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EXPLORING THE FEATURES OF SOCIAL MEDIA TO PROMOTE RESEARCH ACTIVITIES

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ABSTRACT

Aim/Purpose	This paper, explored features of popular social media in promoting research activities for successful integration of information services on social media platforms.
Background	Leisure, in the early days, was more aligned with reading and research activities and enjoyed a long term monopoly until the advent of Information and Communication Technologies (ICTs). The society milieu is now accentuated with arrays of technological innovations and academic activities are, therefore, relegated to remnant time resulting from application and the use of ICTs. While reading and research are required more now than ever, social media, as components of ICTs, present their distractive features. However, studies have shown that social media could be incorporated to promote and communicate academic and research activities.
Methodology	The paper analytically reviewed empirical literatures on information as obtained from innovative and sustained academic activities, which is a key to research development. The paper also discussed ways academic librarians could adapt and utilize popular social media such as facebook, whatsapp, instagram, badoo, skype, imo, wechat, twitter, blogs, flickr and youtube to provide Library services, Selective Dissemination of Information (SDI), and communicate specialized literature search result, to promote purposeful networking, communication and transfer of information to support teaching and research activities.

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Contribution	The study reviewed the features of 21 st century popular social media, and proffered ways of promoting research and academic culture through the adoption and use of social media platforms by information professionals.
Findings	The paper assessed and listed the potentials of the features of social media as a communication tool in academic and research processes, making it possible for librarians to incorporate the features of these communication tools in the discharge of library services in areas such as reference services, professional collaboration, virtual help desk, consortium/resource sharing, selective communication and information, dissemination of knowledge, and information bank.
Recommendations for Practitioners	The paper, recommends that Librarians, as agents of change, should at all times, flow with the evolving trends in the global information arena - that is to embrace ICT-complaint library services, to redefine information services provision and, ultimately, create technology enhanced learning environment for learners, teachers, and researchers. They should also acquire necessary skills on emerging ICTs to enable them utilize these tools and transform social media into new era classroom.
Recommendation for Researchers	With the exponential growth and use of social media as primary mode of communication, this paper elucidated how librarians could utilize such phenomenon to promote academic culture. Researchers are encouraged to capitalize on this opportunity for effective and timely research communication aimed at bridging the research communication gap between developed and developing nation and ultimately, for solving societal developmental problems.
Impact on Society	The paper explored the features of popular social media that have the potentials that could be harnessed by librarians to create a 21st century technology enhanced learning arena aimed at bridging the research communication gap between developed and developing nations for societal growth.
Future Research	The paper has added to the body of literature to serve as a pivot for researchers with focus on social media and concepts such as learning, research, academic achievement, library services and information profession.
Keywords	social media, communication, networking, librarians, research and academic activities

INTRODUCTION

In the past, reading was taken more as a leisure and educational activity. However, since the evolution of ICT there has been a paradigm shift from print media to social media. This is because social media offer people more convenient and faster ways to seek, acquire, communicate, and share information among people of all works of life. The world has transcended tremendously to a virtual college, enabling one-click connectivity. Indeed, social media has become a vital aspect of our general life and thus, the primary mode of communication. The potentials of social media are consciously being explored world-wide to promote services and productivity. 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 remain relevant.

The exponential growth and acceptance of social media such as facebook, whatsapp, instagram, badoo, skype, imo, wechat, twitter, blogs, flickr, and youtube among others, can no longer be contained as new technologies of communication keep evolving. According to Veil, Buehner, and Palenchar

(2011) social media is at its core of human communication. Librarians, as information specialists, could key in to take advantage of the social media environment to still play and improve the core role of information providers, managers, and marketers. The role of librarians has always been to acquire, subscribe, process, catalogue, preserve, maintain, store information materials (in all formats) for easy access, and to make information available to researchers for the growth and development of the society. The library profession, thus, has evolved from the traditional roles to information packagers and informers.

Librarians are concerned about the decline in academic activities which will lead to decrease in the creation and preservation of knowledge. Therefore, they have remained committed to promoting research activities by embracing communication technologies such as social media to reach users who have less interest in visiting the physical library. The social media, as a tool for communication and information transfer, from all indication, have come to stay and there is no restriction or control on the number and time spent on the use of these wonder tools. There is no doubt that they exert a tremendous negative impact on reading culture. Fayaz (2011) echoed that in the modern era, much reading and academic research is required more than ever. However, every new media 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 societal growth and development. Librarians, as agents of change, should embrace ICT-complaint library services, to redefine information services, and ultimately, create technology enhanced learning environment for learners and researchers to transform social media into the new era classroom. It is based on this perceived rapidly declining academic culture that this paper seeks to propose the invaluable roles librarians can play to utilize the features of these communication media (popular social media) in promoting and communicating research activities.

OBJECTIVE OF THE STUDY

The objective of the study is to harness the features and potentials of the social media to create a technology enhanced learning, teaching and research environment.

LITERATURE REVIEW

The history of social media and networking stretches far deeper than might be envisaged. Although, it looks like a new trend, sites like 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 primitive delivery system would become more widespread and streamlined in future centuries. In 1792, the telegraph was invented, and allowed messages to be delivered over long distances faster than a horse and 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. 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. Primitive forms of email were also developed during this time. By the 70s, 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.

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's 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).

Social media are tools of communication. According to Baruah (2012), they refer to the use of web-based and mobile technologies to turn communication into an interactive dialogue. Social media takes 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 works of life ("Social media," n.d.). Lake (2009) defines the social media as a category of sites that is 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 Simpy, and other sites that are centered on user interaction. Social Media allows private individuals to become sources of information online "sharing opinions, insights, experiences and perspectives with others" (Marken, 2007).

The definition of social media is the use of web-based and mobile technologies to turn communication into an interactive dialogue (people to people or person to person). Social networking, on the other hand, is a social structure with people who are joined by a common interest. Social networking on social media websites involves the use of the internet to connect users with their friends, family and acquaintances. Social media websites are not necessarily about meeting new people online, although this does happen. Instead, they are primarily about connecting with friends, family and acquaintances. The most well-known social media platforms are Facebook, Twitter, Instagram and LinkedIn. These websites allow you to share photos, videos and information, organize events, chat, and play online games. Boyd and Ellison (2008) defined social network sites as "web-based services that allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system" (p. 211).

Social media is used to share and re-share information reaching millions of people without the intervening presence of the journalists. Veil, Buehner, and Palenchar (2011, citing Solis, 2009, p. 24) 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 is at its core of human communication, possessing characteristics of participation, openness, conversation, community, and connectedness (Veil, Buehner, and Palenchar 2011). Behzadan and Kamat (2012) highlighted that recent findings indicated that when properly implemented, social media has a 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 on 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 app serves as a platform for both instant messaging and audio/video calls. It also allows for serving 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 apps (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 Inc. introduced a modified version of the whatsapp app 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 of 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 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 story-line. 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 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 29 August, 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, 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 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 the 21 March, 2006. Although twitter has the feature of personal messaging, it is commonly used for communicating to the public. This involved sending short message 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 company policy, developments and events. In addition to its novelty, the character limit per tweet feature helped to promote focused and clear use of language in tweeting. This made twitter a popular social tool and for mass communication and therefore, be regarded as an effective journalistic tool. People use twitter to reach the 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 tag 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

It is inevitable to ignore the very fact that social media plays an essential role in our daily lives. However, scholars (Chettri & Rout, 2013; Fayaz, 2011; Mokhtari, Delello, & Reichard, 2015) are concerned about the role social media play on academic activities in our generation. It is no surprise that most researches on the problem always found social media exerting negative influence on reading and academic culture. Fayaz (2011) opined that every new media of information and communication has been a threat to man’s interest in reading. He further explained 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. He stressed that those who do read spend a much smaller part of their leisure time doing so, compared with 25 years ago. Ojielo (2001) highlighted that Nigerians prefer listening to stories instead of reading, a practice which accounts for the popularity of home video among the people. Ikpaahindi (2008) rightly observed that information and communication technology especially internet technology (social media) is having adverse effect on the reading culture of Nigerians. This is because it discourages lazy students from engaging in serious reading. Many students prefer to spend most of their time in the cyber cafes, browsing, playing games, or chatting with friends.

Reading is the 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 as a result of the emergence of technology and advent of social media as students that have access to the GSM spend a greater part of their time on it by chatting and 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. Different studies have revealed that 40 per cent of Nigerian adults never finish reading a fiction book from cover to cover after leaving school. And there are other studies which show that about 30 million Nigerians have graduated from secondary schools with poor reading skills, attributing it to the poor habit cultivated during their stay at school. Cornelius Audu, 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" (Adesulu, Adebunayo, & Amos, 2017).

Popoola, Ajibade & Etim (2010) reported that a few of her pre-service teachers never loved to read. She 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 when they are not spending a great deal of time reading and writing. Statistics collected according to Kaufman by the U.S 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 while 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 IN ACADEMIC ACTIVITIES

Over the last few years, it has become apparent that social media has 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. Social media presents various advantages that could be harnessed in the promotion of academic activities because they present even greater opportunities, and broaden the scope of learning beyond the classroom walls through flexible and ease of access to digital resource contents. Social media have impacted not only on people, but also services across institutions, organizations, government and policies, as they devise strategies to engage their audience and win their dependability. Librarians are no 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. This flexibility according to Sharples (2000), 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 potential of communication devices to inspire new forms of learning and engagement. The role of librarians in the academic activities of researchers and students has become increasingly important, through the evaluation of attitudes and perceptions of researchers and learners for meaningful integration and management of social media into teaching and learning environments as a powerful means to achieving improved academic output.

The world is currently in the midst of a social media revolution. It is, therefore, more than 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), the 2017 Digital Global Overview research revealed that approximately 2.56 billion people use social media daily; according to them, this equals 34% of the worldwide population. It, therefore, makes sense for librarians to use it to leverage on making them an integral part of their practice, and offer virtual services such as interlibrary loan, reference service, outreach service, prompt notification of library development, notification of new arrivals/acquisitions, institutional repository update, library orientation and use education, and language translation.

POTENTIALS FEATURES OF SOCIAL MEDIA IN ACADEMIC ENVIRONMENT

Chat and private real-time messaging versus reference service

The instant messaging capability of social media is an important feature that creates effective form of communication for everybody, geographical location notwithstanding. Instant messaging makes updates on projects and general team discussions much easier. This feature creates a virtual college of different people spread across different geographical locations and different time zones. Files can be shared and conversations can be accessed if needed. Reference service is a personalized service provided to library users with direction 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, they could offer those users flooded by the millions of unsorted information with the expertise on verified information from multiple sources in space. Social media account by the library could be created and made 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

The online sharing of information and knowledge feature of social media according to Baruah (2012) promotes the increase in the communication skills among people especially among the learners/students of educational institutions. Online discussion forums are still one of the preferred communication business tools 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, Stiwel, 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. However, the information being shared and re-shared are usually non-professional. In abundance of such information flow, the management of information becomes paramount. Librarians could create professional forums (usually set up and monitored/moderated). This can help in knowledge dissemination to targeted audiences and send them information that they know they will be interested in. They can also help effectively in archiving organizational knowledge to be used by anyone as a reference. Chat rooms, forums and groups could be created to facilitate research discussions to posting research objectives, instruments and findings, to 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 discussion over a variety of topics. Due to personal preference, researchers prefer diverse social media to use. Therefore, librarians should also coordinate as many groups on the popular social media as possible, so as to link ideas from one group to other groups, making sure little is missed. Ultimately, they will facilitate organization and sharing of knowledge. No time will be wasted answering the same questions again and again or reproduction of an already existing knowledge once the forums are integrated with library database.

Availability versus virtual help desk

The constant availability and accessibility characteristics of many social networking media are an 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 bank of used information existing in the web. Tracks of issues and challenges in communication are not recorded and 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 use process. In the information business, feedback is a mechanism for organizing resource content based on information needs of the users. 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 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.

It is important to note that one information user behaviour peculiarity of the contemporary information users is short and catchy. Lengthy details are easily ignored and it can be challenging to get one's message across and ensure that it is thoroughly understood. This explains why in such platforms as twitter, users are limited to 280 characters for every single tweet. However, with such a limit, twitter is particularly great for making announcements to the public about businesses or clients such as the launch of a new product, the winning of an award, an upcoming event, introducing a new brand in a new market, or keeping the public updated during a crisis or an emergency. Instances can be linked with the United States President's use of twitter. Realizing the potentials of social media with short and sweet posts, President Trump used twitter to bypass the media and speak directly to the public and has posted around 36,800 tweets since 2009 (Buncombe, 2018). In one of his tweets on 11:41pm July 1, 2017, he twitted that "my use of social media is not Presidential – it is modern day presidential" (Sampathkumar, 2018). The librarian could exploit such, media using it not just to reach the information users but to control the information flow through this era of information explosion. At all times, response to every query and information posts should be concise.

Interconnectivity versus consortium/resource sharing

Resource sharing capability becomes the most convenient means of circulating information among millions of users and institutions. Social media of communication allows for interconnectivity with other networking media. It is possible to use one registration to activate accounts on other media. 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 of 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 relations media fail, social media can be used extensively to communicate with the general public regarding any situation that might have gripped the nation or any organization. One of the reasons behind such success of social media as Instagram is the ease of use. All 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 uses 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, double-tapping 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 insuf-

efficient funding, 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 concluded researches for implementation of 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 GUIDE 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 in their arsenal. Running a social media campaign, however, is no mean task. It requires planning, which will help the librarian to devise a potent strategy. Without it, even the most experienced information professional can falter. Therefore, at all times, 21st digital librarians should consider five important questions and answer profitably. These questions are regarded as the five finger-tip guide because it is expected to be at the finger-tip of every digital librarian in embarking on the campaign to utilize social media as the modern day classroom.

1. Where do we acquire information for users?
2. How do we start and render digital information services on social media?
3. How do we invite and stay in touch with patrons on social media to maintain patronage?
4. How do we organize what we reveal on social media platform for users?
5. How can we influence users with information and manage information on social media?

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

- Plan and state the primary and secondary goals for the campaign.
- Establish an evaluation method. Figure out how to measure whether or not the goals have been achieved.
- Pick the right platform to run the campaign. When doing so, check for specific rules for running a promotion on it. Non-compliance can result in the termination of a page.
- Choose from among 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 as associated with social media of communication.
- Create a campaign-specific landing page to make it easy for users to reach a specific page on the library website.
- Make sure to keep 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 with patrons.
- 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 of communication makes the share of information more efficient and easy that the world can be equated to a virtual college. However, users are using these media of communication for other purposes other than proliferation of verified knowledge aimed towards innovative growth and development. This is a cause for librarians, as precursors of information, to strategize and initiate an effective means to keep the use of academic and research activities 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 themselves in the information business towards promoting academic activities for sustainable development. Researchers are also encouraged to capitalize on this opportunity for effective and timely research communication aimed at bridging the research communication gap between developed and developing nations, ultimately solving societal and developmental problems. The paper also pointed out a five-finger guide for librarians towards investing themselves as social media information professionals, thereby, harnessing social media features to create a 21st century technology enabled learning arena.

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