Digital Library Initiatives in India : An Overview

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Abstract

The paper focuses on the digital library initiatives in India with examples, the initiatives of the government of India and state governments towards digital library activities and the policy of the government of India towards digital library development. The current initiatives, such as the digital library of India, Vidyanidhi, Traditional Knowledge Digital Library (TKDL), Gyandoot, INDEST consortium, UGC-INFONET consortium, I.I.T., Delhi, Indira Gandhi National Centre for the Arts (IGNCA) Kalasampada, etc. and also discussed the problems of digital libraries.

1. INTRODUCTION

The digital revolution of the past three decades has transformed many conventional libraries into digital libraries of the world, specially in the developed countries such as Europe, America, Australia, etc. India has also started making systematic initiatives in this direction in planned manner recently. However the beginning of the digital library initiatives in India during late 90's and early 21st century had been sproadic. The initial digital library initiatives in India started manly for the preservation of Arts, Culture & Heritage of the country. All projects aimed at creating digital libraries concentrate only on specialized collections. The digital library initiative in India is still at a nascent or embryonic stage. But with the initiative like digital library policy, it can also be said that the nation is serious about digital library implementation. Bhattacharya & Choudhary (2008, pp. 3-17) and Jain, P.K. & Babar, P, (2006, pp.161-169)

2. DIGITAL LIBRARY INITIATIVES IN INDIA

Digital Library initiatives in India included initiatives at the government level such as, Vidyanidhi, Traditional Knowledge Digital Library (TKDL), Gyandoot, INDEST consortium, UGC-INFONET consortium, I.I.T., Delhi, Indira Gandhi National Centre for the Arts (IGNCA) Kalasampada, etc. are explained as follows.

2.1. DIGITAL LIBRARY OF INDIA

It is a digital library of books in Indian languages which are free to access on internet. This project is collaboration between different Indian institutes and universities and Carnegie Mellon University

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under digital library project. Joshi & Kumar (2006, p.62)

2.2. ETD AT INDIAN INSTITUTE OF SCIENCE

This is the digital repository of thesis and dissertations of Indian institute of Science, Bangalore. This has been developed to capture, disseminate and preserve research thesis of Indian Institute of Science. Joshi & Kumar (2006, p.62)

2.3. VIDYANIDHI

Vidyanidhi (meaning 'treasure of knowledge' in Sanskrit) is India's premier digital library initiative to facilitate the creation, archiving and accessing of doctoral theses. Vidyanidhi is an information infrastructure, a digital library, a portal of resources, tools and facilities for doctoral research in India. Vidyanidhi is envisioned to evolve as a national repository and a consortium for e-theses through participation and partnership with universities, academic institutions, and other stock holders. Vidyanidhi enhances access to India theses and enlarges the reach and audience for Indian doctoral research works. Vidyanidhi database currently has 1,00,000 metadata records of Indian theses of all Indian languages., Vidyanidhi offers access to 5000 full-text doctoral theses to view, access and download. Vidyanidhi began as a pilot project in the year 2000 with support from NISSAT, DSIR, Govt. of India and demonstrated the feasibility of e-theses programme in India. With support from the ford foundation and also from Microsoft India, Vidyanidhi is evolving as a National initiative. Srimurugan & Kumaravel (2006, p.125) and (http://www.vidyanidhi.org.in.)

2.4.   TRADITIONAL KNOWLEDGE DIGITAL LIBRARY (TKDL)

In 1999 the Department of Ayurveda, Yoga, & Naturopathy, Unani, Siddha and Homeopathy (AYUSH), erstwhile Department of Indian System of Medicine and Homeopathy (ISM & H) constituted an interdisciplinary task force, for creating an approach paper on establishing a Traditional Knowledge Digital Library (TKDL). The project TKDL was initiated in the year 2001. TKDL provides information on traditional knowledge existing in the country, in languages and formats understandable by patent examiners at international patent offices (IPOs), so as to prevent the grant of wrong patents. TKDL thus, acts as a bridge between the traditional knowledge information existing in local languages and the patent examiners at IPOs. TKDL is a collaborative project between Council of Scientific and Industrial Research (CSIR), Ministry of Science and Technology and Department of AYUSH, Ministry of Health and Family Welfare, and is being implemented at CSIR. An inter-disciplinary team of traditional medicine (Ayurvda, Unani, Siddha and Yoga) experts, patent examiners, IT experts, scientists and technical officers are involved in creation of TKDL for Indian systems of medicine.

The project TKDL involves documentation of the traditional knowledge available in public domain in the form of existing literature related to Ayurveda, Unani, Siddha and Yoga, in digitized format in five international languages which are English, German, French, Japanese and Spanish.

2.4.1 PRESENT STATUS (OCTOBER 2009)

Present status of transcription of the traditional medicine formulation in the traditional knowledge digital library is given in the following table :

Discipline	No. of texts (including volumes) used for transcription	Transcribed
Ayurveda	75 books	82600
Unani	10 books	112500
Siddha	50 books	12718
Yoga	13 books	950
Total	148 books	208768

TKDL, for its novel approach in preventing misappropriation of traditional knowledge at international patent offices, has been widely covered in television, newspapers, magazines and scientific journals at both national and international levels. The story on TKDL was covered in nature (London) BBC News, London Telegraph, etc. (http://www.tkdl.res.in/tkdl.)

2.5. GYANDOOT

The emergence of internet based "Gyandoot" digital libraries in Dhar District of Madhya Pradesh have changed the lives of unprivileged rural communities. "Gyandoot" is a unique form of G2C (Government to citizen) digital library activity to address the hardship imposed by transaction costs associated with government services. Dhar district began the new millennium with the establishment of twenty one computers centres (called Sochanalayas), in five blocks of the district through an intranet network. These Sochanalayas (Computer Centres) have been established in Gram Panchayats to provide fee based services to the rural people and at the same time the information technology related services and the developmental needs to government departments and Panchayats are met free of cost. The Gyandoot network has been set up at a total cost of Rs. 25 lakhs and the system is very cost effective. The Sochanalayas cater not only to the twenty one villages, but also to surrounding villages. Sochanayalayas have been established in the buildings of such Gram Panchayats, which are located either at block headquarters or at prominent hatt bazaar places or are prominent villages on major roads, which are easily accessible. Thus, the Gyandoot network benefits over half a million villagers living in 311 Gram Panchayats and over 600 villages with the wide ranging information needs of its users. Naidu, John & Rajput (2007, pp.201-202)

2.6. INDIAN NATIONAL DIGITAL LIBRARY IN SCIENCE AND TECHNOLOGY (INDEST) CONSORTIUM

This is an initiative undertaken by the Department of Secondary and Higher Education of the Ministry of Human Resource Development in 2002. The Ministry has setup a "Consortia Based Subscription to Electronic Resources for Technical Education in India" based on the recommendations of the expert group appointed by the ministry. 37 centrally-funded government institutions including IITs, IISc Bangalore, NITS, and IIMs are core members of the INDEST consortium. The ministry provides funds required for providing differential access to electronic resources subscribed

for the core members through the consortium headquarters setup at the IIT Delhi. The consortiu is renamed as INDEST-AICTE consortium in December 2005 with the AICTE playing pivotal role enrolling its affiliated engineering colleges. The INDEST - AICTE consortium subscribes to ov 6500 electronic journals from a number oi publishers and aggregtors. 462 engineering college have already joined the consortium under its self supported category. Bhattacharya & Choudha (2008, p.4)

2.7. UGC-INFONET E-JOURNALS CONSORTIUM

The programme is wholly funded by the University Grants Commission and is being executed b INFLIBNET centre, at Inter University Centre of UGC located at Ahmedabad. All universities tha come under university grants commissions purview are members of this programme. Access t various e-journals has been started from January 1, 2004. It will provide the best current an archival periodical literature, from all over the world, to the university community. Some example of UGC - Infonet Resources are as follows :

- American Chemical Society (37 journals)
- American Institute of Physics (13 journals)
- American Physical Society (15 journals)
- Annual Reviews (29)
- Biological Abstracts
- Encyclopedia Britannica
- Emerald journals (28 journals)
- Springer journals (1150 journals)

Walia, P.K. (2008, pp. 187-189) and Murthy, Kembhavi ,Cholin (2004,pp.2-5)

2.8. IIT, DELHI

Established as college of Engineering in 1961, the institute was later declared an institution of National importance under the institute of technology (Amendment) Act, 1963 and was renamed "Indian Institute of Technology, Delhi".

It also has access to more than 2000 electronic journals (full text). Following databases are available in IIT Delhi.

- Database of Research Articles by the IIT Delhi faculty.
- Database of Ph.D. theses submitted to IIT Delhi
- The library subscribes to 680 journals in e-version as its own subscription excluding INDEST subscription.
- More than 1600 Ph.D. theses have been digitized in house under the project funded by Department of Biotechnology and MHRD.
- More than 25000 pages of old volumes of journals were scanned and made available on the institutes intranet.
- Electronic submission of theses approved by the institutes senate.
  Bhattacharya & Choudhary (2008, pp. 4-6)

2.9. INDIRA GANDHI NATIONAL CENTRE FOR THE ARTS (IGNCA) KALASAMPADA

Indira Gandhi National centre for the Arts (IGNCA), New Delhi is a premier research organization in the field of Indian Art and Culture. Kalanidhi Division of IGNCA is a National Information System and Databank of Arts, Humanities, Cultural Heritage etc. A fully supported reference library of Multi-media collections, comprises of about 2 lacks cultural print material along with 1700 rare books, 2.5 lacks manuscripts in microfilming format, 1 lacks visuals more than 1000 hours of audio video recordings, 9 personal collections of eminent photographers such as Lala Deen Dayal are some for the other points of attraction at Kalanidhi. Cultural Information Laboratory (CIL) of IGNCA is in the process of digitization of all its non-print material and some print material. Over 70% of the non-print materials have already been digitized. Kalasampada Digital Library Software has also developed by CIL. Online catalogue of about 8 lacks cultural resources in MARC 21 is under finalization. Installation of CD mirror server, networking of various divisions of IGNCA and finalization of various metadata formats for collection such as photographs, manuscripts, slides and audio-video material are some of the plans under implementation. Chaubey, O.N. (2007, pp.183-195)

2.10 OTHER DIGITAL LIBRARY PROJECTS / INSTITUTIONS

- CSIR Consortium.
- FORSA consortium
- National Institute of Technology, Calicut.
- Parliament Library
- NISCAIR (formerly INSDOC)
- National Tuberculosis Institute, Bangalore
- Mobile Digital Library (Dware Dware Gyan Sampada)
- Samadhan kendras. Jain & Babbar (2006, pp.161-169)

3. PROBLEMS OF DIGITAL LIBRARIES

The problems for digital library development are manifold in India such as lack of interest, non-availability of computer and IT infrastructure for library activities, copyright problems, ensuring secure access, properly selecting content from the mass available, internet bandwidth, absence of sufficient financial support, over concentration of professional time on administrative routines, acute shortage over concentration of professional time on administration routines, acute shortage of competent manpower, etc.

Jeevan, V.K.J. (2004, pp.185-197)

4. CONCLUSION

Digital libraries (DLs) have evolved, and developments in information technology have changed the concept of the library from one of print and paper media to digital media. The success of a digital library depends upon the computers, communication skills, and knowledge of library profession-als in connection with modern technology. In the present scenario, we stand at a transition from the traditional library to a global digital library. The technology based idea is to provide universal

access to digital content available only in digital library environment. Today the emergence of digital technology and computer networks has provides a means whereby information can be stored, retrieved, disseminated and duplicated in a fast and efficient manner. On a global level, digital libraries have made considerable advances both in technology and its application. India still has far to go if the nation is to benefit from this movement only sporadic and partial attempts have been made towards digital library initiatives in India.

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