Research Paper

Management

KNOWLEDGE SHARING USING SOCIAL MEDIA TOOLS AMONG POST GRADUATES STUDENTS IN BANGLORE

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ABSTRACT Big data and the social media are the emerging technologies, which posses long lasting impact on society we live. The social media play pivotal role in communicating and connecting with our family, friend, peers and colleagues. People shares different information in many forms such as text, audio as well as video on the social networking site to shares their feeling. The average global internet user spends two and a half hours daily on social media. This way social media users produce enormous amount of data which can't be handled with traditional data management techniques. This social media is much important in various fields like Social Sciences, Politics, Commerce, Education, Management and other Behavioral and allied Sciences because analysis of real time social media data provides an insight of public opinion and thinking pattern. The real time data obtained through social media are complex one and posses 3Vs' of Big Data. Hence, in order to put this huge data to work big data analysis materializes as powerful tool. This paper will discuss inter and intra impact of big data and social media in the context of society in emerging and contemporary field of education, economy, advanced technology, environment and safety.

KEYWORDS : big data and social media, big data and social media impact, big data for society, social media for society.

INTRODUCTION

A paradigm shift in the art of study and learning in contemporary society, where students' use of the technology plays a pivotal role in completing their academic tasks. It is understood that several students of this millennia belong to what is tagged "digital age generation". Students often use social media to interact and share the knowledge with stakeholders and also access online materials. The use of social media in government entities, students and other stakeholders have grown rapidly in recent time, and this trend which is likely to continue. People from all walks of life use social networking tools to share the knowledge and maintain connections with colleagues, peers, family, classmate and co-workers. Information Technology has turned out to be one of the most versatile tools for human existence as held by Kim, (2009).

Knowledge sharing is one of the most important benefits of the use of social media, it is correct to say that, the use of social media is positively related to knowledge sharing and vice versa. The founder and chief executive of the MIT initiative technology and self, stated that the suitability of the social media sites provides users to interconnect and share the knowledge with one another can harm their interpersonal relationship as held by Turkle, (2011). This research aims at investigating the kind of knowledge sharing tools and practice obtain able among students. It also aims at identifying the gaps in the knowledge and communication is gradually becoming more predominant both in the academic (Keller & Cerner haring practices and suggesting ways to overcome the obstacles faced by a large percentage of the population of the world today, to upsurge their networks and also to gather information. The trend is gradually finding its way into the commercial world.

LITERATURE REVIEW

According to Foss, et al. (2010) in the period of a knowledge- based economy, knowledge has turned out to the utmost significant asset for an organisation, in which knowledge sharing plays a pivotal part in the entire process of knowledge management Kim, (2009). Michailova and Foss, 2009) held that the main implementers of knowledge sharing are workforces within a firm. Therefore, an understanding of the employees' mind-set for knowledge sharing is very significant. On the individual bases, it has been found in earlier studies that psychosomatic factors such as norms, attitude and trust as held by (Bock, et al, 2005; Gagne, 2009), have an important impact on knowledge sharing intent and comportment.

(Chang and Lin, 2011) carried out a study focused mainly on the results of Facebook usage in the course of foreign student's education in the USA they held that, the usage added to students' capability to partake socially in their new environments. The students who interrelated with the US students on Facebook remained better and socially adjusted. (Lin et al., 2011) held that, out of the foreign students surveyed, 46 percent of the students showed a social networking site other than Facebook, which was their main account. (Valenzuela et al., 2009) opined that students are using these media sites for communal involvement and knowledge sharing. The theory is buttressed by Junco, (2012) in his study, where it was found that, students use Facebook for causes other than for information collection and sharing activities.

Definition of Knowledge Sharing and Social Media

Several researchers have given their own meaning of knowledge sharing, (Hiekkarranta, 2009) Knowledge sharing is the communication which is mutually beneficial. Nevertheless the benefits abound, outweigh the problem of not sharing it. Likewise (Gafoor and Cloete, 2010) affirmed that, without knowledge sharing, individuals in an establishment tends to stay static in grain store, poorly joined together, susceptible to reproduction of work and repeated mistakes, waste of resources. (Ma & Yuen, 2011) argued that, boosting information sharing has turned out to be one of the most important

research issues online.

Knowledge sharing is thus an important issue in modern organizations (Teng & Song, 2011). Knowledge sharing as held by (Chou, 2010; Hsu, et al 2007; Zhou, 2008) is a sense of insecurity towards exchanging knowledge online, would upshot inadequate participating engagement distributing one's intellectual property authorship and trace the history of shared content design, which might hinder the contributors readiness to share information with unfamiliar users online.

(Hsu et al., 2011) states that shared content may decrease students and workers dependence on the engaged atmosphere and social connection between friends, and in turn, may hinder the growth of virtual communities. Validating the originality of shared contentment may relieve tension arising from ambiguous input and ownership of academic material in information sharing activities (Liu et al., 2013). Yates and Paquette, (2010) held that decision makers found photographic arrangement of data, the most effective format, since a visual medium can be created by layering diverse knowledge sources successively on a common context or orientation. (Kaplan and Haenlein, 2010) suggested that the World Wide Web's growth gradually into a social media state. Hew and Cheung, (2013) held that the main function of social media in learning is to asynchronous and synchronous.

According to (Yates et al., 2010) many types of social networking sites exist. Social media sites have been publicly adopted, but organisation are recently realising the potential of these social networking sites. (Hutter et al., 2013) in their research held that, social media is a channel that accelerates communal building among customers. Boyd and Ellison, (2007) define social media sites as web-centred amenity that permits individuals to design a public profile inside a bounded system. O'Reilly, (2005) termed social media as the next generation network facility and commercial models.

The Importance of Social Media and Knowledge Sharing to Organisation

The research is carried out by Jackson et al., (2006) held that employees used the social networking to gain access to an established community of information in an organisation, Yang and Wu, (2008). It plays a vital role in refining individual and organizational output and competitive advantage. Haldin-Herrgard, (2000) held that, knowledge sharing is a vital asset use in refining quality of work, making resolution, and business culture, efficiency, effectiveness, accuracy of task, which saves time for businesses and individuals. SNS are specific platforms that helps organisation in sustaining, creating and growing a professional social network (Levy, 2009). The main features of modern SNS are to support tacit knowledge flows which include enabling voluntary communities (Chatti et al; Parker, 2011). Hsu, 2008: Lim and Chan, 2004; Senge, 2003 Held that, the ability of an organisation to study and exploit the outcome of knowledge more efficiently than its competitors, is regarded as a core proficiency that can assure competitive benefit in today's ambiguous business setting.

The importance of social media and knowledge sharing to students

Numbers of research have been conducted to show the increasing use of social media in higher education (Arnold and Paulus, 2010; Bennett et al., 2012; Cole, 2009; Hurt et al., 2012; Lederer, 2012; Liu, 2010). YouTube, Wikis and Facebook remain the biggest used social media for education. Students used these tools for social commitment, communication and for feedbacks, social media gives chances for better learning by inspiring students in building connection with alternative source beyond the lecture hall (Fewlkes and Mccabe, 2012 Yuetal., 2010).

Social media encourages students to working group and enhance their learning using online platform, developing students' skills and blog creation (Bennett, 2012). According to Yuen and Majid, (2007) in their study held that, university students in Singapore displayed progressive approach towards

knowledgesharingandconsidereditessentialforknowledgedevelopments.

Wuetal.,(2009)intheirstudiesarguedthattrustinknowledgesharingcouldstemfromco-workersor from supervisor. According to (Chow and Chan, 2008) in which they argued that colleagues' approach towards the knowledge sharing and their individual norms toward knowledge impact of their objectives to share knowledge. He opined that students who use Facebook more for data collectionandinformationsharinginfluencethanstudentswhouseditmoreforsocializing (Junco, 2012). McAfee, (2009) term platforms as a collection of digital content that participant are generally noticeable and persistent improvement of social media tools. Konetes and McKeague, (2011) in revealed that, the use of social media sites especially Facebook and other networks to improve students' beliefs, religious, politics as well as to develop intimate relationships. Notley, (2011)cameupwithafindingthat,socialmediahelpuniversitiestoinfluenceandenhancelearning outcomes. Rainie, et al., (2011) opined that, youth between the ages of 18-29 are the highest user of social networking sites. Al-Rahmi et al., (2013) knowledge sharing among students, teachers and instructorsalikeinnewcircumstance.

Accordingto(JonesandShao,2011)intheirfindingspreferthemoderateuseofcommunicationand informationtechnologyintheircourses.Shamsudin,(2009)attestedinhisstudiestoagrowingusage ofsocialmediasitesamongstudentsandteenagersinMalaysia.DeBellandChapman,(2006)intheir studyattestedthat,adolescentsandyoungadultsaretheheaviestusersofcomputerandinternetand usemoreofsocialmediathantheolderones.Lenhartetal.,(2010)socialmediaandmobileinternet usebyteensandyoungadults.

MutualTrust
Severalresearchershaveshownintheirstudiesthattacitknowledgesharingcantakeplaceoncethere is a mutual trust among individuals this is opined by Panahi et al., (2012). The procedure of gaining trust might not be well-thought-out, as one of the main contributions of social media to tacit knowledgesharing,sinceitislikewisestatedbycontributorsasoneoftheimportantproblemsofusing socialmedia.Though,participantsstatedinPanahietal.,(2012)findingsthattheytrustphysicianson social media, the same way they would, in physical communication" that they trust only doctors to whomtheyhavebeenpreviouslyacquainted,thatarealsoknownintheirneighbourhood.

Theyinsistedthat,theycarryoutcircumstantialchecks,ontheinternetandonthephysicians,when there is need, examine and relate while interacting with them what they have shared previously. If studentshavemutualtrustamongthemselves,wheretheycanexchangeknowledgeandideas.Itwill go a long way in their academic pursuit, view online library and online e-books which aid them positivelyintheirstudies.

ExperienceKnowledgeSharingPossibilities
Accordingto Faust,(2007)appliedknowledgeisrecognisedasoneofthekeybasicsoftacitknowledge achievementprocedures.Thereforeallocationofindividualknow-howbynumerousmeanssuchas tellingstories,discussion,observationandparticipationisalsoconsideredasoneofthecentralmeans of sharing tacit knowledge. (Nonaka, 1994) in her study held that, spreading tacit knowledge is not likelywithoutknowledgesharing.

Yi,(2006)opinedthattheusercreatedthecontentisacceptedasthekeyfeatureofsocialmediatools. Nilmanat,(2009)heldthattoallowindividualssharetheirknowledgeeffectivelyinsocialmediatools; itmustsupportstory-telling,discussionandexperiencesharing.MalitaandMartin,(2010)intheir findings concluded that social networking sites are digital tools for telling stories. Strahovnik and Mecava,(2009)identifyweb2.0toolslike,videosites,wikis,blogsocialnetworkingsitesascurrentand proficienttoolsforexchangingexperiencesandideas.

SocialInteraction
Socialinteractionisaformofverbaldiscussion,conversation;physicalcommunicationanddialogue havebeenheldasthekeybenefitoftheknowledgesharinginnearlyallthestudiedliterature.Murray andPeyrefitte,(2007)heldthatsocialinteractionisnecessaryforcirculationoftacitknowledge.

Yang and Farn, (2009) affirmed tacit knowledge transfered as a natural procedure of social collaboration.Song,(2009)concludedthat,physicalcommunicationgaveimmediatefeedbackand mademultiplecuesavailabletopeople.Zheng,(2010)termedsocialmediaasawebtechnologytools, which supports social and aggregation of social interaction. Lietsala and Sirkkunen, (2008) said socialmediasiteswasaplaceforsocialinteraction.

Boatengetal,(2010)emphasizedoncommunicationandcollaborativefeaturesofweb2.0tools.Lia, (2005)confirmedadoptionoftacitknowledgetransferringintheinternetdiscussionandchatsessions. Wahlroos, (2010) detected that social media represented an important potential in enhanced knowledge sharing by providing the live discussions and relationship interaction among individuals.

EducationalCompatibility
Thechangesintechnologicaladvancementhaveledmodificationingeneralsenseoftheword.Edens, (2008) opined that, In 70s technology influenced on students' learning and academic achievement hadbeendiscussed.Healsostatedthat,Intheearly80s,internet-basedtoolsarebeingexpandedto support theacademic system.According toKeller &Cernerud,(2002)largenumberof researchers recognisedtheComputerSupportedCombinedLearningasavibrantpartoftheactivelearningthat enables students to communicate and share the knowledge with each other. Rogers et al., (2009) argumentisrelevanttostudentsofthe21stcentury.ChenandChen,(2008)arguedthatemergenceof online knowledge; had provided students with new approach, where they gain access to different resources.Educationalcompatibilitytalkaboutstudent'sadoption,andinvolvementswithsystem

featuresaswellasinseveralwaysstudentsenjoyedlearningbysystemconstantly(Tan,2009).

METHODOLOGY
Datawascollectedfrom160studentswhowereintensiveusersofsocialmedia.Theintensiveusers wereidentifiedbasedonthehoursofusageofsocialmedia.Thesamplesizewascalculatedusingthe online sample size calculator. The geographical location of the study was Bangalore which was consideredastheIThubofIndia. Purposivesamplingtechniquewasusedtoselecttherespondents. Participants included students who had the age limit to possess a social media account. Students pursuing various courses were selected to get a holistic picture on knowledge sharing. A questionnaire was used to collect the data. The questionnaire items were anchored using a 5-point Likert scale ranging from the totally disagrees to totally agree. Items for the questionnaire were adaptedfromChowandChan,2008,Aslametal.,2013,AlmanaandZemirli,2010andWhite,(2005). SPSSv.21wasusedtoanalysethedata.

ResearchHypothesis
Hypothesis1: Mutualtrustispositivelyrelatedwiththeintensiontoadaptknowledgesharingusage oversocialmediatoolsamongstudents.

Hypothesis2: Experiencingpossibilitiessharingispositivelyrelatedwiththeintentionofusingthe socialmediainknowledgesharingamongstudents.

Hypothesis3: Socialinteractionispositivelyrelatedwiththeintentionofusingthesocialmediatools withtheknowledgesharingamongstudents.

Hypothesis4: Theeducationalcompatibilityispositivelyrelatedwiththeintensionofusingthesocial mediaknowledgesharingamongstudents

DATAANALYSISANDDISCUSSION

Table1:ReliabilityStatistics

Variables	Cronbach's Alpha	No of Items
Mutual Trust	.892	5
Experience Knowledge Sharing Possibilities	.832	5
Social Interactions	.889	5
Educational Compatibility	.802	5

(Source:Primarydata)

Fromtheabovetable,itcanbeseenthatthereliabilityofthevariablesinthequestionnaireis above0.7. AccordingtoHairetal,(2010)allvariablesinthestudysurpassestheacceptedstandardreliability analysis.

Table2:DemographicProfileofRespondents

		Frequency	Percentage
Gender	Male	79	49
	Female	81	51
Field of Study	Business and Management	30	19
	Information Technology	34	21
	Engineering Courses	29	18
	Accounting and Finance	40	25
	Others	27	17

(Source:Primarydata)

Malerespondentswere79,whilefemalerespondentwere81.Therewasroughlyafairdistributionof respondents across gender. Majority of the respondents were from the Accounting and Finance background(25%)followedbytheInformationTechnology(21%).

To analyse the result of the questionnaire, Pearson correlation was carried out, in order to reach a conclusion on the practicality of the figures collected (Yaacob, 2008). Additionally, stepwise regression analysis was conducted; this was to test the relationship between the dependent and

independentvariables.

Table 3: Correlations

		Mutual Trust	ExperienceKnowledgeSharing Possibilities	Social Interaction	Educational Compatibilities	Knowledge Sharing Using the Social Media
Mutual Trust	Pearson Correlation	1	.519**	.465**	.564**	.549**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	159	159	159	159	159
Experience Knowledge Sharing Possibilities	Pearson Correlation	.519**	1	.446**	.515**	.665**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	159	159	159	159	159
Social Interaction	Pearson Correlation	.465**	.446**	1	.514**	.515**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	159	159	159	159	159
Educational Compatibility	Pearson Correlation	.564**	.515**	.514**	1	.665**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	159	159	159	159	159
Knowledge Sharing Using Social Media	Pearson Correlation	.549**	.665**	.515**	.665**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	159	159	159	159	159

(Source:Primarydata)

From table 3, the result shows that mutual trust is correlated with Knowledge Sharing using the Social Media. (r = .549, n = 159, p <.000). This affirms the argument of Al-Rahmi et al, (2013) that students using the social media for information sharing or collaborative learning among students, teachers alike in real circumstances.

Experience Knowledge Sharing Possibilities is also correlated with Knowledge Sharing Using Social Media. (r = .665, n = 159, p <.000). This affirms the argument of (Panahi et al, 2012). Social Interaction is correlated with Knowledge Sharing Using the Social Media. (r=.515, n = 159,

p<.000). This supports the argument of (Panahi et al, 2012). Educational Compatibility is correlated with Knowledge Sharing Using Social Media (r=.665, n=159, p<.000) and this affirms the argument of Tan, 2009.

Hypothesis Testing

Regression is used to test the hypothesis. The results of hypothesis testing are discussed in the table below.

The figure as shown above depicts that all the independent variables have a great significance in the dependent variables' knowledge sharing using the social media tools with the r =.776 with a significant value of f = .000. Hair et al, (2010) opined that regression and correlation were help to conclude the relationship between variables. Nevertheless, the regression results show that the independent variables had .592 or 59.1 % impact on dependent variable knowledge sharing using the social media tools, which implicitly have high level of significance on the independent variables to the dependent variables knowledge sharing using the social media tools

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.776a	.602	.592	.48580	.602	58.355	4	154	.000

Table 5: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.248	.253		.978	.330
	Mutual Trust	.105	.071	.098	1.479	.141
	Experience Knowledge Sharing Possibilities	.386	.065	.380	5.963	.000
	Social Interaction	.106	.056	.119	1.906	.059
	Educational Compatibility	.382	.073	.354	5.228	.000

a. Dependent Variable: Knowledge Sharing Using Social Media tools (Source: Primary data)

The figure above is the results of the survey which shows the significance for mutual trust is 0.141, Experience knowledge sharing is .000, and Social interaction is .059 and the Education compatibility is .000. The findings ascertain that, mutual trust have no significant relation with the knowledge sharing using the social media tools as held by Panahi et al, (2012). The process of building trust might not be well-thought-out as one of the major contributions of the social media to the tacit knowledge sharing, social interaction has no significant relationship with the knowledge sharing using the social media and so therefore was not supported and opined by Boateng et al., (2010) where there emphasize on interactivity and communicative aspects of web 2.0 tools.

However, experience sharing possibilities have significant relationship with the knowledge sharing using the social media (Nonaka, 1994) in her study points out that spreading the tacit knowledge is not likely possible without knowledge sharing. Also educational compatibility is positively related with the knowledge sharing using the social media also Consequently related, the result confirms that the experience of knowledge sharing possibilities and educational compatibility are strongly related with knowledge sharing using the social media tools (Tan, 2009) affirm that educational compatibility involves student's adoption, and involvements with system features as well as several ways students enjoy learning by system constantly.

FINDINGS AND SUGGESTIONS

The findings ascertain that two of the independent variables (Experience knowledge sharing possibility and Educational Compatibility) have positive relationship and contribute to knowledge sharing among students using social media tools. But two of the other independent variables (Mutual Trust and Social Interaction) have no significant relationship and does not contribute to knowledge sharing among students using the social media tools. The research depicts the knowledge sharing among the students using the social media tools, increases and encourages students to work in group and enhance their learning using online platform. Students displayed progressive approach towards the knowledge sharing and considered it essential for knowledge developments. It was found that social media provides great opportunities for knowledge encountering through providing the better facilities for broadcasting and faster dissemination of information, keeping people up-to-date, enabling to document and retrieve personal knowledge and experiences, it was also found that the information anarchy is still one of the major issues of knowledge seeking on the social media.

Since there is a high degree of knowledge sharing among students, it is suggested that the students maintain high professionalism on the social media. It is also suggested that the students can create a list of trusted source for knowledge sharing. They must be in a position to block any irrelevant and outdated information. Trust is easily attainable in face-to-face communication with the eye contact, the exchange of non-verbal cues, and the possibility of assessing people's confidence and competence. Hence social media can be used collaboratively for knowledge sharing.

CONCLUSION

The purpose of the study was to examine the potential contributions of social media in facilitating the knowledge sharing among students. The results of the study suggest that social media has sufficient potential to support the knowledge sharing through several mechanisms. The aim of this research is to find how social media tools facilitate knowledge sharing among students. The findings of this research suggest that the social media tools have the prospect to support the knowledge sharing through many aspects. It can provide a platform where students can socialise and discuss academic matters freely: listen, watch and build trusting the relationship with other students, reach out and obtain knowledge from much wider audiences and resources. The need for human and social dimensions is always stronger than any other dimension required for knowledge sharing. Thus, social media can be regarded as a complementary rather than a substitute for traditional mechanisms of knowledge sharing.

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