EXPLORING THE CONTENT QUALITY OF ACADEMIC LIBRARY WEBSITES: A STUDY IN UTTARAKHAND

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ABSTRACT

In the digital era, academic libraries play a pivotal role in disseminating information and supporting scholarly activities. With the increasing reliance on online resources, the effectiveness of academic library websites becomes paramount. This study aims to conduct a content analysis-based evaluation of the websites of academic libraries in Uttarakhand, India. The research employs content analysis methodology to systematically examine various aspects of the websites, including usability, accessibility, content quality, design aesthetics, and functionality. A structured evaluation framework is developed, incorporating relevant criteria and indicators derived from established guidelines and best practices in website evaluation. Data collection involves visiting and navigating through the websites of selected academic libraries in Uttarakhand, scrutinizing their content, layout, features, and user experience. Quantitative and qualitative data are gathered to assess the strengths and weaknesses of each website.

Keywords: Academic Libraries, Uttarakhand, India, Website Evaluation, Content Analysis, Usability, Accessibility, Content Quality, Design Aesthetics, Functionality, Evaluation Framework.

INTRODUCTION

In today's digital world, academic libraries are essential centres for sharing knowledge and assisting with research and teaching initiatives at their individual universities. Academic libraries' websites are now essential instruments for easing access to information and services due to the abundance of online resources and changing user needs. In Uttarakhand, India, where the number of academic institutions is growing and the need for digital resources is increasing, the effectiveness of academic library websites is critical. The purpose of this research is to perform a content-based evaluation of academic library websites in Uttarakhand, India, emphasising the assessment of several elements that are essential to their efficacy. The assessment uses a formal evaluation methodology developed from known rules and best practices in website evaluation to analyse usability, accessibility, content quality, design aesthetics, and functioning in detail (Iqbal & Warraich, 2012).This research attempts to discover strengths and shortcomings inherent in the design and implementation of academic library websites in Uttarakhand by methodically analysing their features and content. The study intends to offer a thorough overview of the current state of these websites through a combination of quantitative data and qualitative insights, enabling well-informed recommendations for change. In today's world, websites are becoming commonplace wonders, and libraries are particularly important when it comes to the task of looking for websites. Access to the resources housed in the global system has been ingrained in the culture of Western libraries. The need of posting their data online has also been recognised by Indian libraries, research institutes, government agencies, and commercial organisations; as a result, Indian partners are creating a number of websites (Krishna Kumar & Nirmala, 2014);

Qutab & Mahmood (2009); Walia & Kaur (2010). Websites serve as attention-getting tools for the associations that support the website. A scholarly library's official website serves a different purpose in the Internet distribution scheme. In this context, the key point should be made about the type of information provided and the way it was posted online. Clear, precise, and condensed information is the path to any successful website of any company, but especially that of a university library.

With site page distribution, electronic application/database creation, and online correspondence, research institutes in India started to recognise the value and potential of using the World Wide Web as a tool to provide information to the client group and worldwide. Thanks to this innovation, the institutes are able to provide their people group and the electorate from outside the institute with electronic and auspicious data on issues of interest and motivation (Ahmadian Yazdi & Deshpande 2013); Konnur et al. (2010). The portion of the web that the library is calling continues to progress. Curators use the invention to conduct research, communicate effectively, and move forward with educational activities. It is used for community-focused events, close-knit get-togethers, separation education, and live introductions. The internet is also being used to manage original copies, provide informative distributions, and manage abstracts for introductions Wilson (2015). In essence, the administrators are aware of the fundamental guidelines for creating and maintaining web material in order to participate in this exciting new situation. Bookkeepers must understand the creation and structure of web archives. The implementation of online services necessitates a deeper understanding of how intelligent systems acquire their utility. Information about the various media groups is needed when including graphics and visual and auditory content.

Salient Features of Library Web Site

Many library resources, such as online journals, subject gateways, subscription databases, and catalogues, are accessible through a central website or portal. Easy user access, simplified authentication, unified presentation of high-quality resources, personalisation, and the possibility of offering services to an institutional portal are the main advantages of the portal. This keeps the library at the forefront of larger initiatives involving the presentation of resources.

Building a library or information centre's website is an exciting and demanding endeavour. The success of any website begins with a well-thought-out plan. The web design process is both demanding and satisfying, and web engineering is a new field in its own right. An authentic fusion of Art and Science, it is. Here are some characteristics that make a library website stand out:

1. The library's name and the name of its parent organisation should be attractively displayed on the page.
2. Linkages to the most important information resources, presented in a concise listing.
3. A condensed version of the main information services, with links provided when appropriate.
4. Notable recent occurrences pertaining to library collections, special collections, etc.
5. Links to the library's website, manual, publications, and a list of current additions as well as other resources, such as bulletins and other forms of general information. electronic journals, popular periodicals, newspapers, etc.

Role of Academic Library Web Page

The goal of every national and international library and information centre is to ensure that computerised databases are accessible to as many people as possible. People in academic circles or who utilise libraries for academic purposes can easily access such information over the Internet. In order to determine if it is worthwhile to visit the library, a

user must be aware of the resources, facilities, and services that are offered. In order to search and decrease the time it takes to retrieve documents, an academic library user requires a database that can be accessed remotely Tella & Oladapo (2016). Answering the question "*what does the user of academic library require*?" provides a clear picture of the function of an academic library's website. Many people think that computer culture is essential for sharing resources and that it is the answer to the problem. Indian universities and research institutes are expanding their service offerings and establishing a stronger reliance on information technology to facilitate the admission of students and the distribution of electronic content to their patrons. In addition to providing high-quality information to users, primarily in digital format, libraries of research institutes are also utilising web environments nowadays.

Content Analysis

The contents of a website are the details about your institution, library, or organisation that visitors can find there in various situations. When it comes to providing information to consumers around the clock, environmental websites are the most helpful medium on the Internet. With a focus on providing an objective, systematic, and quantitative description of communication content, "Content Analysis" is an established social science methodology. For all appearances, content analysis is a natural fit for websites and web pages as communication mediums. Structured features (such as message duration or distribution of specific text or image components) and semantic themes are the main focus of content analysis, which is a methodical approach to coding symbolic content (images, text, etc.) discovered in communication.

A message's content can be analysed through content analysis, where "*content*" refers to the information it contains. In a nutshell, content analysis is a technique that uses the message's content to make conclusions and inferences. Additionally, content analysis is a hybrid method that combines elements of both observation and document analysis. This observational technique "*takes the communications that people have produced and asks questions of communications*" rather than just asking them to answer questions. Hence, it is sometimes thought of as a non-reactive or inconspicuous way to do social research. You can find several explanations of content analysis online.

Need of Analysis of Web Content

There are various steps of filtering that traditional sources go through. A referee, authority, editor, etc., reviews these sources. In most cases, a journal article must undergo peer review before it can be published Vasishta (2013). The content doesn't need approval before being posted online, unlike most conventional sources of information. Thus, it is essential to thoroughly assess the reliability of data obtained via the Internet. It is up to the searcher to assess the sources before employing them to see if they will fulfill the requirement. By its very architecture, the internet evolved to facilitate the unfettered flow of data. As far as anyone can tell, there are no rules or regulations controlling the quality or sort of content that writers can post online. Any combination of factual content, reviews, ideas, propaganda, self-promotion, and commercialism is possible on the Internet. Anyone can publish anything online if they have access to a web page creator or can afford to hire one. Not only does everyone get to pick the topic they write about, but they also get to pick the layout of the website and the credibility of the material provided. Web information elements that compel an individual to assess such data include:

1. It is possible that the data presented online is not authentic.
2. The writer might not be certified for writing the article
3. It may not be contemporary
4. It can no longer be reliable

Criteria for Content Analysis of Website

On the World Wide Web, you may find a vast amount of material. Some of this data is conclusions drawn from excellent research. There is data there, and there is influence there as well. Whether a man is a student, teacher, scientist, specialist, or just an interested individual, the sheer volume of info that can be found on the World Wide Web can be overwhelming. Additionally, the individual could potentially find the specific data source they seek with any query. Consequently, the website's content analysis needs to adhere to a set of standards.

Site Accessibility

The first step in evaluating a website's quality is identifying and gaining access to the server that stores the document or documents. Site accessibility is concerned with the initial impression the website gives to users, including matters like how easy it is to connect and download, how to identify the site, any limits on access, and other concerns that need to be addressed before the information on the site can be utilised. By responding to the following questions, you will be able to obtain the site access details:

1. Name of the Research Institution.
2. URL of the Research Institution's website.
3. Library URL present on the website of Research institution.
4. The domain name of the Research Institution

Authority and Accuracy

Websites can be made by anyone. To establish the information's authenticity and dependability, it is crucial to learn who wrote it and what their credentials are. This section seeks to identify the web page's author. Because websites serve as an organization's "second front door," they should provide visitors with all the information they need to get in touch with the business. The information's authority attests to its reliability. Any reputable research institution's homepage should prominently display its authority information. Research institutions in Uttarakhand often have author and designer bios on their websites, either as a dedicated link on the main page or by including such material in the site's footer.

Navigation

Users can't move around a website or conduct searches without navigation. Appropriate headings, a site map, and links to the homepage from any page can accomplish this. The success or failure of a web document is largely dependent on how quickly its contents can be retrieved. Building an institute's or organization's website such that it may be accessible in a matter of seconds is essential. Users will lose interest in a website if they have to wait longer for it to load. One crucial metric to consider when evaluating a website is its ease of navigation.

User Support

When evaluating the research institutions' homepages, usability is an additional factor to consider. All of the features that make the website easy to use are considered. When navigating these sites, users can find useful information in the "Help" option. The criteria utilised to assist users in navigating connected websites and retrieving associated information include online assistance, email help desk, and telephone helpline.

Coverage/Context

Any decent website will have informative, entertaining, or educational content. It is important that the target audience can easily read and comprehend the content on a website. There ought to be sufficient data to warrant a visit to the site. The ability to provide information in an attractive and organised manner is on display on the homepage. Rather than focusing on aesthetics, a research institution's website design should prioritise the information substance and how easy it is to retrieve. The study involves assessing the information about the research institution that is included on the home page through hyperlinks. Welcome message, about the institution, Budget, Research and Development, Extension, Departments, Downloadable form, Alumni, Infrastructure, Facilities, and Visitor Count are some of the hyperlinks that are looked for on home pages. Resources such as a FAQ, a calendar, a publication, a feedback form, website policies, news, a directory, RTI details, a picture gallery, and webmail/login options.

REVIEW OF LITERATURE

Mahmood & Richardson, (2011) examined the use of Web 2.0 tools by academic libraries affiliated with the American Association of Research Libraries (US). All of the libraries were discovered to be using various web 2.0 tools. Wikis, photo sharing, presentation sharing, virtual worlds, customised webpages, podcasts, RSS, social networking sites, microblogs, and vertical search engines all made use of these technologies to disseminate news, advertise their services, teach users how to effectively use information literacy, provide details about print and digital resources, and gather user feedback.

Iqbal & Warraich, (2012) discovered that most people using the Punjab University website do not place a high value on the technical aspects of the site. Many users are satisfied with the results they get from the site's searches, while a small percentage are unsure. Half or more of those who took the survey think the PUL website is useful for professors and researchers.

Pareek & Gupta, (2013) according to their research, the most important features of a library website are clear organisation, options for various user groups, concise and up-to-date material, and acceptable language. There is no need for the 'libraries' to be worried about the availability of hardware and technical support anymore, since the number of internet users in Rajasthan is rapidly increasing, thousands of online communities catering to different interests are springing up, and nearly every institution has its own website. According to research on academic library websites and comparisons to global trends, Rajasthan's library website development is still in its early stages.

Joicy & Rekha, (2014) analysed the websites of major Indian universities using link analysis. As far as webometrics is concerned, it is a virgin territory. The research provides a useful overview of the features and content of the websites of India's Central Universities. The websites of Central Universities may use a lot of work, despite the fact that they already have some online presence and offer different degrees of service. The majority of internet users only visit the most prestigious and revered websites on the planet. Web visitors and

surfers will be more drawn to a Central University website if it is both visually appealing and useful.

Krishna Kumar & Nirmala, (2014) research Councils of India website traffic and page rank statistics are presented in this study. Future research in this area could benefit from this study's findings. It would be possible to expand this analysis by comparing it to other academic or research organisations that focus on certain geographic areas. The researcher suggests that in the future, it would be possible to determine the Global Rank and the Alexa Traffic Rank for country library websites as well provided recommendations for web design standards. Implementing those standards will enhance a website, even though they are unrelated to web trustworthiness. The rules outline how to make good use of design and graphics, which can significantly improve a website's aesthetics.

Analysis of Websites of Academic Institutions

The first step in evaluating a website's quality is identifying and gaining access to the server that stores the document or documents. The first impression a website gives users, how easy it is to connect and download, how to identify the site, any restrictions on access, and any other concerns that need to be addressed before the content on the site can be accessed are all part of site accessibility. By providing the answers to the following questions, we can get the following information about the sites: The Organisation Conducting the Study this is the address (URL) of the library on the website of the research institution. The name of the organisation doing the research.

Table 1 displays the names and abbreviations of 32 institutions in Uttarakhand. The Uttarakhand higher education system relies on these institutions. Students also travel from all around India to attend these universities. In terms of research, some of these universities are among the best in the Uttarakhand.

Table 1		
ABBREVIATIONS OF 32 INSTITUTIONS IN UTTARAKHAND		
Sl.No.	Name of the Institution	Abbreviation
1	University of Petroleum & Energy Studies	UPES
2	Uttarakhand Technical University	UTU
3	Gurukul Kangri Vishwavidyalay	GKV
4	Hemwati Nandan Bahuguna Garhwal University	HNBGU
5	G. B. Pant University of Agriculture & Technology	GBPUAT
6	Kumaun University	KU
7	Doon University	DU
8	G.B. Pant Institute of Himalayan Environment & Development	GBPIHED
9	Indian Institute of Technology	IITR
10	Aryabhatta Research Institute of Observational Sciences	ARIES
11	Forest Research Institute	FRI
12	Forest Survey of India	FSI
13	Wadia Institute of Himalyan Geology	WIHG
14	Zoological Survey of India	ZSI
15	Central Soil and Water Conservation Research & Training Institute	CSWCRTI

16	Indian Institute of Petroleum	IIP
17	Indian National Institute of Visually Handicapped (NIVH)	NIVH
18	Wildlife Institute of India	WII
19	Indian Institute of Remote Sensing	IIRS
20	Lal Bahadur Shastri National Academy of Administration	LBSNAA
21	Indira Gandhi National Forest Academy	IGNFA
22	Irrigation Research Institute	IRI
23	Uttarakhand Forest Training Academy	UFTI
24	Directorate of Cold Water Fisheries Research	DCFR
25	Doon Library & Research Centre	DLRC
26	Uttarakhand Science Education & Research Centre	USERC
27	National Institute of Hydrology	NIH
28	Institute of Biotechnology	IBT
29	Uttarakhand Space Application Centre	USAC
30	National Institute of Technology	NIT
31	Survey of India	SOI
32	Institute of Technology & Management	ITM

Library Services and Technical Services

The services offered by libraries allow people to access and use books and information. Two sections of library and documentation services, which are primarily concerned with documents, have also been evolving in a way that has elevated them to a separate category. On library websites, you may usually see technical services like acquisition, cataloguing, classification, but also circulation. Since providing these services is the primary goal of any libraries website, knowing which ones are offered and to what degree is crucial. Reservation, material renewal, fine calculation, purchase suggestions, "ask a librarian," requests for photocopies, and associated forms and online services are occasionally included in these descriptions as well Table 2, Figure 1.

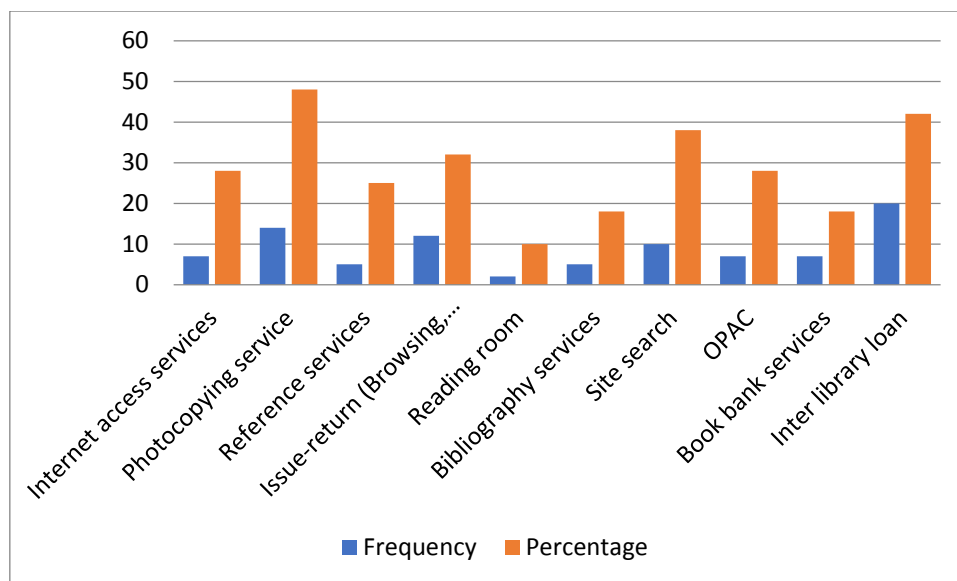| Table 2		
LIBRARY SERVICES & TECHNICAL SERVICES		
Criteria	Frequency	Percentage
Internet access services	7	28
Photocopying service	14	48
Reference services	5	25
Issue-return (Browsing, self-check in/out)	12	32
Reading room	2	10
Bibliography services	5	18
Site search	10	38
OPAC	7	28
Book bank services	7	18
Inter library loan & DDS ((Current Awareness Services, (CAS)	20	42

FIGURE 1
LIBRARY SERVICES & TECHNICAL SERVICES

Web 2.0 Services

Library 2.0 is an idea that evolved in response to the rise of Web 2.0. Michael Casey originally used the term "Library 2.0" in September 2005 on his blog Library Crunch. The goal of Library 2.0 is to make information easily accessible at any time and place needed by the user and to eliminate or greatly minimise obstacles to information reuse and usage. As a result, Library 2.0 aspires to assist libraries in fulfilling their long-standing mission of facilitating users' rapid interaction with pertinent information Table 3.

Table 3 WEB 2.0 SERVICES		
Criteria	**Frequency**	**Percentage**
RSS	2	8
Facebook	10	40
Blogs	0	0
Wikis	5	20
Instant Messenger	0	0
Google Plus	5	20
Delicious	1	4
Twitter	3	12
LinkedIn	5	20
You tube	3	12

CONCLUSION

Findings from the content-based evaluation of academic library websites in the Indian state of Uttarakhand have been quite instructive. This study has shown both good practices and places that require improvement by methodically evaluating accessibility, usability, content quality, design aesthetics, and functioning. This study's use of a systematic evaluation framework allowed for an exhaustive examination, which in turn allowed for the identification of particular areas that needed improvement.

The assessment's recommendations include making the site more accessible to people with disabilities, making the user interface more visually appealing and easier to use, and keeping the content up-to-date and accurate through regular maintenance and updates. In order to keep up with the demands and expectations of modern internet users, academic libraries in Uttarakhand must make website optimisation a top priority. Academic libraries can offer greater service to their scholarly communities by improving the efficiency and usability of their websites according to the study's suggestions.

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