CONTENT ANALYSIS OF LIBRARY WEBPAGES OF COLLEGES RANKED UNDER COLLEGE CATEGORY OF NIRF RANKING 2025

Sunil V. Narnaware
Research Scholar
DLISc. Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

Dr. Shashikant G. Rokade
Research Supervisor
DLISc. Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

Crossref DOI – https://doi.org/10.5281/zenodo.23364595

Abstract :

Academic library websites have become an important part of the digital environment of higher education. It provides students, teachers, researchers, and other users with information about library resources and services without requiring them to visit the library in person. Along with basic information about the library, these websites give access to online catalogues, electronic resources, institutional repositories, remote access facilities, and other digital services. The National Institutional Ranking Framework (NIRF), introduced by the MHRD, Government of India, evaluates higher education institutions using different academic and institutional parameters. In this study, the library websites of top ten colleges included in the NIRF India Rankings 2025 under the College category are examined through systematic content analysis. The study focuses on the availability and presentation of important library-related information. The findings indicate that Miranda House Delhi achieved the highest total score of 26 out of 47 (55.32%.) Miranda House Delhi had the most comprehensive library webpage content according to the selected indicators. Library websites should be treated as an important part of the library's digital services. For better user experience, colleges need to ensure that their library websites are easy to find and navigate, accessible to users, regularly updated, and provide complete and relevant information.

Keywords : Content analysis; Library webpages; College libraries; NIRF 2025; Web-based library services; Digital libraries; Academic libraries; India Rankings.

Introduction :

The growth of information and communication technology has brought several changes to academic libraries. Now libraries are not limited to printed books, journals, and services provided within the library building. Today, users can access online catalogues, e-journals, e-books, databases, institutional repositories, digital reference services, and other electronic resources from different locations. In this changing environment, the library website has become an important means of communication between the library and its users.

Through the website, students, teachers, researchers, and other users can find information about library collections, services, facilities, working hours, rules, staff, and digital resources. A well-organised library webpage can also make it easier for users to access electronic resources and obtain information without having to visit the library physically. Libraries can further use their websites to announce new services, activities, facilities, and other developments.

The National Institutional Ranking Framework (NIRF), introduced by the MHRD, Government of India, provides a framework for ranking higher education institutions in India.

Although library resources and services contribute to the academic environment of an institution, the NIRF ranking methodology does not specifically assess the quality or content of individual library webpages. Therefore, a study of the library webpages of highly ranked colleges can provide a different perspective on their online information services. It can show how these institutions present their library collections, facilities, electronic resources, services, and other useful information to their users through the web.

Background of the Study :

The NIRF 2025 College ranking shows that several Indian colleges have established strong positions in the national higher education system. The NIRF ranking is based on several institutional parameters and is intended to provide an overall assessment of the performance of colleges. However, the framework does not separately examine the design, content, usability, or information services provided through a college's library webpage. As a result, a high position in the NIRF ranking does not necessarily mean that the institution has an equally developed online library presence. Thus, an examination of the library webpages of colleges ranked under the NIRF 2025 College category is useful for understanding their online presence.

Review of Literature :

Academic libraries have shifted from being mainly physical spaces to offering both print and digital resources. Library websites now serve as the “virtual face” of an institution (Madhusudhan, 2008). These sites give users access to OPACs, digital repositories, e-journals, subject gateways, and information literacy guides. Research by Kaur and Rani (2008) showed that the usability, accessibility, and navigation of Indian academic library websites have a strong impact on user satisfaction. On a global scale, Clyde (2004) found that well-designed library websites boost visibility and outreach, which helps support research for faculty and students.

Researchers have used webometric methods to study library websites. For instance, Jeyshankar and Babu (2009) analyzed university library websites in Tamil Nadu by looking at their size, link structures, and visibility. Singh and Kumar (2015) examined IIT library websites and noticed clear differences in how visible their external links were and how many

digital resources they offered. Internationally, Vaughan and Thelwall (2003) used link-based metrics to measure institutional visibility and scholarly influence. Together, these studies show that webometric analysis can reveal the strengths and weaknesses of academic library websites.

Although NIRF does not specifically consider web presence in its rankings, some scholars believe that digital visibility and openness are closely linked to an institution's reputation (Aguillo, 2012; Arora & Agarwal, 2019). For example, Arora and Agarwal (2019) found that Indian universities with higher web visibility tend to rank better in global lists like QS and THE. Still, there are few studies that directly connect NIRF-ranked colleges with the webometric performance of their library websites, showing a clear gap in research.

Most existing studies focus on just one state or certain types of institutions (Jeyshankar & Babu, 2009; Singh & Kumar, 2015), so there is a lack of broad national comparisons. Since libraries are key sources of knowledge and digital resources, it is important to assess their online presence in a systematic way. This study aims to fill that gap by analyzing the library websites of the top ten NIRF College Category institutions for 2023 and 2024 using webometric methods.

Narnaware and Rokade (2022) conducted a webometric study of NIRF-listed college library webpages and examined characteristics including internal links, external links, total links and web impact-related indicators. Their study illustrates the importance of examining the web presence of college libraries associated with nationally ranked institutions.

Objectives of the Study :

The major objectives of the study are:

1. To examine the content of library webpages of colleges listed in the NIRF India Rankings 2025 under the College category.
2. To identify the major categories of information provided on college library webpages.

Scope of the Study :

The study is restricted to colleges appearing in the College category of NIRF India Rankings 2025. For a manageable and reproducible content-analysis study, the recommended primary sample is the top 10 colleges in the NIRF 2025 College ranking.

Methodology :

1. Research Design :

The study adopts a descriptive content-analysis method. Content analysis is appropriate because the objective is to systematically identify, classify and quantify the information and services presented on college library webpages. The unit of analysis is the

official library website or webpage or library section of the official college website.

2. Sample :

The recommended sample for the present study is the top 10 colleges in the NIRF 2025 College category.

Table 1: Top ten college website

Code	Name of College	**Library Website**
C1	Hindu College, Delhi	https://hinducollege.ac.in/library.aspx
C2	Miranda House, Delhi	https://www.mirandahouse.ac.in/library/aboutlibrary.php
C3	Hans Raj College, Delhi	https://www.hansrajcollege.ac.in/studentcorner/elibrary
C4	Kirori Mal College, Delhi	http://kmclibrary.saraswatilib.com/
C5	St. Stephen`s College, Delhi	https://www.ststephens.edu/library/
C6	Rama Krishna Mission Vivekananda Centenary College, Kolkata	https://www.rkmvccrahara.org/viewalllist.aspx?id=29
C7	Atma Ram Sanatan Dharm College, New Delhi	https://library.arsdcollege.ac.in/
C8	St. Xavier`s College, Kolkata	https://sxccal.edu/central-library
C9	PSGR Krishnammal College for Women, Coimbotore	https://www.psgrkcw.ac.in/department/department-of-library-and-information-sciences/
C10	PSG College of Arts and Science, Coimbotore	https://www.psgcas.ac.in/library/

Table: 2 General Library Information

College Code	**General Library Information**																			
	About Library/History	Vision & Mission	Objectives	Library Hours	Floor Plan	Library Sections	Library Rules	Library Services	Library Staff	Membership	Notifications/New &	Library Collection	Library Committee	FAQs	Annual Report	Photo Gallery	Visitor Counter	Feedback	Contact us	**Total Score (Max. 19)**
C1	✓							✓		✓							✓		✓	**5**
C2	✓			✓		✓	✓	✓	✓	✓			✓					✓	✓	**10**
C3				✓		✓	✓	✓	✓											**5**

C4	✓							✓	✓							✓				**4**
C5				✓		✓						✓								**3**
C6				✓																**1**
C7	✓			✓		✓	✓	✓	✓	✓	✓	✓						✓	✓	**11**
C8	✓			✓	✓		✓	✓	✓	✓		✓	✓			✓			✓	**11**
C9																				**0**
C10							✓	✓	✓			✓			✓				✓	**6**

Table 2 examines the availability of 19 general library information features on the library webpages. Each webpage could receive a maximum score of 19. The results show clear differences among the ten colleges. Atma Ram Sanatan Dharm College, New Delhi and St. Xavier`s College, Kolkata recorded the highest score, with 11 out of 19 features available on their library webpages. This shows that their webpages provided relatively more information about the library. Miranda House, Delhi followed with a score of 10. PSG College of Arts and Science, Coimbatore scored 6, while Hindu College, Delhi and Hansraj College each scored 5. Kirorimal College Delhi had 4 features and St. Stephen`s College, Delhi had only 3. Rama Krishna Mission Vivekananda Centenary College, Kolkata provided just one of the 19 features examined. In the case of PSGR Krishnammal College for Women, Coimbatore, none of the selected general library information features were found, resulting in a score of zero.

Table 3: Library Services offered by the NIRF ranked college libraries

College Code	**Library Services**																							**Total Score (Max. 24)**
	OPAC/Web OPAC	Reference Service	Reprographic Service	Bibliographic service	Book Lending Service	Reading Room	Ask a Librarian	Document Delivery	CAS Service	SDI Services	New Arrival	ILL	Internet access service	Orientation/User	Citation Style guide	Information Literacy	Research Tools	Plagiarism	Web search	News Paper Clipping	Institutional Repository	Remote Access Service	Book Recommendation	Other Services	
C1	✓	✓	✓								✓		✓										✓		**6**
C2	✓	✓			✓	✓	✓		✓			✓	✓	✓		✓		✓				✓		✓	**13**
C3	✓	✓			✓	✓			✓		✓													✓	**7**
C4							✓				✓											✓		✓	**4**
C5						✓															✓				**2**
C6																									**0**
C7	✓	✓			✓	✓												✓			✓	✓		✓	**8**
C8	✓		✓		✓					✓							✓	✓			✓	✓		✓	**9**
C9																									**0**

C10	✓																							**0**

Table 3 presents the availability of 24 different library service features, with a maximum possible score of 24. The services considered in this table include OPAC/Web OPAC, reference service, reprographic service, bibliographic service, book lending, reading room facilities, Ask a Librarian, document delivery, CAS, SDI, new arrivals, ILL, internet access, user orientation and education, citation style guide, information literacy, research tools, plagiarism-related services, web search, newspaper clipping, institutional repository, remote access, book recommendation and other library services.

Among the ten colleges studied, Miranda House, Delhi received the highest score of 13 out of 24. This shows that its library webpage provided information about a comparatively larger number of library services. St. Xavier`s College, Kolkata scored 9, followed by Atma Ram Sanatan Dharm College, New Delhi with 8 points. Hans Raj College, Delhi obtained 7 points, while Hindu College Delhi scored 6 points. Kirori Mal College, Delhi showed 4 services, whereas only 2 services were identified for St. Stephen`s College, Delhi, Rama Krishna Mission Vivekananda Centenary College, Kolkata, PSGR Krishnammal College for Women, Coimbatore and PSG College of Arts and Science, Coimbatore received a score of zero in this category. This means that none of the selected library service features could be identified on their respective webpages based on the criteria used in the study.

Table 4 Currency, Accuracy, and Relevance of Library Websites

College Code	Currency, Accuracy, and Relevance of Library Websites				
	Indication of Last updated/revision	Official Logo of the College	Free from Grammatical or Spelling Errors	No Dead Hyperlinks/Empty Link	**Total Score (Max. 4)**
C1	0	✓	✓	✓	**3 (75%)**
C2	0	✓	✓	✓	**3 (75%)**
C3	0	✓	✓	0	**2 (50%)**
C4	0	✓	✓	0	**2 (50%)**
C5	0	✓	0	0	**1 (25%)**
C6	0	✓	✓	0	**2 (50%)**
C7	0	✓	✓	0	**2 (50%)**
C8	0	✓	✓	0	**2 (50%)**

C9	0	✓	✓	0	**2 (50%)**
C10	0	✓	✓	0	**2 (50%)**

Table 4 shows four aspects of website quality: indication of last update/revision, official college logo, freedom from grammatical or spelling errors, and absence of dead hyperlinks/empty links. The maximum score is 4. Hindu College and Mirana House obtained the highest scores, 3 out of 4 (75%). Hans Raj College, Delhi and Kirori Mal College, Delhi obtained 2 out of 4 (50%). St. Stephen`s College, Delhi obtained only 1 out of 4 (25%).

Rama Krishna Mission Vivekananda Centenary College, Kolkata, Atma Ram Sanatan Dharm College, New Delhi, St. Xavier`s College, Kolkata, PSGR Krishnammal College for Women, Coimbotore and PSG College of Arts and Science, Coimbotore each obtained 2 out of 4 (50%). The results show that none of the ten colleges achieved the maximum score of 4. Therefore, none of the assessed library webpages completely satisfied all four criteria of currency, accuracy and relevance. Hindu College and Miranda House Delhi performed comparatively better than other colleges.

Table 5: Total Score of Content Analysis of Library website / webpages of NIRF Ranked Colleges

Rank based on total score	College	General Information	Library Services	Currency/ Accuracy/ Relevance	Total	Percentage
1	C2	10	13	3	26	55.32%
2	C8	11	9	2	22	46.81%
3	C7	11	8	2	21	44.68%
4	C1	5	6	3	14	29.79%
4	C3	5	7	2	14	29.79%
6	C4	4	4	2	10	21.28%
7	C10	6	0	2	8	17.02%
8	C5	3	2	1	6	12.76%
9	C6	1	0	2	3	6.38%
10	C9	0	0	2	2	4.25%

The overall results show that Miranda House Delhi achieved the highest total score of 26 out of 47 (55.32%.) Miranda House Delhi had the most comprehensive library webpage content according to the selected indicators. St. Xavier`s College, Kolkata ranked second with 22 points (46.81%), followed by Atma Ram Sanatan Dharm College, New Delhi with 21 points (44.68%). Hindu College and Hans Raj College, Delhi both obtained 14 points (29.79%). C4 Kirori Mal College, Delhi obtained 10 points (21.28%), while PSG College of Arts and Science, Coimbatore obtained 8 points (17.02%). The lowest scores were recorded by C5, C6 and C9. C5 obtained 6 points (12.76%), C6 obtained 3 points (6.38%), and C9 obtained only 2 points (4.25%).

Overall finding :

- The analysis shows that the library webpages of the selected NIRF-ranked colleges differed considerably in the amount and type of information they provided. The highest overall score was 26 out of 47, which is 55.32%. This means that even the college with the highest score covered only a little more than half of the content indicators included in the study.
- The greatest difference was found in the Library Services category. Miranda House (C2) performed better than the other colleges, with 13 services identified on its library webpage.
- The table-wise analysis suggests that the selected library webpages need further improvement. In particular, colleges need to provide more complete information about their libraries and present library services in a clear and user-friendly manner.
- The webpages of some leading NIRF-ranked colleges are gradually moving beyond the traditional role of providing basic library information.
- At the same time, the structure and presentation of information are not the same across all the colleges. Some library webpages provide detailed information about the OPAC, electronic resources and different services, while others provide only a brief description of the library as part of the main college website.
- Miranda House provides a relatively detailed example of library web presentation. Its library website provides separate information about collections, services, staff, electronic resources, support facilities and contact details. Hans Raj College also provides a separate e-Library section, where users can find information about library sections, services, staff, rules and regulations, as well as the technological facilities available in the library.

Suggestions :

Based on the content-analysis framework, the following suggestions are made:

- Every NIRF-ranked college should maintain a clearly identifiable library portal rather than placing only a short library description on the institutional website.
- A prominent OPAC/Web-OPAC link should be displayed on the library homepage.
- E-books, e-journals, databases, N-LIST, e-ShodhSindhu and open-access resources should be systematically organised.
- Where remote access is available, the webpage should clearly explain eligibility, authentication and access procedures.
- Library webpages should clearly describe services such as plagiarism detection, reference management etc.
- Opening hours, staff names, databases, links and service descriptions should be reviewed regularly.
- FAQs, information-literacy programmes, and video demonstrations can make the library webpage more useful for students.

- A feedback form, Ask-a-Librarian service or direct library email should be clearly visible.
- Library webpages should be mobile-friendly, easy to navigate and accessible to users with different abilities.

Conclusion :

The library webpage can serve as a useful platform for informing students, teachers and researchers about the resources and services available through the library. An initial review of some leading colleges shows that their library webpages provide a wide range of information and online facilities. These include OPACs, electronic resources, remote access to library resources, information-literacy activities, accessibility facilities and support for research. Miranda House is a good example, as its library webpage provides information about library services, e-resources, remote access, OPAC facilities, accessibility and support for users. Hans Raj College also provides information about its e-library facilities, technology-based services, electronic resources and accessibility provisions. These examples show that a well-developed library webpage can make it easier for users to understand and access library resources and services. The findings of the study suggest that the digital presence of a library should be treated as an important part of modern library service. A clear and common framework for presenting information about collections, services, OPAC, electronic resources, remote access, accessibility, user education, research support and communication would help colleges make their library webpages more useful and user-friendly. Further research can include all 100 colleges listed in the NIRF 2025 College ranking. Future studies can also go beyond content analysis by including usability testing, webometric measures, accessibility evaluation and user-satisfaction surveys. Combining these methods would provide a broader understanding of how effectively college libraries are using their webpages to support students, teachers and researchers.

References :

- Aguillo, I. F. (2012). Is Google Scholar useful for bibliometrics? A webometric analysis. *Scientometrics, 91*(2), 343–351. https://doi.org/10.1007/s11192-011-0582-8. Accessed on 20/08/2026
- Aguillo, I. F., Ortega, J. L., Prieto, J. A., & Granadino, B. (2006). Indicators for a webometric ranking of open access repositories. *Scientometrics, 66*(3), 477–484. https://doi.org/10.1007/s11192-006-0038-4. Accessed on 20/08/2026
- Ali, K. S., Shah, G. J., Mamdapur, G. M. N., & Khan, K. M. (2018). Web-based library and information services in the libraries of the institutions of national importance in India: A study with reference to Karnataka, Kerala and Tamil Nadu. *Indian Journal of Information Sources and Services, 8*(3). https://doi.org/10.51983/ijiss.2018.8.3.550.
- Almind, T. C., & Ingwersen, P. (1997). Informetric analyses on the World Wide Web: Methodological approaches to "webometrics." *Journal of Documentation, 53*(4), 404–

426. https://doi.org/10.1108/EUM0000000007205. Accessed on 21/08/2026

- Arora, J., & Agarwal, N. (2019). Web presence and visibility of Indian universities: A study of world university rankings. *DESIDOC Journal of Library & Information Technology, 39*(4), 181–186. https://doi.org/10.14429/djlit.39.4.14004. Accessed on 20/08/2026
- Arunkumar, V. R. (2017). Websites of the leading academic libraries in India: An analytical study. *Library Progress (International), 37*(2), 285–295. https://doi.org/10.5958/2320-317X.2017.00028.
- Clyde, L. A. (2004). Weblogs and library services. *Library Management, 25*(4/5), 183–189. https://doi.org/10.1108/01435120410533756. Accessed on 22/08/2026
- Jeyshankar, R., & Babu, B. R. (2009). Websites of universities in Tamil Nadu: A webometric study. *Annals of Library and Information Studies, 56*(2), 69–79. http://nopr.niscair.res.in/handle/123456789/4364. Accessed on 21/08/2026
- Kaur, A., & Rani, S. (2008). Evaluating the quality of library websites in India. *Library Hi Tech, 26*(4), 583–594. https://doi.org/10.1108/07378830810920906. Accessed on 21/08/2026
- Madhu, S., & Kannappanavar, B. U. (2026). Virtual presence of academic libraries: A content analysis of library websites/webpages of Western-Zone NIRF (2024) ranked pharmacy institutions of India. *Pearl: A Journal of Library and Information Science, 19*(4), 277–290. https://doi.org/10.5958/0975-6922.2025.00030.6.
- Madhusudhan, M. (2008). A study of the use of electronic resources by research scholars at Kurukshetra University. *Library Philosophy and Practice, 2008*(January), 1–12. https://digitalcommons.unl.edu/libphilprac/179. Accessed on 1/08/2026
- Ministry of Education, Government of India. (2025). *India Rankings 2025: College*. National Institutional Ranking Framework. NIRF India Rankings 2025 – College Category
- Narnaware, S. V., & Rokade, S. (2022). Webometric study of National Institutional Ranking Framework (NIRF) listed college website with special reference to library web pages.
- Narnaware, S. V., & Rokade, S. (2024). A webometric study of NIRF India Ranking 2023 top 20 college library webpages ranked under college category.
- National Institutional Ranking Framework. (2025). Discipline-wise methodology for India Rankings 2025. Ministry of Education, Government of India.
- Shukla, A., & Tripathi, A. (2010). Establishing content awareness evaluation criteria for library websites: A case study of Indian academic library websites. *Annals of Library and Information Studies, 57*, 403–416.
- Singh, J., & Kumar, A. (2015). Webometric analysis of IIT libraries' websites: A study. *Library Progress (International), 35*(2), 207–217. https://doi.org/10.5958/2320-317X.2015.00015.6. Accessed on 22/08/2026
- Usha, S. S., & Biradar, B. S. (2024). Digital footprints of academic libraries: A content analysis of Government first grade colleges library websites in Karnataka state. *Pearl: A Journal of Library and Information Science, 18*(3). https://doi.org/10.5958/0975-6922.2024.00017.1.

- Vaughan, L., & Thelwall, M. (2003). Scholarly use of the Web: What are the key inducers of links to journal web sites? *Journal of the American Society for Information Science and Technology, 54*(1), 29–38. https://doi.org/10.1002/asi.10184. Accessed on 21/08/2026