

*Full Length Research*

# A New Skyline of Using Web 2.0 Technology In Endorsing The Library Services: A Case Study Among LIS Professionals In Selected University Libraries Of Assam State

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Web 2.0 tools can play a significant role in creating and designing library website for sharing information to users. These tools through LIS Professionals can develop library website and gives information about catalogs, services, products, events, exhibitions, history of the library, working hours, guidelines about library membership, issues of books, reservation/renewals/reminders, about library staff, contact information and courses offered by institutions, programs to be held etc. A structured questionnaire was considered for examining purposes, benefit and problems in using Web 2.0 tools. Out of circulated fifty seven questionnaires, 75.43% of respondents taking part in this study. On the basis of research outcome some recommendation have been put forwarding for espouse Web 2.0 tools and decision to implement such tools in university libraries of Assam in future.

**Keywords:** Web 2.0, Library Information Science Professionals, Assam, State, SNS

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## INTRODUCTION

Technological development has prepared libraries to transformation the attitude of LIS professionals to espouse emerging technology like Web 2.0 tools, RFID, Bar Code, Ontology, Semantic Web, Cloud Computing etc. for their existence. As we know that library is a service oriented organisation. The primary objective of library is to facilitate the right information at the right time to the right users in the right format at the right place. Library has been adopting new emerging technology for meeting the information needs and satisfaction of the

users. Web 2.0 tools facilitated innovative and excellent library resources for LIS professionals to support today computer savvy users and give different library services. Web 2.0 tools namely Blogs, SNS, RSS Feed, Mashup, Wikis, and Podcast etc. facilitate distinctive and prevailing information sharing and collaborative landscapes help library patrons to right to use. Libraries are using gradually attractive their website by bringing together Web 2.0 features in this today's digital age. The integration of Web 2.0 tools has endorsed the website to

be additional supple and flexible. With the deployment of Web 2.0 tools in library, LIS Professionals makes able to update the recent facts and dynamic websites can be used successfully for outreach and advancement. These tools through LIS Professionals can give up to date information of library. Hence, requirements and expectations of its patrons can be satisfied or fulfilled with providing innovative and excellent library services.

## RESEARCH PROBLEM

In this new era, LIS professionals need to change every new innovation for giving the better satisfaction of library users. So, LIS professionals need to know which library services are used mostly by users of this new era. There is a wide gap in the literature in consideration of these technologies their current and potential usage in selected university libraries of Assam. The reason for undertaking in this research is attempted to get advantage the LIS professionals who are not using Web 2.0 applications, to make inform decisions on whether LIS professionals should make use of certain Web 2.0 tools to enhance their excellent library services and facilitate information sharing among generations.

## RESEARCH OBJECTIVES

The objectives of the present study can be summed up to accomplish as follows.

- a) To find out the use of Wikis, Blogs, RSS Feed, Podcasting, SNS, Mashup etc. among LIS professionals for providing services in selected university libraries of Assam;
- b) To identify and examine the different purposes for using Web 2.0 tools by LIS professionals;
- c) To determine the diverse difficulties faced by LIS professionals while using Web 2.0 tools in their workplace;
- d) To find out Web 2.0 tools usefulness among LIS professionals in their present job;
- e) To know from where respondents acquired Web 2.0 tools for promoting library services;
- f) To examine what types of training required by respondents for providing library services in their professional work.

## SCOPE AND LIMITATION OF RESEARCH

There are many studies conducted worldwide in this area but no study was found on the topic of use of Web 2.0 technologies among LIS Professionals in this particular region. The present study is mainly concerned with LIS

professionals in selected university libraries of Assam and therefore generalisation beyond this population is restricted. The geographical area is delimited and covers only particular university libraries of Assam. The scope of the research was confined to four university libraries of Assam namely, Assam University, Silchar, Tezpur University, Tezpur, Gauhati University, Guwahati and Dibrugarh University, Dibrugarh. Researcher had chosen only those university libraries which are having websites and these are well established.

## RESEARCH METHOD FOR DATA COLLECTION

The entire research work was constructed on survey method as well as a well structure questionnaire was designed in order to accomplish the listed aforesaid objectives of the present study. The questionnaire enclosed different types of questions comprising of dichotomous questions (yes/no), multiple choice questions and opinion-based questions, so that LIS Professionals can express their understandings on the topic of Web 2.0 applications. Apart from personal interaction, emails, face book were also made to follow up the respondents. Some questions found to be unsuitable after pilot study and with required changes, the final questionnaire was prepared.

## REVIEW OF RELATED STUDIES ON WEB 2.0 APPLICATIONS

Researchers from diverse arenas have scanned the use of Web 2.0 Tools such as Blog, Wiki, Podcast, and Mashup, SNS etc. among many sections of the residents, particularly amongst the new generations such as school, college and university undergraduates in order to appreciate the practices, effects and significance of these tools. Researcher reviewed only those existing literatures, which were found appropriate and suitable to the present study contributed by different experts. Following are some of them.

Anunobi & Ogbonna (2012) in a research entitled on "*Web 2.0 Use by Librarians in a State in Nigeria*", and based on their findings, the following recommendations were made: Librarians should be encouraged to embrace the use of Web 2.0 tools through capacity building by their employers; the work environment of librarians in public, school and special libraries, including academic libraries should be re-positioned by providing the needed facilities to enhance the use of Web 2.0 tools; library automation and digital access should form the basis of library operations in all types of libraries in order to meet the user's present information need; and in-house trainings, seminars and workshops on the existent and use of Web 2.0 tools should be organized from time to

time for librarians and library users to help themselves become familiar to the different Web 2.0 tools, their potentials and use approach. This would help to improve their competencies in library service delivery in this new information society.

Arif & Mahmood (2012) conducted a survey on “*The Changing Role of Librarians in the Digital World: Adoption of Web 2.0 Technologies by Pakistani Librarians*” and reported that IM, Blogs, SNS and Wikis were the most popular Web 2.0 technologies. Librarians adopted such technologies in their professional and personal lives. Gender, length of professional experience and place of work had no effect on the frequency of use, while perceived skill level of internet use and perceived ease of Web 2.0 tools use had a significant effect on the frequency. Lack of computer literacy and lower availability of computers and internet facilities were the major hindrances of Web 2.0 adoption by librarians. Awareness and training programs could enable librarians to cope with Web 2.0 technologies.

Baroet. al. (2013) undertook a survey on “*Web 2.0 Tools Usage: A Comparative Study of Librarians in University Libraries in Nigeria and South Africa*”, which showed the differences in the use of Web 2.0 tools among librarians in university libraries in Nigeria and South Africa. The most frequently and very frequently used Web 2.0 tool was Facebook by librarians in both countries. But 63.9% of the librarians in South Africa frequently and very frequently used Facebook, while only 47.3% frequently and very frequently used Facebook among the librarians in Nigeria.

## DISCUSSION AND ANALYSIS OF DATA

On the basis of the responses received, the data was organised, analysed manually and presented the data in the form of pie diagram, tables, chart and percentage with the support of MS Excel (2010) in the following sections.

### Responses Regarding the Use of Web 2.0 Applications

On the question of the regularity of used of Web 2.0 tools among LIS Professionals. The results revealed that 29 (67%) of respondents used Web 2.0 tools while rest of responded were not using Web 2.0 tools due to inability to prove authenticity of the content, IPR and copyright issues, institutional fears, irregular power supply etc. Figure 1

### Use of Web 2.0 Applications

Respondents were requested to identify whether they

using or not using Web 2.0 tools in their personal work or library services. Table 1 disclosed that majority of participants i.e., 29 (67.44%) were used Blog, which 21 (48.83%) of participants were used Wikis. A good number of the respondents i.e., 15 (34.89%) participants showed their usage about RSS, which was followed by Mashup and IM with 4 (9.3%) participants. 3 (6.98%) of participants knew SNS and only 2 (4.65%) of participants were used Podcast.

### Learning Mode of Web 2.0 Applications

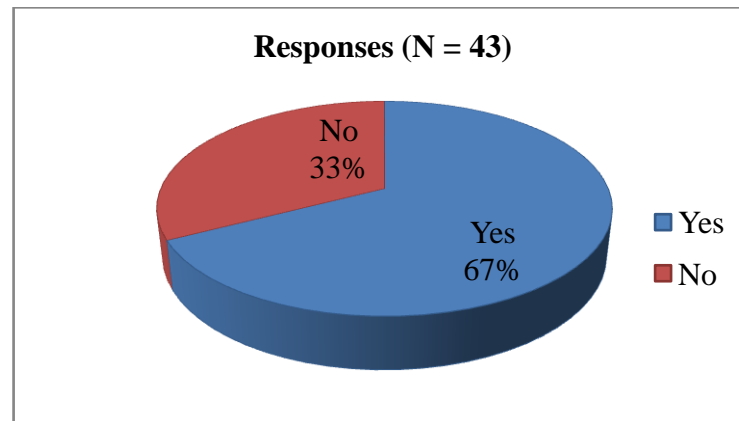
In order to know the fact that how they learn to use Web 2.0 tools in facilitating library services. It was found that 25 (58.13%) of respondents learn through self-practice or through online tutorials and 12 (28%) of respondents learned through friends/colleagues. 11 (25.59%) of respondents expressed acquiring the skills through workshop. Table 2 cleared the doubts that many LIS professionals did not learn the expertise of using Web 2.0 tools from the library schools. The present study noticed that LIS professionals acquired the skills for the use of Web 2.0 tools mainly through self-practice, friends/colleagues and attendance at workshops.

### Reasons for Not Using Web 2.0 Applications

In response to the question why LIS Professionals did not use Web 2.0 Applications. Respondents answered in different ways (Table 3). A majority of respondents i.e., 7 (16.27%) indicated institutional fears. 13.95% of respondents believed that inability to prove authenticity of the content and IPR and copyright issues was the main reason. Only three respondents replied on irregular power supply with a percentage of 6.97% only.

### Web 2.0 Tools Usefulness among LIS Professionals in Current Job

Respondents were requested to pick the preference for usefulness of Web 2.0 tools among LIS Professionals in their current job from the list of seven. Table 4 presented that Blog was the most helpfulness among 21 (48.83%) of respondents for using Web 2.0 tools in their current job, which was followed by Wikis with 13 (30.23%) respondents. A good number of the respondent i.e. 12 (28%) LIS Professionals revealed their effectiveness in using RSS and 5 (11.62%) of respondent identified the advantage of using Podcast. 3 (6.97%) respondents considered Mashup and IM. 2 (4.65%) respondents responded that SNS benefited in their existing job.



**Figure 1:** Use of Web 2.0 Applications among LIS Professionals

**Table 1:** Use of Web 2.0 Applications

Use of Web 2.0 Tools	Responses (N = 43)	Percentage (%)
Blog	29	67.44
Wikis	21	48.83
RSS	15	34.89
SNS	3	6.98
Mashup	4	9.3
Podcasts	2	4.65
IM	4	9.3

**Table 2:** Means of Acquiring Skills to Use of Web 2.0 Tools

Use of Web 2.0 Tools	Responses (N = 43)	Percentage (%)
Learn through self-practice	25	58.13
Through friends/colleagues	12	28
Through library schools	0	Nil
Through workshop	11	25.59

**Table 3:** Reasons for Not Using Web 2.0 Applications

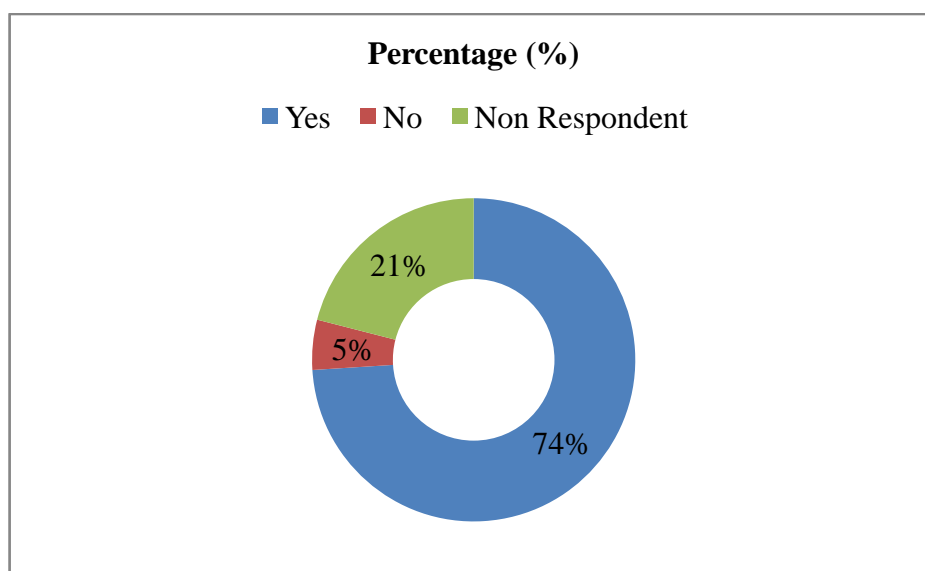
Reasons for Not Using of Web 2.0	Responses (N = 43)	Percentage (%)
Inability to prove authenticity of the content	6	13.95
IPR and copyright issues	6	13.95
Institutional fears	7	16.27
Irregular power supply	3	6.97

**Table 4:** Web 2.0 Tools Usefulness in LIS Professionals Current Job

Usefulness of Web 2.0 Tools	Responses (N = 43)	Percentage (%)
Blog	21	48.83
Wikis	13	30.23
RSS	12	28
SNS	2	4.65
Mashup	3	6.97
Podcasts	5	11.62
IM	3	6.97

**Table 5: Purposes of Web 2.0 Tools Use among LIS Professionals**

Purpose of Using Web 2.0 Tools	Responses (N = 43)	Percentage (%)
To publish library news/announcements/events	14	32.55
To participate in discussions/interaction	7	16.28
To keep users aware with knowledge current subjects	14	32.55
To share information about new arrival of books	10	23.25
To provide information literacy instruction/library tutorials	7	16.27
To share information about new E-journals	1	2.32
For communication only	1	2.32

**Figure 2: Web 2.0 Applications and Their Services**

### Purposes of Web 2.0 Tools Use among LIS Professionals

LIS professionals were questioned to hand-picked the purposes for which they use Web 2.0 applications. Out of seven reasons listed in questionnaire, 14 (32.55%) of respondents used to publish library news/announcements/events and keep users aware with knowledge current subjects which was followed by 10 (23.25%) who specified using Web 2.0 tools for share information about new arrival of books. Only seven respondents used Web 2.0 tools for participate in discussions/interaction and provide information literacy instruction/library with a percentage of 16.28% only. It was a multiple-choice question with some specified purposes. The participants were allowed to give more than one select. Table 5

### Web 2.0 Applications and Their Services

Respondents were questioned to specify which Web 2.0

tools and services were valuable in their workplace. 32 respondents answered “yes” that they consider it as useful for facilitating library services which was 74%. 2 (5%) participants stated that they disagree concerning services. Only 9 (21%) respondents did not response. Figure 2

### Preference of Web 2.0 Application and Services

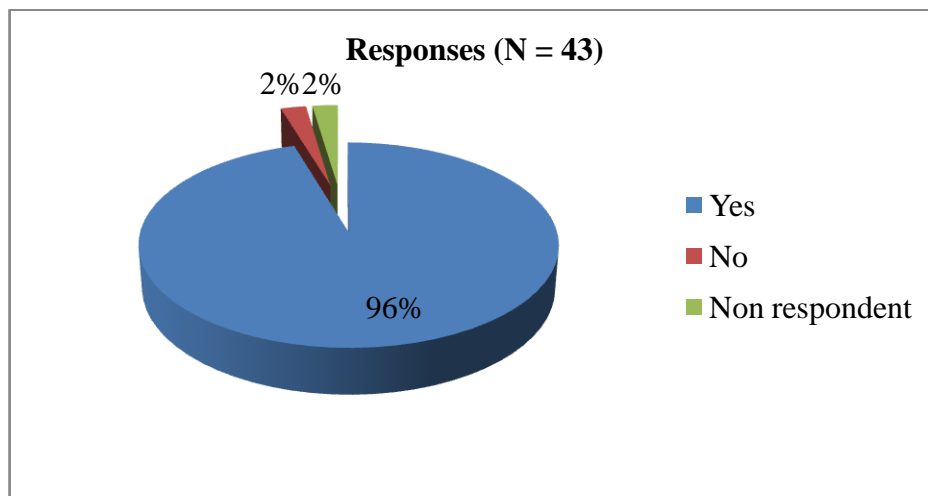
An opinion was sought to know about the preference of Web 2.0 tools and services offered in the following Table 6, 26 (60.46%) of participants stated that they considered Web 2.0 tools was useful for facilitate in obtaining user's feedback and understand readers interest trend in library services, which was followed by improve knowledge sharing and collaboration with 23 (53.49%) respondents. Only 21 respondents described that they agree for offering library services like increase users participation/interaction and communication with users.

**Table 6:** Preference of Web 2.0 Application and Services

Responses of Web 2.0 Application and Services	Responses (N = 43)	Percentage (%)
To facilitate in obtaining user's feedback and understand readers interest trend	26	60.46
To improve knowledge sharing and collaboration	23	53.49
To increase users participation/interaction and communication with users	21	48.83

**Table 7:** Impediment to Change Adoption

Barriers of LIS Professionals	Responses (N = 43)	Percentage (%)
Lack of time	6	13.95
Lack of skills	26	60.46
Lack of facilities	18	41.86
Lack of infrastructure	18	41.86
Lack of interest	1	2.32
Non responded	5	11.62

**Figure 3:** Training Needs on Web 2.0 Tools

### Impediment to Change Adoption

The data concerning the relative severity of a number of likely barriers of change adoption were composed through survey. Respondents were requested to specify what problem they faced in using Web 2.0 applications. The majority of respondents surveyed 26 (60.46%) showed lack of skills such as present computers with internet browser to use Web 2.0 applications as a major obstacle which was followed by 18 (41.86%) respondents who realised lack of facilities and lack of infrastructure with a percentage of 41.86 only. 6 (13.95%) of respondents disclosed lack of time and five (11.62%) respondents did not respond. Only one (2.32%) responded with lack of interest. Table 7

### Training Needs on Web 2.0 Tools

Respondents were questioned to mention their opinion regarding the training needs on Web 2.0 tools in libraries. Figure 3 showed that out of 43 respondents, 41 (96%) of respondents said 'Yes' while rest of the respondents replied "No".

### Type of Training Required on Web 2.0 Tools

Participants were requested to specify their training requirements on the use of Web 2.0 tools. Table 8 presented that 31 (72.09%) of participants need training on application of Web 2.0 applications. 24 (55.81%) of

**Table 8:** Type of Training Needs on Web 2.0 Tools

Training Needs on the use of Web 2.0 tools	Responses (N = 43)	Percentage (%)
Application of web 2.0 technologies and tools in libraries	31	72.09
Workshops for using Blogs/Wikis/SNS/Podcasting etc. in libraries	24	55.81
Workshops on application of Mashups	15	34.88

respondents thought of workshop for using Blogs/Wikis/SNS/Podcasting as essential. When questioned about Workshops on application of Mashups, only a very few of the responded 15 (34.88%). Thus, majority of the respondents had lacked of trainings on application of web 2.0 technologies and tools in libraries as important.

## OUTPUT OF RESEARCH

On the basis of the analysis and discussion of the collected data, the major findings/output of research is laid down.

- a) Researcher observed that majority i.e, 58.13% of respondents acquired the skills to use Web 2.0 tools through self-practice. One more noticeable point was found that LIS professionals did not acquire the skills of using Web 2.0 tools from the library schools.
- b) The study revealed that 67%of respondents used Web 2.0 tools while rest of respondents were not using Web 2.0 tools due to inability to prove authenticity of the content, IPR and copyright issues, institutional fears, irregular power supply etc..
- c) The analysis clearly indicated that 32.55% of the respondents used Web 2.0 to publish library news/announcements/events and keep users aware with knowledge current subjects;
- d) 96% of the respondents stated the training needs on Web 2.0 tools.

## CONCLUSION

In consequence, researchers make an effort this study as a beginning and not the end. Lots of changes may happen in reference services and may enhance additional library services in future after adaptation of Web 2.0 tools in libraries. The researcher is of the opinion that Library and Information Science researchers may take up studies on theme with different perspectives so as to draw suitable findings and offer useful

recommendations for future growth and development of enhancement in innovative library services. Researcher attempt to fulfill the set objectives set for study and these have been reflected in this study.

## RECOMMENDATIONS

Based on the findings/outcomes of research, the following recommendations are made:

- a) In order to expertise in use of Web 2.0 tools in library, library authority should be organised seminars/workshops/conference/orientation programme/induction programme etc. time to time to develop their proficiencies for providing and promoting library services.
- b) Many Web 2.0 tools were available freely in the web and all the youngsters were already taking advantage of them. Hence, library authority should support the use of these existing technologies.
- c) A distinct course on Web 2.0 tools should comprise in library science departments. Educating about Web 2.0 applications in library science department will bring to get ready the next generation of library staff for the new challenges ahead in future.
- d) Consistency is required to give update information of library for providing better library services. Hence, LIS Professionals should to maintain consistency of update information.

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