

DIGITAL PRESERVATION PROCESS OF IMAGE COLLECTIONS: WITH SPECIAL REFERENCE TO PUBLIC LIBRARIES.

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ABSTRACT

A public library is a social institution established by law, financed by public fund, open for all without any discrimination, for general and free diffusion of knowledge and information in the community. Also be responsible for preservation and development of cultural and antiquarian heritage of the community. This paper revealed that, digitizing the images from various valuable sources with the metadata standard and develop digital repository for image collections.

Keywords: Digitization, Image Library, Preservation.

Introduction

Public libraries are often referred to as the “people’s universities” (Gambari, 1986). IFLA/UNESCO (2001) defines a public library as an organization established, supported and funded by local, regional or national government or through a community organization. According to Ochogwu (2007), public libraries are professionally organized collection of graphic and non-graphic materials designed to meet different information needs of the society. All these statements reveal that, public libraries represent the society through their collections and activities.

Also libraries are concerned with the acquisition and proper organization of information and knowledge for easy access and usage. It should be noted that most valuable cultural information and knowledge exist in all countries should be preserved, therefore public libraries have a role to play in the projection of the people’s culture, promoting awareness of cultural heritage, appreciation of the arts, scientific achievements and innovations to all classes of people. They promote awareness of cultural heritage through display of cultural arts and crafts. Through the use of information communication technologies (ICTs) that they bring cherished cultural information to global audience.

Thus libraries that are hooked to the Internet promote awareness of cultural heritage of the people by making available resources on the rich cultures.

By knowing the value of all these collections it is important that, we should initiate appropriate preservation and documentation methods to preserve its collections. This paper focuses the need for the public libraries to preserve the images as digital image collection and suggest the standards for digitalized images.

Ancient pictures such as, king's leisure drawings, technical drawing, architectures, cultural events, valuable personalities, ancient utensils, native animals and native plants have precious and valuable information to our next generations. There are number of preservation methods available to preserve those pictures as it is. In technical world, we have number of modern techniques; digitization is the popular method to preserve documents and images. Limited foreign universities are maintaining their digital Image libraries separately for their image collection.

Methodology

Problem statements

Public libraries have the role to play in the projection of the people's culture. Digitization was considered one of the most important factors affecting the function of present-day libraries, including its spatial solutions. Specially in Sri Lanka the problem is to what extent are the Public Libraries executing to preserve the images through digitization process?

We started this process with Library of congress Digital image standards for different file type and requirement. We digitize the original images from varies sources by scanning and photographing. Then it was edited according to The Library of Congress meta data standards and develop metadata for these images. Standards for different file types were mentioned below.

Image type	Printed text	Damaged printed text	Handwritten manuscripts	Maps and Drawings
Master	Scan Type: Bitonal	Scan Type: 8-bit grayscale or 24-bit color	Scan Type: 8-bit grayscale or 24-bit color	Scan Type: 8 bit grayscale or 24-bit color

	Resolution: 600DPU Format: Uncompressed TIFF	Resolution: 400DPI Format: Uncompressed TIFF	Resolution: 600DPI Format: Uncompressed TIFF	Resolution: 200-400DPI Format: Uncompressed TIFF
Access	Type: 8-bit gray scale/24-bit color Format: JPEG Compression: Medium Spatial Resolution: Resize to 1024*768 pixel	Type: 8-bit gray scale/24-bit color Format: JPEG Compression: Medium Spatial Resolution: Resize to 1024*768 pixel	Type: 8-bit gray scale/24- bit color Format: JPEG Compression: Medium Spatial Resolution: Resize to 1024*768 pixel	Type: 8-bit gray scale/24- bit color Format: JPEG Compression: Medium Spatial Resolution: Resize to 1200 pixels across the long dimension (large maps)Size to 640*480pixel
Thumbnail	4-bit grayscale /8- bit color Format: GIF Spatial Resolution: Pixel across the long dimension 72 DPI	4-bit grayscale/8- bit color Format: GIF (or JPEG) Spatial Resolution: Resize to 150- 200pixel across the long dimension 72 DPI	4-bit grayscale/8-bit color Format: GIF (or JPEG) Spatial Resolution: Resize to 150- 200pixel across the long dimension 72 DPI	4-bit grayscale/8- bit color Format: GIF (or JPEG) Spatial Resolution: Resize to 150- 200pixel across the long dimension 72 DPI

Source : Library of congress Digital Image Project. (1996)

Importance of Digital Image Library

The main reasons to digitize are to enhance access and improve preservation. By digitizing their collections, libraries can make information accessible to many users at a time. Digital projects allow users to search collections rapidly and comprehensively from anywhere at any time. Digitization can also help preserve precious materials. Making high-quality digital images available electronically may also reduce wear and tear of fragile items. However, this does not mean, that the digital copies should be seen as a real replacement for the original artefact and its values. Even after digitization, original documents and artefacts must be cared, as digital files are not permanent and must be periodically transferred to new formats. Successful digital projects are the result of the careful evaluation of collections and the digitization of only those items that will provide the greatest benefit to the user.

In Sri Lanka, Jaffna public library was the centre to preserve our cultural, religious and historical collections in early nineties. It was burnt in 1981 with collections of over 97000 books and manuscripts and we lost all these values and heritage. With this experience, we started to digitize the images from historical books, old news papers, books and cutting of newspapers with the details separately. Even though number of web pages containing image collections as galleries, but as librarians we started to maintain “Digital Image Library” for our valuable collections. It’s in progress with Jaffna University Library and started to digitize the images in the university library archival collections and also in the initial stage with Jaffna Public Library.

Methodology

Step 1:

We were identified three types of digital imaging files created for Image digitization:

1. Master files (sometimes called archival files) are the source files for all other digital files and ensure the long-term usability of the digital information. Master files should be saved in TIFF file format, and should not be compressed, altered or resized. Master files should be stored on a stable medium and should remain in a controlled environment. Please see Section V: Long-term Maintenance of Digital Files for more information.

2. Access files are for day-to-day use. They may be placed on web pages or used for printing. Access files are expected to be of good quality, but they may be modified to meet the needs at hand.
3. Thumbnail files are very small files for use in databases or web pages.

➤ **Image Quality Requirements**

Library of congress designed a proposal for Digital Images processing for National Digital Library program. They identify different quality requirements for above image types and categories, such as printed text, damaged printed text, handwritten manuscripts, drawing and maps, black and white photograph, color photographs and microfilms, with the detail description about its resolution, color mode, color deep, compressing rating and file format.

These requirements should be viewed as the **minimum** necessary to create quality digital images, and library units are encouraged to exceed these basic requirements when it meets the needs of their digital project. We use these requirements for our image digitizing.

Step 2:

Long-term Maintenance of Digital Image Files

The long-term maintenance and preservation of digital files is a major concern for institutions worldwide. Some experts have estimated that it could cost as much as 10% of the price of digitization **per year** to preserve a digital image. In order to maintain the ability to display, retrieve and use digital collections, digital files must be cared for, periodically refreshed, and migrated to new formats. Digital preservation is a rapidly changing and complex field, but there are some simple practices that will help ensure the long-term stability of digital data.

Step 3:

We are in the process to identify the digital repository software for easy access, retrieval and download the required image on time.

Findings

We almost digitized more than 3000 images from various sources through scanning and photographing with metadata standards. The important component in the preservation of digital files is the establishment of a digital repository. We are now in the process of developing a digital repository for all image collections.

Conclusion

This paper proposed a method to preserve images and objects through digitization and develop digital repository for our collections. Since public libraries are the centre of transmission of cultural values from one generation on to the other, they also should preserve its values through digitization. Images have important values to express the situation quickly and impressively. Some valuable books may damage but we may able to extract the pictures from it and digitize those images with information. Finally, it revealed that public libraries should take initiative to preserve their collections by knowing the value of its collections.

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**DEVELOPMENT OF DIGITAL REPOSITORY FOR LIFE SCIENCE
RESEARCH PUBLICATIONS IN BHARATHIDASAN UNIVERSITY**

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ABSTRACT

The present study aims at designing digital repository for Scholarly Life Science research publications in Bharathidasan University. In this study, the faculty publications in the department of Life Science records have been 763 collections are collected from web of science and uploaded regarding to the project the following are the tables that explains the total number of the collections that uploaded for the project, subject subdivision wise classification of each subject and its category and year wise classification of each subject.

INTRODUCTION

In the present digital age, Libraries not act as the storehouse of the printed documents but also are the analysis centres of digital information. Accordingly their responsibilities towards users increase in terms of usage and application of information. For centuries, knowledge has been gathered, recorded, organized and stored in repositories of various kinds. The most common example of this is the traditional library. With growing emphasis on use of technology, libraries have undergone major structural change in terms of their collection, organization and services. The traditional concept of libraries are becoming obsolete day by day with the emergence of new ‘digital’ means of storing and disseminating information. The advanced computing system and the networking revolution have brought a remarkable expansion and abilities to generate and disseminate information in digital formats both online and offline. These technology-based developments have led to speculation on new concepts of libraries i.e. Digital Library.

DIGITAL REPOSITORY

Institutional Repository (IR) is “a digital archive of intellectual product created by the faculty, research staff, and students of an institution and accessible to end users both within and outside of the institution, with few if any barriers to access” (Rajashekar, 2005,