ASSESSMENT OF DIGITAL REFERENCE RESOURCES AND SERVICES IN FEDERAL UNIVERSITY OF TECHNOLOGY LIBRARY, MINNA, NIGER STATE, NIGERIA

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Abstract

This study investigated the digital reference resources and services in the Federal University of Technology Library, Minna. The objectives of the study include identifying the types of digital reference resources available and services provided; determining the challenges faced in the process of rendering such services as well as proffering solutions to the identified challenges. The study adopted a descriptive survey research design. The questionnaire and observation checklist were used as data collection instruments. The entire population of twenty-eight (28) academic librarians was used. The data collected were analyzed using descriptive statistics such as frequency counts, percentages and mean scores. The findings revealed that electronic reference resources such as e-encyclopedias, e-dictionaries, ebiographical sources, and e-handbooks were not available in the library. Reference services such as reference via World Wide Web, social media, video conferencing and collaborative digital reference services (CDRS) were equally not provided in the library. The study therefore, recommended that Management of the Federal University of Technology Library, Minna should subscribe to active online databases that will enable the use of electronic reference resources and services. The library should adopt the use of technologies to allow the provision of digital reference resources and services such as e-dictionaries, ebibliographies, reference via World Wide Web, social media, for their reference service delivery.

Keywords: Digital reference services, Digital reference resources, Academic libraries,

Introduction

University libraries are now more than ever before faced with challenge of providing timely and accurate information resources and services to a group of unique users with constantly evolving information needs. This is partly due to the technological changes experience especially in the educational settings and also partly due to the divergent background of their users. As such, university libraries are trying to breach this gaps by providing innovative services that will support and strengthen the academic programmes of such institutions of learning as it contributes to the total development of its user's community by broadening their intellectual horizons and incucating in them a lasting desire to study and carry out research. Among these services is the digital reference service which is only possible if there are relevant digital reference resources such as e-dictionaries, e-almanacs, eencyclopedias, e-yearbooks, e-handbooks, e-guidebooks, e-indexes and abstracts which serve as tools for the digital reference service provision which help in providing answers to specific questions, such as brief facts, statistics and technical instructions electronically as rightly pointed out by Umaru, Aghadiuno and Namo (2018). Digital reference resources are those library resources that are not intended to be read cover to cover, but rather consulted to provide one with more concise information on a digital format. Their design is generally dependent on the type of information and treatment provided.

Digital reference services refer to all functions performed by a trained librarian to meet the information need of patrons in electronic format. Digital reference service is one of the essential services provided in the modern library system. It is one of the visible expressions of the library's purpose and mission. According to the ALA Glossary of library and information science (2014), reference services is that phase of library work which is directly concerned with assistance to readers in securing information and in using resources of the library in study and research either in person or via electronic means. Reference services in university library should be regarded as an important aspect of library services which seeks to satisfy the hunger of patron, and it is the root of librarianship. Based on the circumstances, Nwalo (2010) opined that services offered by reference section includes answering reference queries, user education, compilation of reading lists, bibliographies, indexing and abstracting, inter library loan services, and current awareness services. More so, reference services are grouped into two - direct and indirect reference services. In fact, the reference service section of every library is of paramount importance to the library just as the library is of paramount importance to every higher institution of learning. Reference service as a distinct function of the library began in the late nineteenth century largely in response to the growing prevalence of publicly funded libraries (both public and academic) seeking to serve relatively inexperienced and unskilled readers and scholars. There was a problem – they did not know how to use the library. Thus a reference service was developed to solve the problem of the library users (Das, Gurey and Saha, 2010).

Problem Statement

Reference services are established to provide direct contact between the librarian and library users. This contact has been dramatically affected by the increasing complexity of users. They are now mostly inclined towards the use of digital media and devices in their daily activities. This development has made reference activities of libraries, especially in developed countries, to witness changes not only in the format of reference resources but also in the methods in which the reference services are delivered. A paradigm shifts from the traditional reference services to the digital reference services, which pave the way to increased reference services provision to a more substantial number of users at a significantly reduced period.

However, decades after the successful implementation of digital reference services in developed countries, libraries in developing nations such as Nigeria are still battling with challenges in terms of bandwidth provision, electricity, Internet access, and other necessary infrastructure needed for the delivery of digital reference services. These perceived problems necessitated this study to understand how academic libraries in developing countries are coping adequately and to proffer possible ways that could be adopted for efficient and effective provision and delivery of digital reference services.

Objectives

The objectives of the study are to:

- Identify the types of digital reference resources available in the Federal University of Technology Library, Minna;
- Find out the types of digital reference services provided in the Federal University of Technology Library, Minna;
- Determine the challenges faced in the provision of digital reference services in the Federal University of Technology Library, Minna;
- 4. Proffer strategies for enhancing the provision of digital reference resources and services in the Federal University of Technology Library, Minna.

Literature Review

University library is an intellectual power house users are provided with information resources and services in various forms aiming at supporting the objectives of their parent institution, which has to do with learning, teaching, research and other services. Oyewusi and Oyeboade, (2009) posited that university libraries are the academic heart of the university system and its basic purpose is to provide students and faculty with material assistance and enabling environment that facilitate teaching, learning and research activities in the universities through the provision of various information resources and services such as

books, periodicals, audio visual materials, reference materials, circulation services, interlibrary loan and reference services among others.

Reference resources/materials are information materials designed by the arrangement and treatment of their subject matter to be consulted for specific piece of information rather to be read consecutively. Therefore, digital reference sources are publications that provide background and factual information to a subject matter on a digital format and could be view via electronic/digital devices such as computers, tablets, e-readers, ipads and mobile smart phones. They are not meant to be read from cover to cover, they are used within the library and also they are meant to be consulted for specific information needs. The availability of digital reference sources will increase users' interest on the use of the library as this will greatly support learning and research activities. Therefore, university libraries should provide users with relevant reference sources that would aid their academic pursuit (Oyedum, 2010).

Opera cited in Edegbo (2011) opined that reference service is the act of bringing into contact the right reader and the right information sources at the right time and in the right personal way. Digital reference services involve providing answers to questions asked by library users through the use of social networks such as Facebook, Twitter, Instagram, Whatsapp etc. with the help of smart phones. Furthermore, digital reference service goes beyond bringing the user in contact with the digital reference sources and the daily routine of responding to users queries. In its widest best development, it covers anything and everything necessary to help the user in his quest for information, education and knowledge (Owolabi and Adeyemi,2015). The provision of qualitative digital reference service will no doubt promote research and development for national development. In a similar view, Achebe (2012) cited in Salami, Akawu and Saka (2017) posited that reference and information service is an essential part of everyday library activity without which other functions such as collection development; cataloguing and classification can hardly be justified. The authors stressed further that it is the responsibility of reference section as part of their services to ensure that the resources and the services are efficiently and effectively used by library patrons. Reference sources are information materials that are consulted for specific purpose based on the information needs of the user. The Reference and User Services Association (RUSA) of the American Library Association (2014) defined reference services as information consultations in which library staff recommend, interpret, evaluate and/or use information resources to help others to meet particular information needs. These reference

transactions can take place in person or via the telephone, e-mail or virtual reference technologies. Librarians are also creating websites, answer archives and links to answers to frequently asked questions all designed to anticipate user questions and help people find information independently.

Adebayo (2009) opined that one of the means of meeting the needs of the university and research community is by providing an effective reference service, the speed accuracy in dealing with user's enquiries by the reference librarian have a great bearing on user satisfaction. On the importance of reference service, Kumar (2010) posited that reference services helps the clienteles to get right kind of documents and information at the right time, thus uplifting the institution. It assists the researchers to avoid duplication of work and helps them in the introduction of new ideas. It makes information available to decision makers to take right decisions. Thus, reference services attempts to fulfill the objectives of the parent body. A satisfied user serves as a friend of the reference service. Udensi and Akor (2014) defined reference services as a direct personal assistance to readers seeking for information in the library.

Consequently, reference services in Nigeria libraries is an age long tradition as reference librarians serve as pilot toward directing information seekers on the latest information that are inherent in a particular field of human endeavor, the provision of qualitative reference service will no doubt promote research and development for national development. Reference sources are information materials that are consulted for specific purpose based on the information needs of the user.

Methodology

The descriptive survey research design was adopted for this study. Survey research design is characterized by population and sample size as well as the use of data collection instrument. The population of the study is academic librarians of FUT Minna libraries while the sample of the study is the entire twenty-eight (28) academic librarians in the library. The decision to use the entire population was guided by the assertion of Bernard (2012) who stated that if a population of the study is less than two hundred (200), the entire population should be used for the study. Questionnaire and checklist were the instruments used to elicit responses from the respondents. Data collected were tabulated and analysed using descriptive statistics of frequency counts, percentages and mean scores.

Data Presentation and Analysis

Digital Reference Resources Available in the Federal University of Technology Library, Minna.

S/N	Digital Reference Resources	Availability
1	E- encyclopedias	×
2	E-dictionaries	×
3	E-biographical sources	×
4	E-year books	×
5	E-Hand books	×
6	E-directories	×
7	E-almanacs	×
8	E-indexes and abstracts	×
9	E-bibliographies	×
10	E-government publications	×
11	E-maps, atlases and globes	×

 Table 1: Types of Digital Reference Resources Available in the FUT Library, Minna

Key: $\sqrt{}$ = Available, \times = Not Available

Table 1 reveals that electronic references resources such as e-encyclopedias, edictionaries, e-biographical sources, e-yearbooks, e-handbooks, e-directories, e-almanacs, eindexes and abstracts, e-bibliographies, e-government documents, e-maps, e-atlases and eglobe were not available in the university library.

The findings reveal that digital reference resources such as e-encyclopedias, e-dictionaries, ebiographical sources, e-handbooks, e-yearbooks, e-almanacs, e-directories, e-indexes and abstracts arenot available in the library. This shows that there will not be an efficient and effective digital reference service provision in the library as rightly observed by Udoudoh (2007) who opined that relevant reference resources must be provided to answer library users many questions likely to arise from the day-to-day happening in the classroom thereby, thus providing avenue to stimulate and sustain their information literacy acquisition consciousness.

Table2: Types of Digital Reference Services Provided in the Federal University of Technology Library, Minna

S/N	Digital Reference Services	Provided	Not Provided
1	E-mail reference service		
2	Reference via Web or Web forms		
3	Video Conferencing or Web Cam Service		
4	Collaborative Digital Reference Services (CDRS)		
5	Text Based Chart/Instant Messaging	\checkmark	
6	Virtual Reference Desk		
7	Digital Reference Robots		
8	Online question and answers services	\checkmark	

9	Online inter library loan services		
	Total	4(44.4%)	5(55.6%)

Table 2 reveals that out of nine (9) items listed, 4(44.4%) items were provided in the library under study. The digital reference services provided include: E-mail reference services, text based chart/instant messaging, online question and answer services and online inter library loan services. Five (55.6%) items were not provided in the library. These include: Reference via Web or Web form, Video conferencing or Web cam service, collaborative digital reference service, virtual reference desk, digital reference robots. This implies that more than half of the items listed were not provided in the library under study.

The study further reveals that provision of digital reference services via World Wide Web, social media, video conferencing /Web Cam service, collaborative digital reference services (CDRS), text based chart/instant messaging, virtual reference desk and digital reference robots are not available in the library under study. This finding is in line with that of Umaru, Aghadiuno and Namo (2018) in their studies who found that digital reference services are provided in few of the Nigerian universities.

 Table 3: Challenges Faced in the Provision of Digital Reference Services in the

 University Library

S/N	Challenges	SA	Α	D	SD	(X)	Decision
1.	Lack of flexible reference service	14	4	2	8	2.78	Agreed
	policy	68.8%	8.2%	4.8%	18.2%		
2.	Lack of expertise to use	5	12	7	4	2.51	Agreed
	technologies such as (video	14.3%	51.9%	21.2%	12.6%		
	conferencing, social media,						
	World Wide Web etc.) to answer						
	users' information needs						
3.	Erratic electricity power supply	12	6	2	8	2.59	Agreed
		50.6%	9.5%	2.2%	37.7%		
4.	Fear of computer taken over their	12	5	2	9	2.51	Agreed
	work	48.5%	9.1%	4.3%	38.1%		
5.	Cost of subscription/packages	11	9	2	5	2.78	Agreed
		45.9%	42.4%	3.0%	8.7%		
6.	Technical issues such as poor	14	4	2	8	2.78	Agreed
	Internet network, hardware	68.8%	8.2%	4.8%	18.2%		
	problems etc.						
7.	Lack of effective library	12	5	2	9	2.23	Disagreed
	cooperation	48.5%	9.1%	4.3%	38.1%		

Key: Strongly Agreed (SA), Agreed (A), Disagreed (D), Strongly Disagreed (SD) and Mean(\bar{x})

Table 3 reveals that out of seven (7) items listed, six (6) were agreed to by the respondents as the challenges faced in the provision of digital reference services in the library. These include: lack of flexible reference service policy, lack of expertise to use technologies to answer users' information needs, erratic power supply, fear of computer taken over their work, cost of subscription/packages, technical issues such as poor Internet network, hardware problems etc. with mean scores above 2.50 criteria standard for acceptance of mean. On the other hand, the respondents disagreed with one challenge: Lack of effective library cooperation with mean scores below 2.50 criteria set standard.

The study also reveals that respondents indicated lack of flexible reference service policy, lack of expertise, erratic electricity power supply, fear of computer taking over their work, cost of subscription/packages, lack of digital reference services and poor internet network as challenges faced in the provision of reference services in the library. This agrees with the findings of Onuoha (2012) who discovered that lack of adoption ofICTs in the library were major challenges in the rendering of effective reference services in academic libraries in Nigeria. The finding also agrees with that of Dara (2005) who discovered erratic power supply, lack of qualified or skilled reference librarian and obsolete reference resources the major challenges facing effective library services in Nigeria.

Servi	ices						
S/N	Strategies	SA	Α	D	SD	(X)	Decision
1.	Effective flexible reference	14	8	2	4	2.82	Agreed
	service policy should be in place	68.8%	18.2%	4.8%	8.2%		
2.	Frequent and regular ICTs	7	12	5	4	2.54	Agreed
	training program should be	21.2%	51.9%	14.3%	12.6%		C
	organised for library personnel						
3.	Steady electricity power	12	8	2	6	2.60	Agreed
	supply	50.6%	37.7%	2.2%	9.5%		
4.	Re-orientation of the staff on	12	9	2	5	2.65	Agreed
	the impression of computer	48.5%	38.1%	4.3%	9.1%		
5.	More funds should be	7	12	5	4	2.54	Agreed
	allocated to library to enable	21.2%	51.9%	14.3%	12.6%		
	it subscribed to e-reference resources						
6.	Steady Internet network	13	8	3	4	2.58	Agreed
	supply	54.5%	18.6%	12.6%	14.3%		
7.	Adoption of technologies to	12	7	4	5	2.56	Agreed
	enable digital reference	51.9%	21.2%	12.6%	14.3%		
	services such as e-mail						

 Table 4: Strategies for Enhancing the Provision of Digital Reference Resources and

 Services

referenc	reference se		video		
conferen	ncing,	referen	ce via		
world	wide	web,	social		
media et	tc.				

Key: Strongly Agreed (SA), Agreed (A), Disagreed (D), Strongly Disagreed (SD) and Mean(\bar{x})

Table 4 reveals that all the seven strategies listed on the way forward were agreed to by the respondents. These include: Effective flexible reference service policy, frequent and regular ICTs training program should be organised for library personnel, steady electricity power supply, re-orientation of the staff on the impression of computer, more funds should be allocated to library to enable it subscribed to e-reference resources, steady Internet network supply and adoption of technologies to enable digital reference services with mean scores above 2.50 criteria standard for assenting of mean.

The study finally highlighted effective provision of reference service in university library under study ranging from effective flexible reference service policy, frequent and regular ICT training, steady electricity power supply, re-orientation of the staff on the impression of computer, steady internet/network supply and adoption of digital reference services such as e-mail reference services, video conferencing, reference via World Wide Web and social networking sites as major strategies for enhancing the provision of effective digital reference services.

Conclusion

The study assessed digital reference resources and services in Federal University of Technology Library, Minna. The concept of types of digital reference resources, reference services provided, challenges faced in providing digital reference services and strategies to enhanced the provision of digital reference services were highlighted. Effective flexible reference service policy, steady power supply, frequent and regular ICTs training program, steady Internet network supply, adoption of digital reference services such as e-mail reference service, video conferencing, reference via World Wide Web, social media, etc. Once these are provided in the university library under study, digital reference services will be enhanced and improved.

Recommendations

Based on the findings of the study and conclusions drawn, the following recommendations are made to improve digital reference services in Federal University of Technology Library, Minna.

- Management of Federal University of Technology Library, Minna should subscribe to effective online database that will enable the use of electronic reference resources and services.
- 2. Management of Federal University of Technology Library, Minna should post librarians with technical know-how to manned the reference section of the library.
- 3. Effective reference services policy, Frequent and regular ICTs training and re-training of the librarians should be in place in the library.
- 4. Management of Federal University of Technology Library, Minna should adopt the use of technologies to enable the provision of digital reference resources and services such as e-dictionaries, e-bibliographies, video conferencing, reference via World Wide Web, social media and the like.

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