# University of Nebraska - Lincoln Digital Commons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

November 2018

# Content Analysis of National Digital Library

Medha Rajesh Mangurkar Mrs. HPT Arts & RYK Science College Nasik, Maharashtra, India, medhamangurkar@gmail.com

Yashwant Chaudhari Mr.

M.Lib.I.Sc student, Dept. of LIS, HPT arts & RYK Science College, nasik, yashwantchaudhari4@gmail.com

Follow this and additional works at: http://digitalcommons.unl.edu/libphilprac



Part of the Library and Information Science Commons

Mangurkar, Medha Rajesh Mrs. and Chaudhari, Yashwant Mr., "Content Analysis of National Digital Library" (2018). Library Philosophy and Practice (e-journal). 1883.

http://digitalcommons.unl.edu/libphilprac/1883

# **Content Analysis of National Digital Library**

\*Mrs.Medha R. Mangurkar

Assistant Professor, Dept. of Library & Information Science
HPT Arts & RYK Science College, Nasik-422005,India
medhamangurkar@gmail.com

\*\* Mr. Yashwant Choudhary

M.Lib.I.Sc.Student, , Dept. of Library & Information Science

HPT Arts & RYK Science College, Nasik-422005,India.

yashwantchaudhari4@gmail.com

Abstract: The aim of the present study is to analyse the contents of National Digital Library. The objectives of the study were to find out the various languages covered, coverage of different subjects in National Digital Library. The study also tried out to find out organizations that have created their institutional repositories and provided links on National Digital Library. NDL is a one stop for all digital resources. The user according to his educational level can choose the learning material. The searches can be refined by choosing different options like type of learning resource, educational degree, file formats, languages etc.

**Keywords**: National digital library, institutional repository, digital library software, content analysis, digital collection

#### **Introduction:**

The National Digital Library Project was launched in May 2016. The NDL project is supported by Ministry of Human Resource Development (MHRD). The NDL is being developed by Indian Institute of Technology (IIT) Kharagpur, Kolkata. The mission of NDL is to provide education on 24x7 basis through Information and Communication Technology on a single window platform. The NDL provides access to digital content like books, articles, audios, videos, images, animation, stimulation etc. The aim of NDL is provide the digitized

material in all vernacular languages. The NDL avails filtered and federated searches to enable the users to find right kind of information with least efforts. It furnishes information right from a school goer to a post doctorate fellow, from a normal person to a differently- abled person. It is helping the student to prepare for competitive examinations and also a common man to become lifelong learner. NDI encourages contributors such as educational boards, government organizations, private institutions to upload their contents, metadata and enable them to access their data in the interest of the society. All the contributors have mandate to create Institutional Digital Repository (IDR) using digital library software preferably D space, upload their metadata contents on (IDR) following a uniform metadata standard. The NDL currently has more than 12 lakh subscribers and can also accessed through NDL app in three different languages English, Hindi and Bengali. To resolve the copyright issue, the NDL gives access only to metadata of the e-content and which is free from copyright.

## **Objectives of the Study:**

To analyse the various contents of National Digital Library.

- 2) To find out the different languages covered in National Digital Library.
- 3) To identify the different subjects available on National Digital Library.
- 4) To find out the educational degrees covered in National Digital Library
- To explore the various organizations have provided access to their Institutional Repositories.

## **Research Methodology:**

The present study used content analysis method to analyze the contents of National Digital Library of India. To collect data the researcher used observation technique. The data is collected from the home page of National Digital Library website. (http://ndl .iitkgn.ac.in). The data is collected with the help of Browse option of home page of NDL during the period 22<sup>nd</sup> February to 15th March 2018.

## **Literature Review:**

Jagannathan (2011.) have discussed about digital library projects in India. The authors have listed the digital projects, implementing agency and their current status of digital library projects in India. Koganuramath (n.d.) talk about an initiative of design and development of digital library taken at Tata Institute of Social Sciences, Mumbai. The objectives of starting a digital library are to improve the access of PG students towards digital collection.

McGinty(2009) explores the impact of digital technologies on the organisation structures of academic libraries. He discusses about structural changes like appointment of full time and supporting staff, changes in library budget, acquisition of digital collection and starting of new digital services by certain academic libraries in America .Nishita(n.d.) talk about the digital library initiatives taken at Physical Research laboratory, Ahmedabad. The author has also discussed about the current and future library plans of developing digital library services. Liu(2004) reviews about the construction, development, the challenges, achievements and trends of digital libraries in China. The variety of digital resources, the cost of digitisation, the standards and specifications are some of the pertinent issues highlighted by the author. Trivedi(2010) has attempted to provide the functionality, usability and accessibility of digital libraries. Suresha and Kumar(2017) have attempted to describe the digital initiatives undertaken in developing the digital libraries in India.

#### **Findings:**

Table No.1 Analysis of Contents by Type

Sr.No.	Contents	Result(items)	Percentage
1	Text	15,003,149	98.04%
2	Audio	216,925	1.41%
3	Image	56,986	0.37%
4	Video	24,244	0.15%

5	Presentation	547	0.03%
6	Animation	383	0.00%
7	Simulation	289	0.00%
8	Application	1	0.00%
	Total	15,302,524	100%

The above Table no. 1 shows that there are eight types of contents including textual material.

The no. of text is highest among all the contents followed by audio material (1.41%).

Table No. 2 Analysis of Content by difficulty level

Sr.No	Difficult	Text	Au	Imag	Video	Presen	Anim	Simu	Appli	Total
	y		dio	e		-	-	-	-	
	Level					Tation	atio	latio	catio	
								n	n	
1	Medium	5,758,34			441					5,758,78
		3			(0.01%)					7
		(99.99%)								(100%)
2	Easy	923			161					1084
		(85.14%)			(14.86%)					(100%)
3	Difficult	70			68					138
3	Difficult	(50.73%)			(49.27%)					(100%)
	Total	(50.7570)			(17.27 70)					5,760,00
	101111									9
										7

Table no. 2 depicts the documents available in NDL according to the difficulty level. It is observed from the above table that the learning material is available only in three formats viz. medium, easy and difficult level. For medium level majority of material is in text form(99.99%). Same is the case for other two levels i.e. easy and difficult level (85.14% and 50.73% respectively).

Table No.3 Languages wise distribution

Sr.No.	Name of language	Result	Percentage
		(Items)	
1	English and Old English	1,531,225	59.07%
2	Germanic(Teutonic)	331,432	12.79%
3	Romance language-	325,161	12.54%
	French		
4	Italian	66,202	2.56%
5	Spanish and Portugese	65,760	2.53%
6	Italic language-Latin	39,685	1.53%
7	Hellenic language-Greek	7,722	0.29%
8	Other Languages	145,773	5.63%
9	Languages not mentioned	79,298	3.06%
	in DDC		
	Total	2,592,258	100%

The homepage of NDL mention that educational material is available in ore than 70+ languages. The researcher listed all the 200 languages alphabetically. Then the researcher further analyzed the languages according to the language schedule of DC and arranged all the

languages as shown in table no 3.It can be seen from Table no. 3 that majority of educational material is available in English(59.07%) and minimum in Greek language(0.29%). The researchers also found that there are some languages which are not found in DDC. Hence the researcher listed it under separate category(3.06%).

Table No. 4 Arrangement of Subjects in NDL

Sr.No.	Subject	Result(items)	Percentage
1	Computer Science,	1,448,595	8.69%
	Information and General		
	Works		
2	Philosophy and Psychology	346,806	2.08%
3	Religion	187,945	1.12%
4	Social Science	1,409,334	8.42%
5	Language	62,175	1.40%
6	Natural Science and	4,214,214	25.18%
	Mathematics		
7	Technology	7,940,267	47.45%
8	The Arts, Fine and Decorative	177,332	1.05%
9	Literature and Rhetoric	497,982	2.97%
10	History and Geography	445,935	2.66%
	Total	16,730,585	100%

Table No.4 displays the subject arrangement in NDL. It can be clearly seen that the subjects are organised according to Dewey Decimal Classification. It can also be observed that maximum number of items are found in the subject Technology (47.45%) followed by Natural Science and Mathematics (25.18%) and the least number of items are found in the subject Language (1.40%).

Table No.5 List of Educational Degrees covered in NDL

Sr.No	Education	Text	Au	Vid	Imag	Presentatio	Animatio	Simulatio	Applicat
	al		dio	eo	e	n	n	n	ion

	Degree								
1	Ph.D.	79,896	_	_	_	_	_	_	_
	Doctor of	(80.43%							
	Philosophy	)							
	)	,							
2	M.Tech.	12,013	_	_	_	_	_	_	_
	(Master of	(12.09%							
	Technology	(12.05%							
	reciniology	,							
3	M.S.(	3,688							_
3	Master of	(3.71%)	_			_	_	_	
	Science)	(3.7170)							
4	M.Phil	1,120	_	_		_	_	_	_
4	(Master of	(1.12%)	-	_	-	-	-	-	_
	,	(1.12%)							
	Philosophy								
5	M.Sc.(Mast	458	_						_
3	er of	(0.46%)	-	_	_	-	-	-	_
	Science)	(0.40%)							
6		392						_	
0	B.Sc.(Bach	(0.39%)	-	_	_	-	-	-	-
	elor of	(0.39%)							
7	Sciece)	201							
7	M.D.(Doct	391	-	-	-	-	-	-	-
	or of	(0.39%)							
0	medicine)	202							
8	Diploma in	302	-	-	-	-	-	-	-
	Higher	(0.30%)							
	Education								
	(UG & PG)								
9	D.M.(Doct	232	-	-	-	-	-	-	-
	or of	(0.30%)							
	Medicine)								
10	B.Tech.(Ba	140	-	-	-	-	-	-	-
	chelor of	(0.14%)							
	Technology								
	)								
11	B.Pharm(B	127	-	-	-	-	-	-	-
	achelor of	(0.14%)							
	Pharmacy)	_							
12	M.S.(Maste	97	-	-	-	-	-	-	-
	r of	(0.09%)							
	Surgery)								
13	B.P.T.(Bac	81	-	-	-	-	-	-	-
	helor of	(0.08%)							
	Physiothera								
	py)								
14	B.S.M.S.(B	76	-	_	-	-	-		-
	achelor of	(0.07%)							
	Siddha								

	Medicine								
	Surgery)								
1.5	DIIMC	(0							
15	B.H.M.S.(	68	-	-	-	-	-	-	-
	Bachelor of	(0.06%)							
	Homeopath								
	ic Medicine								
	and								
1.6	Surgery)								
16	M.Des(mas	55	-	-	-	-	-	-	-
	ter of	(0.05%)							
	Designing)								
17	M.D.S.(Ma	45	-	-	-	-	-	-	-
	ster of	(0.04%)							
	Dental								
	Surgery)								
18	B.A.M.S.(	30	-	-	-	-	-	-	-
	Bachelor of	(0.03%)							
	Ayurveda,								
	Medicine								
	and								
	Surgery)								
19	M.Ed.(Mas	19	-	-	-	-	-	-	-
	ter of	(0.01%)							
	Education)								
20	M.Pharm	17	-	-	-	-	-	-	-
	(Master	(0.017%							
	ofPharmac	)							
	y)								
21	B.B.A	16	-	-	-	-	-	-	-
	(Bachelor	(0.016%							
	of Business	)							
	Administrat								
	ion)								
22	B.D.S.(Bac	13	-	-	-	-	-	-	-
	helor of	(0.013%							
	Dental	)							
	Surgery)								
23	B.U.M.S.(	12	-	-	-	-	-	-	-
	Bachelor of	(0.012%							
	Unani	)							
	Medicine								
	& Surgery)								
24	M.B.B.S.(	12	-	-	-	-	-	_	-
	Bachelor of	(0.012%							
	Medicine&	)							
	Bachelor of								
	Surgery)								
25	B.N.Y.S.(b	11	-	-	-	-	-	-	-
	achelor of	(0.011%							
·	· -	` '		1	1		ı	ı	1

	Naturopath	)							
	y & Yogic								
	Science)								
26	Parma	10	-	-	-	-	-	-	-
	D(Doctor	(0.00%)							
	of Pharma)								
27	M.Med(me	8	-	-	-	-	-	-	-
	dicine	(0.00%)							
	Master								
	degree)								
28	P.D.F.(Post	3	-	-	-	-	-	-	-
	Doctoral	(0.00%)							
	fellow)								
29	M.B.A(mas	1	-	-	-	-	-	-	-
	ter of	(0.00%)							
	Business								
	Administrat								
	ion)								
30	M.P.T.(mas	1	-	-	-	-	-	-	-
	ter of	(0.00%)							
	Physiothera								
	py)								
	Total	99,332							
		(100%)							

Table no. 5 shows the educational degrees covered in NDL. It can also been seen that for the above educational degrees the educational material is available only in text form. Maximum learning material is for Ph.D degree(80.43%). NDL covers educational material for traditional degrees like B.Sc. and M.Sc. and also for non-traditional degrees like Bachelor of Naturopathy and Yogic Science, Unani Medicine and Siddha medicine. The above table alos reveals that post-doctoral degrees are also covered in NDL.

**Table No.6 Institutional Sources wise analysis of Contents** 

Sr.No.	Institutional Sources	No. of	Percentage
		Institutions	
1	Indian Institutions(IITs, NITs,	104	65%
	IIMs, AIIMS, IIS, IUniversity,		

School etc.)		
Government	35	21.87%
Organizations(CSIR,		
INLIBNET, UPSC etc.)		
Government Projects(Project	10	6.25%
OSCAR, NPTEL,		
MOOCsetc.)		
International	02	1.25%
Organizations(OCED,ILibrary,		
WHO)		
Publishers(Springer, Librivox	07	4.38%
etc.)		
Societies( e.g.Satyajit Ray	02	1.25%
Society)		
Total	160	100%
	Government Organizations(CSIR, INLIBNET,UPSC etc.) Government Projects(Project OSCAR, NPTEL, MOOCsetc.) International Organizations(OCED,ILibrary, WHO) Publishers(Springer, Librivox etc.) Societies( e.g.Satyajit Ray Society)	Government 35  Organizations(CSIR, INLIBNET,UPSC etc.)  Government Projects(Project 10  OSCAR, NPTEL, MOOCsetc.)  International 02  Organizations(OCED,ILibrary, WHO)  Publishers(Springer, Librivox 07  etc.)  Societies( e.g.Satyajit Ray 02  Society)

It can be observed from the above table that Indian institutions, Indian Government organizations, government projects, publishers and societies have contributed in national Digital Library.

Conclusion: The National Digital Library provides a single window search facility to act as one-stop for all digital resources. NDL gives the unique facility of choosing knowledge material as per the educational level of the user. The user can refine the search criteria through content type, subject, educational degree, file format, language etc. the material is available in various formats like text, audio, video, image, presentation, animation and

simulation besides textual material. The NDL has divided the subjects into ten core domains and each domain has covered its allied subjects which sums up to 906 subjects. The NDL provides material in Indian and foreign languages. Regarding Indian language m, majority of material is covered in Bengali language followed by Hindi and Marathi.

#### **References:**

- 1. Jagannathan R., Mohankumar s., Murugavel P., and Sudha V.(2011Digital library projects in India.Proceeding of the national conferenceJAC-PKM: Digital Vision-2020.p-33-39.
- 2. . Koganuramath M.M. and Angadi Mallikarjun(n.d.). Design and development of digital library: an initiative at TISS.
- 3. McGinty John (2009)Digital libraries need digital organisation: identifying, defining, and creating new academic library management structures. In ACRL Fourteenth National Conference.March 12-15, 2009, Seattle, Washington.p 208-303.
- 4. .Nishita Anilkumar (n.d.). Digital library initiatives in PRL.Special ETD projects. P 102-104
- 5. Liu, W. (2004). The new development of digital libraries in China. In international symposium on digital libraries and knowledge communities in networked information society (DLKC'04) (pp. 2–5). Tsukuba: University of Tsukuba.
- 6. Trivedi, M. (2010) Digital libraries: functionality, usability, and accessibility. Library Philosophy and Practice. Available: http://unllib.unl.edu/LPP/trivedi-diglib.htm
- 7. Suresha, G P; D Kirana Kumar.(2017) International Research: Journal of Library and Information Science; Aligarh Vol. 7, Iss. 3,
- 8. http://ndl.iitkgn.ac.in