# Analyzing the Library Web Content: a modern publishing tool for delivering resources and services of Central University Libraries of North East India.

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Abstract: Developing good Library Website is one of the processes of Modernization. Library website is the best way to reach its users for delivering resources and services of the library. This study evaluates the status of the library websites of Central University Library of North East India. A study on the contents available at the websites of Central University Library of North East India has been presented.

Keywords: Central University, Information Resources, Library Resources, Library Services, North East India, Website, Web Content.

### 0. Introduction

World Wide Web popularly known as WWW is global information system. Tremendous change in web technology has effected on every sphere of library activities. Application of web technology in library is inherent to extend library resources and services. Web technologies enable libraries to use web environment to provide the updated and new information to its users. Modern Library should consist of its own website to let users explore the services and products of an organization. Since Library website is a reflection of library which showcases its profile, activities, services, etc. In fact it is one of the best publishing tools for delivering resources and services, publishing information about the library, vision, mission, objectives, contact information, library hours, photo gallery, etc. It can help users to get all the necessary information without physical visit of the library. Hence, providing good website content is the essential part of modernization process of a library. It is a challenging task for LIS professionals to keep the Library Website up to date and provide all the library related information through websites. Thus, an attempt has been made to study on the Website contents of Central University Library of North East India.

#### **1.** Review of Literature

Ambika & Ganesan (2021) analysed contents of 13 Central University Library websites in India. 29 standard checklists were used for the study and the Universities were ranked based on assessment of the result. In the study, analysis revealed that variations were found in the websites. The majority of the websites not provided information on mission, copyright, sitemap and library committee. Brahma, Verma & Sinha (2019) studied top 7 Universities of North East India ranked by national Institutional Ranking Framework (NIRF) selected in 2018. The study was based on the domain and page authority, top followed links to the site, spam score, internal followed links and external followed links, total linking domain and followed linking domains, and the web impact factor of the 7 Universities.

Bulla & Hadagali (2020) evaluated the performance and quality of the content of library websites of 33 Central Universities in India. Gtmetrix tool was used for analyzing the library websites. The study showed that there were disparity in content coverage and performance grade. Inadequate information was found for FAQ's/ feedback/ asks a librarian and search option facilities.

Gautam (2017) conducted research on the content of central university library websites of Delhi. The study investigated the application of web technology in the context of content analysis of university libraries. The study shows that maximum library websites are well developed and designed and enrich with e-resources. It is revealed that Jawaharlal Nehru University library website is best and South Asian University library website is worst according to evaluation criteria. Jawaharlal Nehru University library websites provide best products and services than other central university library websites in Delhi. It is concluded that University libraries are playing an important role in higher education, research, and development activities by effective dissemination of information resources and services through their websites.

Verma & Devi (2015) analyzed the contents available in the library webpage of the Central Universities of the North Eastern States in India in this study. The study was based on the information available in the library webpage of the concerned universities. A checklist was designed and the library web pages were evaluated based on the previous evaluations of websites conducted by different authors

### 2. Scope of the study

The study is confined to eight (8) Central Universities of North East India. The study focuses on the library websites of eight (8) Central Universities of North East India. Nagaland University has been excluded as its website was not working during my research work. The area covered for the study has been listed below:

SL       Central       Location       Year       Abbreviation       URL         NO       University       of       used for         .       Estd.       Central         University       University       University	Table 1 List of Central Universities under study								
Chiveishy	 	Location	of	used for	URL				

1	Assam University	Silchar, Assam	1994	AUS	http://www.aus.ac.in/
2	Manipur University	Imphal, Manipur	1972	MU	https://www.manipuruniv.ac.in/
3	Mizoram University	Aizawl, Mizoram	2001	MZU	http://mzu.edu.in/
4	North East Hill University	Shillong, Meghalaya	1973	NEHU	https://www.nehu.ac.in/
5	Rajiv Gandhi University	Itanagar, Arunachal Pradesh	1984	RGU	https://rgu.ac.in/
6	Sikkim University	Gangtok, Sikkim	2008	SU	https://cus.ac.in/index.php/en/
7	Tezpur University	Tezpur, Assam	1994	TU	http://www.tezu.ernet.in/
8	Tripura University	Agartala, Tripura	1987	TRU	https://www.tripurauniv.ac.in/
https	s://www.ugc.ac.in/				

## 3. Objectives of the study

Based on the topic cited above objectives of the study are lined up below:

- 3.1 To examine the Central University Library websites of North East India.
- 3.2 To gather information based on the contents available in the University Library websites of North East India.
- 3.3 To analyse the contents of the Library Websites of Central University Libraries of North East India.
- 3.4 To determine the resources, services and existing facilities through the respective library websites.

### 4. Methodology

Web content of Library Website of Central University Library of North East India have been evaluated. The study categorized in two variables YES and NO. The score provided for YES is 1 and NO is 0. The contents with similar features were grouped together in one place and duplicate feature were removed from the tabulated data after matching with each other. Considering the previous evaluations of Central University Library websites, literature was reviewed and articles were accessed. The survey method of research has been applied and observation technique has been used for collection of data. For data collection, search engine tools have been used. A structured checklist has been designed for gathering information and evaluating the web contents of Library Websites of Central University Library of North East India. The website underwent frequent analysis and the data was presented in the tabular form. For data analysis, Microsoft Excel was used.

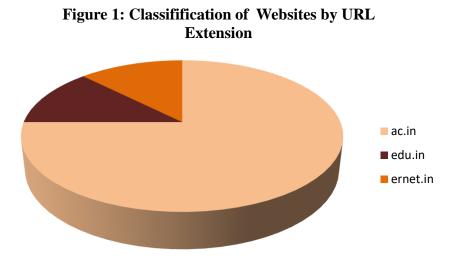
### 5. Analysis and Interpretation

### 5.1 URL of Central University Libraries

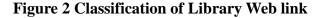
## Table 2: Library URL of Central Universities

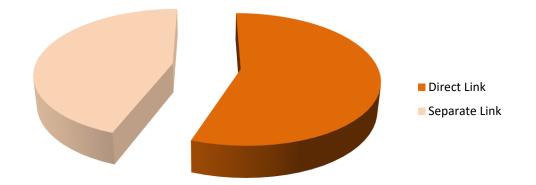
SL. NO.	Central University	Library URL	Accessibility of webpage (Direct link/Link under Facility/Central Library)
1	AUS	http://www.aus.ac.in/library/2021/04/09/hello-world/	Direct link
2	MU	https://mulibrary.manipuruniv.ac.in/	Link under Library
3	MZU	http://lib.mzu.edu.in/	Direct link
4	NEHU	https://www.nehu.ac.in/library/	Link under Library
5	RGU	https://rgu.ac.in/library/	Link under Facility
6	SU	https://library.cus.ac.in/	Direct Link
7	TU	http://www.tezu.ernet.in/Library/	Direct link
8	TRU	https://tripurauniv.ac.in/Page/library	Link under Central Library

Table 2 shows the URL of all the Central University Libraries. All the Central University Libraries have their webpage to share the content to the users. New website was developed by AUS in 2021 for the users.



Based on Table 2, Figure 1 highlights the Central Universities with different URL extension. 6 Central Universities *i.e.* AUS, MU, NEHU, RGU, SU and TRU have *ac.in* extension. MZU has *edu.in* extension and TU has *ernet.in* extension.



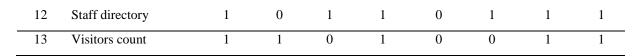


Based on Table 2, it is revealed from Figure 2 that 4 Central University Libraries have Direct Link of their website and other 4 Central University Libraries have Link under 'Facility', 'Central Library' and 'Library'.

# 5.2 General Information about the Library webpage

Table 3: Provision of General Information in Library Webpage

SL. NO.	General Information	Central University Library								
NO.		AUS	MU	MZU	NEHU	RGU	SU	TU	TRU	
1	About us	1	1	1	1	1	1	1	1	
2	Contact Us	1	0	0	1	1	1	1	1	
3	Copyright	1	0	1	0	0	1	1	1	
4	Date of Updating	0	0	0	1	0	1	0	1	
5	Gallery	0	0	1	0	0	1	0	0	
6	Library Rules	1	0	1	1	1	1	1	1	
7	Location	1	0	1	1	0	1	1	1	
8	Membership	1	0	1	1	1	0	1	1	
9	Mission & Vision	0	0	0	1	0	1	1	1	
10	Working Hours	1	0	1	1	1	0	1	1	
11	Sections	1	0	1	1	1	0	1	0	



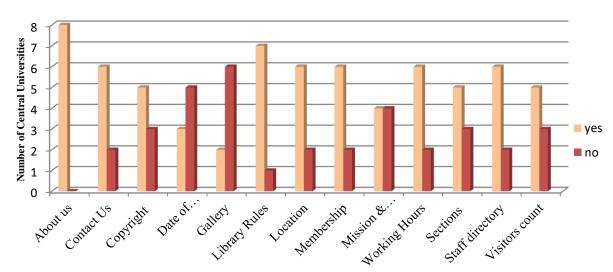
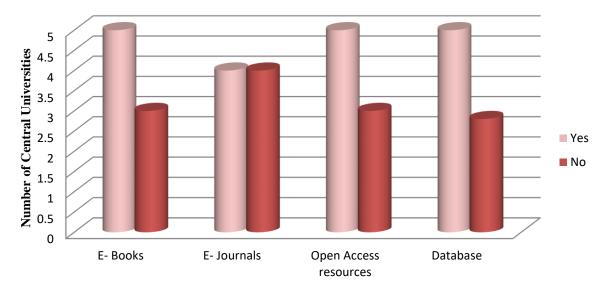


Figure 3: Information available in library webpage.

Providing basic information about the library helps the users to get a clear picture of the library. Based on Table 3, it is found from Figure 3 that all the 8 Central University Libraries provide information about library history as About Us. Contact address is provided by AUS, NEHU, RGU, SU, TU and TRU. Copyright information is not provided by NEHU and RGU. Date of Updating is informed by NEHU, SU and TRU. Gallery is provided by MZU and SU. All the University libraries provide information about library rules. All the University libraries have given Location of the library except RGU. Membership information is provided by all the University libraries except SU. Information on mission and vision of the Library is provided by 4 Universities i.e. NEHU, SU, TU and TRU. Working time is given by 6 Universities i.e. AUS, MZU, NEHU, RGU, TU and TRU. Information on different sections of the library is provided by AUS, MZU, NEHU, RGU and TU. RGU has not provided staff directory. Visitors count is provided by 5 Universities i.e. AUS, MU, NEHU, TU and TRU. **5.3 Resources found in the Library site** 

SL.	Library Collection	Central University Library								
NO.		AUS	MU	MZU	NEHU	RGU	SU	TU	TRU	
1	Audio-visual materials	0	1	0	0	0	1	0	0	
2	Books	0	1	1	0	1	1	1	0	
3	E- Books	1	1	1	0	0	1	0	1	
4	E- Journals	0	1	1	0	0	1	0	1	
5	Government Publications Portal	0	0	0	0	1	1	1	0	
6	Journals	0	0	0	0	1	1	1	0	
7	Open Access resources	0	1	1	0	0	1	1	1	
8	Theses and Dissertations	0	1	0	0	1	1	0	0	
9	Institutional Repository	0	1	1	0	0	1	1	1	

ces found in the Library site	
	Table 4: Resources found in the Library site



## Figure 4: Link to E-Resources

Table 4 shows that AUS has given information on their E-books collection. MU has provided about Audio-visual materials, Books, E-Books, E-Journals, Open Access Resources, Theses and Dissertations and Institutional Repository. MZU has provided with Books, E-Books, E-Journals, Open Access Resources and Institutional Repository. RGU has provided Books, Government Publications Portal, Journals and Theses and Dissertations. SU has given all the information on collection viz. Audio-visual materials, Books, E-Books, E-Journals, Government Publications Portal, Journals, Open Access Resources, Theses and Dissertations Portal, Journals, Open Access Resources, Theses and Dissertations and Institutional Repository. TU has provided Books, Government Publications Portal, Journals, Open Access Resources and Institutional Repository. TRU has provided E-Books, E-Journals, Open Access Resources and Institutional Repository.

5.4 Information about Library Consortium & Network Table 5: Information about Library Consortium & Network

SL.	Library Consortium &	Central University Library								
NO.	Network	AUS	MU	MZU	NEHU	RGU	SU	TU	TRU	
1	DeLCON	0	0	1	1	0	0	1	0	
2	DELNET	0	1	0	0	0	1	1	0	
3	E- ShodhSindhu	1	0	1	0	0	0	1	1	
4	NDLI	0	1	1	1	1	0	1	0	
5	ShodhGangotri	0	0	1	1	0	0	0	0	
6	Shodhganga	1	0	1	1	0	1	1	0	

It is found from Table 5 that all the University Libraries have membership to Library Consortium and Network. DeLCON is subscribed by 3 Universities i.e. MZU, NEHU and TU. DELNET is subscribed by 3 University Libraries i.e. MU, SU and TU. E-ShodhSindhu is subscribed by AUS, MZU, TU and TRU. Information on membership to NDLI is given by MU, MZU, NEHU, RGU and TU. Only MZU and NEHU have ShodhGangotri. 5 University Libraries i.e. AUS, MZU, NEHU, SU and TU have information about Shodhganga.

### 5.5 Library Services found in the site

 Table 6: Information about Library Services

SL.	Services	Central University Library								
NO.		AUS	MU	MZU	NEHU	RGU	SU	TU	TRU	
1	Ask Librarian	1	0	0	0	0	1	1	0	
2	CAS	0	1	0	0	0	0	1	0	
3	FAQs	1	0	1	0	0	1	1	1	
4	Inter Library Loan	0	1	0	0	0	0	1	0	

5	New Arrivals	0	0	0	1	0	1	1	1
6	News & Events	1	1	1	0	1	1	1	0
7	Online Document Delivery Service	0	0	0	0	0	0	1	1
8	Reference service	0	1	0	0	0	0	1	0
9	User Orientation	0	1	1	0	0	1	1	1
10	Web OPAC	1	1	1	0	0	1	1	1

Table 6 shows about the services provided by the Central University Libraries. Ask Librarian is provided by 3 University Libraries i.e. AUS, SU and TU. Only MU and TU provide CAS service. FAQs is provided by 5 University Libraries AUS, MZU, SU, TU and TRU. Only MU and TU provides Inter Library Loan. 3 University Libraries i.e. NEHU, SU, TU and TRU provide New Arrivals services. News & Events is provided by AUS, MU, MZU, RGU, SU and TU. 2 University Libraries provide Online Document Delivery Service TU and TRU. MU and TU provide Reference Service. Information on User Orientation is provided by MU, MZU, SU, TU and TRU. Web OPAC is provided by 6 University Libraries i.e. AUS, MU, MZU, SU, TU and TRU. **5.6 Library Facilities found in the site** 

**Table 7: Information about Facilities** 

SL.	Facilities	Central University Library								
NO.		AUS	MU	MZU	NEHU	RGU	SU	TU	TRU	
1	Citation verification	0	0	0	0	0	0	1	0	
2	Discovery service	1	1	0	0	1	0	1	0	
3	Email alert	0	0	1	0	0	0	0	0	
4	Feedback	0	0	0	0	0	1	1	1	
5	Plagiarism	1	0	1	0	0	1	1	1	
6	QR Code	1	0	0	0	0	0	1	0	
7	Quick Help	1	1	0	0	0	0	0	0	
8	SMS alert	0	0	1	0	0	0	0	0	
9	Subject gateways	0	0	0	1	0	1	0	0	
10	Utility basket	0	0	1	0	0	0	0	0	

Table 7 reveals that all Central University Libraries provide library facilities. TU provide Citation verification. Discovery service is provided by 4 Central University Libraries i.e. AUS, MU, RGU and TU. MZU provides Email alert. 2 Central University Libraries i.e. SU, TU and TRU provide Feedback. 5 Central University Libraries i.e. AUS, MZU, SU, TU and TRU provide plagiarism. QR code facility is provided by 2 Central University Libraries i.e. AUS and TU. Only AUS and MU provide quick help facility for users. SMS alert system is provided by MZU. 2 Central University Libraries i.e. NEHU and SU provide subject gateways facility. Utility basket for users is provided by only 1 Central University Libraries i.e. MZU.

5.7	Library	web	2.0	tools	in	the	Library site
2.1	Library			10015		une	Library site

Table 8:	Web	2.0	tools
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SL. NO.	Web 2.0 tools	Central University Library								
		AUS	MU	MZU	NEHU	RGU	SU	TU	TRU	
1	Blog	0	0	0	0	0	0	1	0	
2	Facebook	1	0	1	0	1	1	1	1	
3	Google+	1	0	0	0	0	0	1	0	
4	Instagram	0	0	1	0	0	0	0	0	
5	LinkedIn	1	0	0	0	0	0	0	0	
6	Twitter	1	0	1	0	0	0	1	`1	
7	YouTube	1	0	1	0	0	0	1	0	

It is found from the Table 8 that all the Central University Libraries have web 2.0 tools in their respective site except NEHU. Blog is provided by TU. AUS, MZU, RGU, SU, TU and TRU have Facebook. Only 2 Central University Libraries i.e. AUS and TU have Google+. Instagram is provided by MZU. Only AUS has LinkedIn. AUS, MZU, TU and TRU have twitter. YouTube is provided by 3 Central University Libraries i.e. AUS, MZU and TU.

**5.8** Navigation of the Library site

SL. NO.	Navigation	Central University Library							
		AUS	MU	MZU	NEHU	RGU	SU	TU	TRU
1	Affiliated organization sites link	1	0	0	1	1	1	1	1
2	Home page link in sub pages	1	0	1	0	1	1	1	1
3	Important links	1	1	1	1	1	1	1	1
4	Links open in same tag	1	0	1	0	1	0	1	1
5	Quick links	1	0	0	0	1	1	0	1
6	Search Engine/facility	1	1	1	1	0	1	1	0
7	Single Window Search	1	0	0	0	1	1	1	0
8	University Web page link	0	0	1	1	1	0	1	1

Table 9 reveals that library site of 6 Central University libraries i.e. AUS, NEHU, RGU, SU, TU and TRU have Affiliated organization sites link. 6 Central University libraries i.e. AUS, MZU, RGU, SU, TU and TRU have Home page link in sub pages. All the Central University libraries are providing Important links. 5 Central University libraries i.e. AUS, MZU, RGU, TU and TRU are providing Links with same tag. Library site with Quick Links is provided 4 Central University libraries i.e. AUS, RGU, SU and TRU. 6 Central University libraries i.e. AUS, MU, MZU, NEHU, SU and TU have Search facility in their respective site. 4 Central University libraries i.e. AUS, RGU, SU and TU have Single Window Search in their library site. 5 Central University libraries i.e. MZU, NEHU, RGU, TU and TRU have University Web page link in their library site.

#### Conclusion

The study reveals that all the Central University Libraries of North East India are interested in sharing their useful content through the web to the users. In fact, the web is master source of information in delivering resources and services of any Library. Advanced features and services must be included in the library webpage of all the Central University Libraries of North East India to provide valuable information to its users. The library webpage must be authentic and effective as well as easily accessible to the users. The library webpage must contain Web 2.0 tools and all the details about the facilities of the libraries provided for its users. The library webpage must be accessible and the dead links should be removed from the web page. The library webpage must be frequently evaluated to check the web content available in the website. The library webpage should be more informative for the online users. Thus, this study was undertaken to help in analyzing the web content of Central University Libraries of North East India.

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