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# **USE OF WEB 2.0 BY LIBRARIANS AND OTHER PROFESSIONALS**

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## Abstract

The study investigated the use of web 2.0 by librarians and other professionals in Ikere-Ekiti, Ekiti State, Nigeria. Four research questions were formulated to guide the study. The study adopted a descriptive survey type of research design. The population included librarians, lecturers, medical practitioners, and bankers from public and private organizations in Ikere-Ekiti with a total population of 478 professionals. A simple random sampling technique was used for sample selection. A sample size of 291 professionals was used and a questionnaire was used as an instrument for data collection. The instrument was validated by two experts and coefficient alpha was used in testing the result of the pilot study. A reliability index of 0.81 was obtained, which guaranteed the reliability of the instrument. The data collected from the respondents were subjected to both descriptive statistical mean with standard deviation and statical analysis of frequency counts and percentages. The findings revealed that web 2.0 was available to use by professionals viz. blogs, Facebook, wiki, and Whatsapp which they used frequently for sharing information, professionals' services, teaching, and learning among others. However, the challenges that affected its uses included unstable power supply, high cost of subscription and maintenance, high cost of the smartphone, network problems, etc. It was therefore recommended that public and private organizations should educate their workers on the use of web tools, libraries and other organizations should formulate policies and rules to guide its uses, etc.

Keywords: Web 2.0, Professionals, Librarians, Ikere-Ekiti, Nigeria

#### Introduction

In this era of the 21<sup>st</sup> century, the internet and the web play a very important role in many fields such as education, healthcare, business, library, and more. The wave of evolution and development in information and communication technology (ICT) has changed the way an individual speaks and delivers tasks in the past. Web term 2.0 was introduced by Darcy Dinucci in 1993. However, web 2.0 was not redesigned until 2002 when it became the site of a global platform based on connectivity. It was recorded by Tim O'Reilly and Dale Dougherty at the first O'Reilly media web 2.0 conference in 2004 where the web 2.0 was referred to as a platform (as cited in O'Reilly, 2005). According to Black (2007), web 2.0 is the platform that uses the network to link all connected devices. Web 2.0 refers to a perceived second generation of web development and design that facilitates communication, secure information sharing, interaction, and collaboration across the Web (Mingle, Lamptey & Hassan, 2015).

However, O'Reilly (2005) cited in Black (2007) described web 2.0 as the basis of seven principles and practices that act as a gravitational basis. The first tenet is that the internet serves as a platform for the delivery and use of computer programs. Applications do not need to operate on individual computers; they can run inside a web browser. The notion that software is a service is another aspect of the web as a platform tenet. Using Google, as an illustration, O' Reily made the point that the real community that the search engine is delivering is not the software itself, but rather the information that it gives users. Utilizing collaborative intelligence is O'Reilly's second tenet of web 2.0. This idea is also frequently referred to as the "wisdom of crowds." The results are outstanding considering that many people just gave a tiny amount. A notable example is eBay, whose power lies in the pooled offerings of its users. Data is the next piece of inside information, according to O'Reilly's third principle. According to his opinion, a specialized database of products has supported every big online application yet. Google's web crawl, Yahoo's directory, eBay's product, and seller database, MapQuest's map databases, and Napster's distributed son database are just a few examples. O'Reilly's fourth principle is the conclusion of the software release cycle. It is not crucial to keep track of software release dates and versions because the business of web 2.0 enterprises is to supply services, not software. The software that these businesses employ to provide their services is updated frequently. They don't wait for the software to undergo significant changes before releasing a new version. They think of their customers as extra members of the development team. The programmers frequently release new features and monitor how users interact with them on the web. If the new features are popular, they are made available to a larger audience; if not, they are either revised or removed entirely. The simplified programming model, the fifth principle, states that the system's success depends on taking small, loosely coupled steps. In the sixth web 2.0 framework, "software higher than a device level" refers to software that bridges the gap between computers and other devices and makes it easier to utilize those other devices. Rich user experiences, the seventh and final step, are a technique to combine several technologies to produce a web-based experience that is more akin to customized desktop apps.

Web 2.0 tools are the ones that do the most of the voluntary benefits of that platform: delivering software as the ever-better services more people use it, retrieving and retrieving data soon. Multiple sources, including individual users, while providing their data and services in a

form that allows replication by others, creating network effects through an architecture of participation and navigation across web 1.0 to deliver experiences rich users (Black, 2007). However, for this study, the web 2.0 tools include Wikis, Blogs, Facebook, Twitter, WhatsApp, Youtube, Podcast, Instant messaging, LibraryThing, mashups, RSS, etc. These tools according to Owusu-Acheaw and Larson (2016); Ibrahim (2017) and Tripathi and Kumar (2018) are used to facilitate sharing of ideas, photos, video, networking, and information dissemination among friends and other professional groups. Costa, Teixeira, and Alvelos (2014) opined that these tools provide several collaboration and communication opportunities, like social interaction, feedback, conversation, and networking.

Really simple syndication (RSS) is a feed in a simple text file written in Extensible Markup Language (XML) that sits on a server alongside the audio file. It is a web 2.0 tool that allows delivering regularly changing web content to the user (Boeninger, 2007). The blog is a web 2.0 tool that represents a webpage with brief paragraphs of opinion, information, and personal diary entries in the form of text, images, video, audio, or links called posts, arranged chronologically with the most recent first (Wikipedia, 2021). Instant messaging (IM) is a type of online chat that offers real-time text messaging on the internet. Wiki is a web 2.0 tool that allows one person or more people to build up a corpus of knowledge in a set of interlinked webpages, using a process of creating, writing, and editing pages. It is edited via a web interface, which allows users to update content without the need for specialized web authoring software or advanced Higher Text Multiple Language (HTML) coding skills (Boeninger, 2007). A social networking service is an online platform used by people to build social networks or social relationships with other people who share personal or job opportunities, services, foundations, or real-life connections. Examples of social networking websites include Facebook, Whatsapp, Messenger, WeChat, MySpace, Twitter, and google+ (Wikipedia, 2021). YouTube is also the most popular website where people share videos, download videos, and comment on them. Social bookmarking is a web tool that provides users the ability to record web pages and therefore to tag those records with keywords that describe the recorded pages. LibraryThing is a web 2.0 that facilities connections between people through personal libraries (Black, 2007).

It is observed that the general use of web 2.0 tools is to communicate and connect people. Schneckenberg (2019) explained that the download rate of web tools is very high because it is easy to use and understand. Therefore, it allows direct and immediate guidance on the internet and the sharing of user content. Eke, Omekwe, and Odoh (2014) opined that web tools are platforms for communication, interacting with friends, online learning, searching for friends online, professional activities, watching movies, connecting with business partners, and loading photos.

First, in the education sector, web 2.0 tools have been recognized as an effective tool for improving student collaboration, and facilitating interaction and quality of work with undergraduate and postgraduate students. Their project and with lecturers during their writing is an enabling technology for knowledge management that can be widely used in the future (Chu, Woo; King, & Choi, 2019). It offers new opportunities for students to take more control of their

learning and access their personalized information, resources, tools, and services (Crook & Harrison, 2008). Second, in the health sector, web 2.0 benefits health professionals and patients by facilitating access to information to share ideas and questions. It also enables medical teams to connect with different medical professionals with similar expertise in a virtual environment and to develop a working environment for sharing common topics (Murray, 2008). Web 2.0 technologies offer new opportunities in undergraduate and postgraduate education (Vijayakumer, 2016). According to Irby (2008), medical students expect to learn and work in a web-based instructional environment and cover the content at their own pace and explore content in greater depth.

Third, in the library sector, the services offered by the library can be grouped into three areas viz. knowledge acquisition, organization, and distribution. These services can be impacted and done with the aid of web technologies. Therefore, libraries use the power of these technologies to provide better and more efficient services to their users (Ibrahim, 2017). Boeninger (2007) pointed out that many library 2.0 concepts and technologies can enable libraries and librarians to communicate more effectively within a library organization and with the community that the library serves. Hence, by integrating web technologies services into their web presence, libraries can easily and effectively enhance the provision of their services through short message service (SMS), e-mail, Facebook, WhatsApp, etc. Last, in the banking sector, web services help enhance the reusability of centralized services and thereby improve quality and reduce costs. Raalte (2009) concluded that web 2.0 is the best tool to facilitate the much-needed communication with and between customers. Web 2.0 provides low-cost communication towards a large mass market by identifying senior executives. With web 2.0 in the banking world, two-way communication is established and users can communicate with their banks and between groups.

However, the general use of web 2.0 is to communicate and connect with people. It is against this backdrop that the researchers are encouraged to study further the web 2.0 tools available to use by professionals, the level of usage, what they use it for in their workplaces, and the challenges that affect their uses.

### **Statement of the Problem**

In this time of the 21<sup>st</sup> century, the internet and web are playing a very important role in many aspects of life viz. education, healthcare, business, library, and more. The wave of evolution and development in information and communication technology has changed the way an individual speaks and delivers tasks in the past. Today's institutions cannot imagine without the use of web 2.0 tools. These web tools have changed the way people live and work by making it easier to connect and work online. The general use of this web 2.0 is to communicate and connect with people. However, previous research showed that web 2.0 tools are not well utilized among professionals under the study and some of them are not aware of its relevance to their professions. This is what the research sets in to investigate and this is the gap to be filled. Though there is much research works on it but this problem has not been well thoroughly investigated to the best of the knowledge of the researchers.

#### **Literature Review**

Modern organizations cannot be imagined without the application of web 2.0 tools. Web 2.0 has been coined as a term for each profession. Brown (2009) pointed out that librarians coined it library 2.0 (as cited in Ibrahim, 2017), lecturers coined it education 2.0, medical practitioners coined it health 2.0 (Chu, 2018) while bankers coined it bank 2.0 (Raalte, 2009). It is noted that the general use of web 2.0 tools is to communicate and connect people.

Web 2.0 tools are free digital programs used for creating and distributing custom student projects and products. They are interactive, multi-purpose, easy-to-use digital platforms that encourage students to integrate with and share individual, response products. Greenhow, Robelia, and Hughes (2016) as well as Redecker (2017) opined that the application of web 2.0 tools in education helps teachers to follow students' online conversations and debates as well as intervene at the right time. Also, Eke et al. (2014) asserted that web 2.0 tools help to complement formal educational activities and enhance outcomes. In his study, Alhassan (2017) confirmed that most teachers use blogs and wikis in school education. The study further suggested that there is a need to increase the use of modern internet tools in earnest. However, this is in line with the decision of the National Policy on Education (2014) that to determine the scope of the education system in Nigeria and to profit from its contribution to the national system, teaching will be practical, authentication and information technology (IT) are supported.

Blanchard, Metcalf, and Burns (2016) in their findings showed that the use of education 2.0 increases student interaction with students, students with their teachers, and increases their confidence in curriculum activities. McManus (2017) revealed that web 2.0 tools are used by teachers to tag specific information on a website, knowledge creation, and writing and technology skills. Bruwer (2019) further explained that web 2.0 tools enable students to create, define, share and discuss content on the web. Yun-jo, Aworuwa, Ballard, and Williams (2017) in their study confirmed the primary benefits of using web 2.0 technologies in education such as; interaction, communication and collaboration, knowledge creation, ease of use, flexibility, and technology skills. Further findings revealed the major barriers encountered in teaching with web 2.0 technologies viz. uneasiness with openness, technical problems, and time. Ahmed (2015) found out that many secondary teachers could not effectively use web 2.0 tools in classroom learning. Eke, et al. (2014) in their finding identified Facebook, Whatsapp, YouTube, and Yahoo as the most social networking site used and visited regularly by undergraduate students of the university while Owusu-Acheau and Larson (2016) confirmed that the respondents visit their social media sites between thirty minutes (30) to three hours per day.

Libraries and librarians have ever since embraced the wind of change and transformation happening in the information and communication technology (ICT) era. Library 2.0 was first used widely by Michael Casey (2005), Ken Chad, and Paul Miller (2005) (as cited in Black, 2007). Michael Casey (n.d.) opined that library 2.0 is a user-based model for library services that encourages user participation in the creation of both the physical and digital services, supported by consistent computing services (as cited in Ibrahim, 2017). According to Black (2007), library 2.0 plays an important role in a library's ability to keep up with the changing need of its users. Rajalaxmi and Kumara (2014) submitted that the applications of web 2.0 to libraries have established unorganized web contents in a systematic and organized way. It allows using of unstructured information on the web more intelligently through a built-in definition of the context in which the information is published. It also enables the librarians to use advanced technology to provide active, more in-depth, and more detailed information services to readers. Tripathi and Kumar (2018) revealed that web 2.0 tools have overcome the barriers to communication and space between the libraries and users. Web 2.0 improved the library services for users while RSS, IM, and blogs are the most popular 2.0 web tools used in academic libraries. Research by Mingle et al. (2015) showed that librarians in Ghana have a better understanding of common web 2.0 websites and social media and social applications viz. Facebook, Twitter, WhatsApp, WordPress dropbox, LinkedIn, etc. but its uses by academic libraries was low.

More so, concerning why libraries and librarians need to integrate the web tools into their services, Ibrahim (2017) opined that the integration will be another library paradigm of services and the libraries would accomplish very robust information service delivery. Gichera and Kwanya (2015) revealed that the use of library 2.0 tools has increased the user interest in library resources and services, enhanced learning, and enables the library users to express their feelings about library service and activities such as good library promotion and marketing programs. In their study, Dickson and Holley (2015) discovered that library 2.0 tools are used for sharing news, marketing library services, providing information on reading guidelines, delivering reference services, providing information about publishing and digital sources, etc. feedback from users about library services. Hane (2017) found that library 2.0 tools are used by librarians worldwide for easy dissemination of information to targeted library users. Maness (2016) affirmed that it also promotes social interaction between librarians and library users.

Health 2.0 tools are used in medical education for communication and collaboration among peers. It gives ample access to an alternative source of information. It is used for traffic and rating information within open areas of the groups. In their study, Campbell, Evans, Pumper, and Morenol (2016) found that a growing number of health practitioners are using health 2.0 tools as a professional platform for health communication. Kaldoudi, Konstantinidis, and Bamidis (2019) stated that a blog is used to post personal assignments and communicate among peers and between instructors and students while wikis are a tool used in medical education for collaborative work done by students and teachers. Aziz and Madani (2017) discovered that web 2.0 tools played a role in the management and support of the main three aspects of healthcare viz. prevention, diagnosis, and treatment. The web tools also support healthcare professionals and patients. It is explored in the areas of research and training for medical professionals. Health 2.0 tools improve access to health-related information on the web through interpretation and resources to acquire health-related knowledge and expertise. It oversees the creation and maintenance of supportive virtual environments within which individuals can help each other understand and manage health-related issues. It reduced the cost of medical treatment and is used to search for health information available to patients (Wikipedia, 2019).

Chretien and Kind (2015) revealed that patients use web tools to find health information, participate in discussion groups and find support for struggles with illness. In support of this, Campbell et al. (2016) revealed the goals of web tools to include allowing users to create, share, comment on, and receive distributed multimedia commentary across multiple users, facilitating patient-to-patient discussion, and patient access to health procedures, reducing illness stigma and provide online advice and allow interaction with colleagues and patients to seek medical information online. According to Sandars (2006), blogs and wikis are a new medium for medical education that can offer resources that can be read by readers, created by students as a portfolio, and used as a place for collaborative learning. The study by Vijayakumer (2017) investigated the usage of web 2.0 applications by basic medical science students. The findings revealed that 87(54%) of the respondents are not aware of web 2.0 usage in medical practice. 107(66%) respondents use blogs and wikis for their medical education. The findings revealed further 96(59%) respondents agree that web 2.0 tools would support new learning, 91(56%) believe that they are easy to use and find, 88(54%) agree that they stimulate collaboration and discussion, 81(50%) believe that they provide more information.

Bruwer (2019) identified Web 2.0 as the latest evolution in internet communication that has a significant impact on crucial business and redefines existing drivers. Bahman (2017) described that the application of web 2.0 tools to banking services; enables the banks to inform their customers and upgrade them as a result. It is used to market its products and services. It is also used to help to heal the financial industry to promote its latest credit cards. In their study, Almeida, Santos, and Monteiro (2018) found out that bank 2.0 tools have brought new business models to the market. Some are based on direct revenue, where access to services is directly paid by the users, such as licensing, subscription, e-payment, and mobile business. It is also assisted in using electronic payments viz. credit cards, e-checks, online bill pay, and pay pal. Though, bank 2.0 is not only an opportunity to improve business but has become an opportunity to create new business. It promotes customer relationship management.

Bruwer (2019) further identified the benefits of bank 2.0 tools in business viz. reducing the cost of information technology infrastructure, increasing the effectiveness of e-commerce, timely and informed decision making, time-saving for data suppliers and users as well as the reduction of information bottlenecks. Olusola (n.d.) identified the non-availability of proper learning and training environment in the usage and implementation of web 2.0 tools, financial problems, lack of access to the tools, and inability to use the tools as challenges to use web 2.0 tools. In his study, Kimbrell (2015) identified slow websites, misused technology, inadequate training, not enough learning method varieties, underutilized and undervalued technology as challenges of using web technologies. Rajasekhara and Narasimha (2018) findings revealed that integration of data and services, the creation of new functionalities, privacy and security, financial; technology, and organizational challenges are challenges for Indian SMSs intending to leverage web 2.0 technologies.

### **Purpose of the Study**

The main purpose of this study is to investigate the use of web 2.0 by librarians and professionals in Ikere Ekiti, Ekiti State. Specifically, the objectives of the study are to identify various types of web 2.0 available, ascertain the level of utilization, find out the purpose of using the web 2.0 and establish the challenges facing the utilization of web 2.0.

### **Research Questions**

- i. What type of web 2.0 is available to use by professionals?
- ii. What is the level of utilization of web 2.0 by professionals?
- iii. What professionals are using web 2.0 for in their workplaces?
- iv. What are the challenges facing the utilization of web 2.0 by professionals?

## Methodology

This study investigated the use of web 2.0 tools by librarians and other professionals in private and public organizations in Ikere-Ekiti, Ekiti State. The descriptive survey design was adopted for the study. It was adopted because it was best applicable to phenomena that can be expressed in terms of quantity. The population for the study constituted librarians, lecturers, medical practitioners, and bankers from public and private organizations in Ikere-Ekiti, which amounted to 478 professionals. A simple random sampling technique was used for sample selection. A sample of 291 professionals was used. This comprised 167 lecturers, 8 librarians, 76 medical practitioners, and 40 bankers from public and private organizations in Ikere Ekiti. Questionnaire items were adapted from the pieces of literature reviewed and it was used as the instrument for data collection. The questionnaire was made up of two sections. Section A consists of the personal attributes of the respondents while section B consists of items on the types of web 2.0 available to use, the level of utilization, the purpose of using web 2.0, and challenges facing its utilization. The questionnaire was structured on a four-point Likert scale of Strongly Agree, Agree, Strongly Disagree, and Disagree. The instrument was validated by two experts in the field of Library and Information Science and Computer Science. To establish the reliability of the instrument, a pilot study was carried out on twenty (20) academic staff at the Bamidele Olumilua University of Education, Science, and Technology, Ikere-Ekiti. Coefficient alpha was used in testing the result of the pilot study, and a reliability index of 0.81 was obtained, which guaranteed the reliability of the instrument. A total of 478 copies of the questionnaire were personally administered by the researchers with the help of two trained research assistants to the respondents within two weeks but only 291 copies were properly filled and returned. The data collected from the respondents were subjected to both descriptive statistical mean (X) with standard deviation (STD) and statical analysis of frequency counts and percentages. Any item with mean scores (X) of  $\geq 2.50$  was accepted while  $\leq 2.49$  was rejected.

Note: The scale point is 4, i.e SA= Strongly Agree (4), A= Agree (3), SD= Strongly Disagree (2) and D= Disagree (1)

## **Data Analysis**

SA	Α	SD	Ι	) X	ST	D. Decision
250	41	0	0	3.86	0.92	Accepted
100	145	30	16	3.13	2.71	Accepted
196	40	35	20	2.85	2.47	Accepted
25	75	145	46	2.27	1.89	Rejected
195	96	0	0	3.67	3.17	Accepted
67	30	160	34	2.45	2.12	Rejected
35	45	170	41	2.25	1.88	Rejected
15	26	196	54	2.01	1.58	Rejected
0	3	270	18	1.95	1.39	Rejected
	250 100 196 25 195 67 35 15	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

**Research Question One**: What type of web 2.0 is available to use by professionals? **Table 1: Table showing the web 2.0 tools available to use by professionals** N= 291

## Source: Field Data, 2022

Table 1 shows that Facebook (3.86), WhatsApp (3.67), wiki (3.13), and blog (2.85) are accepted as the web 2.0 tools available to use.

**Research Question Two:** What is the level of utilization of web 2.0 by professionals? **Table 2: Frequency of Web 2.0 tools use** 

N= 291			
Items	Frequency	Percentage (%)	
Frequently use	195	67.01	
Sometimes	80	27.49	
Rarely	16	5.49	
Never use	0	0	

## Source: Field Data, 2022

Table 2 indicates that 195(67.01%) respondents used the available web 2.0 frequently, 80(27.49%) utilized it sometimes while 16(5.49%) used it rarely.

Research Question 3: What professionals are using web 2.0 for in their workplaces?

## Table 3: Purposes of using Web 2.0 tools

N= 291	
Items	SA A SD D X STD. Decision
Professionals services	91 200 0 0 3.31 2.81 Accepted
Sharing and loading photographs	97 145 0 0 0.83 3.00 Rejected
Communicating, interacting and posting	104 187 0 0 3.36 2.85 Accepted
information with colleagues and clients	
Tagging and searching information	104 187 0 0 3.36 2.85 Accepted
Providing commentary/information	87 204 0 0 3.30 2.79 Accepted
on a particular issue, event or topic	
Teaching and learning	98 193 0 0 3.34 2.83 Accepted
Receiving, sharing and	104 187 0 0 3.46 2.85 Accepted
sending online message	-
Leisure and personal socialization	135 156 0 0 3.46 2.96 Accepted
Watching movies	45 60 86 100 2.17 1.92 Rejected
Connecting and interacting with	67 224 0 0 3.23 2.72 Accepted
business partners	

## Source: Field Data, 2022

Table 3 shows that the respondents used web 2.0 for professional services (3.31), communicating, interacting, and posting information with colleagues and clients (3.36), tagging and searching information (3.36), providing commentary/information on a particular issue, event or topic (3.30), teaching and learning (3.34), receiving, sharing, and sending the online message (3.46), leisure, and personal socialization (3.46) as well as connecting and interacting with business partners (3.23).

N= 291							
Items		SA	A	SD	D	Χ	STD. Decision
Unstable power supply	134	157	0	0	3.46	2.96	Accepted
High cost of data subscription	97	94	0	0	3.33	2.83	Accepted
and maintenance							
High cost of Smartphone	105	186	0	0	3.36	2.86	Accepted
Network problems	187	104	0	0	3.64	3.14	Accepted
Inability to use the tools	34	56	157	45	2.28	1.91	Rejected
Financial problems	45	209	30	27	3.07	2.52	Accepted
Insecurity of information	58	189	34	10	3.01	2.56	Accepted
Inadequate training	97	105	170	19	3.65	2.71	Accepted
Underutilized technology	100	145	30	16	3.13	2.71	Accepted
Misuse of technology	67	160	30	34	1.86	2.05	Rejected

Table 4: Challenges that affect the use of web 2.0 tools
NI 201

## Source: Field Data, 2022

Table 4 indicate that unstable power supply (3.46), high cost of data subscription and maintenance (3.33), high cost of a smartphone (3.36), network problems (3.64), financial problems (3.07), insecurity of information (3.01), inadequate training (3.65), and underutilized technology (3.31) are accepted as challenges that affect the use of web 2.0 tools.

## **Discussion of Findings**

This study investigated the use of web 2.0 tools by librarians and other professionals in Ikere-Ekiti, Ekiti State, Nigeria. The results of the findings were as well discussed. One of the results of the findings revealed that the web 2.0 tools available to use are blogs, Facebook, wiki, and Whatsapp. This implies that these web 2.0 tools are used to provide professional and other services. This finding is in support of Alhassan (2017) that most teachers use blogs and wikis in school education. The finding is in agreement with Tripathi and Kumar (2018) that blogs are the most popular web tools used in academic libraries. This is in agreement with Bahman (2017) that Facebook is used to gain the necessary education and information regarding the services, products, and financial institutions. The finding is in support of Mingle et al. (2015) that librarians in Ghana have a better understanding of common web 2.0 websites and social media and social applications viz. Facebook, WhatsApp, etc. The finding is in support of Vijayakumer (2017) that respondents use blogs and wikis for their medical education.

Another result of the findings showed that the available web 2.0 were used frequently. The finding is in agreement with Eke, et al. (2014) that Facebook and Whatsapp, are the most social networking visited regularly by undergraduate students of the university. The outcome of

the study supports the assertion of Owusu-Acheau and Larson (2015) that the respondents visit their social media sites between thirty minutes (30) to three hours per day.

More so, the finding revealed that the web 2.0 tools were used for professionals' services, connecting and interacting with business partners, tagging and searching for information, communicating, posting and interacting with friends, receiving and sending online messages, providing commentary or information on a particular issue, event or topic, leisure, and personal socialization and as well as teaching and learning. This finding aligns with Campbell et al. (2016) who revealed that web tools are used for providing professional service, sharing, and receiving information. The finding is in agreement with Dickson and Holley (2015) and Bruwer (2019) that web tools are used for sharing news and providing information. This aligns with Hane (2017) and Chretien and Kind (2015) who found out that web 2.0 tools are used for interaction. This finding aligns with Yun-jo et al. (2017) that web 2.0 is used for interaction and communication. It is in agreement with Kaldoudi et al. (2019) that web 2.0 is used to post personal assignments, and communicate among peers and between instructors and students. This finding agrees with Eke et al. (2014) that web tools are platforms for communication, interacting with friends, online learning, searching for friends online, professional activities, and connecting with business partners. This finding aligns with Sandars (2006) that blogs and wikis are a new medium for medical education. It is in agreement with Vijayakumer (2017) that web 2.0 tools would support new learning, stimulate collaboration and discussion and provide more information.

Meanwhile, this study also revealed that unstable power supply, high cost of subscription and maintenance, high cost of a smartphone, network problems, insecurity of information, and underutilized of technology are major challenges that affect the use of web 2.0 tools by librarians, academics, medical practitioners and bankers in Ikere-Ekiti. This finding is in support of Kimbrell (2015) that identified slow websites, misused technology, and underutilized as challenges of using web technologies. The finding aligns with Rajasekhara and Narasimha (2018) that security and financial problem are challenges for Indian SMSs intending to leverage web 2.0 technologies. The finding is aligned with Olusola (n.d.) that non-availability of proper training and financial problem are the challenges of using web 2.0 technologies.

## Conclusion

Arising from the finding of the study, the popularity of the web 2.0 tools usage by librarians, academics, medical practitioners, and bankers has been confirmed from the findings of this study. Therefore, it was concluded that a reasonable number of professionals used the web 2.0 tools. With the result, it has also been established that librarians and other professionals have benefited tremendously from the usage of these web 2.0 tools in carrying out their day-to-day activities. The use of web tools would constitute a meaningful development in libraries and other professions. The service delivery in professions like banking, teaching, and health services would be greatly enhanced by the use of web technologies. However, this conclusion discloses the fact that the high cost of a smartphone, data subscription, misuse and underutilizing of

technology, insecurity of information, network problem, and unstable power supply to charge the smartphone are challenges that could inhibit the use of web 2.0 tools.

## Recommendations

From the findings of this study, the following recommendations were made:

- > Public and private organizations should educate their workers on the use of web technologies.
- Public and private organizations should integrate web 2.0 tools into their operations and services.
- Library and other organizations should formulate policies and rules to guide the use of these tools for organizational benefits.
- Employers and management of organizations should embark on improving users' awareness skills in the use of web tools.
- Employers and management of organizations should encourage their employees to use web tools that could promote the aims and objectives of the organization rather than an outright ban on the use of the applications during work hours.
- The clientele should be encouraged to interact with the organization on any of the tools for official purposes.
- ➤ Awareness and training programs should be organized for both staff and clients of the organizations on the use of web technologies.

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