

Emerging initiatives in reference and information services in university libraries in South-South, Nigeria

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Abstract

This study explored technologies and initiatives arising from ICT transformation with attendant challenges and how they are being applied to reference and information services in university libraries in South-South, Nigeria. A self-constructed questionnaire was used as instrument of data collection from library reference personnel in twelve university libraries. Frequency counts and percentages were used for analysing the data obtained. Findings revealed that, among other social media, chat-based reference interaction is now the order of the day as most students and clientele prefer using WhatsApp for immediate response than face to face reference interview. Despite the high use of the various kinds of social media by university library personnel in Nigeria, the application of the media for reference services in the libraries was quite low. Though most of the personnel regularly used social media platforms, they did so for reasons other than reference services. The findings identified various kinds of problems inhibiting the use of social media by the staff. Such impediments included: lack of awareness of the various social media and their application to reference services, dogmatism on the part of some library personnel (inability to conform/adapt to changes), infrastructural and technological challenges amongst others. This study has added to the growing number of literatures on social media use in libraries in Nigeria.

Keywords: Chat-based reference, Emerging initiatives, Reference services, Social media, University libraries, WhatsApp, Nigeria

Introduction

Libraries generally have undergone a lot of transformation especially with regard to provision of information resources and services. Reference service has long been thought of as a face-to-face transaction performed by a librarian at a reference desk. In practice, however, this service has little relationship to the desk and in actuality has no boundaries and can be performed in a myriad of locations. Cassell (1999) averred that reference service has been described as human mediation or as the ability to analyze a research question, apply critical thinking skills to the question, and use information resources through knowledge of how information is organized to find the answer. Reference transactions connect resources to the interaction of the user and

the librarian. Cassell (1999) concluded that as librarians have rethought the reference transaction and in some cases divided it into series of transactions, reference service has begun to change.

In the past two decades or so, libraries have become more sophisticated and dependent on new technologies aimed at rendering improved, effective and efficient information services to its clientele. The tertiary institutions' library is described by Kayoma and Okotie (2010) as the symbolic heart or nerve centre of the intellectual system of any institution. The quality of an academic institution is measured by the quality services provided by the library because of its unique contributions in the over-all functions of the institution. University libraries are saddled with the huge

responsibility of providing reference services to their clientele on regular basis. Okoroma (2017) posited that reference service is an important aspect of academic libraries' responsibilities towards fulfilling their goal. Reference service provides a platform for interaction between the clientele and library personnel which determines the future patronage of the library.

The crux of this study was to explore some of the initiatives that have emerged recently via information and communication technology (ICT) that have brought about improvement in delivery of reference and information services. With the aid of ICTs, chat-based reference interaction is now the order of the day as most students and library clients prefer using social networking media for immediate response than face-to-face reference interview. In some university libraries in Nigeria today, some systems librarians are doubling up as de facto reference librarians. They create library forums and add library users on social networking sites and provide reference services to better the lot of the users and promote the image of the library. The reason is that, many reference personnel find it difficult to join the moving ICT train and are thus left behind and out of the scheme of things.

The pro-activeness of librarians attracts users to explore the facilities and services of the libraries. Chow (2012) accordingly stated that as virtual reference services have become solidly established in libraries in recent years, and as online communication has become prevalent in the commercial sphere, we are continually challenged to evaluate new and emerging technologies to determine their potential for enhancing our users' access to, and experience of, our academic libraries; that in the rapidly moving world of the information age, information seeking behaviour is increasingly multi-faceted, on demand, real-time and diverse. Despite the emergence of the internet and

availability of a wide variety of robust search engines that can seek information with increasing speed and accuracy, people are turning to their school, public, and academic libraries more frequently and in larger numbers than ever before.

University libraries play important role in the scholarly communication system. As universities are research-intensive and their libraries' main mandate is to support the teaching, learning and research activities of the parent institutions (Jain, 2012), there are bound to be challenging issues with the use of social media by both the librarians and their patrons. Okoroma (2017) identify challenging issues as attitude of librarians towards use of ICT, lack of training for librarians, among others. Where challenges exist there are also bound to be measures to remedy the situation.

Objectives of the study

It is based on foregoing premise that the general objective of this research is to identify the emerging initiatives in reference and information services in university libraries in South-South, Nigeria, while the specific objectives are to:

- a. identify the types of social media sites that are in use by staff of university libraries in South-South, Nigeria,
- b. ascertain the frequency of visit to the sites by the staff,
- c. determine the level of application of social media in reference service by the staff,
- d. determine the occasion of use of social media for reference services by the librarians,
- e. find out the challenges in the use of the social media for reference service in the libraries and
- f. suggest solutions to the challenges in the use of social media for reference services in the libraries.

Literature review

Social media has permeated every facet and is currently widely used by different categories of people. According to Andreas (2010), social media is a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of user generated content. Social media are computer-mediated tools which allow people to create, share or exchange information, ideas, and pictures/videos in virtual communities and networks. It broadly refers to the many relatively inexpensive and widely accessible electronic tools that enable anyone to publish and access information, collaborate on a common effort, or build relationships (Murthy, 2013).

Social media depend on mobile and web-based technologies to create highly interactive platforms through which individuals and communities share, co-create, discuss, and modify user-generated content. They introduce substantial and pervasive changes to communication between businesses, organizations, communities, and individuals which are the focus of the emerging field of techno self-studies. Internet users continue to spend more time with social media sites than any other type of site (Shah, Vasani & Bhatt, 2015).

The total time spent on social media in the United States across personal computers and mobile devices increased by 99 percent to 121 billion minutes in July 2012 compared to 66 billion minutes in July 2011 (Kietzmann, Kristopher, McCathy & Silvester 2011). This reinforces the need to maximally utilize social media platform for user's services by university library personnel. Tang, Gu and Whinston (2012) asserted that the benefits of participating in social media have gone beyond simply social sharing to building reputation and bringing in career opportunities and monetary

income.

Many social media sites provide specific functionality to help users re-share content. For example, Twitter's re-tweet button, Pinterest pin or Tumblr's reblog function (Murthy, 2013). Aichner and Jacob (2015) noted that social media technologies take on many different forms such as blogs, business networks, enterprise social networks, forums, microblogs, photo sharing, products/services review, social bookmarking, social gaming, social networks, video sharing and virtual worlds. Popular among the social media are: Facebook, MySpace, Wikis, LinkedIn, Twitter, YouTube, Flickr, WhatsApp and Library Thing.

Facebook is the most popular now because it is librarian- friendly, with many applications like JSTOR search, World Cat, and much more. With Facebook librarians can interact with users to know their information need. The Facebook page on the library's web site acts as a portal to the library. Academic libraries use Facebook to market the library and the services available with a library fan page. Libraries advertise opening hours, location, and other information. Libraries also create event invitations for programmes as an additional forum to promote library activities; even a basic Facebook page can serve as a reminder to use the resources available at an academic library (Chu and Meulemans, 2008 & Farkas, 2007).

Blogs provide an avenue for librarians to periodically post messages; share information on a particular subject or issue, and allow users to contribute to content. They can write articles, news on topical issues and expect an instant reaction from their users. Boxen (2008) ascertains that Blogs are web pages that consist of user-supplied content in chronological order. Wikis is a free online encyclopaedia that gives a background knowledge and definition of concepts. It offers a platform for users to access, edit

and contribute to content. This is a collaborative web page for developing web content. Wikis are open web pages that allow approved users to add and alter a page's content (Boxen, 2008). Wikis allow for higher use, participation and collaborative activities. With wikis Academic libraries can create subject links to resources on a chosen topic or for a particular class, including information regarding relevant databases and search tips tailored to that subject (Farkas, 2007).

On the other hand, Farkas (2007) continued that through LinkedIn, librarians can get patrons connected with specialists in their particular field of interest. Librarians can use this platform to render specialized services such as Strategic Dissemination of Information (SDI), while YouTube allows individuals and organizations to post original videos. The site also enables users to embed their videos unto other websites. In similar thought, Murthy (2013) stated that Twitter is a micro blogging application, to keep staff and patrons updated on daily activities, like frequently updated collections. Users can utilize this platform to type in short messages or status update. Librarians can use this platform to give users firsthand information on the ongoing national elections. Users can send Instant Messages (IM), complaints, re-share content or ask questions on a particular issue and get a feedback on the spot using Twitter's re-tweet. Furthermore, in institutions, events such as important highlights of inaugural lectures, conferences and workshops are disseminated via the YouTube. YouTube also allows individuals and organizations to post original videos and to embed their videos onto other web sites.

Andrea (2010) opined that librarians and other library personnel can use Flickr to share and distribute new images of library collections. Cover page of new arrivals of both books and journals can be disseminated to users via WhatsApp. It allows users to post

photographs and to create discussion groups. Academic librarians post photos of the library and its staff to provide a virtual tour of the library itself while simultaneously putting a human face to the building.

Ansari (2016) stated that Information and Communication Technologies (ICTs) have changed life of people. The uses of internet through mobile phones and smart phones increased rapidly. Mobile Instant Messaging (MIM) applications made them connected with each other. These applications are also useful for information generation, information gathering and information dissemination in a timely and cost effective manner. So, libraries have to make an effort to provide their services through mobile phones. WhatsApp is an MIM application which makes people connected in real time. It has no additional cost to message and data exchange among mobile devices. Libraries can use it as a tool for providing enhanced user services over user's Smartphone.

Library Thing as well serves as a tool that enriches the library OPAC. Once an account is created, a list of books with ISBNs is sent to Library Thing which sends back a piece of code which is pasted into the footer of the library OPAC. Librarians can utilize this to send a list of current publications to users. In addition to multimedia web sites, there are also social games that can be used in student outreach. Second Life is an online reality game that allows libraries to set up virtual libraries and to provide library services, particularly reference services. Mathews (2007) states that these digital libraries provide a 3-D environment with the potential to include video tutorials, audio players, subject guides, database and catalogue searching, live assistance, instructional sessions, meeting areas, and other features..

Literature has shown that many academic librarians are advocating for the

use of social web platforms to reach out to their users (Farkas, 2007, Mathews, 2006 and Andrea, 2010). But there are still issues and uncertainty on the full integration of social media in reference services by university library personnel in Nigeria. Andrea (2010) reported the need for quantitative and qualitative research about the use of social networking tools within academic libraries. Andrea and Holley (2010) noted that there are several concerns about the use of social media. Such issues need to be considered by any university library using social networking web sites or considering the implementation of social networking outreach programmes. Andrea (2010) further ascertained that there are very few quantitative studies available about the broad effectiveness of the approach. This makes it extremely difficult to determine if the social networking efforts are worth librarian time in competition with other established outreach methods.

Another issue borders on the library personnel attitude to the use of social media. A lack of librarian support for social networking also risks uneven service levels and upgrading of the sites. Also if only selective liaisons are proactive in social networking to provide subject support, subject-based support may become unequal among disciplines (Andrea, 2010). The study conducted by Amina (2015) revealed that privacy concern is the major challenge librarians encounter in the use of social media for promoting library and information resources and services, other challenges are low level of technology penetration and network problem, lack of awareness and lack of funds.

Methods

Twelve (12) university libraries in South-South, Nigeria were used in this study. Questionnaire was the instrument used for data collection. Survey questionnaire was designed for librarians involved in reference services in university libraries

in South-South, Nigeria. Section A consisted of the respondents bio data, Section B was intended to collect data on the social media that are in use in the university libraries by personnel, frequency of use of the social media for reference services in the libraries, issues on the use of social media in the libraries as well as suggestions on enhancing the use of social media for reference services in the libraries. A total of 60 copies of the questionnaire were distributed to reference librarians at their various institutions. However, 52 copies were completed and returned and found usable, while 8 copies were not completed. Frequency counts and percentages were used to analyze the data obtained

Results

Table 1 shows that the respondents were drawn from two university libraries from each of the six states (Edo, Delta, Bayelsa, Rivers, Akwa-Ibom and Cross River) of the South-South geo-political zone of Nigeria. A total of 52 reference librarians participated in the survey.

Table 2 reveals that 52(96.15%) of the respondents were males as against 2(3.85%) females. This gives an indication that there are more male librarians involved in reference services in the university libraries in South-South, Nigeria.

Table 3 reveals that many 39(75%) out of the 52 respondents were using social networking sites while only 13(25%) respondents were not. That means that social media usage in academic libraries in Nigeria is very high among libraries' personnel.

Table 4 shows that Facebook 6(11.5%), YouTube 3(5.7%), Flickr 3(5.7%), WhatsApp 31(59.6%), Twitter 6(11.5%) LinkedIn 1(1.9%) My Space 4(7.7%), Blog 8(15.4%) and Library Thing 2(3.8%) were the social network sites used by reference librarians for reference services in university libraries in South-South, Nigeria. However, WhatsApp

stands out as the most and frequently used site.

Table 5 indicates that a majority of the respondents, 28(53.9%) use social networking sites on work days only, 9(17.3%) respondents used them two to three days weekly, 2(3.8%) once a week, while 13(25%) don't use social networking sites for reference purposes.

Table 6 shows the occasions social media is used for reference services. The table reveals that 39(75%) respondents used the social media for reference services whenever there arises users query on social networking site. 20(38.5%) of the respondents use the media to target special library clientele, 9(17.3%) of the respondents use the site for library adverts while 31(59.6%) of the respondents use the site proactively for reference services.

Table 7 indicates the level of use of social media in reference services in their library. A t 5(9.6%) respondents affirmed that the rate of using social media to reference services in their library was high, 6 (11.5%) respondents affirmed that there was moderate, 28(53.8%) respondents affirmed that the use was low while 13(25%) respondents affirmed that it was never used at all. Therefore social media use by librarians for reference services in academic libraries in Nigeria is very low when the number of respondents that indicated none use and low use are put together.

Table 8 shows the challenges to the use of social media in the libraries. Item 1

on the table shows that 49(74.9%) respondents agreed that lack of awareness of the various kinds of social media and their application to reference services while 3(5.7%) of the respondents disagreed. Item 2 shows that 52(100%) respondents agreed that lack of/inadequate librarians training on the application of the various kinds of social media to reference service. Item 3 in the table shows that 35 (67.3%) respondents agreed that dogmatism on the part of the librarians is a constraint to the use of social media in the library while 17(36.7%) respondents disagreed, 43(82.7%) respondent agreed that infrastructural problem is a constraint to the use of social media in the library while 9(17.3%) respondents disagreed. Item 5 shows that 40(76.9%) respondents agreed that technical support is a challenge to the use of social media in the library while 12(23.1%) respondents disagreed. Item 6 shows that 21(40.4%) respondents agreed that technophobia is a limitation to the use of social media in the library while 31(59.6%) disagreed. Item 7 shows that 33(63.5%) respondents agreed that lack of access to the internet is a constraint to the use of social media in the library while 19(36.5%) respondents disagreed. Item 8 shows that 52(100%) respondents agreed that inadequate user's education is a constraint to the use of social media in the library. Item 9 shows that 52(100%) respondents agreed that inadequate funding is a constraint to the use of social media in the library.

Table 1: Respondents by libraries

S/ N	University libraries	State	Frequency	Percent
1.	Niger Delta University Library, Amassoma	Bayelsa	3	5.76
2.	Federal University Library, Otuoke	Bayelsa	3	5.76
3.	University of Benin Library, Benin City	Edo	5	9.61
4.	Ambrose Alli University Library , Ekpoma	Edo	4	7.69
5.	University of Science and Technology Library ,Port Harcourt	Rivers	5	9.61
6.	University of Port Harcourt Library, Port Harcourt	Rivers	5	9.61
7.	Delta State University Library, Abraka	Delta	5	9.61
8.	Federal University of Petroleum Resources Library, Effurun	Delta	4	7.69
9.	University of Calabar Library, Calabar	Cross River	5	9.61
10.	Cross River State University of Technology Library, Calabar	Cross River	5	9.61
11.	University of Uyo Library, Uyo	Akwa Ibom	4	7.69
12.	Akwa Ibom State University Library, Uyo	Akwa Ibom	4	7.69
	Total		52	100'00

Table 2: Gender of respondents

Gender	Frequency	Percent
Male	50	96.15
Female	2	3.85
Total	52	100

Table 3: The use of social media by academic libraries' personnel in Nigeria

Item	Option	Frequency	Percent
Do you use social network sites for reference services?	Yes	39	75
	No	13	25
	Total	52	100

Table 4: Social media sites used by the academic library reference personnel

Statement	Network site	Frequency	Percent
Indicate the social network sites you use	Facebook	6	11.5
	YouTube	3	5.7
	Flickr	3	5.7
	WhatsApp	31	59.6
	Twitter	6	11.5
	Linkedin	1	1.9
	My Space	4	7.7
	Blogs	8	15.4
	Library Thing	2	3.8
None	13	25	

Table 5: Frequency of social media sites use

Item	Options	Frequency	Percentage
How frequent do you use the Social Networking site for reference purposes?	Work days only	28	53.9
	Two to three days a week	9	17.3
	Once a week	2	3.8
	None	13	25

Table 6: Occasions social media is used for reference services

Statement	Options	Frequency	Percentage
On what occasion do you use social media for reference services in your library	On users query	39	75
	Special targets	20	38.5
	Library advert	9	17.3
	Proactively	31	59.6

Table 7: Level of application of the social media for reference services

Statement	Options	Freq.	Percentage
Assess the level of application of social media for reference services in your library	High use	5	9.6
	Moderate use	6	11.5
	Low use	28	53.8
	None use	13	25

Table 8: Challenges to the use of social media in the library

Statement	Agree	Disagree	Remarks
1. Lack of awareness of the various kinds of social media and their application to reference services	49(94.2%)	3(5.7%)	Agree
2. Lack of/inadequate training of librarians on application of various social media to reference services	52(100%)	-	Agree
3. Dogmatism on the part of librarians	35(67.3%)	17(36.7%)	Agree
4. Infrastructural problem	43(82.7%)	9(17.3%)	Agree
5. Inadequate technical support	40(76.9%)	12(23.1%)	Agree
6. Technophobia	21(40.4%)	31(59.6%)	Disagree
7. Lack of access to the institution's Internet	33(63.5%)	19(36.5%)	Agree
8. Inadequate user education	52(100%)	-	Agree
9. Inadequate institutional funding	52(100%)	-	Agree

Table 9: Solution to enhance the use of social media for reference services

Statement	Agree	Disagree	Remarks
1. Awareness through seminars/flyers and brochures	52(100%)	0	Accepted
2. Workshops/training for librarians on the use of mass media for reference services	52(100%)	0	Accepted
3. Attitudinal change on the part of librarians	35(67.3%)	17(32.7%)	Accepted
4. Provision of appropriate and adequate infrastructure/internet facilities	52(100%)	0	Accepted
5. Advocacy through interpersonal communication within the academic community	52(100%)	0	Accepted
6. Regular workshop/training on use of social media in reference services and faculties	52(100%)	0	Accepted
7. Regular users' enlightenment campaign	52(100%)	0	Accepted
8. Adequate funding	52(100%)	0	Accepted

Table 9 shows data on suggestions on solution to enhance the use of social media for reference services. The table reveals that 52(100%) of those the respondents agreed that awareness through seminars/flyers and brochure are solution to enhance the use of social media for reference services while none of the respondents disagreed. Item 2 shows that 52(100%) respondents agreed that workshops/training for librarians on the use of social media for reference service is a solution while none of the respondent disagreed. Item 3 shows that 35(67.3%) of the respondents accepted that attitudinal change on the part of librarians is a solution to enhance the use of social media for reference service in the library while only 17(32.7%) respondents disagreed. Item 4 shows that 52(100%) of the respondents agreed that provision of appropriate infrastructure will enhance the use of social media for reference services while none of the respondents disagreed. Item 5 ascertains that 52(100%) respondents agreed that advocacy through interpersonal communication within the academic community will enhance the use of social media for reference services while none of the respondents disagreed. Item 6 shows that 52(100%) respondents

accepted that workshop/training on the use of social media in reference services will enhance the use of social media for reference services. Item 7 shows that 52(100%) respondents accepted that user's education enlightenment will enhance the use of social media for reference service while none of the respondents disagreed. Item 8 shows that 52(100%) respondents accepted that adequate funding will enhance the use of social media for reference services.

Discussion

From the findings, a majority of the academic library personnel in South-South, Nigeria are quite familiar with and do make use of different kinds of social media. The social media platforms used by the librarians are Facebook, Blogs, linkedin, MySpace, Youtube, flickr, library thing, WhatsApp and Twitter. The study revealed that chat-based reference interaction using WhatsApp is highly preferred among reference personnel and clientele as faster response like face-to-face reference interview without voice. Most students of tertiary institutions have and make use of smart phones for so many reasons in today's schooling environment (Adomi, 2006). This would include for reference purpose.

Among the chat-base interfaces, the WhatsApp is easier for them to use as they can easily be added to forums like the library WhatsApp group and one-on-one chatting with a librarian. Ansari (2016) supported this finding that WhatsApp is one of the most interesting mobile instant messaging (MIM) applications today. It is a cross-platform instant messaging application for smart phones. It enables users to send and receive location information, images, video, audio and text messages in real-time to individuals and groups of user at no cost.

In some tertiary institutions like the Niger Delta University, there are a lot of WhatsApp groups of students who in the same academic programme, in the same level of study, departmental, faculty, peers, etc.,. The administrators (Admins) of these groups have added librarians to their group for the purpose of information dissemination. Many of the students do snap cover and other pages of information materials and forward same to other students and even paste on forum pages. Most times they chat with reference librarians to do same with them in real-time. Ansari (2016) also corroborated this fact by saying that WhatsApp is quicker and more immediate when compared to traditional messaging. It delivered messages in very less time. It also transfers multimedia files in less time comparing to other methods.

Majority of the reference personnel only use social for reference services during work days meaning that they would not be of service to users during off duty hours like weekends. This is due to the fact that most of the reference personnel use their personal smart phones, iPads etc, for office duties. It was also revealed that while some reference service personnel would only be of service when users query comes along, some are using social media proactively, by posting on the library forum and the pages of library users in line with their

study aspirations. WhatsApp presently is very conveniently used for immediate response like face-to-face reference interview with and without audio.

Despite the high use of the various kinds of social media by academic libraries' personnel in South-South Nigeria, the application of the media for reference services in Nigerian academic libraries is quite low. Though most of the academic library personnel in Nigeria regularly make use of social media platforms, but they do so for reasons order than reference services. Such reasons include interaction with friends, chatting, games, looks and layout and for business networking. It is acceptable for the library personnel to utilise these platforms for personal interactions, but it is also imperative that the core of their profession which is to attend to the library users should be given utmost priority when using these platforms during the working hours.

The findings identified various kinds of problems inhibiting the use of social media by academic library personnel in Nigeria. Such impediments include: Lack of awareness on the various kinds of social media and their application to reference services, dogmatism on the part of some librarians and library personnel (inability to conform/adapt to changes), infrastructural and technological challenges amongst others. This is in tandem with Amina (2015) and Okoroma (2017) who asserted that, there are non regular trainings to enhance and upgrade the library personnel on the emerging technologies and how to apply them to reference services delivery and other aspects of librarianship. Even where such trainings exist, quite a few staff is usually granted approval for sponsorship due to limited library fund allocation. Also some librarians are still dogmatic in the manner they manage the library, including their approach to reference services, they find it difficult to accommodate the changes and innovation

ICT is bringing to librarianship. All these coupled with inadequate infrastructure and technical issues are hindering the full integration of social media in reference services in Nigerian academic libraries.

Problems require solutions, the study gleaned from the questionnaire administered and analyzed that positive attitudinal change on the part of librarians towards the use of technology in the management of libraries; awareness on the emerging technologies through seminars/flyers and brochure; workshops/training for librarians on the use of social media for reference services; provision of appropriate and adequate infrastructure, internet facilities, and advocacy through interpersonal communication within the academic community, user's enlightenment and adequate funding are of great importance and should be embarked upon for the librarians and library to properly function in this digital information era. The research work of Okoroma (2017) also lent credence to this when it stated that these solutions are very imperative.

Conclusion

Reference service currently involves reaching out to the user rather than the user coming to the library. Academic libraries' personnel in Nigeria have embraced the regular use of social media, but the application of these media in reference services is quite low. There are many tools and techniques through which libraries can easily provide services through mobile technology and there are many individuals and institutions that are using mobile technologies in higher education. WhatsApp is an MIM application which can be used in libraries for delivering various services. It has many features like multimedia sharing, instant message delivery, real-time audio recording conversation and group messaging. The application of WhatsApp can change the nature of library services and it is user friendly also.

To achieve maximum impact of ICT and full integration of the social media in reference services in Nigeria, there is need for regular trainings for the library personnel on the emerging technologies, their relevance to the profession and how to apply them for reference services and other aspects of librarianship.

Since WhatsApp amongst other social networking sites is the most used among the students, the tertiary institutions' libraries should catch in on that and render much needed services to the students during off hours. Libraries should establish an electronic reference service policy to determine the parameters for this kind of service. Since electronic questions can come from anywhere, the libraries must decide whether they will answer all questions received, or only questions from registered users.

Reference

- Adomi, E. E. (2006), Mobile phone usage patterns of library and information science students at Delta State University, Abraka, Nigeria. *Electronic Journal of Academic and Special Librarianship*, 7(1). Retrieved from <http://southernlibrarianship.icaap.org/content/v07n01/adomie01.htm>.
- Aichner, T. & Jacob, F. (2015). Measuring the degree of corporate social media use. *International Journal Of Market Research*, 57 (2), 257–275.
- Amina, B. (2015). Challenges librarians encounter in the use of social medial for promoting library and information resources and services in university libraries in South-South, Nigeria. *International Journal of Humanities and Social Science* 5(6). Retrieved from http://www.ijhssnet.com/journals/Vol_5_No_6_June_2015/25.pdf.
- Andrea, D. & Holley, P. (2010). Social networking in academic libraries:

- The possibilities and the concerns. *New Library World*, 111(11/12), 468 – 479. <http://dx.doi.org/10.1108/03074801011094840>
- Andreas, M., & Michael, H. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53 (1), 61. doi:10.1016/j.bushor.2009.09.003
- Ansari, M. (2016). Using WhatsApp for service providing in libraries and information centres. *ResearchGate*. Retrieved from: https://www.researchgate.net/publication/319187617_Using_WhatsApp_for_Service_providing_in_Libraries_and_Information_Centres.
- Boxen, J. (2008). Library 2.0: A review of the literature. *The Reference Librarian*, 49(1),21-34.
- Cassell, K. (1999). *Developing reference collections and services in an electronic age*. New York: Neal-Schuman Publishers.
- Chow, A. and Croxton, R. (2012). Information seeking behaviour and reference medium preferences: Differences between faculty, staff and students. *Reference & User Services Quarterly*, 51 (3), 246-262.
- Chu, M. & Meulemans, Y. (2008).The problems and potential of MySpace and Facebook usage in academic libraries. *Internet Reference Services Quarterly*, 13. Retrieved from https://www.tandfonline.com/doi/abs/10.1300/J136v13n01_04.
- Farkas, M. (2007). Your stuff, their space. *American Libraries*, 38(11), 36.
- Jain, P. (2012). Promoting open access to research in academic libraries. *Library Philosophy and Practice* 2012 .
- Kayoma, P. and Okotie, P. (2010). Evaluation of the manual card catalogue as an information retrieval device in Edo and Delta Library, Nigeria. *Nigerian Journal of Library, Archival and Information Science, NJLAIS*, 1 (10), 38-43.
- Kietzmann, J., Kristopher, H., McCathy, I. and Silvester, B. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons* 54(3), 241–251. Retrieved 3/3/18 from: <https://www.sciencedirect.com/science/article/pii/S0007681311000061>.
- Mathews, B. (2006). Moving beyond the reference desk: Being where users need us. *The Reference Librarian*, 48 (2) 9-13.
- Mathews, B. (2007). Online social networking. In Courtney, N. (Ed.) (2007) *Library 2.0 and Beyond: Innovative technologies and tomorrow's user*, Libraries Unlimited, Westport, CT, pp. 75-90.
- Murthy, D. (2013). Twitter: Social communication in the Twitter age. Cambridge: *Polity*, 7–8. Retrieved 9/3/19 from: <https://www.goodreads.com/book/show/15931679-twitter>
- Okoroma, F. (2017). Issues and the use of social media in reference services by academic library personnel in Nigeria. *Advances in Social Sciences Research Journal*, 4(12) 187-199. Retrieved from <http://scholarpublishing.org/index.php/ASSRJ/article/download/3285/1923>.
- Shah, A., Vasani, R. & Bhatt, V. (2015). A study on impact of popular social media marketing on people of Gujarat. Retrieved from <http://www.rhimrj.com/admin/upload/Viral%20Bhatt%20Updated.pdf>
- Tang, Q, Gu, B. & Whinston, A. (2012). Content contribution for revenue sharing and reputation in social media: Dynamic Structural Model. *Journal of Management Information Systems* 29: 41–75. Retrieved from: <https://www.tandfonline.com/doi/abs/10.2753/MIS0742-1222290203>.

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Abraham Tabor Etebu and Godwin Obirheri Orumah: Emerging initiatives in reference and information services in university libraries in South-South, Nigeria

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