Prospects of Using Digital Collections in NEIST Library: An Evaluation

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Abstract

Digital environment has changed the scenario of the library. It becomes the backbone of the modern library. This paper discusses the overview of the digital collection in the NEIST (North East Institute of Science and Technology) Library. It covers about digital collections, its types, beneficiary points regarding the digital collections, and the criteria for the growth of digital collection. It also highlights how the digital collection in NEIST Library is becoming a solution in providing latest information in science and technology through e-journal of CSIR Consortium. The last part of the paper covers the evaluation of the digital environment of the library and its prospects.

Keywords: Digital Collection, Digital World, E-Thesis, Institutional Repositories, NEIST Library,

1   Introduction

The digital revolution in information industry has changed the structure of library collection. In modern era library and information centers have been moved for acquiring, maintaining and providing resources in digital format. It has attracted almost all the developed and developing countries due to its features and opportunities it extended to information providers and information seekers. The digital document contains the information in the electronic form and electronic media facilities for accessing the information in digital form at different places. It offers new levels of access to broader audience of users and new opportunities for library and information science field both advance theory and practice. Electronic publication has some special problem of management as compared to printed document. They include infrastructure, accessibility, restrictions, readability, standardization, authentication, preservation, copyright, user interface etc. But still there are lots of opportunities for using the digital collection. Therefore the importance of digital documents has been recognized by all nations of the world.

The NEIST library is very impressive and one of the biggest library in science and technology in North Eastern India. The library is very resourceful along with its various resources containing the latest information needs of the user community. In the era of ICT the library has taken a remarkable step through building digital collection.

2.   NEIST: An Overview

The North East Institute of Science and Technology (NEIST) is an ISO 9001:2008 certified organization. The NEIST is also known as Regional Research Laboratory (RRL) located in Jorhat, Assam. NEIST was established in 1961 (RRL) as one of the multidisciplinary laboratories of Council of Scientific & Industrial Research (CSIR) under its Chemical Science Group of laboratories. The

major thrust areas of R&D activities in different scientific disciplines are to develop the indigenous technologies by utilizing the immense natural wealth of India especially in North Eastern Region of the Country. The fact behind the enormous study in this region is the abundance of material resources like petroleum, natural Gas, Minerals, Tea as well as aromatic and Medicinal plants and hence the laboratories was targeted to undertake research for development of Know-How for a wide range of industries and extension works. The main motto of the Institute is to develop the expertise in different areas like Natural Products Chemistry, drug and drug intermediates, VSK cement, Plant Technology, Agro-technologies, Petroleum Microbiology and Petrochemicals, Crude oil transportation, Paper and Paper Products, beneficiation Chemicals, ecology and environmental studies, Geo-technical investigations, foundation design engineering, soil and building materials etc.

3   NEIST Library

The NEIST library is known as the Knowledge Resource Center. Earlier it was known as the Library and Documentation Center. The library is situated in the back side of the administrative building of NEIST. The building of the library is well maintained and well furnished. The library building is divided into two parts. One part is meant for the text and the reference books including thesis and the rare collections with OPAC facility. The other part covers with the back volume and the current journals including reading room facility. The cyber space of the library is a very sophisticated and modern one. The reception and the information desk of the library is in front of the library premise. There is a very good information and bulletin board (notice board) service in the library where the photocopies of abstracts and related information of the published journal articles on NEIST are

displayed. The opening time of the library for the week days are 8.30 AM to 6.00 PM and for Saturday is 8.30 AM to 1.00 PM. The current journals (national and international) and back volumes are stored and displayed with very modern techniques.

The library of the Institute is pioneer and resourceful in the area of Science and Technology in the entire North Eastern Region of the country. The library is using UDC for the scientific classification of the resources. The library is also using the AACR II for the bibliographic information of the documents. The card catalogue cabinet of the text and reference books is kept in the outside of the main library building where the text and the reference sources are kept. The library is enriched with different types of added entry like Subject, Author, and Title entry. In the other hand the library authority is using only Title entry for the National and International periodicals.

3.1 Library Collections

It is earlier mentioned that the NEIST library is the most resourceful library in the area of Science and Technology and related subjects in the region. The total collections in the NEIST library are given below-

Sl. No	Description of the Collections	Total No. of Collections
1	Books	24500
2	Back Volumes	26000
3	National Journal (Current)	102
4	Foreign Journal (Current)	50
5	Patent	8000
6	News Letter	100
7	Digital Collections	4200
8	Thesis	256
9	News Paper (daily)	9
10	News Paper (weekly)	1

Table 1: Total Collections of NEIST Library

The total collection of the NEIST predicts that the library authority gives much importance in the journals for building up the collections. The back volumes are generally stored in the stack subject wise. The nature of the journals is both full text and the indexing and abstracting. News letters from different universities and the scientific organization are also stored and displayed in the library. The scientific patents are the important resources of the organization. The thesis of the Institute library is a very valuable source of information in the area of Science and Technology.

Daily newspaper covers different languages like Assamese, English and Hindi. The weekly newspaper like the Employment News is also available in the library. Various weekly and fortnightly periodicals like the India Today, CSR, and Computer Today are also available in the library.

3.2 Library Services

Library is not a profit making organization. The significance of the library determines by the library services provided to the users. The library services must be user oriented and helpful for the quick and easy dissemination of the information. The major library services of NEIST library are discussed below:

3.2.1 Reference Service

NEIST library provides ready reference services to its user community. Moreover CAS, SDI, Indexing and Abstracting, Bulletin board services are also provided to the users. For CAS and SDI the library authority creates the user profile and provides the service through E-Mail.

3.2.2 Lending Services

Users such as Scientists, faculty, research fellow and the staff members can issue the library documents for a specific time.

3.2.3 Periodical Services

The periodical service of the NEIST library is a very superb one which provides both current and the back volume service to its users.

3.2.4 Internet Service

The Internet service of the Institute library is a very fast and the speed is 100 mbps. Users can access the required information from the digital collection and the others except the social networking site.

3.2.5 Xerographic Service

Users can make photocopies of their required information from the back volume and the current periodical on payment basis.

3.3 Library Staff

Qualified library staffs are essential for dissemination of the information inside the library. Being a scientific library, the library staffs must be well qualified and expert while performing the library services deliberately. The staff structure of the library is given below-

Sl. No	Description of the Staff Staff	Total No of the
1	Professionals	3
2	Non-Professionals	5
3	Others	2

Table 2: Staff structure of the Library

There are only three qualified professional staffs including the Librarian. The present librarian of the Institute is Dr. P. K. Baruah. Other staffs like non professional perform their allotted duty with utmost sincerity.

4. Digital Collection:

In Library concern, the knowledge which is recorded in digital form and can be accessed through the computer peripherals is called digital collection. It offers new levels of access to broader audience of users and new opportunities for library and information science field to both advance theory and practice. Librarians are required to select, acquire, organize, make accessible, and preserve digital collections. It helps in working hybrid library service with the conventional library services.

4.1 Types of Digital Collection

In its simple connotation, digital resources refer to any resource, which is in digitized form. i.e. which can be read and scanned by means of electronic media.

4.1.1. On the basis of the way of digitization, they may include two types of information resources:

a) **Digital Original**: The knowledge which is kept in digital form at the first step of recording is known as the digital original. The digital original includes the resources like e- journals, e- books, computerized database, CD/DVD etc.

b) **Digital Surrogates**: Digital surrogate means the resources which are transformed from traditional format to electronic format via format conversion. Scanning is the basic tool for converting the traditional documents to an electronic one. But the major demerits in this system are that it requires lots of space and handwork.

While both types of resources i.e. digital original and the digital surrogates have the same access management requirements. They raise different issues of selection and acquisition, and their preservation imperatives are also different.

4.1.2 On the basis of access point and the storage media, the digital collections can be divided into the following groups:

a) **Web-based Digital Resource**: Web has developed into a major source of information called as an information super highway.

❖ **Open Access Information Resources:** There are a large number of free and open information sources that offer huge amount of academic and research information on the web.

❖ **Consortium Based Resources:** Co-operation, co-ordination and collaboration (3Cs) might have lead to the concept of consortium. The resources of the consortium are accessed through the web. This is a milestone in the digital collection of the library in today's context.

b) **CD-ROM/Other Media:** These formats are acquired only occasionally if the content is unique, not available in other format and present no technical support difficulties.

4.2 Benefits of Digital Collection

The various benefits of the digital collections are listed below-

4.2.1 Amount of information: There is the provision of accessing the large information collection in the digital format.

4.2.2 Supporting multi-media Content: In digitized document, the knowledge can be presented through multi-media which help the readers in capturing the information deliberately.

4.2.3. Network Accessibility: The digital documents can be accessed outside the library in a networked environment. In this way it helps in the up gradation of library services.

4.2.4. User Friendly Interface: Digital collections are more user friendly by its naturebecause-

a) The digital format is very much user friendly because of the use of hyperlink, there is no need of turning of the pages. The hyperlink helps the users for navigation search of the documents.

b) Multiple users can access single document at a time without any hindrance.

4.2.5. Easy Mechanism: It provides easy mechanism for resource sharing with other libraries. Sharing of digital files is much easier.

4.3 Criteria of the Growth of Digital Collection

The basic criteria of enormous growth of the digital collection are given below-

4.3.1 Acquisition of Digital Collection: The library should concentrate on the acquisition of originally produced digital collection through proper channel. There is a need of special committee for this purpose.

4.3.2 Digitization of the Existing Collection: Before the inception of digitized form, the information is produced on various formats, which have equally beneficiary points with the digital collection. So, the library should introduce digital

project on traditional knowledge using the purposeful library application software.

4.3.3 Connectivity: It is essential to connect the digital collections from the server to the client through proper connectivity. There must be need of sophisticated information communication technology to capture digital resource.

4.3.4 Networking: The library should come under the umbrella of library networking of the like minded library on the regional and national level.

4.3.5 Internet: The library should acquaint with the speedy Internet connectivity.

5. Digital Collection in NEIST Library

The rapid growth of network technology has created a new acquisition policy of digital collection. The increasing popularity of Internet and developments of resource sharing among the libraries through web technologies is a catalyst to the concept of digital collection in NEIST library. The digital resources are recognized as the gateway to touch the latest happenings of the Science and Technological field.

5.1 Library Automation

NEIST library used CDS/ISIS library software package till 2005 for the storage and retrieval of the library collections. CDS/ISIS is not an Integrated Library Management Software. Hence the Institute library has shifted the database of the library from CDS/ISIS to the SLIM 21 in 2005. SLIM 21 is an Integrated Library Management Software (ILMS), which stands for System for Library Information Management. It is a multi-tasking, multi user and user friendly library

software which help the users for easy retrieval of the documents. The importance of using the SLIM 21 software in a library environment are-

a) Today's technology;

b) Resource Sharing;

c) Cost;

d) Retrospective conversion;

e) Information sharing;

The NEIST library has fully automated its services. The circulation section of the library, acquisition policy of the library etc. are performed by the SLIM21 software effectively. Updating of the library works are also done within a very limited time. The automation of the library is done under the supervision of the Library Technical Assistant.

5.2 CSIR Consortium

The CSIR is a premier scientific agency having one of the largest information resources bases in the country. It must take a lead in evolving the first ever consortium of this size in the country. CSIR as a whole gets more than 2500 unique titles of foreign journals.

Accessibility of the CSIR Consortium

a) The access to the e-journals is Internet Protocol (IP) enabled. However where such facility do not exist the publisher/licensor and/or provider shall provide access through login and password.

b) The facilities to search, browse, view and download the articles of interest and their distribution among CSIR labs/institutes/centers/ units etc. are allowed. Publisher/licensor and/or providers make available laboratory-wise and

journal-wise usage data reports to CSIR and/or its designated labs/institutes on monthly basis.

c) The access, view, search, browse, download, print and users are unlimited.

It is earlier mentioned that NEIST is one of the multidisciplinary laboratories of CSIR. The Institute has accessed the CSIR- Consortium from 1999. Presently the library is enriched with the total collection of 4200 on line electronic journals for the benefit of the users. There are no other digital collections in the library such as electronic books, CD/DVDs, Magnetic Disk etc.

The language of the consortium is English. No other regional or other languages are available in the consortium. There are lots of electronic resources on various regional languages published across the world especially in scientific area.

5.3 Committee for Digital Collection

Digital collection is becoming a factor of collection development. There is the need of a special library committee to acquire, maintain the digital collection for better use and to preserve it for the posterity. The NEIST library has no separate library committee for this purpose but the general committee consisting of Chairman, 5 members from the Scientists, Convener, including the Librarian look after the library consortium for growth of digital collection.

5.4 Users of digital Collection

The collection building is done on the basis of user's information need. In NEIST Library there are mainly two types of user:

Types of User	No. of User
Regular	350
Part Time	250

Table 3: List of the users

There are altogether 350 regular library users including the Scientists, Faculty, Research Fellow, Research Officer, Research Assistants and others. The part time users include the various types of users like the Visitors, Research Fellow of different Universities of North Eastern India.

The study is concentrated on finding out User statistics for using the digital collection:

Category of the User	Frequency of using
Scientists/JRF/RA/RO	Weekly
Faculty	Monthly
Other Staff	Occasionally

Table 4: Frequency of using the Library

The evaluation of the collection depends upon the level of user satisfaction. The level of satisfaction of the users in NEIST Library is above 75%.

5.5 Prospects of the Building Digital Collection

The Institute library is very resourceful with its books, published papers, standards, thesis etc. But they are not available in digital format. So, there is the necessity of the digitization of these information resources to touch the user community in the digital world.

5.5.1 Digitization of Book: The library has a very good collection of books on Science and Technology. This resource should be converted to digital form for the user benefit.

5.5.2 Institutional Repository: Institutional repository is an on line locus for collecting, preserving and disseminating in digital form of the intellectual output of the institution. It helps in providing the open access to institutional research by self archiving. It creates global visibility of institutions with scholarly research. The NEIST library has the possibility of making the Institutional Repository to touch the outer community of the library.

5.5.3 Electronic Thesis: There is the possibility of making electronic thesis because it has a good collection of thesis covering Science and Technology. The need of Electronic thesis is to show highly accurate color diagram, and charts, internal and external hyperlinks to present the research work through multimedia including audio-video in the virtual environment.

6.   Conclusion

The consortium based approach has become the most accepted system of resource sharing in the digital environment. In the NEIST library, CSIR consortium provides the information awareness among the user community.

The success of a service library depends upon the user satisfaction. The user community of the library is not fully satisfied with the present digital collections of the library. The study explores that there is the need to build the digital collection in various format such as in Electronic Book, CD/DVD, Magnetic Disks etc. The reason behind in this regard is that sometimes the users especially the Research Fellow and the Scientists ask for the digital books and the CDs for their research purpose. The library authority should concentrate for the recruitment of more professionally qualified

people as presently the library is facing a lot of problems for trained library staff for providing the library services.

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