

# Adoption of Web 2.0 tools for the Promotion of Services and Resources in University Libraries in South-South, Nigeria

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## Abstract

*Rationale of Study* – This study investigated the adoption of Web 2.0 tools to promote library services and resources in university libraries in South-South, Nigeria.

*Methodology* – The study adopted a descriptive survey design. The population of the study was 164 librarians in university libraries that use Web 2.0. These university libraries were identified by physical visit as well as searching their Web 2.0 presence online. The total enumeration sampling technique was used for the study due to the manageable size of the population. Data was collected using questionnaires. Descriptive statistics was used to analyse the data collected.

*Findings* – The study showed that the major Web 2.0 tools used by librarians to promote library services and resources are Facebook, Whatsapp, Instagram and Twitter. LinkedIn, Google+, YouTube, Snapchat, Skype, wikis, and blogs are used minimally. The findings revealed that the services librarians are promoting using the Web 2.0 tools are user education, research help services, reference services, extension and outreach services, selective dissemination of information, announcement, loan services, and book reservation. The challenges affecting the use of Web 2.0 in university libraries include lack of policy on the use of Web 2.0, erratic power supply, and inadequate Internet infrastructure.

*Implications* – The findings of this study can be used by university libraries to develop promotional services using Web 2.0 tools.

*Originality* – This is an original, empirical study conducted in university libraries in South-South Nigeria.

## Keywords

Web 2.0, promotion of services, promotion of library resources, University libraries, South-South, Nigeria

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## 1 Introduction

The mandate of university libraries is to support the university curriculum as well as meet the information resources and service needs of staff and students as a means of facilitating their teaching, learning and research activities in the institutions. The nature of academic programmes in universities determines the type of services the libraries render in relation to the needs of the clients (Urhiewhu, Okeke, & Nwafor, 2015). Ajayi Crowther University Oyo (2012) posited that in order to meet the information needs of their users, libraries render diverse services. These include current awareness services, selective dissemination of information, online reference services, virtual library services, information literacy services, library exhibition and referral services. Similarly, Ekene, Agbo and Onyekweodiri (2016) outlined library services to include reference services, document delivery services, computerised literature search, searching of databases, Internet browsing, current awareness services, selective dissemination of information, reprographic services and inter-library loan.

University libraries acquire a wide range of resources to meet the information and research needs of their patrons. Alaribe (2016) describes library resources as the main sources of information. The author further stresses that traditionally, these resources were mostly books, journals, newspapers, other editorials, and encyclopaedias. The advent of information communication technology has further broadened the scope of university library resources. In the 21<sup>st</sup> Century, university libraries now acquire electronic books and journals to supplement their print resources. Despite the wide range of services and resources available to patrons of university libraries, their level of utilisation remains low. The challenge of low utilisation of library services and resources has prompted librarians to step up their game by employing strategies to promote their services and resources to increase patronage and user satisfaction.

*The Economic Times* (2018) defined promotion as a set of activities which communicate the product, brand or service to the user. Promotion of library services and resources can help to increase users' awareness of what the library holds and how the library can serve them. Dugan (2011) stated that promotion of library services and resources should involve precise means such as the use of Web 2.0 applications.

In spite of the potential benefits of the use of Web 2.0 tools for promoting university library services and resources, the researchers observed from personal visits to some university libraries that their adoption level in Nigeria is still low. To buttress the

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aforementioned assertion, the study by Obasola and Mamudu (2015) established that the integration of Web 2.0 technologies into information service delivery in Nigerian academic libraries is still at its infancy. It was evident from their findings that only a few of the libraries studied have a suitable structure for the implementation and combination of these tools for information services delivery. The situation is not different in other developing nations, as Gichora and Kwanya (2015) posited that academic libraries in Kenya faced countless challenges in their determination to adopt and use Web 2.0 tools effectively. Similarly, Lwoga (2012) noted that in Tanzania there has been a slow start in the use of Web 2.0 tools. She further asserted that the penetration of the tools has yet to reach the levels expected. It has also been observed that the previous studies on the subject focused on awareness of the use of Web 2.0 tools by librarians. This study is focused on the adoption of Web 2.0 to promote library services and resources in university libraries in South-South, Nigeria. This study was undertaken to contribute to filling the gaps in knowledge and serve as a reference to other researchers undertaking similar studies.

The main objective of the study is to examine the adoption of Web 2.0 to promote library services and resources in university libraries in South-South, Nigeria. The specific objectives are to identify the Web 2.0 tools used to promote services and resources in university libraries; determine the services and resources promoted in university libraries using Web 2.0 tools; and evaluate the challenges militating against the adoption of Web 2.0 tools to promote services and resources by university libraries.

## **2 Literature review**

Web 2.0 represents a shift from the passive experience of static read-only web pages to a more interactive Web that enhances collaboration, communication and swift information sharing. Baro, Edewor and Sunday (2014) assessed the awareness and use of Web 2.0 by librarians in university libraries in Africa and discovered that the most frequently adopted Web 2.0 tools by the librarians in university libraries in Africa are Facebook, instant messaging, blogs, Twitter and wikis. Mahmood and Richardson (2011) conducted a study on the acceptance of Web 2.0 in academic libraries in the United States. All the libraries in the study were found to have adopted diverse Web 2.0 tools such as blogs, micro-blogs, Really Simple Syndication (RSS), instant messaging, social networking sites, mashups, podcasts, and vidcasts. The study revealed that wikis, photo sharing, presentation sharing, virtual worlds, customised webpages and vertical search engines

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were used less. Pirshahid, Naghshineh and Fahimnia (2016) studied the use of Web 2.0 in university libraries in East Azerbaijan, Iran. The findings of the study revealed that the respondents widely used blogs and wikis while tools such as social bookmarking, social networks, RSS feeds, instant messaging and digital maps were used less frequently. The study of Awang and Abidin (2013) on Web 2.0 use in academic libraries in Southeast Asia revealed that the order of popularity of Web 2.0 applications deployed on the academic library websites are Facebook, Twitter, RSS and Messenger. Wikis were not widely used. Han and Liu (2010) reported that blogs were the third most common Web 2.0 tool being used with 13 per cent (five out of 38) of Chinese university libraries.

University libraries are swiftly incorporating Web 2.0 tools in meeting their communication, client engagement, and global visibility needs. Muneja and Abungu (2013) carried out a study on the application of Web 2.0 tools in delivering library services in Tanzania. The findings revealed that the selected libraries were using Web 2.0 tools for scholarly communication and promotion of library services 12(66.7%); news and information 10(55.6%); as well as training of users, reference services and professional networking were rated 9(50.0%). Farkas (2007) opined that some academic libraries embed the library catalogue in Facebook to allow students to access the content of the library catalogue without actually visiting the library's web site. Kumar (2013) noted that blogs can be used to disseminate information at a personal level. Links to books, articles, and other library resources can all be shared using blogs. Ekart (2011) explained that using Twitter, libraries not only get feedback about their services but also get valuable information about the library users. This valuable information can be used in planning library resources and services. Vucovich, Gordon, Mitchell and Ennis (2013) pointed out that YouTube can be used successfully in imparting instructions to promote library use. Ngcobo (2016) studied the use of Web 2.0 technologies in academic libraries in South Africa. The findings of the study revealed that YouTube videos were the preferred Web 2.0 tool used to deliver user education (22%). This was followed by Facebook and the library websites.

There are several challenges militating against the adoption and use of Web 2.0 by librarians in university libraries. Arif and Mahmood (2010) studied the adoption of Web 2.0 technologies in Pakistani libraries. Their study revealed that inadequate Internet skills were the main factor militating against the adoption of Web 2.0 technologies in the libraries. Adeyinka and Taofeeqat (2016) carried out a study on usage analysis of Web 2.0 and Library 2.0 tools by academic librarians in Kwara State, Nigeria. The findings of the

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study revealed that the major challenges affecting the adoption of Web 2.0 by the librarians are accessibility, technical-know-how and unstable power supply. Some of the challenges that hamper the effective utilisation and adoption of Web 2.0 tools by librarians are indicated in a study by Baro, Idiodi and Godfrey (2013). They include lack of time, essential skills and facilities. Similarly, the findings of the study by Anunobi and Ogbonna (2012) showed the following challenges: lack of familiarity with Web 2.0 tools, restricted opportunity for use, low skills, as well as lack of essential facilities and interest. The study of Rehman and Shafique (2011) revealed that lack of computer literacy, unavailability of computers and inadequate Internet infrastructure were the main hindrances against the adoption of Web 2.0 technologies in Pakistani libraries. The study of Al-Kharousi, Jabur and Al-Harrasi (2016) revealed that the external factors affecting Web 2.0 implementation are related to lack of policy and low speed of the Internet.

### **3 Methodology**

This study adopted a descriptive survey design of the correlational type. The population for this study was 164 respondents consisting of librarians in 14 university libraries in South-South, Nigeria. Out of the 25 university libraries in South-South, Nigeria, only 14 university libraries had adopted Web 2.0 for their promotional needs at the time of the study. The total enumeration sampling technique, also known as census sampling technique, was adopted for the study because it allows for the study of the entire population. The instrument used for data collection was a questionnaire. Copies of the questionnaire were distributed to the respondents by the researchers through the aid of three research assistants in each of the university libraries sampled in the study. The data obtained from the questionnaire were analysed using descriptive statistics to answer the research questions.

### **4 Results**

The results of the study are presented here. Specifically, the section presents the questionnaire response rate, gender distribution of the respondents, university libraries and the number of respondents that participated in the study, as well as the actual responses to the research questions.

#### **4.1 Questionnaire Response Rate from the University Libraries**

A total of 164 copies of the questionnaire were distributed to the respondents. Of these 137(84%) filled copies were returned. The response rate of 84% is considered adequate

for the study because the standard and acceptable response rate for most studies is 60% (Dulle, Minishi-Majanja & Cloete, 2010).

#### 4.2 Gender distribution of the Respondents

From Table 1, it is evident that more male respondents participated in this study than the female respondents.

Table 1: Gender Distribution of the Respondents

Gender	Frequency	Percentage
Male	82	60%
Female	55	40%
Total	137	100%

#### 4.3 University Libraries and the Number of Respondents

From Table 2, it can be seen that there are more librarians from the Delta State University Library, Abraka that participated in the study because they had the highest number of librarians who participated in the study.

Table 2: University Libraries and the Number of Respondents

Name of Library	No of Respondents	Percentage (%)
Ambrose Alli University Library, Ekpoma, Edo State.	11	8.0
Benson Idahosa University Library, Benin City, Edo State.	12	8.8
Delta State University Library, Abraka, Delta State.	21	15.3
Edo University Library, Iyamho, Edo State.	2	1.5
Federal University Library, Otuoke, Bayelsa State.	10	7.3
Federal University of Petroleum Resources Library, Effurun, Delta State.	6	4.4
Igbinedion University Library, Okada, Edo State.	6	4.4
John Harris Library, University of Benin, Benin City, Edo State.	8	5.8

Rivers State University of Science and Technology Library, Port- Harcourt, Rivers State.	5	3.6
University of Africa Library, Bayelsa, Toru-Orua, Bayelsa State.	5	3.6
University of Calabar Library, Calabar, Cross River State.	11	8.0
Donald Ekong Library, University of Port-Harcourt, Port-Harcourt, Rivers State.	20	14.6
University of Uyo Library, Akwa Ibom State.	16	11.7
Wellspring University Library, Benin City.	4	2.9
Total	137	100.0

#### 4.4 Web 2.0 tools used by university libraries in South-South Nigeria

Table 3 shows the Web 2.0 tools which are currently used by librarians to promote library services and resources in South-South, Nigeria. The main tools are Facebook, Whatsapp, Instagram and Twitter, while LinkedIn, Google+, YouTube, Snapchat, Skype, Wikis, Library Blogs, and WordPress are used minimally.

Table 3: Various Web 2.0 adopted for the Promotion of Services and Resources

Web 2.0	Agree		Disagree	
	No.	%	No.	%
<b>SOCIAL NETWORKING SITES</b>				
Facebook	128	93.4	9	6.6
Whatsapp	124	90.5	13	9.6
Twitter	56	40.9	81	59.1
Instagram	57	41.6	80	58.4
LinkedIn	39	28.5	98	71.5
Google+	45	32.8	92	67.2
<b>VIDEO/ PHOTO SHARING SITES</b>				

YouTube	36	26.3	101	73.7
Snap chat	27	19.7	110	80.3
Skype	39	28.5	98	71.5
<b>WIKI/ BLOGS</b>				
Wikis	37	27	100	73
Library Blogs	41	29.9	96	70.1
Word press	29	21.2	108	78.8

#### 4.5 Library services and resources promoted by university libraries using Web 2.0 tools

Table 4 shows the services and resources librarians are promoting using Web 2.0 tools in their libraries. These are user education, research help services, reference services, extension and outreach services, selective dissemination of information, announcement, loan services, book reservation, journals, books, newspaper, reference materials, academic database and magazines/e-zines.

Table 4: Services and resources promoted in university libraries using Web 2.0 tools

Web 2.0	Agree		Disagree	
	No.	%	No.	%
<b>SERVICES</b>				
User Education	119	86.9	18	13.1
Loan Services	72	52.6	65	47.4
Book Reservation	69	50.4	68	49.6
Announcement	78	56.9	59	43.1
Current Awareness Services for Library Resources	11	8	126	91.9
Selective Dissemination of Information	84	61.3	53	38.7
Reference Services	111	81	26	18.9
Research Help Services	112	81.8	25	18.2
Interlibrary Loan Services	56	40.9	81	59.1



Indexing and Abstracting Services	57	41.6	80	58.4
Extension and Outreach Services	88	64.2	49	35.8
<b>RESOURCES</b>				
Books	127	92.7	10	7.3
Journals	128	93.4	9	6.6
Newspapers	110	80.3	27	19.7
Magazines/ E- Zines	77	56.2	60	43.8
Reference Materials	102	74.5	35	25.5
Geographical Tools	52	38	85	62
Academic Databases	85	62	52	38
Arts works, Architectural Plans, Photographs	42	30.7	95	69.3
Academic Software's	61	44.5	76	55.5

#### 4.6 Challenges affecting the use of Web 2.0 tools in university libraries in South-South Nigeria

Table 5 revealed that the challenges militating against the adoption and use of Web 2.0 tools for promoting library services and resources are no policy on the use of Web 2.0 in the university libraries, erratic power supply, security and privacy issues, poor library policy/regulation, inadequate Internet infrastructure in the libraries, lack of training, unavailability of digital device, time pressure and general lack of interest.

Table 5: Challenges Militating Against the Use of Web 2.0

Web 2.0	Agree		Disagree	
	No.	%	No.	%
No policy on the use of Web 2.0 in my university library	114	83.2	23	16.8
No Internet Facility in my University Library	43	31.4	94	68.6
Bandwidth Issues	104	75.9	33	24.1
Inadequate Time	83	60.6	54	39.4
Unavailability of Digital Devices	88	64.2	49	35.8

Erratic Power Supply	113	82.5	24	17.5
No Interest	78	56.9	59	43.1
Inadequate Training	98	71.5	39	28.5
Poor library Policy/ Regulation	106	77.3	31	22.6
Web 2.0 are too time Consuming	81	59.1	56	40.9
Security and Privacy Issues	109	79.6	28	20.4

## 5 Discussion of the findings

The study was carried out to find out the adoption of Web 2.0 tools to promote library services and resources in university libraries in South-South, Nigeria. The findings of the study revealed that out of the 25 university libraries in South-South, Nigeria, only 14 have adopted Web 2.0 platforms.

The study also found that the Web 2.0 tools majorly adopted by librarians for promotion of library services and resources are Facebook, Whatsapp, Instagram and Twitter, while LinkedIn, Google+, YouTube, Snapchat, Skype, Wikis, Library Blogs, and WordPress are used minimally. This implies that Facebook, WhatsApp, Instagram and Twitter are the major Web 2.0 tools adopted by librarians for promotion of library services and resources. The finding disagrees with the study of Pirshahid, Naghshineh and Fahimnia (2016) which revealed that the respondents widely use Blogs and wikis. The findings also disagree with the study of Mahmood and Richardson (2011) which revealed that the respondents indicated that they use blogs, micro blogs, Really Simple Syndication (RSS), instant messaging, social networking sites, and mashups, among others.

The study shows that librarians are promoting user education, research help services, reference services, extension and outreach services, selective dissemination of information, announcement, loan services, and book reservation, journals, books, newspaper, reference materials, academic database and magazines/e-zines using Web 2.0 tools in their university libraries. The finding disagrees with the study of Muneja and Abungu (2013) which revealed that the respondents were using Web 2.0 mainly for scholarly communication and promotion of library services. The finding agrees with the study of Ngcobo (2016) which revealed that YouTube videos were the preferred Web 2.0 tool used to deliver user education.

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It is evident from the study that a lot of challenges are militating against the adoption of Web 2.0 tools for promotion of services and resources in University Libraries in South-South, Nigeria. The findings revealed that there is no policy on the use of Web 2.0 in university libraries, erratic power supply, security and privacy issues, poor library policy/regulation, no Internet facilities in the libraries, lack of training, unavailability of digital devices, inadequate time, and lack of interest. These challenges militate against the use of Web 2.0 tools to promote library services. The findings disagree with the study by Baro, Idiodi and Godfrey (2013) which indicated that inadequate time, skills and facilities are the major challenges that hamper the effective utilisation of Web 2.0 tools by librarians.

## **6 Conclusion**

The study was carried out to examine the adoption of Web 2.0 tools for the promotion of library services and resources in universities in South-South, Nigeria. The findings show that the main Web 2.0 tools used by librarians in university libraries in South-South, Nigeria to promote services and resources are Facebook, Whatsapp, Instagram and Twitter. The services promoted using the tools are user education, research help services, reference services, extension and outreach services, selective dissemination of information, announcement, loan services, and book reservation. The resources promoted using Web 2.0 tools include journals, books, newspaper, reference materials, academic databases and magazines/e-zines. Challenges that hinder the use of Web 2.0 tools by university libraries in South-South, Nigeria are erratic power supply, security and privacy issues, poor library policy/regulation, inadequate Internet infrastructure, lack of training, and unavailability of digital devices, to mention but a few.

The adoption and usage of Web 2.0 in university libraries can help university libraries to showcase their services, resources, as well as enable swift communication with users if they utilised them effectively.

## **7 Recommendations**

Based on the findings of the study, the following recommendations are hereby made:

1. Training should be organised for librarians in university libraries on the use of Web 2.0 tools.
2. Policies should be formulated that guide and enhance the usage of Web 2.0 tools in university libraries.

3. Adequate Internet infrastructure should be provided in university libraries to enhance the use of Web 2.0 tools.
4. The necessary information communication technology tools necessary for the implementation and usage of Web 2.0 should be acquired and made available early enough in university libraries.

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