INFLIBNET Centre Projects and Services for Higher Education Institutions: An Analytical Study

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Abstract:
Information and Communication Technology is a driving force in the contemporary higher education system. The INFLIBNET Centre has taken up several initiatives for the benefit of the academic community in India. With the support of MHRD and UGC the INFLIBNET Centre conducting many projects for the academic community. In this article, the author identifies 30 projects initiated by the INFLIBNET Centre not only for library and information science professionals/users but also for other disciplines professionals as well as other users. As per the study; out of 30 projects, 9 projects are free access, 19 projects access through institutional membership access and only one commercial project that is SOUL software for library professionals. This article also highlights the statistics of the specific project. The development process and the current status of the projects also highlight in this article. The author also highlights the subject coverage as well as the type of resources/services available on the specific project undertaken by the INFLIBNET Centre. Overall this article focuses on the academic communities like faculty, researchers, students, and other users how to use/access this type of project for their day-to-day activities.
Keywords: *MHRD, UGC, INFLIBNET Centre, Projects, Consultancy Services, Higher Education*

I. INTRODUCTION

In April 1988, the University Grant Commission (UGC) constituted a committee under the chairmanship of Prof. Yash Pal, to work out the details of a University Information Library Networking System. The main aim of the Centre is Computer Communication Network of Libraries and Information Centres of Universities, Institutions of National Importance, R&D Institutions, Bibliographical Information Centres, etc, thereby improving the capability in information handling and services in India. The INFLIBNET Centre is an autonomous Inter-University Centre of the University Grants Commission (UGC) of India under the Ministry of Human Resource Development (MHRD) located in Gandhinagar, Gujarat. The centre was initially started as a national project (INFLIBNET Programme) under the Inter-University Centre of the Astronomy and Astrophysics (IUCAA) in March 1991 at Gujarat University Guest House, Ahmedabad. It became an independent Inter-University Centre of UGC in June 1996. (Wikipedia, 2020 & INFLIBNET, 2021). The INFLIBNET Centre engaging many projects and services under the MHRD guidelines of central government and some of the important projects and consultancy services details are provided in this study.

II. REVIEW OF LITERATURE

Many investigators did their work in INFLIBNET Centres projects and services related for the academic community. Some of the relevant articles collected from the ShodhGanga, e-ShodhSindhu, INFLIBNET website, Google Scholar, and other websites. More than fifty articles collected for this study, few relevant articles reviewed, and the result shown below;

Chandrakar & Arora (2011) focus on their article entitled Initiative of the INFLIBNET Centre for Delivering Information to the Indian Academic Community that Dr. S R Ranganathan five laws and delivery of information services for the end-users. The establishment of the INFLIBNET Centre, an autonomous IUC of UGC located at Ahmedabad as a nodal agency for academic institutions like universities, national importance centres, and colleges within India. They also elaborate on various initiatives of the Centre taken for delivering the information to the academic community of the country. And also highlights the impact of the initiatives on higher education of the country.

Deivam (2016) highlights the status of INFLIBNET centre and information and communication technology initiatives in India. The national program on technology-enabled learning, Gyankosh, Sakshat, Institute of Life Long Learning, GyanKosh, e-PGPathshala, and Shodhganga, etc.

Madaan & Dhingra (2013) highlights the concept of consortia and the factors which led to the development of 'Consortia Based subscriptions'. They discuss various existing consortia like UGC-INFONET, INDEST Consortium, Consortia for e-resources in Agriculture (CeRA), FORSA Library Consortia, and Health Sciences Library and Information Science Network (HELINET).

The concept of N-List has been developed to accelerate the research work. Research articles, journals, books, etc. are available electronically through the N-LIST. One can also read and store electronic information in the N-List. This article aims to create awareness among researchers, students & also higher education institutes about why should use the N-LIST (Ramesh & Rajendra, 2018)

Pradhan (2018) study the Central University of Orissa is getting 8500+ e-journals from e ShodhSindhu consortia of INFLIBNET. To assess the usage of these e-journals by the users of the Central University of Orissa, the author analyzed the statistics using INFISTAT of INFLIBNET. It was found that certain resources are being utilized more by the users, which reflects the popularity of the journals as well as the publisher. The study also shows the trend and statistics of usage by month, by year, by databases, and by journals, etc.

–   ICT Initiatives of MHRD, Government of India (VNIT, 2020).

–   Information and Library Network (INFLIBNET): A Boon for Higher Education in India (Karn & Das, 2019).

–   Open Access Initiatives of INFLIBNET: An Analytical Study (Sheeja, 2019).

–   Access to E-resources (DRWCollege, 2018).

–   INFLIBNET Newsletter (INFLIBNET, 2018).

–   Usage of E-Journals by the Users of Central University of Orissa, Koraput: An Analysis with INFISTATS (Usage Statistics Portal for e-Resource) for the Period 2012-2016 (Pradhan, 2018).

–   Use of Open Educational Resources: Indian Scenario (Thomas, 2017).

–   Information and communication technology initiatives in India Deivam, 2016.

–   Annual Report 2014-15 ((INFLIBNET, 2015).

–   Awareness and Use of Electronic Resources through N-List: A Boon to Academic Libraries (Kumar, 2013).

–   e-PG Pathshala (INFLIBNET, 2012).

–   Initiative of the INFLIBNET Centre for Delivering Information to the Indian Academic Community (Chandrakar & Arora, 2011).

–   Open Access and INFLIBNET's Initiative for Indian Scholarly Contents (Chandrakar & Arora, 2010).

–   Role of INFLIBNET in Growth and Development of Higher Education in India (Waghmode, 2009)

III. OBJECTIVES

The main objectives of the study is;

- to find out the number of projects and consultancy service availability and maintained by INFLIBNET Centre
- to identify the establishment year, URL, status of the projects
- to concentrate on the subject coverage and resource forms offered in the specified projects
- to learn about the project's access kind, phenomenon, and statistics

IV. METHODOLOGY

The Information and Library Network (INFLIBNET) Centre is MHRD project was called stated in the year 1991 under the leadership of Prof. Yashpal. The importance of this article is to analyse and find out the significant projects handled by INFLIBNET Centre for higher education Community. The data were collected from the INFLIBNET, UGC, and other MHRD related Website for this study in the month of July to November 2021 and presented in the analysis part (INFLIBNET, 2021).

V. DATA ANALYSIS AND FINDINGS

Despite of providing valuable resources and services for their end users; INFLIBNET centre also provides the additional projects and consultancy services to them, in order to improve the quality of services to the end users. The study highlights the different projects initiated by the INFLIBNET Centre under the support of UGC MHRD.

The Figure 1 shows that the INFLIBNET Centre provide Phenomenon wise different project and consultancy services to their end users (INFLIBNET, 2020).
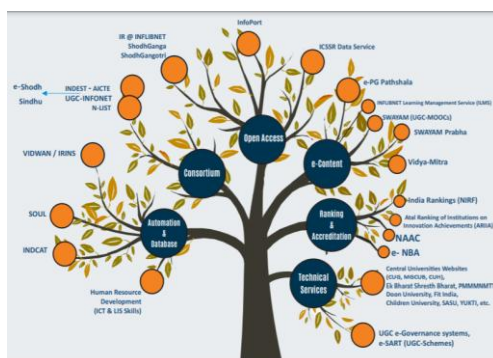

Figure – 1: INFLIBNET Projects and Consultancies

Table -1: List of Projects and Consultancy Services

Sl.No.	Projects/ Consultancy	Emblem	Year	URL
1	IndCat		1995	https://indcat.inflibnet.ac.in/
2	SOUL Software		2000	https://www.inflibnet.ac.in/soul/
3	e-ShodhaSindhu		2015	https://ess.inflibnet.ac.in/
4	N-LIST*		2010	https://nlist.inflibnet.ac.in/
5	infiStats		2011	https://infistat.inflibnet.ac.in/
6	INFED		2018	http://parichay.inflibnet.ac.in/
7	Shodh Suddhi		2019	https://pds.inflibnet.ac.in/
8	Shodhaganga		2016	https://shodhganga.inflibnet.ac.in/
9	ShodhGangotri		2011	https://shodhgangotri.inflibnet.ac.in/
10	Research Project Database		2021	https://www.inflibnet.ac.in/researchproject/
11	Institutional Repository		2002	https://ir.inflibnet.ac.in/
12	INFOPORT		2013	https://infoport.inflibnet.ac.in/
13	Vidwan		2012	https://vidwan.inflibnet.ac.in/
14	IRINS		2012	http://irins.org/irins/
15	ILMS		2020	https://www.inflibnet.ac.in/ilms/
16	e-PG Pathshala		2012	http://epgp.inflibnet.ac.in/
17	Vidya-Mitra		2015	http://vidyamitra.inflibnet.ac.in/
18	UGC MOOC		2017	http://ugcmoocs.inflibnet.ac.in/
19	SWAYAM PRABHA		2017	https://www.swayamprabha.gov.in/
20	NIRF		2015	https://www.nirfindia.org/
21	ARIIA		2018	https://www.ariia.gov.in/
22	e-National Board of Accreditation		2010	https://www.nbaind.org/
23	NAAC		2017	http://www.naac.gov.in/

Sl.No.	Projects/ Consultancy	Emblem	Year	URL
24	ICSSR Data Service		2015	http://www.icssrdataservice.in/
24	e-Governance@UGC		2017	https://www.ugc.ac.in/
26	PMMMNMTT		2019	https://nmtt.gov.in/
27	Study in India		2018	https://www.studyinindia.gov.in/
28	National Testing Agency		2017	https://nta.ac.in/
29	Unnat Bharat Abhiyan		2014	https://unnatbharatabhiyan.gov.in/
30	EBSB		2015	https://ekbharat.gov.in/

* Project merged with e-ShodhSindhu

Table 1 highlights the 30 projects and consultancy services, among which the IndCat (the national union catalogue database) and ShodhSuddhi was launched in the year 1995 and 2019 respectively. In the year 2012, 2017 and 2018, three individual projects introduced by the INFLIBNET Centre under MHRD support. The table also represents website and emblem of the project. The library and information science professional can easily get to know the detailed information for their further study.

Table - 2: Subject wise Projects, Consultancy Services and Resources of INFLIBNET Centre

Sl.No.	Projects/ Consultancy	Subject	Resources
1	IndCat	Multi-discipline	Bibliography
2	SOUL Software	Lib. & Inf. Sci.	Software
3	e-ShodhaSindhu	Multi-discipline	e-Resources
4	N-LIST*	Multi-discipline	e-Resources
5	infiStats	General	Software
6	INFED	General	e-Resources
7	Shodh Suddhi	General	Software
8	Shodhaganga	Multi-discipline	e-Resources
9	ShodhGangotri	Multi-discipline	Bibliography
10	Research Project Database	Multi-discipline	Research Projects
11	Institutional Repository	Lib. & Inf. Sci.	Preserves digital research products
12	INFOPORT	Multi-discipline	e-Resources
13	Vidwan	Multi-discipline	Profile
14	IRINS	Multi-discipline	Research Information Management
15	ILMS	Multi-discipline	e-Learning
16	e-PG Pathshala	Multi-discipline	e-Resources
17	Vidya-Mitra	Multi-discipline	e-Content
18	UGC MOOC	Multi-discipline	e-Learning
19	SWAYAM PRABHA	Multi-discipline	e-Learning
20	NIRF	General	Institutional Ranking System
21	ARIIA	General	Innovation and Entrepreneurship
22	e-National Board of Accreditation	General	Accreditation
23	NAAC	General	Bibliometrics
24	ICSSR Data Service	Social Science	Data Repository
24	e-Governance@UGC	General	Schemes, Grant Management
26	PMMMNMTT	General	Program of Teachers & Teaching
27	Study in India	Multi-discipline	e-Learning
28	National Testing Agency	Multi-discipline	Examinations Testing organization
29	Unnat Bharat Abhiyan	Multi-discipline	Examinations Testing organization
30	EBSB	General	Unity in Diversity and spirit of national integration

*Project merged with e-ShodhSindhu

Table 2 represents the subject coverage in the different projects and consultant services. Amongst 30 projects, there are 17 projects related to Multi-discipline subject, 10 project related to general subjects, 2 from Library and Information Science and one project related to Social Science. This table also signifies the type of resource availability in the projects such as; there are 6 e-resources, 4 e-learning and 3 software based projects.

Table - 3: Access type and Phenomenon of INFLIBNET Centre Projects

Sl.No.	Projects/ Consultancy	Access Type	Phenomenon
1	IndCat	Free	Library Automation
2	SOUL Software	Commercial	
3	e-ShodhaSindhu	Institutional Member	e-Consortium
4	N-LIST*	Institutional Member	
5	infiStats	Institutional Member	
6	INFED	Institutional Member	
7	Shodh Suddhi	Institutional Member	
8	Shodhaganga	Free	Open Access Initiative
9	ShodhGangotri	Free	
10	Research Project Database	Institutional Member	
11	Institutional Repository	Free	
12	INFOPORT	Institutional Member	
13	Vidwan	Free	Scholarly Network
14	IRINS	Free	
15	ILMS	Free	e-Content Development
16	e-PG Pathshala	Free	
17	Vidya-Mitra	Free	
18	UGC MOOC	Institutional Member	
19	SWAYAM PRABHA	Institutional Member	
20	NIRF	Institutional Member	Rankings, Accreditation
21	ARIIA	Institutional Member	
22	e-National Board of Accreditation	Institutional Member	
23	NAAC	Institutional Member	
24	ICSSR Data Service	Institutional Member	Data Services
24	e-Governance@UGC	Institutional Member	e-Governance & Technical Services
26	PMMMNMTT	Institutional Member	
27	Study in India	Institutional Member	
28	National Testing Agency	Institutional Member	
29	Unnat Bharat Abhiyan	Institutional Member	
30	EBSB	Institutional Member	

Project merged with e-ShodhSindhu

Table 3 details the access type for 30 projects and consultancy services offered by the INFLIBNET Centre. Were we can identify that, 19 are institutional membership based access, 9 are free access, and 1 commercial access project of SOUL software. Similarly, project statuses such as 6 in e-Governance & Technical Services; 5 in e-Consortium, Open Access Initiative, e-Content Development, 4 in Rankings Accreditation and 2 in Library Automation and Scholarly Network.

Table - 4: Library Automation

Sl.No.	Projects/ Consultancy	Status of the Project / Consultancy
A	**Library Automation**	
1	IndCat	***Union Catalogue Status*** - Books 15631855 from 200 Universities - Serials 35234 from 229 Universities - Theses 441393 from 444 Universities
2	SOUL Software	- 3800 Institutes as on May 2021

The books, theses and serials union catalogue of the IndCat and the automation of libraries related SOUL Software are the major 2 projects initiated by the INFLIBNET Centre for library automation. Table 4 also provides information such as there are in total 15631855 records of books database from 200 universities, 35234 records of serials database from 229 Universities and 441393 records of Theses database from 444 Universities in IndCat databases. The Software for University Libraries (SOUL) software installed in 3800 institutions.

Table - 5: e-Consortium

Sl.No.	Projects/ Consultancy	Status of the Project / Consultancy
B	**e-Consortium**	
1	e-ShodhSindhu	***Online e-resources Requisition System*** - 98 CFTIs; - 217 Universities; - 134 Tech. Inst.; - 3200 Colleges; - 10000 E-Journals; - 600000 E-Books through NDL; - 22 Resources; - 4 Databases; - 199500 E-Books; - Summary for the year 2021
2	N-LIST*	***Usage – Users and Colleges*** - Total users: 418594 Beneficiary Colleges: 3500

Sl.No.	Projects/ Consultancy	Status of the Project / Consultancy
		Users Activated in July 2021 = 23780
3	infiStats	*e-Resource usage* - 42854196 - year 2018; -36672257 - year 2019
4	INFED	*Status of INFED* - 186 Institutions - 40 Service Providers
5	Shodh Suddhi	*Summary of ShodhSuddhi* - 1048 Total Institutions - 110593 Total Users - 1366909 Total Documents Submitted

***Project merged with e-ShodhSindhu**

Table 5 shows that the status of e-Consortium of five major projects of INFLIBNET Centre for their end users. The e-ShodhSindhu is one of the national consortia project initiated by the government and it merged with all other projects like INDEST, UGC-InfoNet, and N-LIST. The e-ShodhSindhu is one of the top most project initiated by the government for research scholars. The same way N-LIST also providing electronic information sources for the college user community.

Table - 6: Open Access Initiative projects

Sl.No.	Projects/ Consultancy	Status of the Project / Consultancy
C	Open Access Initiative	
1	Shodhganga	*Status of Shodhganga project* - 312098 Full text Theses - 582 Universities Signed MoU - 476 Universities Contributing - 8297 Synopses / Mrps / Pdfs / Fellowships
2	ShodhGangotri	*Synopses Status* - 8297 Synopses uploaded
3	Research Project Database	*Research project Database contain* - 13600 research project's funded by UGC, ICAR, ICMR, DST & DBT, etc.
4	IR	*Status of Institutional Repository* - 586 in year 2010-2020 - 1127 in year 2000-2009 - 144 in the tear 1995-1999 - Total Publications= 1857
5	INFOPORT	*Status of Indian Electronic Resources* - 1515 Unique Resources - 1742 Total Resources

For the academic community, the current state of open access initiatives is very essential. The INFLIBNET Centre for Open Access Initiative has launched five key projects, as shown in Table 6. This project has more than three lakh full-text theses.

Table - 7: Scholarly Network Projects

Sl.No.	Projects/ Consultancy	Status of the Project / Consultancy
D	Scholarly Network	
1	Vidwan	*Status of Vidwan Database* - 91564+ Experts - 9876+ Organisations -1246212+ Citations
2	IRINS	*Status of IRINS Database* - 56996 Profiles - 1014741 Publications - 11596066 Citations - 2491161 Altmetric Mentions

This project will concentrate on the country's top specialists in their fields of expertise. The university expert database was launched in the year 1999, and in the year 2012 rechristened as VIDWAN. Another project is IRINS all the subject expert profile and their status is available in this database. The Table 7 highlights the status of the two scholarly network or expert databases.

The five E-Content Development and Services projects undertaken by the INFLIBNET Centre for the benefit of academic users are shown in Table 8. All of the projects are associated with e-learning and e-training. The UGC, NCERT, CEC, NPTEL, IGNOU, NIOS are UGC MOOC supported projects. According to current trends, online courses are quite important, and the five projects are also beneficial to the learners.

Table - 8: E-Content Development and Services

Sl.No.	Projects/ Consultancy	Status of the Project / Consultancy
E	E-Content Development and Services	
1	ILMS	*INFLIBNET Learning Management Service MOODLE provide* 700+ PG Courses 21 Participating Universities Platform: MOODLE Interactive e-content in 70 subjects Courses: e-PG Pathshala Hosting
2	e-PG Pathshala	*Status of e-PG Pathshala Collections*

Sl.No.	Projects/ Consultancy	Status of the Project / Consultancy	
		- 20000+ e-Text	- 19000+ Video
		- 3200+ Experts	- 30000+ Quiz
		- 70/723 Subjects / Papers	
3	Vidya-Mitra	***Collection of Vidya-Mitra***	
		- 44450 e-text	- 66174 e-Tutorial/Video
		- 37827 Others	- 46515 Under Graduates
		- 20487 Post Graduates	- 4753 Others
4	UGC MOOC	***National Coordinators***	
		- UGC	- NCERT
		- CEC	- NPTEL
		- IGNOU	- NIOS
5	SWAYAM PRABHA	***DTH channels and titles covered***	
		- Channels 34	- Titles 391073

To get the better output we need a ranking system and accordance of the progress. The Table 9 implies the four ranking and accreditation projects / consultancies (NIRF, ARIIA, e-National Board of Accreditation, and NAAC.) and their status.

Table - 9: Rankings and Accreditation

Sl.No.	Projects/ Consultancy	Status of the Project / Consultancy	
F	**Rankings and Accreditation**		
1	NIRF	***NIRF Parameters are***	
		- Graduation Outcome	- Teaching Learning & Resources
		- Outreach & Inclusivity	- Research & Professional Practice
		- Perception	
2	ARIIA	***Parameters of ARIIA***	
		- Teaching and Learning	- Mind-Set Development
		- Innovations Developed	- Infrastructure & Facilities
		- Expenses & Revenue	- IP & Commercialization
		- Initiatives of MOC	- Collaboration and Investment
		- Start-Ups Established	
3	e-National Board of Accreditation	***Status of Accreditation of technical institution's programme***	
		- 4867 - Participate Institutes	
		-1080 Programs Accredited in Various Disciplines	
4	NAAC	The INFLIBNET Centre is awarded a project of validation and verification of bibliometric data for the HEIs undergoing the NAAC Accreditation.	

Table 10 shows six important e-Governance and Technical Services provided by the INFLIBNET Centre for their end-users. These projects and consultancy services also provide the national education system and its status.

Table - 10: e-Governance and Technical Services

Sl.No.	Projects/ Consultancy	Status of the Project / Consultancy	
H	**e-Governance and Technical Services**		
1	e-Governance@UGC	***Governance @UGC covered***	
		- Web Portal for Fellowship/Scholarship Legacy Cases	- Deemed to be Universities web portal
		- UGC NET Online	- e-Schemes
		- CU Portal	- Academic Jobs for NET/SET/Ph.D
		- e-SARTS	- E-Payment Details – PFMS, DBT
		- Skill Development Bureau	- University Activity Monitoring Portal
		- Saksham Portal	
2	Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching	**Activities & Outcomes of *PMMMNMTT***	
		- Leadership for Academic Programme – 15 Centre and 325 Trainee	
		- Annual Refresher Prog. in Teaching 46 Disciplines	
		- Pre Service Teacher Training (SOE) – 25 Centre and 87998 Trainee	
		- Innovations, Awards and Teaching Resource Grant – 9 Centre 725 Trainee	
		- Professional Development (TLC, FDC, CESME) – 49 Centre 649052 Trainee	
		- Teaching Resource Developed (NRCE) - 1 Centre 12183 Trainee	
		- Faculty Induction Program (CESME, FDC, SOE, IUCTE, TLC) - 62 Centre 20041 Trainee	
		- Inclusive Education and Special Focus Area – 4 Centre 4902 Trainee	
3	Study in India	***Status of Institutes and Courses***	
		- 100+ Institutes	- 335888+ Registrations
		- 2600+ Courses	
4	National Testing Agency	***Coverage of Subjects / Discipline***	

Sl.No.	Projects/ Consultancy	Status of the Project / Consultancy	
		- Engineering	- Medical
		- Management	- Pharmacy
		- College/University	
5	Unnat Bharat Abhiyan	*Progress of UBA*	
		- Rural Realities	- Local Need
		- Participating Institutes	- Data Analysis Reports
		- Baseline Survey	- Development Plans (GPDP)
		- Gram Panchayat	- UBA Websites by RCI & PI
		- UBA Footprints	
		- Implementation of Various government programmes	
6	EBSB	*Status of Ek Bharat Shreshtha Bharat*	
		- 5330 Activity Planned	- 2168 Activity Completed
		- 86460737 Participant	- 4540 Involved Institutions

The ICSSR data repository provides the social science datasets. The Table 11 represents four important datasets. They are i) Debt & Investment, ii) Education Dataset, iii) Enterprise Survey, and iv) Health care.

Table - 11: Data Services

Sl.No.	Projects/ Consultancy	Status of the Project / Consultancy	
G	Data Services		
1	ICSSR Data Service	*Datasets are*	
		- Debt & Investment	- Domestic Tourism
		- Education Dataset;	- Employment & Unemployment
		- Enterprise Survey	- Household Consumer Expenditure
		- Health Care	- Housing Condition

VI. CONCLUSION

The INFLIBNET Centre have major projects for the development of Library and Information Science along with other discipline also, But the main aim of the project is to disseminate the information to the students, research scholars and faculty members of higher education. This paper focus on the major projects and services helpful for the end user through their institutional library. So the library professional should aware of this projects and services provided by the INFLIBNET Centre for update the new resources and services.

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