Best Practices of Social Media in Academic Libraries: A Case Study of Selected Engineering College Libraries of Odisha

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ABSTRACT

The way the social media tools are strengthened with the impact of proliferating portable computing, wireless technologies, and other web application, have re-designed how information is generated, communicated and consumed in an academic library. The paper examines the extent to which social media tools impact the most on libraries of engineering colleges of Odisha. An online survey has been conducted by sending online questionnaires librarians affiliated to Biju Patnaik University of Technology (BPUT), Odisha.

Keywords: Social Media, data analysis, acadamic libraries

1. INTRODUCTION

The academic library of any institutions is well known as the center point of knowledge and have always been updated with latest technology. However, these libraries are using current trends and technology to expand service more user friendly. Library 3.0, social media, etc., are the buzz words these days. Everyone now discussing about its application and utilising this service in their day to day activities. Librarians are always interacting with users and other professionals. The main aim of the librarian is to share information. With the impact of information and communication technology (ICT) the same activity of the libraries being done with social media. Librarians are now targets graduate students as they much tech savvy in social media.

Social media tools are very attractive, permits users to share information, communicate among the professionals, build relationship, share picture, video, etc. There are different types of social media tools available for different functionality of the library, i.e., information, communication, information archiving and dissemination and knowledge organisation in an academic library. Facebook, Linkdin, Mebo, Myspace, WhatsApp, Twitter, etc., are the most useful tools for information communication. SlideShare, Research Gate, Academi.edu, YouTube are the best medium to disseminate information to the end user. Similarly Mendeley, Zotero, aNobi, Communitywalk, GoogleScholar, etc., is the suitable tools for organing knowledge of the academic library. The present paper investigates the most used social media tools by academic library for the above three functionalities of the library of selected region.

The application of social media mushrooming day by day, allow users access to precise information through varieties of resources. Social media tools is a bunch of web application, which facilitate individuals or libraries a couple of services like, interact with individuals, exchange information, share feeling, content, thoughts, pictures, videos, etc, and much more with the collaboration of ICT. There are different kinds of social media available, i.e., Microbloging, fourms, social networking, social bookmarking, social curation and wikis, etc. In academic libraries, librarian can use these social media applications in three board ranges of activities like

- (a) Information communication
- (b) Information distribution and
- (c) Knowledge organisation

2. LITERATURE REVIEW

Bryer & Zavatarro¹ defined in their paper 'Social Media are technologies that give opportunity for social interaction, make possible collaboration and enable deliberation across stakeholders'. Boyd & Ellison² stated that social networking websites allow individuals with whom they share a connection, and view and traverse their list of connections and those made by others within the system. Bradely & McDonald³, defined social media encompasses any internet based or mobile application which operates for the purpose of collaboration, where participants can connect, create, comment, view share, rate, discover, profile and exchange user generated content. Kaplan & Haenlein4, defined social media as "a group of internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allows the creation and exchange of usergenerated content".

Smith & Linder⁵, stated wikis, blogs, chat rooms, instant messengers, message boards and social bookmarking are

technology applications that have been used to facilitate member interaction, and thus have been referred to as social networking tools. Wallace & Paul⁶, mentioned 'Students working on a highly collaborative project used social networking technology for community building activities as well as basic project-related communication. Requiring students to work on cross-program projects give them real-world experience working in diverse, geographically dispersed groups'. Vasquez & Bastidas⁷, conducted an exploratory inductive comparative study of the services and tools of a select set of ASNSs.' They argue that maintaining multiple profiles might be time-consuming and propose starting a discussion about how they can make this process less cumbersome.

Tulaboev⁸ explored the factors influencing the acceptability and effectiveness of using Web 2.0 social networking tools as an aid to learning. Topper9 found that libraries will have to reach users in their preferred methods of communication. Salz10 discussed about the impact of online collaboration and social networking that connect people based on their knowledge and talents to initiate innovation, and accelerate career prospects, on organisations. Gunawardena¹¹ proposed a theoretical framework as a foundation for building online communities of practice when a suite of social networking applications referred to as collective intelligence tools are utilised to develop a product or solutions to a problem. Drawing on recent developments in Web 2.0 tools, research on communities of practice and relevant theories of learning, and the authors' own action research experience in collaborative knowledge creation utilising Web 2.0 tools. De-Marcos¹² mentioned in his paper that social networking has already demonstrated its efficiency in e-learning, gamification which is the use of game-thinking and playful design in non-game contexts, has only shown its potential as a motivational tool.

3. OBJECTIVES

The practice of social media in an academic library is a huge challenge for librarians. It is a good medium for archiving, managing and distributing the information rapidly to the end-user. Social media provides a librarian with the ability to receive instant feedback, which further help to improve the quality of an academic library. Ensure the social media profile is used for the correct purpose. Librarian need to be confident that they are not wasting their time on a fad. There are many studies have been conducted on social networking or social media. But no study exists in current practice of social media in engineering college libraries. The need felt that to know the same study in depth on social media current practices with particular reference to selected engineering colleges affiliated to Biju Patnaik University of Technology (BPUT) Odisha.

The objectives of the survey are to acknowledge how librarians are currently adopting social media tools to promote the broad ranges of activities of library. Some specific objectives are to:

- Understand how the library promotes services (library events, new acquisition, SDI service, CAS, CS, etc.)
- Acknowledge how to promote information literacy and library engage users with the academic community
- Know how the library connects easily with the potential user
- Explore respondent's attitude towards the use of social media used in library service.

4. METHODOLOGY

Social media plays very important role in library in current environment. It bridges the gap between the users and librarian to provide and share valuable information using varieties of its tools. The current survey is confined to the librarians of selected engineering colleges, affiliated to BPUT, Odisha. Online questionnaires were sent to the librarians to know about their uses of social media tools, and to acknowledge the best social media used by the librarians to satisfy the user in terms of three basic activities of libraries, i.e., information communication, information archiving & dissemination, and knowledge organisation. The online survey was analysed with online survey tools (surveyanalytic.com).

5. DATA ANALYSIS AND INTERPRETATION

Questionnaires have been distributed to the 45 selected engineering colleges librarians online. Only 40 librarians responded the questionnaires, the response rate was 88.88 %. The questionnaires were divided to 3 board range of categories, i.e., information communication, information archiving and dissemination, and knowledge organisation. The responses are presented in the form of tables.

5.1 Information Communication

Information communication is a connection to the community and work, it's an education from far distances, but more importantly it is a reunion. Social media plays very important role to provide information about academic library, particularly in the engineering college library, though the users are more and they are very tech savvy. To aware the social media tool use of information communication in library, 4 questionnaires were designed and analysed.

5.1.1 Social Media Tools for Promotion of Library Services

Table 1 depicts that 32 (80 %) of respondents were using social media tools to promote library service and 20 % librarians were not using SMT in their library activities.

5.1.2 Types of SMT Used to Promote Library Events

Social media tools are an application of web-based or internet technologies and they are relying on the

Table 1. Promotion of library services through social media

S. No.	Response	Count	Percent (%)
1.	Promote	32	80.00
2.	Not promote through media	8	20.00
	Total	40	100
	Confidence interval @ 95 % : [1.074 - 1.326]	Standard deviation: 0.405	

internet and mobile technologies to operate. Varieties of social media tools are available, i.e., Facebook, blogs, microblogging, YouTube, Twitter, Wikis, Mash Up, Digg, Delicious Second Life, Flickr, etc. To know what media used to promote library events, a questionnaire was given to the librarian.

Table 2 revealed that the majority of social media used above 15 %, Facebook (18.57 %) followed by Blog (17.17 %), (15 %, E-mail and WhatsApp) respectively. Rest showed usage below 15 %.

Social media tools are most preferred and suitable way of attracting new acquisition in terms of library collections and enrollment of new users. Majority of social media used for new acquisition were E-mail attachment (20.91 %), WhatsApp (19.9 %) Facebook, (15.45 %), all were used above 15 %. Rests of all were used below 15%.

Table 2. Social media tools to promote library events

S. No.	Response	Count	Percent (%)
1.	Blog	24	17.14
2.	E-mail attachment	21	15.00
3.	Facebook	26	18.57
4.	LinkedIn	17	12.14
5.	Myspace	7	5.00
6.	Ning	4	2.86
7.	Twitter	11	7.86
8.	WhatsApp	21	15.00
9.	Second Life	8	5.71
10.	Other	1	0.71
	Total	140	100
Mean: 4.271	Confidence interval @ 95 % :[3.825 - 4.71]	Standard deviation: 2.695	a- Standard error: 0.228

5.1.3 SMT Used to Connect with the Potential User

Connecting with potential users is very difficulty in academic libraries, especially in engineering environments. It is only social media, which helps the librarian to connect its potential user very rapidly. A survey was made to know which social media tools are mostly used in libraries.

Table 3 indicates that WhatsApp (21.49), Facebook (19.01 %), Mebbo and twitter 17.36 % each were the most used social media tools (above 15 %) to connect

with the potential users. Rest of all were used below 15 %.

Table 3. Most used social media tools

S. No.	Response	Count	Percent (%)
1.	Blog	17	14.05
2.	Facebook	23	19.01
3.	Mebbo	21	17.36
4.	Myspace	5	4.13
5.	Ning	7	5.79
6.	Twitter	21	17.36
7.	WhatsApp	26	21.49
8.	Other	1	0.83
	Total	121	100
Mean: 4.107	Confidence interval @ 95 %: [3.707 - 4.508]	Standard Deviation: 2.246	Standard error: 0.204

5.1.4 SMT to Provide Customer Services

Customer service in terms of library is the process of ensuring user satisfaction with product or service. Generally, customer service happens while any transaction for the customer is performed in the library, i.e., book issue or book return. Earlier customer service were performed in the form of telephone, person interaction. With the advent of social media now it is becoming easier to performing such activities in library through social media tools.

Table 4 revealed that to provide customer services, i.e., (complaint, suggestions, inquiries, feedback, etc. WhatsApp, (31.3 %), Blog (22.99 %), Twitter (17.24 %) and Facebook (16.9 %) were most used social media tools by librarians to provide customer service. Though there were other tools, which are used less than 15 %, Myspace (8.05 %), LinkedIn (3.45 %) and other (1.15 %).

Table 4. SMT to provide customer services (complaint, suggestions, inquiries, feedback, etc.)

S. No.	Response	Count	Percent (%)
1.	Blog	20	22.99
2.	Facebook	14	16.09
3.	LinkedIn	3	3.45
4.	Myspace	7	8.05
5.	Twitter	15	17.24
6.	Whatsapp	27	31.03
7.	Other	1	1.15
	Total	87	100
Mean : 3.782	Confidence interval @ 95 % : [3.348 - 4.216]	Standard deviation: 2.065	- Standard error :0.221

5.1.5 SMT Used to Communicate Among Librarians

The communication between the librarian has an effect on the way the library is managed. Social media to enhance communication both inside and outside of

Table 5. SMT for communication with customers

S. No.	Response	Count	Percent (%)
1.	Blog	8	6.30
2.	Facebook	28	22.05
3.	LinkedIn	20	15.75
4.	Myspace	8	6.30
5.	Pinterest	20	15.75
6.	Twitter	12	9.45
7.	WhatsApp	29	22.83
8.	Other	2	1.57
	Total	127	100 %
Mean: 4.307	Confidence interval @ 95 %: [3.943 - 4.671]		Standard error: 0.186

the libraries and it can be utilised to arrive the different activities of libraries through internet technology without going to the library itself. It also helps to build connections and reputation library more comprehensively.

Table 5 depicts that WhatsApp, Facebook, LinkedIn and Pinterest—22.83 %, 22.05 %, 15.75 % respectively, were most used social media tools through which librarians were communicating among them. Rests were used below 15 % like (Blog & Myspace - 8.30 % each, Twitter - 9.45 %)

5.2 Information Collection and Dissemination

A collection of information and dissemination those information to the right user at a right time is a very difficult task for librarians. Social media plays very important role in collection management and information dissemination.

These tools are offering flexible ways to present resource, i.e., You Tube for video file, Wikipedia for information about a particular area, slide share for ppt presentation, etc. four questions were asked and analysed in a very comprehensible manner.

5.2.1 SMT Used to Collect Useful Library Information

Table 6 represents that You Tube emerges as most used tool with 16.13 % for collecting useful information followed by Wikipedia (14.52 %), academic.edu, 13.98 %, Teacher Tube, 11.29 % and Google Scholar opted 10.75 %. others were used below 10 %.

5.2.2 SMT Used to Disseminate About Library Collection

Table 7 depicts that Academic.edu was used mostly with 18.24 %, followed by Google Scholar, 16.89 to disseminate the library collection among the users. There were other tools used with less than 15 %, i.e, Mendely (14.86 %), Flicker (14.19 %), ResearchGate, (11.49 %), Pinteest, (4.73 %), Droopal, (3.38 %), Zotero (1.35 % and 0.68 %, Reference Manager, Zoomla and other tools, respectively.

Table 6. SMT used to collect useful library information

S. No.	Response	Count	Percent (%)
1.	Academia.edu	26	13.98
2.	Blog	8	4.30
3.	Digg	12	6.45
4.	Draft Doggy	18	9.68
5.	Google Scholar	20	10.75
6.	Pbwiki	4	2.15
7.	Pinterest	7	3.76
8.	Research Gate	11	5.91
9.	Teacher Tube	21	11.29
10.	You Tube	30	16.13
11.	Wikipedia	27	14.52
12.	Other	2	1.08
	Total	186	100
Mean: 6.565	Confidence interval @ 95 %: [6.048 - 7.081]	Standard deviation: 3.591	Standard error: 0.263

Table 7. SMT used to disseminate the library collection

S. No.	Response	Count		Percent (%)
1.	Academic.edu	27		18.24
2.	Droopal	5		3.38
3.	GoogleScholar	25		16.89
4.	Pinterest	7		4.73
5.	Research Gate	17		11.49
6.	Slideshare	19		12.84
7.	Mandeley	22		14.86
8.	Zotero	2		1.35
9.	Reference Manager	1		0.68
10.	Zoomla	1		0.68
11.	Flicker	21		14.19
12.	Other	1		0.68
	Total	148		100
Mean: 5.209	Confidence interval @ 95 %: [4.687 - 5.732]	Standard deviation:	3.246	Standard error: 0.267

5.2.3 SMT for Creation of Blog/Website

Table 8 clearly shows that most 29.63 % of used tools for creating Blog/Website were bloggers, followed by 27.78 % Wordpress.com and 20.37 % were Hpage. Remaining other tools were used below 20 %.

5.3 Knowledge Organisation

Knowledge organisation in libraries helps to organise the library resource systematically. It is an activity, which librarian performs like classification, indexing, document description, etc., inside the library. In the current environment almost all the library activities is replaced by computer-based technology. Hence social media help to provide varieties of services like cataloging, classification, engage the research communities, etc. In

Table 8. SMT for creation of blog/website

S. No.	Response	Count	Percent (%)
1.	Bloger	16	29.63
2.	Hpage	11	20.37
3.	Wordpress.com	15	27.78
4.	Zoomla	3	5.56
5.	Dropal	8	14.81
6.	Other	1	1.85
	Total	54	100
Mean: 2.611	Confidence interval @ 95 % : [2.225 - 2.997]	Standard deviation: 1.446	

this connection three questions were asked to know about the social media tools used to provide such services.

5.3.1 SMT Used for Book Reviews and Recommendations

Table 9 depicts that Anobii emerges as the most used social media tools for book review and recommendations, followed by Community Walk (26.56 %), Shelfari (23.44 %), Pinterest 17.19 % and other tool 1.56 %.

5.3.2 SMT Used to Engage the Research Community

Table 9. SMT used for book reviews and recommendations

S. No.	Response	Count	Percent (%)
1.	Anobii	20	31.25
2.	Pinterest	11	17.19
3.	Shelfari	15	23.44
4.	Community Walk	17	26.56
5.	Other	1	1.56
	Total	64	100
Mean: 2.500	Confidence interval @ 95 %: [2.198 - 2.802]	Standard deviation: 1.234	Standard error: 0.154

Table 10 revealed that the most used SM tools to keep engaged among the research community with above 15 % were Google Scholar (18.25 %), Academic.edu (17.52 %) and Mandeley (16.6 %). Remaining all were below 15 % and some of them were 0 % too.

5.3.3 SMT Used for Bibliography Management/ Reference Management

Bibliography or Reference management tool is a web based application helps the researcher or individual to manage research and generates bibliography information in different formats. In this regards to knowing which tools were most used a survey was conducted. Table 11 clearly represents that Mandeley (43.28 %) emerges as most popular used tools to generate bibliography information. Others tool was used very less about 20 %.

Overall Matrix Scorecard to know how the above social media tools were satisfied the librarian a survey was analysed with surveyanalytic.com, an online survey analysis tool. Table 12 depicts that Facebook, LinkedIn

Table 10. SMT used to engage the research community

S. No.	Response	Count	Percent (%)
1.	Academic.edu	24	17.52
2.	GoogleScholar	25	18.25
3.	Pinterest	10	7.30
4.	ResearchGate	20	14.60
5.	Slideshare	16	11.68
6.	Mandeley	22	16.06
7.	Zotero	2	1.46
8.	Reference Manager	0	0.00
9.	EndNote	1	0.73
10.	Bibme	8	5.84
11.	Qiqqa	9	6.57
12.	Other	0	0.00
	Total	137	100
Mean: 4.365	Confidence interval @ 95 %: [3.871 - 4.859]	Standard deviation: 2.950	Standard error: 0.252

Table 11. Tools used to generate bibliography information

	Response	Count	Percent (%)
1.	Mendeley	29	43.28
2.	Zotero	3	4.48
3.	Reference Manager	6	8.96
4.	EndNote	5	7.46
5.	Bibme	10	14.93
6.	Qiqqa	13	19.40
7.	Other	1	1.49
	Total	67	100 %
Mean: 3.104	Confidence interval @ 95 %: [2.597 - 3.612]	Standard deviation: 2.119	Standard error: 0.259

and YouTube were most popular social media tools secured 4.438, 4.125 and 4.094 scores, respectively.

6. FINDINGS

The response rate of the survey was very positive. All most all responded were using social media in their respective library, which is a good indication to improve the quality of library services.

Facebook, Blog, E-mail attachment and WhatsApp emerged as most used tools to promote library service and new acquisition. Similarly, WhatsApp, Facebook, and Mebbo appeared the most used SMT to connect with the potential users. Whereas, WhatsApp, Facebook, Blog and Twitter were used mostly to provide customer service. The majority of SMT used for communication among the librarian were WhatsApp, Facebook, LinkedIn and Pinterest. Three were other SMT also used by the respondent with lesser were MySpace, SecondLife, and Ning.

Information collection and dissemination are the most import activities of the library. In this connection, all

Table 14. Overall matrix scorecard

	Table 14. Overall matrix scorecard				
S. No.	Social media tools	Count	Score		
1.	Blog	32	3.375		
2.	E-mail attachment	32	3.250		
3.	Facebook	32	4.438		
4.	LinkedIn	32	4.125		
5.	Myspace	31	2.387		
6.	Ning	31	1.968		
7.	Twitter	31	2.387		
8.	Whatsapp	32	3.688		
9.	Mebbo	31	2.065		
10.	Pinterest	30	1.733		
11.	Academia.edu	32	2.781		
12.	Digg	30	1.467		
13.	Draft Doggy	31	1.484		
14.	Goggle Scholar	31	3.452		
15.	PBwiki	30	1.667		
16.	Research Gate	32	2.625		
17.	Teacher Tube	31	2.484		
18.	You Tube	32	4.094		
19.	Wikipedia	32	3.938		
20.	Zoomla	31	1.194		
21.	Dropal	31	1.226		
22.	Slideshare	30	2.200		
23.	Mandeley	31	1.387		
24.	Zotero	31	2.323		
25.	Reference Manager	32	2.281		
26.	aNobii	31	1.194		
27.	Shelfari	31	1.129		
28.	Library Thing	29	1.103		
29.	Qiqqa	30	1.267		
30.	Secondlife	29	1.414		
31.	Community Walk	32	1.438		
32.	Lib.raio.us	31	1.194		
		Average	2.274		

the respondents were using social media tools to satisfy the end users. Youtube and Wikipedia are the most used tools to collect, use full library information. Whereas, majority of respondent used Academic.edu and Google Scholar to disseminate library information. Similarly, Bloger & Wordpress.com appeared most used SMT to create blog/ website. There were other tools like, Slide share, ResearchGate, Hpage, Zoomla, Droopal. etc used very lesser to satisfy the user in terms of Information collection and dissemination.

Knowledge is a central hub of any organisation and well managed knowledge leads the organisation into great heights. In the library environment knowledge organisation manages the information, i.e., catalogue, classify, engage the research community, etc. In this

regards, all responded were used different social media tools, i.e., aNobi, GoogleScholar and Mandeley emerges as most used SMT for book reviews, engage the research community and bibliography management respectively.

7. CONCLUSIONS

Social media tools are utilised by libraries to convey a mix of user service, news and upgrades, content/endorsement of collection, dissemination of the organisations' intellectual, procurement of educational tools and assets and for building connections both inside and outside of the institution. Verities of online networking channels are utilised, however, so far there is constrained separation between how they are utilised. Facebook and Twitter stay predominant, however visual channels, for example, YouTube and Pinterest are quickly on the ascent. We foresee that sooner rather than later more tools particular techniques will develop.

While there is a drive for librarians to utilise social media tools inside the library setting, it has been recognised this is still a developing process with many library professionals trying different things with what works or not, and how it can advantage the library. More broad publicly accessible studies are expected to show how fruitful libraries are getting along this and how they are measuring their triumphs. Identifying with this, a usually concurred structure of the appraisal is additionally required, so libraries can start to benchmark the effect of their exercises against a scope of destinations.

Obviously, while the complexity of social media tools utilised and the frequency of upgrades are important issues in introducing a solid online presence, many professional are agreed that it is somewhat the quality and sort of content posted, the characterised objectives and plans, and an arrangement of the necessities and desires of the library users that leads to fruitful rendezvous.

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