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Influence of Library Policy and Staff ICT Skills on Adoption and Use of Web 2.0 Technology in University Library Service Delivery in South-South, Nigeria

[1]Chima EMMANUEL, [2]Obinna OBIALOR, [3]Nkechi Igbokwe, [4]Gracious OPARANOZIE and [5]Anastesia ODO

[1,2,3,4&5]Library Department, Alvan Ikoku Federal University of Education, Owerri, Imo State.

This study investigated influence of library policy and staff ICT skills on adoption and use of web 2.0 technology in university library service delivery that is not adequately documented especially in South-south, Nigeria. It adopted the survey research design and census method of sampling techniques to ensuring that every library staff studied was captured. Self-constructed and validated questionnaire were used to collect data for the study. The findings showed that library policy(X= 2.69) and staff ICT skills (X= 3.05) have significant influence on adoption and use of web 2.0 technology in university library service delivery in South-south, Nigeria. This study recommended that for smooth operation of web 2.0 technologies in the university libraries in the South-South, Nigeria, solar energy system as alternative sources of power should be embraced as we have the sun in abundance all-round the year. Again, librarians should encourage themselves with Fred Davis 1986 theory of Technology Acceptance model by canvassing the usefulness of computers in enhancing their job performance with ease rather than fear of losing their jobs. Added to the above is that librarians should strive to acquire ICT skills through personal training to be relevant and be able to defend their profession.

Key Words: Library, Library Policy, ICT Skills, Web 2.0, Library Services and University Libraries

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Introduction

Web 2.0 technologies application to library services delivery will not be complete unless and until a hindsight view of its precursor (Information and Communication Technology and its application to library services) is taken. Aina Okunnu and Dapo-Asaju, (2014) postulate that ICT is a phrase used to characterize the ability to access data by using the internet services dependent on telecommunication. ICT allows the opportunity within a limited time, to generate, coordinate, manipulate and view information from distant location around the world. According to Hussain, Haruna and Muhammad (2021), libraries have grown to the level that exceed the four walls of the library to the extent that information services can reach the library users wherever they are in the world as a result of ICT application to library services delivery. Godwin (2021) states that, libraries in developing countries like Nigeria since the beginning of 21st century have started making efforts to metamorphose from being institutions driven by manual processes into modern ones where operations are in part or wholly dependent on information and communication Technology application to library services delivery.

According to Ejike and Amaoge (2017) the application of ICT has enhanced accessibility to information from all over the world. Through the internet a wide range of information materials are made available in different journals thereby increasing accessibility to information. This correspond with the assertion of Rsamzan and Sigh (2009) that ICT allows easy integration of various library activities, increase efficiency in acquisition, access to data, cataloguing, classification, information retrieval and dissemination. It eliminates uninteresting and repetitive work; helps avoid duplication of efforts, increase the range of services, provides marketing opportunity facilitate cooperation and the formation of network and resource sharing in libraries. Special libraries equally benefits from the application of ICT as it reduces the tedious and energy-sapping tasks associated with manual operations as well as reducing drudgery and time consuming clerical activities such as typing, record keeping and accounting. In librarianship time is of the essence in most interactions; especially when attending to staff and student's request, getting tasks accomplished is of great importance.

According to Egbunuwele, Ola and Uduebor(2014). ICT is a panacea to time wasted on repetitive task while library staff can amass more energy to attend to users and perform other pressing professional duties. In library set up, Information and Communication Technology (ICT) application is the one where computer systems are used to manage one or several library routines such as acquisition, serials control, cataloguing and classification and online public access catalogue(OPAC). ICT has made possible for libraries to access a wealth of up-to- date resources worldwide, providing quicker access to specialist in a number of disciplines and allow librarians to reach each other and users with messages and documents through the internet. Uloaku (2017) sees Internet as a veritable tool for global online services. It is a mechanism for information dissemination and a medium for collaborative and interaction between individuals and their computers as it provides a golden opportunity for the provision of value-added services to by libraries. According to Ribiere, Huddad and Wiefe (2010), web 2.0 is a new phase in internet evolution which represents a paradigm shift on how individuals communicate and collaborate with each other and the creation of their own user experiences. A term that describes the changing trends in the use of World Wide Web technology and web design that aim to enhance creativity, secure information sharing, increase collaboration, and improve the functionality of the web as we know it (web 1.0).The concept of 'University Library Service Delivery' refer to the approaches or mechanism a university library applies in carrying out delivery of its services to its user community including other library operations .Following the concept of university library service delivery; it implies that if the library delivers its services manually, it may not find the use of web 2.0 necessary whereas an automated library system could enhance the adoption and use of web 2.0 for effective and timely library services delivery. Methods of delivering library services and operations could as well lead a library to plan to adopt and use web 2.0 in her services delivery. Library 2.0 is a term that is now synonymous with the concept of web 2.0 services in libraries and was coined by Mike Casey (Boxen, 2008).For the purpose of this research work the two terms will be used interchangeably with reference to how they are used in academic libraries and what their effects/implications may be. It should be pointed out too, that the modern library concepts have also enhanced these services and refer to them as library 2.0 services such that OPAC 2.0 and librarian 2.0 are all offspring of Web 2.0 concepts.

Swain (2012), while emphasizing that in today's high-tech learning environment, the library as a learning resource has taken up increasingly more academic space and time in the life of a learner. It is against the above background that application of web 2.0 to library services can be a best practiced. Kataria and Anbu (2009) assert that library 2.0 as a concept is taken from web 2.0 with a vision of offering a different library services, geared towards the needs and expectations of today's library users. In this vision, according to them, the library makes information available wherever and whenever the user requires it, and seeks to ensure that barriers to use and reuse are removed. In the light of the foregoing, this study therefore, seeks to investigate the influence of library policy and staff ICT skills on adoption and use of Web 2.0 technology in university library service delivery in South-south, Nigeria.

Research Question

i. What influence does the library policy have on adoption and use of web 2.0 technology in university library service delivery?
ii. What influence does the staff ICT skills have on the adoption and use of web 2.0 technology in university library service delivery?

Literature Review

Policy is a guide that regulates actions. It is a plan of action, statement of aims and ideals especially one made by a government or its agency or organ like a university library (Marian Webster's Collegiate Dictionary, 2003). It is an official prescription or enactments that dictate government approach to any issue; for example, the prescription by a university

library on how to adopt web 2.0; who and who is responsible for its operation and management and the modalities for its adoption and use. Policy is therefore a course of action, a regulatory instrument that constantly tries to evaluate institution's or government's actions against certain prescribed modus operandi of its operations as well as focus of government or its organ on its set of goals for the future, like adoption of web 2.0(Okereke,2003). If the library's policy towards ICT is favorable, it could influence the adoption and use of ICT facilities like web 2.0, while it may undermine its use if the policy is unfavorable towards ICT.

Information can be used to mean man's accumulated knowledge in all subjects, in all forms and from all sources that could help users to make rational decisions. Information is central to all activities and very essential to human survival. It is crucial in every research work and it is vital to the development of any society (Oziri, Unegbu and Ndulaka, 2023). According to Unegbu, Oparaand Emuchay (2023), information is viewed as answers to questions that begin with such words as who, what, where, when and how many. This indicates that it could be knowledge one gets about someone or something as well as factors or details about a subject.ICT skills of library staff may also determine the adoption and use of web 2.0 in any university library. Possession of ICT skills in this 21st century has become a major factor in the application, adoption and use of any ICT related facility. According to Unegbu, Amaechi, Njokuand Opara (2015), information Technology (IT) and Information and Communication Technology (ICT)) are the most recent and modern technological tools and resources used to communicate, create, organize, gather, retrieval, disseminate, store and manage information. According to Unegbu (2015), the emergence of ICT has brought about a tremendous technological revolution in the world. This revolutionary impact has affected all aspects of human endeavours, including library services. Salubi, Okaiwa and Nokhweua (2015) provide insight into the ability of those who possess ICT skills and their efficacy in service delivery. It will also equip those who possess ICT skills the ability to locate, identify and use library resources, including web 2.0 technologies. Nwankuoala, (2011) argues that unless a person or staff of university library possesses relevant ICT skills, it will be difficult for them to manipulate any ICT related facility or resource like web 2.0. It therefore means that ICT skills have become critical within the staff of any university library for such a library to adopt and use web 2.0 in its services and operations.

Research Methods

The descriptive survey research design was used for this study using questionnaire as the instrument for data collection. The questionnaire is titled "Influence of Library Policy and Staff ICT Skills on Adoption and Use of Web 2.0 Technology in Library Services Delivery Questionnaire"(ILPSICTSAUWTQ).The South-South, Nigeria comprises six states namely AkwaIbom, Bayelsa, Cross River, Delta, Edo, and Rivers States. The zone is bordered in the North by Kogi, Anambra, Imo, Abia, Eboyi and Benue states, in the South by Atlantic Ocean, in the East by the Republic of Cameroon, and in the West by Ondo State. The zone lies between 7^0 North and 4^030" East and 7^030" East and 9^030" East. It experiences both wet and dry seasons and has a favorable temperature. South-South zone is traversed and cris-crossed by large number of rivers, rivulets, streams, canals, and creeks thus, the Rivers Niger, Imo Rivers, Qua Iboe River and Cross River. The zone is rich in forest and oil resources with farming and fishing as the major occupation. Also, there are allied industries such as food processing, palm and kernel processing, petroleum refining, cement manufacturing, boat building etc (Uya and Uchendu, 1999).

The South-South, Nigeria has a total number of twelve (12) university libraries. They are; Ambrose Ali University Library Ekpoma, Delta State University Library, Dennis Osadebay University Library, Donald Ekong Library, University of Portharcourt, Edo State University Library, Federal University Library, Otuoke, Federal University of Petroleum Resources, John Harris Library, University of Benin, Niger-Delta University Library, River State University Library, University of Calabar Library and University of Uyo, Library.

The population of the study is six hundred and forty-nine (649) library staff. This comprises both professionals and para-professionals in the university libraries in South-east, Nigeria. A total of Six hundred and forty-nine (649) copies of the questionnaire were distributed to staff in university libraries in South-South, Nigeria. Out of these, six hundred and twenty-four (624) copies of the questionnaire were duly completed and returned for analysis giving a response rate of (96.1%). Twenty-five (25) copies of the questionnaire were non-response giving a non-response rate of (3.9%). The return rate of 624 (96.1%) is adequate representation of the entire population.

Analysis

Research Question I

What influence does the library policy have on adoption and use of web 2.0 technology in university library service delivery?

Table 1. Mean Values on Influence of Library Policy on Adoption and Use of Web 2.0 Technology in University Library Service Delivery

	Influence of Library Policy on Adoption and Use of Web 2.0 Technology in University Library Service Delivery	SA	A	D	SD	Total	Mean x	Decision
a	Library policy ensures equal access to adoption and use of web 2.0 technology in university library service delivery	291	290	27	16	624	3.37	Significant
b	Library policy does not ensure equal access to adoption and use of web 2.0 technology in university library service delivery	15	7	318	284	624	1.60	Not Significant
c	Library policy helps to develop and govern available technological, legal and human infrastructure on adoption and use of web 2.0 technology in university library service delivery	299	290	13	22	624	3.39	Significant
d	Library policy guides and regulates adoption and use of web 2.0 technology in university library service delivery	308	276	28	12	624	3.41	Significant
e	Library policy does not guides and regulates adoption and use of web 2.0 technology in university library service delivery	37	21	286	280	624	1.70	Not Significant
	Significant Mean Value= 2.69							

   Table 1 shows that the mean responses on influence of library policy on adoption and use of web 2.0 technology in university library service delivery in university libraries in South-south, Nigeria is greater than the significant mean value (X=2.69) in three main aspects. These are; library policy ensures equal access to adoption and use of web 2.0 (X=3.37), library policy helps to develop and govern available technological, legal and human infrastructure on adoption and use of web 2.0 technology in university library service delivery (X=3.39) and library policy guides and regulates adoption and use of web 2.0 technology in university library service delivery (X=3.41). The other two reasons namely; library policy does not ensure equal access to adoption and use of web 2.0 technology in university library service delivery (X=1.60) and library policy does not guides and regulates adoption and use of web 2.0 technology in university library service delivery (X=1.70) have less than the significant mean value (X=2.69). The significant mean value (X=2.69) shows that library policy have significant influence on adoption and use of web 2.0 technology in university library service delivery in university libraries in South-south, Nigeria.

Research Question 2

What influence does the staff ICT skills have on the adoption and use of web 2.0 technology in university library service delivery?

Table 2. Mean Values on Influence of Staff ICT Skills on Adoption and Use of Web 2.0 Technology in University Library Service Delivery

	Influence of Staff ICT Skills on Adoption and Use of Web 2.0 Technology in University Library Service Delivery	SA	A	D	SD	Total	Mean X	Decision
a	Many staff are literate on the use of web 2.0 technologies	309	289	18	8	624	3.44	Significant
b	Many staff has general ICT skills not compatible with web 2.0 technologies	300	285	26	13	624	3.40	Significant
c	Many staff are resistant to learn web 2.0 techniques	308	288	17	11	624	3.43	Significant
d	Training on web 2.0 techniques is not available	17	7	309	29	624	1.60	Not Significant
e	Many staff are not competent on how to use web 2.0 technique	294	290	35	5	624	3.40	Significant
	Significant Mean Value= 3.05							

Table 2 shows that the mean responses influence of staff ICT skills on adoption and use of web 2.0 technology in university library service delivery in university libraries in South-south, Nigeria. Many staff are literate on the use of web 2.0 technologies (X=3.44), many staff has general ICT skills not compatible with web 2.0 technologies (X=3.40), many staff are resistant to learn web 2.0 techniques (X=3.43) and many staff are not competent on how to use web 2.0 technique (X=3.40) have significant mean value (X=3.05) with the exception of training on web 2.0 techniques is not available (X=1.60) that has less than the significant mean value (X=3.05). Generally, with the significant mean value (X=3.05), evidence from the analysis shows that staff ICT skills have significant influence on adoption and use of web 2.0 technology in library services delivery in university libraries in South-south, Nigeria.

Findings

Result on Table 1, research question 1 revealed that the influence of library policy on adoption and use of web 2.0 technologies in services delivery was not significant. This influence may have arisen because with library policy, adoption and use of web 2.0 technologies in services delivery could be effective. Library policy ensures equal access to adoption and use of web 2.0 technology in university library service delivery, library policy helps to develop and govern available technological, legal and human infrastructure on adoption and use of web 2.0 technology in library services delivery and library policy guides and regulates adoption and use of web 2.0 technology in university library service delivery. This implies that when library policies are adopted, it will ultimately improve and enhanced use of web 2.0 technologies in university library service delivery. This finding agrees with the findings of Okereke (2003) that if the library's policy towards ICT is favorable, it could influence the adoption and use of ICT facilities like web 2.0, while it may undermine its use if the policy is unfavorable towards ICT. This finding is also in line with Chawinga, (2019) that the library staff were aware of a number of web 2.0 technologies; some of which they have adopted and are using them to share work related ideas with colleagues, to keep track with professional current trends and to collaborate with colleagues in other libraries and to interact with users. This finding justifies the Technology Acceptance Model (TAM) by Fred Davis in 1986 that perceived usefulness and perceived ease of use determine an individual's intention to use a system, with intention to use; serving as a mediator of actual system use. Perceived usefulness is also seen as being directly impacted by perceived ease of use. It is of the opinion that user acceptance of any technology is determined by perceived usefulness (PU) and perceived ease of use (PEU).

Result on Table 2, research question 2 revealed that the influence of staff ICT skillson adoption and use of web 2.0 technologies in university library service delivery was not significant. This influence may have arisen because with staff ICT skills, adoption and use of web 2.0 technologies in university library service delivery could be effective. Many staff are literate on the use of web 2.0 technologies, many staff has general ICT skills not compatible with web 2.0 technologies, many staff are resistant to learn web 2.0 techniques and regulates adoption and many staff are not competent on how to use web 2.0 technique. This implies that when staff ICT skills are adopted, it will ultimately improve

and enhanced use of web 2.0 technologies in university library service delivery. This finding agrees with the findings of Nwankuoala (2011) that unless a person or staff of the university library possess requisite ICT skills, it will be difficult for them to manipulate any ICT related facility or resource like web 2.0. It therefore means that possession of ICT skills has become of sine qua non relevance and critical to staff of any university for such a library to adopt and use web 2.0 in its services and operations. This finding justifies the Technology Acceptance Model (TAM) by Fred Davis in 1986 that perceived usefulness and perceived ease of use determine an individual's intention to use a system, with intention to use; serving as a mediator of actual system use. Perceived usefulness is also seen as being directly impacted by perceived ease of use. It is of the opinion that user acceptance of any technology is determined by perceived usefulness (PU) and perceived ease of use (PEU).

Conclusion

University libraries in the south-south zone of Nigeria must be viewed and assessed on its own merit within the prevailing institution library policy and staff ICT skills at some point in time with a view to ascertain how these variables influenced the adoption and use of web 2.0 technologies in their operations.

Recommendations

- It is therefore recommended that for smooth operation of web 2.0 technologies in the public university libraries in the South-South zone of Nigeria Solar energy system as alternative sources of power should be embraced as we have the sun in abundance all-round the year.
- Librarians should encourage themselves with Fred Davis 1986 theory of Technology Acceptance model by canvassing the usefulness of computers in enhancing their job performance with ease rather than fear of losing their jobs. Added to the above is that librarians should strive to acquire ICT skills through personal training to be relevant and be able to defend their profession.

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