

Use of Social Media Technologies (SMTs) by Faculty Members, Research Scholars and Post-Graduate Students of Management Studies

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Abstract

The Social Media Technologies (SMTs) offer facilities for information dissemination this paper aims to assess the awareness and use of SMTs by faculty members, research scholars and post-graduate students of management studies. A survey was carried out in ten management institutions located in the National Capital Region (NCR) of Delhi. The findings revealed that respondents in the field of management studies are quite aware of SMTs and prefer to use YouTube, Wikis and Blogs for their work related purposes. Podcast and Micro-blogging are less used tools.

Keywords: Blogs, Management Studies, Social Media Technologies (SMTs), Social Networking Sites, Web 2.0, RSS

1. Introduction

The World Wide Web has brought about a major shift in the way people access and share information. In recent years people have started making extensive use of social media for a variety of purposes such as social networking, entertainment, online accessing, academic study, professional work, business, research, outreach, marketing etc. The term social media is an umbrella term that covers all those technology tools which promote sharing of content, collaboration with others, the creation of online communities etc. Some of these tools include blogs, wikis, social networking sites, podcasts etc. In the present environment, social media tools appeared to be much faster, easier and economic channels of communication. Kaplan and Haenlein¹ defined social media as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of user-generated content”. Earlier Social Media Technologies (SMTs) were primarily used for leisure or entertainment only, but now various specialized SMTs are available which support many work-related activities such as following²:

- Innovative teaching methods,

- peer to peer learning,
- student's motivation,
- student's participation,
- information and knowledge sharing,
- cooperative and collaborative work,
- creation of personal learning environment,
- lecturers and students rapport,
- assignment/project collaboration/discussions,
- sharing of documents,
- sourcing for information,
- communication, and
- conducting academic surveys etc.

2. Types of Social Media Technologies

There are various social media technologies such as blogs, Social Networking Sites (SNSs), wikis, Really Simple Syndication (RSS), podcasts, etc. widely used by the academic community. These SMTs are easy to use and require only basic technological skills on the part of the user. Table 1 describes various SMTs and its application in the academic environment.

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Table 1. Types of social media technologies

SMTs	Function	Application in Academic Environment
Social Networking Sites (SNSs) (Facebook, Ning, Google+, LinkdIn)	SNSs allow people who share a mutual interest to get connected online with each other, communicate and share things such as text, audio, video or any other media.	Used to form online academic groups. Allows easy sharing of research publications, connections and collaboration between colleagues, co-authors, peers, and specialists of concerned field, etc. Examples of academic networks include academia.edu, researchgate.net, H-Net, myExperiment.
Media sharing tools (e.g. Flickr, YouTube)	Media sharing tools enable one to share multimedia objects with the world at large or just with a select group of colleagues or friends. Provide the facilities to upload and download photos, audios, videos, documents, blogs etc. and that be accessed from anywhere in the world.	Enables sharing of educational resources such as notes, tutorials, lectures, presentations, publications etc. Generates and promotes online discussion. Enhances easy understanding of complex concepts. Examples of educational media sharing tools include TeacherTube, Academic Earth, VideoLectures.net., Slideshare, Sketchfu etc.
Blogs/ Weblogs (e.g. Blogger)	These are personal diaries where authors can communicate or publish their own ideas, thoughts and events in the form of text or graphics to the Web without the need for advanced technical knowledge.	Educational applications of blogs may include researching, tracking, interpreting, and evaluating blogs for commentary, cultural events, business, or other news ³ . For asking queries and giving suggestions about a particular area of interest. Enables participation in discussion forums and commentary on interest based debates or issues. Examples of blog publishing services include Wordpress, Blogger, Live-Journal, Elgg, ScienceBlogs, PLOS etc.
Micro-blogging (e.g. Twitter)	Micro-blogging sites only allow very short entries using a textual format between two or more persons and these can be sent either from a web page or from mobile devices.	Enables easy working on collaborative assignments. Links to important online educational resources. Used as a channel for seeking online assistance from experts. Useful for engaging discussions among common interested people. Examples of micro-blogging services include Sina Weibo, Tumbler, Plurk, Qaiku, Posthaven, etc.
Really Simple Syndication (RSS)	It is a format used for syndicating content from web pages, weblogs and from many other news related sites. RSS is an XML file that provides users with updates to latest web content from sites they are interested in.	RSS feeds or alerts can help researchers, faculty members and other professionals in keeping track of new literature published related to their field such as new articles published on a specific research topic, new patents related to their areas of interest, latest news on specific topics from Google, CNBC, BBC, New York Times etc. Some of the real-time feed aggregators includes TwwetDeck, Flock, Netvibes, Radian etc.
Wikis (e.g. Wikipedia)	A wiki is a Web based collaborative- authoring (or content management) for people to create and editing content through a Web browser.	Wikis support collaboration among geographically dispersed team members. It is used to find group solutions to a problem Promotes group editing and peer review. Some of the examples of wikis include Wikipedia, Wikias, Wikispaces, PBworks, Wikiversity etc.
Podcast	A podcast is a pre-recorded piece of audio and sometimes video which is made available online through syndication feeds. They can be downloaded and saved for future listening and are often updated ⁴ .	To share the lectures of teachers or experts. Enables easy access and sharing of information to all its members. There are several podcasts archives available on the Internet including business or management related podcasts to keep entrepreneurs and management professionals informed as well as inspired. Some of the famous business podcast include HBR's Ideacast, APM: Marketplace, EntreLeadership, TEDTalks Business etc.
Social bookmarking	The social bookmarking sites allow saving bookmarks online, sharing them with the world at large or mark them as private, and to categorize them (place them in folders). Bookmarks are usually tagged with a few keywords for easy grouping and retrieval of similar items.	Educators could use social bookmarking to facilitate collaborative information discovery. They could create a social bookmarking page to save important pages about a topic. Students could also collaborate on group projects using bookmarking sites, sharing links, and uploading resources discovered, while educators could follow their students bookmark pages to gain insight on their research process and progress ⁵ . Examples include Spurl.net, del.icio.us, Digg, Reddit, StumbleUpon etc.

3. Review of Literature

The social media technologies particularly wikis, blogs, social networking sites have been increasingly adopted by academicians. Several studies seek to assess the impact of SMTs on academicians in different subject fields all over the world. Boulos, Maramba and Wheeler⁶ examined the educational use of Web 2.0 tools in medical/health education and patient education. The study indicated that tools such as wikis, blogs and podcasts have the potential to boost students', clinicians' and patients' learning experiences and effective use of these tools could also strengthen collaboration within digital learning environments. Ajjan and Hartshorne⁵ examined university faculty perception and adoption of Web 2.0 applications. They also analyzed factors that could influence faculty adoption of Web 2.0 applications for instructional purposes. Nicholas and Rowlands⁷ investigated the impact of social media on all stages of research process by surveying more than 2000 researchers. Findings indicated high awareness of social media among members of the research community but actual use of tools was found to be quite low. Gaffar et al.⁸ examined the adoption of Web 2.0 in the education process by the lecturers of a Caribbean university and the findings of the study stressed on the need to address factors such as Internet connection speed, familiarity with moderators and frequency of feedback for effective adoption of Web 2.0 in education in a developing country setting. Tenopir and Volentine⁹ examined the use of social media by university academic staff members for their work and its effect on their use of traditional scholarly information sources. The findings highlighted some differences in terms of demographic factors such as discipline and age. In a case study at the University of Delhi, Madhusudhan¹⁰ surveyed 160 research scholars to determine the use of Social Networking Sites (SNSs) in their daily communication for research work. The study revealed that very few research scholars use SNSs for promoting one's research and SNSs such as Facebook and Research Gate were preferred by research scholars for academic purposes. Nández and Borrego¹¹ examined the profiles of the users of an academic social network and conducted a survey of those individuals whose email address was found in their profile. The study found that academics used the service to get in touch with other scholars, disseminate research results and follow other scholars. Nigam and Singh¹² attempted to evaluate the use pattern of social networking sites (SNS) of academicians in scholarly communication in the Central Himalayan region of Uttarakhand state universities of India. The result of the study revealed that 93% faculty members were

using SNS. The SNS were used by the faculty members to access latest knowledge.

4. Purpose

The present study sought to examine the awareness and frequency of use of various types of SMTs by faculty members, research scholars and post-graduate students of management institutions as part of their work related purposes. In this study, there was a focus on the following nine types of SMTs: blogs, forums, podcasts, RSS Feeds, social bookmarking, social networking sites, YouTube, micro-blogging and wikis.

5. Scope and Methodology

This research is confined to faculty members, research scholars and post-graduate students of ten prominent management institutions located in the National Capital Region (NCR) of Delhi. The survey was conducted by means of a structured questionnaire. A stratified accidental random sample method was used for the selection of respondents. A total of 911 questionnaires were distributed and 406 completed questionnaires were returned giving an overall response rate of 44.57%.

6. Analysis and Findings of the Study

6.1 Distribution of Respondents

Respondents' demographic characteristics such as academic status and gender may impact the use of SMTs. Therefore, data relating to academic status and gender have been sought from the respondents. Figure 1 it can be seen that of 406 respondents 73 were faculty members, 45 were research scholars and 288 were post-graduate students who were pursuing MBA/PGDM related courses.

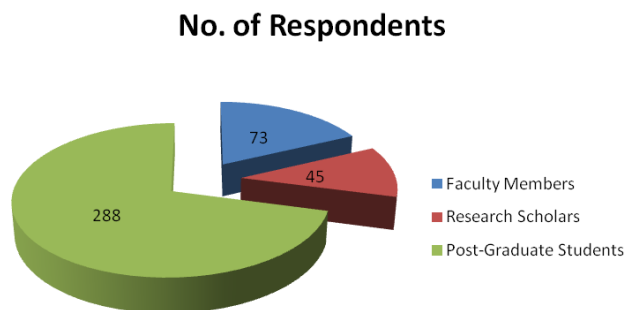


Figure 1. Academic status wise distribution of respondents.

Table 2 shows the gender wise distribution of the respondents and reveals that 265 (i.e. 65.30%) were male respondents and 141 (i.e.34.70%) were female respondents.

Table 2. Gender-wise distribution of respondents

Gender	Faculty Members		Research Scholars		PG Students		Total	
	f	%	f	%	f	%	f	%
	Male	39	53.42	12	26.67	214	74.31	265
Female	34	46.58	33	73.33	74	25.69	141	34.70
Total	73	100	45	100	288	100	406	100.00

6.2 Awareness of Social Media Technologies (SMTs)

The respondents were asked to indicate their awareness of different types of social media technologies. Table 3 below clearly indicates the high level of awareness among all the three user groups regarding various types of SMTs. None of the research scholars reported non-awareness of SMTs. The PG students and faculty members (100% of them) were found to be aware about blogs, SNSs, YouTube and Wikis.

6.3 Use of SMTs for Work Related Purposes by Respondents

In the questionnaire participants were asked to state how frequently they use various types of SMTs particularly for their academic work rather than for entertainment or leisure purposes. The results thus got were tabulated for analysis in the Table 4 below.

It can be seen from Table 4 that the top two SMTs used

by respondents for their work related purposes are Wikis and YouTube respectively. The weighted mean of both of these two social media indicate that they fall within the range of often used to sometimes used. It was found that 27.08% of the PG students often prefer to retrieve information by searching Wikis such as Wikipedia for their projects and assignments followed by 26.39% of the PG students who mentioned they always use them. With regard to YouTube it can be seen that 24.66% of the faculty members often use them, 22.22% of the research scholars always use them and majority of PG students with 33.68% indicated they often use YouTube. The usage of other social media tools such as blogs, forums and social networking sites is relatively low. The weighted means of these three media tools fall within the range of sometime used to rarely use. Further it can be seen that micro-blogging (0.475) and podcasts (0.633) were least used SMTs by respondents for their work.

6.4 Reliability Analysis of Use of Various Types of Social Media Technologies

To test the reliability or internal consistency of the results obtained from the usage analysis of SMTs by the respondents; a Cronbach's Alpha test was applied. The values of Cronbach's alpha are given in the last column of Table 5, which indicates what the Cronbach's alpha would be if that item was deleted from the list of items. The results obtained were tabulated in the underlying Table 5.

The Cronbach's Alpha value= 0.894 proves that the data is internally consistent and reliable. Further, it can be seen that removal of any item from the above list of social media tools would result in a lower Cronbach's alpha.

Table 3. Awareness of respondents regarding various types of SMTs

Type of SMTs	Faculty Members (n=73)		Research Scholars (n=45)		PG Students (n=288)		Total (n=406)	
	f	%	f	%	f	%	f	%
Blogs	73	100.00	45	100.00	288	100.00	406	100.00
Online Forums	70	95.89	45	100.00	245	85.07	360	88.67
Podcasts	65	89.04	45	100.00	233	80.90	343	84.48
RSS Feeds	70	95.89	45	100.00	218	75.69	333	82.02
Social Book-marking	62	84.93	45	100.00	220	76.39	327	80.54
Social Network-ing Sites	73	100.00	45	100.00	288	100.00	406	100.00
Micro-blogging	70	95.89	45	100.00	288	100.00	403	99.26
YouTube	73	100.00	45	100.00	288	100.00	406	100.00
Wikis	73	100.00	45	100.00	288	100.00	406	100.00

Table 4. Use of various types of SMTs by respondents

SMTs		Faculty Members (n=73)			Research Scholars (n=45)			PG Students (n=288)			Total (n=406)		
		%	WM	f	%	WM	f	%	WM	f	%	WM	f
Blogs	AL	6	8.22	1.219	2	4.44	1.200	30	10.42	1.715	38	9.4	1.569
	OF	6	8.22		6	13.33		53	18.4		65	16	
	ST	19	26.03		9	20		86	29.86		114	28.1	
	RR	9	12.33		10	22.22		43	14.93		62	15.3	
	NV	33	45.21		18	40		76	26.39		127	31.3	
Forums	AL	3	4.11	1.178	4	8.89	1.133	26	9.03	1.573	33	8.1	1.453
	OF	7	9.59		5	11.11		60	20.83		72	17.7	
	ST	20	27.4		7	15.56		69	23.96		96	23.6	
	RR	13	17.81		6	13.33		31	10.76		50	12.3	
	NV	30	41.1		23	51.11		102	35.42		155	38.2	
Podcasts	AL	2	2.74	0.671	0	0	0.311	2	0.69	0.674	4	1	0.633
	OF	6	8.22		2	4.44		22	7.64		30	7.4	
	ST	9	12.33		1	2.22		33	11.46		43	10.6	
	RR	5	6.85		6	13.33		54	18.75		65	16	
	NV	51	69.86		36	80		177	61.46		264	65	
RSS Feeds	AL	3	4.11	0.959	0	0	0.622	8	2.78	0.792	11	2.7	0.803
	OF	10	13.7		3	6.67		20	6.94		33	8.1	
	ST	9	12.33		7	15.56		41	14.24		57	14	
	RR	10	13.7		5	11.11		54	18.75		69	17	
	NV	41	56.16		30	66.67		165	57.29		236	58.1	
Social Book-marking	AL	1	1.37	0.699	2	4.44	0.844	17	5.9	1.09	20	4.9	0.993
	OF	12	16.44		5	11.11		27	9.38		44	10.8	
	ST	2	2.74		6	13.33		54	18.75		62	15.3	
	RR	7	9.59		3	6.67		57	19.79		67	16.5	
	NV	51	69.86		29	64.44		133	46.18		213	52.5	
Social Net-working Sites	AL	3	4.11	0.603	3	6.67	0.600	31	10.76	1.205	37	9.1	1.030
	OF	5	6.85		2	4.44		28	9.72		35	8.6	
	ST	3	4.11		2	4.44		45	15.63		50	12.3	
	RR	11	15.07		5	11.11		49	17.01		65	16	
	NV	51	69.86		33	73.33		135	46.88		219	53.9	
Micro- Blogg-ing	AL	2	2.74	0.425	0	0	0.267	6	2.08	0.521	8	2	0.475
	OF	5	6.85		3	6.67		9	3.13		17	4.2	
	ST	0	0		0	0		24	8.33		24	5.9	
	RR	8	10.96		3	6.67		51	17.71		62	15.3	
	NV	58	79.45		39	86.67		198	68.75		295	72.7	
You-Tube	AL	4	5.48	1.425	10	22.22	1.733	62	21.53	2.403	76	18.7	2.153
	OF	18	24.66		8	17.78		97	33.68		123	30.3	
	ST	10	13.7		5	11.11		57	19.79		72	17.7	
	RR	14	19.18		4	8.89		39	13.54		57	14	
	NV	27	36.99		18	40		33	11.46		78	19.2	
Wikis	AL	4	5.48	1.260	11	24.44	2.044	76	26.39	2.493	91	22.4	2.222
	OF	14	19.18		9	20		78	27.08		101	24.9	
	ST	10	13.7		7	15.56		73	25.35		90	22.2	
	RR	14	19.18		7	15.56		34	11.81		55	13.5	
	NV	31	42.47		11	24.44		27	9.38		69	17	

Note: AL=Always, OF=Often, ST=Sometimes, RR=Rarely, NV=Never, WM= Weighted Mean

Table 5. Reliability analysis of use of various types of SMTs by respondents

SMTs	Mean	Std. Deviation	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Blogs	2.57	1.326	17.76	52.898	0.692	0.649	0.879
Forums	2.45	1.363	17.88	51.259	0.762	0.719	0.873
Podcasts	1.63	1.004	18.70	57.994	0.588	0.589	0.887
RSS Feeds	1.80	1.120	18.53	55.860	0.649	0.621	0.882
Social Bookmarking	1.99	1.248	18.34	53.439	0.712	0.573	0.877
Social Networking Sites	2.03	1.353	18.30	51.702	0.743	0.636	0.874
Micro Blogging	1.48	.926	18.85	58.431	0.615	0.521	0.886
YouTube	3.15	1.394	17.18	53.134	0.636	0.592	0.884
Wikis	3.22	1.384	17.11	55.193	0.529	0.551	0.893
Cronbach's Alpha				0.894			

6.5 Respondents' Opinion Regarding Need for Training

Respondents were asked to give their opinion regarding conduct of orientation/training/ information literacy programmes by their respective institutional libraries for making them aware of various types of SMTs particularly for academic and scholarly work. The following pie chart depicts respondents' opinion (Figure 2).

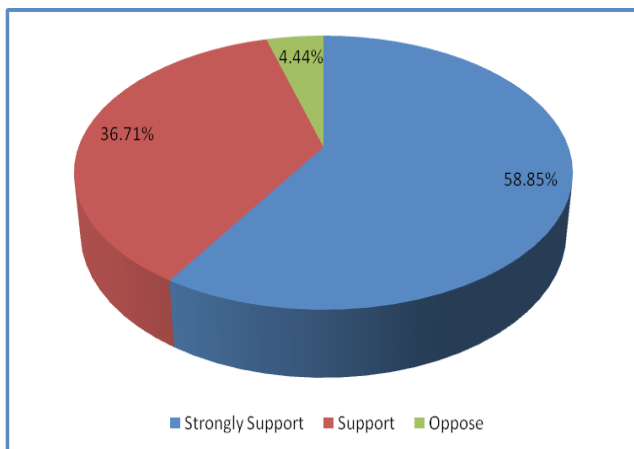


Figure 2. Respondents' opinion regarding need for training.

The above pie chart reveals that majority of the respondents (58.85%) 'strongly support' and 36.71% 'support' organization of orientation/training/information literacy programmes by their libraries.

7. Findings of the Study

The major findings of the study are:

- All the respondents were found to be aware of

different SMTs but the use of SMTs for work related purposes was quite low,

- YouTube, wikis and blogs were the most popular SMTs used by all the three categories of respondents to support their work,
- Variation among users' categories was found regarding the extent of use of various SMTs. The students used SMTs more frequently compared to research scholars and faculty members, and
- Overall all the respondents support the idea that libraries should organize orientation/training/information literacy programmes to make them aware of the various types of SMTs.

8. Conclusion

The Internet and social media have become part and parcel of our daily lives. These technologies have also impacted the field of education. The research suggests that libraries should take initiative to make users aware of various types of SMTs which may be used for academic and scholarly work. The social media tools and technologies have the potential to create new type of education environment. These technologies offer ways to promote academic growth and innovative learning experiences.

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