Original Article

Indian Journal of Library and Information Science
Volume 11 Number 2, May - August 2017
DOI: http://dx.doi.org/10.21088/ijlis.0973.9548.11217.9

Exploitation of Web 2.0 Based Website among the Female Students of University of Rajshahi: A Case Study

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Abstract

The present study mainly explores the usage of Web2.0 based website among female students of Rajshahi University, Bangladesh. The study revealed that the term web 2.0 has popularity among 73 respondents (97.33%). Majority respondents i.e.70.67% has used web 2.0 based websites whereas 29.33% respondents don't use the web 2.0 based website. The present study also find that 32.07% respondent think that web 2.0 based applications is important, and 26.41% respondents are fully satisfied with the web 2.0 based websites. It has been found that 41.51% respondents always visited website for the purpose of social networking information whereas 39.62 % respondents never visited website for the same purpose.

Keyword: Web 2.0; Social Networking Site; Blog; Rajshahi University.

Introduction

University of Rajshahi is one of the largest Universities in the country and the largest with the highest seat of learning in the northern region of Bangladesh. Presently it has 56 departments, 10 faculties, 6 institutes, 25000 students (approximately) [1].

The Web has become a reference that occurs everywhere, and almost everyone knows about it. The web has grown rapidly over time beginning in the early 1990s and has since changed from the traditional (Web 1.0) for the second generation Web (Web 2.0). The Web 2.0 described as a model of World Wide Web sites that emphasize on the content built by users (user-generated content), usability and interoperability. The Web 2.0 shows the new version of the World Wide Web, although it does not refer to any renewal of the technical specifications, to change in the way web pages are created and used. The Web 2.0 is the next generation of the web applications that are more active and participative [2].

The term "Web 2.0" was first used in January 1999 by Darcy DiNucci, a consultant on electronic information design (information architecture) in her article, "Fragmented Future". Web 2.0 is the term given to describe a second generation of the World Wide Web that is focused on the ability for people to collaborate and share information online. Web 2.0 basically refers to the transition from static HTML Web pages to a more dynamic Web that is more organized and is based on serving Web applications to users [3, 4].

Objectives of the Study

This study has been carried out with a view to the following objectives:

- To determine nature, purpose and method of web 2.0 based website usage;
- To explore the motivations in using Web 2.0 based websites
- To explore the pros and cons of web 2.0 based website resources;
- To find out the benefit of web 2.0 based website;
- To discover the level of satisfaction over web 2.0.

Materials and Methods

The survey method was used to acquire the data

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Received on 10.05.2017, **Accepted on** 27.05.2017

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from the respondents. Total 100 questionnaires were distributed to the selected female respondents. Out of 100 respondents, 75 questionnaires (75%) were returned to the researcher to conduct the study. The questionnaire was formulated with both open and closed-ended questions. All the collected data has been analyzed by tables and figures with the help of modern statistical method.

Literature Review

Dasgupta, Diptiman and Dasgupta, Rudranil (2009) highlight the pattern and behavior of different social networks and how they are implemented using Web 2.0. They have also indicated how behavior of individuals and their network can be extracted and analyzed by studying different social networks. Towards the end of this article we highlight the future of Web 2.0 and how its enhanced capabilities can make social networks more mature with added features and functionalities to improve the efficiency of social collaboration [5].

Cha (2010) mentions that online privacy concerns are a deterrent for the frequency of using social media sites. Thus privacy concerns are a barrier for using the Internet and social media sites. He suggests that it is essential for social networking site operators to ensure online privacy to turn potential users into regular users of their sites because potential users will be reluctant to register for, and continue to log into, social networking sites on a regular basis if they fear privacy infringement [6].

Virkus (2008) stresses that social media helps promote the benefits of working co-operatively with tools that facilitate the aggregation and organization of knowledge while at the same time demonstrating that the diversity of individual research interests enhances learning for all. It helps students develop practical research skills that they need in a world where knowledge construction and dissemination make increasing use of online information networks. Thus this social media is suitable for educational and lifelong learning purposes in our knowledge society, because our modern society is built to a large degree on digital environments of work and social communication [7].

Zakaria, Watson, and Edwards (2010) believe that social media applications have already being accepted by younger generations as a platform to socialize, collaborate and learn in an informal and flexible manner, although their level of Involvement and contribution varies significantly [15].

Si, Shi and Chen (2009) find in their study that at least two-thirds (20 out of 30) of Chinese university libraries deployed one or more Web 2.0 technologies; only one-tenth adopting 4 kinds of Web 2.0 technologies; RSS is applied most widely and Wiki the least [8].

Shao and Seif (2014) identify that Wikipedia (15.9%), Facebook (15.6%), Google (14.6%) and Youtube (14.5%) are often used by students. The students seems to be equipped with latest web 2.0 tools and skills [9].

Widyasari, Nugroho and Permanasari (2016) indicate in their study that users use more actively of the Web 2.0 technologies (e.g. social media) as part of lives and their culture. The overall respondents know about what is meant by the Web 2.0 technologies, but only 0.5% who do not want to use it. The survey showed that 49.5% respondents use 4 to 6 types of social media, 28.8% respondents use a 1 to 3 types and 16.7% respondents use 6 to 10 types of social media. The survey shows that the utilization of the Web 2.0 technologies, in this case, are to obtain information, to make social interaction and also to interact with fellow students and educators. There are some perceived benefit students in using web 2.0 technologies. This technology helps to get information. Students are assisted in sharing information, knowledge and learning materials. The use of this technology facilitates and speeds up communication between students and lecturers [10].

Eze (2016) finds in his article *Awareness and use of Web 2.0 tools by LIS Students at University of Nigeria* that students are quite familiar with some Web 2.0 tools such as Social networking sites, Instant Messaging, blogs and Wikis, while, they are not familiar with tools such as RSS feeds, Podcasts, and social bookmarks. The study revealed that the most frequently used Web 2.0 tool was Facebook, followed by YouTube and Wikis. On the other hand, the results showed little use of tools such as Flickr, Podcast, RSS feeds, and Social bookmarks [11].

Results and Discussion

Data analysis has been broken into different parts for the purpose of easy analysis supported by tables and graphs.

Web 2.0 Basics

Respondents were asked to indicate the popularity of the term web 2.0. Figure 1 represents that almost all of the respondents (97%) know the term Web 2.0 and

only 3% respondents don't know exactly what the term meant web 2.0. Those who are known with the term web 2.0 are asked to indicate the meaning of the term by providing six meaning, which are equally or in some cases partially correct answer. Table 1 indicates that social networking sites (84.33%), and web technologies where people bring content, collaborate and share information online (84%) are the most stable answer among the respondents and 17.33% of the respondents don't have clear idea regarding the meaning of the term.

Figure 2 shows that majority percent of the respondents (71 %) use web 2.0 based websites and 29 % respondents don't use web 2.0 based websites. Respondents who use web 2.0 based websites were further asked to indicate their frequencies in using web 2.0 based websites. Table 7 reveals that 43.39% respondents always use web 2.0 based web sites while it have been rarely used by 6% of the respondents. Those who are used to web 2.0 based applications were asked to indicate their learning process of web 2.0 based applications. Table 3 shows that friend and professionals (64.15%) and self-learning (20.75%) have been playing important roles in their learning system.

There are 22 respondents under current study who are not using web 2.0 based websites. Respondents were asked to indicate the reasons for not using web 2.0 based websites. In fact maximum numbers of respondents think that web 2.0 based websites are not required at all (95.45%) while majority percent respondents are also not so much interested on it (86.36%).

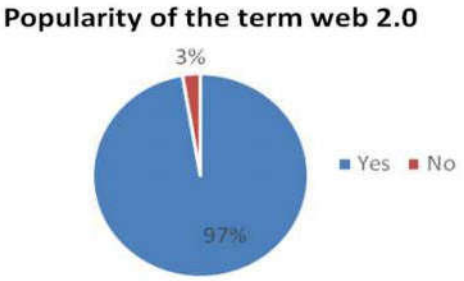

Fig. 1: Popularity of the term web 2.0

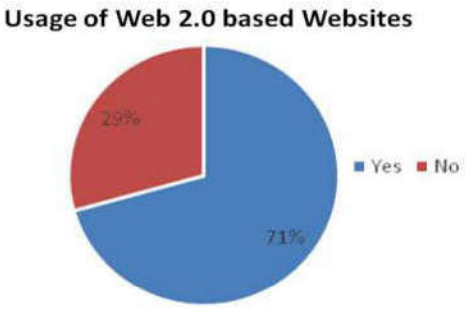

Fig. 2: Usage of web 2.0 based websites

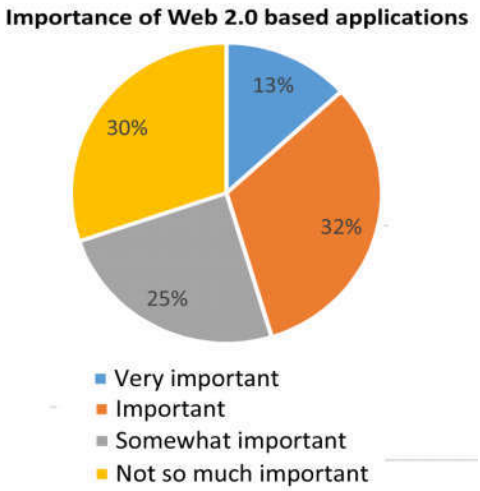

Fig. 3: Importance of Web 2.0 based applications

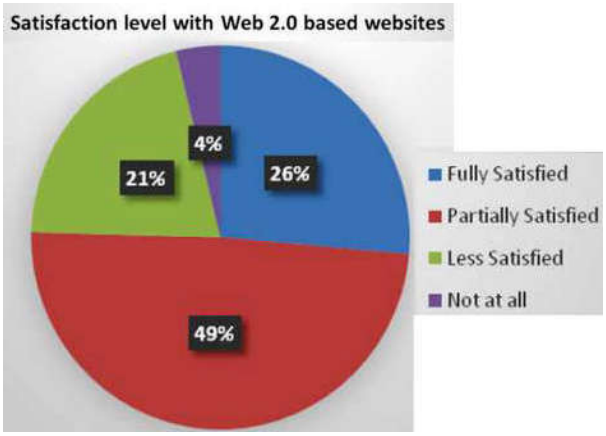

Fig. 4: Satisfaction level with Web 2.0 based websites

Exploitation of Web 2.0

Table 5 shows that 73.58% respondents always use Facebook, 13.21% respondents sometimes use twitter, 50.94% respondents sometimes use YouTube, 16.98% respondents sometime use Wikipedia, 30.19% respondents sometimes use Google AdSense, 7.55% respondents sometime use Bikroy.com and 24.53% respondent sometime use Skype. While cent percent respondents under survey don't use Flickr, Blogger, Scribd, Slide share, RSS feeds, LinkedIn, My space like web applications.

Table 6 depicts that 96.23% respondents have personal Facebook account, 35.85% respondents have maintained Mail group, and 24.53% respondents have Skype account. All the respondents have no LinkedIn account. Table 7 shows that forum (100%), news feeds (83.02 %), wikis (73.58%), file sharing (60.38%) and blogs (22.64%) based applications are more effective in study and research. All respondent think

podcasting is less effective in study and research. Figure 3 demonstrate that 13% respondents think web 2.0 is very important, 32% respondents think web 2.0 is important, 25% respondents think web 2.0 is somewhat important and 30% respondents think web 2.0 is not so much important.

Motivations for Using Web 2.0

Table 8 shows that 28.30% respondents sometimes visited web 2.0 based websites for preparing assignment. 45.28% respondents sometime visited web 2.0 based websites for pursuing research work. 20.75% respondents always reading e-newspaper through web 2.0 based websites. 24.53% respondent sometime visited for getting a result in relating to job searching and application. A number of respondents always visited web 2.0 based websites for mailing (13.21%), group mailing (11.32%), chatting (39.62%), and social networking (41.51%). A good number of respondents sometimes visited web 2.0 based websites for downloading music/movie (39.62%), watching streaming video (60.38%), sharing image (43.39%). 16.98% respondents always visited web 2.0 based websites for getting information from wiki.

Evaluation

Table 9 shows that "spread information faster than previous (32.07%)", "facilitate political change by stimulating democratic thinking (28.30%)" and "allow for quick and easy dissemination of information (50.94%)" are the positives sides of web 2.0 based websites what the respondents strongly agreed. Respondents of our current study strongly believe that "Enables the spread of false and reliable information simultaneously (100%)", "Create a new horizon of fraud and embezzlement (3.77%)", "Tend the student to have lower grade (12%)", "Facilitate inappropriate relationship among the members of its users (32.07%)" are the negative sides of web 2.0 based websites.

Table 10 represents that a good number of respondents think web 2.0 based websites have extreme impact on social activities (30.19%), educational activities (35.84%), and Research activities (58.49%). Figure 4 reflects the satisfaction level with Web 2.0 based websites. 26% respondents are fully satisfied, 49% respondents are partially satisfied, 21% respondents are less satisfied and 4% respondents are not at all satisfied.

Table 1: Meaning of the term Web 2.0

Meaning of the term Web 2.0	Respondents (Number and Percentage)
Second generation of web technologies	32 (42.67%)
Social networking sites	64 (84.33%)
Web technologies where people bring content ,collaborate and share information online	63 (84%)
Smart way of interactive sharing information with each other through online	43 (57.67%)
New generation of dynamic website creation process	26 (34.67%)
Read-write web environment	-
I don't have clear idea	13 (17.33%)

(N.B. Impact scale: 1=Extremely, 2=Very, 3=Somewhat , 4= Not at all)

Table 2: Frequency in using web 2.0 based websites

Web 2.0 usage frequency	1	2	3	4
Respondents (Number and Percentage)	23 (43.39%)	17 (32.07%)	7 (13.21%)	6 (11.32%)

(N.B. Usage frequency: 1=Always, 2=Frequently, 3=Sometimes, 4= Rarely)

Table 3 Learning system of web 2.0 based applications

Learning system	Self-learning	Online tutorial	Friend and professionals	Formal training	Total
Respondents (Number and Percentage)	11 (20.75%)	-	34 (64.15%)	8 (15.09%)	53 (100%)

Table 4: Reasons for not using web 2.0 based websites

Reasons for not using web 2.0 based websites	Respondents (Number and Percentage)
Not so much interested	19 (86.36%)
Unknown technology	-
Not required at all	21 (95.45%)
Complexity	3 (13.64%)
Financial problems	4 (18.18%)
Less infrastructural facility	-

Table 5: Usage of Web 2.0 based web applications

Web applications	Usage frequency			
	1	2	3	4
Facebook	39 (73.58%)	_	12(22.64%)	2(3.77%)
Twitter	_	_	7(13.21%)	46(86.79%)
Flickr	-	-	-	53(100%)
YouTube	-	-	27(50.94%)	26(49.06%)
Blogger	-	-	-	53(100%)
Wikipedia	-	-	9(16.98%)	44(83.02%)
Scribd	-	-	-	53(100%)
Slide share	-	-	-	53(100%)
RSS feeds	-	-	-	53(100%)
LinkedIn	-	-	-	53(100%)
Google AdSense	-	-	16(30.19%)	37(69.81%)
Bikroy.com	-	-	4(7.55%)	49(92.45%)
My space	-	-	-	53(100%)
Skype	-	-	13(24.53%)	40(75.47%)

(N.B. Usage frequency: 1=Always, 2=Frequently, 3=Sometimes, 4= Never)

Table 6: Possession of personal account

Possession of Account	Yes	No	Yes but now remain closed
Personal Blog	-	53(100%)	-
Facebook/twitter/google+ Account	51(96.23%)	_	2(3.77%)
LinkedIn Account	-	53(100%)	-
Mail group	19(35.85%)	34(64.15%)	-
Skype Account	13(24.53%)	40(75.47%)	-

Table 7: Effectiveness of Web2.0 for study and research

Web 2.0 based application	Frequency of effectiveness			
	More effective	Effective	Less effective	Ineffective
Blogs	12 (22.64%)	28 (52.83%)	13 (24.53%)	_
File sharing	32 (60.38%)	21 (39.62%)	_	_
Bookmarking/ Tagging	_	24 (45.28%)	29 (57.72%)	_
Forums	53 (100%)	_	_	_
News feeds	44 (83.02%)	9 (16.98%)	_	_
Podcasting	_	_	53 (100%)	_
Wikis	39 (73.58%)	14 (26.42%)	_	_
Instant Messaging	_	43 (81.13%)	10 (18.87%)	_
Social Networking Site	1(1.87%)	52 (98.11%)	_	_

(N.B. Effectiveness scale: 1=More effective, 2=Effective, 3=Less effective, 4= Ineffective)

Table 8: Purpose in using web 2.0 based websites

Rationality by sectors	Usage frequency			
	1	2	3	4
Study				
Preparing Assignment	5(9.43%)	9(16.98%)	15(28.30%)	24(45.28%)
Pursuing research work	_	_	24(45.28%)	29(54.72%)
Seeking educational information	_	_	_	53(100%)
Continuing online course/training	_	_	_	53(100%)
Reading e-book/e-journal/e-newspaper	11(20.75%)	_	8(15.09%)	34(64.15%)
Job Searching & Applying				
Searching for a job	_	_	_	53(100%)
Applying for a post	_	_	_	53(100%)
Getting a result	_	_	13(24.53%)	40(75.47%)
Continuing online training	_	_	_	53(100%)
Communication & Social Networking				
E-mailing	7(13.21%)	_	19(35.85%)	27(50.94%)
Group e-mailing	6(11.32%)	3(5.66%)	12(22.64%)	32(60.38%)
Blogging	_	_	_	53(100%)
Chatting	21(39.62%)	_	15(28.30%)	17(32.07%)

Video-conferencing	_	_	13(24.53%)	40(75.47%)
Social networking	22(41.51%)	_	10(18.86%)	21(39.62%)
Online voice call	_	_	_	53(100%)
Instant messaging	_	_	_	53(100%)
Using Web SMS	_	_	_	53(100%)
Web voting/polling	_	_	_	53(100%)
Social bookmarking/tagging			38(71.69%)	15(28.30%)
Recreation				
Playing games	_	_	_	53(100%)
Downloading music/movie	13(24.52%)	_	21(39.62%)	19(35.45%)
Seeking sports news/inf.	_	_	_	53(100%)
Watching online live TV	_	_	_	53(100%)
Reading e-magazine	_	_	_	53(100%)
Listening online FM radio	_	_	_	53(100%)
Watching streaming video	_	_	32(60.38%)	21(39.62%)
Sharing image	_	_	23(43.39%)	30(56.60%)
Business & Financial Application				
Buying/selling products	_	_	_	53(100%)
Online money earning	_	_	_	53(100%)
Online business	_	_	_	53(100%)
e-commerce	_	_	_	53(100%)
Enterprise social software	_	_	_	53(100%)
Searching News & Information				
Seeking current, timely and pertinent inf.	_	_	_	53(100%)
Getting information from wiki	9(16.98%)	_	25(47.17%)	19(35.85%)
Using RSS feed	_	_	_	53(100%)
Getting online news	_	_	_	53(100%)
Using online map	_	_	_	53(100%)
Statistical information	_	_	_	53(100%)
Others				
Spreading information to the mass people	_	_	_	53(100%)
Building a platform for collaborative work	_	_	_	53(100%)
Communities of interest	_	_	_	53(100%)
Online health care	_	_	_	53(100%)
Online agriculture help	_		_	53(100%)
Download open source and free software	_	_	_	53(100%)
Dating Application	_	_	_	53(100%)
For collaborating, file sharing	_	_	_	53(100%)
Adult content	_	_	_	53(100%)

(N.B. Rationality scale: 1=Always visited, 2=Frequently visited, 3=Sometimes visited, 4= Never visited)

Table 9: Positive and Negative Sides of Web 2.0 based websites

Positive and Negative Sides of Web 2.0 Application	Rating Scale			
	1	2	3	4
Pros				
Spread information faster than previous	17(32.07%)	36(67.92%)	_	_
Help students to make the study and research easier	_	53(100%)	_	_
Allow people to improve their relationships and make new friends	_	53(100%)	_	_
Help employers find employees and job-seekers find jobs	_	53(100%)	_	_
Increase quality of life by growing level of confidence and self – esteem	_	3(4%)	50(94.33%)	_
Facilitate face to face interaction	_	53(1000%)	_	_
Allow people to create, connect, converse, vote and share information	_	53(100%)	_	_
Facilitate political change by stimulating democratic thinking	15(28.30%)	38(71.69%)	_	_
Good for the economy	_	53(100%)		_
Empower individual to make social change	_	53(100%)		_
Connected socially isolated and shy people	_	46(86.79%)	7(13.21%)	_
Allow for quick and easy dissemination of information	27(50.94%)	26(49.06%)	_	_
Provide a wider academic research to a greater audience	_	47(88.68%)	6(11.32%)	_
Offer teachers and students for collaboration outside the classroom	_	53(100%)	_	_
Brings people together to communicate, learn and share	_	53(100%)	_	_
Forms a platform to moot and regulate ideas	_	53(100%)	_	_
Provides a flow of information dissemination online	_	53(100%)	_	_
Assist in creating online resources	_	53(100%)	_	_

Cons				
Enables the spread of false and reliable information simultaneously	53(100%)	_	_	_
Lack of privacy and expose users to Govt. and corporate industries	_	53(100%)	_	_
Entice people to waste time and labor	_	53(100%)	_	_
Can harm job stability and employment	_	26(49.06%)	27(50.94%)	_
Correlated with personality and brain disorder	_	53(100%)	_	_
Promote criminal activities	_	53(100%)	_	_
Create a new horizon of fraud and embezzlement	2(3.77%)	51(96.23%)	_	_
Vulnerable position to security attack e.g. hacking, identity theft and virus	_	53(100%)	_	_
Tend the student to have lower grade	9(12%)	44(83.02%)	_	_
Facilitate inappropriate relationship among the members of its users	17(32.07%)	36(67.92%)	-	_
Over sharing of information creates more knowledge explosion	_	53(100%)		_
Information access become more complicated	_	53(100%)	_	_

(N.B. Positive and Negative scale: 1=Strongly Agree, 2=Agree, 3=Somewhat Agree, 4= Strongly Disagree)

Table 10: Impact of web 2.0 based websites

Criteria	Rating Scale			
	1	2	3	4
Educational Activities	19 (35.84%)	27 (50.94%)	7 (13.21%)	_
Research Activities	31 (58.49%)	22 (41.51%)	_	_
Communication Activities	3 (5.66%)	44 (83.02%)	7 (13.21%)	_
Entertainment Activities	9 (16.98%)	36 (67.92%)	8 (15.09%)	_
Social Activities	16 (30.19%)	37 (69.81%)	_	_

(N.B. Impact scale: 1=Extremely, 2=Very, 3=Somewhat , 4= Not at all)

Conclusion

Web 2.0 has brought a change to how we communicate and disseminate information with the use of Twitter, Facebook, YouTube, instant messaging and blogging. The use of this technology in the learning process is still focused on personal communications, like as informal communication is done in general.

Implementation of Web 2.0 in organizations that have the support and approval of the management of higher education needs to be studied more back to get an adequate comparison. Web 2.0 techniques are very people centric activities and thus adaptation is very fast. People are coming much closer to another and all social and geographical boundaries are being reduced at lightning speed which is one of the biggest sustenance factors for any social network. Using Web 2.0 also increases the social collaboration to a very high degree and this in turn helps in achieving the goals for a social network[12,13,14].

In the light of above discussion it seems that in this age of information and technology Web 2.0 is playing an important role for providing/gathering information which help the users to complete their daily activities in the field of education, technology etc. Now a days it provides information faster than previous and helps students to make the study and research work easier.

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