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## WEB CONTENT ANALYSIS OF STATE UNIVERSITY WEBSITES OF WEST BENGAL: AN EVALUATIVE STUDY

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# Web Content Analysis of State University Websites of West Bengal: An Evaluative Study

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## Abstract

Now-a-days websites and its services are the most growing and the fast-changing segment, play an important role as an informational gateway for every institution through online mode. The purpose of this paper is to analyse and evaluate the web contents of twenty-six state universities websites of West Bengal selected according to UGC, under Ministry of Education, Government of India and its contribution to global academic knowledge base. After preparing check list, various aspects related to the content of university website are examined; such as accessibility, currency, speed, accuracy, aesthetic value, language, user friendliness, navigation, currency, relevancy, applicability, pertinence and qualitative nature of graphics, animations, existing library facilities, collection, availability of services and variety types of information resources provided by the library elements etc.

**Keywords:** Web Content Analysis, evaluation criteria, State University Websites, West Bengal

## 1. Introduction

In the modern age of 21<sup>st</sup> century, the rapid advancement and applications of Information and Communication Technology (ICT) has been transformed not only our society from information society to knowledge society but also drastically changed the conceptual pattern of library services from traditional based to web enabled services. In this transformed knowledge society, the demands of information from users and researchers in all disciplines are growing day by day; the World Wide Web (WWW) has become the most prominent communication medium for accessing, sharing and exchanging information on the internet. So, the simplest way for collecting, organizing and disseminating of information with economy and efficiency is done by the publication on the websites which helps to maintain scholarly communication with anyone. In this digital era, website plays the leading role for catching recent updates and reciprocating ideas via e-mails, audios, videos, graphics etc therefore, every institution manage their own websites which is easily affordable and accessible for communicating as well as imparting valuable or desirable institutional information to the end users. For effective user services, the libraries are also gateway or reflection mirror of any institution to understand and adopt emerging innovative technologies i.e., web based digital environment, also known as web portal as well as trends for providing quality services through library websites to users with the noble motive of satisfying their required information needs. Present day's university websites are foremost leading window which gives us a fundamental image of the institution as well as act as starting points for visiting the concerned library to access and explore its academic or scholarly information

resources and services to the patrons. With the gradual growth of the university websites as well as library websites, it is much needed to evaluate the web content from time to time which depends upon its collection, facilities, services, administrative support, webpage design and updating policy etc. Now-a-days in state universities, their library websites represent the actual knowledge hub and become one of the best publishing tool to provide right information in right format at the right time to the user and act as a proper medium for our societal development by providing standard information for better library service, the quality education purpose of educational professionals as well as whole academic fraternity, the conduct of research purpose in an intellectually dynamic environment, and the public's understanding of education. This study analyses and evaluates the web contents of state universities websites of West Bengal selected according to UGC, under Ministry of Education, Government of India and its contribution to global academic knowledge base and the end result of this study will help to demonstrate the overall content, coverage, authenticity, authority, currency and different features of university websites.

## **2. Review of Related Literature:**

The present review of related literature mainly highlights the research studies were done on web content analysis of academic institutional websites of India. There have been a number of studies that focus only on library websites and most of the studies have already been conducted on the usability, accessibility, visibility and performance evaluation of the library websites with giving importance to the content analysis. Some related literatures associated with this topic are collected and reviewed and the related studies are chronologically arranged from present to past. For instance,

**Arandhara and Borah (2019)** analysed the content available in the library webpage of the two central universities of Assam through the basis of the information available in the library webpage of selected universities.

**Bharati and Madhusudhan (2019)** assessed the content of Jawaharlal Nehru University and Banaras Hindu University library websites using qualitative (11 checkpoints) and quantitative (170 checkpoints) evaluation and attempted to show certain features in both the libraries for discovering the user engagement nature of library websites in the era of ICT.

In another study, **Hugar (2019)** investigated the representation of the content analysis of Goa University affiliated engineering college library websites in Goa and guided the librarians in improving their library websites.

**Das and Das (2018)** assessed the web content of 07 IISER libraries website and investigated the usability of 07 IISER library websites with the identified criteria for the verification of validity, reliability & usefulness.

**Kumar and Verma (2018)** conducted a critical analysis to evaluate the content of Library Websites of NAAC accredited "A" grade 06 universities in Central Zone of India.

In another study, **Gadhavi (2017)** analysed the content such as about the library, collection, services, online resources, use of social networking sites of 08 library websites of institutes of national importance in Gujarat.

**Gautam (2017)** analyzed the content and investigated the application of web technology in the context of content analysis of 05 central university library websites of Delhi.

**Kumar and Mir (2017)** analysed and compared the content and usability of 04 central universities out of 45 Central Universities under central zone of India according to the parameters of university grant commission.

In another study, **Manjunatha (2016)** conducted a content analysis to evaluate 08 special library websites situated in Bengaluru.

**Prabhu et al. (2016)** assessed the content management and compared the usability of 06 Indian Institute of Management (IIM's) library web sites in India on the World Wide Web regarding the basic functions they perform.

**Sabitha (2016)** revealed that 100% of deemed university library websites provided information About Library, Copyright, Books, Journals and subscribing e-journals, e-books, and e-databases. The author also revealed in this study that 89% of deemed universities provided information about working hours, library sections, and Back volume of journals whereas 44% of deemed universities provided Facebook and twitter facilities.

In another study, **Verma and Devi (2016)** analysed and evaluated the web contents of the 12 IIM libraries website in India through the enumeration of 112 criteria under the 10 headings.

**Lamani and Keshava (2015)** considered to evaluate libraries' homepages of selected 27 universities, out of 96 universities in the entire south Indian states like Andhra Pradesh, Tamil Nadu, Karnataka and Kerala based on the criteria such as Authority, Purpose, Coverage, Currency, Objectivity, Accuracy, Superstructure, Graphics, Use of colour, Content, Readability, Page layout, Hyperlinks, Promotions, Searching and FAQ which were proposed by Benjamin Keevil.

**Verma and Devi (2015)** analysed the web contents of the 07 Central University libraries website of the North Eastern states of India i.e. Assam University; Tezpur University; Manipur University; North Eastern Hill University; Mizoram University; Nagaland University; and Sikkim University.

The present review shows that many webometric or content evaluation research studies have been done for mapping the academic institutional websites of India using checklist and it is clear from the above literature review that the present study has never been explored.

### **3. Objectives of the study:**

The main objectives for this study are mentioned below:

- To identify criteria for the evaluation of web content of state universities in West Bengal;
- To analyse the information contents of websites of state universities in West Bengal;
- To assess the structure, functional interactivity, types of services available in the state universities websites;
- To measure the accessibility, currency, speed, accuracy, aesthetic value, language, user friendliness, navigation and currency of state universities websites;
- To assess the relevancy, applicability, pertinence and qualitative nature of graphics, animations which are used in the selected state universities websites in West Bengal;
- To explore the current trends available in the state universities websites in West Bengal;

- To analyse the existing library facilities, collection, availability of services and variety types of information resources provided by the library elements in the selected state universities websites;

#### **4. Scope and Coverage:**

There are 36 state universities in West Bengal but in order to realize the above objectives, the present study has been confined to examine the web contents of total 26 state universities in West Bengal, India according to the UGC under Ministry of Education, Government of India depending on the evaluation criteria of the authority, currency, accuracy, relevancy, organization and structure, URL extension, special features and manual evaluation etc. Other 10 universities i.e., Alipurduar University, Biswa Bangla Biswabidyalay, Dakshin Dinajpur University, Harichand Guruchand University, Hindi University, Kanyashree University, Mahatma Gandhi University, Murshidabad University, Rani Rashmoni Green University, Sadhu Ram Chand Murmu University are not mentioned or listed in UGC official websites. So Selected 26 state universities in West Bengal and their URL extension are listed in table 1.

#### **5. Methodology:**

This study was carried out in multi-phases i.e., five phases. In the present study, the following methods and procedures were described in the following ways:

##### **5.1 Literature search**

In the first phase, to conduct literature search the authors primarily searched the various e-journals which are published in the electronic databases such as Emerald, Taylor and Francis, DOAJ, Google Scholar and other internet resources regarding the research topic. Further, the authors have consulted some primary sources such as journals, theses and conference proceedings etc., related to this topic.

##### **5.2 Design of the study through Sample selection**

In the second phase, according to the UGC under Ministry of Education, Government of India, 26 state universities in West Bengal and their official websites were taken from the official website of UGC (University Grants Commission, 2020) for the present study.

##### **5.3 Details of the tools employed**

In the third phase, there is no standard tool available to analyse the contents of the state university websites. In the present study, the authors have adopted the necessary elements from the following standards, guidelines and thesis to analyse the contents of state university websites.

- 1) Guidelines for Indian Government Websites (Version 2.0): An Integral Part of Central Secretariat Manual of Office Procedure, Prepared By: National Informatics Centre (NIC), Ministry of Electronics & Information Technology (MeitY), Government of India, 2019
- 2) Content analysis of Medical College Websites in India. Doctoral Theses. (Rekha, H. R., 2017)
- 3) Library Websites of Central Universities of Assam: a Study. Journal Article. (Arandhara, A. & Borah, N., 2019)

#### 5.4 Procedure of data collection

In the fourth phase, the checklist was prepared, finalized and divided into 10 main headings for evaluating the valuable contents of selected state university websites:

**a) Information about homepage of websites**

In this section, 27 main checklist criteria were covered.

**b) Information about University Details**

In this section, 31 main checklist criteria were studied.

**c) Information about incorporating Web 2.0 features in University Websites**

In this section, 7 main checklist criteria were studied.

**d) Primary Information about Library Details available in University Websites**

In this section, 11 main checklist criteria were studied.

**e) Information about Library Collection**

In this section, 16 main checklist criteria were studied.

**f) Information about Library Non-Book Materials and Access to Electronic Resources**

In this section, 11 main checklist criteria were studied.

**g) Availability Contact Information of Library Personnel**

In this section, 2 main checklist criteria were studied.

**h) Information about Value added Library Services**

In this section, 24 main checklist criteria were studied.

**i) Information about Library Policies**

In this section, 2 main checklist criteria were studied.

**j) Information about Language**

In this section, 3 main checklist criteria were studied.

#### 5.5 Statistical methods adopted

In the fifth phase, percentage analysis was used to analyse the data collected. All the selected websites were thoroughly scanned and carefully analysed based on the identified checklists at the various times during August-September 2021.

#### 6. Data Analysis and Interpretation:

**Table 6.1: Alphabetical List of the 26 State Universities in West Bengal and their URL extension**

Sl No	Name of the Universities	URL extension of their websites	Year of Establishment
1	Aliah University	<a href="http://www.aliah.ac.in/">http://www.aliah.ac.in/</a>	2008
2	Bankura University	<a href="https://www.bankurauniv.ac.in/">https://www.bankurauniv.ac.in/</a>	2013
3	Bidhan Chandra Krishi Vishwavidyalaya	<a href="https://www.bckv.edu.in/">https://www.bckv.edu.in/</a>	1974
4	Cooch Behar Panchanan Barma University	<a href="https://cbpbu.ac.in/">https://cbpbu.ac.in/</a>	2012
5	Diamond Harbour Women's University	<a href="http://dhwu.ac.in/">http://dhwu.ac.in/</a>	2013
6	Jadavpur University	<a href="http://www.jaduniv.edu.in/">http://www.jaduniv.edu.in/</a>	1905
7	Kazi Nazrul University	<a href="https://www.knu.ac.in/">https://www.knu.ac.in/</a>	2012

8	Maulana Abul Kalam Azad University of Technology	<a href="https://makautwb.ac.in/">https://makautwb.ac.in/</a>	2001
9	Netaji Subhas Open University	<a href="http://www.wbnsou.ac.in/">http://www.wbnsou.ac.in/</a>	1997
10	Presidency University	<a href="https://presiuniv.ac.in/web/">https://presiuniv.ac.in/web/</a>	1817
11	Rabindra Bharati University	<a href="http://rbu.ac.in/">http://rbu.ac.in/</a>	1962
12	Raiganj University	<a href="https://raiganjuniversity.ac.in/">https://raiganjuniversity.ac.in/</a>	2015
13	Sidho-Kanho-Birsha University	<a href="https://skbu.ac.in/">https://skbu.ac.in/</a>	2010
14	The Sanskrit College and University	<a href="https://www.sanskritcollegeanduniversity.org.in/">https://www.sanskritcollegeanduniversity.org.in/</a>	1824
15	The West Bengal National University of Juridical Science	<a href="https://www.nujs.edu/">https://www.nujs.edu/</a>	1999
16	The West Bengal University of Health Sciences	<a href="https://wbuhs.ac.in/">https://wbuhs.ac.in/</a>	2003
17	University of Burdwan	<a href="https://www.buruniv.ac.in/">https://www.buruniv.ac.in/</a>	1960
18	University of Calcutta	<a href="https://www.caluniv.ac.in/">https://www.caluniv.ac.in/</a>	1857
19	University of Gour Banga	<a href="https://www.ugb.ac.in/">https://www.ugb.ac.in/</a>	2008
20	University of Kalyani	<a href="https://www.klyuniv.ac.in/">https://www.klyuniv.ac.in/</a>	1960
21	University of North Bengal	<a href="https://www.nbu.ac.in/">https://www.nbu.ac.in/</a>	1962
22	Uttar Banga Krishi Vishwavidyalaya	<a href="https://www.ubkv.ac.in/">https://www.ubkv.ac.in/</a>	2001
23	Vidyasagar University	<a href="http://www.vidyasagar.ac.in/">http://www.vidyasagar.ac.in/</a>	1981
24	West Bengal State University	<a href="https://wbsu.ac.in/">https://wbsu.ac.in/</a>	2008
25	West Bengal University of Animal and Fishery Sciences	<a href="http://wbuafscl.ac.in/">http://wbuafscl.ac.in/</a>	1995
26	West Bengal University of Teachers' Training, Education Planning and Administration	<a href="https://www.wbuttepa.ac.in/">https://www.wbuttepa.ac.in/</a>	2015

Table 6.1 indicates alphabetical list of the 26 State Universities in West Bengal are considered for the investigation along with the URL extension of their websites, and year of establishment of these universities.

**Chart 6.2: Century wise Establishment of the 26 State Universities in West Bengal**

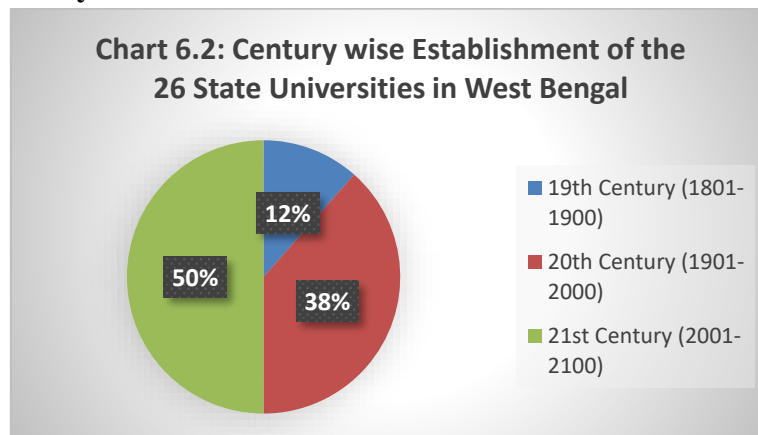


Chart 6.2 reveals century wise establishment of the 26 State Universities in West Bengal. It is observed that most of universities 13 (50%) were established in 21<sup>st</sup> century and 10 (34.46%) were established in 20<sup>th</sup> century. Few universities 3 (11.54%) were established in 19<sup>th</sup> century.

**Chart 6.3: Classification of university websites by URL extension (n=26)**

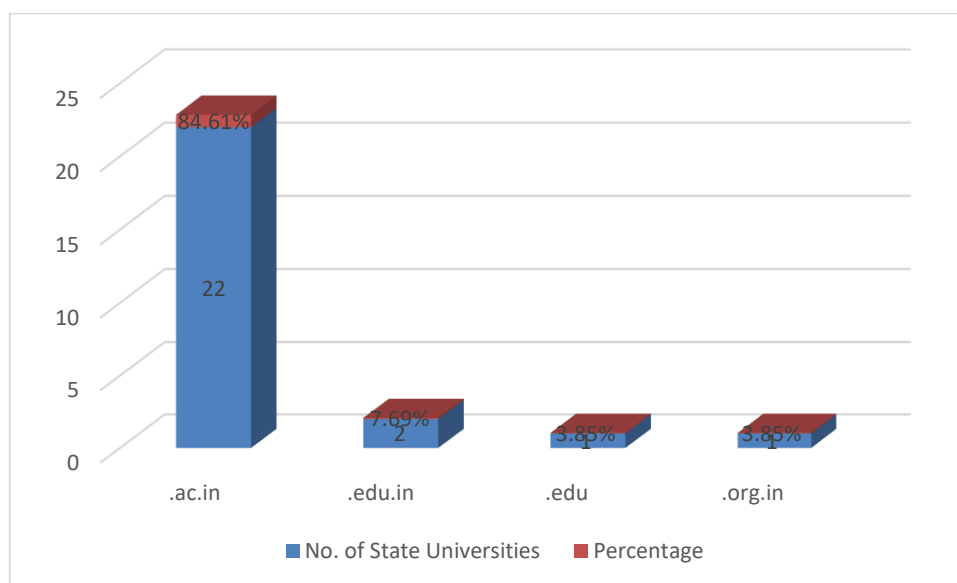


Chart 6.3 helps to show the URL extensions of the 26 State Universities in West Bengal, India which is undertaken for this study. It is observed that there are four types of URL extension. The most common URL extension was .ac.in which have been used by the 22 state universities (84.61%) out of 26 State Universities in West Bengal, India, followed by 2 (7.69%) state universities used .edu.in and another 1 (3.85%) state university used .edu. 1 (3.85%) state university used.org.in URL extension.

**Table 6.4: Information about homepage of websites**

Sl. No.	Checklist Criteria	Frequency	Percentage
6.4.1	Website loading page time within 8-10 sec	25	96.15%
6.4.2	Basic page layout (animated)	25	96.15%
6.4.3	Website frame (Available)	4	15.38%
6.4.4	Availability of University Logo	25	96.15%
6.4.5	Search Box	9	34.61%
6.4.6	Tagline	7	26.92%
6.4.7	Back to home option	25	96.15%
6.4.8	Administration information	25	96.15%
6.4.9	Navigation Scheme i.e. (Interconnected every page with homepage)	25	96.15%
6.4.10	Dead or Error Links	1	3.85%
6.4.11	Library module can be accessed not more than two clicks from homepage	23	88.46%



6.4.12	Visitor information	3	11.54%
6.4.13	About us (vision, mission & objectives)	23	88.46%
6.4.14	History about the University	22	84.61%
6.4.15	Contact Us information with Google map	25	96.15%
6.4.16	Copyright information	25	96.15%
6.4.17	Availability of Useful Links	23	88.46%
6.4.18	Graphics and Animations	25	96.15%
6.4.19	Typography (well written and understandable text)	25	96.15%
6.4.20	Mobile compatibility	25	96.15%
6.4.21	Sitemap	8	30.77%
6.4.22	Archives (accessing past content)	19	73.08%
6.4.23	Welcome note given by VC	21	80.77%
6.4.24	Photos of VC are given	22	84.61%
6.4.25	Photos of Chancellor are given	8	30.77%
6.4.26	Information about Credits (Awards, Convocation, foreign Recognitions)	21	80.77%
6.4.27	Employee Database Creation	2	7.69%

It can be seen from the table 6.4 that among 26 state university websites, maximum 25 (96.15%) number university websites have information on 'Website loading page time within 8-10 sec', 'Basic page layout (animated)', 'Availability of University Logo', 'Back to home option', 'Administration information', 'Navigation Scheme', 'Contact Us information with Google map', 'Copyright information', 'Graphics and Animations', 'Typography' and 'Mobile compatibility' in their webpages. 23 (88.46%) university websites have information on 'Library module can be accessed not more than two clicks from homepage', 'About us (vision, mission & objectives)', 'Availability of Useful Links' whereas 22 (84.61%) university websites have information on 'History about the University' and 'Photos of VC are given' in their webpages. 21 (80.77%) university websites have information on 'Welcome note given by VC', 'Information about Credits' whereas 19 (73.08%) university websites have information on 'Archives' in their webpages. Only 9 (34.61%) university websites have information on 'Search Box', 8 (30.77%) university websites have information on 'Sitemap' and 'Photos of Chancellor are given' followed by 7 (26.92%) university websites have information on 'Tagline' in their webpages. Minimum 4 (15.38%), 3 (11.54%), 2 (7.69%) and 1 (3.85%) university websites have information on 'Website frame (Available)', 'Visitor information', 'Employee Database Creation' and 'Dead or Error Links' respectively in their webpages.

**Table 6.5: Information about University Details**

Sl. No.	Checklist Criteria	Frequency	Percentage
6.5.1	All Departments (Availability of departmental information)	24	92.31%
6.5.2	Availability of Admission related information	25	96.15%
6.5.3	Results	22	84.61%

6.5.4	Examinations	23	88.46%
6.5.5	Photo and Video Gallery	19	73.08%
6.5.6	Students' portal	21	80.77%
6.5.7	Campus Virtual Tour	12	46.15%
6.5.8	Fellowships & Scholarship	21	80.77%
6.5.9	Academic Events	25	96.15%
6.5.10	Faculty/Staff Details	24	92.31%
6.5.11	Research oriented information	24	92.31%
6.5.12	Courses offered	25	96.15%
6.5.13	Publications	22	84.61%
6.5.14	Syllabus	16	61.54%
6.5.15	Act & Statute & Authorities	24	92.31%
6.5.16	Open and Distance Learning Section	7	26.92%
6.5.17	Circulars and Notices	25	96.15%
6.5.18	Press release	12	46.15%
6.5.19	Announcements/Latest News	25	96.15%
6.5.20	RTI	24	92.31%
6.5.21	Tender	25	96.15%
6.5.22	Recruitment	25	96.15%
6.5.23	Committees for academic and administration	22	84.61%
6.5.24	E-mail facility availability	25	96.15%
6.5.25	PG & UG questions	10	38.46%
6.5.26	Creation of separate login ID for students and employees	4	15.38%
6.5.27	Seminars/Conferences/Workshops	24	92.31%
6.5.28	Feedback form	5	19.23%
6.5.29	Quick Contact	6	23.08%
6.5.30	FAQ	4	15.38%
6.5.31	Online Classes/E-Classroom/Study materials	11	42.31%

Table 6.5 represents that among 26 state university websites, maximum 25 (96.15%) university websites have information on 'Availability of Admission related information', 'Academic Events', 'Courses offered', 'Circulars and Notices', 'Announcements/Latest News', 'Tender', 'Recruitment' and 'E-mail facility availability' whereas 24 (92.31%) university websites have information on 'All Departments (Availability of departmental information)', 'Faculty/Staff Details', 'Research oriented information', 'Act & Statute & Authorities', 'RTI' and 'Seminars/Conferences/Workshops' in their webpages. 23 (88.46%) university websites have information on 'Examinations' whereas 22 (84.61%) university websites have information on 'Results', 'Publications', 'Committees for academic and administration' followed by 21 (80.77%) university websites have information on 'Students' portal', 'Fellowships & Scholarship' and 19 (73.08%) university websites have information on 'Photo and Video Gallery' in their webpages. 16 (61.54%) university websites have information on 'Syllabus' whereas 12 (46.15%) university websites have information on

‘Campus Virtual Tour’, ‘Press release’ followed by 11 (42.31%) university websites have information on ‘Online Classes/E-Classroom/Study materials’ in their webpages. Minimum 10 (38.46%), 7 (26.92%), 6 (23.08%), 5 (19.23%) and 4 (15.38%) university websites have information on ‘PG & UG questions’, ‘Open and Distance Learning Section’, ‘Quick Contact’, ‘Feedback form’ and ‘Creation of separate login ID for students and employees’ & ‘FAQ’ in their webpages respectively.

**Table 6.6: Information about incorporating Web 2.0 features in University Websites**

Sl. No.	Checklist Criteria	Frequency	Percentage
6.6.1	Facebook	8	30.77%
6.6.2	Twitter	6	23.08%
6.6.3	Instagram	1	3.85%
6.6.4	WhatsApp	1	3.85%
6.6.5	YouTube	6	23.08%
6.6.6	Linked-In	2	7.69%
6.6.7	Google+	2	7.69%

From the table 6.6 it can be clearly seen that among 26 state university websites, there are only 8 (30.77%) state university websites incorporating Facebook account in their webpages whereas only 6 (23.08%) state university websites incorporating twitter and YouTube account in their webpages. Out of 26 state university websites, there are 2 (7.69%) state university websites incorporating Linked-In and Google+ account whereas only 1 (3.85%) state university websites incorporating Instagram and WhatsApp account in their webpages.

**Table 6.7: Primary Information about Library Details available in University Websites**

Sl. No.	Checklist Criteria	Frequency	Percentage
6.7.1	Separate Library Website	4	15.38%
6.7.2	Library webpage through University website	17	65.38%
6.7.3	About the Library	18	69.23%
6.7.4	Historical details of the Library	11	42.31%
6.7.5	Mission and vision and Objectives of the Library	13	50%
6.7.6	Library Building Information	14	53.85%
6.7.7	Working Hours	13	50%
6.7.8	Library Committee	13	50%
6.7.9	Annual Reports/Statistics	6	23.08%
6.7.10	Library Software Information	16	61.54%
6.7.11	Any Instructions and Tutorials about Library use	4	15.38%

From the table 6.7 it can be clearly seen that out of 26 state university websites minimum 4 (15.38%) university websites have their own ‘Separate Library Website’ and 17 (65.38%) university websites have connected with Library webpage. This table also reveals among 26 state university websites, highest 18 (69.23%) university websites have information on ‘About the Library’ whereas 16 (61.54%) university websites have information on ‘Library

Software Information’ followed by 14 (53.85%) university websites have information on ‘Library Building Information’ in their webpages. Almost 13 (50%) university websites have information on ‘Mission and vision and Objectives of the Library’, ‘Working Hours’, ‘Library Committee’ whereas 11 (42.31%) university websites have information on ‘Historical details of the Library’ in their webpages. Very few only 6 (23.08%) university websites have information on ‘Annual Reports/Statistics’ in their websites and 4 (15.38%) university websites provide information on ‘Instructions and Tutorials about Library use’ in their websites.

**Table 6.8: Information about Library Collection**

<b>Sl. No.</b>	<b>Checklist Criteria</b>	<b>Frequency</b>	<b>Percentage</b>
6.8.1	Books	17	65.38%
6.8.2	Print Journals (Bound volume)	17	65.38%
6.8.3	Print Newspapers	11	42.31%
6.8.4	Print Magazines	12	46.15%
6.8.5	Audio-Video Materials (CD-DVD)	11	42.31%
6.8.6	Theses and Dissertations	14	53.85%
6.8.7	Project Reports	13	50%
6.8.8	Manuscripts	7	26.92%
6.8.9	Reference Sources	9	34.61%
6.8.10	Seminar/Conference Proceedings	7	26.92%
6.8.11	Faculty Publications	12	46.15%
6.8.12	Career oriented resources	7	26.92%
6.8.13	Microfilm/Microfiche	3	11.54%
6.8.14	Links to other institutional libraries online catalogue	14	53.85%
6.8.15	Rare Books Collection	11	42.31%
6.8.16	Gifted Books	8	30.77%

Table 6.8 explains about the library collection information available in the websites, out of 26 state university websites highest 17 (65.38%) university websites have information on ‘Books’, ‘Print Journals (Bound volume)’ whereas 14 (53.85%) university websites have information on ‘Theses and Dissertations’, ‘Links to other institutional libraries online catalogue’ followed by 13 (50%) university websites have information on ‘Project Reports’, 12 (46.15%) university websites have information on ‘Print Magazines’, ‘Faculty Publications’ and 11 (42.31%) university websites have information on ‘Print Newspapers’, ‘Audio-Video Materials (CD-DVD)’, ‘Rare Books Collection’ in their websites. Minimum 9 (34.61%), 8 (30.77%) university websites have information on ‘Reference Sources’ and ‘Gifted Books’ respectively in their websites whereas 7 (26.92%) university websites have information on ‘Manuscripts’, ‘Seminar/Conference Proceedings’, ‘Career oriented resources’ followed by only 3 (11.54%) university websites have information on ‘Microfilm/Microfiche’ in their websites.

**Table 6.9: Information about Library Non-Book Materials and Access to Electronic Resources**

Sl. No.	Checklist Criteria	Frequency	Percentage
6.9.1	E-Books	19	73.08%
6.9.2	E-Journals	18	69.23%
6.9.3	E-Magazines	6	23.08%
6.9.4	Link to online reference/Electronic database	19	73.08%
6.9.5	Digital Library (IR)	14	53.85%
6.9.6	Subject Gateways	7	26.92%
6.9.7	Open Access Resources	16	61.54%
6.9.9	Braille Documents	3	11.54%
6.9.10	Digital Archive	6	23.08%
6.9.11	E-Thesis and E-Dissertation	4	15.38%

The table 6.9 depicts the information about Library Non-Book Materials and Access to Electronic Resources available in the websites, among 26 state university websites in total 19 (73.08%) university websites have information on ‘E-Books’, ‘Link to online reference/Electronic database’ whereas 18 (69.23%), 16 (61.54%) and 14 (53.85%) university websites have information on ‘E-Journals’, ‘Open Access Resources’ and ‘Digital Library (IR)’ respectively in their websites. Minimum 7 (26.92%) university websites have information on ‘Subject Gateways’ whereas 6 (23.08%) university websites have information on ‘E-Magazines’, ‘Digital Archive’ followed by 4 (15.38%) university websites have information on ‘E-Thesis and E-Dissertation’ and only 3 (11.54%) university websites have information on ‘Braille Documents’ in their websites.

**Chart 6.10: Availability Contact Information of Library Personnel**

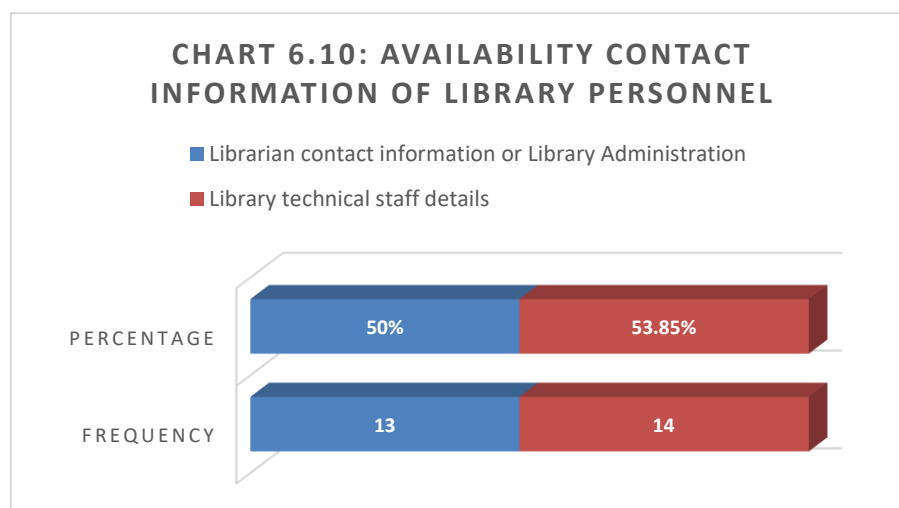


Chart 6.10 reveals the information about contact information of library personnel available in the websites, among 26 state university websites total 14 (53.85%) of university websites have information on ‘Library technical staff details’ whereas 13 (50%) university websites

have information on 'Librarian contact information or Library Administration' in their websites.

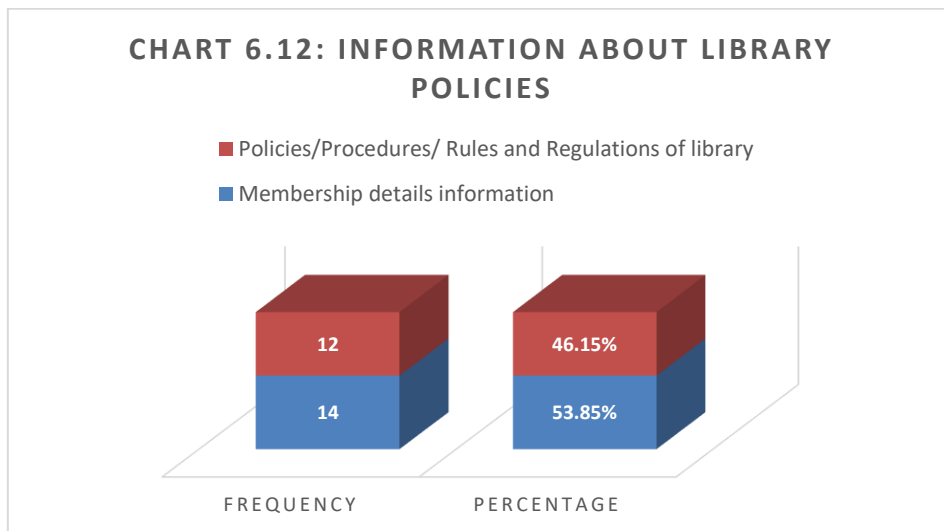
**Table 6.11: Information about Value added Library Services**

Sl. No.	Checklist Criteria	Frequency	Percentage
6.11.1	Reference Service	12	46.15%
6.11.2	Referral Service	4	15.38%
6.11.3	Circulation Service	15	57.69%
6.11.4	Internet Access Service	12	46.15%
6.11.5	Photocopy Service	11	42.31%
6.11.6	Reading Room Service	14	53.85%
6.11.7	Bibliographic Service	7	26.92%
6.11.8	Catalogue/ WEBOPAC	13	50%
6.11.9	Book Bank Service	4	15.38%
6.11.10	Inter Library Loan	8	30.77%
6.11.11	Document Delivery Service	4	15.38%
6.11.12	Reference queries "Ask-A-Librarian"	2	7.69%
6.11.13	CAS/SDI	6	23.08%
6.11.14	Indexing and Abstracting Service	4	15.38%
6.11.15	Off campus access to e-resources	3	11.54%
6.11.16	Preservation and Conservation Service	4	15.38%
6.11.17	Newspaper Clipping Service	2	7.69%
6.11.18	Library News & Events	2	7.69%
6.11.19	Image and Video Gallery of Library	9	34.61%
6.11.20	New Arrivals	11	42.31%
6.11.21	Research Support Information	15	57.69%
6.11.22	Electronic Services	4	15.38%
6.11.23	Journal and Career Guidance Service	15	57.69%
6.11.24	Access to Rare Collection	7	26.92%

Table 6.11 depicts the information on value added library services available in the websites, among 26 state university websites maximum 15 (57.69%) university websites have information on 'Circulation Service', 'Research Support Information', 'Journal and Career Guidance Service' whereas 14 (53.85%) university websites have information on 'Reading Room Service' followed by 13 (50%) university websites have information on 'Catalogue/ WEBOPAC', 12 (46.15%) university websites have information on 'Reference Service', 'Internet Access Service' and 11 (42.31%) university websites have information on 'Photocopy Service', 'New Arrivals' in their websites. 9 (34.61%) university websites have information on 'Image and Video Gallery of Library', 8 (30.77%) university websites have information on 'Inter Library Loan' whereas 7 (26.92%) university websites have information on 'Bibliographic Service', 'Access to Rare Collection' and 6 (23.08%) university websites have information on 'CAS/SDI' in their websites. In total minimum 4 (15.38%) university websites have information on 'Referral Service', 'Book Bank Service',

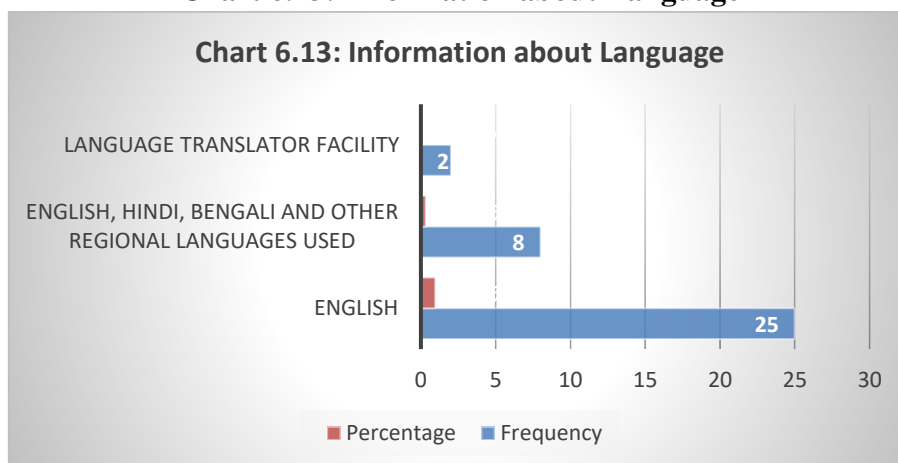
'Document Delivery Service', 'Indexing and Abstracting Service', 'Preservation and Conservation Service', 'Electronic Services' in their websites followed by 3 (11.54%) university websites have information on 'Off campus access to e-resources' and only 2 (7.69%) university websites have information on 'Reference queries', 'Newspaper Clipping Service', 'Library News & Events' in their websites.

**Chart 6.12: Information about Library Policies**



It can be seen from the chart 6.12 that among 26 state university websites, maximum 14 (53.85%) university websites have information on 'Membership details' whereas minimum 12 (46.15%) university websites have information on 'Policies/Procedures/ Rules and Regulations of library' in their websites.

**Chart 6.13: Information about Language**



It can be seen from the chart 6.13 that among 26 state university websites, maximum 25 (96.15%) university websites have used 'English' for their website whereas 8 (30.77%) university websites have used Hindi, Bengali and other regional languages including English and only 2 (7.69%) university websites have 'Language translator facility' in their websites.

## **7. Findings**

The specific major findings of the study are as follows:

7.1 In the decade 1801 to 1900, a total of 3 Universities were established, which is a major mile stone in the academic as well as research-oriented education in India then in the decade 1901 to 2000, a total of 10 Universities were established and in the decade 2001 to till date, a total of 13 Universities were established in West Bengal, India.

7.2 From the study, it is observed that, the most common URL extension was.ac.in which have been used by the 22 state universities (84.61%) out of 26 State Universities in West Bengal, India.

7.3 From the study, it is observed that, maximum 96.15% university websites have information on 'Website loading page time within 8-10 sec', 'Basic page layout (animated)', 'Availability of University Logo', 'Back to home option', 'Administration information', 'Navigation Scheme', 'Contact Us information with Google map', 'Copyright information', 'Graphics and Animations', 'Typography' and 'Mobile compatibility' in their webpages.

7.4 Maximum 96.15% university websites have information on 'Availability of Admission related information', 'Academic Events', 'Courses offered', 'Circulars and Notices', 'Announcements/Latest News', 'Tender', 'Recruitment' and 'E-mail facility availability'.

7.5 From the study, it is observed that, there are only 8 (30.77%) state university websites incorporating Facebook account in their webpages.

7.6 From the study, it is observed that, 15.38% university websites have their own 'Separate Library Website' and 65.38% university websites have connected with Library webpage. Primary information about Library details available in University Websites is less than 70%.

7.7 It is noticed that highest 65.38% university websites have information on 'Books' and 'Print Journals (Bound volume)'.

7.8 Maximum 73.08% university websites have information on 'E-Books' and 'Link to online reference/Electronic database'

7.9 From the study, it is observed that, 53.85% and 50% university websites have information on 'Library technical staff details' and 'Librarian contact information' respectively.

7.10 From website considering for the study, maximum 57.69% of university websites have information on 'Circulation Service', 'Research Support Information' and 'Journal and Career Guidance Service'.

7.11 Maximum 53.85% of university websites have information on 'Membership details'

7.12 It can be seen from this study that maximum 96.15% university websites have used 'English' for making their website.

## **Concluding Remarks**

After all the universities are treated to be leading platform for the research purpose in academic environment. University authority should surely think about the scope of procurement and dissemination of available website content resources to the disadvantaged users. Website Resource sharing is possible only when the memorandum of mutual understanding is there among the various departments of different universities. Depending on the main objectives of this evaluative study, the particular findings show that there are very few universities which have the standard websites of their libraries whereas the majority of the universities do not have the separate library website. After seeing all the findings, this



study firmly recommends to all the universities to have the separate website for the libraries. It will also promote the research scholars and faculties who are engaging mainly on the activities of research and development. The all-state universities should have the common platform to share their resources among needy to avoid duplication of procurement cost.

## References

- 1) Aliah University. (n.d.). Retrieved October 21, 2021, from <http://www.aliah.ac.in/>
- 2) Arandhara, A., & Borah, N. (2019). Library Websites of Central Universities of Assam: a Study. *International Journal of Next Generation Library and Technologies*, 5(1), 1–8. Retrieved October 20, 2021, from <http://www.ijnglt.com/files/ijnglt-vol5iss1-ApsoraArandhara.pdf>
- 3) Bankura University. (n.d.). Retrieved October 21, 2021, from <https://www.bankurauniv.ac.in/>
- 4) Bharati, S. K., & Madhusudhan, M. (2019). Content Evaluation of Jawaharlal Nehru University and Banaras Hindu University Library Websites in India. *Library Philosophy and Practice (e-Journal)*, 1–23. Retrieved October 20, 2021, from <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=5704&context=libphilprac>
- 5) Bidhan Chandra Krishi Vishwavidyalaya. (n.d.). Retrieved October 21, 2021, from <https://www.bckv.edu.in/>
- 6) Cooch Behar Panchanan Barma University. (n.d.). Retrieved October 21, 2021, from <https://cbpbu.ac.in/>
- 7) Das, S., & Das, S. (2018). Web Content Analysis Of IISER Library Web Sites in India: A Comparative Study. *International Journal of Information Movement*, 2(9), 41–47. Retrieved October 20, 2021, from <http://www.ijim.in/wp-content/uploads/2018/01/Vol-2-Issue-IX-41-47-Paper-8-11-Susmita-Das-WEB-CONTENT-ANALYSIS-OF-IISER-LIBRARY-WEB-SITES-IN-INDIA-A-COMPARATIVE-STUDY.pdf>
- 8) Diamond Harbour Women's University. (n.d.). Retrieved October 21, 2021, from <http://dhwu.ac.in/>
- 9) Gadhavi, G. G. (2017). Content Analysis of Library Websites of Institute of National Importance: A Critical Analysis. *International Journal of Innovative Research in Science, Engineering and Technology*, 6(8), 16620–16627. Retrieved October 20, 2021, from [http://www.ijirset.com/upload/2017/august/280\\_77\\_Modified\\_manuscript\\_n.pdf](http://www.ijirset.com/upload/2017/august/280_77_Modified_manuscript_n.pdf)
- 10) Gautam, V. K. (2017). Content Analysis of Websites of Central University Libraries in Delhi, India: A Study. *International Journal of Information Movement*, 2(6), 82–89. Retrieved October 20, 2021, from <http://www.ijim.in/wp-content/uploads/2017/10/Vol-2-Issue-VI-82-89-paper-1119-Virendra-Kumar-Gautam-CONTENT-ANALYSIS-OF-WEBSITES-OF-CENTRAL-UNIVERSITY-LIBRARIES-IN-DELHI-INDIA-A-STUDY.pdf>
- 11) Hugar, J. G. (2019). Content Analysis of Engineering College Library Websites in Goa. *Library Philosophy and Practice (e-Journal)*. Retrieved October 20, 2021, from

<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=5735&context=libphilprac>

- 12) Jadavpur University. (n.d.). Retrieved October 21, 2021, from <http://www.jaduniv.edu.in/>
- 13) Kazi Nazrul University. (n.d.). Retrieved October 21, 2021, from <https://www.knu.ac.in/>
- 14) Kumar, N., & Verma, S. (2018). Content Analysis of Library Websites of NAAC Accredited 'A' Grade University in Central Zone of India: A Study. *Library Waves*, 4(2), 68–77. Retrieved October 20, 2021, from <http://www.librarywaves.com/index.php/lw/article/view/90>
- 15) Kumar, S., & Mir, M. S. (2017). Content Analysis of Central Universities Library Websites of Central Region of India: A Survey. *International Journal of Scientific & Technology Research*, 6(6), 283–286. Retrieved October 20, 2021, from <http://www.ijstr.org/final-print/june2017/Content-Analysis-Of-Central-Universities-Library-Websites-Of-Central-Region-Of-India-A-Survey.pdf>
- 16) Lamani, M., & Keshava (2015). Evaluation of University Library Homepages: with Special Reference to South India. *International Journal of Library and Information Studies*, 5(4), 125–138. Retrieved October 20, 2021, from [http://www.ijlis.org/img/2015\\_Vol\\_5\\_Issue\\_4/125-138.pdf](http://www.ijlis.org/img/2015_Vol_5_Issue_4/125-138.pdf)
- 17) Manjunatha, K. S. (2016). Content Analysis of Special Library Websites: An Analytical Study. *International Journal of Next Generation Library and Technologies*, 2(2), 1–9. Retrieved October 20, 2021, from [http://www.ijnlgt.com/files/v2i2/Manjunatha\\_K\\_S.pdf](http://www.ijnlgt.com/files/v2i2/Manjunatha_K_S.pdf)
- 18) Maulana Abul Kalam Azad University of Technology. (n.d.). Retrieved October 21, 2021, from <https://makautwb.ac.in/>
- 19) Netaji Subhas Open University. (n.d.). Retrieved October 21, 2021, from <http://www.wbnsou.ac.in/>
- 20) Prabhu, R., Sankar, U., Ragavan, S. S., & Yasmin, M. (2016). Evaluation of Indian Institute Management Library Websites in India. *Bharatisadan University Central Library*. Retrieved October 20, 2021, from <http://14.139.186.108/jspui/bitstream/123456789/2475/1/iim%20paper.doc.pdf>
- 21) Presidency University. (n.d.). Retrieved October 21, 2021, from <https://presiuniv.ac.in/web/>
- 22) Rabindra Bharati University. (n.d.). Retrieved October 22, 2021, from <http://rbu.ac.in/>
- 23) Raiganj University. (n.d.). Retrieved October 22, 2021, from <https://raiganjuniversity.ac.in/>
- 24) Sabitha, K. S. (2016). Content Analysis of Deemed University Library Websites of Karnataka State: A Study. *International Journal of Digital Library Services*, 6(1), 87–93. Retrieved from <http://www.ijodls.in/uploads/3/6/0/3/3603729/767.pdf>
- 25) Sidho-Kanho-Birsha University. (n.d.). Retrieved October 22, 2021, from <https://skbu.ac.in/>
- 26) The Sanskrit College and University. (n.d.). Retrieved October 22, 2021, from <https://www.sanskritcollegeanduniversity.org.in/>

- 27) The West Bengal National University of Juridical Science. (n.d.). Retrieved October 22, 2021, from <https://www.nujs.edu/>
- 28) The West Bengal University of Health Sciences. (n.d.). Retrieved October 22, 2021, from <https://wbuhs.ac.in/>
- 29) University of Burdwan. (n.d.). Retrieved October 21, 2021, from <https://www.buruniv.ac.in/>
- 30) University of Calcutta. (n.d.). Retrieved October 21, 2021, from <https://www.caluniv.ac.in/>
- 31) University of Gour Banga. (n.d.). Retrieved October 22, 2021, from <https://www.ugb.ac.in/>
- 32) University of Kalyani. (n.d.). Retrieved October 21, 2021, from <https://www.klyuniv.ac.in/>
- 33) University of North Bengal. (n.d.). Retrieved October 22, 2021, from <https://www.nbu.ac.in/>
- 34) Uttar Banga Krishi Vishwavidyalaya. (n.d.). Retrieved October 22, 2021, from <https://www.ubkv.ac.in/>
- 35) Verma, M. K., & Devi, K. K. (2015). Content Analysis of Central Universities Library Websites of North Eastern States of India: A Survey. *Journal of Research in Librarianship*, 2(5), 48–59.
- 36) Verma, M. K., & Devi, K. K. (2016). Web Content and Design Trends of Indian Institutes of Management (IIMs) Libraries Website: An Analysis. *DESIDOC Journal of Library & Information Technology*, 36(4), 220–227. doi: <https://doi.org/10.14429/djlit.36.4.9983>
- 37) Vidyasagar University. (n.d.). Retrieved October 22, 2021, from <http://www.vidyasagar.ac.in/>
- 38) West Bengal State University. (n.d.). Retrieved October 22, 2021, from <https://wbsu.ac.in/>
- 39) West Bengal University of Animal and Fishery Sciences. (n.d.). Retrieved October 22, 2021, from <http://wbuafscl.ac.in/>
- 40) West Bengal University of Teachers' Training, Education Planning and Administration. (n.d.). Retrieved October 22, 2021, from <https://www.wbuttepa.ac.in/>

