

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

---

May 2022

## Availability and Use of Digital Reference Service Tools for Effective Service Delivery by Librarians in Private Universities Libraries in South-East Nigeria

Ejike Igwebuike  
onlyson222@gmail.com

Emmanuel Ifechukwu Onoh Mr.  
Godfrey Okoye University Enugu, emmanuelonoh2006@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Scholarly Communication Commons](#)

---

Igwebuike, Ejike and Onoh, Emmanuel Ifechukwu Mr., "Availability and Use of Digital Reference Service Tools for Effective Service Delivery by Librarians in Private Universities Libraries in South-East Nigeria" (2022). *Library Philosophy and Practice (e-journal)*. 7105.  
<https://digitalcommons.unl.edu/libphilprac/7105>

# **Availability and Use of Digital Reference Service Tools for Effective Service Delivery by Librarians in Private Universities Libraries in South-East Nigeria**

\*Ejike Udensi Igwebuike,  
onlyson222@gmail.com

\*\*Emmanuel Ifechukwu Onoh,  
emmanuelonoh2006@gmail.com

\*University Library, Alex Ekwueme Federal University, Ndufu Alike, Abakaliki, Ebonyi State Nigeria. \*\*University Library, Godfrey Okoye University, Enugu State Nigeria.

## **Abstract**

This study examined availability and use of digital reference tools in private university libraries in south-east Nigeria. It is designed to ascertain the extent of use of DRS tools by Librarians in effective service delivery to users. Survey design was used for the study and 46 respondents comprising of Librarians and Library Staff who directly provide reference services in the private university libraries participated in the study. An observation checklist and a structured questionnaire were administered to the respondents. Data collected was analyzed using descriptive statistics. The study found that email services, text based/instant messaging, online pathfinders and mobile reference service were the most popular digital tools available in the private university libraries. It found that while some tools are being utilized to a very high extent and high extent, other are utilized at a low extent and not used at all. It also found paucity of funds among others as some of the challenges encountered in proving DRS. It shows that provision of funds, regular power supply are some of the strategies that can be adopted at effective provision of DRS. The study concludes by recommending adequate provision of DRS tools in the university libraries for effective service delivery.

**Key words: Librarians, Reference service, Digital Reference Service, Information service, Private Universities, Academic Libraries, Nigeria.**

## **1. INTRODUCTION**

Reference service is one of the fundamental services provided by libraries all over the world. It is an assistance or instruction provided by a Librarian or a Library Staff to clients in identifying needed information resources from the library. Ranganathan (1961) defines it as a personal service to each reader in helping him find documents answering his interests at the moment, pin-pointedly, exhaustively, and expeditiously. Reference service is that part of library service in which the user interacts with the Librarian or Library Staff with a view to matching the information needs of the user with information resources in the library. Reference services can range from providing assistance on how to use the library or its resources, computers, the library catalogue, answering reference queries, giving directions, to the use of proper citation, factual answers to questions, and information services. Traditionally, in order to provide this service, libraries acquire, process, organize, and disseminate books, periodicals, reference resources, etc.

in print format. But with the introduction of Information and Communication Technology (ICT) to the library, these resources are now provided in electronic format.

## **1.1 TECHNOLOGICAL ADVANCEMENT, A PRECURSOR TO DIGITAL REFERENCE SERVICES**

As a result of the proliferation of ICT, reference service is no longer centered on in-person interaction with users in the library alone, but queries are obtained and responded to electronically and in real time. This is evident with the emergence and development of virtual or digital reference services. According to Lankes (2005), Digital Reference Services (DRS) refer to a network of expertise, intermediation and resources put at the disposal of a user seeking answers in an online/networked environment. DRS emanated from the traditional reference service but have progressed to enhance users' access to library services without depending on physical visits to the library. This service can be provided using variety of digital tools, such as the internet, e-mails, real-time chat, instant messenger, video conferencing, learning forums, social media platforms, mobile phones, etc.

Consequently, private university libraries in Nigeria are incorporating these new technologies for effective service delivery and to meet the information needs of their users. However, it has been observed that despite the significant role of ICT in providing effective DRS in libraries, some private university libraries in Nigeria are yet to deploy these technologies to provide reference services to their users in spite of its attending benefits. This could be as a result of some challenges, knowledge of these challenges would assist in effective service delivery to users. Hence the study, which is designed to ascertain the availability and extent of use of digital tools in providing digital reference services by library staff in private university libraries in south-east Nigeria. Many studies have been conducted on digital reference services in Nigeria in the past. Still, none of these studies focused on the level of its availability and use in private university libraries in Nigeria. This study presents a review of the concept of digital reference services. It analyzes tools available for the provision of digital reference services and the benefits associated with applying digital reference services in academic libraries. The study attempted to find answers to the following questions:

- What digital tools are available in private university libraries in south-east Nigeria for the provision of digital reference services?
- To what extent are these tools used in the provision of digital reference services in private university libraries in south-east Nigeria?
- What are the challenges encountered in providing digital reference services in private university libraries in south-east Nigeria?
- What are the strategies for enhancing the provision of digital reference services in private university libraries in south-east Nigeria?

## **2. LITERATURE REVIEW**

The concept of DRS has been defined differently by many authors, but the fundamental factor is the use of technology in meeting the information needs of the users. Moran (2010) sees it as any service provided to users that can be accessed remotely. According to Sharma, Kumar, and Singh (2004), it refers to a network of expertise, human intermediation, and resources made available

to users in an online context. It includes those library resources that can be used by the library to suit the needs of the library user in an online medium Umaru, Aghadinuno, and Namu (2018).

In a study, conducted by Yousuf and Haider (2016) on an analysis of digital reference services tools and usage in university libraries of Karachi they identified digital reference tools such as Ask Librarian, instant messenger, e-mail services, mobile reference, live chats services, social media networks, VoIP (Skype Google talk etc.) Video Conference. Similarly, Sharma, Kumar, and Singh (2004) in a review identified digital reference service tools to include e-mail based reference, Ask a services, online pathfinders, chat based reference, and real-time live web reference.

Tofi, Agada, and Okafor (2019) in a study on Utilization of Digital Reference Resources and Services by Postgraduate Students in University Libraries in Benue State, Nigeria identified inadequate reference librarians, the lack of a functional interactive chat box stream, librarians' poor attitudes toward digital reference services, a lack of professional skills among reference librarians, a lack of professionalism among reference librarians and Poor internet connectivity as challenges encountered in providing digital reference services. Ekwelem, Okpala, Igbokwe & Ekwelem (2018) added that Epileptic power supply and Lack of funds to support Digital Reference Services are also some of the challenges.

Most of the authors (Uutoni, (2018); Okeji, Tralagba & Obi, (2019); Ekwelem, Okpala, Igbokwe & Ekwelem, (2018); Tofi, Agada, and Okafor, (2019) identified training and retraining of librarians in the use of digital reference service as a major strategy to ensuring a hitch free implementation of DRS. Ekwelem, Okpala, Igbokwe & Ekwelem (2018) observed that provision of funds to support digital reference service, provision of steady power supply, Orientation of users on digital reference services. Tofi, Agada, and Okafor (2019) added that increase of bandwidth to increase speed of server and attractive salaries and better working conditions should be considered.

### **3. METHODOLOGY**

The survey design was used to obtain data for the study. The population of the study comprised of all Librarians and Library Staff who provide reference services in private university libraries in south-east Nigeria. According to National Universities Commission (2021), there are thirteen (13) private universities in south-east Nigeria. A total of 46 Librarians and Library Staff participated in the study. An observation checklist and a structured questionnaire which was designed to elicit responses for the research questions were administered to the respondents. Data collected was analyzed using descriptive statistics such as Frequency Count, Percentages, Mean and Standard deviation. The instrument which take the form of a continuum of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD), was scored thus; VHE=4, HE=3: LE=2 and VLE=1. The Mean benchmark is 2.50. Therefore any item with a Mean value of 2.50 and above was considered "High Extent or Agreed" while those below 2.50 were considered "Low Extent or Disagreed". Table 1 shows the distribution of participants.

**Table 1: Distribution of participants**

S/N	Name of University	No. of Professional	No. of Para professionals	Total
1	Caritas university Enugu (CUE)	2	2	4
2	Evangel university Okpoto (EUO)	3	2	5
3	Godfrey Okoye university (GOU)	1	5	6
4	Gregory university Uтуру (GUU)	2	3	5
5	Madonna university Okija (MUO)	2	4	6
6	Paul university Awka (PUA)	3	2	5
7	Renaissance university Enugu (RUE)	2	2	4
8	Tansian university Umunya (TUU)	1	1	2
9	Coal city university Enugu (CCUE)	1	-	1
10	Clifford university Owerinta (CUO)	2	-	2
11	Legacy university Okija (LUO)	2	-	2
12	Spiritan university Nneochi (SUN)	2	-	2
13	Claretian university of Nigeria Nekede (CUNN)	1	1	2
	<b>Total</b>	<b>24</b>	<b>22</b>	<b>46</b>

**Source: Field work by the Researchers**

## 4. RESULTS AND DISCUSSION

### 4.1. Digital tools available in private university libraries in south-east Nigeria for the provision of digital reference services

**Table 2: Observation checklist result of digital tools available in private university libraries in south-east Nigeria for the provision of digital reference services**

Item statement	CUE		EUO		GOU		GUU		MUO		PUA		RUE		TUU		CCUE		CUO		LUO		SUN		CUNN	
	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA	A	NA
E-mail based reference	√		√		√		√		√		√		√		√		√		√		√		√		√	
Reference Via Web		x		x		x		x		x		x		x		x		x		x		x		x		x
Video conferencing/webcam services		x		x		x		x		x		x		x		x		x		x		x		x		x
Collaborative Digital Reference Services	√			x	√		√		√			x		x		x	√			x	√			x		x
Text Based Chat/Instant Messaging	√		√		√		√		√		√		√		√		√		√		√		√		√	
Online Pathfinders.	√		√		√		√		√		√		√		√		√		√		√		√		√	
Ask Librarian		x		x		x		x		x		x		x		x		x		x		x		x		x
Mobile Reference	√		√		√		√		√		√		√		√		√		√		√		√		√	
Live Chats Services		x		x		x		x		x		x		x		x		x		x		x		x		x

**Key: A: Available, NA: Not Available**

#### *4.1.2 Digital tools available in private university libraries in south-east Nigeria*

Table 2 above shows that (13) 100% of the private university libraries under study have the facilities to provide e-mail services, text based/ instant messaging, online pathfinders and mobile reference service. It also shows that (6) 46.2% of the university libraries has the facility to provide collaborative digital reference services, while (7) 53.8% do not have the facility to provide collaborative digital reference services. The table shows that (13) 100% of the private university libraries under study do not have the facilities to provide reference via web, video conferencing/ webcam services, Ask Librarian and live chats services.

## 4.2. Extent of utilization of digital reference tools in private university libraries in south-east Nigeria

**Table 3: Mean and standard deviation analysis of the extent of utilization digital reference tools in private university libraries in south-east Nigeria**

Item statement	CUE		EUO		GOU		GUU		MUO		PUA		RUE		TUU		CCUE		CUO		LUO		SUN		CUNN	
	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D
E-mail based reference	3.5	<b>0.5</b> HE	3.6	<b>0.49</b> HE	3.3	0.86 HE	3.6	0.49 HE	3.5	<b>0.5</b> HE	3.4	<b>0.49</b> HE	3.5	<b>0.5</b> HE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	3.5	<b>0.5</b> HE	3.5	<b>0.5</b> HE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE
Reference Via Web	1.75	<b>0.43</b> LE	1.8	<b>0.4</b> LE	1.3	<b>2.24</b> LE	1.0	<b>0</b> NA	1.6	<b>0.48</b> LE	1.6	<b>0.49</b> LE	1.25	<b>0.43</b> LE	1.5	<b>0.5</b> LE	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.5	<b>0.5</b> LE	1.5	<b>0.5</b> LE	1.0	<b>0</b> NA
Video conferencing/webcam services	1.75	<b>0.43</b> LE	1.8	<b>0.4</b> LE	1.3	<b>2.24</b> LE	1.0	<b>0</b> NA	1.6	<b>0.48</b> LE	1.6	<b>0.49</b> LE	1.25	<b>0.43</b> LE	1.5	<b>0.5</b> LE	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.5	<b>0.5</b> LE	1.5	<b>0.5</b> LE	1.0	<b>0</b> NA
Collaborative Digital Reference Services	4.0	<b>0</b> VHE	1.4	<b>0.49</b> LE	3.8	<b>0.56</b> HE	3.8	<b>0.4</b> HE	3.5	<b>0.76</b> HE	1.2	<b>0.4</b> LE	2.0	<b>0</b> LE	2.0	<b>0</b> LE	3.0	<b>0</b> HE	1.5	<b>0.5</b> LE	4.0	<b>0</b> VHE	1.0	<b>0</b> NA	1.5	<b>0.5</b> LE
Text Based Chat/Instant Messaging	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE
Online Pathfinders.	3.75	<b>0.43</b> HE	3.4	<b>0.49</b> HE	3.1	<b>0.69</b> HE	4.0	<b>0</b> VHE	2.6	<b>1.09</b> HE	3.4	<b>0.8</b> HE	3.25	<b>0.66</b> HE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	3.5	<b>0.5</b> VHE	3.5	<b>0.5</b> HE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE
Ask Librarian	1.0	<b>0</b> LE	1.8	<b>0.4</b> LE	1.8	<b>0.37</b> LE	1.0	<b>0</b> NA	2.0	<b>0.57</b> LE	1.0	<b>0</b> NA	1.75	<b>1.39</b> LE	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.5	<b>0.5</b> LE	2.0	<b>1</b> LE	1.5	<b>0.5</b> LE	2.0	<b>1</b> LE
Mobile Reference	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE	4.0	<b>0</b> VHE
Live Chats Services	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.0	<b>0</b> NA	1.0	<b>0</b> NA

**Key: LE: NA; Not Applicable, HE: High Extent, VHE: Very High Extent**



#### *4.2.1 Extent of utilization of digital reference tools in private university libraries in south-east Nigeria*

Table 3 above shows that text based chat/instant messaging and mobile reference services are utilized to a very high extent in all the university libraries under study. It reveals that e-mail based references are used to a very high extent in (4) 30.7% and to a high extent in (9) 69.3%. (6) 46.2% of the libraries under study utilize online pathfinders to a very high extent and (7) 53.8% use the tool to a high extent. It shows that (2) 15.4% utilize collaborative digital reference services to a very high extent while (4) 30.8% and (6) 46.2% utilize it to a high extent and little extent respectively. (1) 7.7% library do not use collaborative reference service at all. The table shows that Ask Librarian, is utilized to a little extent in (9) 69.2% and not applicable in (4) 30.8%. Also video conferencing is utilized to a little extent in (9) 69.2% and not applicable in (4) 30.8%.. However, live chats services are not utilized in the university libraries under study as all (13)100% fall below the benchmark of 2.50.

### 4.3. Challenges encountered in providing digital reference services in private university libraries in south-east Nigeria

**Table 4: Mean and standard deviation analysis of the challenges encountered in providing digital reference tools in private university libraries in south-east Nigeria**

Item statement	CUE		EUO		GOU		GUU		MUO		PUA		RUE		TUU		CCUE		CUO		LUO		SUN		CUNN	
	X	SD/ D	X	SD /D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD /D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D	X	SD/ D
Inadequate Reference Librarians	3.75	0.43 SA	4.00	0 SA	3.83	0.37 SA	3.4	0.49 A	4.00	0 SA	4.00	0 SA	4.00	0 SA	3.75	0.43 SA	4.00	0 SA	4.0	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA
Poor attitudes toward digital reference services	3.25	0.66 A	3.2	0.4 A	3.6	0.47 SA	3.0	0 A	3.3	0.47 A	4.0	0 SA	3.25	0.66 A	3.5	0.5 SA	4.00	0 SA	3.5	0.5 SA	3.5	0.5 SA	4.0	0 SA	4.0	0 SA
Lack of professional skills among reference librarians	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA
Poor internet connectivity	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA
Lack of funds to support Digital Reference Services	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA:
Poor knowledge on the use of DRS among users	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA

**Key: SA: Strongly Agree, A: Agree**

#### *4.3.1 Challenges encountered in providing digital reference services in private university libraries in south-east Nigeria*

Table 4 above shows all the items identified as challenges encountered in providing digital reference service in private university libraries in south-east Nigeria were agreed by the respondents as posing a challenge to effective reference service delivery.

#### 4.4. Strategies for enhancing the provision of digital reference services in private university libraries in south-east Nigeria

**Table 4: Mean and standard deviation analysis of the strategies for enhancing the provision of digital reference services in private university libraries in south-east Nigeria**

Item statement	CUE		EUO		GOU		GUU		MUO		PUA		RUE		TUU		CCUE		CUO		LUO		SUN		CUNN	
	X	SD/D	X	SD/D	X	SD/D	X	SD/D	X	SD/D	X	SD/D	X	SD/D	X	SD/D	X	SD/D	X	SD/D	X	SD/D	X	SD/D	X	SD/D
Training and retraining of librarians in the use of DRS	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA
Provision of funds to support digital reference service	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA
Increase in bandwidth	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA
Orientation of users on digital reference services	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA
Provision of steady power supply	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA	4.00	0 SA

**Key: SA- Strongly Agree, A- Agree**

#### *4.4.1 Strategies for enhancing the provision of digital reference services in private university libraries in south-east Nigeria*

Table 5 above shows that all the items listed as strategies for enhancing the provision of effective digital reference services in the private university libraries were accepted by the respondents as measures that can be implemented to improve effective digital reference service in private university libraries in south-east Nigeria .

### **5. FINDINGS AND DISCUSSION**

The purpose of this study is to ascertain the availability and extent of use of digital tools in providing digital reference services by Librarians in private university libraries in south-east Nigeria. The findings of the study reveals that email services, text based/instant messaging, online pathfinders and mobile reference service were the most popular digital tools available in the private university libraries for digital reference services while collaborative reference service tools are available in some of the university libraries. It was discovered that the facility to provide reference via web, video conferencing/webcam services, Ask a librarian and live chat services were not available in the private university libraries. This implies that private university libraries in south-east Nigeria are yet to fully deploy tools necessary for the provision of DRS. This could be seen in the number of digital reference tools available in the libraries. This could hamper effective information service delivery to users. This collaborates Malik and Mahmood (2013) who observed that librarians in developing countries have been reluctant in adopting DRS.

It was also discovered that the extent of utilization of digital reference tools also vary in the private university libraries. While some tools are being utilized to a very high extent and high extent, other are utilized at a low extent and not used at all. This can be attributed to non availability of DRS tools in the libraries. It also defines the stage at which the DRS tools are implemented in each private university library. Malik and Mahmood (2014) noted that only few libraries were adopting or planning DRS while many were very slow over this task. Generally, the findings show that text based chat/instant messaging and mobile reference services and e-mail services were the most utilized reference tools in the private university libraries. This findings aligns with Adeleke and Nwalo (2017) assertion that internet and email were ranked most available and used in the university of Ibadan.

The study found that inadequate reference librarians, poor attitudes toward digital reference services, lack of professional skills among reference librarians, poor internet connectivity, lack of funds to support Digital Reference Services, poor knowledge on the use of DRS among users are some of the challenges encountered in proving DRS in the private university. These challenges are not peculiar to private universities in Nigeria but as observed by Malik and Mahmood (2014) most developing countries still grapple with these challenges in their quest to implement DRS.

The study also found that training and retraining of librarians in the use of DRS, provision of funds to support digital reference service, increase in bandwidth, orientation of users on digital reference services, provision of steady power supply were some of the strategies that can be

adopted to ensure effective provision of DRS. Funding library services has been identified as a major hindrance Okiy as cited in Ekwelem et al (2018) noted that institutions should look for alternative source of income to meet the ever increasing demand of library users for electronic information service.

## 6. CONCLUSION AND RECOMMENDATION

Reference service is one of the fundamental services provided by libraries all over the world which entails giving personal assistance to clients in identifying needed resources from the library. As a result of the proliferation of ICT, reference service is no longer centered on in-person interaction with users in the library alone, but queries are obtained and responded to electronically and in real time. This service can be provided using variety of digital tools such as the internet, e-mails, real-time chat, instant messenger, video conferencing, learning forums, social media platforms, mobile phones, etc. These tools enhance users' access to library services without depending on physical visits to the library. Based on the findings, the following recommendations were made:

- There is need to provide adequate DRS tools in the libraries for effective reference service delivery
- Management of private universities should provide adequate funds for the provision of DRS in the university libraries for effective service delivery.
- There is need to train and retrain Librarians on the use of DRS tools
- There is need for the provision of steady power supply in the libraries for effective service delivery
- Librarians should conduct vigorous orientation of users on the use of DRS.

## References

- Adeleke, D. S. & Nwalo, H. I. N. (2017). Availability, Use and Constraints to Use of Electronic Information Resources by Postgraduates Students at the University of Ibadan. *IJKCDT.*, 7(4), 51-69.
- Ali, M.Y.; & Haider, K. (2016). An Analysis of Digital Reference Services Tools and Usage in University Libraries of Karachi. *Pakistan journal of library and Information Science.*, 47(1) 20-29.
- Ekwelem, V.O.; Okpala,H.N.; Igbokwe, J.C; & Ekwelem, C.N. (2018). Evaluation of Online Reference Services: Reflections from Nigeria Academic Libraries. *Library Philosophy and practice.*, 1-20.  
<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=5014&context=libphilprac>. (Accessed on 12 January, 2022).
- Lankes, L.(2005).The digital reference research agenda. *Journal of the American Society for Information Science and Technology*, 55(4), 301-311.

- Malik, A. & Mahmood, K. (2013). Infrastructure needed for digital reference service (DRS) in university libraries: an exploratory survey in the Punjab, Pakistan. *Library Review.*, 62(6/7), 420-428.
- Malik, A. & Mahmood, K.(2014). Readiness for digital reference services (DRS) in university libraries: a survey in the Punjab, Pakistan. *Information Development.*, 30(2), 181-188.
- Moran, C. (2010). The Utility of digital reference service in Academic Libraries: an annotated Bibliography INFO522: *Information access and reference.*
- National Universities Commission. (2021). *Private universities in Nigeria.*  
<https://www.nuc.edu.ng/nigerian-universities/private-universities/> (Accessed on 12 October 2021)
- Okeji, C.C., Tralagba, E.C. & Obi, I.C. (2019). An investigation of the digital literacy skills and knowledge-based competencies among librarians working in university libraries in Nigeria. *Global Knowledge Memory and Communication*, 69 (4/5), 311-330. <https://doi.org/10.1108/GKMC-05-2019-0054>. Sourced on 12/01/22
- Ranganathan, S. R. *Reference service.* London: Asia Pub. House.1961.
- Sharma, S.; Kumar, A.; & Singh, M. (2004). Digital reference service. *DESIDOC Bulletin of Information Technology.*, 24(6), 11-18.
- Tofi, S.T.; Agada, E.O.; & Okafor, C.J. (2019). Utilization of digital reference resources and services by postgraduate students in University Libraries in Benue State, Nigeria. *IJRIS.*, IV(VI),72-84.  
<https://www.rsisinternational.org/journals/ijriss/Digital-Library/volume-4-issue-6/72-84.pdf>. (Accessed on 12 January, 2022).
- Umaru, I.A.; Aghadinuno, P.C.; & Namo, I.U. (2018). Provision of digital reference resources and services in three federal University libraries in North-Central Nigeria. *JATLIM.*, 2018, 4 (1) 51-67.
- Uutoni, W. (2018). Providing digital reference services: a Namibian case study. *Information and Learning Sciences*, 119 (5/6), 342-356.  
<https://doi.org/10.1108/ILS-11-2017-0122>. Sourced on 12/01/22.
- Yousuf, A. & Haider, K (2016) An Analysis of Digital Reference Services Tools and Usage in University Libraries of Karachi. *Pakistan Journal of Library and Information Science* 47(1):20-29.