



WEBOMETRIC STUDY OF NATIONAL INSTITUTIONAL RANKING FRAMEWORK (NIRF) LISTED COLLEGE WEBSITE WITH SPECIAL REFERENCE TO LIBRARY WEB PAGES

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ABSTRACT:

The present study is an analysis of National Institutional Ranking Framework (NIRF) listed top 20 college website under the college category on NIRF website with special reference to library webpages in the year 2021. A total of top 20 NIRF listed college website selected for the study. The study focused on webometric analysis, which examines the domain, domain age, all three types of web impacts factors. To collect data in this study, various small SEO tools such as opensiteexplorer.org (now moz.com), duplichecker.com and smallseotools.com had used to find out domain age, domain authority, page authority and total, internal and external links and alexa global and India rank of college library websites covered in this study. Findings revealed that the Loyola College website having the oldest domain registered on October 24, 1997, and the common highest Domain Authority score of 60 was achieved by Kirorimal College Delhi and Acharya Narendra Dev College New Delhi with the first position among all colleges. Among the top 20 colleges websites,

St. Stephens College Delhi achieved the highest page authority score of 34. It was also found that 12 colleges from Delhi state were achieved place in NIRF ranked top 20 colleges of India.

Key words: - *Webometric, webometric study, webometric analysis, NIRF Ranking 2021, College website, Library webpages, Web Impact Factor, Domain & Page Authority.*

INTRODUCTION:

Libraries are treated as the backbone of academic institutions that share information and knowledge with users to benefit them and make the most of their academic pursuits, and the library website becomes the knowledge gateway accessible by the library. The library homepage is a major source of information because it is considered the easiest way to find information through a simple internet search rather than going to the library directly.

College library websites should focus more on usability as they cater to different areas of user needs. It connects users with the library's resources and services. NIRF ranking 2021 College of India has a wealth of resources. In

this study, the researcher studies the webometric study of the library websites of the top ten college library websites ranked in NIRF 2021.

The National Institutional Ranking Framework (NIRF)

The National Institutional Ranking Framework (NIRF) was approved by the MHRD (Minister of Human Resource Development) and launched by the Honorable Members on 29 September 2015. The framework describes the method of classifying national institutions. The National Institution Ranking Framework publishes the top 100 Indian institutions of higher learning based on a wide range of parameters such as teaching, learning and resources, research and

professional practice, degree results, reach and inclusion and retention. The study includes the top 10 college websites in India listed in the college section in NIRF Rankings 2021. This study builds webometric analysis with the help of webometric tools focusing on library web page activity.

REVIEW OF LITERATURE :

Patel & Vyas (2021) conducted a webometric survey of Open University websites in India using WISER Index Ranking, Social Media Connectivity and Alexa Ranking. This study suggests that Open Institute websites need to attract more external links and web influencers. Kadam and Bhusawar (2021) analyzed the websites of the 25 best higher education institutions in India. They found out that Anna's University website was number one on Alexa's traffic location. Vinit Kumar and Sheel Bhadra Yadav (2020) NIRF Ranking University Library Portal Efficiency in Indian Universities: An Evaluation Study. In this article, the researcher studies various functions of the library portal. Verma and Jaiswal (2020) explored the websites of Indian medical institutions and their parameters are connection analysis, web influencers and WISER assessments. According to their study, the SRM Institute of Science and Technology's website has 84 fastest loading times in Google searches. Nitesh Kumar Verma and Akhandanand Shukla (2019) Usability Analysis of the Top 20 NIRF Accredited Institutional Library Websites in India: Evaluation. He studied 20 nationally ranked institutional library sites, including the library's site functionality. Krishna Brahma and Manoj Kumar Verma (2019) Evaluating Library Sites for Selected Legal Institutions in India: Webmetric Analysis Researchers in this article study the study of web metrics for legal institutions, examine library sites, and discover web influences from sites in selected libraries; Calculate Finds internal tracking links, external tracking links and complete links to selected

library sites as well as domain permissions and page permissions for selected library sites.

OBJECTIVE OF THE STUDY :

- To analyse the URL of selected College websites ranked by NIRF in 2021.
- To examine the domain age and domain creation of selected College ranked by NIRF in 2021.
- To identify the domain authority and page authority of selected College ranked by NIRF in 2021.
- To examine the global as well as Indian Alexa traffic rank of selected College ranked by NIRF in 2021.
- To identify the link analysis of selected College ranked by NIRF in 2021.

Scope and Limitations of the study

1. Present Study is limited to only NIRF Ranked 2021 College Websites listed in College Section of NIRF in India.

2. The study is limited to only top 20 NIRF Ranked 2021 College Library Websites in India only, universities, engineering, management, pharmacy, medical, Law, Architecture, dental and research institute library are excluded from the study.

HYPOTHESIS :

H1: There exists websites to top 20 colleges websites listed by NIRF in 2021.

H2: There exist significant differences in number of internal link, and external link among the website of top 20 colleges listed in NIRF 2021.

METHODOLOGY :

In the present study researcher investigates top 20 college websites listed by NIRF in 2021. The study only focused on top 20 college website specially library webpage of colleges listed by NIRF in 2021 by observation and collected the information of domain. Data were collected from the library web pages of Colleges ranked by National Institutional Ranking Framework (NIRF) by using the tool smallseo.com, moz.com, and duplichecker.com. It identifies the internal

links, external links and web ranking in India and Global Rank.

ANALYSIS & INTERPRETATIONS :

List of top 20 colleges and their library web pages, domain age, domain registration, domain authority and page authority.

Table 2 shows the top twenty colleges library web page and their domain age, domain registration date, domain authority and page authority. Study examines that the St. Stephens's College library website having oldest domain registered on 22 October, 1998 and the age of the domain was 23 Years 7 Month 11 Days and the PSGR Krishnammal College for Women Coimbatore library website had recent domain registered on 15th November, 2018 having age of 3 Years 6 Month 17 Days. Domain Authority of Kirori Mal College and Acharya Narendra Dev college having common 60 highest score followed by Lady Shriram College for Women and Loyola College having common 40 score. Gargi College had lowest domain authority score of 6. It also examines that page authority of St. Stephens's College with 34 highest score and the Ramakrishna Mission Vidyamandira examines zero score.

Table 3 shows the top twenty college's library web page, internal links and external links, India Rank and Global Rank. Among top 20 colleges PSG College of Arts and Science had highest 913 (100%) total links. Madras Christian College leads with 371 (98.1%) internal Links followed by Loyola College with 300 (97.7%) internal links. PSG College of Arts and Science leads with 720 (78.8%) highest external links followed by PSGR Krishnammal College for Women with 54 (28.7%) external links. It was found that Ramakrishna Mission Vidyamandira had no internal and external links. Study examines the India rank and Global Rank with smallseotools.com. After analysis, it was found that Kirorimal College Delhi and Acharya Narendra Dev College New Delhi with the first position in Alexa Global Rank as well as Alexa

India Rank among all colleges followed by Hansraj College and St. Xavier's College in 2nd & 3rd position in Alexa Global Rank. St. Xavier's College with 2nd position in Alexa India Rank followed by St. Stephens's College with 3rd position in Alexa India Rank.

CONCLUSION :

This study investigates the library website of top 20 college ranked by NIRF in 2021. The paper investigates the library website, its domain age, domain registration, internal and external links and global and India Ranking of top 20 colleges library websites and rank them orderly. NIRF is a method of ranking universities and colleges in India and acts as an independent body on the initiative of the Ministry of Education. A detailed study in this area is quite interesting and exploratory for the current status of library websites and will be more helpful to readers. The paper resolved that Domain Authority of Kirori Mal College and Acharya Narendra Dev college having common 60 highest score and St. Stephens's College library website having oldest domain registered. It was also resolved that 12 colleges from Delhi state were achieved place in NIRF 2021 ranked top 20 colleges of India. Presidency College, Rama Krishna Mission Vivekananda Centenary College and Gargi College not found any India Rank. It is suggested that Ramakrishna Mission Vidyamandira should improve its links for better accessibility and connectivity among college library websites should be supported.

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Table 1: National Institutional Ranking Framework (NIRF) ranking colleges in year-2021

Sr. no.	NIRF ranking 2021 colleges	City	State	Rank	Library web page
1	Miranda House	Delhi	Delhi	1	https://www.mirandahouse.ac.in/facilities/library.php
2	Lady Shri Ram College For Women	New Delhi	Delhi	2	https://lsr.edu.in/students/facilities/library/
3	Loyola College	Chennai	Tamil Nadu	3	https://www.loyolacollege.edu/library/profile
4	St. Xavier's College	Kolkata	West Bengal	4	https://www.sxccal.edu/central-library/
5	Ramakrishna Mission Vidyamandira	Howrah	West Bengal	5	http://vidyamandira.ac.in/
6	PSGR Krishnammal College for Women	Coimbatore	Tamil Nadu	6	https://www.psgkwc.ac.in/gr-govindarajulu-memorial-

					general-library/
7	Presidency College	Chennai	Tamil Nadu	7	https://www.presidencycollegechennai.ac.in/UI/DepartmentPage.aspx
8	St. Stephens's College	Delhi	Delhi	8	https://www.ststephens.edu/library/
9	Hindu College	Delhi	Delhi	9	https://hinducollege.ac.in/library.aspx
10	Shri Ram College of Commerce	Delhi	Delhi	10	https://www.srcc.edu/library
11	Sri Venkateswara College	Delhi	Delhi	11	http://www.svc.ac.in/SVC_MAIN/Library/library.php
12	Atma Ram Sanatan Dharm College	New Delhi	Delhi	12	https://www.arsdcollege.ac.in/index.php/aboutlibrary/
13	Deen Dayal Upadhyaya College	New Delhi	Delhi	13	https://dducollegedu.ac.in/Viewtopics.aspx?MenuId=jrb2AVpQN8XwbJkaIbXisQ==
14	Hans Raj College	Delhi	Delhi	14	https://www.hansrajcollege.ac.in/infrastructure/library
15	Rama Krishna Mission Vivekananda Centenary College	Rahara	West Bengal	15	https://rkmvccrahara.org/viwallist.aspx?pid=29
16	Gargi College	Delhi	Delhi	16	http://gargicollege.saraswati-lib.com/
17	Kirori Mal College	Delhi	Delhi	17	http://kmc.du.ac.in/college-library-2/
18	Madras Christian College	Chennai	Tamil Nadu	18	https://mcc.edu.in/library-2/
19	PSG College of Arts and Science	Coimbatore	Tamil Nadu	19	https://www.psgcas.ac.in/academics_library.html
20	Acharya Narendra Dev College	New Delhi	Delhi	20	https://www.andcollege.du.ac.in/infrastructure/library

(Source: <https://www.nirfindia.org/2021/CollegeRanking.html>)**Table 2: List of colleges and their library hyperlinks, domain age, domain registration date, domain authority and page authority.**

Sr. no.	NIRF ranking 2021 colleges	Library web page	Domain age	Domain Registration	Domain authority	Page authority
1	Miranda House	https://www.mirandahouse.ac.in/facilities/library.php	18 Years 3 Month 4 Days	28-02-2004 05:00	33	25
2	Lady Shri Ram College For Women	https://lsr.edu.in/students/facilities/library/	11 Years 7 Month 28 Days	04-10-2010 09:00	40	31
3	Loyola College	https://www.loyolacollege.edu/library/profile	24 Years 7 Month 9 Days	24-10-1997 00:00	40	27
4	St. Xavier's College	https://www.sxccal.edu/central-library/	23 Years 0 Month 20 Days	13-05-1999 00:00	36	32
5	Ramakrishna Mission Vidyamandira	http://vidyamandira.ac.in/	13 Years 0 Month 21 Days	11-05-2009 05:52	27	0
6	PSGR Krishnammal College for Women	https://www.psgkwcw.ac.in/gr-govindarajulu-memorial-general-library/	3 Years 6 Month 17 Days	15-11-2018 11:32	28	18
7	Presidency College	https://www.presidencycollegechennai.ac.in/UI/DepartmentPage.aspx	3 Years 9 Month 12 Days	20-08-2018 11:40	25	19
8	St. Stephens's College	https://www.ststephens.edu/library/	23 Years 7 Month 11 Days	1998-10-22 00:00:00	39	34
9	Hindu College	https://hinducollege.ac.in	6 Years 6	06-11-2015	34	22

		n/library.aspx	Month 26 Days	05:45		
10	Shri Ram College of Commerce	https://www.srcc.edu/library	23 Years 5 Month 17 Days	16-12-1998 00:00	39	30
11	Sri Venkateswara College	http://www.svc.ac.in/SVC_MAIN/Library/library.php	12 Years 8 Month 16 Days	16-09-2009 07:47	33	27
12	Atma Ram Sanatan Dharm College	https://www.arsdcollege.ac.in/index.php/aboutlibrary/	4 Years 10 Month 25 Days	07-07-2017 10:07	25	24
13	Deen Dayal Upadhyaya College	https://dducollegedu.ac.in/Viewtopics.aspx?MenuId=jrb2AVpQN8XwbJkaIbXisQ==	6 Years 0 Month 28 Days	04-05-2016 10:42	32	23
14	Hans Raj College	https://www.hansrajcollege.ac.in/infrastructure/library	5 Years 11 Month 19 Days	13-06-2016 05:34	33	25
15	Rama Krishna Mission Vivekananda Centenary College	https://rkmvccrahara.org/viewalllist.aspx?id=29	13 Years 0 Month 11 Days	21-05-2009 12:44	25	18
16	Gargi College	http://gargicollege.saraswatilib.com/	3 Years 7 Month 19 Days	13-10-2018 11:39	6	10
17	Kirori Mal College	http://kmc.du.ac.in/college-library-2/	18 Years 3 Month 4 Days	28-02-2004 05:00	60	33
18	Madras Christian College	https://mcc.edu.in/library-2/	17 Years 1 Month 28 Days	04-04-2005 10:20	34	30
19	PSG College of Arts and Science	https://www.psgcas.ac.in/academics_library.html	16 Years 9 Month 14 Days	18-08-2005 09:07	33	28
20	Acharya Narendra Dev College	https://www.andcollege.du.ac.in/infrastructure/library	18 Years 3 Month 4 Days	28-02-2004 05:00	60	33

Table 3: List of colleges and their library hyperlinks, internal links and external links, India Rank and Global Rank

Sr. no.	NIRF ranking 2021 colleges	Library web page	Total link	Internal links	External links	India Rank	Global Rank
1	Miranda House	https://www.mirandahouse.ac.in/facilities/library.php	177 (100%)	170 (96%)	7 (3.95%)	67361 (8)	368943 (9)
2	Lady Shri Ram College For Women	https://lsr.edu.in/students/facilities/library/	193 (100%)	143 (74%)	50 (25.9%)	46146 (6)	302520 (8)
3	Loyola College	https://www.loyolacollege.edu/library/profile	307 (100%)	300 (97.7%)	7 (2.28%)	36237 (5)	217640 (6)
4	St. Xavier's College	https://www.sxccal.edu/central-library/	177 (100%)	151 (85.3%)	26 (14.6%)	18006 (2)	170737 (3)
5	Ramakrishna Mission Vidyamandira	http://vidyamandira.ac.in/	0 (0%)	0 (0%)	0 (0%)	79773 (13)	561622 (13)
6	PSGR Krishnammal College for Women	https://www.psgrkwcw.ac.in/gr-govindarajulu-memorial-general-library/	188 (100%)	134 (71.2%)	54 (28.7%)	56064 (7)	526705 (12)
7	Presidency College	https://www.presidencycollegechennai.ac.in/UI/DepartmentPage.aspx	93 (100%)	92 (98.9%)	1 (1.07%)	N/A (17)	1037778 (17)
8	St. Stephens's College	https://www.ststephens.edu/library/	160 (100%)	153 (95.6%)	7 (4.37%)	20381 (3)	196814 (5)
9	Hindu College	https://hinducollege.ac.in/library.aspx	208 (100%)	187 (89.9%)	21 (10%)	67703 (9)	742279 (16)
10	Shri Ram College of Commerce	https://www.srcc.edu/library	205 (100%)	196 (95.6%)	9 (4.39%)	175027 (16)	177065 (4)
11	Sri Venkateswara College	http://www.svc.ac.in/SVC_MAIN/Library/library.php	220 (100%)	201 (91.3%)	19 (8.63%)	67972 (10)	493937 (11)
12	Atma Ram Sanatan Dharm College	https://www.arsdcollege.ac.in/index.php/about/library/	192 (100%)	167 (86.9%)	25 (13%)	77358 (12)	248291 (7)
13	Deen Dayal Upadhyaya College	https://dducollegedu.ac.in/Viewtopics.aspx?MenuId=jrb2AVpQN8XwbJkaIbXisQ==	259 (100%)	259 (100%)	0 (0%)	92712 (15)	398444 (10)
14	Hans Raj College	https://www.hansrajcollege.ac.in/infrastructure/library	189 (100%)	183 (96.8%)	6 (3.17%)	29501 (4)	163582 (2)
15	Rama Krishna Mission Vivekananda Centenary College	https://rkmvccrahara.org/viewalllist.aspx?id=29	112 (100%)	97 (86.6%)	15 (13.3%)	N/A (17)	2451465 (18)
16	Gargi College	http://gargicollege.saraswatilib.com/	49 (100%)	34 (69.3%)	15 (30.6%)	N/A (17)	7320975 (19)
17	Kirori Mal College	http://kmc.du.ac.in/college-library-2/	157 (100%)	144 (91.7%)	13 (8.28%)	515 (1)	5630 (1)
18	Madras Christian College	https://mcc.edu.in/library-2/	378 (100%)	371 (98.1%)	7 (1.85%)	86674 (14)	727966 (15)
19	PSG College of Arts and Science	https://www.psgcas.ac.in/academics_library.html	913 (100%)	193 (21.1%)	720 (78.8%)	75395 (11)	635524 (14)
20	Acharya Narendra Dev College	https://www.andcollege.edu.ac.in/infrastructure/library	178 (100%)	167 (93.8%)	11 (6.17%)	515 (1)	5630 (1)