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Application of Social Media in the Promotion of Research Activities: Librarians as Catalysts

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Abstract

This paper explored the features of popular social media in the promotion of research activities and enhanced provision of information services in libraries. The paper assessed the potential features of social media and ways academic librarians could adapt to utilize the popular social media such as Facebook, Whatsapp, Instagram, Badoo, Skype, Imo, Wechat, Twitter, Flickr and Youtube as a communication tool in academic and research activities; thus, making it possible for librarians to discharge their duties effectively. The paper recommends that librarians, as agents of change, should always flow with the evolving trends in the global information arena. They should embrace ICT-complaint library services in order to redefine information service provision and, ultimately, create a technologically enhanced learning and research environment.

Keywords: Social media, Networking, Librarians, and Academic Activities.

Introduction

In the past, reading was regarded more as a leisure and educational activity. However, since the evolution of Information Communication Technology (ICT), there has been a paradigm shift from print media to use of digital media for information access. This is because social media offer people more convenient and faster ways to seek, acquire, communicate, and share information among people of all walks of life. The world has transcended tremendously to a virtual college, enabling one-click connectivity to access, transfer, utilize, create and communicate information. Indeed, social media have become vital aspects of our daily activity and thus, the primary mode of communication because of its speed and versatility. The potentials of social media are consciously being explored world-wide to promote services and productivity. Consequently, as the media of communication and technology continue to evolve, professionals, organizations, institutions, and individuals are inclined to adapt their use and redefine their personal and professional roles in line with these innovations in a bid to be abreast with technological development.

Social media defined.

Social media are tools of communication that allow users to create, edit, share, and receive digitally created contents. Baruah (2012) observed that social media refer to the use of web-based and mobile technologies to turn communication into an interactive dialogue. Social media take on many different forms including magazines, Internet forums, weblogs, social blogs, micro blogging, wikis, podcasts, photographs or pictures, video, rating and social bookmarking. These are series of

dedicated websites and applications used to communicate informally with other users, or to find people with similar interests. Social media are primarily Internet-based tools for sharing and discussing information among people from all walks of life ("Social media," n.d.). Lake (2009) defined the social media as categories of sites that are based on user participation and user-generated content. They include social networking sites such as LinkedIn, Facebook, or My Space, social bookmarking sites such as Del.icio.us, Social news sites such as Digg or 23img, and other sites that are centered on user interaction. Social media allow private individuals to become sources of information online "sharing opinions, insights, experiences and perspectives with others" (Marken, 2007).

The exponential growth and acceptance of social media such as facebook, whatsapp, instagram, badoo, skype, imo, wechat, twitter, flickr, and youtube among others, cannot be contained as new technologies of communication keep evolving. According to Veil, Buehner, and Palenchar (2011) social media are at the core of human communication. Librarians, as information specialists, therefore, could key in to take advantage of the social media environment and continue to play and improve on their core roles as information providers, managers, and marketers.

The core mandate of academic librarians has been to provide information resources and services to support learning, teaching, and research activities. They are committed to adapting and harnessing the emerging ICT tools in providing enhanced information services for improved research outcome. Therefore, social media as tools of communication and information transfer have come to stay and there is little or no

restriction on the use of these wonder tools. There is no doubt that they exert tremendous influence on the reading culture. Fayaz (2011) echoed that, in the modern era, much reading and academic researches are required more than ever. However, every new medium of information and communication has been a threat to man's interest in reading. It is, therefore, intended that the potentials of social media be harnessed to improve reading and research activities for improved research output. Librarians, as agents of change, should embrace ICT-complaint library services to redefine information services and ultimately, create technologically enhanced learning environment. It is based on this that this paper seeks to propose the invaluable roles librarians can play in utilizing the features of these communication media (popular social media) to promote scholarship and research. The objective of the study is therefore to explore ways librarians could harness the potential features of social media in creating a technologically enhanced learning to promote scholarship and research.

History of Social Media

The history of social media and networking stretches far deeper than might be envisaged. It may seem as a new trend but sites such as Facebook are the product of several centuries of social media development. The original means of communicating across great distances (such as the telegram) used written correspondence delivered by hand from one person to another (letter). The initial form of postal service dates back to 550 B.C. and this traditional delivery system would become more widespread and streamlined with time (Ruozi and Anderloni, 2002 and DeWald, 2003). In 1792, the telegraph was invented, and allowed messages to be

delivered over long distances faster than a horse and a rider could carry them. Although, no longer popular outside of drive-through banking, the pneumatic post, developed in 1865, created another way for letters to be delivered quickly between recipients (John, 1998 and Lehnus, 1982). A pneumatic post utilizes underground pressurized air tubes to carry capsules from one area to another. Two significant inventions occurred in the last decade of the 1800s: the telephone in 1890 and the radio in 1891. Both technologies are still in use today, although the modern versions are much more sophisticated than their predecessors. Telephone lines and radio signals enabled people to communicate across great distances instantaneously, which is something that mankind had never experienced before (Hendricks, 2013).

Technology began to change very rapidly in the 20th Century. After the first super computers were created in the 1940s, scientists and engineers began to develop ways to create networks between those computers, and this later led to the birth of the Internet. The earliest forms of the Internet, such as CompuServe, were developed in the 1960s (John, 1998; Lehnus, 1982). Primitive forms of email were also developed during this time. By the 1970s, the networking technology had improved, and 1979's UseNet allowed users to communicate through a virtual newsletter. By the 1980s, home computers were becoming more common and social media was becoming more sophisticated. Internet relay chats, or IRCs, were first used in 1988 and continued to be popular well into the 1990's.

According to Olcheski, (1976) the first recognizable social media site, Six Degrees, was created in 1997. It enabled users to upload a profile and make friends with other

users. In 1999, the first blogging sites became popular, creating a social media sensation that is still popular today. After the invention of blogging, social media began to explode in popularity. Sites such as MySpace and LinkedIn gained prominence in the early 2000s, and sites such as Photobucket and Flickr facilitated online photo sharing. YouTube came out in 2005, creating an entirely new way for people to communicate and share videos with each other across great distances. By 2006, Facebook and Twitter both became available to users throughout the world. These sites remain some of the most popular social networks on the Internet till date. Other sites such as Tumblr, Spotify, Foursquare and Pinterest began popping up to fill specific social networking niches. Today, there is a tremendous variety of social networking sites and many of them can be linked to allow cross-posting. This creates an environment where users can reach the maximum number of people without sacrificing the intimacy of person-to-person communication (Hendricks, 2013).

Use of social media

Social media are used to share and re-share information reaching millions of people without the intervening presence of the journalists. Veil *et al.*, citing Solis, (2009) observed that 92% of communication practitioners surveyed believe that blogs and social media now influence mainstream news coverage. Hence, social media could be integrated to aid and promote academic and research activities. Social media are at the core of human communication, possessing characteristics of participation, openness, conversation, community, and connectedness (Veil *et al.*, 2011). Behzadan and Kamat (2012) highlighted that recent findings indicated that when properly

implemented, social media have significant effect on student achievement, stimulated increased instructor–student interaction, encouraged cooperative learning, collaboration, problem-solving, and student inquiry skills. Yingxia, Ajjan, and Hong (2013) found that social media use has a positive effect on student's learning outcomes and their satisfaction.

Popular Social Networking Media

Whatsapp

Whatsapp was launched in February 24 2009, by two former employees of Yahoo, Brian Acton and Jan Koum. By February 2013, whatsapp boasted of 50 staff members and 200 million users. The application serves as a platform for both instant messaging and audio/video calls. It also allows for sharing documents, and other media files. Whatsapp runs from a mobile device and on desktops and laptops using standard cellular mobile numbers. Based on the number of monthly active users, as of January 2017, whatsapp has become the most popular messenger application (Statista, 2018). The features include instant messaging and texts, web/desktop-based messaging, voice and video calls, end-to-end encryption, photos and videos sharing, voice messaging, and documents sharing. Users are required to sign-up on whatsapp using their mobile numbers only.

At the end of 2017, Whatsapp Incorporation introduced a modified version of the whatsapp application called Whatsapp Business app. (WhatsApp, n.d.). It was built for business owners so that they can interact with customers easily by using tools to automate, sort, disseminate and respond to messages. This allows users to create a worldwide visible business profile and

labels, respond to messages quicker, use automated messages for customers, and access messaging statistics (Statista, 2017). It is expected to enable business owners to interact better with customers by providing updates, support and basically provide the option to run their business off their mobile phones.

Instagram

According to Wikipedia.org ("Instagram," n.d.), Instagram is a portmanteau of instant camera and telegram. Instagram created in October 6, 2010, is a mobile desktop and internet-based photo-sharing application and service that allows users to share pictures and videos either publicly or privately to pre-approved followers. Instagram lets registered users upload photos or videos. They can apply various digital filters to their images and add locations through geotags. The features include photo uploads, short videos uploads, following each other (connectivity) and their feeds, geotag images, open or private nature of account, link account to facebook, image filters, hashtags (help users discovers photos and each other – by allowing users tag both specific and relevant rather than tagging generic words), and general (broadcast) and direct (instagram message) messaging. Users are required to register with an email address or facebook account. Notifications are sent as live feed and email addresses to registered users.

Facebook

The Facebook ("Facebook," n.d.) is like a household name to almost every family, institutions and organisations. Facebook was created by Mark Zukerberg and three of his mates on October 28, 2003 as a Facemash for posting and comparison of pictures for Harvard students. It was

officially launched as Facebook on February 4, 2004.

The features found on facebook website are news feed, friends, wall (profile space for status update), timeline, likes and reactions, comments, messages and inbox, notifications, groups, poking, and storyline. The recent addition to facebook messenger app is the voice and video call. Most importantly, facebook allows for integration of other social media and websites, such as Instagram, whatsapp, and email addresses. Users are required to register with an email address and mobile number. Facebook acquired Whatsapp and Instagram.

Skype

Skype was developed by Priit Kasesalu and Jaan Tallinn and was officially launched on August 29, 2003 ("Skype," n.d.). Skype is a telecommunication application software designed to enable voice and video call between technologies of communication such as computers, tablets, and mobile devices via the internet. It also allows for the exchange of text and video messages and digital documents. The features of skype are instant messaging, internet calls, voice mail, and short message service (SMS).

Twitter

Twitter is an online news and social networking service where users post and interact with messages known as "tweets" ("Twitter," n.d.). It was founded by Jack Dorsey, Noah Glass, Biz Stone, and Evan Williams on March 21, 2006. Although twitter has the feature for personal messaging, it is commonly used for communicating to the public. This involves sending short messages of 280 characters limit to anyone who follows the sender. This is known as tweeting. Companies and other

organizations use twitter to keep their numerous interested followers updated on the policy, developments and events of the company. In addition to its novelty, the character limit per tweet feature helps to promote focused and clear use of language in tweeting. This makes twitter a popular social tool and for mass communication and therefore, be regarded as an effective journalistic tool. People use twitter to reach their audience easily for several reasons such as news reporting, marketing tool, awareness creation platform, campaign tool, and recreational purposes among others. Twitter has gained prominence among celebrities and news reporters that it could be regarded also as an amateur form of news broadcasting. President Trump is a famous twitter user. His daily updates to Americans and the world in tweets he usually tagged MAGA (Make America Great Again), fosters a sense of connectedness with his followers, which is powerful in influencing behaviour, compelling action, and motivating for those following his tweets.

Virtual Environment and Academic Activities

Social media play essential roles in our daily lives. However, Fayaz, 2011; Chettri and Rout, 2013; Mokhtari *et al.*, 2015 are concerned about the role social media play on academic activities in our generation. Fayaz (2011) opined that every new media of information and communication has been a threat to man's interest in reading. He emphasized that social media have captured a big slice of time and reading has taken a back seat. According to Ikpaahindi (2008), research has shown that more than half of the adults in Nigeria hardly ever read a book, stressing that those who do read spend a much smaller part of their leisure time doing so, compared with 25 years ago. He, therefore, concluded that social media is

having adverse effect on the reading culture of Nigerians as it discourages students from engaging in serious studies. Ojielo (2001) also highlighted that Nigerians prefer listening to stories instead of reading, a practice which accounts for the popularity of home video among the people.

Reading is an essential factor that forms the foundation of greatness in everyone's life irrespective of gender, status, and age. However, the reading habits of students have been washed down the drain, most students spend a greater part of their time on social media surfing the Internet for non-educative information (Effects of Social Media on Education, n.d.). Students are expected to read and keep abreast of what is happening around them, but that obviously does not happen anymore as a result of the advent of the social media. Many students now spend quality time surfing the internet on gossips and other immaterial issues. Adesulu, Adebusayo, and Amos (2017) reported that a library officer at the Ramat Library at the University of Maiduguri while reflecting on the attitude of students to reading, asserted that "students prefer the electronic-library to going to the shelf to get books because most students like easy things and don't want to stress themselves looking for books or reading them. They no longer read hard and for a long time like before, and as a result, the future may not have qualified people in different fields. Most of the students you see here are either in part-one or part-two; they mostly come here to get textbooks and other educational materials. Students don't read on their own volition anymore".

Popoola, Ajibade and Etim (2010) reported that few of their pre-service teachers never loved to read. They pointed out that although many of them know how to read, they prefer to gather information through

movies, television, websites and conversations. Kaufman (2001) observed that children spend their time watching TV and playing video games and are not spending a great deal of time reading and writing. Statistics collected according to Kaufman by the US Department of Education “National Centre for Educational Statistics” show that students’ achievement has been declining in recent times. Ganguly (2004) observed that as social media websites, such as facebook, youtube and twitter, gain popularity, they are also becoming increasingly dangerous as they create modes to students to procrastinate in trying to complete homework and assignment. Social networking sites have also become easiest point of access to pornography and other obscenities which distract student reading habits (Kur & Olisah, 2007). Oji (2007) noted that the growing incidence of students using the internet not necessarily for academic purposes, but for antisocial activities is at an astonishing rate.

Social Media as Communication Tools for Academic Activities

Over the last few years, it has become apparent that social media have captured the fancy of most people. The extensive use of social media has drastically changed the way people communicate and share information. The proliferation of these communication technologies presents a competitive advantage for librarians to key in and keep abreast of the development in the information industry. Some features of social media can be harnessed in the promotion of academic activities as they present greater opportunities and broaden the scope of learning beyond the classroom walls through flexibility and ease of access to digital resource contents. Social media

have impacted not only on the people, but also services across institutions, organizations, government and policies, as they devise strategies to engage their audience and win their dependability. Librarians are not different, as other professionals relentlessly seek to communicate with and expect feedback from customers (users), who are constantly active on social media. This creates an avenue for the delivery and enhancement of academic activities in the most flexible means. According to Sharples (2000), flexibility allows users to access and use learning contents through communication technologies independent of time, space and location. Gezin, Adnan, and Guvendir (2018) stated that, due to the prospects of communication technologies in education, scholars in the field of learning, instructional design and technology are still working on developing theoretical conceptions of the potentials of communication devices to inspire new forms of learning and engagement. Thus, the role of librarians has become increasingly important in the evaluation of attitudes and perceptions of researchers and learners for the integration and management of social media in the teaching and learning environments.

The world is currently witnessing a social media revolution. It is, therefore, obvious that social media such as facebook, whatsapp, instagram, badoo, skype, imo, wechat, twitter, blogs, flickr and youtube among others, are used extensively for the purpose of communication. According to Kemp (2017), in the 2017 Digital Global Overview report, it was revealed that approximately 2.56 billion people use social media daily; according to them, this equals 34% of the worldwide population. It is appropriate, therefore, for librarians to leverage on social media tools as an integral

part of their practice, and offer virtual services such as interlibrary loan, reference service, outreach service, prompt notification of library development, new arrivals/acquisitions, institutional repository update, library orientation, user education, and language translation.

Potential Features of Social Media in Academic Environment

Chat and private real-time messaging versus reference service

Reference service is a personalized service provided to library users with directions to information resources, advice on library collections and services. With the incident of information explosion where many users feel self-sufficient in information search and retrieval process, professional librarians remain the curator of standardized knowledge and information provision. Through social media, with instant messaging capability, librarians could offer those users, flooded with millions of unsorted information, with the expertise on verified information from multiple sources in the web. The library can then create social media accounts and make them public through blogs, Google, and library websites, to offer digital reference service on a stipulated round the clock hours.

Online discussion forums versus professional collaboration

Baruah (2012), the online sharing of information and knowledge feature of social media promote the increase in the communication skills among people especially the learners of educational institutions. Online discussion forums are still one of the preferred communication tools widely used today. Discussion forum on social media brings together different

stratification of persons and allows for open discussion on any topic. Often times, mass information and achievement of propaganda are boosted by participating in regular discussion forums for targeted audience. Kwanya, Stiwell and Underwood (2015) stated that the innovation of technologies promoted the creation and sharing of information that anyone could easily receive a message, interpret, alter and re-share the message, making the world a virtual college. Librarians could create professional forums such as LinkedIn, WhatsApp etc.(usually set up and monitored/moderated), which can help in knowledge dissemination to targeted audience. They can also help effectively in archiving organizational knowledge to be used by anyone as future reference material. Also, chat rooms, forums and groups could be created to facilitate research discussions to posting research objectives, instruments and findings, that would assist researchers link up with persons of the same research interest for mentorship and innovative collaborations. The librarian, here as an apomediator, should at all times update the group with new arrivals in their respective fields of interest. Learners can also form groups and engage in discussions over a variety of topics. Librarians should coordinate as many groups on the popular social media as possible, so as to link ideas from one group to another. Ultimately, the integration of the forums with the library database will facilitate effective organization and sharing of knowledge.

Availability versus virtual help desk

The constant availability and accessibility characteristics of many social networking media are outstanding feature that ensures timely information and communication round the world. However, the proliferation of these media and other sources of information production and sharing make

little or no use of feedback in communication. This accounts for the data bank of unused information existing in the web. Tracks of issues and challenges in communication and information retrieval are not recorded and, therefore, are lost. Thus, a lot of time is spent in communication and information retrieval process. Feedback in communication cannot be ignored. Information users need some level of assistance and guidance in the information retrieval and usage. In the information business, feedback is a mechanism for organizing resource content based on information needs of the users. Feedback enhances the fidelity of the message. Therefore, librarians should establish an online help desk with a case tracking system that enables patrons to submit a case or search query. This allows help to be assigned to the right users and have their issues checked and resolved in time. This case tracking system helps to centralize patron support queries and keep track of any new and old issues. The librarian should prioritize the most relevant and important queries and collect valuable user feedback that can help in improving information services.

Interconnectivity versus consortium / resource sharing

Resource sharing capability becomes the most convenient means of circulating information among millions of users and institutions. Social media communication allows for interconnectivity with other networking media. It is possible to use one registration to activate accounts on other media. In this era of social media connectivity, Lynch (2000) observed that effective relationships between information providing organizations such as universities and other educational institutions are growing in importance. Libraries also form

consortium for resource transmission of information and resource sharing. Libraries could merge together to form an online alliance to host a page for uniting users with varied information needs. Social media communication such as LinkedIn, blogs, and google+ among others could be utilized in this regard. Librarians can use such media to highlight user's experience, disseminate content, gain prominence in information management, connect with new users, discover media opportunities, identify information opportunities and satisfy user's information need.

Notification and feeds versus selective communication and information

When the major forms of public relation media fail, social media can be used extensively to communicate with the general public. One of the reasons behind such success of social media as Instagram is the ease of use. All the users need to do is to click a photo and post it. The Search and Explore functions are turning the social network into an easy-to-navigate news source. Such media use mainly picture presentation format. Pictures can speak better than text. The main motive of such media is to offer interesting accounts, photos and places to consumers. Librarians could put up captivating posters and advert to showcase their resource content and services. In addition to this, they can use visuals to create and raise awareness about issues and causes, take followers behind the scenes to make a personal connection, and promote events before, after and while they are in progress to entice, create interest and keep tongues wagging for a long time. Features such as hash tag, geo-tagging and tagging people go a long way in increasing user engagement as well.

Bridging communication gaps in research

Earlier models in communication assume a one-way dimension. Researchers in developing countries are restricted or have little access to innovative research findings from developed world due to insufficient funding and poor or lack of internet facility. The library through interlibrary collaboration has continued to bridge the gap in research communication. However, with the reduced physical patronage to the library, librarians could continue to bridge the gap in research communication especially between developed and developing countries through social media. They should offer platforms for online users to find others who share the same interests and build virtual communities based on those shared interests. With the availability of social media technologies and services, content sharing and user interaction between researchers in developing and developed countries would become relatively easy, efficient and effective. For instance, the social networking website was created for researchers of different disciplines. The platform allows for ongoing research project for researchers across the globe to contribute their experience towards a plausible research outcome and for implementation of concluded research findings across cultures.

Information bank

Local content and ideas generated within the library through research and academic activities stored in the institutional repositories serve as information bank for various topics. These resources should be made available to users on the library social platform free of charge. Users can search for content, download and use the content available on these sites free.

The five finger-tip guides for digital librarians

The information business and services can benefit a great deal by using social media optimally. Social media campaigns can become a powerful tool for librarians in formation arsenal. Running a social media campaign, however, is not a menial task because it requires planning, which will help the librarian to devise a potent strategy. Without it, even the most experienced information professional can falter and so at all times, 21st digital librarians should consider five important questions and answer them profitably. These questions are regarded as the five finger-tip guides because it is expected to be at the finger-tip of every digital librarian for embarking on the campaign to utilize social media as the modern-day classroom.

1. Where do we acquire information for users?
2. The digital librarian answers the critical questions regarding the source of information for the social media platform. The source must be an authenticated source of verifiable information. Such places could be open education sources, free resources, and databases among others.
3. How do we start and render digital information services on social media?
4. The digital librarian considers how to go about setting up such platform. In doing this, the librarian must consider the particular social media platform to select, consider the technical know-how needed for whichever platform selected, and also, consider the appropriateness of selected media and their applicability.

5. How do we invite and stay in touch with patrons on social media to maintain patronage?

The librarian should consider the mode of operation of selected social media and different mode of reaching potential users. The librarian should determine the campaign strategy for users whether through the library website, flyers, library patron data/profile and, amongst all, the librarian should strategize on how to sustain the interest of users and commitment to the objectives of the platform.

1. How do we organize what we post on social media platform for users?

After planning, creation, acquiring data, the librarian prior to execution, would require planning the organization of content to be displayed and schedule of dissemination

How can we influence users with information and manage information on social media?

The sole aim of this digital service is to drive attention to academic and research activities using social media. Therefore, in a time of information explosion, people source and get information from numerous verified and unverified information sources. The librarian should make it a point to influence users with the content of what they share to the public. It could be timely, accurate, and educational information to promote societal development.

The questions above require meticulous planning by the digital librarians. Therefore, in order to answer them thoroughly, the librarians need to:

- Plan and state the primary and secondary goals of the campaign.

- Establish an evaluation method and figure out how to measure whether or not the goals have been achieved.
- Select the right platform to run the campaign. When doing so, check for specific rules for running a promotion on it, as a non-compliance can result in the termination of a page.
- Choose from a variety of free and low-cost apps to strengthen the campaigns.
- Before launching the campaign, make a list of the keywords to use in the posts to avoid ambiguity that are associated with social media communication.
- Create a campaign-specific landing page to make it easy for users to reach a specific page on the library website.
- Constantly reviewing the success metrics throughout the campaign and even after its completion.
- Follow up and reach out to patrons with monthly updates, newsletters or mass emails to build a long-lasting relationship.
- Plan constructive means of responding to negative comments.

Conclusion

The ultimate aim of technological innovation is to improve societal growth and development. The exponential growth in technologies of communication offers people more ways to connect, and communicate, and share information. Social media communication makes the sharing of information more efficient and easier to assess that the world can be equated to a virtual college. However, users are using these media communication for other purposes other than proliferation of verified knowledge which is aimed towards

innovative growth and development. This is a cause of concern for librarians, as precursors of information, to strategize and initiate an effective means to keep the use of academic and research outcome thriving. This paper established the usefulness of selected features of popular social media in promoting research activities. To achieve this, librarians constantly need to train and

re-invest in themselves in the information business towards promoting academic activities for sustainable development. The paper also pointed out a five-finger guide for librarians towards investing in themselves as social media information professionals, thereby, harnessing social media features to create a 21st century technologically enabled learning arena.

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