

Librarians Perceptions on the Adoption of Digital Reference Services in University Libraries of North-West, Nigeria

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Abstract

Reference service is one of the library's primary services besides acquisitions, classification, cataloguing and physical planning. Digital reference is a service by which library reference service conducted through online and the reference transaction is a computer-mediated communication. The word "reference" in this context refers to the task of assisting library users in finding information, answering questions, and otherwise fulfilling users' information needs. This paper identifies the Librarian perception on the adoption of Digital Reference Services (DRS) in north-west Nigeria. The purpose of the study was to investigate Librarian' perceptions on the adoption of digital reference services in north-west university libraries based on their awareness, quality as well as identity librarians understanding and interest in this service. A survey method with the questionnaire was used to collect data from respondents. The questionnaire has been sent to 161 respondents of the university libraries under study. The findings of the study, however, revealed that the majority of Academic Librarians were aware of digital reference services which were already in use in their Libraries. The respondents have a positive perception of the digital reference services in their respective libraries for the information services delivery. The study, therefore, recommends that the university management should put more funds in the area of digital reference services in order to boost its services. The Libraries should also create more awareness efforts on how to use digital reference services in the Libraries.

Keywords: Academic Librarians, Digital Reference Service, University Libraries

Introduction

The world has become a global village due to the jet speed of Information and Communication Technology (ICT). Moreover, there is a need for information managers and disseminators to equip themselves with the skills required to cope with this trend of development, one of which is to embrace the use of ICT in their reference services. Reference service is a personal service given to a user of information, in the library, or any other information centre. According to Unegbu (2013), myriads ways of disseminating information in information centres exist, each aiming at accomplishing an objective. Reference librarians now provide users with databases that give access to millions of journal articles as well as access to the internet which has holdings of even more libraries and a limitless variety of information from both formal and informal sources. This implies that needed information can now be identified, accessed and delivered within the shortest time possible with minimal effort from both the

librarian and the client (Ifijeh and Isiakpona, 2013). Also, patrons can send queries anywhere and receive answers from the reference librarian without necessarily visiting the library in person.

Electronic reference service has become a universal feature of libraries in the twenty-first century. Other nomenclatures for electronic reference service include virtual reference service, online reference service and real-time service (Nicholas, 2011; Opara, 2006; Jabir, 2008; and Malik and Mahmood, 2014). In this study, these terms are used interchangeably. Malik and Mahmood (2014) also affirmed that many libraries are offering or advancing towards digital reference service to meet users' needs anytime, anywhere. Electronic reference service is communicating and interacting with users in virtual environments by utilizing computer and internet technology. Digital reference service is defined as a mechanism by which people can submit their questions and have them answered by a library staff member through some electronic means (e-mail, chat, web forms, and the like (Janes, Carter & Memmott, 1999 in Malik & Mahmood, 2014).

Moreover, Nicholas (2011) expressed that students born in the information age want services that are fast and efficient, making the model of providing a service through a physical reference desk obsolete. Nicholas (2011) affirmed that college students, especially undergraduate students, live in a 24/7 world and seek out services that cater to their lifestyle. They want services that will assist them in completing their assignments while off-campus, and at any time of the day.

The provision of information services to clients in this age of globalization is tasking especially in developing countries, such as Nigeria. Nicholas (2011) submitted this new paradigm with its various models, each with its unique functionalities, has been much debated in the professional discourses of librarianship. Libraries in developed countries have adopted models of these innovative online reference services in their operations while libraries in countries with developing economies are moving toward embracing them. In a similar vein, Unegbu (2013) stated that developing countries where the needed gadgets may either not be available and are too expensive to afford due to poverty are finding it difficult to cope. Notwithstanding any impediment to access the global new technology or from which bloc any country belongs, development does not wait for anybody. The best any country lagging could do is to brace up and run a little faster; otherwise, the gap may be too wide to be covered. This is the reason Babcock University library as one of the pioneers of private universities in Nigeria has risen against these impediments to acquire and embrace modern technology in order to provide and meet the information needs of library users at any point in time. However, the level and extent to which services especially reference services, are offered to users electronically is not well known.

Objectives

The study was based on the following objectives

1. to identify the types of digital reference services available in the university libraries of North-West, Nigeria

2. to determine the level of awareness of digital reference services of librarians in the university libraries of North-West, Nigeria
3. find out the level of awareness of digital reference services tools in the university libraries of North-West, Nigeria
4. uncover the perception of librarian on the adoption of digital reference Services.

Literature Review

Libraries are founded basically to provide their clientele with information resources and services, and these materials are made accessible through cataloguing and indexing services provided by the libraries through the public service section. Among the public service functions of a library which performed more significant part is the reference section. The provision of reference services is one of the essential functions of library and information services provided to meet the information needs of users. It is the core service of the library that creates contact between the reference librarian, information resources and the users. In defining reference service Gama (2008) in Idris, Oji and Abana (2011) cited scholars such as Lynch, Bunge, and Edoka means personal assistance given by librarians to users in pursuit of information. They further stated that the assistance could be in the form of a referral to likely sources of information or in the form of information itself or it could be any library activity deliberately designed to facilitate easy retrieval of information. Reference service is the act of bringing into contact the right reader and the right book or the right information source at the right time in a personal way (Umunna in Mole, 2006). Reference services are the culmination of all library activities aimed at facilitating the use of the library and its resources. It is perhaps the most demanding aspect of librarianship and its performance can either make or mar the image of the library (Quadri and Abiodun 2017).

Achebe (2012) opined that reference and information service (RIS) is an aspect of library services in which contact between the reader and library materials is established through staff assistance, matching the user with the library materials which could be printed or electronic. Reference service is the most demanding of the entire library services and close to the patrons. Management of reference section in an academic library is the most challenging task facing librarians in the world today. According to Olaleye (2015), reference service is a reactive service given to users of the library on-demand. To buttress more on this fact, Ifidon and Ifidon (2008) defined reference services as direct personal assistance given by librarians to library patrons who are in pursuit of information for whatever purpose. They further assert that reference service does not only involve directing the user to the location of the material where the information can be found or the identification and selection of materials related to a particular information need and the provision of a piece of brief factual information, but also locating which information is relevant from a mass of relevant and irrelevant.

Reference services according to Retiz (2004) are all the functions performed by a trained librarian employed in the reference section of a library to meet the information needs of the patrons (in person, by telephone or electronically). However, reference services are not limited to the activities, roles, functions and services rendered by the reference librarians, but also behind-the-scene activities like documentation lists which also constitute the reference services.

Kumar (2003) noted that it helps to bring contact between a user and the right document, thereby saving the time of the user. However, the responsibility of academic libraries goes beyond information resources gathering and organizing but play an active role of information dissemination through the process of reference services. Thus, reference services serve as the fundamental basis of research activities to students. Hence, academic libraries should endeavour to provide adequate and relevant reference sources in order to meet the information needs of students.

A more formal definition refers to digital reference as “a network of expertise, intermediation and resources placed at the disposal of someone seeking answers in an online environment. Kumar (2012) assert that Digital Reference Service is an advancement of the traditional reference services that are emerging as the natural solution to meet the user's information needs in the changing environment Gama (2012) assert that in a digital environment, physical contact between users and reference Librarian is highly minimized. A user can have access to all set of information resources that the library store electronically without the user being physically present in the library. Kumar and Gama are of the view that with the digital reference services, the physical contact between users and librarian is no longer needed as the users can access the information they want without coming to the library.

Tutu (2016) describes Digital Reference Services as an information service that uses electronic communication to connect library patrons with librarians. Communication is done via instant messaging, chat, videoconferencing, Voice over IP, among other electronic communication channels. To him, digital reference services allow the user to communicate with the library without even coming to the library via electronic means of communications to access what they want quickly and at a given time. According to Hann and Kibbee (2011) and Bakker (2002), digital reference service or electronic reference service developed *following* ubiquitous popularity of the internet as an avenue of communication; increasing availability of networked digital resources; the corresponding need for the service; decreasing numbers of in-person reference transaction; librarians are continuing efforts to *respond* to user preferences; mushrooming of commercial digital references like AskJeeves and web help; expansion of reference service to reach a wider audience and remote library users; The convenience, immediacy and interactivity made possible by the digital reference. This means the introduction of the internet to the Library operations made a significant impact in the digital reference services which was introduced purposely to reduce the number of users in asking reference question in the library and many users will access the library stock through the electronic library. Vijayakumar, (2011) VRS or DRS are simply defined as the provision of real-time personal assistance to users via web-based interactive software. To satisfy the information need, the librarian can "chat" as a component of the software to answer a reasonably specific or straightforward question, or deliver digital materials, or suggest relevant web resources to the user, and provide online bibliographic instruction. This service may happen when the library is closed or when the user is unable to get to the library. This way, users can still be in contact with experienced reference librarians. Questions submitted via e-mail and linked web pages require attention from reference staff, and the virtual reference transaction can be more complex and time-consuming than traditional in-

library service. The Web medium that poses a new challenge for librarians offers powerful new tools to give us the power to control our situation.

Methodology

The study adopted the survey method with the questionnaire as the instrument for the data collection and consisted of 6 pages in three sections. It included Likert-scale items and close-ended questions. Every item was constructed to represent each variable. Variables were represented by a series of statements that required a response on a five-point Likert-scale ranging from strongly agree to strongly disagree. The population for the study comprises of 186 academic librarians of university libraries of north-west Nigeria as respondents.

The statistical method of data analysis SPSS (Statistical programme for social sciences) was used for this study to analyze the information gathered from the respondents and summarized the findings in a clear, precise and reliable way.

Findings and Discussion

The table below shows 186 copies of the questionnaire were administered to the respondents, out of which 161(86.6%) of the questionnaires filled and returned and found useful for the analysis. In contrast, 25(13.4%) were not returned. With the high returned rate from the questionnaire administered, it will serve as a good sample needed for the generalization and a data is good enough to generate the needed response for the study. This analysis, therefore, is based on the 161 copies of the questionnaire that were filled by the academic librarians.

Table 1 Response Rate

S/N	Federal Universities in North-west Zone	Number of questionnaires Administered	Number of Return Questionnaires	Percentage
1	Ahmadu Bello University Zaria	113	103	91.2%
2	Bayero University Kano	34	28	82.3%
3	Federal University, Dutse	8	8	100%
4	Federal University Dutsin-ma	5	3	60%
5	Nigeria Police Academy Wudil-Kano	8	6	75%
6	Usmanu Danfodiyo University Sokoto	18	15	72.2%
Total		186	161	100%

In this study, the gender of the respondents, male 95(59%) and Female 66(41%), among the 161 respondents, majority of the respondents 100(62.2%) have less than 10 years working experience, meaning that they have not spent much time working in the library as such their experience in some issues of managing the library is still low.

Table 2: Types of Digital Reference Services Available in the Libraries

Types of Digital Reference Services	Frequency	Percentage %	Total
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	Yes	No	
Asynchronous	58 (36%)	103 (64%)	161 (100%)
Synchronous	87 (54%)	74 (46%)	161 (100%)

Respondents were asked to indicate the type of digital reference services available in their libraries, 87 (54%) being the majority of the respondent indicated that the synchronous digital reference services was available in their libraries. In contrast, 74 (46%) indicated the absence of synchronous digital reference services in their library, on the other part 58 (36%) revealed that asynchronous reference service was available in their libraries. In comparison, 103 (64%), which is the majority indicated that there were no asynchronous digital reference services in their libraries. This shows that digital reference services in Northwest Nigeria university libraries are at the infant stage.

a. Awareness of digital reference services by the Librarians

The librarians were asked about their level of awareness of digital reference services. Below is the summary of their responses

Table 3: Awareness of digital reference services

Response	Frequency	Percentage
Very aware	49	29.8
Aware	91	55.5
Not sure	20	12.4
Not aware	2	1.2
Total	161	100

Table 2 presents a general overview of respondents rating of the awareness of digital reference services in university libraries. Data gathered indicated “aware” with 91(55.5%) over “very aware” and “not sure” which had a rating of 49(29.8%) and 20(12.4%) respectively. While “not sure” with 2(1-2%). With a positive perception for librarians presently adopting digital reference services process in the discharging reference operation, there are possibilities that more universities may realize this awareness and decide to adopt it over time.

Table 4: Awareness of Digital Reference Services Tools

Digital Reference tools	Frequency/ Percentage		Total
	Yes I am aware	No, I am not aware	
Blog	68 (42.5%)	92 (57.5%)	161 (100%)
Bulletin Board	91 (56.5%)	70 (43.5%)	161 (100%)
Decision Board	30(18.6%)	131(81.4%)	161 (100%)
Shared Calendar	33 (20.5%)	128 (79.5%)	161 (100%)
E-Books	117 (72.7%)	44 (27.3%)	161 (100%)
Data bases	113 (70.2%)	48 (29.8%)	161 (100%)
Streaming audio	28 (17.4%)	133 (82.6%)	161 (100%)
Web link	57 (35.4%)	104 (64.6%)	161 (100%)
Survey pol	41 (25.5%)	120 (74.5%)	161 (100%)
E-mail	120 (74.5%)	41 (25.4%)	161 (100%)
Social networking	102 (63.4%)	59 (36.6%)	161 (100%)
Asked services	76 (47.2%)	85 (52.8%)	161 (100%)
Chat reference	67 (41.6%)	94 (58.4%)	161 (100%)
Video conferencing	63 (39.1%)	98 (60.9%)	161 (100%)
Digital reference robot	30 (18.6%)	131 (81.4%)	161 (100%)
Collaborative reference	38 (23.6%)	123 (76.4%)	161 (100%)
Real-time live web referencing	41 (25.5%)	120 (74.5%)	161 (100%)

The findings from table 4 shows that Email 120(74.5%), E-books 117(72%), database 113(70.2%), social network 102(63.4%) and bulletin board 91(56%) are the known digital reference services tools used among libraries in these universities. The finding implies that the librarians under study are more aware of specific digital reference services tools than others. This could be attributed to the lack of knowledge of other types of digital reference tools available. Therefore, awareness of such digital reference services tools among academic librarians could be said to below.

Table 5: Perception of Librarian on the Adoption of Digital Reference Services

Statement	Frequency and Percentage					
	SA/A		UD		SD/D	
Digital Reference Services allow librarians to disseminate information to users more effectively.	137	85.1	2	1.2	22	13.7
Use of Digital Reference Services tools allow librarians to share and collaborate with sister institutions	130	80.7	1 2	7.5	19	11.8
Digital Reference Services help librarians to enhance information service delivery.	130	80.7%	1 4	8.7%	17	10.6%
Digital Reference Services allow the librarians to communicate with users efficiently	135	83.9%	1 1	6.8%	15	9.3%
Digital Reference Services enhances the librarians-user relationship	126	78.3%	1 8	11.2 %	17	10.5%
Digital Reference Services will help to reduce traffic from the reference desk	138	85.8%	8	4.9%	15	9.3%
Digital Reference Services make information sharing, dissemination and collaboration between librarians and the user more interactive	136	84.5%	1 4	8.7%	11	6.8%
Use of digital reference services allow librarians to tap the potentials embodied in the technology	114	70.9%	2 9	18.0 %	18	11.1%
Digital reference services have no information security	64	48.8%	4 0	24.2 %	57	36.1%
I fear harassment using digital reference services	54	33.6%	3 8	23.6 %	69	42.8%
Digital reference services are very costly to use	85	52.8%	2 9	18%	47	29.2%

Respondents were asked to rate their perception of the adoption of digital reference services in their libraries. Table 5 reveals the following percentages: 138(85.8%), 136(84.4%), 135(83.9%), 130(80.7%) 126(78.3%) and 114(70.9%) being the majority of the respondents unanimously have positive perceptions towards the adoption of digital reference services for information service delivery. This of, positive perception of the librarians' understudy was proved by Davis et al. (1989) who posits that individual's behavioural intention to use technology is determined by Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) of the technology.

Conclusion

The academic librarians in the university libraries of a federal university in Northwest Nigeria are aware of digital reference services and using different types of digital reference services tools mainly Blogs, e-mail, e-books and e-journal, social networking and chat reference. The digital reference services is an essential and useful tool for communication and collaboration with users, dissemination of information, marketing and reference services, bibliographic services and the like. Therefore, the librarians have a positive perception and are ready and prepared to use the new technology for service delivery. They also perceived digital reference services as useful in their libraries. The present study has also highlighted factors such as training, provision of ICT facilities, sufficient knowledge and skills, and commitment by those involved and the like. That could facilitate the use of digital reference services by the academic librarians in university libraries under study.

Recommendations

Based on the findings of the study and conclusion drawn, the following recommendations were made:

1. Awareness of other types of digital reference services tools particularly those that are currently emerging such as blogs, decision board e-books, databases, weblink e-mail referencing social networking chat reference asked services collaborative reference services, real-time web reference and the like. Should be increased through various avenues for staff training on the use of digital reference services such as seminars, conferences, and workshops on the use of digital reference services in library service by the library authorities.
2. The library management should adopt the use of blogs, decision board e-books, databases, weblink e-mail referencing social networking chat and reference asked services. Others are collaborative reference services, real-time web reference in information service delivery as they are the most popular digital reference services known and used by the librarians.
3. The library management should be more proactive to integrate and support the use of digital reference services technology in their libraries. This would help boost the awareness and perception level of the librarians to be more committed in the provision of better and improved services to the users.

4. The management of the institution should increase the funds allocated to the libraries, and the libraries should increase the skilful manpower.

References

- Achebe, N (2012). Current trends and challenges in reference and information services in Nigerian libraries. In: Daniel JO, Ifidon EI and Okegbola T (eds) Trends in Library & Information Science in Nigeria: festschrift in honour of Prof. Sam E. Ifidon. Lagos: Elis Associates.
- Ifijeh, G.I. and Isiakpona, C.D. (2013). Reference and information services in the digital age: Issues and trends. In Issa A.O., Igwe, KN and Uzuegbu, C.P. Provision of library and information services to users in the era of globalization. Pp. 113 – 128.
- Kumar, N. S. (2013) Digital Reference Service in University libraries: a case study of northern India: *International Journal of Library and Information Studies*: 2 (4), 1-16
- Kumar N.S, (2012) Digital reference services in libraries: A study of Northern India, *International Journal of Library and Information Science*, 2 (2)
- Linh, N. C. (2008). A survey of the application of Web 2.0 in Australasian university libraries *Library Hi-Tech*, Vol. 26.
- Malik, A. and Mahmood, K. (2014). Readiness for digital reference service (DRS) in university libraries: a survey in the Punjab, Pakistan. *Information Development* (30), 181 – 188
- Nicholas, P. (2011). Creating a digital reference agenda for academic libraries in Jamaica: An exploratory case study. *Libri* 61. 258 – 280.
- Olaleye Samuel (2015) Demographic Variables as factors influencing the use of library services by undergraduates in two selected universities in Ibadan, Nigeria; University of Ibadan final project publication page 7.
- Oparah, U.N. (2006). Integration of ICT in the reference service school curricula of Nigerian Library and Information Science Schools. *Information Technologist: an International Journal of Information and Communication Technology (ICT)* 3(1), 27 – 35.
- Tutu, J, M. (2016) Provision of digital reference services in academic libraries in Kenya: a review, *Regional Journal of Information and Knowledge Management* 2(1), 16- 28
- Wan Ab. Kadir Wan Dollah&Diljit Singh. (, 2005). Digital Reference Service in Academic Libraries. *International Conference on Libraries 2005 (ICOL 2005)*. Retrieved February 8, 2019, from World Wide Web: <http://www.lib.usm.my/elmuequip/conference/Documents/ICOL%202005%20Paper%2018%20Mohd%20Sharif,%20Nor%20Edzan%20&%20Zainab.pdf>