# WEB CONTENT ANALYSIS OF NATIONAL LIBRARY WEBSITES OF SOUTH ASIAN REGION: A COMPARATIVE STUDY

Mithu Anjali Gayan Assistant Professor, DLIS, Tripura University

Email id: <u>mithuanjaligayan@tripurauniv.in</u>

Saumen Das, Guest Lecturer, DLIS, Tripura University saumendas 1990@gmail.com

#### **Abstract**

Purpose – The study aims to present a comparative analysis of web tools used in Library Websites of national libraries of south Asian region.

**Design/methodology/approach** – Content available in the particular websites were thoroughly scrutinized, analyzed and evaluated based on design, domain, CAS, search criteria, authority, general information, query, and page rank and resource information. 64 item check lists were prepared for collecting data and evaluating those web sites.

Findings – The study showed one encouraging fact that all the national libraries of this region have adopted library websites. The major findings of the study revealed that Out of 8 National Library, all (100%) the Libraries has 'About Statement' and 'Mission Statement', 6(75%) Libraries have given 'Membership Information', 'Library Section' and 'Facilities/Services'. 'Working hours' is given in 5(62.5%) Libraries and 'Library Rules' is given in 3(37.5%). 3(37.5%) websites has 'page under construction' page, title of all the websites are appear in the top, 7 (87.5%) websites have dead links and websites are having more than 5 pages, all the websites have home link in every page, no website has 'website index' menu, 4 (50%) websites are offering information in more than one language. 2 (25%) Libraries have Bibliographic database, No Library is providing Book Banks, Back Volume of Journals, Open access journals, Links to e-resources, and Links to e-books. 7 (87.5) websites have Graphics in their site, and download option. 5 (62.5%) websites have animations, site maps and photo gallery. 3 (33.33%) websites have Site map, only 1 (12.5%) website has hit counter, Text only version and site designer. current awareness services where 6 (75%) libraries are providing News alert service. 3 (33.33%) Libraries are providing new arrivals service and Links to SNS. And no library is providing RSS feed in their website. 4 (50%) websites provide user education/help, 3 (37.5%) websites provide feedback and job vacancy option, 2(25%) websites provides FAQs facility, 1 (12.5%) website has Login page. Results also shows that 7 (87.5%) websites have search facility and webOPAC, 6 (75%) websites provide links to external search and more than 5 external links, 1 (12.5%) website provide, A-Z title list, Publisher wise

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list and Subject wise list. All the websites come on 1st rank in Google and yahoo search engines with

keyword search "National library of < Particular country name>" and 75% websites under the study have

domain type ".gov".

Originality/value – The results from the study provide a vivid picture of the contents of national library

websites of the sample covered. The study also provides some suggestions for betterment of web content

of the particular websites.

**Keywords:** Web content Analysis, Web 2.0, Library 2.0, National Library

Paper type: Research paper

1. Introduction

Emergence of World Wide Web has brought rudimentary changes in the society. Internet along with ICT

has instrumented the paradigm shift from industrial age to network age. Burke (2006, p. 149) explained

that a library website is a website that provides a library "with a space to share its services and to tell its

story to the community it serves". A library without a website is missing the prospect "for marketing its

services and this usually affects the patrons negatively in terms of finding the information they need" (p.

150).

Adeyinka Tella, Oyegunle John Oladapo (2106), Now a days, Websites are predominantly used as a tool

by different persons, institutes, governments and corporate bodies to provide information and broadcast

their products and services while displaying their goals and missions. In essence, websites are used to

ascertain businesses and corporations in the general world. The websites help organizations in the

creation, processing, sharing and use of information in a digital appearance and they also help in speedy

information transmission across the globe. With the help of internet services, libraries can offer wider

range of creative services through their website. A well built website can help a library in achieving its

missions and visions. There is huge number of benefits of library websites such as creation of gateway to

E-resources, online library catalog, remote login facility, virtual reference services, RSS feed, links to

social media sites; etc...So, library websites can offer its services to its users beyond the physical space of

the library. Today's users do not want to come to the library so library services have to reach the users

and library websites are very beneficial in that context. This paper states the survey report of the websites

of National libraries of South Asian region in terms of their adoption of new web based technologies and

services provided through them.

#### 1.1 Web 2.0

Library websites are entitled to provide all vital information to its users through them. It enhances the mobility of the library. Websites are predominantly used now days for upholding the services and publicizing different institutes so does libraries. If a library is running without a website then its users are surely deprived of some advanced user environments and services. Today's libraries must have their websites and should try to provide interactive and innovative services with the help of web based technologies.

Web 2.0 is the user oriented and participatory Web. Web 2.0 facilitates user communication, provides security and boosts up interoperability. In web 1.0, only the publisher of the content had control over it. The users could not take participation in web 1.0 phenomena. But with the advent of technologies the more interactive version of the web emerged where users could take participation in the web by liking, tagging, posting comments; etc. Web 2.0 tools include Wikis, Mash ups, Rich Site Syndicate (RSS), Social networking sites such as Facebook, Twitter, blogs, Social content curation sites such as Pinterest, Instagram, Reddit. Web 2.0 environment provides user opportunities like information storage, creation and dissemination capabilities that were not available in the previous version of the web.

# 1.2 Library 2.0

Libraries always keep themselves abreast with the technological changes. Libraries have always been inviting and accepting the changes that have taken over the years. Web 2.0 tools are acknowledged by the library fraternity and have been widely used invariably (Khalid Mahmood, John V. Richardson Jr, 2011). Applying the concept of Web 2.0 to libraries, Michael casey coined the term "Library 2.0" in September, 2005. It revolves around the new ideas of library services. Theheart of Library 2.0 is user centered change. It is a model for library service that encourages constant and purposeful change, inviting user participation in the creation of both the physical and the virtual services they want, supported by consistently evaluating services. It also attempts to reach new users and try to better serve current ones through improved customer-driven offerings". (Casey and Savastinuk, 2006).

# 1.3 National Library

A National Library is the type of library which is established and recognized by the government of a particular country (Manoj Kumar Verma and Krishna Brahma, 2017). A national library is expected to collect, process, organize, disseminate and preserve all the printed material produced in the country. In India, authors have to be submitting four copies of their book to the national library failing which the author gets penalized. National libraries are responsible for preparation and production and national

bibliographies and union catalogs and these should made available through the library website because of the change in user approaches in the digital environment.

# 1.4 Objectives:

The major objectives of the study includes

- 1. To assess the content of National Library Websites.
- 2. To know the existing facilities provided on the National Library Websites.
- 3. To measure the aesthetic value, accuracy, currency, accessibility and user friendliness of the websites
- 4. To assess the relevancy and quality of graphics, animations which used in the selected Websites
- 5. To suggest measures for improvement of websites.
- 6. To assess the use of web 2.0 services by those selected websites.

### 1.3 Need of the study

In today's era websites are one of the most vital and most used information resources. Websites are used for marketing different products of an organization. 21<sup>st</sup> century libraries offer different services through their web site. So, it is essential to evaluate the websites against its authority, authenticity, currency and latest technologies adopted by them.

The national library websites should offer updated and authentic information to its users. In this context, it is requisite to assess the web content offered by these websites and to check the use of web 2.0 tools by these sites.

### 1.4 Scope of the study

The current study tries to investigate the web content available in the websites of national libraries of south Asian region.

#### 1.5 Limitation of the study

Due to time constraint, data is collected only from websites of national libraries of south Asian region.

#### 2. Literature review

(Khatri & Baheti, 2013) analyzed the various aspects of the credibility of Websites of Deemed universities of Maharashtra. 21 Deemed universities from all over the Maharashtra were considered for the study. The analysis of the data represented the extent and level of credibility possessed by these Universities.

(Qutab & Mahmood, 2009) studied library web sites in Pakistan, to analyse their content. Survey of web sites of 52 academic, special, public and national libraries in Pakistan were done based on a 77-item checklist. It was found that Pakistani libraries have developed web sites over the past few years but these are few in number. No directory is available to locate library web sites and no scholarly literature has been written on this topic in Pakistan. No standards for content selection were considered in developing library web sites so they lack uniformity and often miss important features.

(Pareek & Gupta, 2013) surveyed websites of different academic libraries of Rajasthan based on 133 criteria. They investigated the web content and navigational strengths and weaknesses of those web sites. They also provided recommendations for creating better websites.

(Haridasan & Uwesh, 2014) investigated 13 central university library websites for the study on the basis of content available on the websites. It was found that majority of the university library websites in India provides informative link to contacts, news and events. They also revealed that about fifty percent of the libraries provide some information of their history on their websites.

(Kumar, Raj, Naik, & Reddy, 2009), scrutinized and compared websites of 6 Indian Institutes of Management. They found that all library websites have information about library and site map. Only in case of IIM Lucknow, the information about Webmaster is available, and only IIM Kolkatta has provided Hit counter IIM Ahmedabad library website has information about library committee. Only IIM Bangalore has not provided information about their mission statement.

(Seema, 2013) analyzed the websites of technical university libraries to ascertain that libraries are effectively utilizing their respective websites to provide trouble-free access to electronic journals available in the library. The research revealed that technical university libraries are trying to set up useful websites but the library websites of most of the institutes seem to be at primitive stage. Majority of libraries' websites have very simple and basic features. Overall, they fall short of their potential to act as a platform for proper dissemination of electronic journals. There is enormous scope for the improvement of the websites of the institutions under study. A few recommendations were made for the improvement of

these websites in the form of enhancement in various aspects like quality content, users' convenience and artistic composition.

# 3. Methodology:

The present study is conducted with the aim to understand the web information and services available through the national library websites.

**Population:** The sample population for the current study consists of 8 national library websites of South Asian region.

Sl. No. **Names** Websites 1 National Library of Afghanistan - Kabul University www.ku.edu.af 2 National Library of Bangladesh www.nlb.gov.bd 3 National Library of Bhutan www.library.gov.bt National Library of India www.nationallibrary.gov.in 5 National Library of Maldives - QaumeeKuthubukhaana www.nlm.gov.mv 6 Nepal National Library www.nnl.gov.np 7 National Library of Pakistan www.nlp.gov.pk al Library of Sri Lanka 8 www.natlib.lk

Table 1. List of the sample population

**Construction of instrument**: 64 items checklist were prepared for evaluation of the web content.

**Data collection:** Data was collected from the 8 national library websites based on the checklist prepared from October 3, 2017 to October 20, 2017. Data was analysed from October 20 to October 25, 2017.

# 4. Results and Discussions:

The major findings of the study are discussed in tabular format to give a statistical view.

**Table 2: General Library information** 

Sl. No	Aspects	Yes	No	Percentage of yes
1	About Statement	8	0	100

2	Mission Statement	8	0	100
3	Working Hours	5	3	62.5
4	Membership Information	6	2	75
5	Library Rules	3	5	37.5
6	Library Sections	6	2	75
7	Facilities/Services	6	2	75

Table 2 shows that out of 8 National Library, all (100%) the Libraries has 'About Statement' and 'Mission Statement', 6(75%) Libraries have given 'Membership Information', 'Library Section' and 'Facilities/Services'. 'Working hours' is given in 5(62.5%) Libraries and 'Library Rules' is given in 3(37.5%) National Library websites.

**Table 3: Authority** 

Sl. No.	Aspect		No	Percentage of yes
1	Date of update	2	6	25
2	Maintained without any internal/ external Advertisement	8	0	100
3	Links to Mobile site	0	8	0
4	Page under construction		5	37.5
5	Page title appears in the top		0	100
6	Are there dead links		1	87.5
7	Home link in every page	8	0	100
8	Website index		8	0
9	Site is larger ( not less than 5 pages)		1	87.5
10	The site offer Multilingual information	4	4	50

Table 3 reveals that out of 8 National Library, 2 (25%) Library has 'Date of update' plug-in, all the websites are maintained without any internal or external advertisement, no national library website has

mobile version website, 3(37.5%) websites has 'page under construction' page, title of all the websites are appear in the top, 7 (87.5%) websites have dead links and websites are having more than 5 pages, all the websites have home link in every page, no website has 'website index' menu, 4 (50%) websites are offering information in more than one language.

**Table 4: Resource Information** 

Sl. No.	Туре	Yes	No	Percentage of Yes
1	Books	8	0	100
2	Print Journals	7	1	87.5
3	Electronic Journals	4	4	50
4	Book Banks	0	8	0
5	Back Volumes of Journals	0	8	0
6	Non-print Media	7	1	87.5
7	Full text e-journals	1	7	12.5
8	Bibliographic database	2	6	25
9	Open access journals	0	8	0
10	Links to manuals for e-resource	0	8	0
11	Links to e-books	0	8	0
12	Licensing information	8	0	100
13	Copyright issue	8	0	100
14	Achieving information	4	4	50

Table 4 states All the Libraries have books, Licensing information and Copyright issues information provided on the websites.7 (87.5%) Libraries have print journals and Non-Print Media ,4 (50%) Libraries have Electronic journals and Archieving Information, 2 (25%) Libraries have Bibliographic database, No Library is providing Book Banks, Back Volume of Journals, Open access journals, Links to e-resources, and Links to e-books.

**Table 5: Current Awareness Services** 

Sl. No.	Туре	Yes	No	Percentage of Yes
1	New arrivals	3	5	37.5
2	News alert	6	2	75
3	RSS feed	0	8	0
4	Link to SNS	3	5	37.5

Table 5 reveals the current awareness services where 6 (75%) libraries are providing News alert service. 3 (33.33%) Libraries are providing new arrivals service and Links to SNS. And no library is providing RSS feed in their website.

Table 6: Web site classification by Design matter

Sl. No.	Design	Yes	No	Percentage of yes
1	Graphic in site	7	1	87.5
2	Animations	5	3	62.5
3	Site map	5	3	62.5
4	BG & font color match	7	1	87.5
5	Downloads Option	7	1	87.5
6	Hit Counter	1	7	12.5
7	Photo gallery	5	3	62.5
8	Text-only version	1	7	12.5
9	Site Designer	1	7	12.5

Table 6 reveals that 7 (87.5) websites have Graphics in their site, BG & font color match, and download option. 5 (62.5%) websites have animations, site maps and photo gallery. 3 (33.33%) websites have Site

map, all the websites have Background and font color match, and only 1 (12.5%) website has hit counter, Text only version and site designer.

**Table 7: Contact related query** 

Sl. No.	Aspects	Yes	No	Percentage of Yes
1	Contact no. of staff	6	2	75
2	Postal address	6	2	75
3	Email id contact	6	2	75
4	Suggestion box	0	8	0
5	Feedback	3	5	37.5
6	User education/Help	4	4	50
7	FAQs	2	6	25
8	Job Vacancy	3	5	37.5
9	Events	6	2	75
10	Login page	1	7	12.5

Table 7 shows that 6 (75%) websites provides the contact number of staff, postal address and Email id contact, and events links, 4 (50%) websites provide user education/help, 3 (37.5%) websites provide feedback and job vacancy option, 2(25%) websites provides FAQs facility, 1 (12.5%) website has Login page and no website provide suggestion box option.

**Table 8: Search Criteria** 

Sl. No.	Aspects	Yes	No	Percentage of Yes
1	Search Facility	7	1	87.5
2	Links to external Search Engine	6	2	75
3	No. of external links(More than 5)	6	2	75
4	Web OPAC	7	1	87.5

5	A-Z title list	1	7	12.5
6	Publisher wise list	1	7	12.5
7	Subject wise list	1	7	12.5

Table 8 shows that 7 (87.5%) websites have search facility and webOPAC, 6 (75%) websites provide links to external search and more than 5 external links, 1 (12.5%) website provide, A-Z title list, Publisher wise list and Subject wise list.

**Table 9: Search Rank** 

Sl. No.	Rank	Yes	No	Percentage of Yes
1	1st rank on Google search	8	0	100
2	1st rank on Yahoo search	8	0	100

Table 9 shows that all the websites come on 1<sup>st</sup> rank in Google and yahoo search engines with keyword search "National library of < particular country name>".

**Table 10: Website Domain type** 

Sl. No.		.gov	.natlib	.edu
1	Number	6	1	1
2	Percentage	75	12.5	12.5

Table 10 shows that 6 (75%) website have domain type ".gov", and domain type ".natlib" and ".edu" have both 1 each.

# 5. Conclusion and suggestions:

The websites can be evaluated for quality based on criteria such as clear picture, updated information, user-friendly interface, interactive tools, precise information, etc. The current study which was done based on 64 checklist items showed both encouraging and discouraging facts about the content of the particular websites of national libraries of South Asian region. The results of the present study

showed that most of the libraries are yet to cop up with the latest web technologies available for providing better user oriented services.

The following suggestion are made for betterment of library websites based on the results found

- 1. Majority of the websites don't have the information about "Library Rule", it must be in the website to know about the library rules by the users.
- 2. "Date of update" must be provided in the website as date of update confirms the currency of the website.
- 3. Mobile version of the websites must be developed to provide better access to the website in the mobile like devices.
- 4. Website indexing facility must be provided.
- 5. Dead links should be removed as it creates in convenience to the users.
- 6. There must be provision of multiple languages so that user can visit the site in different languages.
- 7. The facility of "Full text e-journals" and "Bibliographic Database"must be provided in the websites
- 8. Links to social network should be given in the websites
- 9. All the websites must provide "A-Z title list", "Publisher wise list" and "Subject wise list".
- 10. No website provides links to manual for e- resources which should be provided by all the National library website.
- 11. Hit counter is available only in 1 website. It shows the popularity of the website so it must be there.
- 12. Computer and network literacy is very important for librarians to redesign user friendly and user oriented library websites.
- 13. Librarians should have thorough knowledge on latest web technologies.
- 14. (Lalith Wickramanayake,2012) Postgraduate courses of Library and Information Science should include Web designing and evaluation. Regular usability testing and quality evaluation studies of each library website are a necessary requirement to meet international experiences.

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