INFORMATION AND LIBRARY NETWORK CENTRE: AN HIVE OF DIGTAL CONTENTS AND ROLE MODEL OF ICT SKILL DEVELOPMENT PROGRAMMES

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Abstract

Currently, Indian academic system is in a transaction phase as due to emergence of nascent technologies, the hybrid system has envisaged. Academic contents are available in both form, print and non-print. Undoubtedly, the nascent technologies are upholding the digital contents in academics; thereby the institutions have started to develop their contents in electronic form and started to share in public domain through institutional repository. Gradually, the academics and libraries are marching towards digitization. Even to enhance the usage of technology in academics activities, the GOI has taken the initiative to start many new programmes like SWAYAM- Study Webs of Active-Learning for Young Aspiring Minds etc. The digitization of the study material and its services are the demand of the twenty first century academics. Efforts to digitize the material are really indeed replacing the print media. However to cope up with these emerging and upcoming technologies, some technical skills are required. The INFLIBNET centre is playing a fundamental and significant role in imparting the training and in developing the skills through information and communication technology and physically. It won't be an exaggeration to say that it is the upswing role model in conducting the training on ICT skill development time to time. The author personally feels that the efforts of INFLIBNET are really appreciable and commendable. The present paper will try to unveil the programmes and services of INFLIBNET which are being offered and conducted time to time for academic communities and user communities.

Key-words: *INFLIBNET, Technologies, SWAYAM, GOI, Digital, Print and Non-Print.*

Introduction

In olden days, the papyrus was used for recording the thoughts for present and future use. Moreover, parchment or the skin of the animals, principally those of sheep and goat was also used. Yellum or the skin of lamb or kid was used for expensive writings, while for messages and notes wax-coated wooden tablets [1]. The recorded and kept knowledge was accessible to particular group of people for a limited period of time. With the passage of time, the orientation of the information centre has got changed; even new preserving tools have been introduced and emerged. During the latter half of the fourteenth century, the term 'library' was defined in the Oxford English Dictionary as a place where books were kept for reading, study and reference. By the nineteenth century, the word 'library' denoted a room, set of rooms and building containing collection of books for the use of public. Simply, library came to the regarded as a public institution [2]. Commenting on the role of library in society; J.H Shera writes 'The library is a product of our cultural maturation'.

Though the concept of library came into existence, literature in huge quantity was available for use, but the access was limited, even to access the available material, the concerned users/scholars had to take the permission from the library caretaker that was a time consuming process. But with the passage of time, nascent technologies have reached at the threshold of the academic and libraries that changed the orientation of the both. Digital contents development speed has increased with jet speed and their accessibility in the public domain has also been started. The technology has given remarkable changes in the pattern of information storage and retrieval advancement. With these technologies, the influx of information has given the birth of library network concept. Many new networks have been envisaged; thereby information flow from one place to another place has become possible with minimum possible time, whereas previously it seemed impossible.

Out of different library and information networks, the INFLIBNET has grown up with the hive of digital contents and has also become the role model for training and development of ICT skills which really proved mile stone to understand the applications of technology and make them customized according to the requirements.

About INFLIBNET Centre

The Information and Library Network (INFLIBNET) Centre is the autonomous Inter-University Centre of the University Grants Commission. The objectives of the centre are to modernize libraries and information centres for information transfer and access, to support scholarship, learning and academic pursuit by establishing a national network of libraries and information centres in universities, institution of higher learning and R&D institutions in India. Creation of repository of dissertation and theses of Indian universities (Shodhganga ETD Repository) and for synopses Shodhgangotri, union catalogue, development of integrated library management software (SOUL 2.0), human resource development, real time training, offline training, extending technical help and guidance from time to time to academic libraries in automation and networking are some of the major activities of the INFLIBNET. Apart from the above, e-Shodhganga is providing access to more than 15000 full text journals to 356 institutions. N-List is a college component of e-ShodhSindhu providing more than 6000+ e-journals and 30 lacks e-books to government aided and non-aided colleges .

Why ICT Skill Development Programme(s) Requires

Technology has made easier the access of the study and recreational material in minimum efforts. World is coming very close due to technology, even some network agencies have given the slogans i.e. **'kar lo duniya mutthi mein'** and **'duriyon ka matlab, faanslay nahi'**. Things are available on web and are access with single click round the clock and throughout the year. However, technology has put forth so many unaddressed challenges in front of the user communities. To address these unaddressed challenges, some ICT skills are required and to develop the same, some sort of training is required. In web world, latest apps are being introduced daily but to understand the basics of these apps and to customize according to the needs, the training plays a vital role. To know the basics of the ICT is the demand of the time; otherwise library professionals would be failed to cope up with the demand of the well aware seekers of information. Moreover, the libraries are not untouched with the influence of ICT applications. In fact, the technology has changed the orientation of the libraries and transcended their four walls and employed latest technologies to meet the emerging and pressing demands of the Gen 'Z' users. Many new concepts have envisaged and emerged in the library like hybrid library, digital library, electronic library, virtual library, and many more. Therefore, the library is taking a stride towards advocating and disseminating novel information techniques in the present digital era. Training makes the concerned capable enough to go extra mile and uphold the strength to meet the forthcoming challenges and issues.

Role of INFLIBNET Centre in the development of Human Resources

Human resource of any organisation is known to be the heart of an organisation. The human capital plays a key role in any well established organisation. In the era of information technology, where technology plays a vital role to change the orientation of any organisation but despite of this, public sector and private sector has been focusing on HR and paying more to meet the challenges of an open market competition. At the strategic level, the main function of the HR is to develop the balancing act in the growth of the business of the company and its human capital. The HR function works like a catalyst in the organisation as the human resource is the prime asset for any organisation. Without human resource, the development cannot be imagined. Technology cannot replace the HR but it may be used as supplement tool to enhance the efficiency and accuracy and to accomplish the task with minimum efforts. 'Development is not about the factories, dams, roads and technology. Development is about people. The goal is material, cultural and spiritual fulfilment for the people. The human factor is of supreme value in development' (Gandhi, 2010).

The INFLIBNET centre has realised for proper utilization of the ICT applications, the trained manpower is required. Therefore, to impart the training to manpower to use the ICT applications, working in the universities and colleges is a prime objective of the centre and has been given due priority. In this connection, as on December 31, 2016, 679 training programmes, workshops and seminar focusing on the library automation and networking have so far been conducted whereby 53642 participants benefitted. Apart from the above, user awareness programmes have also been conducted in different parts of the country in collaboration with the universities. National and International conventions called PLANNER in North- Eastern regions and International CALIBER in various states of India in being organised in alternate year as part of the human resource development activities. So far, the centre has conducted 129 training programmes on SOUL installation and operational for libraries .

List of INFLIBNET Digital Contents which really make sense of 'Hive of Digital Contents'

Merging of UGC-INFONET DLC, INDEST-AICTE & NLIST Programme: to make it really the hive of digital contents, some other consortium have been merged by INFLIBNET and named e-ShodhSindhu .

Based on the recommendation of an Expert Committee, the MHRD has formed e-ShodhSindhu merging three consortia initiatives, namely UGC-INFONET Digital Library Consortium, NLIST, and INDEST-AICTE Consortium. The e-ShodhSindhu will continue to provide current as well as archival access to more than 15,000 core and peer-reviewed journals and a number of bibliographic, citation and factual databases in different disciplines from a large number of publishers and aggregators to its member institutions including centrally-funded technical institutions, universities and colleges that are covered under 12(B) and 2(f) Sections of the UGC Act.

Aims and Objectives

The main objective of the e-ShodhSindhu Consortium is to facilitate the scholars who are associated with the Higher Education and to provide access to qualitative electronic resources including full-text, bibliographic and factual databases to academic institutions at a lower rates of subscription. The major aims and objectives of the e-ShodhSindhu are as follows:

- ❖ Setting-up e-ShodhSindhu: Consortia for Higher Education E-Resources by augmenting and strengthening activities and services offered by three MHRD-funded Consortia;
- ❖ Develop a formidable collection of e-journals, e-journal archives and e-books on perpetual access basis;
- ❖ Monitor and promote usage of e-resources in member universities, colleges and technical institutions in India through awareness and training programmes;
- ❖ Provide access to subscription-based scholarly information (e-books and e-journals) to all educational institutions;
- ❖ Provide access to scholarly content available in open access through subject portals and subject gateways;
- ❖ Bridge digital divide and move towards an information-rich society;
- ❖ Provide access to selected e-resources to additional institutions including open universities and MHRD-funded institutions that are not covered under existing consortia;
- ❖ Take-up additional activities and services that require collaborative platform and are not being performed by existing Consortia; and
- ❖ Moving towards developing a National Electronic Library with electronic journals and electronic books as its major building blocks.

List of Full Text Resources under e-ShodhSindhu

Consortium meant for higher education. Provides access to e-resources to universities, college and centrally funded technical institutions in INDIA. So far, 87 centrally funded technical institutes, 230 universities, 94 technical institutes, 4000 colleges are being enjoyed the collection of 15000+ e-journals, 3135000+ e-books, 40

resources and 16 databases under e-ShodhSindhu   project .

Name of the Publisher	No. of Journals/ Database	No. of Universities	URL
McGraw Hill Access Engineering	0	0	https://accessengineeringlibrary.com/
ACM Digital Library	140	51	http://dl.acm.org/
American Chemical Society	49	125	http://pubs.acs.org/
American Institute of Physics	19	141	http://journals.aip.org/
American Physical Society	13	150	http://publish.aps.org/browse.html
Annual Reviews	43	145	http://arjournals.annualreviews.org
ASCE Journals Online	36	86	http://ascelibrary.org/
ASME Journals Online	29	96	http://asmedigitalcollection.asme.org/
ASTM Standards + Digital Library	0	39	https://compass.astm.org
Cambridge University Press	224	135	https://www.cambridge.org/core
Economic & Political Weekly	1	264	http://epw.in/
Science Direct (10 Subject Collection)	1036	77	http://www.sciencedirect.com/
Science Direct Content Fees (CFTIs)	48	0	http://www.sciencedirect.com/
Science Direct Custom Collection	4	0	http://www.sciencedirect.com/
Emerald University Collection (133 titles)	133	86	http://www.emeraldinsight.com/
Emerald CFTI Collection (298 titles)	299	53	http://www.emeraldinsight.com/
IEEE/IET Electronic Library (IEL) Online	479	42	http://ieeexplore.ieee.org/
All Society Periodicals Package (ASPP) & Proceedings Order Plan (POP)	0	4	http://ieeexplore.ieee.org/
All Society Periodicals Package (ASPP)	187	94	http://ieeexplore.ieee.org/
Institute of Physics	45	177	http://iopscience.iop.org/journals
JSTOR	3165	226	http://www.jstor.org/

Nature	1	160	http://www.nature.com/
Optical Society of America (Optics InfoBase)	18	8	http://www.opticsinfobase.org/
Oxford University Press	262	202	http://www.oxfordjournals.org
Portland Press	6	58	http://www.portlandpresspublishing.com/
Project Euclid Prime	24	58	http://projecteuclid.org
Project Muse	676	143	http://muse.jhu.edu/
Proquest-ABI/Inform Complete	0	29	http://search.proquest.com
Royal Society of Chemistry	29	111	http://www.rsc.org/
SIAM	16	76	http://epubs.siam.org/
Springer Link	1438	211	http://link.springer.com/
Taylor and Francis	1079	163	http://www.tandfonline.com/
Wiley Blackwell Publishing	908	140	http://olabout.wiley.com/WileyCDA/Section/id-815577.html)

The browse e-journals by Alphabet are also available. Subject-wise, publisher-wise and collection-wise access is available. These access facilities really make it different from other information network and make user friendly. These e-resources are really being proved the mile stone in the research activities. Information and Library Network centre monitoring the programmes independently. A web site has been created to provide all needed information to consortium members about the status of the programme at http://web.inflibnet.ac.in/econ/index.htm.

INFLIBNET conduct various training programmes at different places to spread awareness and to develop expertise in the university community in the use of E-Resources. Special training programmes, seminars are conducted on different University campuses by publishers of complex.

List of Training Programmes of INFLIBNET- 2017 which really become it 'Role Model'

Detail of workshops/training programmes being offered in the year 2017

Sr. No.	Subject	No. of Days	Date
1	KOHA Instillation and Subjects	3	23-25 January
2	SOUL2.0 Training Programme	6	30 Jan-4 Feb
3	Open Journal Systems(OJS)For e-Publishing	2	27-28 February
4	Research Methodology & Academic Writing	2	9-10 March
5	Soul 2.0 Training Programme	6	20-25 March
6	Ethical Issues & Use of Anti –Plagiarism for Research Integrity	2	6-7 April

7	SOUL 2.0 Training Programme	6	17-22 April
8	Creation and Management of Digital Collection using Dspace	5	24-28 April
9	Bibliometrics and Research Output Analysis	5	1-5 May
10	Research Data and Statistical Analysis using R Programming	5	15-19 May
11	SOUL 2.0 Training Programme	6	29May -3 June
12	Metadata Standard: Retrospective Conversion, Preservation, Harvesting and	3	7-9 June
13	E-Resource Management	3	13-14 June
14	Workshop on Cyber/Web Security	3	21-23 June
15	Creating and Managing digital Libraries using E Prints	3	5-7 July
16	Research Evaluation and Altmetrics	3	10-12 July
17	SOUL 2.0 Training Programme	6	17-22 July
18	CALIBER-2017 at Anna University, Chennai (TN)	3	2-4 August
19	VIVO Profile Management System	3	16-18 August
20	Institutional Ranking Methodology and Parameters	2	28-29 August
21	SOUL 2.0 Training Programme	6	4-9 September
22	Workshop on Cloud Computing, Virtualization and Network Management	5	18-22 September
23	National Conference on ETD	2	26-27 September
24	Advanced Training Programme on Configuration and Management of digital Library using DSpace	3	4-6 October
25	Library and Big Data	3	11-13 October
26	E-Content & E-Learning using MOOCs	3	1-3 November
27	SOUL 2.0 Training Programme	6	6-11 November
28	KOHA Instillation and Operations	5	13-17 November
29	Bibliometrics and Research Output Analysis	5	20-24 November
30	Capacity Building Programme on ICT For LIS(Hindi)	5	27Nov.-1 Dec.
31	Library on Cloud	5	4-8 December
32	Advanced Training Programme On Shodhganga	3	13-15 December
33	SOUL 2.0 Training Programme	6	18-23 December

Consultancy Services for Open Sources

In the present century, the open source movement is on full swing. Many free open source applications are available on internet, but to make these applications usable according to requirements is the predominant challenge in front of the academic and information/knowledge resource centres. To meet these challenges, the INFLIBNET centre is the emerged centre amongst academic and users communities. The centre has started the consultancy services for DSpace and Koha. The detail of these is as under:

Sr. No.	Services	Deliverables
1	**DSpace Installation Service (plain)**	Latest stable version of DSpace installation in pre-installed Operating Systems (Window/Linux) along with all pre-requisites (PostgreSQL, JDK, Maven, Ant, Tomcat) with auto start service configuration.
2	**DSpace Basic Customization (Layout)**	Layout Customization (Logo, Sidebar News, Header, Footer, Color-Fonts).

3	DSpace Advance Customizations and Data Import	Search Parameters, E-mail templates, OAI Interface, Localization, Branding, Custom Indexes, Custom Item Display, Custom input forms, Facets, controlled Vocabulary, Data Import from compatible formats etc.
4	DSpace Maintenance For Hosted solutions at INFLIBNET Data Centre	1 Backup and log Maintenance 2 Version upgrade with client's consent(once per annum) 3 Statistics Generation
5	DSpace Hosting Instance at INFLIBNET's Data Centre	Hosted DSpace Instance accessible via < instance> inflibnet.ac.in with disc space up to 20GB Unrestricted Access NKN
6	Virtual Machine Hosting	Dedicated Linux Virtual Machine (30GB), With Dedicated IP Address and domain name with root credentials. Unrestricted Access on NKN
7	Server Hosting	Hardware to be supplied by client with requisite OS Licences, Unrestricted Access on NKN

Sr. No.	Services	Deliverables
1	Koha Installation	Installation of KOHA's latest version along with database configuration (MySQL) in Preinstalled operating systems Window/Linux
2	Customization of Koha Interface(Basic)	Customization of Layout which includes Header, Footer, Colour, Font-Style
3	Advanced Customization	Requirements should be provided by Client
4	Hosting Instance at INFLIBNET Centre	Hosted Koha Instance will be accessible via <instance>. Inflibnet.ac.in with Disc Space up to 20GB undirected access on NKN
5	Virtual Machine Hosting	Dedicated Virtual Machine (30GB) with dedicated IP address and domain name with root/administrator credentials having unrestricted access on NKN
6	Server Hosting	Hardware to be supplied by the client with requisite OS Licences having unrestricted access on NKN
7	Annual Maintenance for Koha instance hosted at INFLIBNET's Data Centre	Backup and Log Maintenance. Version Upgrade on client's request

Suggestions

Though the INFLIBNET centre has become the hive of digital contents and role model in conducting the training programmes for ICT skills. However, many studies unveil that the objective to incorporate the e-resources with academic and its syllabi is still partially achieved. Somewhere, it is found that the IT infrastructure is not up to the mark and proper electricity supply is not available. Even in urban areas also, the same problem persists. Somewhere, the non availability of technical manpower is the main hurdle to implement the concept of e-resources amongst academic communities. It has also been observed that the awareness programmes are not being conducted in the rural areas institutes, whereas these awareness and orientation programmes are required. Language is another problem in rural areas, though technology is trying to overcome this gap but not 100 percent. The authors feel that the INFLIBNET centre after having a giant database of e-resources, not

able to connect every student with these facilities. Therefore, to achieve this target, awareness and orientation programmes must be conducted at grass root level so that a common student can easily understand the meaning and their utilization as per their requirements; otherwise the objective of these e-resources may be partially achieved.

Conclusion

INFLIBNET centre is meant for supporting the academic and user communities in respect to implement the electronic databases in academics and organizing training programmes time to time to develop the basic understanding these applications. With continuous efforts, the INFLIBNET centre is playing a vital and significant role and achieving the excellence in its core areas. The quality of the programmes is good. The authors personally feel that the INFLIBNET Centre is really doing a commendable job for academic society in general and for libraries/information resource centres in particular. The Libraries are access round the clock throughout the year because of these services. Even in research activities, it is playing a prominent role as huge amount database of theses is available on single platform which helps the research scholars to avoid the delicacy in research. Therefore, the centre has become the giant in electronic databases for academic and research activities.

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ELECTRONIC RESOURCES AND THEIR ULIITY IN LIBRARY

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Abstract

Electronics resources are becoming more popular, easy to use and reliable. E-resource makes the e-learning effective which develop the interest among the students and encourage them for the independent learning. This paper discuss the future aspects of electronic resources such as e-books, e-journals, e-newspaper, database, bibliographic databases this paper defines the importance and types of electronic resources in libraries and also discusses the merits and demerits of e-resources. Additionally the review details what is knows about the opportunities and issues arising from the inclusion of electronic collection in library?

Keywords: *e-source, e-education, e-book, e-journals, e-reports, e-publishing.*

Introduction:

The information needs of the users have increased enormously so much that no much that no single library on its own can meet their needs. In electronic timing librarians have faced and overcome the challenges posed by the new format materials. Information technology has brought the change in all field of life. Information technology has also revolutionized the role of libraries. Information need of the users may be fulfilled by many ways. They do not merely depend upon the printed source of information. Advancement of information technology has lead to the development of electronic resource. E-resource is one of the revolutionary changes in the field of publication. Publishing area is moving rapidly towards the digital age.

E-resources

E-resources is known as web-based sources or web based training, e-resources is a type of technology support education learning's sources, e-resources provide on time information in electronic format, the information is available at any time as per the need of users.

It is the age of information, it is well recognized the power, wealth and value added phenomenon to an individual, one's society and for a developing nation.

Electronic publishing is fastly overtaking the print paper. This new publishing medium has given scope for more efficient means of storage, maintenance and quick access from remote places. Under financial constrains, libraries need to think on developing, electronic documents and have access to electronic information resources, using network facilities to serve the users in a more fulfilled way.

Features of e-resources

- Multi-access
- Any time learning facility: 24X7 learning system
- Speed
- Content
- Re-used
- Functionality
- Storage
- Management
- Timeliness
- Remote learner teache

Advantages of e-resources

Internet has brought about a new breed of electronic publishers who are technology confident, and who intent to disseminate nascent intellectual thoughts, new discoveries and inventions in a faster and better way-thus giving rise to the domain of electronic resources. Electronic resources have therefore the following advantage compared to their traditional counterparts.

- Resources sharing at desired level among the libraries and information centers.
- Providing need-based and retrospective services to the users'
- Information Access can be made without wasting any time.
- Enabling to introduce friendly users' services at any time Etc