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Abstract

This paper reports on a study of evaluation of online reference services (ORS). The paper focuses on the librarians' perception of the evaluation of online reference services of academic libraries in Nigeria. The study was guided by the following four objectives: to find out the extent of application of online reference services in academic libraries in Nigeria; to examine the benefits of using ORS in academic libraries in Nigeria, to identify the challenges associated with the use of ORS, and profer solutions for ameliorating the challenges faced by these academic libraries in Nigeria. The study adopted a survey design which was employed to derived responses from 198 librarians. Data were collected from the population using questionnaire. The statistical packages for social sciences(SPSS) was used to extract data while the data were presented with the help of 4-point Likert scale, mean and standard deviation. The result revealed that e-mail services ranked 1st in the overall application of ORS. Lack of ICT infrastructure to support ORS ranked first as reason for non-application of ORS. Most noted benefit is that it provides more alternatives and flexibility to users. Challenges include: lack of proper training on use of ICT infrastructure among libraries and lack of funds to support ORS.Recommendations were made at the end of the study.

Introduction

Recent in-road in technological development in libraries have affected how information resources can be accessed and utilized. Libraries have always tried to find improved method to information access. Rightly the ultimate goal of library services is to make her information resources available to the public in the most efficient way, using standardized library tools and new information technology such as digital reference services (DRS). Malik and Mahmood (2014) also noted that many libraries are offering or advancing towards digital reference service with the main aim meeting users' needs anytime and anywhere. Development in information technology coupled with the advent of internet, are transforming not only the ways in which libraries work, but also those underlining philosophies. It is therefore very important to note that the formation of the internet provided an avenue for the development of digital reference services, because DRS cannot stand on its own without internet connectivity

There are numerous names for DRS, they including online reference ser. vices (ORS), virtual reference service (VRS), electronic reference services (ERS) and so on. In this study, virtual reference services refer to question answering services that libraries provide via email, an asynchronous channel of communication, either through a mail to link on a library website or a web form that users can fill out to ask reference questions online. (Shachaf, Horowitz, Sarah, 2007) As a result of the dynamic changes in library and information services and ICT,DRS has become so well developed that reference is not only a service but a place(Qobose,Mologany(2015) .However, Nicol and Crook (2013) concluded that the successful implementation and sustainability thereof remains a major challenge for librarians and libraries.

DRS no doubt is a very important branch in library provision of information resources and services. Therefore, evaluation of the services rendered by it is an important component of the provision of information resources. Result from evaluation of DRS will enable the library management and other stakeholders to know whether the DRS is meeting its objectives successfully. Another reason for accessing the performance of DRS is to gain a basis for fund sharing among various units in the library. For example if the result of the investigation is positive among others the library management may decide to purchase more equipment for the unit or send the staff in the unit for further training/workshop as the case may be. An evaluation from the broad view of online reference services itself will ask questions concerned with the efficiency of the operation which include the volume of questions handled per unit of time and the speed with which questions were answered (Pomerantz, 2008) . There is increasing pressure to demonstrate their value to their stakeholders, customers, and funders (Lakos and Phipps, 2004.The truth of the matter is that libraries do spend a large amount of its budget on services rendered to its users which at the end of each fiscal year it gives detail account on how the money was used to the funding body, in case of Nigeria Universities, libraries report to the National Universities Commission. For the purpose of this study, evaluation can be defined as:

a. The systematic collecting, analyzing and reporting of information.
b. For the purpose of making inferred decisions about programming(National Marine Sanctuaries, NA) while educational evaluation (2011) defines evaluation as an act or a process that allows one to make a judgment about desirability of value of a measure.

"In a library, evaluation is the process whereby we systematically collect and analyses information about students encounter with the library system, by using evidence (testing), assigning numerical values to the result to make decisions (assessment) (Ugah, 2007). In his discussion of evaluation in libraries. Pomerantz (2008) argues that "evaluation provides objectives and outcomes, the degree to which the service is meeting users needs and whether resources being committed to the service are producing the desired results." Denscombe (2009) has conceived of evaluation as a tool "that investigates particular programme or policies with the specific intention of weighting up their strengths/weaknesses and considering how things might be improved." In most libraries today competition is increasing not only from the internet as an information source but also giant bookstores that provide strong alternatives to traditional library services. Pomerantz, Mon, and McClure (2008) take a different tack in their excellent overview of importance of evaluation of library services. "Any library service needs ongoing evaluation (formative) and evaluation conducted at specific key points in time, such as annually, by semester, ors quarterly(summative).Such evaluation is essential if decision-making is to be done that will improve the service". Some DRS evaluation go beyond usability related issues, they also access the content and performance of the services it provides. Many recent studies suggest the use of IFLA DRS Guidelines and RUSA Guidelines for Behavioral Performance of

Reference and Information services providers in other to evaluate quality service (Shaw and Spink,2009,Shachaf and Horowitz,2008 cited by Ramos,Abrigo 2011 and Uutoni, 2014)

The question then is what can we evaluate? DRS is still in its infancy in Nigeria and researchers and Library administrators are still contemplating on how, who and what are to be evaluate. Reference services have long been regarded by many users as the bedrock of any library and for it to be service oriented it needs regular reassessment. Greenberg and Buxton(2017) argues that "institutions with usability groups advocate usability evaluation as a critical part of every design process. This is for good reason: usability evaluation has a significant role to play when conditions warrant it. Yet evaluation can be ineffective and even harmful if not properly done 'by rule' rather than 'by thought'. "Evaluations are conducted for many reasons. Often, they are done to meet requirements established by funding agency. It may be for political reasons or simply because the people involved in an enterprise believe it is the right thing to do, akin to taking vitamins or engaging in vigorous exercise" (Reeves, Apedoe, Hee Woo, 2005). It is pertinent to note that whenever decision is taken on evaluation of any library services, users must be involved .Ideally, users are in a better position to know when things are going bad and when changes are needed . As Zeithaml, Parasuraman and Berry(1990) acknowledged "only customers judge quality; all other judgments are essentially irrelevant". Saunders (2007) disagrees from this point of view, when he noted that "librarians are also qualified to make judgments about library quality. The views of customers cannot be ignored" .In essence, the main objective of development of DRS is to help users get information they needed with little difficulty. We regard the most important aspect in evaluating a DRS to be the identification of real user problem. Wilson (2014) summarized what can be evaluated as follows:

1. The way the management structure functions.
2. Internal operations relating to information materials, such as cataloguing and classifications, indexing e.t.c.
3. Library information services to users.
4. New programmers' of service delivery
5. New possibilities for technological support to services.
6. Alternative possibilities for doing anything.
7. The functioning of a total system prior to planning change.

The library community in Nigeria is still in the early stages of applying statistics in assessing and measuring of library services. Following the line of thinking of the authors, professionals in different field depend mostly on the result of evaluation on their area of specialization before carrying out a major operation. For example medical Doctors don't just send their personnel to an epidemic area without first of all evaluating the situation. Within this framework, as we have already noted, librarians need to acquire sufficient training in the evaluation of library resources processes. They need to become familiar with every aspect of librarianship in order to know how and what to evaluate.

Despite numerous challenges, all the departments in the library are benefiting from the new technology. However, the reference department seems to be the area that has benefited most. For example, among other technologies, DRS help users to submit their queries to the reference staff at any time, from any location where internet faculties are available. All library services should be evaluated based on anticipation of users. Along similar lines, Lakos and Phipps(2004)argues that "in order to do this, libraries must develop internal organizational systems that enable successful assessment and evaluation of their services and processes to achieve positive outcomes for customers.

Modules of evaluation

Models of Evaluation may be refer to as a framework of reasoning or a sequence of procedure if when adopted in evaluation will generate needed information that could be utilized by policy makers to improve services..(http://www.saedsayad.com/model_evaluation.htm). Interest in evaluation procedure was developed by the American Federal Government legislation in the 1960,when it mapped out evaluation as a condition for initiation and continued funding of new educational programmes.Campbel (l975),argues" that measuring productivity is a very fundamental process. It makes goals very precise, serves to asserts the work to be done, influences individual and define what will be rewarded and punished. Ali and Ndubuisi (1986) similarly reported that prior to the standardization of evaluation practices, earlier works reported in American and United Kingdom journals were criticized for either lack of empirical models as basis for evaluation, or that models used were too narrow. However, there are standardized and accepted models of evaluation today which could be effectively utilized in the evaluation of library services. Some of these models are:

1. **The Open Systems Model** (Willett,1992)The 'systems approach' defines a system as a set of related and interdependent parts that form a unified whole. Societies are systems, so too is library services. Systems can be closed, with no interaction with the outside environment, or open, which recognizes the dynamic interaction that takes place between the system and its environment. Open systems require feedback from the environment to know if they are successful, or if corrective action needs to be taken.

2. **The Analytic Hierarchy Process (AHP)** (Saaty, 1990) AHP is a multiple criteria decision technique. When a decision maker has to choose among several alternatives and there are multiple criteria which are relevant for the decision maker, it may be quite difficult for the decision maker to establish the relative importance of each criterion the AHP is a methodology which helps the decision maker in determining the value of each alternative, and the weights of each criterion.

3. **The Common Assessment Framework (CAF)** (European Foundation for Quality Management 2006) this management quality tool is based on the European Foundation for Quality Management Excellence Model. The set of enabler's criteria includes: leadership, human resources management, policy and strategy, external partnerships and resources and process and change management.

4. **Balanced Scorecard (BSC)** (Kaplan & Norton, 1992) BSC is a performance management model to assess organizations. This tool expresses the organization's strategy and vision using four important issues: financial perspective, internal process perspective, innovation and learning perspective and customer perspective .This evaluation technique establishes a balance between organization vision, performance indicators, goals and implementation actions versus financial perspective, internal process perspective, innovation and learning perspective and customer perspective that can be represented in a scorecard.

5. **Structural Equation Modeling** or(SEM.) is a powerful technique that can combine complex path models with latent variables (factors). Using SEM, researchers can specify confirmatory factor analysis models, regression models, and complex path models SEM. is a comprehensive statistical approach to testing hypotheses about relations among observed and latent variables (Hoyle, 1995). is a methodology for representing, estimating, and testing a theoretical network of (mostly) linear relations between variables (Rigdon, 1998).it tests hypothesized patterns of directional and non directional relationships among a set of observed (measured) and unobserved (latent) variables (MacCallum & Austin, 2000)

6. **libQUAL** was developed byProfessors Zeitham,Parasuranam and Berry of Texas A and M University in 1999.Since then Library administrators have successfully used LibQUAL+® survey data to identify best practices, analyze deficits, and effectively allocate resources. LibQUAL+® gives your library users a chance to tell you where your services need improvement so you can respond to and better manage their expectations. Institutional data and reports enable you to assess whether your library services are meeting user expectations—and develop services that better meet those expectations.)

7. **SERVQUAL** model is One service quality measurement model that has been extensively applied by organizations. SERVQUAL model was developed by Parasuraman et al(1985,1986). Service quality can be define as the difference between customer expectations of service and perceived service. If expectations are greater than performance, then perceived quality is less than satisfactory and hence custom dissatisfaction occurs (Parasuraman et al, 1985; Lewis and Mitchell,1990)

8. **Goal free Evaluation Model**(Seriven,1972)This model advocates that an independent evaluator should not be restricted during data collection and determination of outcome by acceptance of the planners predetermined goals and objective.

Each of the above models has its own discreet features which make it suitable in a given evaluation situation. However, some form of modification could be adopted in their usage by researcher.Popham(1975)drive this home when he advocated that:

> …instead of engaging in a game of "same and differences "the evaluator should become sufficiently conversant with the available models of evaluation to decide which, if any, to employ. Often a more eclectic approach will be adopted where by one selectively draws from several available models those procedures or constructs that appear most helpful (p.83)

In other words, one or more models could be adopted by a researcher in services evaluation.

Librarians, according to Pomerantz(2008) are interested in evaluation. Evaluation has always been a very important ingredient of managing an online reference service..He further stress that online reference, is highly resource-intensive work, both of librarians' time and of library materials .Accordingly evaluation is the means that can determined if resources are being used effectively. This study being a formative evaluation research on online reference services in Nigeria academic libraries will adopt libQUAL or serQUAL both are designed to measure service quality . These models are mostly used by libraries for the purpose of evaluating library services.

Purpose of the Study

The general purpose of the study is the evaluation of Digital Reference Services in Nigeria Academic Libraries. The specific purposes of the study are to:

1. Find out the extent of application of ORS in academic Libraries in Nigeria
2. Examine the benefits of using ORS in academic libraries in Nigeria.
3. Identify the challenges -associated with the use of ORS in academic libraries in Nigeria
4. Proffer solutions for ameliorating the challenges faced by these academic libraries in Nigeria,

Justification of the study

The development of effective **inf**ormation systems is a key component of teaching and learning in higher education in Nigeria. Information is one of the most important elements in our lives as it provides a direct gain in knowledge. And thus modern technology such as ORS greatly enhances such systems. Because evaluation is the process of assessing, testing and measuring services, the process of strengthening library services has revolved around the evaluation of its services whose main objective is to achieve qualitative improvement of service.

The study reveals the importance of evaluation of ORS in academic libraries in Nigeria. It highlights various strategies that will be employed by academic libraries in Nigeria in ensuring that libraries services particularly ORS productivity is optimal. Furthermore, the study clarifies the strategic roles evaluation plays in library services productivity. The findings of this study will create some degree of awareness in library management of the need to have evaluation of library resources and facilities quit often for greater effectiveness in library services . It acts as information data bank for scholars in librarianship who may embark on a similar research.

The study also re-examines challenges as applied in ORS. Furthermore, it attempts to apply these insights to the tasks of providing enabling environment for improving conditions of ORS in libraries particularly academic libraries.

Moreover, the study reveals the models and ascertains those that are appropriate in library system evaluation. This will enable the academic library management to evolve more result – oriented evaluation strategies that would lead to increased productivity in future.

Also the study will be of immense benefits to library institutions as it will help in identifying the role evaluation of library services play in the development of effective information delivery system in libraries through the librarians.

Methodology

The study includes all types of academic libraries which includes the university library, polytechnic library and college of education library. : The survey design was used to obtain appropriate data for the study. The population of the study comprised of all the academic librarians that works in the above mentioned libraries in Nigeria.

The sample consisted of all the academic librarians that works in University libraries, Polytechnic libraries, and College of Education libraries who attended 2016 annual general conference of the Nigeria Library Association held   at Funtaj International School Gudu Abuja from,24-29 July 2016. The Nigeria Library Association (NLA) is an umbrella association comprising of all the librarians in Nigeria, and its main objective is to improve the professional wellbeing of her members.   A total of 198 librarians among others who falls within the categories mentioned above were identified and selected for the study. The sample is representative because it included librarians from all types of academic libraries and, all the political zones of the country were represented. Because of the small number of the academic librarians who attended the conference, all of them were sampled for the study. The distributions were as follows: universities, 87, Polytechnics 54 and, Colleges of Education, 57.

The instrument for the study was a specially designed self-administrated structured questionnaire which covered socio-demographic data, type of academic libraries, application of digital Reference Services in libraries, benefits of DRS in libraries, challenges facing DRS, and strategies to enhanced DRS in libraries. The section B no 2 of the questionnaire was meant for librarians whose libraries are yet to implement the DRS project.

At the top beginning of the questionnaire, it was indicated that the survey was only for academic librarians. Four points rating scale mean decision was based on 2.5, which implies that any responses that are 2.5 and above is accepted as a factor, while those below 2.5 were rejected.

The instrument was validated by three experts in Library and Information Science and, Vocational Business Education of University of Nigeria, Nsukka. As a result of the validation, the finally questionnaire omitted some questions and refined others. The reliability of the questionnaire was calculated by Cronbach's alpha and found to be 0.785. The instrument was administered to the respondents at the venue of the national conference and retrieved with the help of paper boxes placed at strategic places within the conference arena. A total number of 180 questionnaires were distributed among the qualified librarians.51 of these do not have libraries that operates DRS and they were asked to fill only section B no 2. However, only 129 valid questionnaires were retrieved for further analysis from the remaining 147. The response rate was 87.7 percent.

The data generated from the questionnaire were entered and analyzed with SPSS version 13. 0. Means (±SD) were computed for continuous variables and percentages for categorical variables.

Literature Review

Quite a good number of current research on librarianship suggest that libraries recognized the importance of evaluation of library services (Ugah, 2007, Becker, 2009). , Herget and Hierl (2007) identifies six methods of evaluation of services, which include: 1. The resource approach (e.g. ratio of media per capita); 2. The input-output approach (measures of inputs and outputs, sometimes as ratios); 3. The provision of services approach (quality as perceived by the customer); 4. The strategic achievement approach (measuring how objectives are met); 5. The stakeholder approach (considers the expectations of all stakeholder groups); 6. The balanced scorecard approach (not truly a different method, but the balanced scorecard provides a management tool for measuring performance). ORS has been on for more than two decades now. According to Copler(1989)libraries and librarians have been providing ORS as far back as 1987.However in the mid- 1990s and 1999 synchronous and chat software programs respectively were introduced. In line with the ongoing discussion, Granfield & Robertson (2008) noted that DRS comes in two types, namely: asynchronous, where a patron submits a question through e-mail and web form and the librarian responds at a later time; and, synchronous, where a patron communicates directly with a reference librarian in real-time using web chat applications . Recent articles investigating libraries using the international Federation of Library Association (IFLA) and the Reference and User Services Association (RUSA) of the American Library Association (ALA) guidelines on Library services evaluation concluded that despite potential values associated with the use of such guidelines, few libraries have actually used them. (See Shachaf and Horowits, 2006,). Similarly a study by Shachaf and Horowitz (2008) evaluate the level to which virtual (e-mail) reference services adhere to professional guidelines by IFLA and RUSA for the evaluation of Libraries. Results from the 54 libraries studied indicate that:

    a. Low level of adherence to both sets of guidelines
    b. Varied levels of adherence based on request types and user names on both set of guidelines.
    c. Variation in institutional rank according to different sets of guidelines.
    d. No correlation between user satisfaction and adherence to either set of guidelines.

No doubt adherence to these guidelines may provide a higher level of service to the libraries.

. "The result of the study indicates that users preference and satisfaction for virtual reference services are highly correlated with the services overall usability in terms of effectiveness and efficiency. Among others, Online Chat was rates highest across all measures including satisfaction and seven different usability factors. Shachaf and Horowitz (2006). Study questioned if librarians provide equitable service based on the perceived race or ethnicity of chat users. The result of the study shows that the quality of service librarians provide to African Americans and Arabs is lower than the quality of service they provide to Caucasian, Hispanic, Asian, and Jewish students Kemp.,Ellis,Maloney(2013)conducted a research at the University of Texas at SanAntonio Libraries in 2013 which implemented a proactive, context-sensitive chat system developed for online business. An analysis of the study indicates that most of the reference questions required the attention of a librarian. The results showed that the system has lowered the bar of inquiry for reference users, transforming chat from a low-use alternative to a heavily used service which in addition support academic research and literacy. Xie (2006) examines the evaluation of digital libraries. The study indentifies users' criteria and applies them to the evaluation criteria, especially from the users perspectives. The results indicated that the participant criteria suggest that usability is an important criteria for evaluating digital libraries. In addition, service quality, system performance efficiency, and user opinion solicitation were also considered essential criteria.

Lien,Cao,Zhou(2017) examined the impact of WeChat on the daily life of Chinese people. The main findings show that environment quality and outcome quality are two important predictors of satisfaction. Users' satisfaction has a positive effect on their stickiness to WeChat and usage intentions. Furthermore, the result also showed that the outcomes provide insights into how WeChat can improve its service quality which in turn will enhance users' satisfaction.Yang, ,Dalal(2015) studied the delivery of virtual Reference services on the Web. The findings indicate that approximately 68% of the libraries in the sample stated reference services are on the main webpage. About 74% of the libraries used, have at least one of the following technologies for virtual reference: email, phone, chat, IM, text, and video chat. Exactly 47.5% of the libraries provide chat. Further finding indicate that The institutions that offer more advanced degrees and have more students are more likely to offer chat than those who offer low-level degrees and fewer students. Schiller's (2015) study addresses learning in online chat virtual reference service at a large university library. The research data contains a total of 2380 chat transcripts in their natural setting dated from May 1st to December 31st, 2015. The findings indicate that mediated learning in chat reference conversations is co-constructed with the technical environment that is mediated by online technology and the social environment that is mediated by social presence. Also, the study result indicate that the primary role of the online technology is that it enables developmental transformation of learning of the patron who benefits from both "give fish" and "teach fishing" styles of teaching.Chow and Croton(2013)presented the results of a survey on usability evaluation of Academic Virtual Reference Services. The study's results suggest that user preference and satisfaction for virtual reference service are highly correlated with the service's overall usability in terms of effectiveness and efficiency. Online chat was rated highest across all measures including satisfaction and seven different usability factors.

Uutoni (2014) focus on academic libraries in Namibia. Two academic Libraries were used for the study. The result of the investigation revealed that the two libraries studied did not follow the IFLA and RUSA standards of staff and training of librarians working with digital reference services. In addition, the study also found that a lack of ability to fully demonstrate to users how to navigate into various library services was one of the major problems that librarians experienced. There are many motivating factors in developing adequate and meaningful standards for measuring best practice which will serve as a guide to ensure

consistency in implementation of a DRS project. Shaw and Spink (2009) recommended five guides that will ensure best practice. They include:

1. Review digital reference guidelines.
2. Assess the existing reference policies and guidelines to identify what is being emphasized.
3. Examine current practice by checking with librarian's tactic knowledge
4. Compare the organization's mission and goals to patron's needs and
5. Utilize any new software or recent organization changes to improve processes.

As another recent article on the need for evaluation of DRS states "user satisfaction has been suggested and is considered to be a useful tool in library evaluation (Tessier, Crounch Atherton cited by Kuruppu, 2007).

Result and Discussion

The mean age of the participants was 28.3 .Their years of working experience are shown in fig 1, with 41% of the surveyed librarians having worked for between 11 and 20 years. Of the 129 librarians that participated in the survey, 6(5)were university librarians or its equivalent,9(7.%) were deputy University Librarians or it equivalent,35(27%) were Principal Librarians or its equivalent,37(29%) were Senior Librarians or its equivalent,20(16%) or its equivalent, were Librarian 1, and 10(7.0%) were Librarians 11 or its equivalent,12(9%) were assistant librarians or its equivalent. See Fig.2.

With regard to their academic qualifications, 26(20. %) are PhD holders, 46 (36.%) holds MLS 16 (12.%) are holders of BLS, 12(9.%) holds HND and 20(16%) are holders of OND, see fig 3..
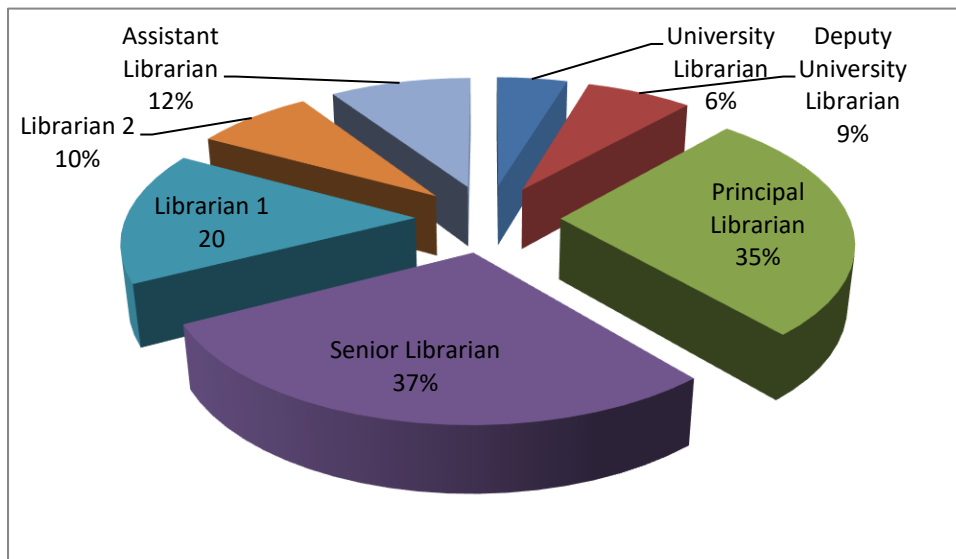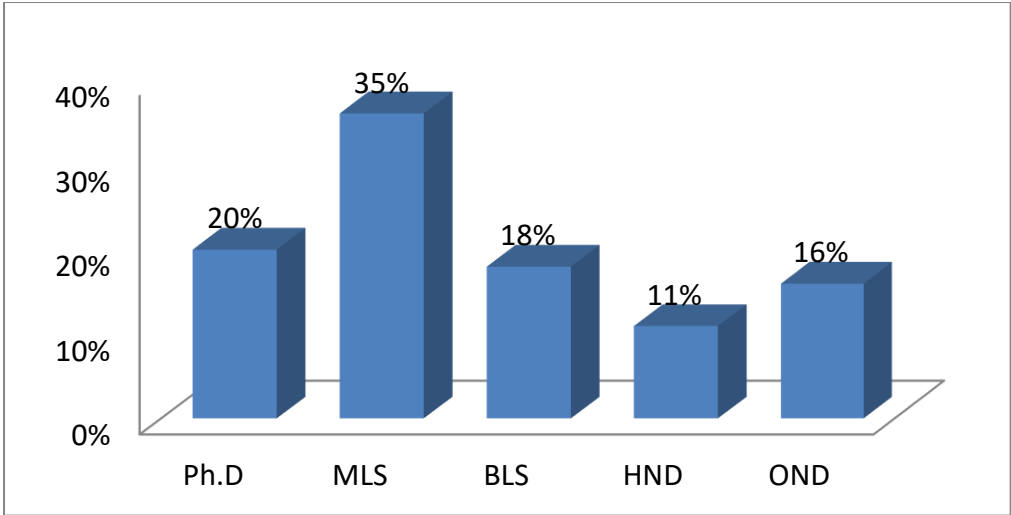

Fig 1: Designations of participating librarians.

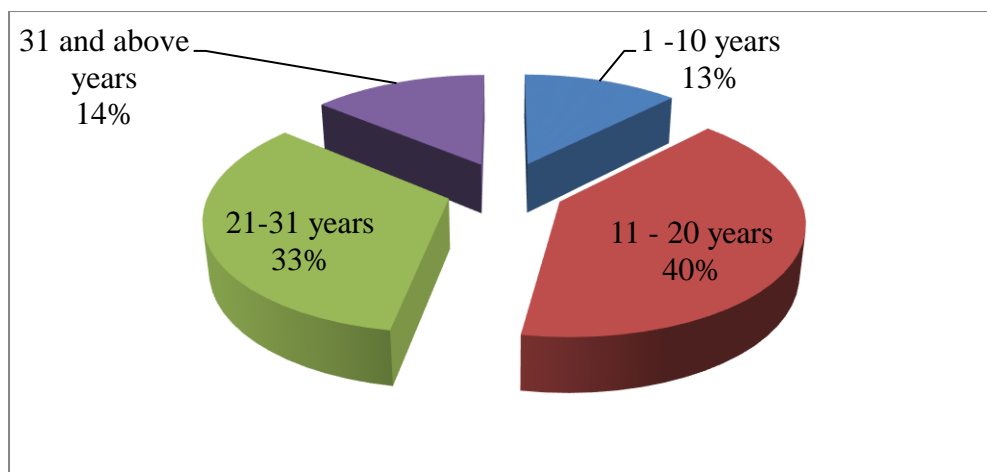Fig 2: Distributions of Academic qualifications o the participants

Fig 3: year of working experience of participants.

Table 1: Application of Digital Reference Services (DRS) in Academic Libraries in Nigeria

S/N	Items	VHE	HE	LE	VLE	X	SD	RANK
1.	E-mail Services	352	-	-		2.7	29.7	1st
2.	Chat reference services	248	27	34	1	2.4	26	2nd
s3.	Library Consortia	72	78	58	15	1.7	18.4	6th
4.	Real-Time Reference	212	54	26	4	2.3	24.8	3rd
5.	Web Form (filling of online forms on the library website)	172	57	42	-	2.1	22.6	4th
6.	Video Conferencing or Webcam Services	128	24	66	14	1.8	19.2	5th
7.	Collaborative digital reference	52	15	86	27	1.4	14.6	7th
8.	Others							

$\sum \dot{X}$ = 14.4

Table 1 shows the application of DRS in academic libraries in Nigeria. We asked survey respondents a variety of questions related to the application of DRS in academic libraries in Nigeria. With a mean score of 2. 7 most respondents agreed that e-mail services ranked 1st in the overall application of DRS in Nigeria academic libraries. This is closely followed by chart reference services and, Real-Time Reference with mean scores of 2.4 and 2.3 respectively. However these two items did not meet the required criteria of 2.5 for acceptance. Collaborative digital reference with mean score of 1.4 attracted the least attention by the respondents.

Table 2: Reasons for non-Application of DRS in Academic Libraries in Nigeria

S/N	Items	SA	A	D	SD	X	SD	RANK
1.	Lack of ICT infrastructure to support digital reference services	204	6	2	-	3.9	26.4	1st
2.	The library management refuses to imbibe new technology for DRS	124	33	12	6	3.2	21.3	3rd
3.	There is limited fund to support digital reference services in my library	204	6	2	-	3.9	26.4	1st
4.	Digital reference services is not the priority of my library	196	10	-	-	3.8	25.6	2nd

| 5. | There is little or no idea about digital reference services in my library | 104 | 54 | 16 | 2 | 3.2 | 21.5 | 3rd |
| 6. | Others | | | | | | | |

Table 2 above shows the respondents mean scores of librarians who had indicated non-application of DRS in their libraries. According to .data on table 2, all the listed items were accepted as reasons for non-application of DRS in their libraries.However,with mean scores of 3.9 both" lack of ICT infrastructure to support digital reference services and, "there is limited fund to support digital reference in my library" were widely accepted by the participants as reasons for non-participation in DRS.

Table 3 Benefits of using Digital Reference Services in Library

S/N	Benefits	SA	A	D	SD	X	SD	RANK
1.	It helps in satisfying users' information needs	312	30	-	-	2.6	28.6	5th
2.	It broadens the horizons of librarians in offering services to user's	324	21	-	-	2.6	28.9	4th
3.	It aids in promoting distance learning	348	3	-	-	2.7	29.4	3rd
4.	It encourages librarian-user relationship	352	-	-	-	2.7	30.5	2nd
5.	It enables users access reference services despite time and distance	348	15	-	-	2.8	30.5	2nd
6.	It provides more alternatives and flexibility to users	352	15	-	-	2.8	30.8	1st

In table 3 above the respondents with mean scores of 2.8 agreed that the benefits of DRS are that it enables user's access to reference materials despite time and distance, and that it provides more alternatives and flexibility to users.Respondents with mean scores of 2.7 agreed that it aids in providing distance learning and that it encourages librarian-user relationship. Similarly 4 respondents with mean scores of 2.6 agreed that it helps in satisfying users' information needs, and also it broadens the horizons of librarians in offering services to users.

Table4: Challenges facing Digital Reference Services in Academic Libraries in Nigeria

S/N	Items	SA	A	D	SD	X	SD	RANK
1.	Lack of proper training on use of ICT infrastructure among librarians	324	18	2	-	2.6	28.8	1st
2.	Users' & librarians' non-exposure to ICT facilities in Libraries	252	36	16	5	2.3	25.7	3rd
3.	Lack of interactieness of library website to support DRS	72	69	78	8	1.7	18.5	5th
4.	Epileptic power supply	292	21	6	5	2.5	26.8	2nd
5.	Lack of funds to support Digital Reference Services	324	18	2	-	2.6	28.8	1st
6.	Users' preference of traditional reference service to DRS	52	9	142	1	1.57	16.4	6th
7.	Lack of proper orientation of users on Digital References Services	220	63	16	4	2.3	25.2	4th
8.	Lack of interest of librarians to adopt Digital Reference Services	32	6	120	9	1.2	13.4	7th

In table 4 above respondents with mean scores of 2.6 agreed that lack of proper training on use of ICT infrastructure among librarians and, lack of funds to support DRS are the most noted challenges facing academic libraries in Nigeria. Similarly, the respondents agreed with mean scores of 2.5 that epileptic power supply is a challenge to the development of DRS in Nigeria academic libraries. The other items did not meet the agreed criterion mean for the study which is 2.50.

Table5: Strategies to enhance Digital Reference Services in academic Libraries in Nigeria.

S/N	Items	SA	A	D	SD	X	SD	RANK
1.	Training of librarians in the use of digital references services	324	18	4	-	2.6	29	4th
2.	Exposure of ICT facilities to users and librarians	252	84	8	-	2.6	28.9	5th
3.	Making library ,website interactive to users and librarians	208	69	20	3	2.3	25	6th
4.	Provision of steady power supply	332	15	-	-	2.6	29.1	3rd
5.	Provision of funds to support digital reference service	344	6	-	-	2.7	29.4	1st
6.	Orientation of users on digital reference services	348	3	-	-	2.7	29.3	2nd

The data on table 5 revealed that all the five factors considered as strategies to enhance DRS in academic libraries in Nigeria were considered relevant by respondents. However, among the accepted items provision of steady power supply and orientation of users on digital reference both have mean scores of 2.7 and are well accepted by the respondents.

The table further indicated that of the 6 listed criteria, only making library website interactive to users and librarians are found non-relevant by librarians.

Discussion

The purpose of this study was to evaluate digital reference services in academic libraries in Nigeria. The main conclusion of this study is that DRS in academic library are faced with a lot of challenges the following discussion, we present and explain findings and conclusions that lead to this main conclusion.

First, we discovered that e-mail is the most popular services used by users in academic libraries in Nigeria. Burger, Park and Li (2010) shared this view when they reported that email reference was once considered for "ready reference type questions, but found that many users rely on the service for any type of research or question". In the same vein, E mail transactions allow the librarian some extra time to gather references and conduct additional research as necessary. It doesn't require the user to "wait" around for a lengthy time while the librarian works through the question. Similar email service provided by the IPL2 utilizes the use of email to provide reference help to users across the world. In a situation where many Nigerians are not well grounded in Information and Communication Technology (ICT) the alternative is to embraced e-mail which seems to be easier to learn and use for communication purposes.

Table 2 was completed by librarians in libraries that are as at now not using DRS.We can see that the respondents accepted all the suggested conditions with high mean scores. The findings are consistent with conclusions reached by Adeniran(2014),Odeh (2011)and Younus(2014). These researchers argued that:

scarcity of competent human resources; access to appropriate digital resources; unavailability of suitable software for DRS; financial constraints; lack of ICT facilities; absence of a digital reference policy; lack of ICT application; paucity of resources; electricity supply; inadequate physical facilities; lack of local research and literature   tend to result in non- provision of DRS in some libraries. Again the inability of the funding agent to provide adequate funding to support DRS was stressed by the respondents. The 2001 FGN/ASUU agreement accepted to make a budgetary provision of 10% for the development of University's Libraries. The fund is meant to procure up –to-date books and journals, for automaton and computerization and maintenance of other library facilities.

 In this study, respondents reported (as indicated in table 3) that the benefits of DRS in academic libraries are numerous. Some researchers such as Naylor,Stoffel andVan Der Laan(2008),and Moran(2010)argued that Technology such as DRS now allows users to submit their queries to the library at any time from any place in the world. and that the use of digital reference services in academic libraries is essential because it helps libraries to meet the needs of their users more effectively .An analysis of the survey responses supports this contention(see table3)

With regard to the issue of challenges facing DRS in academic libraries in Nigeria, this study found that: lack of proper training on use of ICT infrastructure among librarians, epileptic power supply and lack of fund to support digitalization are major challenges confronting DRS in academic libraries in Nigeria..Obaseki, Maiddabino,Makama (2012)shared this view when they reported that library professionals themselves must make efforts to acquire new skills in the area of ICT to enable them to move along the digital path. Uutoni (2014) in a study found that a lack of ability to full demonstrate to users how to access various library services was one of the major problems that the librarians experience.

In our study a considerable number of the respondents agreed with all but one listed item as strategies for the enhancement of DRS in academic libraries in Nigeria. As can be noticed in Table 5 with scores of 2.7 both provision of funds to support Digital Reference services and orientation of users on DRS had the highest mean score of 2.7 Funding of library services has been a major obstacle. It is interesting to note the argument(Okiy,2005) raises in advocating the need for a vigorous library funding in Nigeria. According to her Government funding has been poor, requiring libraries to look for alternative sources of income in order to meet the increasingly sophisticated demand of library users for electronic information services.

Conclusion

Despite the speed at which DRS has been adopted across the developed world, libraries in most developing world has been relatively slow in adopting it. According to the study it is as a result of many factors such as inadequate funding. Ifijeh (2011) stressed that poor funding of the library in particular and the educational sector in general affect the provision of library and information services adversely. He further noted that .It is when the library is well funded that acquisition of essence infrastructural facilities, information resources, conducive environment, adequate accommodation as well as training and retraining of the staff will be made possible . Part of the funding problem affecting the establishment of new services such as DRS is the inability of library management to convince the institution management or funding agency to set up a separate budget line for electronic resources. We think that when the authorities are convinced of the importance of DRS that definitely they will start making fund available for the project. Those who think that government or funding agency will make money available at will without much pressure or convincing them of the need for the establishment of such new services should think again. We must now clearly acknowledge, however,that the economic recession and corruption that has been witness in Nigeria is

seriously affecting funding of various institutions. Even if funds are made available, such will in most cases be diverted to individual pockets and the project will suffer.

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RECOMMENDATION

1. Since proper implementation of DRS project is dependent on adequate provision of human and material resources, the government especially the federal and state governments should allocate more funds to university libraries. This will ensure proper funding of DRS projects.
2. Universities should also engage income generating activities. Funds generated to augment funds from the state and federal government. This will help in better attainment of DRS objectives in Nigerian academic libraries
3. Staff of academic libraries especially technical staff should be trained and retrained by academic libraries that operates DRS.
4. The federal government should provide infrastructural facilities like electricity to make for for effective utilization of DRS in academic libraries in Nigeria.
5. Academic libraries in Nigeria using DRS should constantly evaluate their DRS project to make sure that their objective is being met.

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