Institutional Readiness and Application of Web 2.0 Tools for Information Service Provision in University Libraries in Nigeria

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Abstract
This study examined the readiness and application of Web 2.0 tools for information service provision in University Libraries in Nigeria survey research design was adopted, while a multi-stage sampling technique was used to select two universities from each of the six geopolitical zones based on the web 2.0 presence of the university libraries. Questionnaire was used as instrument for data collection while data collected was analysed with the use of descriptive statistics and standard deviation. Findings revealed that some of the web 2.0 tools are frequently used while others are not used at all. It also shows that the level of institutional readiness is low, while majority of the respondents agreed that the web 2.0 tools are useful for information service provision. The study recommended that the universities should increase financial resources available to the university libraries in the area of ICT facilities acquisition among others.
Keywords: Institution, University, Libraries, Web 2.0, information, Readiness, Services

INTRODUCTION

The advances made in Information Communication Technology have no doubt resulted in the use of web based technologies for the provision of information services. The conventional library services are now being replaced with online information services which appear to be the preference of library clients. The resultant effect of this is the development of the internet in such a way that libraries now use the new technologies to render services in a more specialized and value added way.

According to Hangsing and Sinate, (2012) the preference for web-based information resources and services occasioned by new technologies is because of their easy of accessibility and use.

According to Alabi cited in Madu (2005), "Whenever technology innerves in human activities, the essential feature is how to bridge tone and speace to minimize cost and efforts as well as the maximization of quality efficiency and effectiveness" P1

The new technology which has revolutionized the ways services are provided,utilized and change users behaviour is web 2.0 basically this is the development of on-line services or web based technologies that encourages collaboration, communication and information sharing, Akporhonor and EbideEndoumare (2016). The emphasis here is on on-line collaboration, information shaving and contribution resulting in improved quality of service. Academic libraries must therefore evolve beyond the traditional walp of just staying in one place if they must meet the needs of their clients who have moved from the traditional ways of seeking for information to a new web based approach.

According to Webopaedia (2016) Webs 2.0 is the term given to describe a second generation of the world wide web(www) that is focused on the ability for people to collaborate and share information on line. Essentially web 2.0 is about revolutionary new ways of creating, collaborating, editing and showing user generated content online.

According to Maness (2006), the use of web 2.0 technologies and its application to library services will no doubt constitute a meaningful and substantive change in the history of libraries. This change will make library collection more interactive and fully accessible to users. The services in the libraries will change from providing controlled access to the facilitation of information transfer and information literacy.

The history of web. 2.0 as we know it today was popularized by Tim O'Reilly and Dale Dougherty at the O'Reilly media web 2.0 conference. However, this term web 2.0was first mentioned in 1999 by Darcy Di. Nucci. Since then this term has attracted hudge attention in the areas of library collection and library operation. It has basically changed the faces of the ways libraries and the users interact. This magical technologies allow users to

create, search, interact, collaborate and allow for communication of contents ranging, from music, bookmaking, social networking etc.

With these benefit that accrue from the use of web 2.0 especially in information services provision in libraries and information centres, it is necessary to determine the institutional readiness and application of web 2.0 especially in the university libraries.

This study is predicated on a theoretical framework called technology acceptance Model (TAM). According David (1999) this is an information system theory that describe how users come to accept or reject the use of a technology. The theory argues that users have a choice in the acceptance or rejection of technology depending on how the technology affects them. The decision on the acceptance or rejection of the technology is influence by two critical factors. The first factor is perceived usefulness (PU) of the technology, this is the degree to which the user believes that using an online database or a technology would enhance his or her academic task.

The second factor that influences users decision to use a technology is what David (2006) called perceived ease of use. The second factor is seen by users as the degree to which the use of technology can not be cumbersome but with minimal effort. Technologies that require the acquisition of complicated skills may not easily attract users. He concluded that both factors, perceived usefulness and perceived ease of use effect peoples decision to use, new technologies therefore contribute to either acceptance or rejection.

In the present study, this theory will would explain both the readiness and application of web 2.0 in information provision for the academic in university libraries in Nigeria.

LITERATURE REVIEW
Conceptually, Maness (2006) defined web 2.0 as the application of interactive, collaborative and multi-media web based technologies to web- based library services and collection" P4.

In his definition of Web 2.0, O'Reilly cited in Tiemo and Edewor (2011) argued the web 2.0 is the network as platform, spanning all connected devices, web 2.0 applications are those that make the most of the intrinsic advantages of that platform. These definitions have been various used in most of the empirical studies.

In a study by Akporhonor and Endouware 2016, titled challenge of using web 2.0 tools among university Librarian in Niger Delta region of Nigeria. The study used total enumeration and questionnaire for the collection of data. The research questions were answered using descriptive statistics. The finding revealed that inadequate time, number of library policy and its use were the major challenges facing librarians in the use of web 2.0 tools.

Tripathic and Kumar (2010), studied" use of web 2.0 tools by libraries. A reconnaissance of the international landscape". This study revealed an increase in the use of web 2.0 in the libaries, with the use of tools such as blog, RSS ranking highest while other like wikis etc are coming up.

In another study by Obasola and Mamudu (2015) titled "Adoption of Web 2.0 by academic libraries in Nigeria, the authors attempted to ascertain the extent to which academic libraries in Nigeria have adopted web 2.0 for library services. The libraries were categorized into three groups and the adoption of web 2.0 was tested across the groups using analysis of variance. The finding revealed that the adoption of Web 2.0 for library services was at its infant stage. Only a few of the libraries have a proper structure for the co-ordination and integration of the tools used in the delivery of information services.

Other studies include those of Raman and Shafique (2011) who argued that the most important problem in the use of Web 2.0 is the absence of proper learning and training environment and the implementation of the tools in libraries while Hosseini and Hashempour (2012) in their study argued that lack of knowledge, lack of familiarity with the service, lack of institutional support, lack of appreciation of the values of the tools etc are some of the problems militating against the use of web 2.0 tools.

The summary of these empirical studies brings to the fore the fact that the use of Web 2.0 in the world and in Nigeria in particular is still at its infact stage. It is also evident the same problems that be devil newly introduced technologies such as lack of skill manpower and lack of appreciation of the perceived usefulness of the new technology lack of institutional support are there.

Objective of the study
The broad objective of this study is the determine the readiness and application of Web 2.0 tools for information service provision in university libraries in Nigeria.
The specific objectives include to:
a. Determine the frequency of use of web 2.0 tools in the university libraries understudy.
b. Ascertain the institutional readiness for the use of Web 2.0 in the university libraries understudy.
c. To determine the perceived usefulness of Web 2.0 tools in information services provision in the universities understudy.

Research questions
The following research questions guided this study

a. What is the frequency of use of web 2.0 tools in the university libraries understudy.
b. What is the institutional readiness for the use of Web 2.0 in the university libraries understudy.
c. What is the perceived usefulness of Web 2.0 tools in information services provision in the university libraries understudy.

Statement of the problem
In the noble profession of information today, every effort is being made to embrace the new methods of information service provision. The ever increasing advances in technology has made it impetrative for the information professional to either shape in or ship out as he can not remain static. One of these technologies which has gained popularity recently is Web 2.0 technologies which is now affecting the ways that libraries, archivers and museums respond to the needs of their clients. Specifically Web 2.0 can be used to enhance the level of librarian and user engagement especially in the use of rapidly developing electronic information resources on the internet. Muneja and Abungu (2012), have argued conclusively that the Web 2.0 tools play very important roles on information handing, knowledge and communication services in the university which has resulted in the increase in the quality of service offered and improved communication among libraries.

In view of the benefits associated with Web 2.0 technologies, it is Pertinent to investigate the libraries for whom these tools are meant for make use of the tools and the readiness of the institutions concerned to adopt it and their perception of the usefulness of the tools if any. This is the focus of attention of this study as it addresses a case study of university libraries in Nigeria.

METHODOLOGY
The research method adopted for this study is survey design. The population comprised 318 librarians from twelve universities involved as sample for this study. The sample was purposively determined by the use of Web 2.0 presence of the university library. To arrive at this it must have the social network page and search or browsing efforts on the libraries web page or Google must yield result.

Questionnaire was used as instrument for data collection.
This survey method effectively elicited information of the web 2.0 tools, institutional readiness, level of awareness of use and the challenges of using web 2.0 tools in the universities understudy.

While the data collected were analysed with the use of descriptive statistics frequency count, mean and percentages.

Table 1 Frequency Distribution of respondents by University

s/n	University	Frequency	Percentage
1.	Covenant university library	16	5.0%
2.	University of Ibadan library	48	15.1%
3.	FederalUniversity of Petroleum Library	14	4.4%
4.	University of Port-Harcort Library	28	8.8%
5.	BayeraUniversity Library	38	11.9%
6.	Umaru Musa Yar'Adu University Library	22	6.9%
7.	University of Nigeria, Library Nsikka	44	13.8%
8.	FederalUniversity of Technology Library Owerri	26	8.2%
9.	University of Maiduguri Library	16	5.0%
10.	UsmanDanFodioUniversity Library Sokoto	24	7.5%
11.	BenueStateUniversity Library Makudi	24	7.5%
12.	Salem University Lokoja Library	18	5.7%
	Total	**318**	**100%**

Responds rate of respondents:
A total of 318 questionnaire were distributed and 210 copies representing a response rate of 66.1% were returned. This response rate of 66.1% is consideration adequate for this study in view of the wide spread of respondents.

Table II
Research Question I: what is the frequency of web 2.0 tools use by university libraries in Nigeria.

Web 2.0 tools	Mean	Std
Facebook	3.35	1.23
Twitter	3.20	1.30
Instant messaging (IM)	3.89	1.35
Blogs	3.30	1.37
Linkedin	3.17	1.31
Delicious	2.71	1.21
Chat	3.79	1.27
Vodcast	3.55	1.25
Wikis	3.65	1.19
Tagging	3.89	1.21
Photo bucket	2.66	1.06
Youtube	3.78	1.28
User review	3.34	1.24
Podcast	2.78	1.20
Friend star	3.32	1.10
Personal bookmark	3.32	1.34
Ask Librarian	3.84	1.20

Aggregate means = 3.36
Criterion mean = 3.00

The findings on Table II show clearly the frequency of use of Web 2.0 tools especially as it affects up tube, instant messaging (IM) facebook, chat vodcastwue, blogi, twitter etc. from the analysis, are frequently used in our university libraries. This result stems from the fact that the suggested mean of 3.36 is greater than the criterion mean of 3.00. However, from the analysis also, there are other web 2.0 tools that are not frequently used. These include photo bucket with a suggested score of (x=2.6), delicious with aggregate score of (x=2.71 and friend star with aggregate score of (x=2.79). These scores are less than the criterions mean of 3.00.

The result is in line with the study by Akphorhonor and Endonware (2016) who argued that some tools are never made use of by the university libraries.

TABLE III
Research question 2: What is the level of institutional readiness for the use of web 2.0 in the university libraries. Where less than 50 percent agreement is low level and above is high level)

Statement	SA/A	Percentage %	SD/D	%		
ICT facilities are readily available for the use of Web 2.0 tools in the library.	18	8.9	192	91.4	210	100
There is enough space in the library for the storage of web 2.0 tools facilities	136	64.7	74	35.2	210	100
There is interlet connectivity in the library for the use of web 2.0 tools facilities	22	10.4	188	89.5	210	100
There is equipment like Air-conditioner in the library for the preservation of Web 2.0 tool facilities	121	57.6	79	42.4	210	100
There is management policy which supports the use of Web 2.0 tools for information provision and service in the library	33	15.7	177	84.2	210	100
The library has sufficient skilled manpower to man the web 2.0 tools facilities	48	22.8	162	371	210	100
There is alternative source of power supply to ensure regular power supply to use the Web 2.0 tools facilities	55	26.1	155	73.8	210	10
There is provision for staff training on the use of the Web. 20.0 tool facilities	88	41.3	122	586	210	100

From the finding in table III, it is clear that the level of institution readiness with regard to most of the items in the questionnaires is low.

On the availability of ICT facilities in the university libraries under study, 192 of the respondents representing 91.4 percent ranked it low.The same is true of availability of internet connectivity which ranked second low with 188 respondents represent 89.5% indicating it. Management support for the use of web 2.0 tools in the university libraries ranked third low with 177 (84.2%) of the respondents indicating it while lack of skilled man power which ranked fourth low was indicated by 162 representing (77.1%) of the respondents. The issue of

alternative source of power supply for the use of web 2.0 tool ranked fifth low with 155 (75.8%) of the respondents indicating it. The sixth in the low level ranking is the provision of staff training on the use of web 2.0 tools. The was indicated by 122 representing 58.6 percent of the respondents.

However only two items on the table recorded high levels of institutional readiness.With more than 50% agreement. These include the issue of space in the libraries for the storage of web 2.0 facilities this was indicate first high by 136 representing (64.7%) of the respondent, while the issue of equipment like Air conditioners etc was indicated second high with 121 representing 57.6 of the respondents indicating it.

From the analysis above it is very clear that the institutional readiness of the university libraries understudy is low. The reason for this is not unconnected with the fact that ICT facilities for the use of Web 2.0 tools is capital intensive and would therefore need institutional will on the part of the universities to meet it.

Table IV

Research Question 3; What is the perceived usefulness of Web 2.0 tools in information service provision.
Useful statement Frequency/percentage

	SA/A	Percentage %	SD/D	%	Total	%
The use of web 2.0 tools bridges time and space in information services provision	162	77.1	48	22.8	201	100
The use of Web 2.0 tools minimizes cost and efforts in information services provision	155	73.8	55	26.1	210	100
The use of Web 2.0 tools in information services provision maximize quality	136	64.7	74	35.2	210	100
The use of Web 2.0 tools maximise efficiency and effectiveness	121	576	79	42.4	210	100

From the analysis in table IV about the usefulness of Web 2.0 tools in information services provision, majority of the respondents agreed that Web 2.0 tools are useful for information services provision in their libraries.

Their positions are corroborated in a study by Alabi cited in Madu 2005 which argued that" whenever technology intervenes in human activities, the essential feature is how to bridge time, space, to minimize cost and efforts as well as maximize quality, efficiency and effectiveness" PI. The findings in the study are also in line with the position of scott-Emuakpor (2000) who argued that with the ability to retrieve remote sources on the internet, it is now possible to provide the needed information when the need is made manifest.

This is also in line with the position of Hangging and Sinate (2012) who argued that the preference for Web based information resources and service occasioned by new technologies is because of their easy of accessibility and use.

CONCLUSION

This study set out to determine the readiness and application of Web 2.0 tools for information service provision in university libraries in Nigeria.

Survey research design was adopted for this study. A multi-stage sampling technique was used to select two universities from each of the six geopolitical zones base on the web 2.0 presence of the university libraries.

Questionnaire was used as instrument for data collection while the data collected were analysed with the use of descriptive statistics (frequency count, mean and percentage) and standard deviation.

From the finding, the results revealed that some of Web. 2.0 tools like youtube, instant messaging (IM) facebook, chart, blogs, twitter vodcastetc are frequently used in the university libraries understudy, while some Web 2.0 tools are never used at all.

On the level of readiness of the institutions for the use of Web 2.0 in the university libraries understudy the findings showed clearly that the level of the institutional readiness is low.

On the perceived usefulness of Web 2.0 tools in information service provision, majority of the respondents agreed that Web 2.0 tools are useful for information service provision in their university libraries.

RECOMMENDATIONS

The following recommendations have been made base on the findings
1. The university administrations should show more political will by increasing financial resource available to the university libraries in the area of ICT facilities acquisition.
2. Training programmes should be organized for the library staff to acquire skills in the use of web 2.0 tools
3. The universities should provide alternative sources of power supply to use the Web 2.0 tools facilities.
4. There should be internet connectivityin the libraries to enable staff and users to use Web. 2.0 tools facilities.

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