

Extent of Provision and Utilization of Synchronous and Asynchronous Services for Digital Reference Delivery in Public University Libraries in South East, Nigeria

Onuh, Scholastica Ngozi (CLN)

*Department of Library and Information Science
Enugu State University of Science and Technology
scholasticaonuh@gmail.com*

Prof A. J. C. Mole

*Department of Library and Information Science
University of Nigeria, Nsukka
austin.mole@unn.edu.ng*

ABSTRACT

This paper examines the provision and utilization of synchronous and asynchronous services for effective digital reference delivery in public university libraries in South East, Nigeria. The paper also considers the extent to which reference librarians in public university libraries in South East, Nigeria, provide these services and also how this can make reference services be effective. This research also discusses the synchronous and asynchronous services provided by reference librarians in public university libraries in South East, Nigeria, such as chats, WhatsApp messages, phone calls, e-mail, video conferencing, WhatsApp calls, and so on. The paper also mentions some of the challenges facing the provision and utilization of these services such as poor internet services, lack of internet facilities, inadequate power supply, and so on. It discusses the strategies for enhancing the provision and utilization of synchronous and asynchronous services such as provision of internet services, provision of adequate power supply, provision of adequate fund, etc. The paper thus recommends that: Stake holders of public universities should map out ways to improve the teacher-related strategy, they should embark on human resource development through conferences, and so on. The government should embark on human resource development in use of Modern technology, through conferences, workshops and seminars for school administrators. The state government should device a means of rehabilitating dilapidated structures and maintaining library ICT equipment for enhancing better digital learning outcomes. Students should be taught to learn to construct their own learning, acquire the necessary gadget required for digital compliance and take responsibility for their performance in school.

Keywords: *Digital reference services, personalized information services, Public University, Synchronous reference Services, Asynchronous reference services*

Introduction

Reference services refer to the personal assistance provided to users in pursuit of information (Philip, as cited in Dika, 2016). Provision of such personalized information services has remained the central theme of the library and information profession. According to Noor (2012), reference services are the services provided by the reference department in the library that helps the library patrons to

get access to the information that they need. According to Isaac (2018) reference services is considered as the heart of the library services.

Such services could be through the following modes Twitter, WhatsApp, Facebook, Telegram, Instagram, Snapchat, YouTube, E-mail, Synchronous and Asynchronous, Current awareness services (CAS). The advent of information and communication technology (ICT) has made great impact in all spheres of library services, which has brought about effectiveness and

efficiency in delivery of library services (Dika et al, 2016).

Formerly, reference work depends on patrons approaching librarians. The reference librarian serves as mediator between the resources of the library and the users. The librarian renders reference services through advertising, assisting, instructing, guiding users in accessing recorded knowledge and offers direct and indirect services to them which brings the library users' physical contact with the librarians within the confines of a library (Philip, in Dika, 2016). However, whether e-mail reference, chat reference or an automated routing system, virtual reference is significantly influencing the delivery of high-quality library services. According to Ranganathan, in the present electronic and communication environment, reference service is not only confined to library service but also to remote users. At times, it is termed as e-reference service, digital reference service, virtual reference service, but its main objective is to provide pin-pointed, exhaustive, expeditious service to its information seekers whenever they have a query. (Chandwani, 2018)

Digital reference service may be defined as the provision of digital resources involving collaboration between library users and librarians, in a computer based medium (Chadwani, 2015). According to her, these services can utilize various media, including e-mail, chat, video, customer center, voice over internet protocol (VOIP) etc. (Anita, Chandwani 2015). Digital reference service is one of the services which library reference section conduct online so that reference transaction is made in a computer mediated communication. Digital reference resources and services can also be seen as information resources and services that the library provides for accessing the information available in the library.

Provision simply means the act of making something available for use. It is making sure that something is made available for those that needed it. Provision in the context of this study is the ability of the public university libraries to provide the required medium through which its users will be able to access and utilize the library's online information resources through digital reference medium. The library materials are therefore

made available for users to make sure that the resources are provided for them.

Utilization refers to the extent library users exploit and benefit from library resources in different formats to satisfy their information needs. Utilization as a concept in the context of this study is making use of the digital reference resources that is available in a library. In other to build an enquiry mind, utilization of digital reference resources becomes indispensable. The use of digital reference resources stimulates users to search online in order to retrieve the information materials they needed. This is because with the use of digital reference resources and services, they can access all the resources available in a library anytime, anywhere.

Provision and effective utilization of digital reference resources and services among post graduate students enhance their knowledge and overall academic performance. Thus, utilization of appropriate digital reference resources and services play an important role in the achievement of their educational goals. The effective utilization of digital reference resources and services by the library users in public university libraries help immensely in their research. Digital information resources play a very prominent role in facilitating access to needed information by the users in a very easy and expeditious manner.

Digital reference is a network of expert intermediaries and resource kept at the disposal of users seeking answers in an online environment (Dika, 2016). It can provide support for library users who are unfamiliar with online tools and also who find it difficult to learn or to get sufficient answer to their reference queries. Digital reference services are provided by reference librarians through the following means:

Facebook is the most popular of all the digital reference service tools. The Facebook page of a library can act as a portal to the library. Librarians in academic libraries use digital reference tools to market the library and information services with a library Facebook page (Dika, Sani, & Eze, 2016).

Twitter is a micro blogging application meant to keep staff and clientele updated on everyday activity such as frequently updated collections. Librarians in public universities can also utilize this very platform to type in

short messages or status update. Librarians in public university libraries can also use this platform to users firsthand information on the ongoing national elections and other information available.

WhatsApp is a free, multiplatform messaging application that lets you make video and voice calls, send text messages, and more, all with just an internet connection (<https://africa.businessinsider.com/news/what-is-whatsapp-a-guide-to-navigating-free-meta-owned-communication-platform/f44ddyx>) over 2 million active users, and is especially popular among friends and families who live in different parts of the world and want to stay in touch. With the use of WhatsApp, a librarian has an easy and quick means of sending message to the users without spending money. The only thing needed is internet connection to be on and steady. The library users on the other hand have quick access to library resources through the library via WhatsApp. The users can also send queries to the librarian on WhatsApp.

Telegram messenger, commonly known as Telegram, is cloud-based, cross-platform, social-platform, social media and instant messaging (IM) service. It is a globally accessible freemium, cross-platform, cloud-based, instant messaging service <https://en.m.wikipedia.org/wiki/Telegram->. Telegram is among the most popular messaging services in the whole world yet there are still many who do not know what it is all about. It is used for online privacy. The call functionality of telegram is the same as most other messaging application. You can message other telegram users, create group conversation, call contacts, make video calls, and send files and stickers. Telegram is private and to ensure its privacy, it employs end-to-end encryption. Librarians in public university libraries employ the use of telegram in rendering the work of reference and information services.

LinkedIn is the world's largest professional network on the internet. You can use LinkedIn to find the right job on internship, connect and strengthen professional relationship, and learn the skills you need to succeed in your career. A complete LinkedIn profile can help you connect with opportunities by showcasing your unique professional stories through experience, skills and education. You

can also use LinkedIn to organize offline events, join groups, write articles, post photos and videos, and lots of them (<https://www.linkedin.com/help/linkedin/answer/a548441>). Therefore, librarians in public university libraries as well use LinkedIn in the dissemination of reference and information services to library users. With the use of LinkedIn, librarians comfortably perform the work of sending and receiving needed reference and information services to library clientele such as giving information on new materials available, answering reference queries, etc.

Instagram is a free digital service platform for chatting and sharing photos and videos. It has become a popular way to connect with brands, celebrities, thought-leaders, friends, families and so on. Instagram application can be installed in google Play Store using an android phone or app store using an apple phone and the application can be used to edit profile, view feeds, like and comment on posts and send and receive direct messages. Librarians especially librarians working in public university libraries also disseminate reference and information services via Instagram. The users at the comfort of their homes access the various information resources through Instagram.

Snapchat is a mobile application for android and iPhone operating system (iOS) devices (Maggie, Tillman 2022). It is one of the reference services used by librarians in public university libraries for the dissemination of reference and information services. One of the principal concepts of the mobile application is that any picture, video or message you send by default is made available to the receiver for a short time before it becomes inaccessible. This temporal nature of the application was originally designed to encourage a more natural flow of interaction. Snapchat was initially focused on private person-to-person photo sharing, but now it can be used for a range of asks, including videos, live video chatting, messaging, creating caricature-like Bitmoji avatars, and sharing a chronological story that is broadcasted for all your followers.

YouTube is an American online video sharing and reference platform headquartered in San Bruno, California (https://en.m.wikipedia.org/wiki/history_of_yo

utube). It is a website designed for sharing videos. Millions of users around the world have created accounts on the site that allow them to upload information (<https://www.digitalunite.com/technology-guides/tv/video/youtube/what-youtube>). It is also one of the reference tools used in sharing information online. Librarians use YouTube for dissemination of reference and information resources to users. Information dissemination using YouTube is fast and easy.

With the help of the provision of the above reference services in public university libraries, librarians in public university libraries can now manipulate and manage them in information sharing. The dissemination of reference services will be very easy and accurate and the aim will also be achieved. It is the main duty of the university library to provide these reference tools to enable librarians to perform their professional duties. The university library provides a variety of reference and information services and these cannot be achieved effectively without the use of digital reference services such as synchronous and asynchronous services.

Synchronous communication refers to real-time interactions where parties are present together in a virtual space, enabling live conversations www.sciencedirect.com. (i.e., who has the right to talk or act). It is a prime determinant of how the interaction will proceed. Synchronous event or actions happen or are done at the same time. Synchronous learning also refers to instructors and students gathering at the same time and (virtual or physical) place and interacting in “real-time”. Synchronous online learning means that students are required to log in and participate in class at specific time each week. Synchronous online classes attend class virtually each week with instructors and classmates, participate in real-time discussions during class time, improve presentation skills. A reference librarian uses synchronous reference service to reach users easily and receive immediate reply. Synchronous communication is essential for the smooth team collaboration for decision-making.

Communication, immediate answers occur when team members talk or send messages to one another in real time, which

can be either in a physical setting or through digital channels. There are classic forms of immediate communication through synchronous services. They are: in-person meeting, Phone calls, Video conferencing, live events, Hiring interview, chats, instant messaging, live webinar, group-paced.

An in-person meeting refers to a gathering or interaction where participants physically assemble in the same location, such as a conference room, office or any physical venue. It allows attendees to interact face-to-face, engaging in direct conversations, observing body language, and making eye contact. This makes it easy for library users to have one on one contact with the reference librarian for effective information delivery. Phone call is an instance of messaging to someone on the phone or attempt to contact someone by phone. Phone call is also a connection over a telephone network between the called party and the calling party. Through phone calls, library users and the reference librarian can interact on a certain issue or need.

Video conferencing is a live, visual connecting between two or more remote parties over the internet that simulates a face-face meeting. Video conferencing is important because it joins people who would not normally be able to form a face-to face connection. Hiring interview is an interview that the interviewer asks question and listens actively to the interviewee. The goal of hiring interview is to learn about the candidate’s qualification and determine whether they are a good fit for the role. Chat is to have a conversation with another person or other people on the internet, when you write down what you want to say, and can say immediately what the other person or other people are writing. Asynchronous is the opposite of Synchronous. Asynchronous communication involves interactions that are not simultaneous, allowing participants to enter a persistent world to exchange information at different times.

Asynchronous learning allows you to learn on your own schedule, within a certain life frame www.vocabulary.com>dictionary. You can access and complete lectures, readings, homework and other learning materials at any time during a one or two-

week period. Asynchronous online classes mean that you don't always need to be online at the same time as your instructor or class mate. Online Asynchronous classes might include short videos teaching key concepts that you can watch over and over again, if necessary. A reference librarian uses asynchronous reference service to reach the users at any time. This will help in enhancing effective service delivery.

Asynchronous communication allows individuals to message and queries at their own convenience. This involves adoption of a variety of tools and platforms that support such adaptable communication and collaboration, for example: Emails, Digital boards, Company newsletters, Videos and voice notes, Recorded training, Collaborative documents and self-paced and so on.

Email is a communication method that uses electronic devices to deliver messages across computer networks. Email refers to both the delivering system and individual messages that are sent and received.

Digital boards are symphony of features, seamlessly integrating intuitive touch surfaces, versatile connectivity, and robot recording and sharing capabilities. Together, these elements elevate interaction to new height, combining innovation with practicality in perfect harmony (<https://promark.co.in/what-is-digital-board-its-features-applications-and-future>)

Company newsletter is an electronic or printed communications piece that is used by an organization for its internal or external communication. The company newsletter shares details of the activities, the latest news and update about the company (<https://swiftdigital.com.au/blog/best-company-newsletter/>)

Videos and Voice notes: Video is a recording of an image or of moving images. It is a way of transferring visual information from one point to another, which can originate from various sources like VCRs, DVD players, or the internet. While video notes on WhatsApp allow somebody to instantly record and share up to 60 second video notes directly in the chat.

Collaborative document is a file that multiple people edit or contribute to, with the goal of creating single final version through collaboration. Collaborative documents may be

word processing or text documents. Spreadsheets, presentations, images, PDFs, videos, or maps.

Blogs provide a good avenue for librarians to occasionally post messages; disseminate information on a particular subject Or issue, and give room for users to make their contributions to content. The librarians can write articles, news and so on typical issues and expect an immediate reaction from their clientele. Wikis is a free online encyclopedia that offers a background knowledge and definition of concepts that offers a platform for library users to access, edit and make contributions to contents. Wikis is a collaborative web page for developing web content and are known as open web pages that allow every approved user to add and change a page's content (Chebe 2012). There are so many challenges facing the provision and utilization of digital reference services for effective reference delivery in public university libraries in South East, Nigeria.

Challenges associated with the provision and utilization of synchronous and asynchronous services for effective reference delivery

Challenges are obstacles and also they are impediments which when overcome leads to opportunities. There are definitely some challenges inhibiting the provision of synchronous and asynchronous services for effective reference delivery. These include: Lack of current digital reference resources, lack of skills among librarians in handling ICT facilities, power failure, lack of fund, poor internet facilities etc. (Isaac, 2018).

Most public universities in south east are in deplorable conditions, this conditions manifest in these public university libraries having a few current resources such as e-books, e-journals, and other reading resources (Fabunmi in Isaac, 2018). Without the provision of synchronous and asynchronous services, users will not find it easy to access the resources. This is because you cannot use what you cannot see. If the resources are obsolete, they cannot use them for their research work because every researcher would want most current resources.

Also, Asogwa, et al (2014) suggest that although a majority of Nigerian university libraries have websites and associated resources, users cannot maximize the use of electronic resources in these libraries because of intermittent power supply, weak and sluggish internet services, shortage of information technology personnel, poor funding of academic libraries, and constant changes in computer hardware and software, among other factors.

It is obvious that most librarians need more than basic ICT skills to be able to cope with the challenges of globalization in library (Isaac, 2018). He also asserted that this placed greater demand on their ability and the need to rise to this challenge. This brings to the fore the issue of subject background as pre-requisite for a career in librarianship. Librarians need to be well grounded in some disciplines other than librarianship. Indeed, many librarians working in public university libraries in South East Nigeria lack ICT skills which will help them handle the facilities. Many of them are not perfectly trained on how to handle the facilities maybe because of lack of fund.

Another factor is power failure because of inconsistency light supply. Users might be prepared to use the internet but there will be no light and this will hinder them from using it Isaac, (2018). Regular power generation remains a problem in Nigeria. Frequent power outages constitute a serious bottleneck to automation. The cost of running generative plants is prohibitive. Therefore, without the availability of light, users will not be able to use the internet.

Lack of fund is another challenge inhibiting the effective provision of digital reference resources and services. Poor funding is a major challenge to public university libraries in south east, Nigeria. Public university libraries in South East derive their funds from the government (Isaac 2018). The federal and state budget provision is very poor. The government do not provide adequate fund for the provision of the needed ICT facilities for libraries. Enough funds are supposed to be allotted for library to provide these facilities so that it will be easy for librarians to provide the digital reference resources and services.

Poor internet facilities are another factor that faces provision of digital reference resources and services in public university libraries in South East, Nigeria. Adequate internet facilities are lacking in these public university libraries.

Students definitely face some challenges in their quests for relevant library information resources and services for study and research. Therefore, there are also challenges that hinder the utilization of digital reference resources in public university libraries in South East, Nigeria. They include: lack of the knowledge of the use of digital reference, provision of good internet facilities, adequate/ regular power supply through the provision of generator, lack of skills on how to use the ICT facilities among students, creation of awareness about the digital library, power user interface of the system, inappropriate search engine, outdated relevant resources, inadequate relevant librarians, unavailability of a functional interactive chat box stream librarians, poor attitude towards digital reference services, lack of professional skills etc. (Tofi, 2020). Most students do not have the knowledge of the existence of digital reference resources and services in the library.

Strategies for enhancing the provision and utilization of synchronous and asynchronous services for effective service delivery

The strategies for enhancing effective provision and utilization of synchronous and asynchronous reference services in public university libraries in South East, Nigeria include: regular power supply, provision of good internet facilities, adequate/regular power supply through the use of standby generator, creation of awareness about digital library, assisting users in the use of information system, provision of information retrieval skills through user education programs, provision of appropriate search engine, provision of current and relevant resources, ensuring adequate training for reference librarians to update their skills through in-service training, (Agada, 2020)

If light can be provided constantly, there will be easy access to synchronous and asynchronous services because the available

ICT facilities will be there for user's consumption. With regular power supply, even those that have android phone or laptop can charge them for use. Regular power supply will instigate the librarians to make sure that all the possible digital resources will be ready for users.

Creation of awareness about digital library for users is also necessary for them to know that there are synchronous and asynchronous services available in the library and also to acquire the skills of using them (Agada, 2020). Also current library education program should be introduced to empower students with the benefit of using these services in all formats and to expertise in the use of digital reference services. There is also need for library use instruction in the use of synchronous and asynchronous services as a step to help the students meet some of the digital reference needs.

Provision of good internet facilities: Good internet facilities are very important as it will encourage users to navigate through the internet. Internet facilities such as Wi-Fi Hotspots, Dial-up, Broadband, DSL which stands for Digital Subscriber Line, Cable Satellite etc. should be made available in the digital library for easy access to the resources and services (Tofi, 2020).

Another factor is assisting users in the use of information resources and services. Reference librarians should try their best to see that users are assisted in the use of digital reference resources and services. Most of these users do not know how to use internet facilities and are always confused when they want to use it. It is the duty of the librarians to see that they are carried along.

Conclusions

The conclusions made on the provision and utilization of synchronous and asynchronous services for effective services delivery by librarians in public university libraries in South East, Nigeria is that there are provision and utilization of synchronous and asynchronous services, and a low extent of utilization of synchronous and asynchronous digital services, several challenges are

associated with provision and utilization of synchronous and asynchronous services and numerous strategies were offered for enhancing the provision and utilization of these services for effective service delivery in public university libraries in South East, Nigeria.

Recommendations

The following recommendations were made based on the findings of the study.

- Stake holders of public university should map out ways to improve the teacher-related strategy they should embark on human resource development through conferences, workshops and seminars, and trainings.
- The government should embark on human resource development in use of Modern technology, through conferences, workshops and seminars for school administrators
- The state government should device a means of rehabilitating dilapidated structures and maintaining library ICT equipment to enhance better digital learning outcomes.
- Students should be taught to learn to construct their own learning, acquire the necessary gadget required for digital compliance and take responsibility for their performance in school.

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