

Content Analysis of Library Websites of Select Colleges of Delhi University: A Study

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ABSTRACT

The paper examines the accessibility, accuracy, currency and user-friendliness in ten selected library websites of the colleges affiliated to the University of Delhi. It further, discusses services and facilities being offered by the websites. The data were collected through a well-structured checklist from the selected colleges under study. The study reveals that maximum number of college libraries have mentioned information related to introduction 9(90 %), library staff 8(80 %), library hours 6(60 %) and membership 6(60 %) on their websites. However, study also report that none of the library websites/web-pages have features of social networking tools, feedbacks, regular updates and they also lack in providing question papers, news-clippings, user manual and single window search. The study findings reveals that Deshbandhu College library scored thirty eight (38) out of 43 which is highest (ranked 1st) whereas Ramjas College scored only five (05) out of 43 and stands last. The study suggests, for carrying out such evaluative studies which is the need of hour to enable the institutions to update their websites periodically and come up with flying colours on user's expectations.

Keywords: Content analysis; College library websites; Library resources, University of Delhi.

1. INTRODUCTION

The advent of Internet and development in ICT has revolutionised the way people seek and use information from library¹. The growth of e-resources and their growing demand by the users put a challenge for the library and librarians today. Furthermore, the new searching and sharing tools available on the internet provide users extra power, ease and fun in information seeking and thus the task of satisfying the new generation of users who are technology savvy becomes a challenge for the librarians². Academic libraries are especially facing the challenge of meeting the varying information needs & demands of users that have shifted from printed materials to electronic resources. Academic library websites have to provide information about libraries and library services as well as access to online catalogues, electronic databases, digital collections and different library tutorials. They have to work as gateways to information as users can ask reference questions online, conduct research in databases, place interlibrary loan requests online, and obtain academic articles electronically³⁻⁴.

The website is a collection of web pages, images, videos, and other digital contents⁵. It is usually dedicated to a particular purpose such as education, news etc. As far as the college website is concerned, it is very important for college fraternity and works as a primary source for prospective students who seeks information about academic programs and colleges in the decision-making process for taking admission⁶.

The college website is one of the important tool to publish the activities of the college, which gives the information related to courses, admission, syllabi, examination, fees, faculty, rules and regulations, placements, research and publications, library facilities, resources and services⁵. As far as the library website is concerned, it is face of the library resources for its users and acts as an open forum for the community. A well-equipped library website is the mirror of the library and its services⁷. Nowadays college libraries use their respective websites to extend their services and resources. The library website of any institution plays a vital role in providing the services and resources available in the library. The libraries should follow the guidelines while designing the website based on the demand of the users⁸. The content of a websites can be presented in different forms, the most common and accessible being text and graphics⁹. The content and its presentation plays an important role in increasing the usability of the library. The stronger the content of any library website, the more users will be attracted¹⁰.

Content analysis is defined as a method of observation and document analysis, and a research technique for the objective, systematic and quantitative description of the manifest content of communication¹¹. Content analysis of the college library websites have been viewed in different criteria such as general information, about the library, library resources, services, collection, contact information, RSS feeds and chats with librarian etc.¹² The main purpose of the evaluation of college library website is to guide its user towards accurate and authentic information¹³.

Table1. List of colleges

Name of College	Abbreviations of college	Established year	URL
Aryabhatta College	ABC	1973	https://aryabhattacollege.ac.in
Delhi College of Arts & Commerce	DCAC	1987	http://dcac.du.ac.in
Deshbandhu College (M)	DBC	1952	https://www.deshbandhucollege.ac.in
Hindu College	HC	1899	http://www.hinducollege.ac.in
Hansraj College	HRC	1948	https://www.hansrajcollege.ac.in
Kirori Mal College	KMC	1954	http://www.kmcollege.ac.in
Moti Lal Nehru College	MLNC	1964	http://www.mlncdu.ac.in
Ramjas College	RC	1917	http://ramjas.du.ac.in
Shri Ram College of Commerce	SRCC	1926	https://www.srcc.edu
Sri Venkateswara College	SVC	1962	http://www.svc.ac.in

Table 2. General information about the library

General Information	Name of colleges										Total (10) (%)
	ABC	DCAC	DBC	HC	HRC	KMC	MLNC	RC	SRCC	SVC	
Introduction	NA	A	A	A	A	A	A	A	A	A	9(90)
Mission/Vision	NA	A	A	A	A	NA	A	NA	A	A	7(70)
Library Hours	A	A	A	NA	NA	A	A	NA	A	NA	6(60)
Library Rules	A	A	A	NA	NA	A	NA	NA	A	NA	5(50)
Membership	A	A	A	A	NA	A	NA	NA	A	NA	6(60)
Services	NA	A	A	A	NA	A	NA	NA	A	NA	5(50)
Collection	NA	A	A	NA	A	A	A	NA	A	NA	6(60)
Infrastructure	NA	A	A	NA	NA	A	NA	NA	A	NA	4(40)
Library staff	A	A	A	NA	A	A	A	A	A	NA	8(80)
Library Sections	NA	A	A	A	A	A	NA	NA	A	NA	6(60)
Statistics	NA	NA	A	NA	NA	A	NA	NA	NA	NA	2(20)
New Arrivals	NA	A	A	NA	NA	A	NA	NA	A	NA	4(40)
Differently-abled section	NA	A	A	NA	NA	A	NA	NA	A	A	5(50)
Book Bank	A	A	A	NA	NA	A	NA	NA	A	NA	5(50)
Photocopy	NA	A	A	A	NA	A	NA	NA	A	NA	5(50)
Total Score (15)	05	14	15	06	05	14	05	02	14	03	

1.1 Delhi University

Delhi University is a premier university of the country established in 1922 having 91 affiliated Colleges spread over Delhi with two main campuses North and South Campus. These affiliated colleges include some specialised colleges of medical sciences, college of commerce and college of professional courses¹⁴.

The present study is to examine the web content of websites of libraries of Delhi university colleges to determine how effectively these libraries are using their websites to provide easy access for different resources and services to their clientele¹⁰.

2. LITERATURE REVIEW

Some studies are done on the topic of usability, content analysis and evaluation of library websites. In a study Brahma and Verma¹⁵ calculated the web impact factors of websites of six public libraries in India, by systematically evaluating the domain authority, number of web pages, and their links by using Open Site Explorer software. The study found that Khuda Baksh Oriental Public Library has the highest domain authority and web pages. Only 2 among selected libraries passed the criteria of internal equity-passing links and total internal links. CSL has the highest web impact factor followed by National Library and Khuda Baksh Oriental Public Library. Verma and Shukla¹⁶ evaluated the efficiency, usability, and effectiveness

Table 3. Library resources and services

Resources and Services	Name of colleges										Total (10) (%)
	ABC	DCAC	DBC	HC	HRC	KMC	MLNC	RC	SRCC	SVC	
OPAC	NA	w*	NA	A	NA	A	NA	NA	A	w*	5(50)
E-Journals	NA	A	A	A	NA	A	A	NA	A	A	7(70)
Databases	NA	A	A	NA	NA	A	A	NA	A	A	6(60)
Link to other websites	NA	A	A	NA	A	A	NA	NA	NA	NA	4(40)
FAQ's	NA	NA	A	NA	NA	NA	NA	NA	NA	NA	1(10)
User manual	NA	NA	A	NA	NA	NA	NA	NA	NA	NA	1(10)
Photo/Video	NA	A	A	A	A	NA	A	NA	NA	NA	5(50)
Single window search	NA	NA	A	NA	NA	NA	NA	NA	NA	NA	1(10)
Ask a Librarian	NA	NA	A	NA	NA	NA	NA	NA	NA	NA	1(10)
Newspaper clipping	NA	NA	A	NA	NA	NA	NA	NA	NA	NA	1(10)
Question Paper	NA	NA	A	NA	NA	NA	NA	NA	NA	NA	1(10)
Remote access	NA	A	A	NA	NA	A	A	NA	NA	NA	4(40)
N-LIST	NA	A	A	NA	NA	A	A	NA	NA	NA	4(40)
DELNET	NA	A	A	NA	NA	NA	A	NA	A	NA	4(40)
ILL/document delivery	NA	A	A	NA	NA	NA	A	NA	A	NA	4(40)
Total Score (15)	00	09	14	03	02	06	07	00	05	03	

*web OPAC

of 14 Indian Institute of Management library websites and found that most of the IIMs' library websites have simple and common usability features. All the libraries under study have a separate webpage and 29% libraries have multilingual options. Further, study reveals that IIM Ahmadabad has the highest and IIM Kozhikode least usability scores among the selected one. In another study Rahman and Batcha¹⁷ suggested that the College library should improve the internet facilities and organise library orientation programs at regular interval to maximise the use of library resources and services especially electronic resources. In recent study Shukla⁸, examined the content of the central university library website in north India with 3 main criteria namely; general information, library resources, features of the library websites and identified top 5 universities among selected under study.

Manjunatha¹⁸, investigated the contents of eight special library websites of Karnataka with criteria such as general information, library collection, library services, domain and display quality, and link, search and retrieval interface. The study found that all libraries have provided the details of library collection, library services and web OPAC. Most of the libraries have given the general information related to the visitors of library website and only half of the libraries have updated their website. However, limited number of libraries have feedback options, FAQ links, suggestion box

and alerting services on their website. Jange¹⁹, evaluated 16 university library websites in Karnataka using criteria general information, collections, services, useful links, web OPAC, web 2.0 services and concluded that the library websites should be strengthened with content and performance. In similar study Ramesh Babu, *et al.*²⁰ have studied the content of the 43 university library websites in Tamil Nadu, which include 17 affiliated and 21 private universities and further examined the design, languages, services and navigation. They suggested to update websites regularly, arrangement of web objects and links in the logical order to improve the design and structure of the website.

3. OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

- To analyse the contents of college library websites of Delhi University
- To find out the services and facilities offered on the websites
- To know about the accuracy, accessibility, currency and user-friendliness
- To find out the rank of library websites of selected colleges of Delhi University.

4. SCOPE OF THE STUDY

The present study covers the library websites of the

Table 4. Features of library website

Features	Name of colleges										Total (10) (%)
	ABC	DCAC	DBC	HC	HRC	KMC	MLNC	RC	SRCC	SVC	
Last update	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nil
Navigation	A	A	A	NA	NA	NA	NA	NA	NA	NA	3(30%)
Registration/ Login	A	NA	A	NA	NA	NA	NA	NA	A	NA	3(30%)
Direct Link	NA	NA	A	A	NA	NA	NA	NA	NA	NA	2(20%)
Download forms	NA	A	A	NA	NA	NA	NA	NA	A	NA	3(30%)
Social networking	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nil
Feedback	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nil
Layout	NA	NA	A	NA	NA	NA	NA	NA	A	NA	2(20%)
Keyword Search	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Nil
Total Score (09)	02	02	05	01	00	00	00	00	03	00	

colleges affiliated to the Delhi University. Total 10 colleges, five each from south and north campus having library website/webpage and imparting undergraduate courses have been selected for the study (listed in Table1).

5. METHODOLOGY

In the present study, a checklist was prepared based on earlier studies conducted by Singh and Gautam²¹ & Qutab and Mahmood²². The websites of college libraries under study were scanned thoroughly during November 2019 and the content of the study categorised into two variables ‘Available’ (A) and ‘Not Available’ (NA). The score (1) was given for ‘Available’ and (0) for ‘Not Available’. The collected data have been presented in tabular form and calculated for the purpose of ranking of the college library website.

6. ANALYSIS AND DISCUSSION

The collected data were organised and tabulated by using statistical methods. The analysis and interpretation of the data collected through the checklist were followed for the study.

Table 1 shows the name, abbreviations and year of establishment of the colleges. Table also depicts the different Uniform resource locators (URL) of select websites. Further, none of the college selected for study were found to have separate library website.

The data presented in Table 2 reveals that most of the college libraries 9(90 %) have given introductory information, 8(80 %) provided information regarding library staff, 7(70 %) about mission/vision of the library and 60 percent have provided information related to membership, library hours, collection and library sections. About 50% of libraries have information about library rules, differently abled sections, various services, book bank facilities and photocopy services on their websites. However, some of them lack in providing information regarding new arrival of books 4(40 %) and only 2(20 %) libraries have mentioned their statistics.

Table 3 describes the details of various library facilities

and services provided through the websites of colleges. Most of the college libraries under study are having e-Journals 7(70 %), database availability 6(60 %) and OPAC facilities 5(50 %). Out of these 5 colleges, 2(40 %) have Web OPAC facilities. Study also reveals that 40% college libraries have uploaded the photo/video, links to other websites, N-LIST and DELNET membership to facilitate access to e-contents remotely and interlibrary loan facilities through their websites.

Further analysis of the data shows that most of the college library websites are failed in listing certain information through their websites. Only 10% college libraries have information related to the user manual, question papers, newspaper clipping services, FAQs, Ask a Librarian and single-window search facilities.

The data analysis evaluates the various features of websites/webpages of college libraries with the selected criteria (Table 4). None of the library websites/webpages have found to get updated regularly or at regular intervals and no library webpage have a keyword search facility, feedback mechanism and social networking tools on their websites. Only selected number of library websites have successfully passed the criteria set to check features related to navigation 3(30 %), layout of library websites 2(20 %), Registration/Login 3(30 %), and downloading forms and other materials 3(30 %).

A user-friendly website is one which can be accessible to all users of the system regardless of physical, cognitive, language, and technical constraints and it should be browser as well as device compatible and can easily be opened in all physical media i.e. desktop, tablet or mobile and in different browsers. Also easy-to-follow structure and navigation, well-organised content, single window search and updated links are other major criteria to judge the user friendliness and accessibility of a library website.

For the evaluation of accessibility and user-friendliness of library websites, this study found that no library webpage are found to have a keyword search facility and limited number of colleges have direct links 2(20 %) of their library web-pages on their homepage (Table 5). However, the remaining 8(80

Table. 5 Ranking of websites of college libraries

Particulars	Name of colleges									
	DBC	DCAC	SRCC	KMC	MLNC	HC	ABC	HRC	SVC	RC
General Information (Max. Score 15)	15	14	14	14	05	06	05	05	03	02
Resources and Services (Max. Score 15)	14	09	05	06	07	03	00	02	03	00
Features (Max. Score 09)	05	02	03	00	00	01	02	00	00	00
Accessibility (Max. Score 04)	04	03	03	03	03	04	03	03	03	03
Total (Max. Score 43)	38	28	25	23	15	14	10	10	09	05
Rank	01	02	03	04	05	06	07	07	08	09

%) have links under facilities and infrastructure. It is found that all the college libraries are accessible through the selected browsers i.e. Google Chrome, Internet Explorer and Mozilla. The data analysis reveals that most of the library websites failed in approaching accessibility and user friendliness i.e. last update (0 %), layout 2(20 %), and navigation 3(30 %).

The ranking of college libraries of the Delhi University under study is listed in Table 5. The ranks are provided on the basis of score point obtained by the library websites/webpages based on the availability of web contents. It was observed that Deshbandhu College, scored highest i.e. thirty eight (38) out of forty three (43) followed by Delhi College of Arts and Commerce twenty eight (28) out of forty three (43) and Shri Ram College of Commerce stands 3rd position with score 25, whereas the Ramjas College placed the last position among selected colleges under the study.

7. CONCLUSIONS & SUGGESTIONS

The world wide web is an inseparable feature in every aspect of our life nowadays. We can't imagine information dispersal without the use of it. In the same way, above mentioned college libraries gives some ideas about how they incorporate this technology in their services. The study finds that most of the library websites under study have static pages with poor layout and navigation features and rarely being updated. None of the library websites are found to exploit the potentials of web-based forms, which are very effective tools to get the comments and suggestions from the users and thereby making the library websites interactive and communicative.

The evaluation of the library websites under study and subsequent analysis of data and findings have enabled the investigator to conclude that there is an urgent need to make websites of the college library more dynamic and interactive by following the web 2.0 or 3.0 technologies. There should be provisions for instant messaging, RSS feeds, digital reference services, FAQs etc. on the library websites so that users can have opportunity for direct conversation and communication with the system.

In addition, the academic library websites should frequently update their web pages with new announcements, information sources and services and check their compatibility with different browsers and media before uploading. Similarly, provisions for web forms should be given on pages to get the

feedbacks, comments and suggestions from the end users and thereby know their requirements and improve the services accordingly. It is also suggested to have provisions for remote access to digitised collections of the library in order to maximise the use of the library collections and websites.

The study concludes with the recommendation of conducting such evaluative studies on regular basis in order to keep the library websites up-to-date and meet the expectations of its clientele and also to develop a digital environment for the delivery of library services. It is believed that the study will serve as an example for further research on developing measurement frameworks for library website evaluation.

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In the current study, he collected the data and did all the analysis along with writing the theory part of the paper i.e. Introduction & literature review.

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