

KNOWLEDGE SHARING PRACTICES AMONG ACADEMIC LIBRARIANS IN NIGERIAN UNIVERSITIES

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Abstract

This study investigated factors that influence academic librarians use of Web 2.0 technologies tools for knowledge-sharing practices in Nigerian universities. The study discussed demographics factors that influence the usage of Web 2.0 technologies, kinds of Web 2.0 technologies used by academic librarians, advantages of using Web 2.0 technologies and challenges that hinder the use of Web 2.0 technologies among academic librarians in Nigerian. A structured questionnaire was administered to 413 academic librarians across federal, state, and private universities. Quantitative data were analysed with descriptive statistics and the results were presented in tables. The findings revealed types of social networking platforms used by academic librarians are (Facebook, Twitter), blogs, wikis, with ($\bar{x}$ =2.50), advantages include increase interaction and communication and promote collaboration and resource sharing (92.9%) the study identified challenges as: intermittent internet connectivity, erratic power supply, Lack of ICT skills, lack of infrastructure, and inadequate training with weighted ($\bar{x}$ =2.44).The study concludes that improving training, upgrading infrastructure, and creating incentives for online collaboration will substantially increase meaningful use of Web 2.0 among Nigerian academic librarians. The paper offers practical recommendations for library managers and university administrators and suggests directions for future research on long-term impacts of Web 2.0 mediated knowledge communities in higher education.

Keywords: Web 2.0, Knowledge sharing, Academic librarians, Demographic factors, Nigeria

Introduction

The ever-increasing recognition of Web 2.0 social networking platforms made it easy and faster for all academic librarians to share knowledge (Zamiri and Esmaeili, 2024) This has significantly enabled all types of libraries to adopt Web 2.0 social networking platforms, as an

approach to, in the first instance, promote their presence within their respective academic societies, and the world at large (Ogbomo and Ijiekhuamhen, 2020). As the concept of an academic library is not a new thing (Chawinga and Zinn, 2016), the issue of Web 2.0 coming into the library is no longer a debate (Olajide and Alao,

2016). The authors noted that Web 2.0 has taken its place in academic libraries for enhanced work operations (Olajide and Alao, 2016). Library 2.0 services are constantly updated and re-evaluated to best serve library users. It also attempts to harness the library user in the design and implementation of library services by encouraging feedback and participation (Kwanya *et al.*, 2009; Zhou, 2022; Tella, 2022 Tripathi and Shukla, 2014).

The rise of Web 2.0 interactive, user-generated platforms such as blogs, wikis, social media, RSS, and collaborative tools has transformed how information is created, exchanged and reused in academic environments. For university libraries, Web 2.0 technologies offer low-cost, scalable channels to disseminate information, support collaborative cataloguing and metadata enhancement, provide interactive reference services, and foster communities of practice among library staff and faculties (Adekunmisi and Olabisi, 2016; Okite-Amughor, 2015). In academic libraries, knowledge sharing (KS) the exchange of professional expertise, tacit and explicit knowledge between colleagues is critical for institutional memory, service innovation, and continuous professional development. Web 2.0 tools are especially well suited to support KS because they lower coordination costs, enable asynchronous collaboration, and create persistent artifacts (e.g., wikis, blog posts, shared bibliographies) that can be re-used by others.

Knowledge sharing is multidisciplinary as it cuts across various disciplines and theories. Varying theoretical models have been propounded for predicting the application of Web 2.0 technologies, with each of these theories having differing determinants of

acceptance (Pandey and Madhusudhan 2024). In Information Science Research, developing a conceptual framework in academic research provides the opportunity for the enhancement of a better understanding of the phenomenon under investigation, and at the same time, increases the validity and provides a better explanation of research outcomes. Using two or more theories in research allows the researcher to use one to complement the other, or better still, use one as a lens to understand the other.

Utilising such Web 2.0 technologies can advance effective knowledge capturing in organisation and facilitate collaboration and learning. It can also encourage sharing tacit knowledge across multidisciplinary teams and encourage the utilisation of knowledge for collaborative problem-solving (Maiga, 2017). Williams (2020), Tella *et al.* (2017), Tella and Soluloku (2016) as well as Tella and Oladapo (2016) examined issues such as the usage of Web 2.0 by librarians, usage and applications of Web 2.0 by libraries, availability of Web 2.0 for library services, and the likes (Isaias *et al.*, 2019; Hassan *et al.*, 2021).

There are various types of Web 2.0 tools used in the library to share knowledge among academic librarians. Web 2.0 tools are grouped according to their categories of use. Some of the famous Web 2.0 tools used in academic libraries are Blogs, Wikis, Really Simple Syndication or Rich Site Summary (RSS), Social Networking Sites (SNSs), Instant Messaging (IM), Tagging, X, Podcast/Vodcast, Social Bookmarking, LinkedIn, YouTube, Flickr, Mashup and many more (Okello-Obura and Ssekitto, 2015). Therefore, emphasis on most commonly used web 2.0 technologies is facebook. Facebook is the most popular

Social Networking site used by millions of people worldwide. It had 2.3 billion active users monthly as at December 2018 (Williams, 2020). It allows interaction and socialisation by adding friends, making comments on posts, joining groups and so on. Libraries can use this site to build relationships with their patrons to know their information needs and also to publicise library events, news, and so on.

To investigate the advantages of using Web 2.0 technologies by librarians, Tella and Soluoku (2016) conducted a study on the usage analysis of Web 2.0 and Library 2.0 tools by librarians in Kwara State academic libraries. The findings of the study revealed that librarians use Web 2.0 and Library 2.0 for the following advantages: publicise information on the web, connect with professional colleagues, publicise their profile on the web, and communicate with friends. Similarly, Adewoyin *et al.* (2017) conducted a study on social media use and service delivery by librarians in federal universities in South-west, Nigeria. The respondents were requested to indicate the extent to which they used social media tools for service delivery in their libraries. The result of the study indicated that more than half of the librarians studied use social media for user orientation followed by information literacy, electronic document delivery, and book reservation, posting of library events, current awareness, overdue reminders and book/serial ordering. Dokhani *et al.* (2017) in their study, also identified five main purposes of Web 2.0 tools in libraries including provision of public news and university and library news, sharing of useful links, provision of a list of books, magazines, databases and other new library sources, creating discussion and chat groups and collaborative and research

works among library users and access to library sites.

However, they did not investigate factors that influence the usage of Web 2.0 technologies for knowledge sharing promotion among academic librarians in Nigerian universities. Furthermore, those studies were self-sponsored research conducted for publication in journals. This current study differs from these previous studies because it is an academic doctoral study that involved a rigorous examination of the use of Web 2.0 tools for knowledge sharing by academic librarians. Similarly, there is limited information in this area. The results from this study are also intended to improve the knowledge-sharing practices in academic libraries in Nigeria. Academic libraries in Nigeria that lack good knowledge-sharing practices may find this study useful in determining the feasibility of implementing knowledge-sharing policies.

Statement of the Problem

Web 2.0 tools have demonstrable potential to enhance internal knowledge sharing and outward service delivery in academic libraries, their integration into everyday professional practice among Nigerian university librarians remains inconsistent. Prior research reports awareness but limited or superficial use (e.g., using social media mainly for announcements), significant infrastructural constraints (slow or unreliable internet), limited training and technical skills, and weak institutional policies to guide use (which can create uncertainty or low managerial support). These issues limit the capacity of libraries to capture tacit knowledge, coordinate service innovations, and support collaborative research activities across departments (studies in Nigeria and

comparable contexts). Consequently, there is a need for a systematic investigation into the factors influencing the use of Web 2.0 technologies for knowledge sharing among academic librarians in Nigerian universities, clarifying which determinants are most influential, how they interact, and what practical measures will improve adoption and sustainable use.

Objectives of the study

The main objective of this study is to examine factors that influence the usage of Web 2.0 technologies for knowledge sharing promotion among academic librarians in Nigerian universities. The specific objectives are to:

- i. establish the demographics factors that influence the usage of Web 2.0 technologies for knowledge sharing promotion among academic librarians in Nigerian universities
- ii. find out the kinds of Web 2.0 technologies used by academic librarians to promote knowledge sharing in Nigerian universities
- iii. examine advantages of using Web 2.0 technologies among academic librarians in Nigerian universities
- iv. find out challenges that hinder the use of Web 2.0 technologies to promote knowledge sharing among academic librarians in Nigerian

Research Questions

The following question guides the conduct of the study

- 1) what are the demographics factors that influence the usage of Web 2.0 technologies for knowledge sharing promotion among academic librarians in Nigerian universities?
- 2) what are the kinds of Web 2.0 technologies used by academic librarians to promote knowledge sharing in Nigerian universities?

- 3) what are advantages of using Web 2.0 technologies among academic librarians in Nigerian universities.
- 4) what are challenges that hinder the use of Web 2.0 technologies to promote knowledge sharing among academic librarians in Nigerian.

Methodology

This study adopted the cross-sectional survey design. The quantitative data were collected using a survey questionnaire. The questionnaire was used to collect data from the academic librarians working in all the 73 federal, 67 state and 159 privately owned university libraries in Nigeria. The population for the study consisted of 1736 academic librarians. Eighteen (18) federal, state and private universities were purposively chosen. They were selected from each of Nigeria's six geopolitical zones. Six (6) out of the first generation established federal, state and private universities were selected from each of the geopolitical zone in Nigeria, the sample size consists of 381 academic librarians working in the selected federal, state and private universities in the geopolitical zones of Nigeria. The instrument for the data collection was questionnaire it was divided into two sections. Section A dealt with demographics information of respondents and section B deals with research questions of the study.

Data collected were analysed statistically using both the descriptive/inferential statistical methods. It presents the findings of the quantitative data collected through a survey questionnaire. The research data were analysed using SPSS software. The analysed data were interpreted and presented using tables, charts and figures.

Presentation of Data Analysis and Results

Distribution of the Respondents by Gender

Table 1: Distribution of the respondents by gender

Gender	Frequency	Percentage
Male	199	52.2
Female	182	47.8
Total	381	100.0

Table 1 shows that 199(52.2%) academic librarians are male, and 182(47.8%) of them are female. This implies that there

are more male academic librarians in the sampled university libraries.

Distribution of the Respondents by Age

Table 2: Distribution of age of the respondents

Age	Frequency	Percentage
20-25 years	20	5.2
26-30 years	55	14.4
31-35 years	54	14.2
36-40 years	61	16.0
41-45 years	61	16.0
46-50 years	71	18.6
51-55 years	43	11.3
56-60 years	11	2.9
61 years and above	5	1.3
Total	381	100.0

It was revealed from table 2 that 20(5.2%) academic librarians are aged 20-25 years, 55(14.4%) of them are aged 26-30 years, 54(14.2%) of them are aged 31-35 years, 61(16.0%) of them are aged 36-40 years as well as 41-45 years, 71(18.6%) of them are aged 46-50 years, 43(11.3%) of them are aged 51-55 years, 11(2.9%) of them are aged 56-60 years, and 5(1.3%) of them are 61 and above years of age. This indicates that there are relatively younger

librarians working in the sampled University Libraries in Nigeria.

Distribution of the Respondents by Category of Institution

The respondents were selected from the Federal, State and privately owned Universities in Nigeria with a total number of 413 questionnaires administered, while 381 of them were completed and used for data analysis. Below is the frequency distribution of the respondents based on their categories of institution.

Table 3: Distribution of the respondents by category of institution

Category of institution	Frequency	Percentage
Federal	252	66.1
State	92	24.1
Private	37	9.7
Total	381	100.0

Table 3 shows that 252(66.1%) academic librarians are from Federal owned institutions, 92(24.1%) of them are from state-owned institutions, and 37(9.7%) of them are from privately owned institutions. This is an indication that the majority of the academic

librarians were employed by Federal universities. This may be attributed to the fact that the federal universities are owned by federal government of Nigeria; hence, funding the university may be easier when compared with the others.

Presentation of Research Questions

Section A: Demographics Factors that Influences the usage of Web 2.0 technologies

RQ1: What are the demographics factors that influence the usage of Web 2.0 technologies for knowledge sharing promotion among academic librarians in Nigerian universities?

Demographics Factors that Influences	Frequency	Percentage
Age	85	22.3
Level of education	119	31.2
Employment status	83	21.8
Professional experience	57	15.0
Gender	37	9.7
Total	381	100.0

Table above shows that 85(22.3%) age of academic librarians had effective sharing of knowledge through the use of Web 2.0 technologies, 119(31.2%) level of education of academic librarians indicated they allow enhancement of information, 83(21.8%) professional qualifications of

academic librarians indicated they allow fast and quick response, 57(15.0%) while employment status indicated they allow flexibility use, and 37(9.7%) gender of academic librarians was able to reach large audience.

Section B: Kinds of Web 2.0 technologies used by Academic Librarians

RQ2: What are the kinds of Web 2.0 technologies used by academic librarians to promote knowledge sharing in Nigerian Universities?

S/N	Type of Web 2.0 technologies	1	2	3	4	$\bar{x}$	S.D.
1	Blogs/Vlogs	145 38.1%	90 23.6%	56 14.7%	90 23.6%	2.24	1.191
2	Instant Message (IM)	64 16.8%	49 12.9%	56 14.7%	212 55.6%	3.09	1.163
3	Podcast	201 52.8%	70 18.4%	52 13.6%	58 15.2%	1.91	1.126
4	RSS feeds	179 47.0%	62 16.3%	39 10.2%	101 26.5%	2.16	1.269
5	Facebook	21 5.5%	45 11.8%	37 9.7%	278 73.0%	3.50	0.905
6	X	47 12.3%	62 16.3%	71 18.6%	201 52.8%	3.12	1.083
7	Pinterest	148 38.8%	76 19.9%	76 19.9%	81 21.3%	2.24	1.177
8	MySpace	158 41.5%	62 16.3%	62 16.3%	99 26.0%	2.27	1.245
9	WhatsApp	15 3.9%	12 3.1%	24 6.3%	330 86.6%	3.76	0.696
10	YouTube	40 10.5%	48 12.6%	60 15.7%	233 61.2%	3.28	1.041
11	Flickr	180 47.2%	91 23.9%	47 12.3%	63 16.5%	1.98	1.123
12	Delicious	195 51.2%	78 20.5%	54 14.2%	54 14.2%	1.91	1.103
13	LinkedIn	102 26.8%	89 23.4%	87 22.8%	103 27.0%	2.50	1.153
14	Skype	122 32.0%	106 27.8%	70 18.4%	83 21.8%	2.30	1.135
15	Folksonomies	218 57.2%	77 20.2%	43 11.3%	43 11.3%	1.77	1.042
16	Mashups	222 58.3%	69 18.1%	35 9.2%	55 14.4%	1.80	1.102
17	Social bookmarking/ tagging	134 35.2%	99 26.0%	63 16.5%	85 22.3%	2.26	1.160
18	Instagram	57 15.0%	56 14.7%	77 20.2%	191 50.1%	3.06	1.117
19	Wikis	145 38.1%	65 17.1%	67 17.6%	104 27.3%	2.34	1.239
Weighted Mean =2.50							

Table showed the kinds of Web 2.0 technologies used to promote knowledge sharing among academic librarians in Nigerian universities. “WhatsApp” ($\bar{x}$ =3.76) was rated highest by the mean score rating as the most frequently used Web 2.0 technology used to promote

knowledge sharing among academic librarians in Nigerian universities, and was followed in succession by “Facebook” ($\bar{x}$ =3.50), “YouTube” ($\bar{x}$ =3.28), “X” ($\bar{x}$ =3.12), “Instant Message (IM)” ($\bar{x}$ =3.09), “Instagram” ($\bar{x}$ =3.06),

and lastly by “LinkedIn” ($\bar{x}=2.50$) respectively. There is no doubt that the academic librarians actually utilized Web

2.0 technology in promoting knowledge sharing among themselves.

Section C: Advantages of using web 2.0 technologies to share knowledge

RQ3: What are the advantages of using Web 2.0 technologies among academic librarians in Nigerian universities?

S/N	Advantages	No	Yes
1	Increase interaction, communication, promote collaboration and resource sharing	27(7.1%)	354(92.9%)
2	Enhance knowledge creation	38(10.0%)	343(90.0%)
3	Ease of use and flexibility	44(11.5%)	337(88.5%)
4	Improve writing and technology skills	72(18.9%)	309(81.1%)
5	Available at any time and place	75(19.7%)	306(80.3%)
6	Variety of media	65(17.1%)	316(82.9%)
7	Can create dynamic learning communities	64(16.8%)	317(83.2%)
8	Everybody is the author and the editor and every edit that has been made can be tracked	106(27.8%)	275(72.2%)
9	User friendly	49(12.9%)	332(87.1%)
10	Provide real-time discussion	71(18.6%)	310(81.4%)
11	Provide a wider access to information and knowledge	39(10.2%)	342(89.8%)
12	Cut the cost of dissemination of information	56(14.7%)	325(85.3%)
13	Facilitate quick and ready access to information	37(9.7%)	344(90.3%)
14	Facilitate seamless communication and feedback loop	67(17.6%)	314(82.4%)
15	Enrich the information services with multimedia experience	54(14.2%)	327(85.8%)

Table shows the advantages of using Web 2.0 technologies to share knowledge among academic librarians. The advantages include increase interaction and communication and promote collaboration and resource sharing; 92.9%, facilitate quick and ready access to information; 90.3%, enhance knowledge creation; 90.0%, provide a wider access to information and knowledge; 89.8%, ease of use and flexibility; 88.5%, user friendly; 87.1%, enrich the information

services with multimedia experience; 85.8%, cut the cost of dissemination of information; 85.3%, create dynamic learning communities; 83.2%, variety of media; 82.9%, facilitate seamless communication and feedback loop; 82.4%, provide real-time discussion; 81.4%, improve writing and technology skills; 81.1%, available at any time and place; 80.3%, everybody is the author and the editor and every edit that has been made can be tracked; 72.2% respectively.

Section D: Challenges that hinder of use Web 2.0 technologies to share knowledge

RQ3: What are Challenges that hinder the use of Web 2.0 technologies to promote knowledge sharing among academic librarians in Nigerian?

s/n	Challenges	1	2	3	$\bar{x}$	S.D.
1	Low level of awareness of Web 2.0 technologies	32 8.4%	151 39.6%	198 52.0%	2.44	0.644
2	Erratic power supply	23 6.0%	78 20.5%	280 73.5%	2.67	0.584
3	Poor internet connectivity	23 6.0%	61 16.0%	297 78.0%	2.72	0.569
4	Lack of ICT skills	29 7.6%	89 23.4%	263 69.0%	2.61	0.625
5	Lack of infrastructure	25 6.6%	103 27.0%	253 66.4%	2.60	0.610
6	Technical constraint	28 7.3%	130 34.1%	223 58.5%	2.51	0.631
7	Restrictive ICT policies in my organisation	64 16.8%	162 42.5%	155 40.7%	2.24	0.720
8	Lack of access to Web 2.0 technologies	72 18.9%	133 34.9%	176 46.2%	2.27	0.760
9	Budget constraint	42 11.0%	107 28.1%	232 60.9%	2.50	0.687
10	Inadequate time	75 19.7%	137 36.0%	169 44.4%	2.25	0.762
11	Lack of management support	57 15.0%	117 30.7%	207 54.3%	2.39	0.734
12	Lack of interest	71 18.6%	122 32.0%	188 49.3%	2.31	0.766
13	Technophobia	61 16.0%	123 32.3%	197 51.7%	2.36	0.742
14	Privacy risks	50 13.1%	160 42.0%	171 44.9%	2.32	0.693
15	Copyright issues	48 12.6%	146 38.3%	187 49.1%	2.36	0.696
16	Inadequate training	30 7.9%	111 29.1%	240 63.0%	2.55	0.637
Weighted Mean =2.44						

Table shows the challenges hampering the use of Web 2.0 technologies for promoting knowledge sharing among academic librarians in Nigerian universities. The main challenges hampering the use of Web 2.0 technologies to promote knowledge sharing among academic librarians are “Poor internet connectivity” ($\bar{x}$ =2.72), “Erratic power supply” ($\bar{x}$ =2.67), “Lack of ICT skills” ($\bar{x}$ =2.61), “Lack of infrastructure” ($\bar{x}$ =2.60), “Inadequate

training” ($\bar{x}$ =2.55), “Technical constraint” ($\bar{x}$ =2.51), “Budget constraint” ($\bar{x}$ =2.50), and “Low level of awareness of Web 2.0 technologies” ($\bar{x}$ =2.44) respectively.

Discussion

The findings of the study revealed age, level of education and employment status are demographics factors influences the usage of web 2.0 for knowledge sharing among academic librarians in Nigerian

universities, age, level of education and job status of academic librarians had effective sharing of knowledge. This aligned with Ibegbulam and Ejikeme (2021) who findings affirmed that the majority of the academic librarians' age, level of education and employment status factors influences the use of Web 2.0 of Nigerian universities.

On the types of Web 2.0 technologies used by academic librarians, the data's analysis result shows that WhatsApp was rated the highest Web 2.0 technologies tool used in promoting knowledge-sharing practices among academic librarians in Nigerian universities closely followed by Facebook. This in agreement with the study by Ogedengbe and Quadri (2020) on social media tools use in sharing and disseminating information in South-West Nigeria. It was revealed that the majority of the respondents used WhatsApp, Facebook on daily basis specifically for promoting knowledge sharing practices among librarians and students.

Based on advantages of use of web2.0 among librarians, the findings revealed that almost all the respondents agreed that increase interaction and communication, promote collaboration and resource sharing are the greatest advantages to knowledge sharing practices, followed by enhance knowledge creation and facilitate quick and ready access to information. This result was in consistent with that of Akparobore (2015) who investigated knowledge sharing among librarians in Nigerian university libraries. It was revealed that the main advantage of sharing knowledge among librarians is to improve workers' skills and knowledge. Similarly, Olayemi and Olayemi (2021) examined knowledge sharing practices among African health science librarians using a cross-sectional survey design and

reported that one of the merits of sharing knowledge is that it enhances research output and promote collaboration among librarians in African health science.

Major challenges revealed by the findings study are: inadequate ICT infrastructure, lack of policies to support Web 2.0, inadequate staff capacity, lack of maintenance culture, lack of power supply, and poor internet connectivity among others. Singh (2018) corroborated the above submission and revealed that lack of internet access, adequate skills, and deficiency of proper time are some of the problems confronting Web 2.0 technologies for knowledge sharing.

Conclusion

The study revealed that the librarian's demographics factors influence the use of Web 2.0 technologies tools that are capable of promoting knowledge sharing practices in libraries. There are some identified hiccups affecting knowledge sharing activities through Web 2.0 technologies as noted by the librarians. It was also established that WhatsApp was rated highest among the types of Web 2.0 technologies that promote knowledge sharing practices among librarians. Meanwhile, Facebook, YouTube, X, Instant Messaging were acknowledged tools responsible for promoting knowledge sharing practices in the libraries. Above all, uninterrupted power supply influences ease of use, while quality equipment and infrastructure enhance ease of use. This could be because these tools are popular to the librarians among the available tools. Poor internet connectivity, erratic power supply, lack of ICT skills, lack of infrastructure, inadequate training and policy, technical problem, low level of awareness of Web 2.0 technologies were

some of the highlighted challenges affecting effective knowledge sharing practices through Web 2.0 technologies.

Recommendations

The following recommendations were surmmised from the findings of the study:

1. The demographics factors facilitate effective knowledge sharing among academic librarians thus, promoting effective service delivery.
2. Universities should recommend the use of various kinds of Web 2.0 technologies tools WhatsApp, Facebook, YouTube, and X to promote knowledge sharing among academic librarians
3. Library management should organise regular training and workshops to improve librarians to developed ICTs needed for web 2.0 skills
4. Universities should provide adequate infrastructure such as: stable internet access, computer and software tools to encourage Web 2.0

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