

## RESEARCH ARTICLE

# Evaluation of Web 2.0 Use by School Library Personnel in Ibadan, Oyo State, Nigeria

## Ibrahim A. Ayankola

Albert Ilemobade Library, Federal University of Technology, Akure

Received: 12 February 2024 Accepted: 23 February 2024 Published: 20 March 2024

Corresponding Author: Ibrahim A. Ayankola, Albert Ilemobade Library, Federal University of Technology, Akure.

### **Abstract**

The study examined the use of web 2.0 tools and library service delivery in private secondary schools in Ibadan metropolis, Oyo State, Nigeria. It examined the available services in the school libraries, the level of quality of services provided to students, the web 2.0 tools available and the level of web 2.0 tools used by librarians in private secondary schools in Ibadan Oyo State, Nigeria. The study established the relationship between use of Web 2.0 tools and library service delivery. The study adopted the descriptive research design of correlational type and employed a simple random sampling technique. Data were collected within (149) private secondary schools library personnel across (11) local governments in Ibadan. Findings from the study revealed that the availability of library services in private secondary school in Ibadan metropolis was high, the use of web 2.0 tools rated high, web 2.0 increases flexibility of access to other online resources. Furthermore, positive significance relationship was established between use of web 2.0 tools and library service delivery (r=.311, p=.000<.05) in private secondary schools in Ibadan. The study recommended general awareness about web 2.0 tools, adoption and use of web 2.0 tools, provision of funding for acquisition of facilities to support the use of Web 2.0 tools, as well as training of school library personnel on the use of Web 2.0 tools for library service delivery.

**Keywords:** Web 2.0, library Service Delivery, Private Secondary Schools, Ibadan, Oyo State, Nigeria.

## 1. Background

Efficient and effective service delivery is key to the growth, development and survival of every organisation. Usually, service delivery is designed with the aim of meeting the needs of clients and/or customers. It usually involves communication, building strong relationship, identifying problems, providing solutions, sound planning and regular support with the sole aim of ensuring that the goals of organisations are met, which implies that any organisation that does not take quality service delivery seriously is bound to lose client, customer or patrons. In the same manner, the primary objective of every library, particularly school library is to meet the information needs of members of its community and to support the teaching and learning of the school.

To achieve this, the school library media centre offers different services geared towards meeting the information needs of its community of users thereby achieving quality library service delivery

The school library media can be regarded as physical and digital learning space where reading, inquiry, research, thinking, imagination, and creativity are central to student's information-to-knowledge journey and to their personal, social and cultural growth (IFLA, 2015). The library media centre provides a range of services to meet the needs of the learning community or school. Services such as reading and literacy, technology, inquiry and research processes, vibrant literature/reading programmes for academic achievement and personal enjoyment and enrichment, inquiry-based learning and information literacy

**Citation:** Ibrahim A. Ayankola, Evaluation of Web 2.0 Use by School Library Personnel in Ibadan, Oyo State, Nigeria. Research Journal of Library and Information Science. 2024;8(1): 11-22.

©The Author(s) 2024. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

development and collaboration with other libraries (public, government, and community resources). Therefore, a school library is of paramount significance to the learning and teaching activities of any school as it acts as a hub for juvenile intelligence gathering and innovation centre.

Based on the relevance of the library as pointed out by the National Policy on Education (citation needed), it becomes difficult to believe that some secondary schools are established without functional libraries or adequate resources and services. A non-functional library is equal to no library. No quality service delivery can exist where functional school libraries are absent.

In the opinion of Villanueva, Alejandro and Gaan (2023), quality service concerns examining and understanding the gap between the library user's expectation and their perception of having this expectation met. This implies that where there is a gap reduction in users' expectation and actual service provided, it can be said that quality service has been delivered. When the reverse is the case, such a service can be said to be of poor quality. It is therefore important for the school library to offer services that will always meet users' expectations.

The analysis of library service delivery by Madu (2010) and corroborated by Aboyade (2013). It is the duty of a school librarian within and outside available resources to provide answers to users' queries and meet their information needs. According to Dollah (2012), service delivery is about giving of assistance to a user in search of information in a library.

According to (Olanlokun, 2013), quality library service delivery is the ability of a librarian to strive within and outside available resources to provide answers to users' query and to meet the overall information needs of the users.

He further identified certain services that would be pertinent in the provision of quality sources and services delivery in the school library. These services include; user education services including storytelling, book fairs, book talks, word games, creative activities (drawing, painting, etc.) and library skill education which involves instruction and orientation of teachers and students on the use of school library collections.

Adoption of web 2.0 in school libraries is important in improving the quality of library service delivery. An examination into the correlative properties of web 2.0 and library service delivery will expectedly provide insights into how school librarians use web 2.0 to

perform their duties even when working conditions are not favourable. Also, it is hoped that this study will reveal the extent to which library personnel use web 2.0 to meet user's needs. This renders adoption of web 2.0 as a major construct in this research.

However, the 21<sup>st</sup> century library faces a more significant challenge as there are a paradigm shift from the printed pages to digital screens for information and communication (Mullaney, 2013). They include technology integration, innovative services, institutional identity and right-sizing collections (plan for shaping a library's physical collection into one that meets its users' needs (Ward 2015).

Also 21st century library patrons have significantly evolved as Mathews (2011) grouped them into three categories which are: the digital fugitive, which are the patrons that are not digital migrants and have not really accepted digital technology and still prefer the 'good old library' as their source; the digital migrant are the group who did not grow up with digital technology but have absorbed and integrated it into their lives as a necessity; and the digital native, which are the group of users who grew up learning digital technology and have come to depend on it as an integral part of their lives.

Aside the relatively small group of digital fugitives who are not really into technology, majority of library clienteles falls into the younger generation of users. Therefore, libraries must acknowledge and adopt new technology trends like web 2.0 tools and reinvent their services in order to remain relevant in the scheme of things.

Otherwise, users will bypass processes and institutions perceived to be slow, unresponsive, unappealing and irrelevant in favour of a more direct approach to services offered by others that just might be "good enough" for what they need to do. This implies that libraries have to be proactive, to re-strategize and to restructure its mode of service delivery which needs the adoption of web 2.0 tools so as to meet the information needs of their 21st century clienteles (McCallum, 2015).

Another important variable in this study is the use of web 2.0. Although, DeLone and McLean (2021) argued that there is no accurate definition of the use construct, it is considered by some researchers as a measure of the spread of a technology. DeLone and McLean (2003); Urbach and Muller (2011) and Dwevidi et al. (2013) understood it to be the use of an ICT system for daily routine to perform tasks,

while Urbach and Muller 2011 described "use" as the degree and manner in which an information system is employed in a particular task. It is also seen as the extent to which the capabilities of ICT systems are utilized by users in task performance (Makokha, 2011).

Empirical studies have adopted multiple measures of use, including intention to use, frequency of use, self-reported use and actual use (Petter, DeLone and McLean 2008). Although, DeLone and McLean did distinguish between intention to use and system use in their updated model, intention to use is generally an individual level construct Petter, DeLone and McLean 2008.

DeLone and McLean 2003 contend that use and intention to use were alternatives in their model, and that intention to use may be worthwhile in the context of mandatory usage. However, where the use of the system is voluntary, use is regarded as an actual behaviour preferred to "Intention to Use" as a success variable DeLone and McLean 2003 and Makokha 2011. Among the measures that have been used to measure system use are frequency of use, number of accesses, usage pattern, time of use, dependency and voluntariness (Makokha, 2011).

These tools have penetrated all facets of communications including business, social, scholarly, health and many more. Libraries need a communication strategy which is cost effective and convenient both to users and service providers.

Capitalize the importance of integrating web 2.0 systems into library and information services as it supports, promote and extend information services to patrons or user community. Web 2.0 tools can be used to promote services, share information, and engage with users and network with colleagues, on a global scale. In this perspective, librarians and information professionals could not be left behind in utilizing the power of the web in communication.

Also, Social networking sites provide libraries with an effective way of connecting with their patrons. Some of the most common social networking sites include Facebook, Twitter, LinkedIn, Myspace and Pinterest, etc. Also, Podcast is used to provide advice on library skills, searching library catalogues, guidance to use resources, archiving interviews/speeches of heads of institutions and important library guests, publishing users' and librarians' presentations, and providing virtual library orientation tours. Again, Instant Messenger is mainly used as a platform for text and or

video chat through which advice on library services was offered. Most of the libraries which used this tool applied it to solicit and respond to users' queries; provide current awareness services through alerts; specialized dissemination of information; and engage the users on myriad issues affecting their use of the library services and products.

Also, Video Conferencing / Webinar or Web conferencing is used to convene group meetings or live presentations through the internet. A web conference usually features a web version of a PowerPoint presentation and web co-browsing, whereby conference participants see whatever is on the presenter's screen; voice communication, either through a traditional telephone conference, or through voice over internet protocol (VoIP); and text messaging, enabling participants without a microphone to use text chat in place of voice. Libraries have a challenge of providing library services to remote areas due to distance.

This is where conducting tutorials, meetings and workshops via Webinar or web conferencing becomes important since these bring librarians together to share ways of keeping their libraries up-to-date and flourishing. Vodcasting as a step beyond podcasting which adds video to the downloadable sound files podcast listeners are used to.

The videos are online delivered on demand via Atom or RSS attachments. Ideally, a vodcast allows someone to download and watch an episode of a TV program or a video segment whenever and wherever he/she likes, even after the broadcast has been aired. In libraries, vodcasts are used to illustrate recent library programmes and to attract the user community to attend future programmes conducted by the library; Bibliographic Reference Manager is software's for managing bibliographic references.

In particular, they allow one to capture bibliographic information about research materials, create bibliographies, add footnotes, and manage research collections. Some of these tools also make it easy to share references with other researchers. In libraries, they allow rapid and simple creation of a bibliography by importing records from various library catalogues and databases. Good examples are Zotero, RefWorks, CiteULike, and BibMe; Delicious was used for tagging. A tag is a keyword that is added to a digital object to describe it. Users used delicious to tag documents as well as choose and add uncontrolled keywords that allowed them to identify library resources better. Furthermore, the use of Delicious

enabled the users to share their perceptions of the resources thus helping their peers to identify, access, and use relevant resources easily. Delicious was also used to facilitate effective discovery, storage and sharing of digital information sources.

Gichora and Kwanya (2015) carried out a study on impact of web 2.0 tools in libraries in Kenya. Their findings revealed that, using Web 2.0 tools for academic libraries in Kenya was improved awareness of library resources (86%). This impact was achieved through the wide application of RSS by the libraries.

This impact was further augmented by the versatile social connectedness of users and librarians through Web 2.0 tools such as Twitter, LinkedIn and Facebook.

The other no table impact was improved communication among librarians and between librarians and patrons (81%). Web 2.0 has deepened communication amongst library communities due to the fact that the tools are not too formal thus reducing the restrictions associated with traditional communication.

The other impacts of Web 2.0 on academic libraries in Kenya included improved searching and exposure to more information materials (77%); and increased usage of library resources (65%). The other identified impacts included: Increased interest in the library; Enhanced indexing and search relevance; Improved timeliness of information; Increased efficiency and effectiveness of outreach activities; Increased collaboration and customisation of communication; Increased learning and knowledge sharing; Reduced costs of library operations and training.

Web 2.0 tools can be used by librarian to promote essential library services for example; chat reference, tagging, personalised social network media tutorial with interactive databases, blogs or micro-blogs, can be used to go straight to the user with news and up to date information related to new services, materials or service developments.

The presence of web tools on library websites can provide cost effective marketing opportunities for library services and also provide invaluable public service to ask a librarian with the use of instant messaging (IM), the web tools can be used to raise awareness and promote library services by updating users and publish instantly. Web 2.0 tools such as bookmarking tools, collaborative writing, news and blogs, social networking sites (SNS), YouTube, Real Simple Syndicate (RSS), Wikis, Instant Messaging

(IM), and Podcast, video sharing tools and photo imaging are now being used to provide innovative library services and also to present new opportunities for professional collaboration and professional development of librarians (Williams, 2020).

The school libraries in secondary schools should be a place of activities as a result of goal-oriented services organised in conjunction with teacher and the school management. However, it has been observed that poor service delivery, underutilisation of resources, poor record keeping, poor patronage, shortage of reading materials, unavailability of functional libraries and lack of qualified librarians characterized the school library in secondary schools.

Lack of will to organize activities such as debate, authors' day and the underperformance of professional roles such as information acquisition, cataloguing and classification, selective dissemination of information, charging and discharging, have also been observed.

Many of the library services in the secondary schools in Nigeria are delivered manually and the delivery of these services through traditional means have been cumbersome and time-wasting. The operation of library tradition created a restriction between the librarian and library users. The library of 21st century should be able to carry out its services delivery anywhere and at any time without delay. The technical and readers' services which are the core services rendered mostly in libraries should be able to function without the physical library (Tait, Martzoukou and Reid, 2016).

Lack of quality library services delivery in private secondary school library in Ibadan Metropolis has caused libraries to lose some of their patrons. Some library clients are being turned away because of the poor level of library services. Poor quality library service delivery had caused the library patrons to have negative opinion about the library even before visiting the library. A school library with poor library service delivery is bound to lose their clients.

Furthermore, during incidents of pandemic such as the outbreak of Covid 19 in 2020, libraries were considered as public centres and became restricted areas for people especially those seeking information or additional knowledge. Librarians that had not adopted web 2.0 were heavily affected during the Covid 19 pandemic (source?) and thus, they could not enjoy a major benefit of web 2.0 which connects users with physical and electronic information resources regardless of time and physicals pace.

With the use of web 2.0 tools in the library, the gap between client and library staff will be minimal, it is also possible to communicate with the client without seeing each other face to face, materials can be downloaded online by the clients, new library users can be registered without necessarily coming into the library, materials can be charge and discharge between the library users and the library personnel.

The use of web 2.0 tools into the library will improve the quality of library service delivery to library users. Hence, the reason for this study to evaluate use of web 2.0 tools by school library personnel in private secondary school in Ibadan, Oyo State, Nigeria.

The study is, therefore, guided by the following research questions:

- 1. What are the available library services in private secondary schools in Ibadan metropolis, Oyo State, Nigeria?
- 2. What are the types of Web 2.0 tools available in school libraries in private secondary schools in Ibadan metropolis, Oyo State, Nigeria?
- 3. What is the level of Web 2.0 use by school library personnel in private secondary schools in Ibadan metropolis, Oyo State, Nigeria?
- 4. What relationship exists between the use of Web 2.0 tools and library service delivery in private secondary schools in Ibadan metropolis, Oyo State, Nigeria?

#### **Review of Related Literature**

Library services and resources contribute to the learning, academic, research and teaching needs of educational institutions (Terhile and Anthanisus, 2013). For this reason, library patrons would expect that information resources are organised in such a way that will enhance accessibility to fulfil this objective.

This has placed a demand on decision makers in library on how to meet and exceed users' expectations and experience for library information management and service delivery. Fegan (2014) gave some qualities that should be found in the services rendered by library staff: as including, ability to give the users undivided attention individually and with care, willingness to respond to users' question in order to aid library use, efficient knowledge to answer question and direction as well as dependability in handling users service challenges in order to instil confidence in the users, among others. Libraries have transformed drastically from storehouses for books and journals to the powerhouses of knowledge and information.

Over the last decade many potential uses of Web 2.0 technologies in pre-service teacher educational context have been articulated by several researchers and practitioners (Dooly, 2010; Huang &Neuland, 2013; Guth& Helm, 2010). However, in Africa due to its novelty as teaching and learning tool, academic interest in Web 2.0 technologies is only recent and research into its application in teaching and learning environment is somewhat sparse (Okello-Obura, 2015).

For instance, in a survey conducted in four universities in Ghana, Abrokwa (2015) found that about 90% of the student teachers used WhatsApp application extensively for an informal group discussion on assignments, examination questions and exchange of vital information relevant to their courses. However, very few take the opportunity to use them formally for pedagogical purpose.

Dooly (2010) was of the view that when using the term Web 2.0, it is always important to define what it means. Several different definitions of Web 2.0 technologies have been proffered in the last few years by different researchers (O'Reilly, 2005; Paroutis and Al Saleh, 2009). A search of academic literature published between 2004 and 2011 revealed thirty-eight definitions of the term Web 2.0 (Stansfield, et al., 2012). Examples of some of these definitions include that of Paroutis and Al Saleh (2009), O'Reilly (2005) and several others.

Paroutis and Al Saleh (2009) defined Web 2.0 as "a perceived second generation of community-driven web services such as wikis, social networking sites, blogs and others which facilitate a more socially connected web where everyone is able to communicate, participate, collaborate and add to and edit the information space.

O'Reilly (2005) who has been described as the originator of the Web 2.0 identified Web 2.0 in the importance of three aspects of concept including the Web as a shared space for "collective intelligence", more focus on participative and collaborative user experiences, and the notion of the "Web as a platform" for applications, which were formerly found on individual computers (O'Reilly, 2006).

The growing importance of Web 2.0 technologies such as academic wiki in a teacher's educational context, combined with their potential to facilitate communication, support collaboration, and foster the development of community makes them worthy of the attention of both student- teachers and teacher-

educators. Ramanau and Geng (2009) posited that use of Web 2.0 technology such as wiki presents an architecture of participation that enable learners to create their self-regulated, and collaborative work on the web. For instance, Ramanau and Geng (2009) indicated that academic wikis make available a format for asynchronous discussion to take place at the convenience of the users.

With the aforementioned, student-teachers can respond to each other at any place and anytime via wikis, and academic discourses can be tracked by name, subject and time. The newly coined terms such as Learning 2.0, School 2.0, Classroom 2.0, Education 2.0 and Teacher 2.0 clearly shows that the impact of Web 2.0 technologies in education in the last ten years has been substantial. (Dooly, 2010; Guth& Helm, 2010)

A variety of web 2.0 communication tools help to save researchers energy and offer wider channels to communication processes. Librarians can use the internet to communicate, share ideas and offer support for a long time through use of Web 2.0 tools which present opportunity for large scale professional collaboration and cooperation.

Web 2.0 tools are weblogs, wikis, podcasts, RSS feeds, photo-sharing, social bookmarking, instant messaging, social media networks, and so on. Librarians can provide virtual learning environment by online access OPAC and through WEBOPAC that are very useful to users. Librarians need to acquire skills to effectively utilize web 2.0 tools and they have to impart skills for the users to use these tools effectively.

These library services attract the non-visitors of the library also to use library services in their privacy at their various homes. The use of web 2.0 can broaden the walls of the libraries. It allows users to comment, review and re-use information or service with the application of web 2.0 tools. So that librarians can get the feedback from the users without any formal procedures. Thus, the users also can express their views or needs to the librarian without any hesitation or any barrier.

Web 2.0 services currently offered by libraries include bookmarking, user-added reviews/rating/summaries, blogs, wikis, RSS (real simple syndication feeds), podcasts, vidcasts, instant messaging, tagging, social networking sites, streaming audio and video, chat, community photo services, community book services, Twitter, reader's advisory, book lists, and maintaining a virtual library in a second (Life, Tripathi& Kumar, 2010; O'Dell, 2010). Web 2.0 is a next generation of

web services which offers more services in comparison to traditional web. Traditional web has only web sites and search engine-like facilities but web 2.0 is a two-way shared network used in every place. Traditional webs have great effect on libraries, but it seems that the web 2.0 have much more impact on libraries.

It reveals the gaps between the libraries and the users, if the tools of web 2.0 and the existing services of libraries were used together then the libraries succeed to provide better and new services to their users at present scenario. Technologies are the tools through which libraries provide services to their users and satisfy their users' needs, as the time changes technology changes, when technology changes there is change in the form/way/style in the demand of the users. To satisfy the demand of libraries, we have to adopt new technologies. In this era, web 2.0 is needed in libraries.

With web 2.0, the collections of libraries will become virtual collections and libraries become without walls. The traditional library materials read only catalogues will become Amazon style where the users' comments, reviews and feedback will be used for enhancing the catalogues.

The information is viewed as a two-way process where the users search, investigate and participate in the creation and re-mixing of new content. The web 2.0 focuses on users and how to attract them as information consumers, as well as contributors. Webs 2.0 also give a lot of impact on reference services. With the help of web 2.0, library provides web-based reference services in which web 2.0 tools (such as blogs, social network sites, etc.) can be used so that users can meet their information needs without placing limitation.

There are many libraries all over the world which offering services through their blogs and making blogs the most common channel for providing digital reference services. To be successful in modem society, library and information science educators should take advantage of this web 2.0 as a new information and communication technology (ICT) and consider the learning performances of digital natives and digital immigrants. Web 2.0 is participatory, and participation seems to be on the part of end users such as bloggers.

Library use web 2.0 to share information and as a way to encourage feedback from library patrons in order to highlight rendered services or new materials and more about opinions and input from users to collaborate on making their library the best to be reckon with.

## 2. Research Methodology

This study adopted the descriptive research design. The population of the study comprised all school library personnel in the 494 registered private secondary schools spread across the 11 Local Government Areas in Ibadan metropolis, Oyo State, Nigeria. Simple random sampling technique was adopted in selecting 30% of the total population of the private secondary

**Table 1.** Distribution of respondents by gender

schools in each local government area within the metropolis. Thus, a total number of 149 school library personnel in the selected secondary schools in Ibadan metropolis were selected for the study.

Data collected was analysed using descriptive statistics such as, simple frequency counts, percentages, means and standard deviations as well as inferential statistics of Pearson product moment correlation.

Gender	Frequency	Per cent
Male	99	66.4
Female	50	33.6
Total	149	100.0
Age	Frequency	Percent
18-25years	123	82.5
26-35years	26	17.5
Total	149	100.0
Qualification of Respondents	Frequency	Percent
HND, Degree	149	100.0
Total	149	100.0

The background information on gender of respondents shows that there were more males' respondents with response rate of 66.4% than females' 33.6% respondent. The implication of this is that there are more male respondents in the schools surveyed as at the time of this study. Also, the result shows that most of the respondents were between ages 18-25 years

which implies that most of the respondents were within the age bracket of 18-25 years of age. Also, all the respondents are either HND or Degree holders with response rate of 100.0%.

**Research question 1**: What are the available library services in private secondary school libraries in Ibadan Metropolis, Oyo State, Nigeria?

Table 2. Available Library Services in secondary School Libraries

Type of Library Service	Frequency & Percentage (%)	Mean	Std. Deviation
Book fair	YES= 100 NO= 49	1.33	.473
Counselling services	YES= 100 NO= 49	1.33	.473
Loan services	YES= 110 N0= 39	1.27	.444
Current awareness	YES= 110 N0= 39	1.27	.444
Book club	YES= 110 N0= 39	1.27	.444
Study time	YES= 110 N0= 39	1.27	.444
Authors visit	YES= 110 N0= 39	1.27	.444
Reading group time	YES= 110 N0= 39	1.27	.444

Music/game time	YES= 110 N0= 39	1.27	.444
Selective dissemination of information	TTTC 440	1.27	.444
Story time	YES= 110 N0= 39	1.27	.444
Literary debate	YES= 10 N0= 139	1.07	.250
Literacy campaign	YES= 140 NO= 9	1.07	.250
Information Dissemination	YES= 100	1.00	.000
Library use orientation	YES= 100	1.00	.000
Internet services	YES= 100	1.00	.000
References	YES= 100	1.00	.000
Bibliotherapy	YES= 149	1.00	.000
N= 149			

Table 2 presented information on the Available Library Services in secondary School Libraries in Ibadan, Oyo state, Nigeria as it revealed that majority of the respondents affirmed Information dissemination (100%), Library use Orientation (100%), Internet services (100%), References (100%), Bibliotherapy (100%). Current awareness (73.8%), Loan service (73.8%), Book club (73.8%), Study time (73.8%), Authors visit (73.8%), Reading group time (73.8%), Music/game time (73.8%), Selective dissemination of Information (73.8%), Story time (73.8%), are also

utilized. There is a fairly low utilization of Book fair (67.1%), Counselling service (67.1%) as library services available in the selected private secondary schools. Meanwhile, book fair, counselling, loan and current awareness service topped the list of library services available in the selected schools in Ibadan metropolis, Oyo State.

**Research question 2:** What are the types of Web 2.0 tools available in the secondary school libraries in Ibadan Metropolis, Oyo State?

 Table 3. Web 2.0 tools available in the secondary school libraries in Ibadan Metropolis, Oyo State

We	b 2.0 tools	Frequency & Percentage (%)	Mean	Std. Deviation
1	Facebook	YES= 90 (60.4)	1.40	.492
1	1 decoook	N0= 59 (39.6)		
2	Twitter	YES= 80 (54.0)	1.47	.501
	Twitter	N0= 69 (46.0)		
3	LinkedIn	YES= 80 (54.0)	1.47	.501
3	Linkedin	N0= 69 (46.0)		
4	Weblogs	YES= 60 (41.1)	1.60	.492
4	weblogs	N0= 89 (58.9)		
5	YouTube	YES= 80 (54.0)	1.47	.501
3	TouTube	N0= 69 (46.0)		
6	Carala Dasa	YES= 70 (47.0)	1.53	.501
6	Google Docs	N0= 79 (53.0)		
7	W/:1-:-	YES= 80 (54.0)	1.47	.501
7	Wikis	N0= 69 (46.0)		

8	Picasa	N0= 149 (100)	2.00	.000
9	Delicious	N0= 149 (100)	2.00	.000
10	RSS	N0= 149 (100)	2.00	.000
11	Library Thing	YES= 50 (33.6) N0= 99 (66.4)	1.67	.473
12	Slide share	YES= 70 (47.0) N0= 79 (53.0)	1.53	.501
13	Podcasting	YES= 40 (26.9) N0= 109 (73.1)	1.73	.444
14	Others	YES= 20 (13.4) N0= 130 (86.6)	1.87	.341
N= 1	150			

Table 2 presents information on Web 2.0 tools available in the secondary school libraries in Ibadan Metropolis, Oyo State, Nigeria.

The result shows that respondents attested to the availability of; Facebook (60.4%), Twitter (54.0%), LinkedIn (54.0%), YouTube (54.0%), and Wikis (54.0%). It can be deduced from the result that

Facebook, Twitter, LinkedIn, YouTube and Wikis are the only Web 2.0 tools available in school libraries in private secondary schools in Ibadan metropolis, Oyo State, Nigeria.

**Research question 3:** What is the level of web 2.0 use by school library personnel in private secondary schools in Ibadan Metropolis, Oyo State?

**Table 4.** The level of web 2.0 use by school library personnel in secondary school libraries in Ibadan metropolis, Oyo State.

Web 2.0 Use		ngly	Ag	ree	Disagree		Stro	ongly	Mean	SD
	Agree (4)		(3)		(2)		Disagree (1)			
Flexibility	F	%	F	%	F	%	F	%		
The use of web 2.0 can increase flexibility of access to other online resources	50	33.6	99	66.4	-	-	-	-	3.33	.473
Use of Web 2.0 are flexible enough for me to perform library multiple tasks together anywhere	50	33.6	90	60.4	9	6.0	-	-	3.33	7.434
With use of web 2.0 tools I can visit several information Sites at the same time	10	6.7	40	26.7	99	66.6	-	-	2.40	.613
Web 2.0 tools use support flexible delivery of electronic Materials sharing with the library users.	10	6.7	39	26.2	100	67.1	-	-	2.40	.613
Use of Web 2.0 tools cannot enhance access to access to online resources	40	26.9	99	66.4	10	6.7	-	-	3.93	10.222
Web 2.0 tool use supports independent and collaborative library experiences	10	6.7	139	93.3	-	-	-	-	3.07	.250
Weighted Mean = 3.08										
Usefulness										
Using web 2.0 tools will helps me to access relevant information all the time	60	40.3	69	46.3	20	13.4	-	-	3.27	.682
Using web 2.0 tool will enables me to perform library tasks more quickly	10	6.7	129	86.6	10	6.7	-	-	3.00	.366
With web 2.0 tools use I usually cannot access relevant library information	10	6.7	120	80.5	19	12.8	-	-	2.93	.444

Using web 2.0 enhances my effectiveness in carrying out my library work	10	6.7	100	67.1	-	-	39	26.2	2.53	.960
Using web 2.0 tools saves me a lot of more time than using other sources of getting information	20	13.4	89	59.7	-	-	40	26.9	2.60	1.023
Weighted Mean = 2.87										
Learnability										
I understand the features of my web 2.0 tools very well and can use them for sourcing information	10	6.7	139	93.3	-	-	-	-	3.07	.250
I can use the web 2.0 tools to search for any type of information I needed for my users	10	6.7	139	93.3	-	-	-	-	3.07	.250
I always need an experienced person around anytime I use web 2.0 tools	10	6.7	60	40.3	40	26.9	39	26.1	2.27	.932
I do not need the assistance of others to access information on web 2.0 tools	10	6.7	90	60.4	10	6.7	39	26.1	2.47	.960
Learning to operate web 2.0 tools could be difficult	10	6.7	90	60.4	10	6.7	39	26.1	2.47	.960
It is difficult to understand how to find electronic information sources on web 2.0 tools	129	86.6	20	13.4	-	-	-	-	2.87	.341
Weighted Mean = 2.70									•	
Ease of use										
Web 2.0 tools are very easy to use for accessing information	49	32.9	100	67.1	-	-	-	-	3.33	.473
Searching for electronic information on web 2.0 tools is easier than searching for similar information in the physical library	49	32.9	100	67.1	-	-	-	-	3.33	.473
Using web 2.0 tools makes it easy for me to access library and other educational materials	49	32.9	100	67.1	-	-	-	-	3.33	.473
It is easier to read books, share and communicate digital contents on web 2.0 tools	20	13.4	129	86.6	-	-	-	-	3.13	.341
Using web 2.0 tools for library information does not require a lot of mental effort.	10	6.7	139	93.3	-	-	-	-	3.07	.250
It is easy to get web 2.0 tools to search and get information in the library.	10	6.7	129	86.6	10	6.7	-	-	3.00	.366
I do not find it easy to search to get information web 2.0	10	6.7	90	60.4	49	32.9	-	-	2.73	.575
Weighted Mean = 3.13										
weighted Mean = 3.13										

Table 4 presents information on the level of web 2.0 use by school library personnel in private secondary school libraries in Ibadan Metropolis, Oyo State. The result shows that there is high level of Web 2.0 use by school library personnel in private secondary schools in Ibadan metropolis, Oyo State with a response rate of 2.93. Since the grand weighted mean of 2.93 established by the result is greater than the criterion mean of 2.50 set as benchmark, it can be deduced that there is a high level use of Web 2.0 by school library personnel in the selected schools., Ease of Use, Flexibility, Usefulness

and Learnability with mean response rates of 3.13 3.08, 2.87 and 2.70 respectively were indicators that contributed to the high level of Web 2.0 use by the school library personnel in private secondary schools in Ibadan metropolis, Oyo State, Nigeria. Ease of use was found to top the list of the indicators of Web 2.0 use by school library personnel in Ibadan metropolis, Oyo State, Nigeria.

**Research question 4:** What relationship exists between the use of Web 2.0 tools and library service delivery in private secondary schools in Ibadan metropolis, Oyo State, Nigeria?

**Table 5.** The significant relationship between the use of web 2.0 tools and library service delivery in private secondary school libraries in Ibadan Metropolis, Ovo State

Mean	Std. Deviation	N	R P 1		Remark
100.13	19.627	149	K	1	Kemark
51.00	8.654	149			
			.311**	.000	sig.
	100.13	100.13 19.627	100.13 19.627 149	100.13 19.627 149 51.00 8.654 149	100.13 19.627 149 51.00 8.654 149

<sup>\*</sup>Sig. at .05 level

Table 5 presents the result of the relationship between the use of web 2.0 tools and library service delivery in private secondary schools in Ibadan metropolis, Oyo State, Nigeria. The result shows that there was a significant relationship between the use of web 2.0 tools and library service delivery in private secondary schools in Ibadan metropolis, Oyo State, Nigeria (r = .311, p = .000 < .05). This implies that the use of web 2.0 tools increases the level of service delivery by school library personnel in private secondary schools in Ibadan metropolis, Oyo State, Nigeria.

#### 3. Discussion

The study found that majority of the school library personnel in in private secondary schools in Ibadan metropolis, Oyo State, Nigeria are males and within the age range of 18-25 years. Also, school library personnel in private secondary schools in Ibadan metropolis, Oyo State, Nigeria are either HND or Degree holders.

The findings further revealed the availability of library services such as information dissemination, library use orientation, internet services, references, etc, followed by loan services, current awareness, book club, study time, authors visit, reading group time, music/game time, selective dissemination of information and story time in private secondary schools in Ibadan metropolis, Oyo State, Nigeria.

This finding corroborates Mkumbo (2016), Mojapelo (2018) and Adeoye (2022) findings which reported readers' services, user education service, information dissemination, library use orientation, internet services, references, SDI service and current awareness service as major services available in libraries.

Findings from the study also revealed high level of library service delivery by school library personnel in private secondary schools in Ibadan metropolis, Oyo State, Nigeria. The study established Facebook, Twitter, LinkedIn, YouTube and Wikis as the only types of Web 2.0 tools available to school library personnel in private secondary schools in Ibadan metropolis, Oyo State, Nigeria just as a high level of use of Web 2.0 tools by school library personnel was established.

This finding is in line with findings from the studies of Anderson (2007). Ata-ur-Rehman and Shafique (2011), and Buigues-García and Giménez-Chornet (2012) which established Facebook, Instagram, wikis, YouTube, Blogs, and Twitter as commonly used Web 2.0 tools in school libraries. Ease of use, Flexibility, Usefulness and Learnability were identified as key indicators that contributed to the high level of use of Web 2.0 tools by school library personnel in private secondary schools in Ibadan metropolis, Oyo State, Nigeria.

A significant relationship was established between Web 2.0 use and library service delivery by the school library personnel such that increased use of Web 2.0 tools leads to improved library service delivery by the school library personnel. This corroborates the result from the studies of Schneckenberg (2009), Tripathi and Kumar, (2010) and Adesina (2017). The synthesis of the results from the studies established a strong, positive relationship between Web 2.0 tools usage and library service delivery.

## 4. Conclusion

This research work investigated the use of web 2.0 tools and library service delivery by school library personnel in private secondary schools in Ibadan metropolis, Oyo State, Nigeria. The findings showed that there was significant relationship between use of web 2.0 tools and library service delivery by school library personnel in private secondary schools in Ibadan metropolis, Oyo State, Nigeria.

#### 5. Recommendations

Based on the findings of this study, the following recommendations are proffered:

- 1. Awareness should be made about web 2.0 tools for school library personnel in secondary schools
- 2. Web 2.0 tools should be generally adopted and made accessible to school library personnel in secondary schools in Ibadan metropolis
- 3. Fund should be adequately provided to acquire web 2.0 tools (internet, computers, laptops, tablets, e-books, access to online video etc)

4. School library personnel should be trained on how to make use of web 2.0 tools for library service delivery.

#### 6. References

- 1. Aboyade, S. 2013. User education: the quintessence of quality readers services for teacher education libraries in Nigeria. Nigerbiblios ,11.4: 20
- 2. Adebayo, J.O. and Salau, I.T. 2017. Influence of information literacy skills on use of web 2.0 technologies by students in two monotechnics in Oyo State, Nigeria. Library Philosophy and Practice (e-journal).1613. http://digitalcommons.unl.edu/libphilprac/1613
- 3. Adesina, O.S. 2017. Cybercrime and poverty in Nigeria. Canadian Social Science, 13.4: 19-29.
- 4. Anderson P. 2007. What is Web 2.0? Ideas, technologies and implications for education. Available from: http://www.jisc.ac.uk/media/documents/techwatch/tsw0701b.pdf.
- Ata-ur-Rehman and Shafique, F. 2011.Use of web 2.0 and its implications for libraries: Perceptions of information professionals in Pakistan. Retrieved from http://unllib.unl.edu/LPP/
- 6. Buigues-García, M. and Giménez-Chornet, V. 2012 "Impact of Web 2.0 on national libraries", International Journal of Information Management, vol. 32, no. 1, pp. 3-10.
- 7. Burhansab, P.A., Batcha, M.S. and Ahmad, M. 2020. Impact of web 2.0 technologies on academic libraries: a survey on affiliated colleges of Solapur University. Library Philosophy and Practice (e-journal). 4587. https://digitalcommons.unl.edu/libphilprac/4587
- 8. Dooly, M. 2010. Teacher 2.0.inGuth, S. and Helm, F. 2010. Telecollaboration 2.0 language.Literacies and intercultural learning in the 21st century. Telecollaboration in Education (eds).
- 9. Guth, S. and Helm, F. 2010.Telecollaboration 2.0 language.Literacies and intercultural learning in the 21<sup>st</sup> century.Telecollaboration in Education (eds).
- 10. IFLA, 2015.International Federation of Library Associations and Institutions.IFLA School Library Guidelines (2<sup>nd</sup>rev.ed.).Netherland:IFLA
- 11. Madu, E.C. 2010. Reference services in libraries and information centres in the 21<sup>st</sup> century. In: E.C. Madu and Ezeani, C.N (eds.). Modern Library and Information Science for Information Professionals in Africa. Ibadan: Textlinks Publishers, 47-77.
- 12. Mkumbo, W. C. 2016. The role of school libraries in realizing the achievement of inclusive and equitable quality education in Tanzania: SDGs by 2030. International Research: Journal of Library & Information Science, 6(2), 184-190.

- 13. Mojapelo, S. 2018. Challenges in establishing and maintaining functional school libraries: lessons from Limpopo province, South Africa. Journal of Librarianship and Information Science: 1-17. http://www.lis.sagepub.com
- 14. Oden, A.N. and Owolabi, R.O. 2021.Staff attitude and service delivery in university libraries in Ogun State, Nigeria.Journal of Information and Knowledge Management, 12.2: 17-29. https://dx.doi.org/10.4314/iijikm.v12i2.2
- 15. Okello-Obura, C. and Ssekitto, F. 2015.Web 2.0 technologies application in teaching and learning by Makerere University academic staff.Library Philosophy and Practice (e-journal). http://digitalcommons.uni.edu/libphilprac/1248.
- 16. O'Reilly, T. 2005. What is web 2.0? Design patterns and business models for the next generation of software. http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-2.0.htm1
- 17. Paroutis, S. and Al Saleh, A. 2009. Determinants of knowledge sharing using web 2.0 technologies. Journal of Knowledge Management, 13.4: 52-63.
- 18. Ramanau, R. and Geng, F. 2009. Researching the use of wikis to facilitate group work. Procedia Social and Behavioural Sciences, 1: 2620-2626. http://oro.open.ac.uk/27433
- 19. Schneckenberg, D. 2009. Web 2.0 and the empowerment of the knowledge worker. Journal of Knowledge Management, 13(6), 12.
- 20. Stansfield, M., Connolly, T., Hainey, T. and Baxter, G. 2012. Games-based learning and web 2.0 technologies in education: motivating the "ilearner" generation. In A. JimoYiannis (ed.). Research on e-Learning and ICT in Education: 227-239.
- 21. Tait, E., Martzoukou, K. and Reid, P. 2016. Libraries for the future: the role of IT utilities in the transformation of academic libraries. Palgrave Communications. 2:16070. www.palgrave-journals.com/pal.comms
- 22. Tripathi, M. and Kumar, S. 2010."Use of Web 2.0 tools in academic libraries: Reconnaissance of the international landscape", The International Information & Library Review, Vol. 42 No. 3, pp. 195-207.
- 23. Villanueva, M., Alejandro, A. and Ga-an, M. 2023. Measuring the service quality, customer satisfaction, and customer loyalty of selected fast-food restaurants during the COVID-19 pandemic.Open Journal of Business and Management,11: 1181-1207. Doi:10.4236/ojbm.2023.113066
- 24. Williams, M.L. 2020. The adoption of Web 2.0 technologies in academic libraries: a comparative exploration. Journal of Librarianship and Information Science, March 52.1, pp. 137-149.