The Use of Social Media as Knowledge Sharing Tools in Academic Libraries: A Case of University of Nairobi in Kenya

Grace Wanja Karanja[1], Emily Bosire[2], Joseph Kiplang'at[3]
[1,2]Moi University, Kenya
[3]The Technical University of Kenya

Abstract: Knowledge sharing is a new way of knowledge creation although people sometimes hesitate to transfer their knowledge, especially when there is potential risk that other people would take advantage of it. Statistics have shown the tremendous use of emerging technologies such as social media tools by university students all over the world in sharing knowledge. These emerging technologies provide new opportunities that facilitate knowledge sharing. Much as this is the case, knowledge on how to utilize social media in a constructive way is limited. The aim of the paper is, therefore, to examine the types of social media tools used for knowledge sharing at the University of Nairobi and to establish how these social media tools can be used appropriately in knowledge sharing. The De Fleur model of communication was used to inform the study. Mixed method approach was used with a case study design informing the study. The target population for this study was staff and students of the College of Education at the University of Nairobi who were selected using purposive and systematic random sampling respectively. 151 students and 6 staff formed the sample size. Data was collected using interviews and questionnaires. From the findings of the study, it is evident that social media tools are used in knowledge sharing for social and academic purposes. Similarly, it was noted that the social media tools such as Facebook, twitter, blogs, LinkedIn, Myspace, Skype among others, provide effective channels of knowledge sharing. The study recommends that policymakers in the universities encourage students and staff to use social media productively.

Keywords: Knowledge Sharing, Social Media tools

INTRODUCTION

Social media is a means of communication through the internet that enables social interaction. It is an effective approach for people to use in communicating and interacting with each other. The popularity of various forms of social media has grown rapidly for both leisure and work-related tasks. In spite of the fact that the use of social media tools is increasingly attracting the attention and interest of academics and researchers, there is little research done. Yet the reality is that social media tools have great potential to enhance networking, collaboration, sharing of experiences and communication. Most university students are known to rely on social media for communication purposes. Research has shown that students spend 60% of their time on social media [1]. The students' use of social media is majorly for knowledge sharing whether it is their experiences, or views and opinions on topical, academic and other issues for personal development. Apart from students,

the staff also uses social media for the same purposes and for knowledge sharing between themselves and students.

STATEMENT OF THE PROBLEM

Sharing knowledge is a way of new knowledge creation [2]; however, people sometimes hesitate in transferring their knowledge, especially when there is potential risk that other people would take advantage of their knowledge [3]. Statistics have shown the tremendous use of social media tools by students all around the world. With the advent of social web initiatives, several studies argued that these new emerging technologies might provide new opportunities to facilitate knowledge sharing [4]. In spite of the current arguments, there is still a lack of understanding about the potentials and pitfalls of the social web for knowledge sharing. This study therefore examined the ways of utilizing social media tools for knowledge sharing with a view of providing a

framework to improve its utilization. Opportunities such as the social media tools should aid in building trust among participants to overcome the knowledge sharing obstacle whereby participants are not comfortable sharing their knowledge with people they do not know [5]. The study explored the use of social media as knowledge sharing tools in academic libraries with the objectives of examining the types of social media tools used for knowledge sharing and establishing how these social media tools can be used appropriately in knowledge sharing at the University of Nairobi

LITERATURE REVIEW
Social media tools are online utilities that deliver social media functionality. They include Facebook, Blogs and wikis, Twitter and YouTube among others. These particular tools are of great interest to this study. They have provided creative ways to facilitate strategic knowledge sharing and to transform research collaboration in research communication strategies. The social media tools are largely used for knowledge sharing; an activity through which knowledge (i.e. information, skills, or expertise) is exchanged among people, friends, or members of a family, a community or an organization.

Social media tools Used in Knowledge Sharing
Knowledge sharing is necessitated through Social media tools such as Facebook, Blogs and wikis, Twitter and YouTube. Facebook has helped individuals connect and share with the people in their life [6]. Though Facebook originated in 2004 as a Social media tools for college student use, the site soon opened to corporate networks in early 2006 and then to the general public in less than a year [7]. In the argument of Hargittai [8], Facebook is one of the most popular Social media tools. Ellison and colleagues [9] noted that Facebook is a popular social media that serves to build social capital and online interactions that keep people in contact, even when life move them away from each other. Another argument by Haase [10] concludes that Facebook connects individuals to local and long-distance social ties. Facebook has recently opened to the public, but it is still dominated by college users. College students create 'networks' in social media, which are equivalent to 'schools'. The default setting is that only people in your college (network) can see your full profile, while all others can see only the profile picture, the name of your home network, and the name provided by the owner of the profile. Therefore, at least for college students, Facebook has a close connection between offline and online social environments [11]. Because of its strong user base among college students, Facebook appears to be the most logical social media tool.

The other social media tools common for knowledge sharing are Blogs and wikis. Blogs are web pages consisting of user-supplied content in chronological order [12]. Blogs, originally known as 'Web-logs', are a method of sharing expertise and information via commentary and description of events. They encourage user interaction through their comment feature, which allows students to provide feedback regarding the information provided and the library itself [13]. Blogs are also used to create subject guides as they can be easily updated to reflect the most current sources for a particular class or department. According to Richardson [14]. Blogs allow students to comment on the information included in the blog by inviting user feedback regarding the library and allow libraries to provide easy-to-update information for students while also encouraging student comments and interaction.

Wikis, on the other hand are open web pages that allow approved users to add and alter a page's content [15]. Wikis are a tool for working collaboratively on a project and is best for students. A wiki may be made available publicly and therefore, found by anyone searching on the internet. YouTube is another social media tool for knowledge sharing and is a popular video-sharing venue online that attracts millions of users daily, especially college students. According to Kinsey [16] users, find it easy to disseminate messages through video clips for the global audience.

Twitter is another social media that allows registered users to post brief messages for other users who follow the account and comment on other user posts [17]. Twitter allows users to post events, new resources available, search tips, deadlines, links to the library web sites, responses to student comments, and news affecting students without the requirement that students visit the official library web site [18].

## Use of social media in knowledge sharing Social media and gaming
Assortments of social media web sites have appeared in recent years to encourage users to share multimedia objects from photographs to videos [19]. These sites also encourage users to comment on items posted by fellow users. Users can also tag the content of the media, essentially creating a new classification system within the web site itself. YouTube, Flicker, and Second Life are a few of the most popular social media web sites. YouTube allows individuals and organizations to post original videos. The site also enables users to embed their videos onto other web sites, including other tools such as Facebook, blogs and Wikis [20]. In addition to multimedia web sites, there are also social games that can be used in student outreach. Ultimately, social media sites enable users to create

multimedia profiles with the goal of encouraging interaction among students.

Social bookmarking

Social bookmarking web sites have also emerged to encourage users to store their internet bookmarks and to interact with users bookmarking similar web sites. Social bookmarking is a form of link management that lets users to collect and label information resources for both their own use and for sharing with other users [21]. The bookmarks can be accessed from any computer or browser. After bookmarking, users tag their links with keywords that describe the web page's content so that a tag cloud of related web sites can be viewed and so that the user can view what other, sources users tagged have with the same keyword. This process is known as folksonomy [22]. In addition, the youth in the 21st century lack a real-world venue in which they can be together and interact as if youth of the previous generations did [23]. They have therefore turned to cyberspace to meet and interact with others in a relatively adult-free environment.
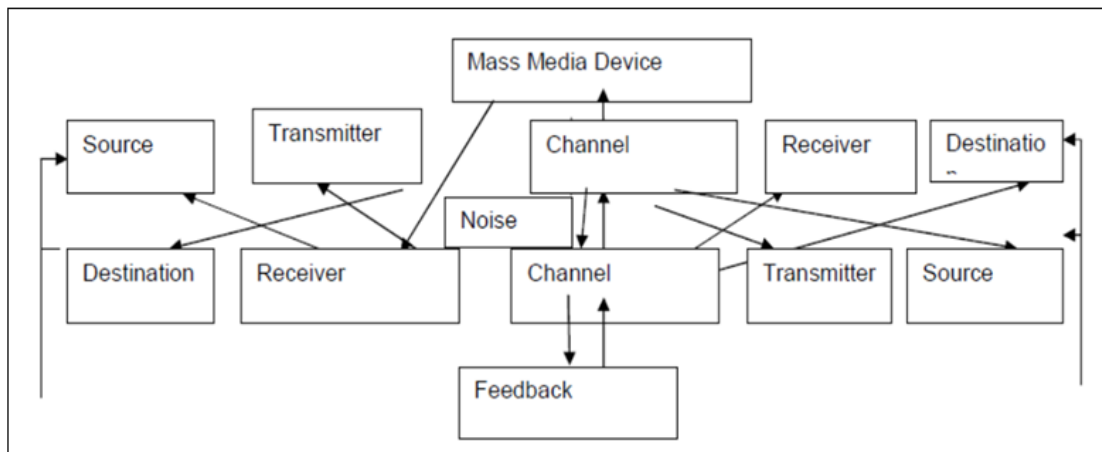
Fig−1: The de Fleur Model of Communication

The De fleur model of communication seeks to explain various forms of communication in one graphic construct. It took some ideas from Cybernetics on self-generating and self-maintaining systems. This emphasizes the interchangeability of the source/ encoder and receiver/decoder roles. De Fleur also recognizes that 'noise' can emanate from any of the elements and not from the channel or the source.

De Fleur model includes the Mass Media device and it suggests that the communication process is circular. It also gives possible two-way feedback. This feedback device helps to analyze the target audience (as separate from the receivers). In addition, the "feedback element" helps to determine the results of the message conveyed as well as the impacts of the message conveyed to the sender and the receiver. In the whole communication process, noise may occur at any stage. De fleur pictures the source, transmitter, receiver and destination as separate phases of mass communication. The De Fleur model of communication enables correction of errors and deviation of the message by returning the message to where it is created, it is possible to determine and change the following messages.

Significance of De Fleur Communication Model

De Flour's model is significant in the use of social media tools for knowledge sharing in that the source can be a student who conveys academic information through Facebook where this piece of information is intended to be communicated to other students. This is then converted into message as Facebook chat/update. The update is then transmitted through the social media tools by a channel. At the other end, the receiver (e.g. friend on Facebook) decodes the information as message and finally it is transformed to the destination (the target audience). The feedback acts an information source where the student conveying the message can get communication from the receiver to facilitate knowledge sharing. In addition, De fleur model of communication relates to the Dependency Theory. The Dependency Theory says the more a person becomes dependent on the media to fulfill their needs, the media will become more important to that individual. The media will also have much more influence and power over that individual. Dependency theory is a mass communication theory that seeks to explain the long-term effects of media on the audiences and a society. Mass media dependency theory as developed by DE Fleur and Ball-Reach in 1975 holds that the ultimate basis of media influence lies in the nature of the relationship between the social system, the role of media in that

system, and the relationship of the audience and the media. The focus of this theory is the relationship between media and its audiences. In the present modern world, you will find that individuals highly depend on media to satisfy a range of their needs.

DISCUSSION OF THE FINDINGS
This chapter presents the results of data analysis on the utilization of social media tools for knowledge sharing among staff and students at the University of Nairobi. The collected data has been presented, analyzed and interpreted. Data are presented based on interviews conducted with the staff and questionnaires distributed to education students. Their opinions, views and comments formed the basis for the findings of the study. The presentation of the data has been done according to the objectives of the study.

Characteristics of the respondents
The study targeted one hundred and fifty one (151) undergraduate students. One hundred and twenty seven (127) students completed and returned the questionnaires. The response rate for the students was therefore eighty-four per cent (84%). On the other hand, six (6) key informants were interviewed.

Types of social media tools used for knowledge sharing
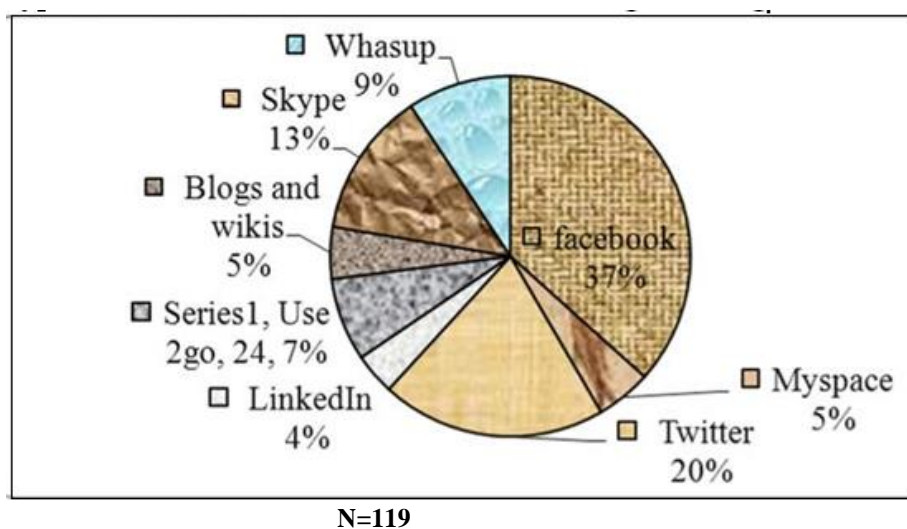
N=119
Fig−2: Social media tools commonly used

The study examined whether the respondents used the social media tools. It further sought to establish the types of social media tools they used. When asked whether they used social media tools, 119(94%) of the respondents indicated that they use social media tools while only 8(6%) do not use social media tools. From the study, one can conclude that most students use the social media tools. Respondents were asked to indicate the types of social media tools they used. Of the 119(94%) of the respondents who use social media tools, 47(37%) of the respondents said they use Facebook, 25(20%) indicated they use Twitter, and 17(13%) used Skype. Those who use WhatsApp messenger were 11(9%) while those who said they use Linked In are 9(7%). In addition, respondents who say they use 2go are 5(4%), and (5%) use Myspace.

The study showed that Facebook and twitter are the most commonly used social media tools constituting of 47(37%) and 25(20%) respectively as shown in Figure 2 above. Facebook and twitter have changed the way people communicate and have expanded reach and functionality of processes at the University of Nairobi. Were these the only tools that they used?
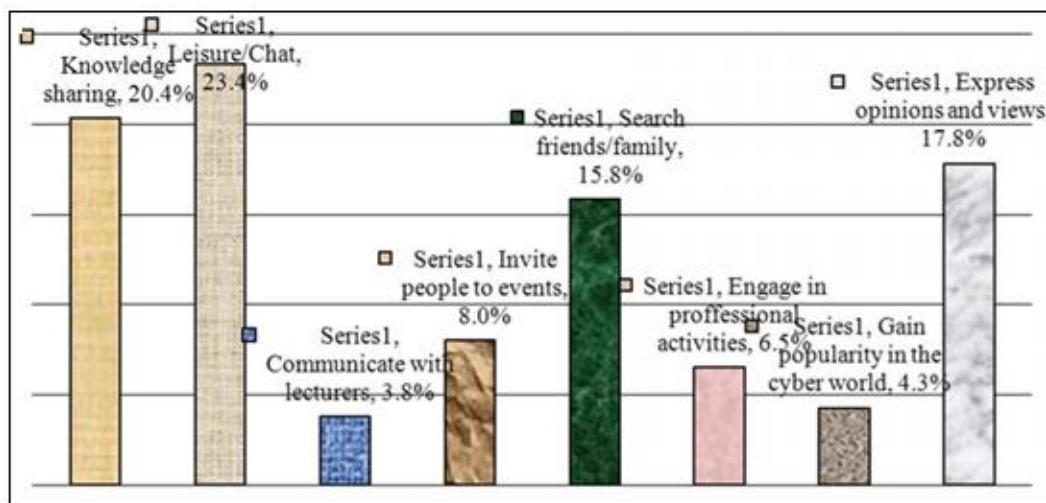
Purpose of utilizing the social media tools
Figure 3 indicates responses given by respondents in defining their purpose for using the social media tools. This was necessary to establish the reasons why respondents use social media tools. This data was important, as it would help determine whether they use social media tools for knowledge sharing. The figure above shows that 25(20%) of the respondents use social media tools for knowledge sharing while 29(23%) use it for Leisure/Chat. In addition 5(4%) of the respondents use the social media tools to communicate with Lecturers. Similarly 10(8%) respondents said they used the social media tools to invite people to events, while 20(16%) of the respondents indicated that they use the tools to search friends/Family. Consequently 23(18%) used the social media tools to express opinions and views. Seven percent 9(7%) of the respondents engaged in professional activities while using the social media tools and 5 (4%) respondents used the tools to gain popularity in the cyber world. In

addition, the study sought to determine the purpose of using the social media tools from the librarian. The response was that the library staff to update clients on services for instance new acquisitions and for current

awareness service used the social media tools. In the discussion of this objective, two thematic areas are entailed and they include Knowledge sharing and leisure/Chat.

N=119
Fig-3: The purpose of social media tools

Knowledge sharing

The findings of the study showed that items regarding the sharing of knowledge which includes Knowledge sharing, express opinions and views, communicate with lecturers and engage in professional activities entail 62 (49%) of the total number of respondents. This was an indication that social media tools can be used for the provision of information to support the student centered learning. This is because the respondents express opinions, communicate and engage in professional activities on the social media. In addition, the social media tools can be excellent tools for teaching and learning hence, knowledge sharing and can provide exciting new

opportunities for universities to engage communicate and collaborate.

Leisure/Chat

In addition, areas regarding leisure/chat which include search friends/family, invite people to events, and gain popularity to the cyber world and leisure/chat entail 65 (51%) of the respondents. This means that since the social media is interactive, instant and a mass medium, it has become a natural background of everyday life hence its importance in the university.

Use of social media tools for knowledge sharing

Table-1: Use of social media tools appropriately in nowledge sharing

Strategies to ensure that social media tools are appropriately used in knowledge sharing	Frequency	Percentage (%)
To share Information	98	77
Use of proper language and decency regarding content posted	14	11
Reduce Internet costs	11	9
Skills on usage of social media tools	4	3

This open-ended question sought to find out the ways the social media tools can be used for knowledge sharing. This was to determine whether the respondents knew how to appropriately use the tools for knowledge sharing.

To share Information

Seventy seven per cent 98(77%) of the respondents indicated that the social media tools can

be used as a forum to share information. Their views were "For research work", "To share educative materials and lecture notes", "To access quality information", "It can be used for educational purposes" and "Groups can be created where challenging questions can be posted so that others can discuss them"

Reduce Internet costs

In addition, 11(9%) of the respondents

expressed views that the reduction of costs on the internet access can result to social media tools being used appropriately for sharing of information. Their views were "By reducing internet costs", "Have no costs" and "Free access to the social media tools"

Use of proper language and decency regarding content posted

Furthermore, they noted that if information on social media can be posted in a decent manner and in proper language then the tools can be very useful in sharing knowledge. This was noted by 11% of the respondents. Their responses included "Avoidance of pornography", "Use of correct language" and "Enhance proper language use"

Skills on usage of social media tools

Moreover, 3% of the respondents noted that the social media tools require some skills in access and use hence educating students and staff on how to use the tools would assist in ensuring that they are appropriately used for knowledge sharing. Their responses included "Skills on usage of social media" and "Creating awareness on the importance of social media."

CONCLUSION

The study established that nearly all of the respondents used the social media tools. Facebook and twitter were the most commonly used social media tools. The social media tools encourage openness in thinking, sharing of knowledge in a collaborative manner, shared power to decide, and interactivity. Moreover, they establish enduring relationships with real people. This means going beyond seeing others simply as peers who trade digital content. The findings of this study are consistent with Ellison and colleagues [24] who noted that Facebook serves to build social capital, concluding, "Online interactions keep people in contact, even when life changes move them away from each other". The findings of the study concur with those of Lenhart [25], which reported 75% of 18-24 years olds use some form of social network

The study revealed that about half of the respondents used social media tools for knowledge sharing while the other half used the tools for leisure/chat. Using social media to support educational endeavors leverages the benefits of in-person learning communities with the benefits of using technology to support student engagement. The findings are in agreement with Tinto [26] who found that learning communities could have a positive impact on student learning and the level of university student interaction and cooperation. Along with supporting the formation of professional learning communities, social media has the potential to reap the benefits of using technology for academic purposes. This is also supported by Hemmi, Bayne and Land [27], who maintain that since students already collaborate, search for information, communicate and socialize using web technologies as part of their everyday lives, there is no reason not to use the same skills and behaviors in the classroom to support learning. Similarly, Boshoff and du Plessis [28] noted that Social media tools provide a collaborative learning environment in which problems encountered are collectively solved and solutions are shared among peers, bridging the gap between procedures and practice. The social media tools permit and favor the publication and sharing of information; self-learning; teamwork; communication, both between students and between pupil-teacher feedback; access to other sources of information that support or even facilitate constructivist learning and collaborative learning; and contact with experts.

REFERENCES
1. Goodyear P, Ellis RA. University students' approaches to learning: Rethinking the place of technology. Distance Education. 2008 Aug 1;29(2):141-52.
2. Nonaka I, Takeuchi H. The knowledge-creating company: How Japanese companies create the dynamics of innovation. Oxford university press; 1995 May 18.
3. Park JH. The role of trust on knowledge creation in a virtual organization: A social capital perspective. Journal of Knowledge management practice. 2006 Dec;7(4):49-58.
4. Hsia TL, Lin LM, Wu JH, Tsai HT, Koohang A. A framework for designing nursing knowledge management systems. Interdisciplinary Journal of Information, Knowledge & Management. 2006 Jan 1; 1.
5. Goman C. What leaders can do to foster knowledge sharing. Knowledge Management Review. 2002;5(4):10-1.
6. Facebook.com Available at: www.facebook.com
7. Ellison NB. Social network sites: Definition, history, and scholarship. Journal of Computer-Mediated Communication. 2007 Oct 1;13(1):210-30.
8. Hargittai E. Whose space? Differences among users and non-users of social network sites. Journal of Computer-Mediated Communication. 2007 Oct 1;13(1):276-97.
9. Ellison NB, Steinfield C, Lampe C. The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. Journal of Computer-Mediated Communication. 2007 Jul 1;12(4):1143-68.
10. Quan-Haase A. University students' local and distant social ties: Using and integrating modes of communication on campus. Information, Communication & Society. 2007 Oct 1;10(5):671-93.

11. Ellison NB, Steinfield C, Lampe C. The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. Journal of Computer-Mediated Communication. 2007 Jul 1; 12(4):1143-68.

12. Boxen JL. Library 2.0: a review of the literature. The Reference Librarian. 2008 Aug 29;49(1):21-34.

13. Kroski E, Folksonomies and user-based tagging, in Courtney N, (Eds). Library 2.0 and beyond: Innovative Technologies and Tomorrow's User. Libraries Unlimited: Westport, CT. 2007.

14. Richardson W, *Blogs, wikis, podcasts, and other powerful web tools for classrooms.* Thousand Oaks CA: Corwin Press. 2006. Print.

15. Richardson W, *Blogs, wikis, podcasts, and other powerful web tools for classrooms.* Thousand Oaks, CA: Corwin Press. 2006. Print.

16. Kinsey J. Simple steps to making a Web-based video. Journal of Extension. 2010 Aug.

17. Wilburn J. Using Twitter for higher ed. Retrieved July. 2008;12:2008.

18. Milstein S, Twitter for Libraries. Computers in Libraries, 2009; 29 (5), 17-18.

19. Farkas MG. Social software in libraries: building collaboration, communication, and community online. Information Today, Inc.; 2007.

20. Kroski E. The social tools of Web 2.0: opportunities for academic libraries. Choice. 2007 Aug 1;44(12):2011-21.

21. Gilmour R, Stickland J. Social bookmarking for library services: Bibliographic access through Delicious. College & Research Libraries News. 2009 Apr 1; 70(4):234-7.

22. Gilmour R, Stickland J. Social bookmarking for library services: Bibliographic access through Delicious. College & Research Libraries News. 2009 Apr 1; 70(4):234-7.

23. Boyd S. Are you ready for social software?

24. Ellison NB, Steinfield C, Lampe C. The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. Journal of Computer-Mediated Communication. 2007 Jul 1; 12(4):1143-68.

25. Lenhart A, Madden M. Pew Internet project data memo. Pew Internet & American Life Project. 2009 Jan 14; 2:17.

26. Tinto V. Linking learning and leaving. Reworking the student departure puzzle. 2000:81-94.

27. Hemmi A, Bayne S, Land R. The appropriation and repurposing of social technologies in higher education. Journal of computer assisted learning. 2009 Feb 1;25(1):19-30.

28. Boshoff M. Preferred communication methods and technologies for organizational knowledge sharing and decision making: peer reviewed article. South African Journal of Information Management. 2008 Jun 1; 10(2):1-8.