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EVALUATION OF WEB CONTENT TECHNOLOGIES IN LIBRARIES OF SELECTED INSTITUTIONS OF NATIONAL IMPORTANCE IN INDIA

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ABSTRACT

"This study focused on Evaluation of web content selected National Institute of Importance Libraries in India. This study based on Including the three aspects, every aspect consists of various elements examined based on the information on the library website. The General information, Library Collection and Library feature that IIT Delhi library scored 7 out of 8, after the data analysis evaluates the various feature of the website and webpages of selected libraries with the selected criteria. The website has found to get updated. All the selected Institution have a proper library webpage. This study finds out that IIT Delhi library web content and advance technology using in own services. School of Architecture and Planning Delhi website some features are not available Keyword Search (70%) is the most commonly available feature, ensuring efficient resource discovery. Registration/Login, Download Forms, Feedback, and Layout (each at 30%) are moderately implemented, indicating a focus on accessibility and user interaction, though not universally adopted. However, Navigation (10%) and Direct Links (20%) have limited presence, suggesting potential difficulties in website usability. Notably, Social Networking 20%."

Keywords: Library Website, Content Analysis, Library Services, Library Automation, NIT Libraries, National Importance Institution

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1. INTRODUCTION

A website is a collection of web pages and related content identified by a common domain name and published on at least one web server. Websites like news, education, commerce, entertainment or social networking are typically dedicated to a particular topic or purpose. Hyperlinking between web pages guides the site's navigation, often starting a website's home page. In December 2022, an analysis of the most visited websites in the world after the investigation found that Google, YouTube, Facebook, Twitter and Instagram were the most visited websites worldwide.

The Content analysis methods use the collected content data of any website like pages, homepage, service, website section, maps, a website feature, etc. These techniques use systematic and Quantitative descriptions in Valuable form. In this study, the content analysis of the library.

2. LITERATURE REVIEW

The significant studies which evaluated the library websites are discussed.

Aharony (2012) demonstrated the changes in American academic libraries' websites from 2000 to 2010. The findings observed the major transformation in the academic libraries' websites in 10 years about using graphics, e-journals, feedback links, site search, live chats, frequently asked questions (FAQs), OPAC, and Web 2.0 tools.

Vasishta (2013) evaluated the websites of technical university libraries to assess how libraries were utilising websites for providing access to electronic journals. The author found that most of the libraries' websites were at the nascent stage and had simple structures and designs. Websites need to be adequately utilised for disseminating electronic journal information.

Ganaee and Rafiq (2016) studied the 85 library Websites of Pakistani universities based on specific categories such as navigation, website aid and tools, appearance, authority and currency, languages, library building, general library information, information on different library sections, value-added services and OPAC. The author pointed out the scope of improvement related to providing information about library services and resources to users by raising the visibility of existing library websites, developing interactive, modern, mobile-friendly websites, and regularly adding and updating the content on the website.

Another study by Gayan and Das S. (2017) explored the websites of national libraries of the South Asian region based on specific criteria, which covered 64 item checklists such as design, domain, CAS, search criteria, authority, general information, query, page rank and resource information. The study found that all the national universities had library websites; however, libraries still need to cope with the emerging web technologies to serve users better. Gupta and Walia (2017) conducted a webometrics study to analyse the structure of European national library websites using the checkpoint method. The Google search engine and Check PageRank tool were used to collect webometrics data. The study reported that most European national libraries had a good web presence with many web pages, in-links, rich content files, and a user-friendly structure.

Sahoo and Panda (2019) investigated the websites of the IIT library by developing a checklist of 100 items under seven main categories, which were accessibility, navigation and links, authority and currency, general library information, user support and resource discovery tools, library services section and web 2.0 tools. They found that all the IIT libraries still needed to fulfil the evaluation criteria. 16 % of libraries scored less than 50 items. The library organisational chart was not found on any IIT library websites.

Rahman and Sadik Batcha (2020) was conducted on the library websites of the colleges affiliated with the University of Delhi based on the accessibility, accuracy, currency, user-friendliness and services and facilities using a structured checklist. The author reported that most libraries mentioned information about the introduction, library staff, library hours and membership on their websites. However, none of the library websites had features of social networking tools, feedback and regular updates.

Yadav and Mishra (2021) studied accessibility, efficiency, and effectiveness by conducting a content analysis of the websites of the Indian Institutes of Science Education and Research (IISERs) libraries. The study revealed that websites could have performed better in usability characteristics; most were very basic and easily explained. The authors given the advice that content analysis is an essential tool for the improve usability ranking and helping to create new updates and attractive website

3. OBJECTIVES OF STUDY

Following is main Objective of this study.

1) The explore the library services, Function and Facilities showing on website.
2) Find out the Website accuracy, accessibility and feed
3) Find out the feature of Library website
4) Examine the Ranking of Libraries website
5) Find out the service and Function of selected library.

4. SCOPE

The present study only covers the library website of the selected Content Analysis of National Importance Institute Delhi NCR. This data was taken from data on 1/3/2024.

5. RESEARCH METHODOLOGY

This study is based on the review of Primary and secondary literature, which includes books, Journals, Documents, and seminar papers, as well as a few good websites and articles that were accessed to prepare a checklist of analysis of the website of those Selected Institute of India. The checklist was prepared mainly based on earlier studies (Hugar, 2019; Khatari & Beheti, 2013; kumar Mir, 2017; Mohamed Hannfa & Jiji, 2019; Sahoo & Panda, 2019; Vasishta, 2013). The methodology uses the collected data searching concern website and homepage and calculated to rank the college library website under this study; first upon a total number of library website. Selected and used Quantitative research in a compressive checklist was implemented. Including the three aspects, every aspect consists of various elements examined based on the information on the library website. And Questioner based to selected intuitions

Following are the main three aspects or categories of the checklist in this study

1) The General information
2) Library Collection
3) Library feature

6. DATA ANALYSIS AND INTERPRETATION

This study is based on the review of Primary and secondary literature, which includes books, Journals, Documents, and seminar papers, as well as a few good websites and articles that were accessed to prepare a checklist of analysis of the website of those Selected Institute of India. The checklist was prepared mainly based on earlier studies (Hugar, 2019; Khatari & Beheti, 2013; kumar Mir, 2017; Mohamed Hannfa & Jiji, 2019; Sahoo & Panda, 2019; Vasishta, 2013). The methodology uses the collected data searching concern website and homepage and calculated to rank the college library website under this study; first upon a total number of library website. Selected and used Quantitative research in a compressive checklist was implemented. Including the three aspects, every aspect consists of various elements examined based on the information on the library website.

Following are the main three aspects or categories of the checklist in this study

1) The General information
2) Library Collection
3) Library feature

Table 6.1 explore the college name, website, Abbreviations, year of establishment and Library Website of Institute of India.

No.	Name	Abbreviation	Founded	Location	Library Website
1	All India Institute of Medical Sciences	AIIMS	1956	New Delhi	https://www.aiims.edu/aiims/library/library.htm
2	Indian Institute of Technology	IIT	1961	New Delhi	https://library.iitd.ac.in/
3	Indian Institute of Management	IIM	2015	Amritsar	https://iimamritsar.ac.in/the-institute/library
4	School of Planning and Architecture	SPA	1941	New Delhi	http://spa.ac.in/User_Panel/UserView.aspx?TypeID=1501
5	National Institute of Technology	NIT	2010	New Delhi	https://nitdelhi.ac.in/?page_id=12031

6.2. GENERAL INFORMATION ABOUT THE LIBRARY

The general information about the library is most important for any library website. The table below uses the 17 parameters of analysis of the library website of the selected National importance institutions of India.

General Information	AIIMS	NIT Delhi	SPA	IIT	IIM	Out of 100(%)
Introduction	Yes	Yes	Yes	Yes	Yes	100
Mission/Vision	Yes	Yes	No	Yes	No	60
Library Hours	Yes	Yes	No	Yes	No	60
Library Rules	Yes	Yes	No	Yes	Yes	80
Membership	Yes	Yes	Yes	Yes	No	100
Service	Yes	Yes	Yes	Yes	No	100
Collection	Yes	Yes	Yes	Yes	Yes	100
Infrastructure	Yes	No	No	No	No	60
Library Staff	Yes	Yes	No	Yes	Yes	80
Library Sections	Yes	No	No	Yes	No	20
Statistics	No	No	No	No	No	20
New Arrivals	No	Yes	No	Yes	Yes	40
Differently abled section	No	No	No	No	No	20
Book bank	No	No	No	No	No	00
Photocopy	Yes	Yes	Yes	No	No	60
RFID	No	Yes	No	Yes	No	40
Maps	No	No	No	No	No	20
Total 17	11	11	05	12	05	

The analysis of general library information across institutions reveals significant disparities in the availability of key details. Introduction, Membership, Service, and Collection details are universally provided across all institutions, ensuring comprehensive access to fundamental library information. However, aspects like Mission/Vision, Library Hours, Library Rules, and Library Staff vary, with only around 60–80% coverage, indicating room for improvement in standardization. Notably, essential services such as Library Sections, Statistics, Differently Abled Sections, Book Banks, and Maps are largely absent, with coverage as low as 20% or even 0% in some cases. Additionally, modern technologies like RFID and Photocopying are inconsistently available. The data suggests a need for better uniformity in library information and services, particularly in areas that enhance accessibility and technological integration.

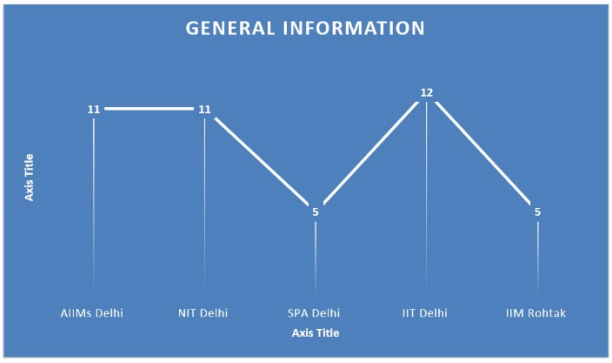


Figure 5.1 General Information about the Library

6.3. LIBRARY RESOURCE AND SERVICE

The library website plays a significant role in the digital world. The effective tool to access electronic resources. This section provides information about different kinds of e-resources and their links. The e-resource consists of e-books, E-data base service online resources.

Resource and Services	AIIMS	NIT	SPA	IIT	IIM	Out of 100(%)
OPAC	Yes	Yes	No	Yes	Yes	95(100)
E-Database	Yes	Yes	No	Yes	Yes	100
FAQ's	No	Yes	Yes	Yes	No	60
User Manual	Yes	Yes	No	No	Yes	20
Remote access	No	No	No	Yes	Yes	40
Question paper	No	No	No	Yes	No	20
N-List	No	Yes	No	Yes	No	40
Delnet	No	Yes	No	Yes	Yes	60
Ask a Librarian	Yes	Yes	Yes	Yes	Yes	100
Photo Video	Yes	Yes	No	Yes	No	60
Total Score (10)	5	7	2	9	6	

Table 6.3 explains the details of various library facilities and services given by the library website of Institution most libraries under study are e-journals. Further analysis of the data shows that most of the Institute websites should have listed specific information through their website. Only 20% of libraries have information related to the user manual, question papers, newspaper Clipping services, and other OPAC services all Libraries are available on the website. The E-database is available in 10 out of 10 Institutes on the website. The total score is 10 out of 10; the maximum features of resources and services are available in IIT Delhi.

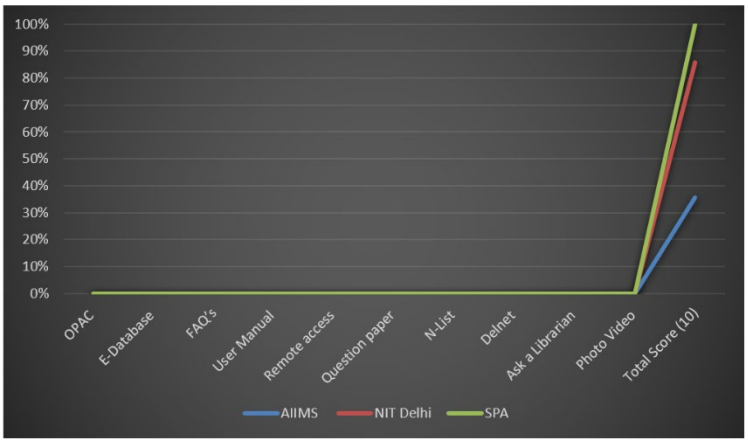


Figure 5.2 Library resource and Service

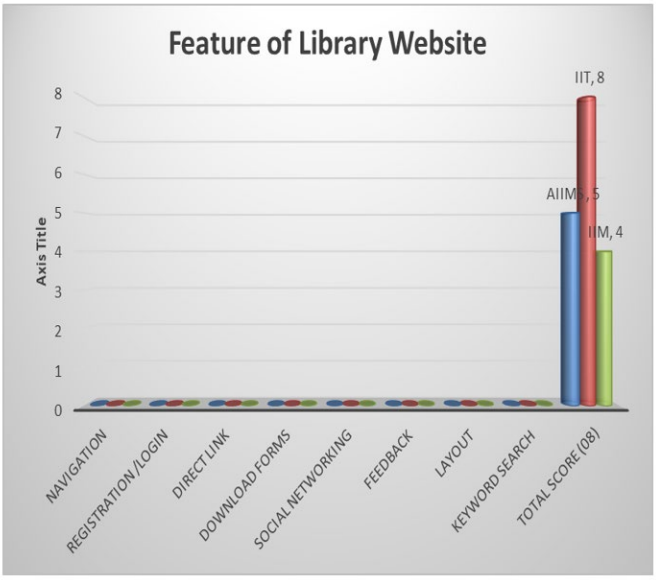
6.4. FEATURE OF LIBRARY WEBSITE

The feature of library website the many types of features line

Feature	AIIMS	IIT	IIM	SPA	NIT	Out of 100 (%)
Navigation	**Yes**	**Yes**	**No**	**Yes**	**Yes**	**10**
Registration / Login	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**30**
Direct Link	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**20**
Download Forms	**No**	**Yes**	**Yes**	**Yes**	**Yes**	**30**
Social Networking	**No**	**Yes**	**No**	**No**	**No**	**20**
Feedback	**No**	**Yes**	**No**	**Yes**	**Yes**	**30**

Layout	**Yes**	**Yes**	**No**	**No**	**Yes**	**30**
Keyword Search	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**70**
Total Score (out of 8)	**5**	**8**	**4**	**3**	**7**	

The analysis of library website features across institutions highlights significant gaps in functionality and user engagement. Keyword Search (70%) is the most commonly available feature, ensuring efficient resource discovery. Registration/Login, Download Forms, Feedback, and Layout (each at 30%) are moderately implemented, indicating a focus on accessibility and user interaction, though not universally adopted. However, Navigation (10%) and Direct Links (20%) have limited presence, suggesting potential difficulties in website usability. Notably, Social Networking (20%) is largely absent, reflecting a lack of integration with modern communication platforms. The overall variation in scores indicates inconsistencies in digital library services, with some institutions excelling while others lag behind in providing essential online features.



6.5. RANKING WISE FEATURE OF NATIONAL INSTITUTE OF IMPORTANCE

Particulars	IIT Delhi	NIT	AIIMS	IIMS	SPA
General Information Max score (17)	12	11	11	05	05
Resource and Service (10)	09	07	05	04	02
Feature Total Score (08)	08	07	05	4	03
Total 35	29	25	21	13	10
Rank wise	1st	2nd	3rd	4th	5th

The ranking of library services across institutions reveals significant disparities in the availability of general information, resources & services, and features. IIT Delhi ranks 1st with the highest total score (35), indicating a well-developed library system with comprehensive information, services, and digital features. NIT follows in 2nd place (29), showing strong performance but with some gaps. AIIMS (25) and IIMs (21) rank 3rd and 4th, respectively, suggesting moderate access to resources and digital services. SPA, ranking last (5th) with a score of 13, has the most limited library offerings across all categories. The results highlight the need for improvements, particularly in lower-ranked institutions, to enhance library accessibility, digital integration, and resource availability.

6.6. WEBPAGES OF LIBRARY WEBSITE

Sr. No.	Name of	Website
1	All India Institute of Medical Sciences, New Delhi	
2	Indian Institute of Technology Delhi	
3	Indian Institute of Management Amritsar	
4	National Institute of Technology Delhi	
5	School of Planning and Architecture (SPA) New Delhi	

Table 6.7 Where do you usually use the Internet?

Sl. No	Particular	Never	Occasionally	Moderately	Frequently	Always
1	Home	7.38%	17.30%	14.75%	24.59%	35.98%
2	Cybercafé	14.10%	20.49%	29.13%	15.79%	20.49%
3	Office/Work place/Dept.	15.00%	20.49%	13.93%	24.58%	26.00%
4	Others (Please specify)	8.00%	17.49%	22.52%	31.00%	20.99%

The survey data reveals that home is the most preferred location for internet use, with a significant 35.98% of respondents using it "Always" and 24.59% "Frequently," indicating strong reliance on home internet access. Cyber cafés, while still used, show a more moderate usage pattern, with the highest percentage (29.13%) in the "Moderately" category and lower percentages for "Always" and "Frequently" use, suggesting they are secondary options. Offices or workplaces also show notable usage, with a combined 50.58% indicating "Frequently" or "Always," highlighting their importance for professional or academic internet access. The "Others" category, which might include libraries or mobile devices, reflects a fairly balanced distribution, with 31% using these sources "Frequently" and 20.99% "Always." Overall, the data suggests that while home remains the dominant location for consistent internet access, workplaces and alternative sources also play key roles in meeting users' connectivity needs.

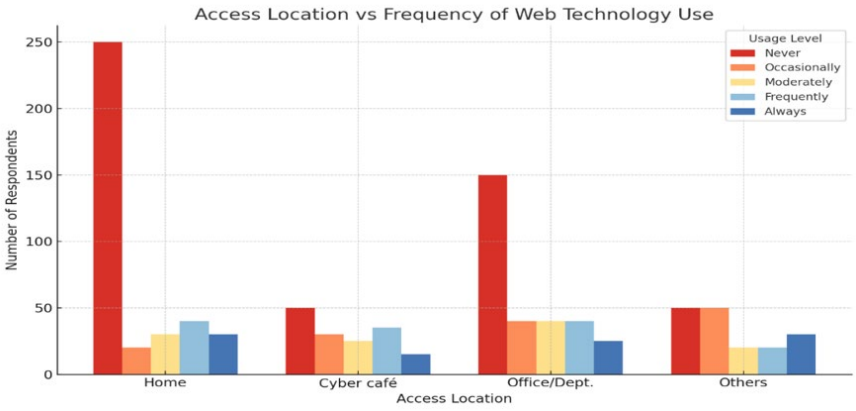


Figure 5.6 Use the Internet

Table 6.8 With what device do you use the internet?

Sl. No	Particular	Never	Occasionally	Moderately	Frequently	Always
1	Desktop	7.38%	12.30%	14.75%	24.59%	40.98%
2	Laptop/Notebook	1.10%	23.49%	22.13%	32.79%	20.49%
3	Mobile	2.10%	10.49%	13.93%	26.59%	46.89%
4	Tablet	4.10%	20.49%	22.13%	32.79%	20.49%

The data indicates that mobile phones are the most frequently used device for internet access, with 46.89% of respondents indicating they "Always" use them and 26.59% "Frequently," reflecting the widespread accessibility and convenience of mobile devices. Desktops also show strong usage, with 40.98% "Always" and 24.59% "Frequently" using them, suggesting their continued relevance, possibly in workplaces or fixed settings. Laptops and tablets present a more moderate usage pattern; for both, around one-third of respondents use them "Frequently," but fewer indicate "Always" use (20.49% each), implying they serve as secondary or situational devices. Interestingly, the lowest "Never" usage was reported for laptops (1.10%), indicating broad access, even if not constant. Overall, the trend underscores a shift toward mobile internet access while maintaining significant use of desktops and laptops in more stable environments.

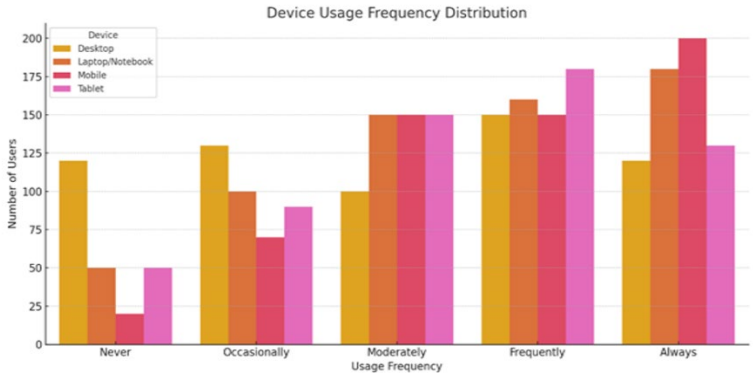


Table 6.9 Dependent on the internet

Sl. No	Particular	Never	Occasionally	Moderatel y	Frequentl y	Alway s
1	Desktop	7.38%	12.30%	14.75%	24.59%	40.98 %
2	Laptop/Noteb ook	2.10%	22.49%	22.13%	32.79%	20.49 %

3	Mobile	4.50%	20.89%	13.93%	24.59%	36.89 %
4	Tablet	3.10%	21.49%	22.13%	32.79%	20.49 %

The data reflects varied preferences in device usage for internet access. Desktops show the highest "Always" usage at 40.98%, indicating that they remain a primary tool for consistent access, likely in fixed locations such as homes or offices. Mobile phones follow closely with 36.89% "Always" and 24.59% "Frequently," highlighting their strong presence due to portability and ease of use. Laptops and tablets have similar usage patterns, with a notable percentage (32.79%) of respondents using them "Frequently," though fewer rely on them "Always" (20.49% each). The slightly higher "Never" and "Occasionally" responses for laptops and tablets suggest they are more supplementary tools rather than primary access devices for many users. Overall, while desktops and mobiles dominate in consistent use, laptops and tablets serve as flexible alternatives dependi users' needs and contexts.

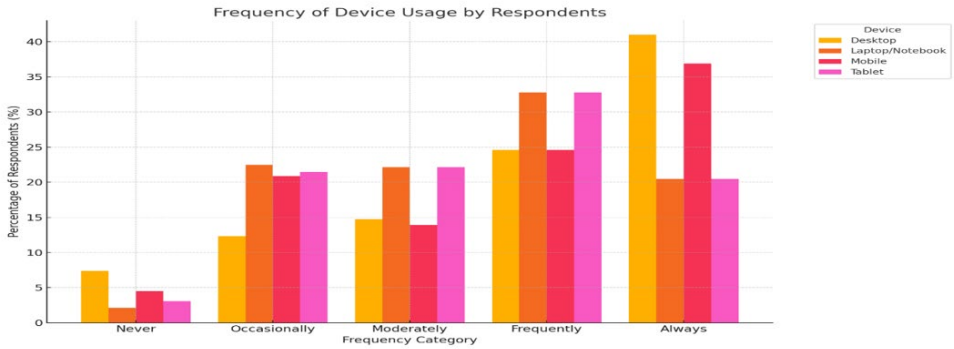


Table 6.10 Web Technology technologies/tools?

Sl. No	Particular	Never	Occasionally	Moderately	Frequently	Always
1	Desktop	7.38%	12.30%	14.75%	24.59%	40.98%
2	Laptop/Notebook	4.10%	20.49%	22.13%	32.79%	20.49%
3	Mobile	2.10%	22.49%	13.93%	24.59%	36.89%
4	Tablet	4.50%	20.89%	22.13%	32.79%	20.49%

The data shows a clear preference for desktop and mobile devices for consistent internet access. Desktops are the most frequently used, with 40.98% of users selecting "Always" and 24.59% "Frequently," indicating a strong reliance, possibly for work or study in fixed settings. Mobile phones follow, with 36.89% "Always" and 24.59% "Frequently," underscoring their popularity due to portability and widespread availability. Laptops and tablets exhibit similar patterns, each with 32.79% "Frequently" usage and 20.49% "Always," suggesting they are commonly used but not the primary devices for all users. Notably, the higher "Occasionally" and "Moderately" responses for laptops and tablets imply more situational or secondary usage. Overall, while desktops and mobiles lead in regular internet access, laptops and tablets play a supportive yet significant role.

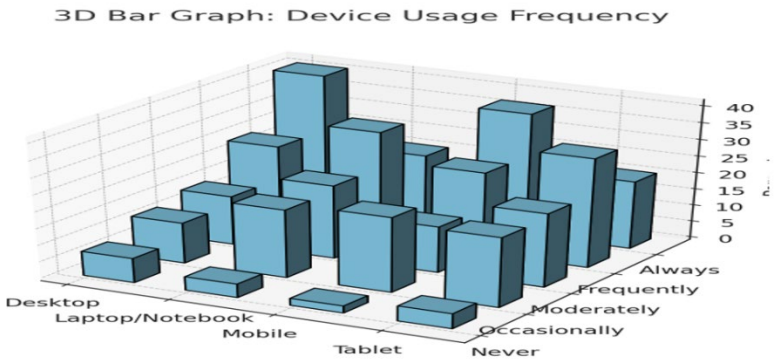


Table 6. 11 Which Web Technology tools are you aware of? Whether you use or not please rate the degree of awareness.

S. No.	Name of Web Technology Tool	Not at all aware	Slightly aware	Moderately aware	Very aware	Extremely aware
1	Blogs	3.38%	16.30%	14.75%	24.59%	40.98%
2	Wikis	9.10%	15.49%	24.13%	30.79%	20.49%
3	Instant Messaging	3.10%	21.49%	13.93%	24.59%	36.89%
4	RSS Feeds	5.10%	20.49%	23.13%	30.79%	22.49%
5	Social Networking Sites	7.38%	12.30%	14.75%	24.59%	40.98%
6	Podcasts	4.10%	20.49%	22.13%	32.79%	20.49%
7	Tagging	4.30%	20.69%	13.93%	24.59%	36.89%
8	Mashup	7.38%	12.30%	14.75%	24.59%	40.98%
9	Federated Search	4.10%	20.49%	22.13%	32.79%	20.49%
10	Other	4.10%	20.49%	13.93%	24.59%	36.89%

The data presents varying levels of awareness regarding different web technology tools. Blogs, Social Networking Sites, and Mashups show the highest levels of awareness, with 40.98% of respondents being "Extremely aware" and around a quarter "Very aware," indicating widespread familiarity and usage. Instant Messaging, Tagging, and Other tools also show strong awareness, with over 60% of respondents indicating either "Very aware" or "Extremely aware." On the other hand, tools like Wikis, RSS feeds, Podcasts, and Federated Search show a more balanced distribution, with higher percentages in the "Moderately aware" and "Very aware" categories, suggesting growing familiarity but not widespread expertise. Wikis, in particular, have the highest "Not at all aware" percentage at 9.10%, indicating a potential gap in understanding or usage. Overall, the data reflects a high level of awareness and adoption of user-friendly and social tools, while more technical or niche tools like RSS feeds and Federated Search require further outreach and training to boost familiarity.

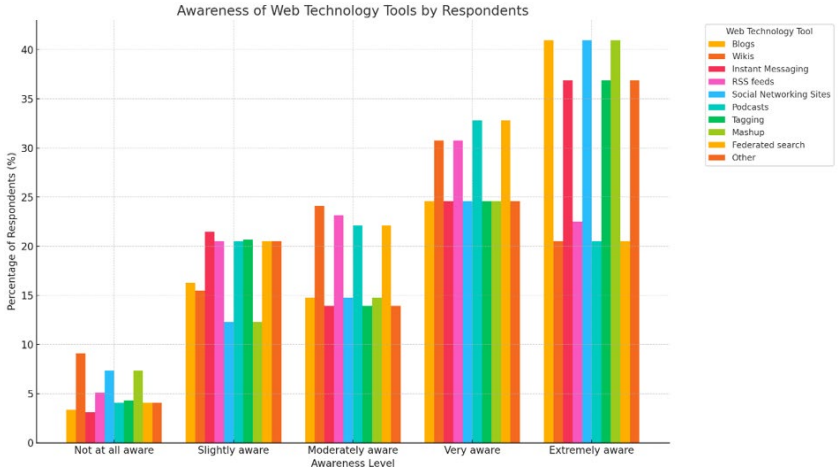


Table 6.12 Which Web Technology tools do you use?

Sl. No	Particular	Never	Occasionally	Moderately	Frequently	Always
1	Blogs	5.38%	14.30%	14.75%	24.59%	40.98%
2	Wikis	4.10%	15.49%	22.13%	32.79%	25.49%
3	Instant Messaging (IM)	6.10%	22.49%	10.93%	27.59%	36.89%
4	RSS Feeds	4.10%	20.49%	22.13%	32.79%	20.49%
5	Social Networking Sites (SNS)	7.38%	12.30%	14.75%	24.59%	40.98%
6	Podcasts	6.10%	17.49%	23.13%	32.79%	20.49%
7	Tagging	4.10%	20.49%	13.93%	24.59%	36.89%
8	Mashup	7.38%	12.30%	14.75%	24.59%	40.98%
9	Federated Search	4.10%	20.49%	22.13%	32.79%	20.49%
10	Other	4.10%	20.49%	13.93%	24.59%	36.89%

The data highlights varying degrees of usage of web technology tools. Blogs, Social Networking Sites (SNS), and Mashups emerge as the most consistently used tools, with each showing 40.98% "Always" usage and around 24.59% "Frequently," indicating they are integral to users' digital habits. Instant Messaging, Tagging, and the Other category also show strong engagement, each with 36.89% "Always" usage, suggesting widespread daily application. Tools like Wikis, RSS Feeds, Podcasts, and Federated Search have moderate engagement, with the highest percentages typically in the "Frequently" and "Moderately" categories. Notably, Wikis and Podcasts show substantial "Frequently" use (32.79%) but lower "Always" percentages (25.49% and 20.49% respectively), indicating they are useful but not essential for all users. The relatively higher "Never" and "Occasionally" responses for Instant Messaging and Podcasts reflect a divide in usage patterns, possibly influenced by user preferences or institutional support. Overall, socially-driven and content-sharing tools dominate in regular use, while specialized tools show more varied engagement

7. SOME SUGGESTIONS

- Library websites as good accessibility and well design.
- The website layout should be user-Friendly and attractive for user satisfaction with the library website.
- The new technology can be implemented in a website, so the library website is more dynamic and interactive.
- Advance technology is uses in library websites, so the library quickly solves the user's queries, Instruction and Education
- The library website should be updated from time to time so more users are connected to this site.

8. CONCLUSION

This study after the analysis of a Library checklist methodology as a valuable tool for increasing the operational efficiency, Improving the user stratification, Experience and improvement with the library. The content analysis is most important for optimizing the collection development, enhancing information retrieval and Evaluating library services and resources. Library should be well maintained and digital so user easily use the library. This study finds that many web technologies are using by National Importance Institute. IITs Delhi library website and services is most dynamic and effective.

CONFLICT OF INTERESTS

None.

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REFERENCES

Ahmadian Yazdi, F., & Deshpande, N. J. (2013). Evaluation of selected library associations' websites. Aslib Proceedings, 65(2), 92–108. https://doi.org/10.1108/00012531311313952

Aharony, N, (2012). an analysis of american academic libraries'websites: 2000-2010. Electron. Libr., 30(6), 764-776

Yadav and Mishra (2021) studied accessibility, efficiency, and effectiveness by conducting a content analysis of websites of Indian IISR, Library Philosophy and Practice, 1-10

Babayi, B. U., & Aminu, B. A. (2018). Evaluation of two Academic Library Websites in Nigeria using the Heuristic Principles. Library and Information Science Digest, 11(1), 32-39. https://lisdigest.org/index.php/lisd/article/view/112/84

Connell, R. S. (2008). Survey of Web Developers in Academic Libraries. Journal of Academic Librarianship, 34(2), 121–129. https://doi.org/10.1016/j.acalib.2007.12.005

Ganaee, M. A. and Rafiq, M. (2016) 'Pakistani University Library Web Sites: Features,

Contents, and Maintenance Issues', Journal of Web Librarianship, 10(4), pp. 294–315

Haridasan, S., & Uwesh, M. (2014). Content Analysis of Central University Library Websites in India : a Study. Journal of Information Management, 1(2), 59–71. http://www.splp.in & www.pacificresearchpublication.com

Hugar, J. G. (2019). Content analysis of engineering college library websites in Goa. Library Philosophy and Practice (e-journal). https://digitalcommons.unl.edu/libphilprac/2320

Konnur, P. V,; Rajani, S., & Madhusudhan, M. (2010). Academic Library Websites in Bangalore City, India: An Evaluative Study. Library Philosophy and Practice (e-journal). https://digitalcommons.unl.edu/libphilprac/408

Qutab, S., & Mahmood, K. (2009). Library web sites in Pakistan: An analysis of content. Program, 43(4), 430-445. https://doi.org/10.1108/00330330910998075

Gupta, M. and Walia, P. K. (2017) 'Web Presence and Structure Evaluation of the European National Libraries ' Websites : a Study', Library Philosophy and Practice

Vasishta, S. (2013) 'Dissemination of electronic journals: A content analysis of the library

websites of technical university libraries in North India', Electronic Library, 31(3), pp. 278–

289. doi: 10.1108/EL-03-2011-0038

Rahman, A., & Batcha, M. S. (2020). Content Analysis of Library Website of Select Colleges of Delhi University: A study. DESIDOC Journal of Library & Information Technology, 40(4), 247- 252. DOI: 10.14429/djlit.40.4.15454

Shukla, A., & Tripathi, A. (2011). Establishing content awareness evaluation criteria for library websites: a case study of Indian academic library websites. Annals of Library & Information Studies, 58(1), 403–416. http://hdl.handle.net/123456789/11059

Thomas, C., & McDonald, R. (2006). Disconnects Between Library Culture and Millennial Generation Values. Educause Quarterly, 29(4), 4-6. University of Delhi. 2020. http://www.du.ac.in/du (accessed on March 16, 2020).

Vijayakumar, M., Kannappanavar, B. U., & Mestri, M. (2009). Content Analysis of Indian Institutes of Technology Libraries Web Portals: A Study. DESIDOC Journal of Library & Information Technology, 29(1), 57–63. https://doi.org/10.14429/djlit.29.231

Negi, Dheeraj Singh (2022), Web Visibility and Research Productivity of Central Universities in India: A Webometric Study, International Journal of Information Library and Society,11(1), 21-25.

Negi, Dheeraj Singh (2022), Web impact factor of library of congress, British library and National Library of India, Gyankosh- The Journal of Library and Information Management, 13(1-2),61-69.

https://en.wikipedia.org/wiki/Website