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**A COMPARISON INVESTIGATION IN
DIGITIZATION ENDEAVOURS ALONG WITH
COLLEGE AND UNIVERSITY LIBRARY WITHIN
ASIA**

A Comparison Investigation in Digitization Endeavours Along With College and University Library within Asia

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Abstract - This paper talks over the different parts of the change of in-house library materials into electronic configuration, which advances to the making of computerized library. Likewise portrays the digitization drives that have occurred in India. Goals of digitization have been corresponded with the mission of college libraries. Manages different picture catching furthermore handling advances and suitability for a school library. It tries to distinguish the zones to be secured under computerized transformation system of in its first phase.

INTRODUCTION

Informative data Technology is moving so quick that is making challenging to adapt to updates & challenges. Informative data exercises have experienced quick change from customary systems, ensuing upon presentation of new innovations. To meet the gigantic informative data blast and towering request of informative content, libraries are currently making the most of computerized innovation accessible at the shabbier rate. Right away each library and instructive expert in India is discussing digitization what's more advanced library. 15 years back Lis expert just talked about computerizing the library exercises. Later developments in computer' space & preparing, conveyance innovations, e-items, systems administration, web use have acquired a revolutionary updates working of the libraries. Digitization began with the presentation of Pcs in library exercises in 1980s in India however it was constrained to production of bibliographic database and house keeping operations. This transformation of bibliographic index record into computerized organization was the beginning stage, however now it has been expanded by achieving it to transformation of full content, design, sound, motion picture records and so forth.

A considerable measure of perplexity is even now predominant around numerous library and qualified information experts about distinctive sorts of libraries developing out of the growth and merging of workstation and correspondence procedures. So it is suitable here to say something about these sorts of libraries. Customary library is a library where the right to gain entrance focuses for example, library indexes and also the library accumulations are print-based and administration is all things considered manual. In a

computerized library, access focuses furthermore housekeeping operations are automated. Electronic library and computerized library mean one and the same thing. The British individuals call it electronic library and the U.s. individuals call it a computerized library.

In this sort of library both the right to gain entrance indicates and also the realistic records are in electronic/digital shape, inasmuch as in a robotized library the realistic records are still print on paper productions. The point when the electronic libraries/computerized libraries are associated through different arranges especially the Internet, this is called a virtual library. In this library conventional stipulations of time and space stand caved in.

MAJOR DIGITIZATION INITIATIVES IN INDIA

Some of critical digitization drives undertaken in India are given underneath:

- the National Science Foundation, Usa has started the "million book project" at Carnegie College in Usa as a team with The Indian Institute of Science, Bangalore as his Indian friend. The activity is an universal helpful endeavor to digitize a million original books in fields that happen to be in the general population space or are copyrighted yet no longer available, and make them approachable through the web all around. By 2005 very nearly one million books have been digitized in India separated from everyone else.
- the national Library of India has undertaken digitization of regularly utilized books and reports for

example East India Co. records, journals and so forth and also Mss on paper and palm leaves out.

- the Parliament Library has digitized all civil arguments, inquiries, advisory group reports, biodata of display and past parts of Parliament incorporating photos and addresses and so forth.

- national Mission for Manuscripts started by Government of India in 2003 is turning point in protection and conservation of original copies for family and also for giving access to a researcher from any purpose of planet through web. India being the biggest archive of original copies on the planet has incalculable old Mss and extraordinary books, which earnestly require digitization. The National Informatics Centre, Government of India has ready definite guidelines for digitization of such materials.

- the Indira Gandhi National Centre for Arts (Igncra) is pioneering computerized fortune of Arts, computerized pictures and so forth. Igncra has been distinguished as the nodal channel for National Mission for Original copies of Government of India.

- Indian Academy of Sciences has digitized all its diaries.

- some of Institutions and Universities, to be specific IIT, Delhi and Mumbai, University of Hyderabad, Physical Research Laboratory, Ahmedabad, Banaras Hindu University, Varanasi have begun the digitization of their Manuscripts/thesis /Dissertations under diverse ventures.

- IIT, Kanpur, Allahabad University, Central Institute of Higher Tibetan Studies, Varanasi, and so forth are digitizing the accumulation of books (free from copyright) under the venture launched by The National Science Foundation, USA in a joint effort with The Indian Institute of Science, Bangalore.

- the National Chemical Laboratory has the digitized national accumulation of modern micro organic entity.

MISSION OF UNIVERSITY LIBRARIES AND DIGITIZATION

School library framework exists to serve the qualified data needs of its scholarly group and helps the educating and investigate mission of the school. College libraries have emulating mission:

- acquiring, archiving, preparing and disseminating the informative data
- support the educating & investigate project
- serve the qualified information needs of understudies, educators and staffs

- conservation and conservation of learning
- dissemination of production of examination comes about
- to work for greatest fulfillment of clients.

Objectives of Digitization give or take match with the school library mission. The fundamental goal of digitization is to conquer the twin oppressive regimes of time and space. By digitizing we go to greatest client fulfillment. Undoubtedly it will back the studying, educating and research of the college. In the light of mission of school library we find closeness to the owing focuses:

- preserve to use for family
- to Capture, store, process and scatter qualified data in computerized shape
- save the space and time both
- facilitate for systems administration and asset imparting
- make accessible to remote clients
- maximizing user' fulfillment by furnishing different and simple access
- foundation of new quality included library benefit

We can overcome with the issue of space in pleasing the materials which each college library is confronting instantly.

DIGITIZATION

Digitization is the transformation of materials or simple media into electronic structure for making advanced accumulation. Simple media incorporates books, diary articles, micro structure, photographs, sound, motion picture, and so forth. Essentially it is fast information transmission strategy. In digitization, work is layered in digit (0,1) structure. 0 and 1 is a symbolic structure about polarization of particles in attractive media, where we store the information. On account of digitization of content matter the pictures ought to be in bi-tonal i.e. dark and white.

Digitization is required for both openness and protection. By making and manufacturing the computerized Qualified information we will be advancing towards advanced library. Computerized accumulation is a generally significant part of the computerized library. A computerized library is not a solitary element granted that it may have computerized substance made in-house or procured

from outside in computerized configuration and stacked on system.

Equipment and Software Requirement : Today we have moderately shoddy fittings supplies needed for digitization, which are competitive by University libraries. Equipment and Software Requirement for digitization are given beneath:

Computer system	Pentium IV Processor with 1 GB RAM and 40 GB Hard disk, and Windows 2000/XP or Unix Operating System
Scanner	Flatbed Sheet Feeders or Planetary
Digital camera	Nikan D100/ Kodak/ Minolta/Sony/ Canon etc with minimum 5 Mega Pixel
Image processing/editing	Adobe Photoshop/ Kodak Imaging software
File Compression software	MrSid Image Compression software
OCR Software	Prime Recognition

ATTENTION & PREPARATION BEFORE STARTING RECON

It is not conceivable for any University library especially improving nation like India, to digitize (full content) the entire accumulation in a solitary stage. Colossal store and time will be needed for such venture. Transformation of such existing materials/records into electronic/digital organization may be recognized as 'retrospective Conversion' in short Recon. We might as well receive some strict measures before we continue for transformation. The time and require needed to make computerized records for the leftover must be taken into attention.

What is to be digitized?

School library needs to choose what is to be digitized and what could be protected on other media. If there is a need to incorporate entire accumulation for digitization or a parcel of it. The choice may be taken directed by the measure of trust ready. A conventional college library accumulation for the most part comprises of the accompanying:

- □□text books/ reference books
- manuscripts and uncommon books
- serial distributions
- theses and papers
- technical Reports and Annual reports.
- newspaper and Magazines
- audio/video tapes
- microfilm/microfiche

By raising the advanced gathering University library might move ahead to advance the computerized

library. Which might incorporate electronic diaries, electronic books, full-content article databases, Cd-Rom databases and so on?

There are numerous issues: managerial, specialized and fiscal, which are to be acknowledged & explained at sufficient time by concerned power. Change sets back the ol' finances cash to make, transform, redesign also store the record.

- deciding the zones secured under advanced change
- deciding the necessity around zones of the gathering to be changed over
- time outline, figuring out the velocity
- cost variable

After watchful investigation of need of clients, we may as well start for engaged gathering and the accumulation free from copyright issue. Accompanying things of college gathering may be taken for digitization in place given beneath:

- manuscripts and Rare materials
- thesis / exposition
- technical reports and twelve-month reports
- special accumulation, if any

Since Manuscripts structure a critical asset material of the college library accumulation for study furthermore research, it ought to be at our top necessity. Computerized safeguarding of old extraordinary archives and original copies is key in light of the fact that it holds significant qualified information about social order and society. By digitizing them we might as well attempt to protect and make ready to all through system. Proposal and theses are an additional vital part of any school library accumulation which ought to be digitized at the necessity premise. As these may not be accessible to other library clients in light of inaccessibility in print then again other media. Digitization of these will be demonstrated productive for clients. Specialized reports and twelve-month reports issued and distributed by organizations are light black literary works, holding profitable informative data not accessible through whatever available channel. College might move their necessity of digitization dependent upon the needs of customers and nature of the establishments. All these does not identify with copyright issue so digitization of such materials is straightforward.

DISTINGUISH RECON ALTERNATIVE

There are numerous alternatives accessible to libraries for review change. Every one has its benefits what's more faults. We might as well break down and pick the alternative precisely. The alternatives to complete Recon are as under:

- in-house transformation by existing staff
- in-house transformation by outside agency/contract laborers
- outsource off-site transformation
- in-house transformation utilizing existing staffs and contracts, a mixture of above two

Expense is central point, which is to be acknowledged in picking the choice. For every alternative picked for examination it is essential to confirm the expenses for the accompanying:

- funds accessible
- staff prerequisite
- equipment
- vendor charges
- location & time

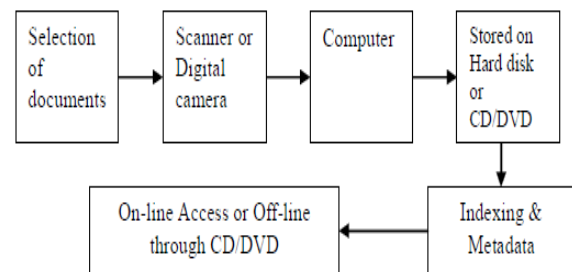
Around the options ready, in-house digitization utilizing existing staffs and contract specialists (prepared) elective is more functional. The Library undertaking for review transformation might need supplemental hands to complete the occupation. One major profit with this alternative is that records need not to send outside. There is dependably danger of lost of materials and client's misfortune in the event that archives sent outside for change. Around different elements, it is in our order and supervision, according to our necessity. Without any additional venture work of physical verification is finished, synchronously, when we include information with the assistance of reports under control. One major point of interest of this activity is that a kind of stock verification is done simultaneously without any additional venture.

DIGITIZATION PROCESS

The existing assets of the library could be changed over into advanced media by checking the materials. Flatbed scanner or advanced Polaroid may be utilized for picture catching or filtering. Checking of pictures might happen at 300 dbi bitonal. 600 dbi bitonal is utilized for higher determination. Filtering is the most famous strategy for changing over the materials. Computerized imaging engineering has various alternatives that might be embraced relying on the targets, its end clients, accesability of store and so on.

In the wake of picking one of the information change strategies, as suited to specific library, we might as well improve arrange of activity. Digitization handle begins with venture arranging with documentation emulated by a straight movement of assignments : select/prepare, convert/scan, process, store, disseminate and support as time passes. Advanced transformation transform incorporates:

- data/image catch
- data Processing
- storage
- indexing and handling
- retrieval and show



Choice and Id of materials/documents consistent with necessity chose prior is first stage. A record of contestant records for whole venture may be ready as a database. It might as well have recognizing informative content, necessity dependent upon substance and its copyright status. After determination every page may be checked as a differentiate picture document. A spreadsheet record is made for every record. The fields in the spreadsheet are utilized to computerize certain parts of information creation. This spreadsheet incorporates the thing recognizable proof number, title, number of pages and notes of every archive. All the coming about records are gathered into a solitary catalog. The content in the convertible record might need transformation of diacritics, or unique characters, pictures might require upgrade, enhancement or squeezing. Records are verified and processed/edited, if needed. The qualified data changed over into computerized structure will require advanced space medium, which may be hard circle, attractive tape, optical Album Rom, or coordinates with workstation to gain entrance to. Utilization of Dublin center standard is prudent to make metadata of computerized assets.

CONCLUSION

Digitization ventures have been paramount for school libraries pointing the digitization of compositions, postulations, papers, unique gatherings, which are exceptional in nature. A

percentage of the Research and Unique libraries have as of recently undertaken digitization ventures in their full swing. Few digitization drives by college libraries could be seen. Yet deliberations are to be made in this bearing by college libraries in India. It will give result for their a few issues, such as: space, protection of age old and delicate materials, clients' fulfillment, system based full message searching, time, and so on.

Safeguarding issues, copyright, scholarly duplicate right issues, bibliographic uprightness, distinguishing proof, particular and principles are critical issues to be kept into brain while undertaking for digitization.

Significant time must be given for performing quality control checks and each phase of handling. For additional reasonable quality control, materials ought to be handled in groups. College libraries need to construct advanced informative content sources and administrations utilizing the up to date innovation to fulfill the clients request and laws of Library Science.

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