in whatever format or medium they are instated; Coherent : they must present as logically coherent quantity of information; Significant : they must include viable and useful information content; Control : the objects are prepared and organized according to some standards, and are preserved in some way; and Access : they must be accessible by the libraries' systems.

Databases What is Database? It should be noted that the word 'database' is often used outside the library and information field to describe " a structured set of data held in a computer, especially one that is accessible in various ways (Source: The New Oxford Dictionary). In the field of information management the words database are now usually taken to have the following meanings: a database generally provides details of bibliographic references which the searchers uses as keys in order to consult the original source literature to obtain the detailed knowledge he is seeking' . (Source: Computer in Library Management,2003,167)

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protect these documents? They are vulnerable to fire, flood, insects or mice, or even simply the effects of time. They are also vulnerable to theft, or to being seen by unauthorized eyes. The more documents you have, the more difficult it is to keep them safe.

Document Imaging Process Digital Document Imaging offers the high-tech solution to an age-old problem! We convert your paper documents into electronic files which can be easily stored on either the internet, your personal computer, or on backup media such as CD's or zip disks. Once they have been transformed, they can be printed from any printer, emailed, copied, or even archived into databases for easy searching and reference. We can save them either as image files, for a complete and accurate representation of the original (especially appropriate when signatures are required or if there are pictures in the original) or as text files (not a re-creation, but much smaller in terms of file size).

Document Imaging Process PDF Files A very common electronic format is the PDF file (Portable Document Format). This is an excellent, versatile means of storing your documents. Among its greatest advantages is the fact that it can easily be read by anyone with a computer! The viewing software, known as Acrobat Reader, is available free of charge from Adobe, and downloads quickly and easily from the internet for those who do not have it. A more complete version of this software, "Acrobat", is available for a reasonable fee and offers the ability to edit these files as well as simply read them. Other advantages to PDF files include the fact that they are "platform-independent", which means they can be opened on any type of computer: PC's, Macintosh, or Unix-based. PDF files can also be saved in various different formats depending on how it will be used. These formats include: TIFF Files : These are "raw" image files, which have not been formatted for PDF. These files are large but are the least expensive to create. PDF, Image Only : Image-only files are exact re-creations of the original but are built solely from images, and thus cannot be "searched" if archived in a database. This has a relatively large file size but is the least costly PDF to create.

Document Imaging Process Why PDF? PDF is the industry standard for image files Platform-independent and easily viewed using free software Entire file can search for any/all words on page Image files can be converted to text to reduce size Why not PDF? Image files cannot be indexed Non-text files can be unrealistically large CD-ROM and Internet In the 1980s, when reference sets on CD-ROM began to appear, these were often still used by librarians on behalf of users. The rise of open-access terminals and PCs meant that increasingly users checked out the CD-ROM from the issue desk and had unmediated interaction with it — with varying degrees of frustration given that most products had different interfaces and search methods. With networked CD-ROMs. access could he from outside the library, and users had to be even more self-reliant. Figure: CD-ROM network infrastructure diagram.

DIGITIZATION AND AUTOMATION:
Although a large proportion of a digital library's collection comprises materials that arorn digital, such as e-journals, internet resources, databases, and so on, there are many resources that are not originally created in digital form, but are digitized in order to include them in a digital library's collection. Digitization is the conversion of an analog signal or code into a digital signal or code. (Lee, 2001)

What is Digitization? Since the time of the Sumerians, documents and their supporting technologies have continued to evolve at an unprecedented path. Schramm (1988) documents that it took at least 50 million years for society to progress from spoken language to writing; about 5,000 years from writing to printing; about 500 years from printing to the development of sight-sound media (photography, the telephone, sound recording, radio, television); and yet fewer than 50 years from the first of the sight-sound media to the modern computer. In recent years, with the development of computing and networking technologies, documents and their supporting technologies are experiencing a revolutionary change. Many technologies appear to expand the document boundaries and extend the traditional definition of documents. As new document technologies cause transformation in the way we use documents, it has become increasingly important to rethink the role of documents.

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LIBRARY AUTOMATION:
What is Automation? What is the meaning of automation? Automation means ' the use or introduction of automatic equipment in a manufacturing or other process or facility' (The New Oxford Dictionary). The focus now in library automation is on interconnecting systems, information resources , and users . Developments for the future include the growth of the use of networks and the Internet. Computers have traditionally been used in the management of libraries in many ways. Traditional library automation is blending with other information storage/retrieval operations and this is becoming standard for library automation. Integrated automated library management systems come with standard modules that include: Circulation (keeping track of books checked out and by whom) Cataloging (keeping and offering access to materials) Acquisitions (acquiring new items) Serials (tracking periodicals) Online Public Access Catalogue or OPAC InterLibrary Loan (cooperative sharing of library materials)

Automation and Libraries M echanisation of library house-keeping operations predominantly by computers is known as library automation. The term 'library automation' is used extremely to refer to the use of computers to perform some of the traditional activities such as: Acquisition; Serial control; Cataloging; Circulation and some related fields such as: Information retrieval, automatic indexing, abstracting, automate textual analysis, and resource sharing through networks. Purpose of Library Automation Purposes and some advantages of libraries automation are enumerated below: Increase in Speed and Saving of Time Updating record files much more quickly and easily Greater Library Cooperation Better Library Management Staffing New services Protection of Records Report production (Source: Computer in Library Management:2003,82)

Conclusion
Purpose of Library Automation Increase in Speed and Saving of Time Library automation saves time in information storing, handling, processing, retrieval and etc. because all these functions are done at enormous speed. As a result the time lag between the acquisition of documents and their availability to the user will be reduced considerably. Purpose of Library Automation Updating record files much more Quickly and Easily Computers system will lend in updating the record files much more quickly and easily than in the manual system. Greater Library Cooperation Computer systems installed indifferent libraries can be hooked to each other via satellite and through a central agency and thereby can know each other's collection. Better Library Management When

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