



Evaluation Of Library Websites And Digital Services At The University Of Jammu (Dhanvantri Library)

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Abstract

Library websites serve as critical gateways to knowledge in higher education, supporting access to both physical and digital collections, facilitating research workflows, and enhancing institutional visibility. This study evaluates the Dhanvantri (Central) Library website of the University of Jammu with a focus on usability, accessibility, digital service integration, and alignment with international standards such as WCAG 2.1. Using a mixed-method heuristic analysis of the website's public pages, the study examines the structure, navigability, e-resource accessibility, and digital service readiness. Findings indicate that the library offers robust online catalog access (OPAC), e-journals, and repository links, yet lacks a unified discovery search, limited mobile responsiveness, and incomplete accessibility compliance. Recommendations include short-, medium-, and long-term measures to improve user experience, accessibility, personalization, and digital integration. This study provides a roadmap for modernizing academic library websites in India, ensuring they remain user-centered and technologically adaptive.

Keywords: library website evaluation, usability, accessibility, academic libraries, digital services, WCAG 2.1, University of Jammu, Dhanvantri Library.

1. Introduction

In the digital age, academic library websites function as the primary interface between users and the university's knowledge resources. They provide access to catalogs, e-resources, institutional repositories, and services that facilitate research and learning (Kaur & Singh, 2019). The Dhanvantri Library, as the central library of the University of Jammu, supports students, faculty, and researchers through online catalog access, e-journal gateways, and digital repositories. The Dhanvantri Library, the central library of the University of Jammu, has embraced this digital transition by developing a website that offers essential services including online catalog searches, access to subscribed e-resources, digital repositories, and user guides. It serves thousands of students, faculty members, and researchers, acting as a hub for academic communication and information exchange. However, as the expectations of digital users increase, library websites must continuously evolve in terms of usability, accessibility, interactivity, and mobile responsiveness to remain relevant and user-friendly.

Despite the importance of library websites, empirical studies evaluating their usability, accessibility, and digital service integration remain limited in the Indian context (Madhusudhan, 2020; Verma & Kumar, 2020). This study addresses this gap by providing a comprehensive assessment of the Dhanvantri Library's website, identifying strengths, gaps, and actionable recommendations to enhance its digital presence and functionality.



<https://www.google.com/search?q=dhanvantri+library>

2. Objectives

The objectives of this study are:

1. To map current online services offered by the Dhanvantri Library website.
2. To evaluate usability, discoverability, and accessibility of these services.
3. To identify gaps and provide actionable recommendations for improvement.

3. Literature Review

The digital transformation of library services has prompted extensive research on the structure, usability, and accessibility of academic library websites. According to Kaur and Singh (2019), an effective library website serves as an integrated information system providing seamless access to physical and electronic resources. Madhusudhan (2020) highlighted that usability testing and information architecture are critical factors influencing user satisfaction in Indian university library portals. Similarly, Tripathi and Jeevan (2018) found that the quality of navigation, visual design, and content organization significantly impacts user engagement.

The transition toward discovery services and federated search systems has redefined how users interact with academic library websites. Anuradha and Usha (2021) emphasized the importance of unified discovery tools like EBSCO Discovery Service and Koha integration for improving accessibility and reducing search complexity. Meanwhile, Singh and Kaur (2022) observed that responsive and mobile-first design principles have become essential as more users access library portals via smartphones.

Accessibility remains another major concern. W3C (2021) standards and Jain (2020) both stress that library websites must adhere to WCAG 2.1 guidelines to support users with disabilities. Studies by Babu and Tamizhchelvan (2017) on Indian university libraries reveal that many websites lack compliance with accessibility standards and need structural redesigns.

Open access and institutional repositories also play an increasingly vital role in academic visibility. Shodhganga and Shodhgangotri have transformed the dissemination of theses and dissertations in India (Parmar, 2018). These repositories promote transparency and academic integrity while supporting the global open access movement (Suber, 2019).

Overall, the literature converges on several key aspects of library website quality — usability, accessibility, integration of e-resources, and discoverability. As Chand and Kumbar (2021) conclude, libraries that combine user-centered design with technological innovation achieve higher satisfaction and research output impact.

4. Methodology

This study employs a descriptive and evaluative research design to assess the structure, usability, and effectiveness of the Dhanvantri Library website and its digital services. Both primary and secondary data were used. The primary data were collected through a structured questionnaire and direct observation of the library website, while secondary data were obtained from library records, reports, and previous studies. A sample of 100 respondents—comprising undergraduate students (40%), postgraduate students (25%), research scholars (20%), and faculty members (15%)—was selected using a random sampling method to ensure balanced representation. Data were analyzed using descriptive statistics such as percentages and mean values, with graphical representation through charts and tables. The evaluation criteria included content quality, design, navigation, accessibility, interactivity, and availability of digital resources. Ethical principles such as informed consent, confidentiality, and voluntary participation were strictly observed.

Data Collection Methods

Both primary and secondary data were utilized for the study.

A. Primary Data

Primary Data is Collected using the following method:

- **Structured Questionnaire:** Designed to collect user opinions about the library website's design, content, accessibility, and digital services such as OPAC, e-resources, institutional repository, and remote access facilities.
- **Observation Method:** Direct observation of the Dhanvantri Library website to evaluate features like navigation, responsiveness, links, multimedia, and interactivity.

B. Secondary Data

Secondary data is obtained from:

Library records and reports

- University of Jammu's official website
- Previous studies, research papers, and articles related to library website evaluation and digital services.

5. Findings

5.1 Digital Collections and Infrastructure

The Dhanvantri Library provides comprehensive physical and digital collections, including specialized regional materials, theses, and research resources. Reading halls and access policies are clearly listed, supporting both in-person and online users.

5.2 OPAC and Library Automation

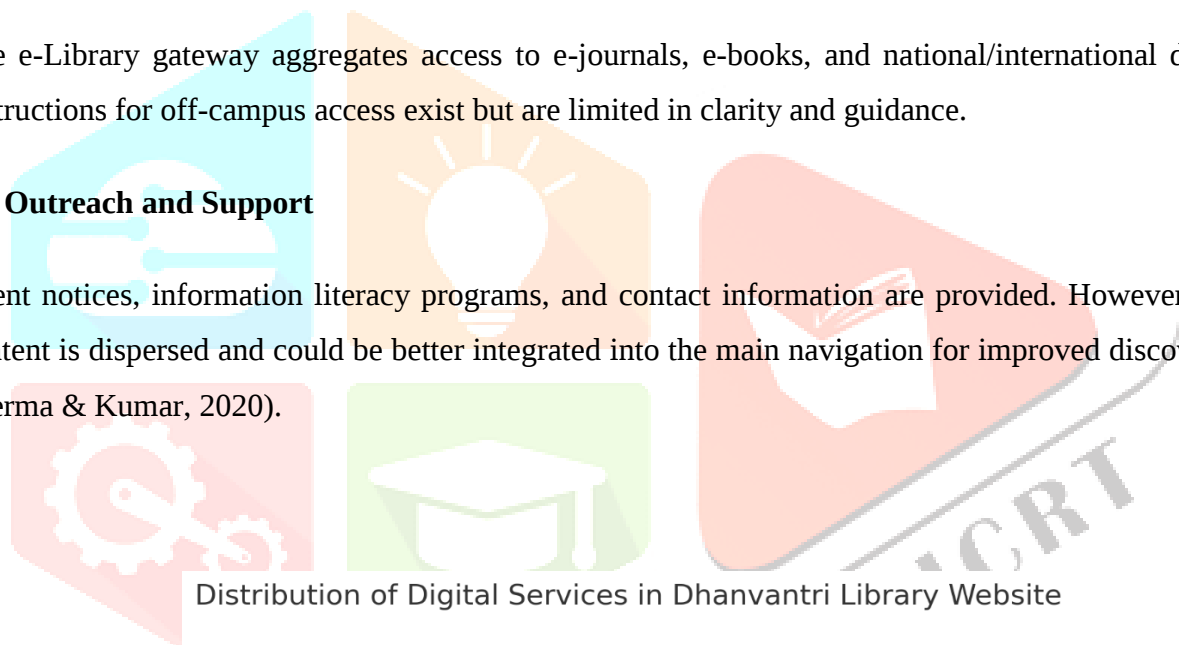
LIBSYS10 supports catalog searches, showing holdings, availability, and thesis records. Users can efficiently locate materials but lack a unified search across digital and print resources.

5.3 E-Resources and Remote Access

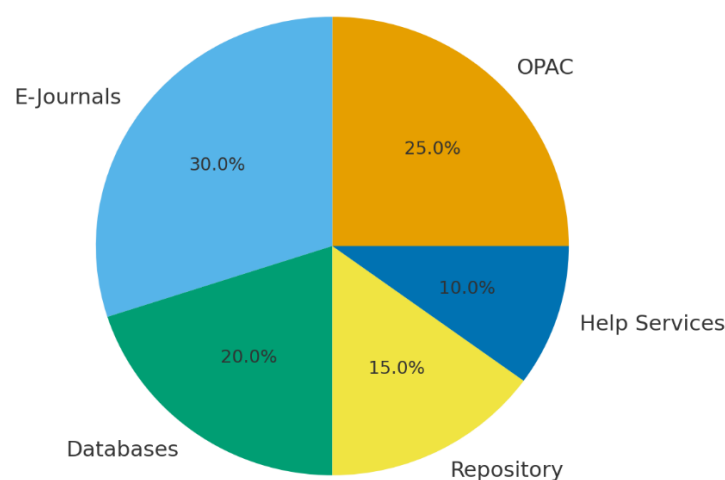
The e-Library gateway aggregates access to e-journals, e-books, and national/international databases. Instructions for off-campus access exist but are limited in clarity and guidance.

5.4 Outreach and Support

Event notices, information literacy programs, and contact information are provided. However, support content is dispersed and could be better integrated into the main navigation for improved discoverability (Verma & Kumar, 2020).



Distribution of Digital Services in Dhanvantri Library Website



Gaps / Opportunities

1. **Search & Discoverability:** No unified discovery/search box that returns results across catalog, e-resources, and repository with faceted filters and relevance ranking.
2. **Mobile Responsiveness:** The portal requires testing and probable optimization for mobile-first users.
3. **User Guidance:** Limited visible quick-start guides, tutorial videos, or an accessible FAQ for common tasks such as remote login and thesis submission.
4. **Accessibility:** No prominent accessibility statement or clear evidence of WCAG conformance.

Personalization & Analytics: Lack of visible user dashboards, saved searches, and published usage statistics for transparency and collection decisions

7. Recommendations

To enhance the usability and effectiveness of the Dhanvantri Library website, several improvements are suggested. In the short term, the library should introduce a unified search box integrating OPAC, e-resources, and repositories, along with creating tutorials, FAQs, and short instructional videos for user guidance. A live help window should also be added to offer real-time support. In the medium term, implementing federated discovery tools, ensuring mobile responsiveness, and publishing an accessibility statement in line with WCAG 2.1 standards are essential. For the long term, the library should develop personalized user dashboards, incorporate machine-readable metadata through OAI-PMH/APIs, and create analytics dashboards to monitor usage and inform collection decisions. These steps will make the Dhanvantri Library website more user-friendly, accessible, and aligned with modern digital library practices.

8. Future Evaluation Plan

- **User survey:** Quantitative feedback on usability, accessibility, and satisfaction
- **Task-based usability testing:** Observation of catalog searches, e-journal access, and repository submissions
- **Analytics audit:** Web traffic analysis to identify high-usage pages and search patterns

9. Limitations

The present study is primarily based on a heuristic evaluation and content analysis of the publicly accessible sections of the Dhanvantri Library website. As such, it is limited in scope and does not incorporate primary user data collected through surveys, interviews, or usability testing sessions that could provide deeper insights into user satisfaction and behavioral patterns. Additionally, the study does not include a technical performance audit of the website's authentication systems, server response time, or backend functionalities, which could influence user experience during remote access or resource downloads. Time constraints and restricted administrative

access also limited the ability to assess real-time analytics and staff-side management features. Future studies involving user-centered usability testing, web analytics, and accessibility audits would provide a more comprehensive understanding of the library's digital service performance.

10. Conclusion

The evaluation of the Dhanvantri Library website reveals that it possesses a strong foundation in digital services, e-resource access, and online information dissemination. The library's commitment to providing OPAC access, e-journals, and institutional repository links reflects a progressive approach toward digital transformation. However, the study also identifies notable gaps in unified discovery mechanisms, mobile responsiveness, and accessibility compliance, which limit the overall efficiency and inclusivity of the user experience.

By adopting the recommended improvements—such as integrated search systems, responsive web design, accessibility enhancements, and user personalization tools—the Dhanvantri Library can significantly improve its digital presence. These changes will not only make information retrieval more seamless but also promote greater user engagement, inclusivity, and satisfaction. Ultimately, this transformation will position the Dhanvantri Library as a modern, user-centered digital gateway that effectively supports research, learning, and innovation at the University of Jammu while aligning with global best practices in academic library website design.

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