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Abstract

The study investigated the impact of web search engines for digital reference services in academic libraries in Sokoto. A descriptive survey design was used for the study. The study used all the professional librarians on seat of the academic libraries (27) for the study. This is because the population was manageable and as such it does not required sampling and sampling techniques. 27 structured questionnaires were administered to the respondents for data collection and 25 (92%) were returned. The data collected were analyzed using frequency and percentages. The findings of the study revealed that majority of the libraries have trained staff to provide DRS. It also revealed that the libraries do not collaborate with other libraries in providing DRS. The study further revealed that the libraries do not have policy or statement for DRS. It is also revealed that the libraries lack digital tools to provide DRS. But the libraries have plan to start DRS though it is not yet started. The libraries also agreed that web search engines can be used to provide reference services. It was also disclosed that the libraries get topical research question most from the users than other questions. The study also found out that SMS is the channel that the libraries used most to provide reference services to its users. Finally, the services mostly offered by the libraries is CAS. The study recommended that libraries need to train more staff on ICT skills and social media skills, libraries should have written DRS policy, should provide DRS working tools, should create social media platforms for DRS and government should provide adequate funds to academic libraries to procure facilities that will run the library services better.

Key words: Web search engines, Digital reference services, Academic libraries

Introduction

It is no doubt that the advent of information and communication (ICT) to library has drastically changed the traditional library system and services to modern one. Likewise, reference services is not an exception to that changes. Eze and Uzoigwe (2018) cited in Ukidie posit that it has been commonly accepted and proven that information and communication technology (ICT) is the engine of the 21st century and beyond. Internet is becoming more and more popular source among reference librarians and users. It enables them to search, retrieve, request, receive, and download information from sources scattered all over the world on the web (Singh, 2012). Therefore, ICT has greatly impacted on reference services delivery to make it more effective (Adetomiwa, 2020).

Digital reference services (DRS) is one that occurred electronically using computer/ smart phone mediated communication between the user and the librarian. In other words, DRS is a question and answer session that take place electronically between the user and the librarian. Due to the high demand by the users, librarians keep on finding new ways to respond to those demands via technology- based solution (Ozakaramanli, 2005).

Search engines have changed the world of information and are rightfully considered the foundation of the Internet. The abilities of search engines have tremendously improved in the last decade and people are found commenting that if you are not able to find anything on a search engine, then it may not exist at all (Khan, Khan, Malik and Idrees, 2017). Dudek, Mastora and Landomi (2007) defined search engine as “a web application that gathers information items from the web according to different strategies (using crawlers or spiders) and then performs the basic retrieval task, the acceptance of a query, a comparison of the query with each of the records in a database, and then the production of a retrieval set as output”. Search engines are the most useful and high-profile

resources on the Internet. At the same time, reference services are considered as the most vital service that library provides.

Since the beginning of the 21st century, traditional reference desk library services is gradually becoming obsolete. Search engines undoubtedly have a wider impact on the information sector. Accordingly, users tend to consult web search engines for reference material rather than visiting the library. As such, new marketing strategies in order to arouse the interest of library users and assure them library is ever ready to serve them better compared to other information services providers need to be addressed. The Internet has established strong reference services such as Google, Ask Jeeves and other computer-mediated online reference services, which have seemed to supersede the library's reference staff via increased efficiency. However, Khan, Khan, Malik and Idrees (2017) argued that these tools are not alternatives to a capable reference librarian. Library experts have repeatedly demanded the adoption of new technology and an increase in tech-savviness.

Statement of the Problem

It is obvious that great number of library users across the globe connect to the internet and expect their libraries to provide services to them online as many of the library users of today prefer to access library resources and services remotely without taking a step to visit the physical library. This is one of the essence of DRS to users as it enable them to access the reference services as comfort as in their respective homes. However, based on the previous literature reviewed, there has not been any research carried out to investigate the Impact of Web Search Engines for Digital Reference Services in Academic Libraries in Sokoto State to the best knowledge of the researcher at the point of the study. As such, this is the gap which study intend to fill.

Research Questions

Based on the literatures reviewed, the research is guided by the following research questions.

1. Which are the reference services currently offered by academic libraries in Sokoto state?
2. Which type of reference questions are generally deal with in academic libraries in Sokoto state?
3. What channels are being used by library staff to provide DRS to its users?
4. Why types of DRS is rendered in academic libraries in Sokoto state?
5. What is the extent of use of WSE in provision of DRS in academic libraries in Sokoto state?

Scope of the Study

The scope of this study is aimed to investigate the impact of web search engines for effective DRS in academic libraries in Sokoto state.

Literature Review

Adetomiwa (2020) conducted a study on “Electronic Reference Services Delivery” at Redeemer’s university library in Nigeria found that the library in question has moved from the traditional approach of reference services to electronic reference service delivery methods. However, a few things are still required in order to perfect the process and procedure of the Selective Dissemination of Information (SDI) system being provided presently. For effective SDI service, training is required in the areas of scanning and abstracting of all the main ideas or concepts in the material.

This will enable clients make informed decisions, using the information received. Omeluzor and Tinuoye (2017) revealed that in an era of advancement in ICT in all sectors of human endeavour, most university libraries, especially in Nigeria, have yet to adopt ICT in the delivery of Selective Dissemination of Information (SDI) and Current Awareness Services (CAS) to its patrons. Among the university libraries in South-West Nigeria, few libraries and a low percentage of librarians have adopted ICT in the delivery of CAS and SDI, while a larger number of libraries have yet to do so, but rather resorted to the use of notice boards and memos. The level of ICT literacy among the librarians in this study is low, as a large percentage of them did not have adequate ICT skill to use available online resources on the Internet and other ICT tools to deliver SDI and CAS in South-West Nigeria. Younus (2014) conducted a study on DRS in Pakistani university libraries and found out that specific research, ready-reference and directional questions are the most common type of reference questions dealt with. He also revealed that the majority of libraries are using email as a channel for providing virtual reference services in Pakistani university libraries. The subsequent study conducted by Khan, Khan, Malik and Idrees (2017) in same university libraries revealed that instant messaging, Skype and web forms are currently being used by librarians in Pakistani university libraries. They discovered factors that hinder effective DRS include very few libraries have trained and skilled staff, and mostly the head librarian being responsible for answering the reference questions himself and recommended that libraries that are not providing DRS at the moment should adopt such services to attract users and also university libraries should depute competent and technically sound staff to the reference section, especially for DRS, and such staff should be compensated accordingly. Such staff should also be trained and equipped with use of new tools and technologies in providing DRS. Another research conducted by Uutoni (2018) at Namibian university libraries stated that the libraries are providing the following digital reference

services: e-mail services, online library feedback forms, chat box and Book a librarian service. He found that the two libraries did not follow the International Federation of Library Associations (IFLA) and Reference and User Services Association (RUSA) standards of staffing and training of librarians working with digital reference services. The study further found that a lack of ability to fully demonstrate to users how to access various library services was one of the major problems that the librarians experienced. Singh (2012) in his study on DRS in the Northern India university libraries revealed that all the four selected University libraries were providing some form of DRS such as E-mail reference service, Ask a librarian, Question Point, Online chat, FAQ, Web based user education, user feedback service through e-mail, etc. The researcher concluded that Kashmir University Library is the Second best University for providing the DRS (29.4%). Panjab University Library is the third best University which providing the DRS (17.64%). Jammu University Library comes at the fourth number for providing the DRS (17.64%). The researcher concluded that the four selected university libraries are deeply involved in the organization and management of a large number of e-resources to provide various digital reference sources to their users under intranet as well as internet environment. Waller (2011) in his study stated that use of WSE has become an important activity taken on the Internet, and it has become important to know for what purpose people are using search engines. The study further endorses that Google is dominating and is considered a reliable source of information in today's digital era. Khan, Khan, Malik and Idrees (2017) says the aspect of WSE is related to the declined usage of physical library material, which has also influenced the library's reference desk and caused swift modification of reference services from human to digital and from physical to virtual. Ekpenyog and Edem (2010) conducted a study on "Current Status of DRS in academic Libraries in Nigeria". They revealed that thirteen (48%) of 27 Federal University libraries in Nigeria are offering some form of digital reference

services to their users. Twelve (92%) of these libraries are linked to subscribed databases while none had interactive services. The research concluded by highlighting the need for more academic libraries to digitize their reference services which will be contingent upon the development of new models to deal with staffing and other relevant issues. Baro, Efe and Oyeniran (2014) in their study titled: “Reference Inquiries Received through Different Channels in Nigerian University Libraries” discovered that the challenges reference librarians faces was the absence of policy statement concerning DRS as it was mentioned by 31 out of 36 respondents (86.1%). Mwiinga (2020) on his research recommended that librarians working with DRS need training on reference interview skills, chat techniques, providing logical solutions to library users, maintenance of DRS and frequently ask questions (FAQs).

The above review of the related studies are related to the present study because they supply the researcher with the knowledge of DRS in libraries and information centres.

Methodology

Descriptive survey research design was used for the study. The respondents of this study were all professional librarians on seat at the academic libraries in Sokoto state used for the study. The study used all the professional librarians on seat of the academic libraries (27) for the study. This is because the population was manageable and as such there was no need for sampling and sampling techniques. Twenty-seven (27) structured questionnaire were administered to the respondents for data collection and twenty-five (25) (92%) were returned.

Results and Discussion

Respondent profile: The actual number of male and female respondents were 23 (92%) and 2 (8%) respectively. For institutions, Usmanu Danfodiyo University have 9 (36%), Sokoto State

University have 5 (20%), Shehu Shagari College of Education have 1 (4%), Umaru Ali Shinkafi Polytechnic have 5 (20%), Sultan Abdulrahman College of Health Technology have 3 (12%), Sokoto School of Nursing and Midwifery have 1 (4%) and College of Agriculture and Animal Production have 1 (4%). For educational highest qualification, 13 (52%) have BLS, 9 (36%) have MLS, and 3 (12%) have PhD.

Research question 1: Which of the following services are currently offered by your library to its users?

Table 1: Responses on the services currently offered by the academic libraries in Sokoto state

S/N	Description of items	Frequency	Percentages
1	Selective dissemination of information (SDI)	8	32%
2	Current awareness services (CAS)	14	56%
3	Receiving and answering questions	1	4%
4	All of the above	1	4%

Table 1 above shows that 32% of the respondents indicated that the libraries offered SDI services, 56% CAS, 4% receiving and answering questions, and 4% all of the above services. From the table, reveals that majority of the services offered by the libraries is current awareness services.

Findings reveals that academic libraries in Sokoto state offered current awareness services most to its users followed by selective dissemination of information.

Research question 2: Which of the following types of reference questions do you get at your reference desk/ section?

Table 2: Responses on the types of reference questions that librarians get in academic libraries in Sokoto state

S/N	Description of items	Frequency	Percentages
1	Directional questions	1	4%
2	Procedural questions	1	4%
3	Research questions	4	16%
4	Topical research questions	12	48%

5	Subject based questions	2	8%
6	Ready reference questions	1	4%
7	Fact finding	4	16%

Table 2 above reveals that 4% of the respondents received directional questions, 4% procedural questions, 16% research question, 48% topical research questions, 8% subject based questions, 4% ready reference questions and 16% fact finding. From the table, reveals that majority of the respondents indicated that they received topical research questions from the users over other questions.

Findings, therefore, reveals that academic libraries in Sokoto state receives topical research questions most followed by other questions.

Research question 3: Which of the following channels are being used by you to provide reference services to the user?

Table 3: Responses on the channel being used to provide reference services in academic libraries in Sokoto state

S/N	Description of items	Frequency	Percentages
1	Skype/ Zoom	3	12%
2	Web form/ Emailing	6	24%
3	Instant messaging	2	8%
4	SMS	12	48%
5	Web chatting	1	4%
6	Window live messenger	1	4%

Table 3 above show that 12% of the respondents used Skype/ Zoom as a channel of providing reference services to users, 24% web form/ emailing, 8% instant messaging, 48% SMS, 4% web chatting and 4% window live messenger. From the table, reveals that majority of the reference librarians used SMS as a channel of providing reference services to its users in academic libraries in Sokoto state.

Findings reveals that the academic libraries in Sokoto state uses SMS most as a channel of providing reference services.

Research Question 4: Why types of DRS is rendered in academic libraries in Sokoto state?

Table 4: Responses on the reason why DRS is rendered in academic libraries in Sokoto state

S/N	Description of Items	Frequency	Percentage
1	To allow users who have poor oral communication skills to benefit from the library services	2	8%
2	To reduce the barrier that users faces while asking for assistance, questions in the library physically	1	4%
3	To answer reference questions from the users instantly and satisfactorily	4	16%
4	To facilitate remote access to library services by the users	3	12%
5	All of the above	15	60%

Table 4 above shows that 8% of the respondents indicated the reason why academic libraries in Sokoto state rendered DRS is “to allow users who have poor oral communication skills to benefit from the library services”, 4% responded “to reduce the barrier that users faces while asking for assistance, questions in the library physically”, 16% responded “to answer reference questions from the users instantly and satisfactorily”, 12% responded “to facilitate remote access to library services by the users” and 60% responded “all of the above mentioned reasons”.

Finding reveals that academic libraries in Sokoto state rendered all these services in order to meet information needs of its users.

Research Question 5: What is the extent of use of WSE in provision of DRS in academic libraries in Sokoto state?

Table 5: Responses on the extent in which librarians in academic libraries in Sokoto state use WSE in providing DRS to their users

S/N	Description of Items	Frequency	Percentage
1	Excellent	13	52%
2	Very good	9	36%
3	Good	2	8%
4	Fair	1	4%

Table 5 above shows that librarians in academic libraries in Sokoto state uses web search engines to provide digital reference services. 52% of the respondents indicated “Excellent”, 36% “Very good”, 8% “Good” and 4% “Fair”.

Finding reveals that the librarians in academic libraries in Sokoto state are extremely uses web search engines to provide digital reference services to their users.

Conclusion

The study clearly shows that academic libraries in Sokoto state, Nigeria, have trained staff to handle DRS but there is need to train more staff. The libraries do not collaborate with other libraries to provide DRS. The libraries also do not have policy or statement for DRS consequently may cripple the effectiveness of the services. The libraries also lack digital tools to provide DRS which lead to run most of the services manually. The libraries have plan to start DRS but not yet implemented. The libraries agreed that search engines can be used to provide reference services. The libraries also get topical research questions most from the users. The libraries do not use social media for reference services, they only use SMS as a channel of providing reference services. The libraries mostly offered CAS services to its users.

Recommendations

Based on the findings of the study, the following recommendations are proffered:

1. Libraries need to train more staff on ICT skills, social media skills to handle DRS tasks.
2. Libraries should have written policy to serve as a guideline for effective DRS.

3. Libraries should provide DRS working tools such as computers, smart-phones and speed internet facility to carry out the tasks.
4. Libraries should have more channels to be used in providing reference services by creating social media platforms such as Facebook, WhatsApp, Telegram, among other instant messaging to its users.
5. Libraries should provide SDI services so as to keep users informed about the latest literature on their different areas of specialization.
6. Government should provide adequate funds to academic libraries to procure facilities that will run the library services better.

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