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Implementation of web 2.0 in the library websites of universities of North-East India: An analytical study

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Abstract:

For moving with the flow in this technology driven environment, the libraries have been forced to adopt new technologies and tools. Now-a days, along with the traditional services the libraries have been adopting Web2.0 tools for providing user oriented services to their users. This paper is a web based survey of library web pages of universities of North-East region of India regarding application of Web 2.0 technology. Here, an attempt is made to gain a picture of the status of application of web 2.0 services by the university libraries of the region. The study has been conducted through the official websites of the universities and the result shows that 78% of the university libraries have websites/webpages and 26% university libraries have implemented web 2.0 tools to serve their users.

Keywords: North-East India, University library, Web 2.0, Webpage, Website,UGC.

1. Introduction:

The beginning of the 21st century has witnessed a major transformation in the management and dissemination of knowledge in libraries. The new techniques and technologies have enabled the libraries to develop new services suitable for its users. Libraries are subscribing electronic resources, online database, web based resources for their users with the help of ICT. With the massive use of social networking sites (SNS) and other two way communication technology, the information seeking patern of people are getting changed day by day. Therefore the libraries are adopting new techniques for promoting and disseminating its resources to its users in a more user friendly and easily accessible way. University libraries are always regarded as the knowledge centres and they are using new tools and techniques to

provide best possible services towards its users. Web 2.0 is a term that was first documented by Tim O'Reilly (2005) refers to basic transformations in the websites from the static and non-interactive to the dynamically generated, more sophisticated and more user friendly one through a greater range of software applications. Web2.0 refers to the second generation web technology through which the libraries provide a two way communication between the users and libraries. The implementation of web 2.0 technologies increases the reach of the libraries to more users and thereby gaining numbers of potential users. Web 2.0 offers libraries a platform from where they can interact with their patrons. Applying Web 2.0 technologies on library websites, libraries can encourage participation, collaboration and seek feedback from the user's community. Web 2.0 does not replace the existing technology used by libraries but rather adding more value to the services that is provided by the library. Some of the popular web 2.0 technologies are being used by the libraries are RSS (Really Simple Syndication), Social Networking Sites (SNS), Social Bookmarking, Blogs, Instant messaging (IM), Podcast etc**.** The main objective of the study was to find out the implementation of web 2.0 technology in the library websites of universities of northeastern region of India. The study also has been carried out with an objective whether these technologies helps the libraries for dissemination of library resources as well as increases the numbers of potential users.

2. Literature Review:

There are number of literatures published on the issue of implementation of web 2.0 technology on the websites of libraries of academic institutions as well as other websites. A few have been followed in preparing this paper.

Ahmad & Siddique (2011) conducted a study to assess and highlight the potential of web 2.0 in the context of libraries. According to them the web 2.0 features are opening new avenues and giving libraries the ability to offer the improved, customer driven services to the user communities.

Chua & Goh (2010) did a extensive study including 120 library websites from North America, Europe and Asia, using content analysis method. It was found that the libraries in North America leads in applying web 2.0 applications in comparison to their European and Asian counterparts.

Haneefa & Jasna (2014) did a content analysis of the application of web2.0 in online newspapers which gives a clear picture of the web 2.0 tools used on websites.

Majumder (2012) in his study regarding the application of web 2.o technology on the library webpages of different universities and institutes of West Bengal, has found that only a few universities have applied web 2.0 on their library webpages.

Sahoo & Panda (2017) after analyzing the websites of the 16 nos. of IITs described that all the libraries are using atleast more than one web 2.0 tools for their library users.

Tyagi (2012) did a study on the use of web 2.0 technology by library professionals of selected engineering colleges in Western Uttar Pradesh have recommended that the LIS professionals should be encouraged towards adoption of web 2.0 technologies in the library by providing training to the staff.

Verma & Verma (2014) described in their paper that large number of central universities in india are using web 2.0 technologies to provide better services to their potential users.

Walia and Gupta (2012) conducted a vast study on 66 national library websites of the world on their adoption of web 2.0 technologies with the help of an online survey. The finding shows that 42% of the libraries use one or more web2.0 technologies and the popular tools are RSS, SNS and microblogs.

3. Statement of the problem:

It is observed that web 2.0 technologies offer a variety of platforms to the libraries where they can encourage the participation, users' collaboration and also seek feedback from user community. So, this study has been conducted to investigate the use of web 2.0 technologies by the university libraries of North-Eastern India.

4. Scope and Limitation of the study:

The study will investigate the library websites of universities of North-Eastern region of India. As on today (2021) the North-East India houses 72 UGC recognized universities (Source: http://www.ugc.ac.in). This study has been concentrated on the state and central universities (Table 1), which have been accredited by NAAC (National Assessment and Accreditation Council). Hence, the present study has been confined only to 27 numbers of universities of the region.

State	No. of State University	No. of Central University	NAAC Accreditation
Assam	12	02	Yes (Only 6 nos. of universities have been accredited so far)
Arunachal Pradesh	-	01	Yes
Manipur	03	03	Yes
Meghalaya	-	01	Yes
Mizoram	-	01	Yes
Tripura	01	-	Yes
Sikkim	01	01	Yes
Nagaland	-	01	Yes

5. Objectives:

The main objective of this study is to investigate the implementation of web 2.0 in the library websites of universities of Northeast India. Followings are the specific objectives lined up in order to meet the main objective.

i) To find out the availability of library websites or webpages of universities of North-East India.

ii) To find out the status of implementation of web 2.0 technologies by the university libraries.

iii) To find out the web 2.0 tools available in university library websites.

6. Methodology:

The list of UGC recognized state and central universities of North-East India has been retrieved from the official website of University Grants Commission. All the websites of the selected universities have been visited to find out any web 2.0 icons on the library web pages. The available links have been followed to check the presence of web 2.0 tools. The collected data have been organized in tabular form on the basis of which further analysis has been done.

7. Data Analysis:

The list of the UGC recognized universities of North-East India has been collected from the official website of University Grants Commission (http://www.ugc.ac.in/). The names and address of the universities accredited by NAAC (National Assessment and Accreditation Council) along with their types and websites are given in table 1.

Table 1.Universities of Northeast India

SN	University	State	Estd.	Type	Websites
1.	Gauhati University	Assam	1948	State	www.gauhati.ac.in
2.	Dibrugarh University	Assam	1965	State	www.dibru.ac.in
3.	Assam Agricultural University	Assam	1969	State	www.aau.ac.in
4.	North Eastern Hill University	Meghalaya	1973	Central	www.nehu.ac.in
5.	Manipur University	Manipur	1980	Central	www.manipuruniv.ac.in
6.	Rajib Gandhi University	Arunachal Pradesh	1985	Central	www.rgu.ac.in
7.	Central Agricultural University	Manipur	1993	Central	www.cau.ac.in
8.	Tezpur University	Assam	1994	Central	www.tezu.ernet.in
9.	Assam University	Assam	1994	Central	www.aus.ac.in
10.	Nagaland University	Nagaland	1994	Central	www.nagalanduniversity.ac.in
11.	Sikkim State University	Sikkim	1996	State	www.sikkimstateuniversity.com
12.	Mizoram University	Mizoram	2001	Central	www.mzu.edu.in
13.	Sikkim University	Sikkim	2007	Central	www.cus.ac.in
14.	Bodoland University	Assam	2009	State	www.bodolanduniversity.ac.in
15.	Krishna Kanta Handique State Open University	Assam	2009	State	www.kkhsou.in
16.	Assam Science & Technology University	Assam	2010	State	www.astu.org.in
17.	Srimanta Sankaradeva University of Health Sciences	Assam	2010	State	www.ssuhs.in
18.	National Law University and Judicial Academy	Assam	2011	State	www.nluassam.ac.in
19.	Kumar Bhaskar Varma Sanskrit & Ancient Studies University	Assam	2011	State	www.kbvsasun.ac.in
20.	Assam Rajib Gandhi University of Co-Operative Management	Assam	2012	State	www.argucom.org.in
21.	Assam Women's University	Assam	2013	State	www.awu.ac.in
22.	Manipur University of Culture	Manipur	2015	State	www.muc.ac.in
23.	Maharaja Bir Bikram University	Tripura	2015	State	www.mbbuuniversity.ac.in
24.	Manipur Technical University	Manipur	2016	State	www.mtu.ac.in
25.	Cotton University	Assam	2017	State	https://cottonuniversity.ac.in/
26.	Dhanamanjuri University	Manipur	2018	State	www.dmu.ac.in

| 27. | National Sports University | Manipur | 2018 | Central | www.nsu.ac.in |

Table 2 shows the availability or non availability of library webpages of the universities with their links. The status of implementation of web 2.0 tools is showed in table.3.

Table2.Library webpage status with link

SN	Name of University	Availability of Library website/Webpage	Library Website/Webpage Link
1.	Gauhati University	Available	https://www.gauhati.ac.in/footerlink/library-&-digital-resources
2.	Dibrugarh University	Available	https://dibru.ac.in/portals/lnblibrary/temp/index.htm
3.	Assam Agricultural University	Available	http://www.aau.ac.in/index.php/academics/library
4.	North Eastern Hill University	Available	https://www.nehu.ac.in/library/index.html
5.	Manipur University	Available	https://www.manipuruniv.ac.in/p/library
6.	Rajiv Gandhi University	Available	https://rgu.ac.in/library
7.	Central Agricultural University	Not Available	-
8.	Tezpur University	Available	http://www.tezu.ernet.in/Library/
9.	Assam University	Available	http://www.aus.ac.in/library/
10.	Nagaland University	Available	https://library.nagalanduniversity.ac.in/
11.	Sikkim State University	Not Available	-
12.	Mizoram University	Available	https://lib.mzu.edu.in/
13.	Sikkim University	Available	https://library.cus.ac.in/
14.	Bodoland University	Available	www.bulibrary.in
15.	Krishna Kanta Handique State Open University	Available	http://library.kkhsou.in/
16.	Assam Science & Technology University	Available	http://astu-opac.koha.co.in/
17.	Srimanta Sankaradeva University of Health Science	Not available	-
18.	National Law University and Judicial Academy	Available	http://librarynlujaa.blogspot.com/
19.	Kumar Bhaskar Varma Sanskrit & Ancient Studies	Available	https://www.kbvsasun.ac.in/Library.php

		University		
20.	Assam Rajib Gandhi University of Co-operative Management	Not Available	-	
21.	Assam Women's University	Available	https://centrallibraryawu.blogspot.com/	
22.	Manipur University of Culture	Available	https://muc.ac.in/muc-library-system/	
23.	Maharaja Bir Bikram University	Available	https://mbbuniversity.ac.in/library-details	
24.	Manipur Technical University	Available	http://mtu.ac.in/library/	
25.	Cotton University	Available	http://skblibrary.cottonuniversity.ac.in/	
26.	Dhanamanjuri University	Not Available	-	
27.	National Sports University	Not available	-	

The Fig.1 shows that out of 27 Universities of North-East India, 21 (78%) University Libraries have Library Website/Webpage.

Fig.1: Availability of Library website/Webpage
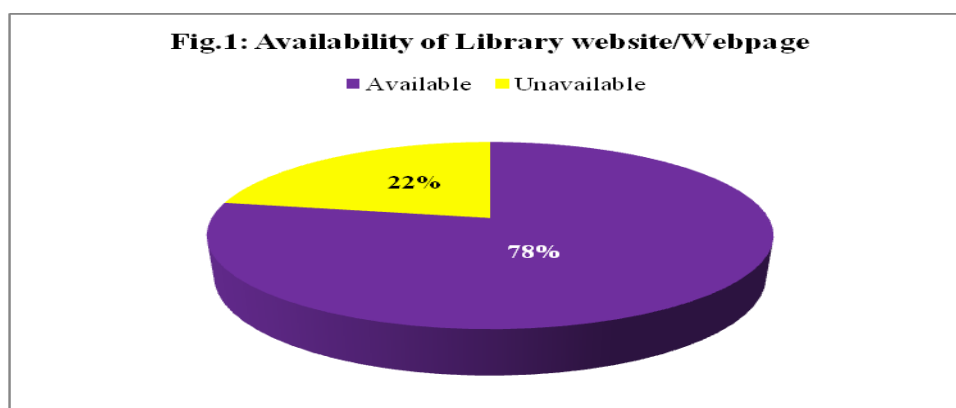
Table 3: Implementation of Web 2.0 tools in libraries

SN	Name of University	Implementation of Web 2.0	Web 2.0 Tools Used
1.	Gauhati University	Yes	Facebook
2.	Dibrugarh University	Yes	Facebook, Blog
3.	Assam Agricultural University	No	-
4.	North Eastern Hill University	No	-
5.	Manipur University	No	-
6.	Rajiv Gandhi University	No	-
7.	Central Agricultural University	No	-
8.	Tezpur University	Yes	Blog, Facebook, Twitter, YouTube

9.	Assam University	Yes	Facebook
10.	Nagaland University	No	-
11.	Sikkim State University	No	-
12.	Mizoram University	No	-
13.	Sikkim University	Yes	Facebook
14.	Bodoland University	No	-
15.	Krishna Kanta Handique State Open University	No	-
16.	Srimanta Sankaradeva University of Health Sciences	No	-
17.	Assam Science & Technology University	No	-
18.	National Law University and Judicial Academy	Yes	Facebook, WhatsApp, RSS, YouTube
19.	Kumar Bhaskar Varma Sanskrit & Ancient Studies University	No	-
20.	Assam Rajib Gandhi University of Co-Operative Management	No	-
21.	Assam Women's University	No	-
22.	Manipur University of Culture	No	-
23.	Maharaja Bir Bikram University	No	-
24.	Manipur Technical University	No	-
25.	Cotton University	Yes	Facebook
26.	Dhanamanjuri University	No	
27.	National Sports University	No	-

Fig.2: Implementation of Web 2.0 tools by libraries
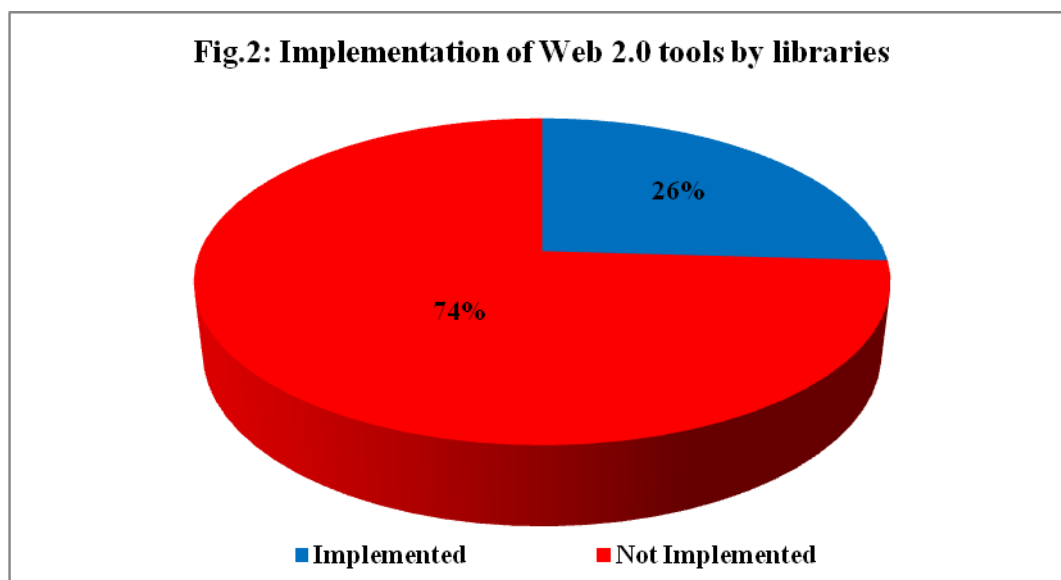
The Fig.2 shows that out of 27 Universities of North-East India, only 7 (26%) University Libraries have implemented Web 2.0 tools.

Fig.3: Web 2.0 tools implemented in libraries

Legend:
- Facebook
- Twitter
- Blog
- WhatsApp
- YouTube
- RSS

Bar values: Facebook 7, Twitter 1, Blog 2, WhatsApp 1, YouTube 2, RSS 1
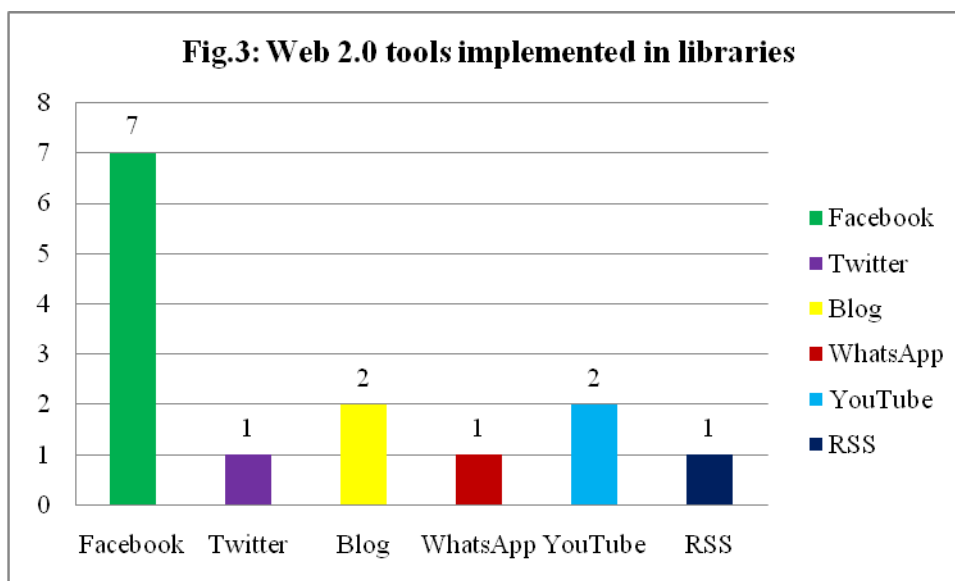
The above figure (Fig.3) shows different Web 2.0 tools implemented in the University libraries in North-East India. It is found from the figure (Fig.3) that Facebook (7) is the mostly used Web 2.0 tool by the University libraries in North-East India followed by Blog (2), YouTube (2), Twitter (1), WhatsApp (1) and RSS (1).

8. FINDINGS:

From the analysis of the data it was found that 21 (78%) University Libraries of the Universities in the North-East India have Library Website/Webpage and only 7 (26%) University Libraries have implemented Web 2.0 tools. The study also revealed that Facebook (7) is the mostly used Web 2.0 tool by the University libraries in North-East India followed by Blog (2), YouTube (2), Twitter (1), WhatsApp (1) and RSS (1).

9. SUGGESTIOS & RECOMMENDATION:

On the basis of the findings of the study the following suggestions have been put forwarded:

i) Although majority of University Libraries of the Universities in the North-East India have Library Website/Webpage, the figure should be 100% as the websites can give an overall idea about the holdings and quality of a library and hence more users can be attracted.

ii) In addition to the websites, Web 2.0 tools can give more visibility to a library as most of today's academic communities use Web 2.0 tools for various academic as

well as social purposes. Therefore, there is a need of implementing Web 2.0 tools by the University libraries.

iii) It is also important to use different Web 2.0 tools equally and actively to reach all sections of the user community. Therefore, the University libraries should implement different Web 2.0 tools equally and actively for marketing their resources and services to all sections of the user community.

10. CONCLUSION:

Web 2.0 tools have opened up the scope of serving the library users in an interactive environment and hence it has enabled the libraries to provide library resources and services to their users according to their need over the web. The result of the study reveals that most of the university libraries have websites/webpages. But to survive with the rapid changing environment, there is a need for all the libraries to have their own website/webpage.

The study also revealed that the use of web 2.0 tools by the university libraries of the North-East India is in very initial stage. But to remain relevant with the demand of the scenario, it is important for the libraries to adopt all the new technologies and means. For this purpose, there is a need for exercises of imparting professional training, inculcating the interest to learn and to apply modern technologies among the library personnel.

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