



Implementation of Digitization in Public Libraries in India with Problems and Possible Solutions: with special references to West Bengal

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ABSTRACT

Digital library is a type of Library that uses information and communication technology (ICT). In this era of ICT, it may seem appropriate to adopt digitized public libraries, but in West Bengal, most people are ICT illiterate and thus unable to access the web. The first modern public Library in West Bengal was the Calcutta Public Library, founded in 1836. Public libraries have always been regarded as social institutions. They are well known as people's universities, developed under the concept of "for the people, by the people and of the people". As a Knowledge dissemination centre, it provides the right knowledge to the right person at the right place at the right time. People from the whole community can use the public Library to meet their different information needs. This paper highlighted the major problems and solutions in public libraries' library resources in West Bengal.

Introduction

Today information has become basic need of life like other needs of life such as foods for survival and shelter for development. Now a days, it can be said that human life cannot be developed and saved without information. Information accelerates the development of society as well as the development of



the nation. This public libraries enriches people's lives through accessing of different information, ideas from books and other types of information resources.

A 'Digital library' is a kind of library where library materials are accessed via Internet. In other words, one can access the library materials without depending on anyone. It can be accessed from anywhere and without any time constraint. If digital public library is implemented in India, it not only will pose problem for many who can't access the web, but also create a fear among them. So, in this context, if both the digitized, as well as traditional materials are made to co-exist, it will be very effective for our country, especially in the case of Public libraries where people from all walks of life come to quench their thirst for information.

Review of Literature

A Literature Review is a body of text that aims to review the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic. Literature reviews are secondary sources, and as such, do not report any new or original experimental work. Also, a literature review can be interpreted as a review of an abstract accomplishment. In article 'The Role of Delhi Public library in adult education: a recapitulation' written by D.R. Kalia and Published in CLIS Observer during 1991, study was made on the production of reading materials for the new reading public and also on the contribution made by the libraries in the organizations of cultural activities for the neo-literates in Delhi.(Kalia,1991).

During the same year i.e. in 1991, K.A. Kodam in his article, 'Libraries as partners in the fight to eradicate illiteracy in Sub-Saharan Africa' examined the situation of adults illiteracy in Africa and suggested the establishment of special literacy libraries to help effectively in the fight against illiteracy. The article emphasized on publication of suitable reading materials and also recommended for easy access to such reading materials for the neo-literate from the remotest village community. (Kodam, 1991).

In 1993, K.C.Das in his article 'Library and literacy in India' published in Lucknow librarian dealt on the role of libraries in promoting and reinforcing literacy skill in India and on the possible ways to combat illiteracy in the country. Das advocated for the enactment of library legislation for the purpose of building up of a library network for promoting literacy. (Das 1993).

W.D. Ratta in his article 'Status Report on the development of public library in Haryana' published in Granthana during 1994 recommended an action plan for the implementation of national policy on library and information system covering both formal and non-formal education system. Ratta after detail study



suggested manpower development and modernization of present library system in the country. (Ratta 1994).

In 1999 P. N. Kaula in his article 'Adults education and public libraries' published Herald of Library Science. discussed in detail the role of public libraries in adults education programme and while discussing on the need of neo-literate expressed dissatisfaction for the lack of reading habits among adult neo-literate while suggesting a plan for developing adult education programme through cooperative efforts and the application of information technology and communication technology suggested the need of training of workers. (Kaula, 1999).

A. Buragohain in his article 'Public library scenario in India problem and prospects' published during 1999 in Herald of Library Science, discussed detail role of public libraries in continuing programme. Buragohain had also discusses pm the major draw backs of library acts of India State. (Buragohain, 1999).

During the year 2000, P.N.Kaula in an article, 'A study of public library development and service for rural upliftment published in Herald of Library Science, stressed on the needs for promoting the reading habit and also on the publication of books suitable for rural masses. While discussing on the role of public libraries Kaula had recommended establishment of suitable network of libraries so that every person had the privilege of easy access to this institution. (Kalua, 2000).

In 1980 R.P.Kumar and S.P. Nagpal in their article.' Public libraries: a pivot to adult education' Published in International Library Movement, stressed on the need and importance of public library service in supporting adult education programme in India. The article while arguing for placement of more fund for the purpose suggested several ways to improve the existing services.(Kumar and Nagpal,1980).

In this article 'National Adult Education Programme and public library' published Herald of Library Science. Arun Kumar Sinha discusses in detail on the role of public libraries in National Literacy programme. He mentioned that public library according to UNESO manifesto was a 'living force of popular education' and therefore the institution is capable of extending its services to all groups of person in the society.' He also referred to comment made by Houle, where he was of opinion that adult education was an 'effort put forth by a mature person to improve himself by acquiring new skill, information, understanding, attitude of appreciation.'" Therefore Library had the inbuilt capability to

provide 'opportunity and encouragement' to these people so that they could improve their mind and skill through learning process. (Sinha, 1978).

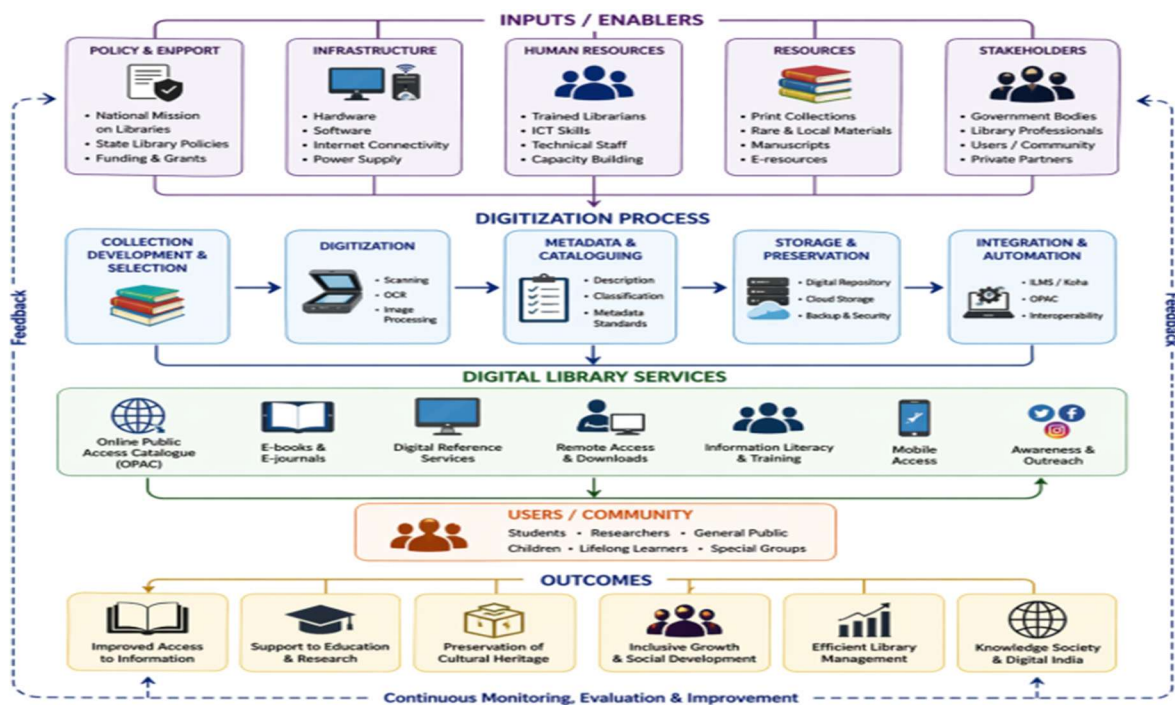
Objectives

The objectives of this study are:

- To examine the status of digitization in public libraries initiative taken in India.
- To understand the importance of digitization of public libraries in India.
- To identify major problems in implementation of digitization of public libraries in West Bengal.
- To propose possible solutions of digitization of public libraries in West Bengal.

Methodology

Figure-1: Conceptual Framework of Digitization of Public Libraries in India



Digital Library

'Digital library' is a kind of library where library resources are available in 'digitized form'. That is, to access the resources in the digitized library, one needs to access the web. For example, if any one wants to read a book on any subject, he can read it in the digital library in digitized form i.e. in the soft copy, The main difference with the traditional library is that in the traditional library one can access the



resources in the physical form and not in the digitized form. But, in the digital library, one can't access the resources in physical form. It can only be accessed in the digitized form.

Digital library initiatives in India

Digital library initiatives were taken in the 1990s but that was in the experimental stage. Most of the digital library initiatives were seen through the research projects of National Science Foundation (NSF) of U.S.A. and Joint Information Systems Committee of U.K. In 1993, the British library took up the "Electronic Beowulf Project" to preserve, enhance and capture the cultural artifacts in digital form. This is now available for study anytime and anywhere. This is the very testimonial of how the cultural heritages are preserved throughout generations and make available for our own purposes. In 1999, the digital library initiatives began expanding when NSF began to link its digital library projects with the similar projects being undertaken by JISC, thus resulting in the JISC-NSF digital library initiative internationally. Since then, many associations and groups were involved in the digital library initiatives. These were the International the Federation of Library Associations and Institutions (IFLA), the Institute of Electrical and Electronics Engineers (IEEE), the American Library Association (ALA), the Coalition for Networked Information (CNI), the Digital Library Federation (DLF), European Union, Association for Computing Machinery (ACM)(**Koganuramath, M. M. & Angadi Mallikarjun**).

India is not lagging behind in digital library initiatives. Some of the the initiatives were taken up in this regard during the 1990s when the information and communication technology was adopted by the Central Government. In this regard, mention may be made of some higher educational institutions where digital library initiatives were taken. Some of these are Indian Institutes of Technology (IIT), Indian Institutes of Management (IIM), Indian Institutes of Science (IIS) under NISSAT and some other special libraries. Some of the major digital library initiatives taken up by various institutions are mentioned below:

Archives of Indian Labour

The Archives of Indian Labour was established in July, 1998 under the collaborative project of V.V. Giri National Labour Institute and the Association of Indian Labour Historians. The main activities include the digital achiving, research, collection, Public Interface & Dissemination. This initiative was taken to preserve documents relating to the Indian labour and to give access to the public as it was felt that the documents of this kind are continuously decaying and lost due to proper preservation and care. The Archive, like repository builds collections and spurs research in the field of Labour history.



National Digital Library of India

The **National Digital Library of India** is a major initiative by the Government of India aimed at providing free access to digital educational resources for students, researchers, and lifelong learners. The National Digital Library of India (NDLI) is a **virtual repository of learning resources** developed under the **Ministry of Education** and implemented by the **Indian Institute of Technology Kharagpur**.

- Promote **digital learning and literacy**
- Provide **equitable access to knowledge**
- Support **education and research across India**
- Bridge the **digital divide**

Digital Library of Art Masterpieces

HP Labs initiated a project in collaboration with Centre for Development of Advanced Computing (CDAC) to digitize art collections to be able to buy digitized collections of National Gallery of Modern Art (NGMA) from web. Similarly, Indira Gandhi National Centre for the Arts (IGNCA) has taken up projects to digitized major collections of artwork that will be made available on the web. The digitization of “GeetGobinda” is a major initiative in this regard.

Down the Memory Lane

The National Library of India has taken an initiative in the late 1990s to digitize the English collections before 1990s and Indian collections before 1920s. This project was recognised as “Down the Memory Lane”. These were the rare books, manuscripts and other resources from its collections. Similarly the Central secretariat Library has initiated a Programme to digitize Government Publications like the Gezette of India, Committee & Commission Reports, Annual Reports of the Ministries etc.

Indian National Digital Library in Engineering Science and Technology

INDEST Consortium is an ambitious project by The Ministry of Human Resources Development (MHRD), Government of India. This is a major initiative taken so far in this country. It invites other institutions to join and offers highly discounted rates of subscriptions and better terms of agreement with the publishers. It includes ACM Digital Library, ASCE Journals, ASME journals, Nature, Indian



Standards, ProQuest Science, Sciencedirect, Springerlink, and bibliographic databases of MathSciNet, Compendex, Inspec etc.

Mobile Digital Library (Dware Dware Gyan Sampada)

To promote literacy among the common citizens, Internet mobile digital library was brought to use. Mobile van with active internet connection is used. The Van is also fitted with printer, binding machinery etc. This a product from C-DAC-ERDC Noida.

Mukhtabodho Digital Library and Archival Project

The Mukhtabodha Digital Library and Archival Project is an international collaborative initiative led by the **Mukhtabodha Indological Research Institute**, based in India. Its main aim is to **digitize, preserve, and disseminate endangered manuscript heritage**.

- Preserve **rare and fragile Sanskrit manuscripts**
- Promote research in **Tantra, Shaiva, and other Indian philosophical traditions**
- Provide **digital access** to scholars worldwide
- Support **Indological and textual studies**

National Mission for Manuscripts

The Department of Culture, Government of India has started digitization project of rare manuscripts in 2003. The name of this project is National Mission for Manuscripts. The main objective of this project is to preserve through digitization rare manuscripts, classics, sacred books etc. and give access to the general public. Detailed guidelines for digitization of manuscripts have been prepared by The National Informatics Centre (NIC).

Parliament Library

In order to cater to the needs of the members of Parliament, Officers and Staff members of Parliament secretariat, a digital Parliament library was set up in the Parliament. A large number of index based databases was developed at the computer centre. The data stored and available now at the PARLIS databases for online retrieval relates to the questions, debates, databases and bio-data of the members of Parliament with Photographs and addresses etc.



Vidyanidhi

S Vidyanidhi is a Sanskrit word. It means “Treasure of Knowledge”. It is begun as a pilot project in 2000 at the department of Library and Information Science of the University of Mysore in collaboration with National Information Centre for Science and Technology (NISSAT), Government of India. It is started as a pilot project to demonstrate the feasibility of electronic Theses and Dissertations. According to the National action plan of Information Technology and Software Development, it is mandatory for every University and deemed Universities to host every thesis/dissertation on a designated website. This national policy has catered a policy framework for initiating a digital library of ETDs. The visions of this project’s are to be built and strengthen the research capabilities and enhance the quality of doctoral research in India.

Need for digitization in the Public libraries

Digital library is actually a need in this era of Information Communication Technology (ICT), as this kind of library is very much helpful in accessing library resources without any hardship. It can be easily accessed from the comfort of home and the library hour is not restricted. One can access it 24*7 via Internet. So, time and manpower both are saved in this type of library. In remote areas especially in rural areas where there is a huge distance between the users and Public libraries, this kind of digitization can be a kind of salvage for the users as this would give the users comfort of using library services from home without going anywhere or without bothering to even go out of home if there is an active internet connection. This would both save the time of going to the library and accessing the required book and cost of going there. Not only this, but also a Public library can cater community Information services to the Rural and Urban people both through its network. As per the information available on the website of the West Bengal Public Library Network (WBPLN), Public libraries of West Bengal are listed in three categories i.e. Government Library (12 libraries), Government Support Library (7 libraries) and Government Sponsored Library (2459 Libraries). Among these, there are 81 century old public libraries situated in different areas of West Bengal. So it can be easily understood that huge amount of rare collection will be available in those century old public libraries of West Bengal.

Table 1: Status of Digitization in West Bengal Public Libraries

Aspect	Current Status	Remarks
Automation	Partial	Mostly urban libraries



Aspect	Current Status	Remarks
Digital Collections	Limited	Lack of local content
Internet Access	Uneven	Rural areas lagging
ICT Infrastructure	Inadequate	Needs modernization
Skilled Staff	Insufficient	Training required

Problems in implementing digitized public libraries in West Bengal

Some of the problems which occur in implementing digitized public library system in West Bengal are:

- Digital libraries are based on ICT and many people find it difficult (or are unable) to access the web. As such, many people will be discouraged (or rather frightened) in coming to the public libraries and accessing library materials to fulfill their information needs.
- It will generate unemployment as these kind of libraries need little manpower.
- High cost involving in maintain this kind of library system.
- Lack of fund to develop this kind of library system. Public libraries get very meager fund from Government. With this little fund, library materials are purchased, salaries of employees are paid etc. In this situation, it is a kind of luxury to even think of digitized public library.
- Lack of initiative on the part of the Government to implement this type of library.
- Lack of motivation to upgrade any system.

Table 2: Problems and their impact

Problems	Impact
Lack of funding	Slow digitization
Poor infrastructure	Limited services
Skill shortage	Inefficient systems
Digital divide	Unequal access
Policy gaps	Lack of standardization

Possible solutions



Some of the solutions may be suggested to the problems of implementing digitized public libraries in West Bengal. This are-

- Making people literate (Digitally)/imparting training on ICT. Imparting training will help eradicate ICT illiteracy and people will be encouraged to go to the digitized public libraries to make information needs fulfilled.
- Implementation of Electronic library where both digitized and physical documents co-exist. This can encourage both the people who have knowledge and don't have knowledge on ICT.
- Employment of educated youths in the public libraries to manage both kinds of libraries simultaneously at the public libraries.
- Conducting user education Programme at regular intervals.
- Motivate users to use digitized technology frequently.
- Arrangement of more funds by way of gifts, exchanges, endowments and Government funds.
- Library cess may be levied if necessary.

Conclusion

Digitization is a necessary function of modern day libraries. In the vast country like India, where population is large and most of the people are not ICT literate, it is very difficult to run only digital public library, without making most of the people ICT literate. As such, it is better if we go for electronic library where both digital as well as physical documents will be present and users will be able to consult both physical catalogue as well as OPAC (Online Public Access catalogue) simultaneously. As such, there is a kind of 'Digital divide' in accessing the resources of public libraries of West Bengal. So, it is suggested to use both Digitized as well as traditional materials in Public library simultaneously. In other words, Electronic library (Where both digital and traditional materials are used) can be implemented in the Public libraries in West Bengal without any difficulties.

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