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Librarians' Awareness of Online Information Services and Resources for Effective Services Delivery in Public University Libraries in South-East, Nigeria

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Abstract:

This study investigated the extent of public university librarians' awareness of various services that online information resources are utilized for effective services delivery in public university libraries in South-East Nigeria. To guide the study, one research objective, and one research question were used while one hypothesis was formulated and tested at 0.05 level of significant. Descriptive survey was adopted for the study. The population of the study was 174 professional librarians. Total census was used for the study hence there was no sampling. The instrument of data collection was questionnaire. Validated copies of the questionnaire were tested for reliability using Cronbach Alpha, and the reliability coefficient obtained was 0.94 confirming its reliability. The 174 copies of questionnaire were administered to the respondents through the help of research assistants one from each state of the South-East.157copies of the questionnaire were returned representing 90% return rate. Data was analyzed using descriptive statistics of mean frequency count and standard deviation. The mean was used for answering the research question while inferential statistics of t-test was used for testing the hypothesis. The result showed mean at 2.95 high extent responses by the respondents agreeing conclusively that the public university librarians are to a high extent aware of various services that online information resources (OIR) are utilized for effective services delivery in the public university libraries in South-East, Nigeria. Hence the study recommends that university librarians should aptly direct for the utilization of OIR for continuous and effective services delivery for high impacts of services delivery in public university libraries in South-East, Nigeria.

Keywords

University, University library/Librarians, Utilization, Online, Information, Resources, and Services

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Introduction

There are types of online information resources and services utilized in the university libraries in respect of services delivery. They include but not limited to: e-books, e-journals, institutional repositories, e-requests/queries, e-ordering and e-shearing of resources among others. They have their characteristics such as: portability, large space of information resources content, less accommodation of library space, varied information

resource materials (in different formats), easy of accessibility etc. They also have potentials of generating limitless information resource materials across the globe timely and timelessly irrespective of the location of the service giver and receiver respectively. Also, several users can be accessing similar or different information from them at the same time without interruption. The influence of Information and Communication Technology (ICT) has continued to hold sway in the contemporary world. This has brought many changes that have been impacting a lot of influences and even some dissension of voices on various ways and means in the patterns of services delivery that have Internet/online connectivity. However, almost all professionals in various vocations and industries are integrating and utilizing online/Internet platforms for effective information and information resources conveyance and services delivery in their businesses. ICT indeed has lead to a lot of easier achievements and value additions to human life activities and endeavours. Its' overwhelming influence and the twigging effects resulted into some new words in ICT vocabulary that have become operative jargons in the information and communication industry. Prominent and universal among them are: "online", "Internet", "wireless", "inter face" and "cloud" (ether) etc. Their application and manipulations have led to effective services delivery; the harnessing and dissemination of information and information resources in their verities with speed, and timelessly irrespective of location both locally and globally with Local Area Network (LAN) or Wide Area Network (WAN) respectively (Amadi, 2023). These are no longer news and cannot be over emphasized. The banking industry indeed is a good instance where online cum Internet approach to services delivery is significantly effective and has extremely displaced a lot of manual ways and means of the system's information links and conveyance. The university libraries and librarians are not left out of this same scenario and pattern of services delivery by online/Internet connectivity as in the banking industry. The university librarians whose professional domains are the university libraries are really on the move with this trend and scenario in the modern day librarianship and services delivery to the library users by online. As it stands, online information/information resources vis-a-vis sources are quite numerous and varied. Their common nature is that they are operated using electricity together with appropriate electronic devices which the computer with its peripherals and connectivity is main. At this position therefore, the university librarians' awareness on the utilization of online information resources for effective services delivery to the library users is needful and will generate more confidence and interest for the service givers (the librarians). This, in the opinion of this paper, is because the achievements of effective services delivery in contemporary library services delivery bothers and extremely depends on the utilization of online sources and resource stuffs/materials, with the dexterity of both the librarians and the library users in manipulating the online gadgets/tools. Awareness and application of the various online/Internet information

resources and tools in the public university library services delivery, has been viewed to have been resulting in the enormity of various information resource materials that enhances faster, timely and timeless availability and utilization of the library and library information resources for effective services delivery irrespective of the time, distance or location of both the service giver and receiver respectively. In this paper the *Internet* is used as a generic term and also implies *online,* and as such both are used synonymously and interchangeably as off-shoot words (jargons) of the ICT. This paper therefore, adopts *online* to express electronic/electrical processes of harnessing stuffs/material information resources hoisted in the "cloud" and what are gotten there from, and their utilization for effective services delivery in the public university libraries in the South-East, Nigeria.

Statement of the Problem

The application of online systems in libraries' routine operations to accessing and harnessing information resource materials and making them available for utilization has been a welcome development and approach that is enhancing and changing services delivery in libraries world over. This has been viewed to have been revolutionizing, guarantying and providing access to databases stored in remote computer systems globally. The characteristics and potentials of online information resources are very clear. They include but not limited to: speed, accuracy, availability of numerous information resources in varied forms and formats, timely and timeless access to them/their information content etc. More so, the location and distance of the user is immaterial and many users can be accessing the same information resource materials at the same time without interruption. A common thing about them is that all the gargets and wares applicable with them are electronic and are electrically powered. However, in spite of all the enhancing characteristics and potentials of online information resources, and the general acclaim of their utilization for effective services delivery, in public university libraries, the observation of the researchers is that the extent of awareness of the types of online information resources utilized for effective services delivery by the university librarians is not certain and at that a mere axiom particularly in the public university libraries in South-East, Nigeria, and therefore, require scientific objectivity to determine this general acclaim empirically, which is what this study is set for.

Objective of the Study

The purpose of this study is to determine the extent of public university librarians' awareness of the utilization of online information resources/services of various types for effective services delivery in the public university libraries in South-East, Nigeria.

Research Questions

What is the extent of the public university librarians' awareness of the various types of services that OIR are utilized for effective services delivery in public university libraries in South-East, Nigeria?

Hypothesis

There is no significant difference between the mean responses/rating of the public university librarians of federal and state owned university

libraries on the extent of awareness of the utilization of online information resources for effective library services delivery in the South-East, Nigeria.

Literature Review

In the opinion of this article, the *Internet* as a generic term also implies *online* and can be used synonymously and interchangeably as off-shoot words (jargon) of the ICT. This article therefore, adopts *online* to express electronic/electrical process(es) of harnessing information stuffs/materials hoisted in the "cloud" and what are gotten from it from any part/location of the globe, with good speed, timely and timelessly; in any required quantity, and their utilization for effective services delivery in the public university libraries. There are types of online/internet information resources. They are in diverse and varied format for effective service delivery. They include but not limited to: e-books, e-journals, camera services(video and photographs), sound recordings, institutional repositories (IR) services, reference and referral services, registration and regulation of users and materials respectively, reservation of materials, e-resources sharing and inter library loaning etc These also are used to edify the library with other materials/resource collections (Vasishta 2008). Reitz (2004) gave the definition of online, as the connection of computers to the Internet via telecommunication links, as opposed to a standalone system. Reitz further stated that, online refers to the accessories or devices physically separate from, but directly connected to, and under the control of a central processing unit (CPU) and ready for interactive use in real time. Kennan and Johnstone (2000) define it as a "direct real-time communication with central processor of a computer via terminals or separate computers". Online, according to Reitz (2004), is used synonymously in libraries with the words, "automated, computerized, e-resources, network electronic information resources (NEIR), digital system and world wide web (www)".

The word/term, information in the opinion of this paper is universally used in every day moment by moment conversations or discussions of people. It could be applied as suitable as its user(s) in any sphere of life activities put it and understand it to be. The use of the word "information" cuts across disciplines and professions as it cannot be easily pinned to one particular profession or business (Amadi, 2023). Information generally, implies any ideas or knowledge communicated and received. Information could be by symbols, signs, oral forms etc. (Reitz, 2004). Information educates, advertises and enlightens which can bring about reactions (changes) in individuals or organizations. It aids in clearing doubts in respect of people's mind agitations, and decision making or taking, in order that people, institutions and organizations do not derail from achieving desired results (Amadi, 2023). In the opinion of this article, awareness or knowledge of the types and numerous benefits of the utilization of online information resource materials makes the librarians to like them and accordingly adopting them and utilizing them for effective services delivery in public university libraries. In terms of information resources per se, they are the materials used to achieve an aim; usually for the

purposes of information (i.e. enlightenment/knowledge or even more enlightenment/knowledge) on a particular subject, ideas, expressions, items or agenda as the case may be (Amadi, 2023). Books, newspapers, libraries, databases, computers equipment and other media and their respective personnel even the radio, television etc. that provide information for teachers and students and others, are examples of resources for information (Hornby, 2010). Resources and sources are mostly confused to have the same meaning, which is not true (Pattar, 2017). According to Pattar, resources are things that are readily available for utilization while sources are the places where we get things from. This is corroborated by English, (2017) who stated that a source is that from which something comes.

Consequently, online information resources (OIRs) as relates to this study article, refers to all such information products that are hoisted in the cloud and with networks, which are browsed to get relevant information and resources that are utilized in various ways and for different purposes of business and services delivery in the university libraries. They are manipulated through the use of computers and their peripherals connectivity as the tools. The notable characteristics imbedded in online information and information resources services delivery therefore, are that they are electronic and are carried out electronically. As Nwosu and Opara (2019) put it, online (electronic) resources are materials that require computer mediation in order to access and use them or make them available for use if required. According to them both online and offline information material resources such as the CD-ROMs fall within this category. They refer to all the resource products that a library provides electronically through the use of computer networks or connectivity. They are delineated in this paper to imply those information materials and tools (data and/or programs), suitable, relevant and encoded for manipulation by computerized devices either in a Local Area Network (LAN) or Wide Area Network (WAN), as described by Quadri, Adetimirin and Idowu (2014). According to Vasishta (2008), online information resources (OIR) is a broader term that encompasses abstracting and indexing services, full-text by materials such as newspapers and reference books, electronic journals and offerings of electronic "aggregators", articles delivery services and free resources on the internet. Arms (2000) define online information resources as "a managed collection of information, with associated services, where the information is stored in digital formats and accessible over a network". However, Bertroit (2004) is of the view that in libraries, online-based services and resources can take many forms/formats including: searching library holdings, placing a hold or recalling library materials, making an inter-library loan request, licensing online databases, e-journals, and e-books for customer access, digitizing library collections for online access, providing organized web pages that lead customers to library/non-library content, and providing real-time and asynchronous digital reference services.

Online information resources therefore, may include three types of networked information systems (Mritunjay, (2006): (a) Local Area Networks systems: The file servers in LAN are loaded with microcomputer based applications including various CD-ROM type databases. All microcomputers based workstations are linked to one or more file servers to share various applications and information. Thus, LAN is a distributed network system. (b) Online integrated library management systems (ILMS): also categorized as INTERNET. This type of network system handles traditional library functions such as circulation, interlibrary loan, cataloguing, acquisition, serial control and online public access catalogue (OPAC), which this paper also reflects. (c) Wide Area Network Systems: These systems communicate with the Internet through Gopher, World Wide Web (WWW), Wide Area Information Server (WAIS), and other Internet Index Tools. Online information resources (e-resources) are in the form of E-Books, E-Journals, Online Public Access Catalog (OPAC), CD-ROMs, Online database, Internet resources, electronic link and web publishing. Added and ascribed online information resources in this paper are other off-line electronic information resource versions. They include; e-data-archives, e-manuscripts, e-maps, e-magazines, e-theses, e-newspapers, e-mails, e-research reports, e-bibliographic database which also are accessible through electronic machine systems' ways, patterns and protocols (Vasishta, 2008). They edify and make richer the libraries holdings, for effective services delivery by the librarians to their varied clienteles.

All the library and information resource materials harnessed in a university library are for utilization in most routine services and more. Utilization in library parlance is the application or putting of various tools or facilities of work to achieve desired goals or expectations for effective service delivery. In the words of Duranceau (2008), utilization is the degree to which people use a system or product to a successful completion of a task for which it was employed. Hornby, (2010) defines utilization as the process of using something. Online information resources as materials are utilized for effective services delivery in university libraries. Uhegbu (2007) conceptualizes utilization as the actual putting into appropriate use of acquired information. In this paper invariably, utilization of online information resources is similarly applicable.

Utilization of online information resources by librarians is the hub that results in effective services delivery in university libraries. Furthermore, utilization in the concept of this study, refers to the application of numerous information resources uploaded and generated into and from the Internet respectively through the manipulation of computer networks and connectivity. Utilization of online information resources and effective services delivery differs from one library to another depending on needs of users, the level of ICT configurations that are on ground in the library and other variables. In the present age of information explosion and utilization, it is rare or strange to see a university library and its librarians not complementing and effectively consummating their

services delivery without online information resources utilization.

Hornby, (2010) explains utilization as "to make use of available service resources at the individuals' disposal". Utilization therefore is a complex behavioral phenomenon that is related to availability. Online information resources are made more meaningful when they are appropriately and properly utilized for effective library services delivery, i.e. in meeting the information needs of the university library patrons.

Services are the duties an individual or groups of individuals renders as professionals or non-professional, to person(s) in society, organizations or establishments which the service receivers find useful in satisfying their needs. Services are either for free or for fee. This however, depends on the institution/organization involved. Services also are valuable actions, deeds or efforts performed to satisfy needs or demands (Hornby, 2020). Ultimately, services are actions of activities that are rendered to someone or doing something for someone. In respect of library services in the context of this paper, the concept of services delivery is the ability of librarians to professionally strive to process and organize information resources (both online and traditional) made available, and the ability to utilize them in meeting all or reasonable levels of information needs, queries, and demands of the library users (Olanlokun, 2013). There are both outreach and in house library services. Outreach library services take services to the clienteles' domain or abode, while the in house services are the opposite. Utilization of online information resources in library services delivery makes both modes of services (outreach and in house) effective. It is in this light and focus that *effective services delivery* in this article implies; a timely, timeless, speedy, accurate, simple and easy provision of profuse online information resources that meets the information needs of the library users. Services of this nature can take place with or without a one-on-one interface irrespective of location.

Academic institutions of higher learning particularly the universities world over, are up hailed as purveyors of knowledge as a result of the regular studies, researches, teaching and learning with other community services that take place in and around them. According to Okezie (2015), universities are knowledge factories which pursue academic excellence and intellectual transmissions from generation to generation through their prescribed functions of research, teaching and public services or functions. Hornby (2010), define university as "an institution of the highest level of education where you can study for a degree and do research. Given the above assertions, the institution of any university attracts different other arms and components that truly make it a complete university structure and which the university library is a major one among them.

University librarians are fashioned a bit differently in orientation to curiously and constantly put efforts that help to increase and up-hold the information resources knowledge base of the university staff and students for research, teaching and learning. They are academics *sui generis*, and serve the colleges or faculties of the universities. Today's university (academic) librarians are involved in

a variety of challenging library services delivery. They may consult with individual library users in analyzing, identifying and fulfilling their information needs; create campus wide information literacy programs and deliver classroom instructions to strengthen information literacy skills; select, organize and facilitate access to information in a variety of formats; keep abreast of technological advancements and develop strategies to take advantage of them; plan, implement and administer computer based systems electronic databases design and manage web sites; collaborate with classroom faculty computer specialists and instructional developers; contribute to effective teamwork among colleagues, and participate in the public relations efforts to promote and raise funds for academic libraries. All these are done in and from the library because, historically, university libraries (academic libraries) are the natural destinations for students, faculty staff and researchers seeking for relevant information (Ozioko, 2007). Ozioko further asserts that academic libraries serve as the repository for published information as well as the intermediary for acquiring materials from every part of the globe. The university libraries where the university librarians have their domain to deliver services are major and an integral department of university education; established to meet the information resource needs for study, research, and teaching to students (Pandey, 2015). To this end, the application or incorporation of online information resources for effective services delivery in university libraries by librarians are quite expedient and needful. Nevertheless, no one can deliver what he or she does not have. To this understanding, the extent of the librarians' awareness of the various types of services that OIR are utilized for effective services delivery is needful.

Methodology

The study was conducted in the South-East, Nigeria. Well Structured closed ended questionnaire was the instrument used for data collection for the study. The population of the study was 174 professional librarians in the public university libraries of the South-East only. The sampling technique was total census. (The entire population of 174 was used because it was a manageable size of population). Data collected was analyzed using the population mean (x) statistics and standard deviation to answer the research question. The cut off score for decision making was obtained by summing the value in the rating (1+2+3+4=10) and divided by 4 to obtain 2.50. Any mean value ranked 2.50 and above was positive i.e. agree, otherwise it was negative i.e. disagree. The interpretation of the items from the respondents on the (closed-ended) questions, had their real limits viz.: 1.0-1.49 (Very low extent), 1.50-2.49 (low extent), 2.50-3.49 (High extent), 3.50-4.00 (Very high extent). The null hypothesis was tested using t-Test statistical tool about the difference between variables. If the t-Test calculated value was less than the t-Test table value at 0.05 level of significance. This means there was significant difference between the two variables, the null hypothesis was rejected. If otherwise, the null hypothesis was accepted.

Reliability of the Instrument

The reliability index of the instrument was determined by administering the instrument (i.e. questionnaire) to thirty (30) librarians at another university, South-South, Nigeria who were not part of the study area, but have similar characteristics based on their training, profession and work environment. Their responses were computed and the internal consistency coefficient was determined using Cronbach Alpha statistics. The reliability coefficient obtained was 0.94. The coefficient is very high, hence the instrument was considered reliable.

Results

Table 1: Mean ratings on the extent of awareness of various types of service that online information resources are utilized for effective services delivery by librarians in the public university libraries South-East, Nigeria.

S/N	Items	State		Federal		Grand	Remarks
		$\overline{x}$	SD	$\overline{x}$	SD	$\overline{x}$	
1.	Ordering of information resource materials	3.11	0.96	3.12	0.86	3.12	HE
2.	Accessioning of acquired information materials	3.00	0.90	2.82	0.88	2.91	HE
3.	Cataloguing & Classification of information resource materials	3.21	0.88	3.00	0.94	3.11	HE
4.	Reference and referral services	2.89	1.07	2.79	1.07	2.84	HE
5.	Registration & regulation of users and material resources	3.25	0.75	2.82	0.86	3.04	HE
6.	Current Awareness Services (CAS)	3.00	0.90	3.12	0.75	3.06	HE
7.	Selective Dissemination of Information Services (SDIS)	3.00	0.98	3.06	0.75	3.10	HE
8.	Charging & discharging book materials	3.25	0.93	2.94	0.83	2.82	HE
9.	Labeling of books	3.04	1.17	2.60	0.99	3.15	HE
10.	Circulation and borrowers management	3.36	0.83	2.94	1.00	2.93	HE
11.	Serials management	3.21	0.96	2.65	0.79	2.91	HE
12.	Books reservation	3.00	1.09	2.82	0.81	2.32	LE
13.	Camera services (video & photographs)	2.39	1.07	2.24	0.90	2.43	LE
14.	Sound recordings	2.50	1.07	2.35	1.06	2.43	LE
15.	Institutional repositories (IR) services	2.68	1.12	2.18	0.95	2.43	LE
16.	Funds accounting	2.36	0.99	2.71	1.16	2.54	LE
17.	Bibliographic services	2.75	1.04	2.82	0.88	2.79	HE
18.	Resource sharing & inter-library loaning	2.68	1.06	2.53	1.07	2.61	HE
19.	Indexing, abstracting & documentation services	2.89	0.79	2.53	0.86	2.71	HE
	Grand mean	**2.69**		**2.72**		**2.70**	**HE**

X = Mean, SD = Standard deviation, LE = Low Extent, HE = High Extent

The data in Table 1 reveal that there are types of online information resources for effective services delivery. Of the 19 items listed, awareness of 14 of them were rated high extent (HE) by the university librarians which also implied availability of online information resources that invariably are utilized or can be utilized/applied in routine duties and other possible library operations for effective services delivery in public university libraries in South- East Nigeria. In that respect also, the state and federal universities obtained a group mean of 2.69 and 2.72 respectively. This implies that the federal and state public university librarians to a high extent are also aware of the utilization of online information resources and online applications and processes in ordering and acquiring information resource materials, (collection development services), cataloguing and classification of information resource materials, reference and referral services, registration and regulation of users and material

resources, current awareness services, selective dissemination of information services, charging and discharging of book materials among others.

On the other hand, Table 1 also revealed that 5 out of the 19 items listed were rated low extent (LE) of awareness. These items are: books reservation, camera services (videos and photographs), sound recordings, institutional repositories (IR) services and funds accounting. Still showing that extent of awareness and other objective variables of the study for effective service delivery were of high extent because only 5 of the items out of 19 listed were not quite significant.

Hypothesis

There is no significant difference between the mean responses/rating of librarians in federal and state owned public university libraries on the extent of awareness of various types of online information resources utilized for effective services delivery in public university libraries in South-East, Nigeria.

Table 2: T-test Analysis of mean difference between federal and state owned public universities on the extent of awareness of types of online resources utilized by librarians for effective service delivery

Variable	**N**	**$\bar{X}$**	**SD**	**Df**	**T**	**Sig**	**Decision**
Federal	122	12.12	.723	172	2.404	0.02	Reject Ho
State	52	1.23	.892				

** Significant at P<0.05*

The result in Table 2 above revealed t-calculated value of 2.404 at df = 172 where $p < 0.05$. This indicate that there is a significant difference between the mean score of librarians in federal and state owned public university libraries on the extent of awareness of the types of various online resources utilized by librarians for effective service delivery in public university libraries in South-East, Nigeria. Hence the null hypothesis was therefore rejected. It implies that the federal university librarians are more aware of the various types of online information resources utilized for effective services delivery.

The implication of this research is that presently and more in the future, online information resources and their utilization have become prominent and will be more adopted and utilized in the propagation of routine duties and other applicable variables for effective services delivery in the university libraries in the South-East, Nigeria particularly. The advantages include but not limited to their operational speed, easy accessibility, timeliness and timelessness, enormity of information resource materials (i.e. availability of information resources) from across the globe, irrespective of the location of the service giver and receiver, enough space for needed information content and lesser accommodation space of the library building among others.

Discussion of Findings

The findings of the study revealed that there are various types of online information resources utilized for effective services delivery in

public university libraries. This is in agreement with Mritunjay (2006) who itemized these online information resources into three: (a) Local Area Networks system which the file servers are loaded with microcomputer based applications including various CD-ROM type databases, (b) Online Integrated Library Management System (IMLS) also interpreted as INTERNET. This type handles traditional library functions such as circulation, inter library loans, cataloguing, acquisition, serials control, and online public access catalogue (OPAC) and (c) Wide Area Network Systems; which communicate with the Internet through Gopher, the world Wide Web (www), the Wide Area Information Server (WAIS) and other internet index tools. In corroboration also, Vasishta (2008), noted that OIR (e-resources), are in the forms of E-books, E-journals, OPAC, CD-ROMs, Online database, internet resources, Electronic link and Web publishing among others. They found online information availability and utilization as determinants of managers' performance in commercial banks and accordingly can replicate in libraries for effective services delivery. All types of online information resources in one way or another enhances the librarian's ample time to gather and disseminate online information resource materials and do other functions easier when compared with the traditional methods of information systems and approaches on routine duties and services delivery. With the various types of OIR on ground and utilized effectively, the outcome would become very influential and convincing to the libraries' and universities' management. This invariably, would result into new positive policy decisions, support and changes in favour of OIR adoption into the public university library operations and systems that also will further enhance availability and utilization of OIR for effective library services delivery by the librarians in the public universities.

Conclusion

The study was on "extent of the public university librarians' awareness of the utilization of online information resources for effective services delivery in public university libraries South- East, Nigeria. The study covered 174 public universities professional librarians in ten (10) public federal and state university libraries. Structured questionnaire (closed ended) was the instrument used to collect data for the study. The result showed that both the state and federal public university librarians to a high extent have awareness of the types of OIR utilization in routine duties of the public university libraries and their availability invariably for effective services delivery in the public university libraries in South-East, Nigeria. The grand mean figures obtained were 2.69 and 2.72 for the states and federal public university librarians respectively, and the overall grand mean was 2.70.

Recommendation

Based on the findings, librarians should aptly direct for more awareness on the types of online information resources, their availability and utilization in routine and other variable and appropriate duties for effective services delivery in the university libraries in South-East, Nigeria.

References

Amadi, E. C. (2023). Utilization of online information resources and effective services delivery by librarians in public university libraries in South-East, Nigeria Unpublished PhD thesis Department of Library and Information Science, College of Education, Michael Okpara University of Agriculture, Umudike.

Arms, W.Y. (2000). *Digital libraries.* Cambridge, MA: MIT Press.

Bertroit, F. C. (2004). Libraries and networked information services: Issues and consideration in measurement. *Performances Measurement and Meters, 5* (1), 11 - 19.

Duranceau, E. F. (2008). The wealth of network and institution repositories: MIT, D-space and the future of scholarly commons. *Library Trends, 57* (2), 244- 261.

English, J. (2017). What is the difference between the word 'source" and "resource"? *Quora.* Retrieved from: http://www.quora.com/topicresources-2.

Hornby, A. S. (2010). Utilization. *Oxford advanced learners dictionary of Current English.* Oxford University Press.

Hornby, A. S. (2020). Service. *Oxford advanced learners dictionary of current English.* Oxford University Press. Retrieved from http://www.business dictionary.com> definitions.

Keenan, S. & Johnson, C. (2000). *Concise dictionary of library and information science.* London: Bowker Sour.

Mritunjay, K. (2006). Network information society: A window to library profession in 21st century. *Published in 4th Convention Planner held at Mizoram, Aizawal from 9th-10thNovember 2006, pp.455-463.*

Nwosu, M. C. & Opara, U. (2019). The future of 21st century library is hybrid. Paper presented at the International Conference on Information Technology and Economic Development(ICITED), held at the Conference Auditorium University of Calaber, 6th-8th July, 2016.

Okezie, C. A. (2015). Indices of library and information science publications output and availability in selected academic libraries in South-East, Nigeria. Unpublished PhD Thesis, University of Uyo, Nigeria.Olanlokun, O. (2013). Users' delinquency as factor affecting effective service. *Library Philosophy and Practice (e-journal).* Retrieved from: https://digitalcommons.unl.edu>cgi.

Ozioko, C. J. (2007). The education of library users in Nigeria. *Education Libraries Bulletin,26* (1), 1 – 3.

Pandey, R. (2015). R. Gupta's dictionary of library and information science. London: Libraries Unlimited.

Patter, R. (2017). What is the difference between the word "source" and "resource"? *Quora.* Retrieved from: http://www.quora.com/topic/resources-2.

Nwosu, O., Okeke, I. E. & Ejedafiru, E. F. (2013). Challenges of electronic information management in Nigerian university libraries. *IOSR Journal of Humanities and Social Sciences, 13* (2), 75 - 79.

Quadri, G. O., Adetimirin, A. E. &Idowu, O. A., (2014). A study of availability and utilization of library electronic resources by undergraduate students in private universities in Ogun State Nigeria. *International Journal of Library and Information Science, 6* (3), 28-34.

Reitz, J. M. (2004). *Dictionary for library and information science.* London: Libraries Unlimited.Uhegbu, A. N. (2007). *The information user: Issues and themes* (2nd ed.). Okigwe: Whytem

Vasishta, S. (2008). Networked electronic information resources (NEIR):

Some instructive thoughts. *Retrieved from:* *https://www.researchgate.net/publication/2881054*