# A Study on the Content Analysis of Library Resources in Libraries through Library Websites, with Special Reference to Madhya Pradesh Region

# Umesh Kumar Gaur<sup>1\*</sup>, Dr. Pradeep Kumar Dubey<sup>2</sup>

<sup>1</sup> Research Scholar, Shri Krishna University, Chhatarpur M.P.

Abstract - The aim of this study is to conduct a content analysis of library resources in libraries located in the Madhya Pradesh region of India through their respective library websites. The study intends to analyze the types and amount of resources available on library websites, the ease of access to these resources, and the quality of information provided on the websites. the growth of information and communication technology has revolutionized the way information is accessed and disseminated. Libraries have also embraced the use of technology to enhance the provision of information resources to their users. The use of library websites has become a common trend in libraries worldwide, providing users with access to a wide range of resources from different locations.

Keywords - Library, Resources, Websites, Madhya Pradesh Region

# -----X-----X

### 1. INTRODUCTION

The Third Wave" describes the world's evolution from an agricultural civilization (the first wave) to an industrial society (the second wave), and finally to an information society (the third wave), in which knowledge has become a commodity and is essential to existence. In the past, libraries served primarily as secret storage facilities for the exclusive knowledge of powerful elites, such as monarchs. A utopian notion, education for all, and the subsequent proliferation of universities throughout the globe contributed to the opening of libraries to the general public in the modern industrial society. Universities and educationalists depend on data to ensure their continued existence since their establishment. As a result, libraries have become the hubs of the institutions and organizations that rely on knowledge to foster innovation.[1]

Libraries have been highly impacted by the developments in communication technology to implement these technologies into their daily operations. Evidently, in 1936, Ralph Parker set up a Hollerith punched card system at UT to manage circulation. Libraries were early users of technology, as shown by relics of their pioneering use of the medium. It's worth noting that many modern search engines owe a great deal to the work of bibliographic databases like Dialog and Orbit, which were utilized widely by professional searchers in libraries in the early 1960s (human intermediaries=librarians).[2]

### 1.1 World Wide Web

Web refers to the World Wide Web (www), the most essential information delivery platform in the digital world. It's a collection of papers that may be viewed and read online. Web pages may be viewed in a variety of digital formats, including data, text, picture, audio, video, animation, and so on. It's a great place to store and peruse hypermedia files. URLs provide access to a network of interconnected hypertext documents (also known as web pages) hosted on various servers, as well as other documents and databases (Uniform Resources Locator).[3]

The World Wide Web makes it easy to quickly access related information by linking its many components together. "The only way to know whether a fantastic website really works is to put it through its paces. Time and money are saved by using the website, but big structural modifications are difficult to adopt once it has been launched.[4]

# 1.2 Information Services through Library Websites

Information services and library websites exist to facilitate patrons' access to and use of libraries' collections for the purposes of learning, research, and community service. Library services, client services, and e-learning services are the three pillars around which the Information Services of Libraries at the University of Exeter, UK are built. [5]

<sup>&</sup>lt;sup>2</sup> Professor, Shri Krishna University, Chhatarpur M.P.

# A Study on the Content Analysis of Library Resources in Libraries through Library Websites, with Special Reference to Madhya Pradesh Region

In a new setting, a library's online resource may serve as a vital information hub. The library's website is carefully and efficiently built since online research is so popular among library patrons. Several library websites have made the switch to content management systems in this direction. They are looking for someone with technological expertise to update the websites so that information can be accessed and delivered more efficiently. Customers of library websites should be able to find information that is easy to understand, reliable, and up-to-date. That's according to research.[6]

### 1.2.1 Features of a Good Library Website

A well-designed library website will have the following characteristics: a logical and user-friendly layout, information for all types of readers, clear and concise writing, frequent updates, use of everyday language, etc. Below, we'll go through a few of the highlights:[7]

### i. Contents

The information shown on a website is, at its core, digital information. It may be anything that can be stored or sent electronically, including but not limited to words, numbers, photos, designs, features, sounds, archives, records, and so on. The degree to which it was significant, comprehensive, comprehensive, precise, accurate, reliable, dependably clear, profound, etc. [8]

- The term "relevance" refers to how useful the information is for actual farmers.
- Coverage is a measure of how well a website addresses its intended audience's needs.
- The accuracy of a website may be determined by checking its qualities against actual, verifiable outcomes.
- The trustworthiness of a website depends on the accuracy and consistency of the information it provides.
- When a website is clear, it communicates its intended message without leaving room for interpretation.
- The term "depth" refers to the website's abundance of useful and original information.

### ii. Website design and layout

Website design refers to the whole process for developing a website, from conceptualization to completion. The layout of a website refers to how the page's information is organized and presented. Graphic design is the term for the aesthetic qualities of a website, such as its contrast, colors, fonts, images, and overall appeal.[9]

### 1.3 Characteristics/ features of library website

A library website or home page should have below mentioned features.

- The Page should highlight the name of the library & its parent organization in an appealing manner.
- Highlights of some important events, lecture series, book talk, book exhibition, special collection etc.
- A brief listing of library services, hyperlinks of services is required wherever necessary.
- Direct links of online resources given through library website which that particular library website subscribes.
- Hyperlinks of Electronic journals, popular magazine, E-newspapers given through library page.
- Information about latest conferences, seminars, workshops given.
- Guideline of how to use library services, e resources, internet guide with Boolean operators, scholarly article search tips given.

### 2. LITERATURE REVIEW

George, C. A. (2015) This research analyzed the differences between national and provincial websites, both online and off. The survey indicated that sites of national, coastal, and inland government entities have adopted e-governance, e-knowledge, and e-service activities. the content of American political party websites, Zhou discovered that the Chinese government had effectively adopted egovernance to decentralize decision making at the government level. Web analysis was employed in the investigation (combination of structural and feature elements and hyperlink analysis). The research set out to do just that by examining the political parties' internet behavior during the 2000 US election. The research looked at the three major types of online political actions: coproduction (joint production), carnival (jokes, insults, satire, and parody), and mobilization.[10]

Ha, L., & James, E. L. (2018) have looked at how 11 EU nations used the internet to vote in the 2004 European Parliament elections. The researchers wanted to know, "How and to What Extent Do the Structures of Websites Produced by Political Actors During the 2004 European Parliament Election Campaign Facilitate Political Engagement of Site Visitors?" by providing answers to these questions through an analysis of websites created by political actors during the 2004 election campaign. Researchers looked at endorsements, platform comparisons, speeches, images, audio and video contact information, recruitment, files, registration, online newsletters, discussion forums, offline distribution of election materials, and online promotion of campaigns to come up with an answer (e.g., banners, screensavers). According to the research, the characteristics of EU parliament election campaign websites vary across member states. In Luxembourg, for example, it has been mostly the younger candidates who have utilized the internet to campaign. Candidates for Finland's main political parties are more likely to have set up websites for internet campaigning than their

counterparts from smaller or more marginal groups. [11]

Han, Z., & Liu, Y. Q. (2020) Studies of online newspapers and other forms of new media have also made heavy use of content analysis research. the articles found in US online publications at the time. The study looked at 100 US online newspaper websites to see whether they offered any kind of interactivity. The research showed that almost all newspaper websites offered readers direct access to the publication's editor through email. The research also revealed that just 8% of publications have chat rooms. Thirty-three sites had a forum for visitors to post questions and comments. This research found statistically significant relationships between the size of newspaper organizations and the prevalence of interactive components. There is a Greek-language web presence for 80% of the publications. The research looked at the structural and interactive aspects of three morning newspaper websites, two evening newspaper websites in Greek, and the websites of two international newspapers, the New York Times and The Guardian. [12]

Gibson, R. K., & Ward, S. (2020) Broadcast television station websites have been analyzed by Chan-Olmsted and Park (2000). The content and organization of the websites of 300 television stations were analyzed. The study's findings mirrored those of Schultz's (1999) research on newspaper websites. According to the study's conclusion, the internet presence of broadcast stations was mostly informative, with few avenues for user interaction beyond basic news and weather updates. Li (2006) examined the relationship between website layout and search engine results for five different US-based online dailies. Doctor HTML, an automatic website evaluation tool. was used for this research. Doctor HTML was used to evaluate the rate of download, as well as the quality of images and text. When compared to other digital newspapers, the Chicago Tribune's home page retrieval efficiency score was highest. According to the findings, great information retrieval efficiency may be attained if newspaper websites prioritize facilitating quick access to news information and a continuous flow of news.[13]

Maguignaz, L., & Miller, J. (2017) analyzed 114 individual webpages to determine commonalities in the sites' content and layout. One of the first studies to examine personal webpages on the Internet was conducted by Bates and Lu. Personal websites were chosen using the People Page directory. The sample for the research consists of the first five items under each letter of the alphabet. Purpose of personal home pages, personal information, home page internal structure, random material, and home page physical feature were the categories used to classify the features of the content present on these websites. According to the results, 45.0% of the population has relevant professional skills and experience. The vast majority of individuals have made their email addresses accessible on their homepage. Almost 80%

of the homepages I checked featured some kind of navigational structure at the top, such a menu bar or a list of sections. There is color in the backdrop of 61% of homepages. According to the study's findings, personal homepages are still in their infancy as a social phenomenon. [14]

### 3. METHODOLOGY

This research combines qualitative and quantitative approaches to website evaluation with custom-built CALS features to analyze the user interfaces of a subset of Madhya Pradesh library websites. The homepage's content, broken down into its constituent parts, is assessed. Both qualitative and quantitative approaches were used to compile the results of this study. Create Checklist - Information gathered using the checklist has been given, followed by an examination and interpretation of the results. The research procedure must be tailored to the specifics of the study topic, its scope, and its aims. The research included analyzing the online library catalogues of every educational establishment in the state of Madhya Pradesh. Many literature databases are utilized for this purpose. Articles regarding novel services like SM and interactive online elements were found via a search of library science literature databases. Research papers were retrieved from the EBSCO database and other subscribing publications

### 4. RESULT

### 4.1 Frequency analysis for Library website of each stream

The CALS on Library Homepage or Website was evaluated using a 104-point criteria. It was found that most libraries lack their own dedicated webpage. The website of the organization or institution receives information about the library. The library's details were included under "Campus area" in the site's "Infrastructure" section of academics and facilities. Several libraries, however, have set up their own websites with links to the main university site. Because of this, the phrase library homepage appears often throughout the text of this research. The CALS survey found that the vast majority of library websites are missing essential elements. However there were a few pages online that had a respectable amount of items that matched the criteria. The following is a frequency analysis of the library's various streams:

#### and Commerce Libraries 4.1.1 Sciences website/Homepage:

As can be shown in Fig.4.1, 48 percent of the ASC library homepages are subpar and might benefit from additional CALS functionalities. Although twenty percent of the library's online material was aboveaverage, not a single library scored exceptional in the CALS assessment.

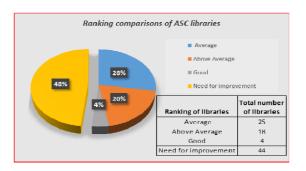


Figure 4.1: Ranking comparison of ASC Libraries

### 4.1.2 Multimedia features:

Just two websites (out of a total of ninety-one) had all their photos load instantly. According to the CALS (Content Analysis of Library Services) survey, ASC libraries make little attempt to use any multimedia elements, such as virtual tour of the library and the provision of audio video items on their webpage.

### Currency Accuracy & Updates:

Just 8% of sites properly stated their copyright status when we checked the currency correctness and updates. No ASC library seems to have a plagiarism checker. Just 42% of homepages have a visible company logo. (Table 4.1)

Table 4.1: ASC Frequency of currency, accuracy & updates

Currency Accuracy & Updates	Frequency	Percentages
Date of last updates	3	3%
Copyright status clearly stated	7	8%
Any official logo present on the site	38	42%
Actual coverage matched with intended mission	28	31%

### • User interface features:

Just 33% of libraries have user-friendly navigation that includes properly labeled links. Just 2% of websites make use of any kind of graphical symbols or indication. (Table 4.2)

Table 4.2: ASC-Frequency of User Interface Features

User interface features	Frequency	Percentages
Navigational aids clearly labeled	33	36%
dome link on every page of website	27	30%
Web pages load faster within 6-8 seconds	36	40%
Search engine present	19	21%
Search instructions clearly indicate what to do	19	21%
Help features present	5	5%
t's clear how to access & exit the help facility	1	1%
Jse of Graphics – Symbols or signs	2	2%

### 4.2 Special Libraries:

Highest score in Special Library is 52/104. Total 26 Special libraries website visited for CALS study. Study shows that only two SPL comes under category "Good" and & libraries shows "Above Average" score. None of the library comes under excellent category like ASC library. (Figure 4.2)

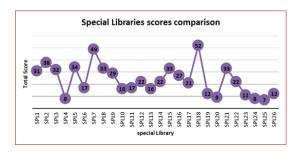


Figure 4.2: Special Library score comparison

### 4.2.1 Multimedia features:

There is no animation features available on the sites and hence it's not enhancing the web design. Only two sites appears audio / video content on their site. (Table 4.3)

Table 4.3: Frequency of Multimedia features

Multimedia features	Frequency	Percentage
Audio/video content available on the site	2	8%
Fextual description of external audio/video files Provided	2	8%
All images display when the web page loads	4	15%
Virtual tour of library	1	4%

### 4.2.2 Currency Accuracy & Updates

Out of 26 websites only one website shows date of last updates and none of the website showing an important feature like Plagiarism Check facility while 12% indicates copyrights status on their webpage. (Table 4.4)

Table 4.4: SPL: Frequency of Currency Accuracy & updates

Currency Accuracy & Updates	Frequency	Percentage
Date of last updates	1	4%
Copyright status clearly stated	3	12%
Any official logo present on the site	11	42%
ctual coverage matched with intended mission	18	69%

### 4.3 Public Libraries Website

Public libraries website visited for evaluation of their services. Two PL showed Excellent score i.e. 66/104 & 61/104. Four libraries shows status "above average" and only one shows "average". (Figure 4.3)

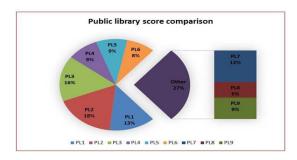


Figure 4.3: Public Library score comparison

### 4.3.1 Multimedia features

Multimedia features like animation are not distracting to the user of any public library website.22% Public library provide virtual tour of library. 67% of the sites added audio/video content. (Table 4.5)

**Table 4.5: PL Multimedia Features** 

Multimedia features	Frequency	Percentage
Audio/video content available on the site	6	67%
extual description of external audio/video files provided	3	33%
nimation features available on the site	1	11%
Animation enhance the website design	1	11%
All the Images display when the web page loads	7	78%
irtual tour of library	2	22%

## 4.3.2 Currency Accuracy & Updates

Date of last updates, plagiarism Check facility is not available on any website. Three libraries mentioned copyright status on the site. All the PLs content matched with the public at large to provide information to all types of readers (Table 4.6).

Table 4.6: PL Currency Accuracy & Updates frequency

Frequency	Percentage
3	33%
8	89%
9	100%
	3 8 9

## 5. CONCLUSION

The institutes coming under the jurisdiction of Mumbai by visiting UGC website, SNDT and Mumbai University website and also on web. Make a list of the entire institution category wise like Arts, Science, Commerce, Special Library, Engineering Institutes, Law Colleges, and Medical& Research Institutes along with their URLs. Visit all the sites one by one and prepare a list of only active websites. After that visit the library page and save the URLS of all types of Library with DOA. In next step remove all these sites where only one or two features of library services available. For CALS study ignores all these websites where little or no library content found on the homepage/website. . The collected URLs were analysed for further study finding the quality contents available on the website. With respect to the objectives of the study researcher used statistical tools such as comparative analysis & correlation analysis to conclude the result

### **REFERENCES**

- 1. Bates, M. J., & Lu, S. (2016). An exploratory profile of personal home pages: Content, design, and metaphors. Online & CDROM Review, 21(6), 331-340.
- Armstrong, C. J., Edwards, L., & Lonsdale, R. 2. (2016). Virtually there? E-books in UK academic libraries. Program: Electronic Library and Information Systems, 36(4), 216-
- 3. Clyde, L. A. (2019). School library websites: 1996-2002. The Electronic Library, 22(2), 158-
- 4. Dinkelman, A., & Stacy-Bates, K. (2017). Accessing e-books through academic library web sites. College & Research Libraries, 68(1), 45-58.
- Cohen, L. B., & Still, M. J. (2015). A 5. comparison of research university and twoyear college library websites: Content, form. functionality. College and Research Libraries, 60(3), 275-289.
- 6. Bao, X. (2015). Academic library home pages: Link locations and database provision. The Journal of Academic Librarianship, 26(3), 191-195.
- Blattberg, R. C., & Deighton, J. (2015). 7. Interactive marketing: Exploring the age of addressability. Sloan Management Review, 35, 5-14.
- Cano, V. & Prentice, R. (2015). WWW home 8. pages for the tourism industry: The Scottish experience. Aslib Proceedings, 50(3), 61-68.
- Detlor, B., & Lewis, V. (2016). Academic 9. library websites: Current practice and future directions. Journal of Academic Librarianship, 32(3), 251-258.
- George, C. A. (2015). Usability testing and 10. design of a library website: An iterative approach. OCLC Systems and Services, 21(3), 167-180.
- Ha, L., & James, E. L. (2018). Interactivity 11. reexamined: A baseline analysis of early business websites. Journal of Broadcasting & Electronic Media, 42(4), 457-474.
- Han, Z., & Liu, Y. Q. (2020). Web 2.0 12. applications in top Chinese university libraries. Library Hi-Tech, 28(1), 41-62.
- Gibson, R. K., & Ward, S. (2020). A Proposed Methodology for Measuring the 13. Function and Effectiveness of Political Websites. Social Science Computer Review, 18(3), 301-319.
- Maquignaz, L., & Miller, J. (2017). Learning from our clients: Victoria University Library website evaluation. Paper presented at evolving Information Futures, Melbourne Exhibition and Convention Centre, February 6–8.

## **Corresponding Author**

**Umesh Kumar Gaur\*** 

Research Scholar, Shri Krishna University, Chhatarpur M.P.