Deployment Of Social Media Tools For The Enhancement Of Services In Selected Academic Libraries In Nigeria

Bamidele Olawale

University Library Ekiti State University, Nigeria

Adereolu Ojo

University Library Ekiti State University, Nigeria

Abstract

The focus of this research work was to investigate the deployment of social media for the enhancement of services in academic libraries in Nigeria. The study adopted a descriptive survey research design. The population of the study was made up of Students and Librarians from the University of Ibadan, Ekiti State University and the Federal University of Technology, Akure. Data were collected using questionnaire designed to elicit responses from the respondents and analysed using descriptive statistics method of frequency counts and percentages. However, out of the seven hundred and eighty-nine (789) copies of questionnaire distributed, six hundred and fifty-four (654) copies were returned with valid responses, which represent (83%) response rate for the study. Findings revealed that the respondents use social media more for social engagements than promoting library services. In addition, technical/network issues, erratic power supply, low internet speed and lack of ICT skills among other issues are factors inhibiting the use of social media tools in academic libraries in Nigeria. The study recommended that academic libraries should create social media handles, provide regular internet subscriptions and use of alternative sources of power to encourage the use of social media tools to enhance library services in Nigeria.

Keywords: Social Media Use; Social Networking; Service Delivery, Web Services Academic Libraries, Nigeria.

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I. Introduction

The introduction of Information and Communication Technology (ICT) has completely transformed every sphere of the society, and the library is not exempted from this development. This development refers to the transition from the traditional methods of providing library services to the more cutting-edge and sophisticated digital approaches. This progress led to a paradigm shift away from conventional media and modes of interaction, communication, and information sharing and toward a more sophisticated approach utilizing the social media. In terms of its layout and purpose, the library offers services to both people and communities, as well as to those who are doing research across all areas of knowledge, such as students, researchers or online learners who are not enrolled in a traditional classroom(Bamidele and Ogunsakin 2014).

The emergence of the internet and the World Wide Web (WWW) has further revolutionized library operations and services to congregate the increasing needs of its users and consumers. Arif & Mahmood (2012); Ramzan (2004); and Ramzan& Singh (2009, 2010) argued that information technology is the most effective innovation that has changed the way libraries have been acquiring, managing, and spreading information to their users. Notess (2006) described that modern life had been influenced greatly and massively by the internet. Several corporations, like Amazon and Google, uncovered the weaknesses of the services of the library accessible for restricted hours. Owing to the amazing advancement of services which are made possible through the internet, libraries and information centers have to change and perform efficiently to better serve the information needs of modern users. Libraries must use social media tools to survive and thrive in this age of the internet.

In light of the aforementioned context, librarianship can be regarded from two eras: the period prior to the development of information and communication technology and the current digital age. All aspects of library services in the pre-ICT period were, at best, characterized by manual operations. In the past, university libraries were tasked with finding, choosing, acquiring, organizing, preserving, and disseminating information to their community in the shortest amount of time possible. To do this, they relied on time-consuming manual methods for the majority of their operations, including charging and discharging of materials, filing of user's

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cards, keeping statistical records, controlling and maintaining serials, and technical services (Bamidele, O.2015).

However, the introduction of information and communication technology was a welcome development and a solution to the shortcomings of the previous methods of library administration and service provision. In this way, ICT sparked a drastic change and a paradigm shift in how libraries perform their routine services. Social media use in the rendering of library services was purportedly an offshoot of ICTs. Social media use is widespread among students and lecturers in the academic community, who use it to disseminate pertinent information. As an essential partner in their academic endeavours, librarians in academic libraries should make use of this medium to inform their clients and engage with them to determine their information needs. Quadri and Idowu (2016) noted that social media is quickly taking over as the preferred method for librarians to build social and professional networks. In addition to being used to connect with potential library users, social media is also used to extend information services to remote users, particularly those in the academic community. Social media is quickly replacing traditional methods of service delivery in libraries, especially in academic settings.

Objectives of the study

The specific objectives of this study are as follows:

- a. To determine the frequency of social media use in the selected academic libraries.
- b. To identify the purpose of the use of social media in the selected academic libraries.
- c. To determine the social media services rendered by librarians in the selected academic libraries.
- d. To identify the challenges in the use of social media tools in the selected academic libraries.

Research Questions

The following research questions were formulated to guide the study:

- i. What is the frequency of use of social media in the selected academic libraries?
- ii. What is the purpose of use of social media in the selected academic libraries?
- iii. What are the social media services rendered by librarians in the selected academic libraries?
- iv. What are the challenges of use of social media tools in the selected academic libraries?

II. Literature Review

The delivery of services in libraries has evolved from the traditional to the modern in this era of globalization, employing Information and Communication Technology (ICT), one of which is social media. Social networking technologies, according to Ezeani and Eke (2010), are the most suitable Web 2.0 technology for library services. With the use of these tools, librarians will be able to communicate with and get feedbacks from their users. In addition, these systems can allow students to post or upload photos, creating a repository for these images. According to O'Dell (2010), social media gives libraries a creative and successful approach to interact with their users. Kaplan and Haenlein (2010), opined that social media is an offshoot of ICT that consists of a variety of user-driven marketing channels like Facebook, Twitter, Blogs, and WhatsApp and is a group of Internet-based applications that build on the philosophical and technological foundations of Web 2.0. Librarians and users can benefit from each of these platforms in various ways. Lehtinen (2007) discovered that various social media engagement routines are used to recreate the traditional social networks.

As the world entered the era of technological innovations, everything is shifting towards advance digital applications. Every field of human endeavour is opting for the latest trends and technologies to meet day by day changing needs in their professions. This day to day technological advancement also forces libraries to implement new technologies (Arif & Mahmood, 2012). Birdsall (2007) tag Web 2.0 as a social movement. Information centres are also an amalgamation of this bandwagon of "social movement", thus the derivative of web 2.0 technologies in Libraries. This has facilitated the concentration of libraries around the globe as a source for endorsing and expanding their services

Arumugam and Balasubramani (2019) found that library professionals of the age group 31-50 years frequently use Facebook to share the library products and services. Male respondents are using the social media platform enormously for communicating, sending and receiving information to a group of persons. According to Ahmad (2018) social media tools and channels are deployed everywhere since the early 2000s, and it has been growing at exponential rates from last two decades. Quadri and Idowu (2016) noted that social media allow students and information professionals to adopt a new role by placing them in a social realm with their users.

Furthermore, library professionals and students in Nigerian universities as well as all academic libraries have realized the importance of social media such as Facebook, Twitter, YouTube, LinkedIn, Google+ and Skype. Duffy (2015) stated that social media includes blogs, discussion forums, chat rooms, Wikis, WhatsApp, YouTube channels, LinkedIn, Facebook and Twitter. However, unlike traditional media such as newspapers and magazines, social media manages the content of the conversation or interaction in the online

environment which allows for spontaneous two-way and multiple dialogue system. Social media consist of various user-driven channels such as Facebook, Twitter, blogs, etc. and offer one-to-one, one-to-many and many-to-many communication interface. Therefore, Social media can be defined as digital technologies used by people to interact socially and together to create and exchange content.

Kumar and Kumar (2013) in a study on using social networking sites by post graduate students and research scholars of Maharishi Dayanand University, Rohtak, India. The findings of the study show that majority of the respondents are aware and make use of social media for their research work. The study also revealed that Facebook is the most popularly used among the various platforms. The study of Hinchliffe and Leon (2011) mentioned that, to keep pace with evolving information technologies, librarians must use a group of software applications including blogs, wikis and podcasting, media-sharing tools such as YouTube and Flickr, and social networking services such as Twitter and Facebook to market their services and resources with mixed success. Blogs and wikis, as well as social networking and information sharing sites such as Facebook, Flickr and YouTube, create new types of content.

Olajide and Oyeniran (2014) evaluated librarians' understanding of social media and their use based on the aforementioned presumptions. The research found that most of them preferred using social media for personal satisfaction to library services. They conversed, talked, uploaded, asked questions, read blogs, shared photographs, and played games on social media. However, Solis (2010) stated unequivocally that the goals of academic libraries using social media are to advertise library services, improve information access to meet the information needs of users. A survey by Mahmood and Richardson (2011) involved one hundred university libraries affiliated with the Association of Research Libraries. The survey found that Twitter was being used by 85% of the respondents for dissemination of news, announcements, and other library services.

In a similar vein, Mabewazara (2014) looked at how librarians and students in two universities in South Africa and Zimbabwe used social media. The findings indicated that the majority of librarians and students were familiar with a variety of social media platforms such as LinkedIn, Google Chat, Facebook, and WhatsApp. Wikis, Twitter, YouTube, Skype, among other well-known social media platforms. The librarians in one of the institutions, however, were less conversant with several social media technologies, such as FLICKS, linkedin, etc.

Street (2003) looked at how Canadian academic libraries adopted and used social media tools such as Facebook, Twitter, YouTube, and Flickr because they were thought to be the most popular social media platforms in Canada. According to the report, Twitter and Facebook were the two most popular social media platforms among university libraries. Flickr was never utilized, whereas YouTube was the least popular. By using social media, librarians might feel as though they are contributing to the academic endeavors of their community (Szkolar2012), or they can advertise the services and events that their libraries offer. (Taylor and Francis, 2014; Hendrix et al., 2009).

III. Challenges To The Use Of Social Media Tools For Library Services

The useSocial Media in Nigeria libraries is faced with several challenges. According to Ezeani andIgwesi (2012) in their study on the Nigeria experience in using social media for dynamic library service delivery found out that apathy, lack of awareness and phobia militate against use of social media in most libraries especially in developing countries. More so, Ezeani &Igwesi (2012) also found out that insufficient bandwidth and obsolete Internet facilities which they described as 'moribund' are inhibiting factors to using Social Media in libraries. They lamented that it was frustrating, and that most university libraries in Nigeria only subscribed to higher bandwidth during NUC accreditation period.

In addition, erratic power supply hampers the use of technological tools in most developing nations of the world. Although, Nigeria is witnessing a radical change in the power sector; however, power supply in Nigeria is still unstable. Also, Igun (2012) lamented that irregular supply of electricity is common in the Nigeria system. In the same vein, Haliso and Ogungbemi (2014) bemoaned that erratic nature of electric power supply in Nigeria is another problem that confronts academic libraries. This situation adversely affects use of electronic information resources and other Internet-based resources.

Lack of training of staff in the use of computer is also a challenge that hinders effective service delivery in libraries. Most library staff lack skills that are necessary for the adoption and use of social media tools in library services. Ogunsola, *et al.*(2011), study on information literacy in Nigerian higher institutions and role for librarians revealed that lack of qualified electronic librarians, poor communication systems and poor funding are factors militating against social media use in academic libraries.

Inadequate ICT skills of librarians can hinder the use of social media and other electronic resources in libraries and information centres. Technophobia is another challenge affecting the use of social networking tools in academic libraries. Most library staff and users are not willing to embrace this new technology because of fear and are therefore, comfortable with the traditional library services.

IV. Presentation And Discussion OfResults

Below is the comprehensive analysis of data and findings based on the responses received from the respondents through the use of questionnaire. Out of the seven hundred and eighty-nine (789) copies of questionnaire distributed, six hundred and fifty-four (654) copies (83%) were returned with valid responses, while one hundred and thirty five (135) copies (17%) were not returned at all.

Table 1 Distribution of Respondents by Institution and Designation

S/N	Institution	Students	Library Personnel	Total
1	University of Ibadan, Nigeria (UI)	183 (93%)	13 (7%)	196 (30%)
2	Ekiti State University, Nigeria (EKSU)	231 (93%)	18 (7%)	249 (38%)
3	Federal University of Technology Akure, Nigeria (FUTA)	199 (95%)	10 (5%)	209 (32%)
	Total	613 (94%)	41 (6%)	654 (100%)

Table 1 present the findings on the distribution of the respondents by institution and designation 30% of the respondents were fromUI, 38% from EKSU while the remaining 32% were from FUTA. From UI, 93% of the respondents were Students and 7% were Librarians, 93% of the respondents from EKSU were Students and 7% were Librarians, from FUTA, 95% were Students while the remaining 5% were Librarians.

Table 2 Frequency of Use of Social Media

S/N	Frequency of Use	Students	Librarians	Total
1	Used everyday	592 (97%)	39 (95%)	631(96%)
2	Usedonce in a week	101 (16%)	7 (17%)	108(17%)
3	Used fortnightly	52 (8%)	2 (5%)	54(8%)
4	Used monthly	17 (3%)	-	17(3%)
5	Never used	-	-	-

Table 2 present the findings on the frequency of use of social media platforms by the respondents, descriptive statistics was computed and the results reveal that a total of 96% of the respondents used social media every day, 17% used social media platforms once in a week and only 3% of the respondents used the tools once in a month. This is in line with the findings of Duffy (2015) that library professionals and students in Nigerian universities as well as all academic libraries have realized the importance of social media such as Facebook, Twitter, YouTube, LinkedIn, Google, Skype, Discussion forums, Wikis and WhatsApp and therefore used them very frequently. He further noted that social media manages the content of the conversation or interaction in the online environment which allows for spontaneous two-way and multiple dialogue.

Table 3 Purpose of Use of Social Media Tools in Library

S/N	Purpose of use of Social Media	Students	Librarians	Total
1	Sharing library related information	338 (55%)	30 (73%)	368(56%)
2	To keep up with social engagements	499 (81%)	33 (80%)	532(81%)
3	For professional networking	200 (33%)	35 (85%)	235(36%)
4	To increase social accountability	303 (49%)	28 (62%)	331(51%)
5	To get entertained	587 (96%)	32 (78%)	619(95%)
6	Promoting general library services	301 (49%)	36 (88%)	337(52%)
7	Provide quick library updates	354 (58%)	29 (71%)	383(59%)
8	Reference services	107 (17%)	25 (61%)	132(20%)
9	Current Awareness Services (CAS)	289 (47%)	31 (76%)	320(49%)
10	Overdue reminder	67 (11%)	36 (88%)	103(16%)

Table 3 present the findings on the purpose of use of social media platforms, the result of the findings reveal that 56% of the respondents used social media to share library related information, 81% used social media to keep-up social engagement, 36% used them for professional networking, 51% for social accountability, 95% of the respondents used social media for entertainment purposes, 52% for promoting library services and so on. The findings aligns with the position of Olajide and Oyeniran (2014) who evaluated librarians' understanding and use of social media based on the aforementioned presumptions. The research found that most of them preferred using social media for personal satisfaction to library services. They conversed, talked, uploaded, asked questions, read blogs, shared photographs, and played games on social

media. However, Quadri and Idowu (2016) noted that social media allow students and information professionals to adopt a new role by placing them in a social realm with their users.

Table 4 Social Media Platforms U	Used by	Students and	Librarians for	Library Services
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S/N	Social Media Platforms	Students	Librarians	Total
1	Facebook	521 (85%)	33 (80%)	554 (90%)
2	Twitter	498 (81%)	28 (68%)	526 (80%)
3	Instagram	452 (74%)	30 (73%)	572(87%)
4	LinkedIn	380 (62%)	19 (46%)	399(61%)
5	WhatsApp	575 (94%)	34 (83%)	609(93%)
6	YouTube	320 (52%)	23 (56%)	343(52%)
7	Myspace	398 (65%)	27 (66%)	425(65%)
8	Wikis	504 (82%)	19 (46%)	523(80%)
9	Flicker	302 (49%)	18 (46%)	320 (49%)

Table 4 present the findings on the various social media platforms used by the respondents, the result of the findings reveal that 90% of the respondents used Facebook, 80% used Twitter, Instagram users consist of 87%, while 61% of the respondents used LinkedIn, 93% of them used WhatsApp and so on. These findings are in tandem with the position of Mabewazara (2014) in a study of how librarians and students in two universities in South Africa and Zimbabwe used social media. The findings indicated that the majority of librarians and students were familiar with a variety of social media platforms.

Table 5 Challenges of Use of Social Media

S/N	Challenges of Use of Social	Students	Librarians	Total
1	Technical/network issues	485 (79%)	27 (66%)	512(78%)
2	Erratic power supply	559 (91%)	35 (85%)	594(91%)
3	Low Internet speed	506 (83%)	32 (78%)	538(82%)
4	Lack of skills to use these tools	108 (18%)	13 (32%)	121(19%)
5	Financial challenges	588 (96%)	2 (5%)	590(90%)
6	Time constraint	435 (71%)	28 (68%)	463(71%)

Table 5 present the findings on the challenges to the use of social media platforms, the result of the findings reveal that 78% of the respondents noted that technical and network issues constitute barriers to the use of social media, erratic power supply 91%, low internet speed 82%, lack of skills to use the tools 19%, financial challenges 90% and Time constraint accounting for 71% of the respondents respectively. These findings are in consonance with the submission of Haliso&Ogungbemi (2014) who bemoaned the erratic nature of electric power supply in Nigeria as another problem that confronts academic libraries. Also, Ezeani &Igwesi (2012) found out that insufficient bandwidth and obsolete Internet facilities which they described as 'moribund' are inhibiting factors to using Social Media in libraries. They lamented that it was frustrating, and that most university libraries in Nigeria only subscribed to higher bandwidth for accreditation purpose only.

V. ConclusionAnd Recommendations

In this digital age, library users and LIS Professionals have efficient and deep knowledge of the social media tools. This study reveals that the most of the users deploys social media tools such as Facebook, Twitter, and LinkedIn for information sharing. Considering the ease of access to these tools by the users, LIS professional should focus more on updating the information provided via these tools. However, the trend of using social media tools for the marketing of library services suggest the need to educate LIS professionals and users about the importance of social media tools to enhance the visibility of libraries in the digital era. The use of social networking tools enables librarians to identify library patrons in the social cyberspace and pro-actively meet their information needs andprovide opportunity to communicate with them. Social networking tools are not only being used as a vehicle for promoting services, programmes and new resources but they are also used for reference services and real time communication with users. Presently, students are significantly using various social media tools available to them and the results of this study offered a significant insight into the level of use of social media tools for the enhancement of services in the surveyed academic libraries. On the basis of these findings the following recommendations are proposed:

- 1. Academic libraries should create social media handles like Facebook, Twitter, Instagram, Telegram, Tiktok, blogs and so on and assign staff to manage it and make it visible to library users.
- 2. Social media platforms should be deployed in academic libraries to render services like current awareness services, overdue reminder, referral services, display of new arrivals etc. rather than chatting and using them for personal uses.
- 3. Library management should focus on improving internet access and use of alternative sources of power supply so that the library can always connect with its patrons at all times.

4. Library staff should be trained regularly on the use of various web technologies so that they can effectively deploy them for effective service delivery.

References

Ahmad, I. 2018. The history of social media: infographic. Social Media Today. Available at: https://www.socialmediatoday.com/news/the-history-of-social-mediainfographic-1/522285/

Arif, M., and Mahmood, K. 2012. The changing role of librarians in the digital world Adoption of Web 2.0 technologies by Pakistani librarians. Electronic Library, 30(4), 469–479. https://doi.org/10/f39j6v

Arumugam, J. and Balasubramani, R. 2019. Impact of social media tools in promoting the library services in engineering colleges in Tamilnadu. Library Philosophy and Practice (e-journal). 2936. Available at: https://digitalcommons.unl.edu/libphilprac/2936

Bamidele, O and Ogunsakin, A. 2014. Impact of the World Wide Web (www) on the Acquisition, Control and provision of Grey Literature. Fountain of Knowledge Journal of Library and information Science. (FKJOLIS) 4, (1): 26-38

Bamidele, O. 2015. Assessment of Undergraduates' Utilisation of Electronic Resources for Academic Tasks in Universities in Ekiti State, Nigeria. Journal of Library, Educational Media and Information Studies (JOLEMIS). 7, (1): 75-87

Birdsall, W. F. 2007. Web 2.0 as a Social Movement. Webology, 4(2). www.webology.org/2007/v4n2/a40.html Duffy, B.E. 2015. Gendering the labor of social media production. Feminist Media Studies, 15 (4), 710-714. Available: https://doi.org/10.1080/14680777.2015.1053715

Ezeani, C. N; and Eke, H. N. 2011, Transformation of Web 2.0 into Lib 2.0 for Driving Access to Knowledge by Academic Libraries in Nigeria. In the 48th National Conference and Annual General meeting of the Nigerian Library Association Theme: Knowledgemanagement for national development. HEBN Publishers, Ibadan.

Ezeani.C.N. and Iqwesi, U. 2012, Using Social Media for Dynamic Library Service Delivery:
The Nigerian Experience. Available http://digitalcommons.unl.edu/libphilprac/814 Accessed 16th August 2019

Haliso, Y. and Ogungbemi, J.I. 2014. Internet vs Library: Coping strategies for academ librarians in Lagos State, Nigeria. Information and Knowledge. Managemen., 2014, 4(1) 58-64.

Hendrix, D., Chiarella, D., Hasman, L., Murphy, S., and Zafron, M. L. 2009. Use of Facebook in academic health sciences libraries. Journal of the Medical Library Association, 97 (1), 44–47.

Hinchliffe, L.J. and Leon, R. 2011. Innovation as a framework for adopting Web 2.0 Approaches. Marketing Libraries in a Web 2.0 World. In D. Gupta, & R. Savard (Eds.), Proceedings of the 2010 Satellite Preconference of the Mangement and Marketing Section of the International Federation of Library Associations and Organizations (pp. 57-65). De Gruyter.

Igun, S.E. 2010. Gender and librarians' information and communication technology (ICT) utilization access points in Nigerian University Libraries. Delta Library Journal, 4(1&2), 18–21.

Kaplan, A.M. and Haenlein, M. 2010 Users of the world, unite! The challenges and opportunities of Social Media. Business Horizon, 2 (53), 59 - 68

Kumar, Anil and Kumar, Rajinder 2013. Use of social networking sites (SNSs): a study of Maharishi Dayanand University, Rohtak. Library Philosophy and Practice (ejournal). 1000, 1-12. Available at: https://digitalcommons.unl.edu/libphilprac/1000

Lehtinen, V. 2007. Maintaining and extending social networks in IRC galleria, University of Helsinki. Master's Thesis.Department of Social Psychology, Faculty of Social Sciences.

Mabweazara, R. 2014. Use of social media tools by library staff at the University of the Western Cape, South Africa and the National University of Science and Technology, Zimbabwe. University of the Western Cape, A mini thesis submitted in partial fulfilment of the requirements for the Degree of MLIS in the Department of Library and Information Science, University of the Western Cape.

Mahmood, K. and Richardson, J. 2013. Impact of Web 2.0 technologies on US academic libraries: A survey of ARL libraries, The Electronic Library, 31 (4), 508 -520.

O'Dell, S. 2010. Opportunities and obligations for libraries in a social networking age: A survey of Web 2.0 and networking sites. Journal of Library Administration, 50(3), 237–251.

Notess, G. R. 2006. The Terrible Twos: Web 2.0, Library 2.0, and More. Information Today Inc., 30(3).

Olajide, A. and Oyeniran, K. 2014. Knowledge and use of social media among Nigerian librarians. Library Philosophy and Practice (e-journal). 1-16

Ogunsola, L.A.; Akindojutimi, B.F. and Omoike, A.D. 2011. Information literacy in Nigerian higher institutions and role for librarians? Ozean J. of Soc. Sci., 2011, 4(2), 85-92.

Quadri, G.O. and Idowu, O.A. 2016. Social media use by librarians for information dissemination in three federal university libraries in Southwest Nigeria. Journal of Library & Information Services in Distance Learning, 2 (5), 1-11.

Ramzan, M. 2004. Levels of information technology (IT) applications in Muslim world libraries. Electronic Library, 22(3), 274–280. https://doi.org/10/cvk7k3

Ramzan, M., & Singh, D. 2009. Status of information technology applications in Pakistani libraries. The Electronic Library, 27(4), 573–587. https://doi.org/10/dthvj8

Ramzan, M., and Singh, D. 2010. Factors affecting librarians' attitudes toward IT application in libraries. Electronic Library, 28(2), 334–344. https://doi.org/10/d5jh9d

Street, C. (2003). Time-saving tips for social media marketing. Retrieved 13th March,2013 from http://socialmediatoday.com

Solis, B. 2010. Defining Social Media: 2006 – 2010. [Accessed 16th August 2019] Available from World Wide Web: http://www.briansolis.com/2010/01/defining-social-media-the saga continues

Szkolar, D. 2012. Pinterest: A New Social Media Opportunity for Libraries. [Accessed 15th August 2019] Available from World Wide Web: http://infospace.ischool.syr.edu/2012/03/10/pinterest-a-new-social-media-opportunity for libraries

Taylor and Francis 2014. Use of Social Media by the Libraries: Current Practices and Future opportunities. A White paper from Taylor and Francis, available atwww.tandf.co.uk/journals/access/white-papers-social-media.pdf Accessed 16th August 2019