



information resources has changed information processing and administration in academic settings in Nigeria (Toyo, 2017). An electronic database contains a set of data that is well-organized. Internet academic databases are often electronic repositories for full-text journal article copies or bibliographic information, together with perhaps other materials like books, reviews, reports, and conference proceedings. Online databases are searchable via the World Wide Web and can be general or niche. EBSCOHOST, PROQUEST, EBRARY, SCIENCE DIRECT, JSTOR, as well as HINARI AGORA, OARE, EBSCOHOST, and PROQUEST, are notable online databases used in Nigeria. Some electronic databases, however, are closed access, requiring a subscription fee from the library that subscribes in order for their user community to have access to and use the academic databases. However, a search engine can also return a tonne of useful information from the internet. (Adeleke, Toyo, 2015; 2015) Ishola, et al (2016) previously reported from their study that private university libraries in Nigeria's success with service delivery and accreditation exercises strongly depends on their subscription to and use of electronic databases.

Anunobi (2020) claimed that the COVID-19 lockdown gave librarians and information professionals the chance to reevaluate their abilities and offerings, but she discovered from her investigation of the websites of the major university libraries in Nigeria that while there were e-resources present, the majority of virtual activities were not interactive. While COVID-19 guidelines will control library services for many months to come, Adeleke (2020) expressed concern that once libraries reopen in the midst of the pandemic, "normal" may no longer be "normal" for library practise and services. There will be fewer in-person visitors to the library and more online users than in-person ones, straining the bandwidth and leaving vacant carrels. Without a doubt, as libraries reopen in the mist of the pandemic, LIS professionals are left with little alternative but to urge patrons to utilise online resources and make their e-resources more remotely accessible. Reopening libraries is not a "low-risk" decision, as Poon (2020) accurately stated, citing John Hopkins University (2020). Consequently, reopening the library amid the pandemic means, library managers have put in place all necessary measures to make the library learning environment safe, by moving library services online, minimizing human contact with their library physical environment. It is against this backdrop that we case study library services amid the COVID-19 Pandemic: a study of remotely exploitable electronic academic databases in two Nigerian foremost university libraries.

## II. OBJECTIVES OF THE STUDY

1. Determine the library Electronic databases remotely exploitable to users.
2. Find out the reasons why remotely exploitable Electronic databases are so formatted.
3. Find out the electronic databases subscribed to at the university libraries under study.

4. Find out Electronic databases on IP regulation and reasons why IP regulated Electronic databases are so formatted.
5. Determine the challenges to the utilization of remotely exploitable Electronic databases.
6. Determine the challenges to the utilization of IP regulated Electronic databases.

## III. LITERATURE REVIEW

### *A. Library Services and the COVID-19 Pandemic*

Academic libraries offered unique library services to users during the pandemic using a number of technologies, including electronic mail and artificial intelligence ( Dube, and Jacob, 2022). In a similar spirit, Ishola-Isiwele (2021) stated that libraries must capitalise on the COVID-19's successes by re-jegging their services to guide the new typical library environment and by maintaining and cultivating a strong culture of online library services. According to Obeidat, O. A. (2022), the availability of digital content and online database access was the most well-liked aspect of library services throughout the epidemic. To Omeluzor, Nwaomah, and Sambo (2021) libraries' participation in the dissemination and provision of information to customers during the COVID-19 outbreak in Nigeria had enhanced their standing among other information providers.

According to Momoh and Folorunsho (2022), the COVID-19 epidemic compelled librarians to acquire new skills that boosted their productivity in the years after the outbreak. Oche (2021) claims that libraries in Nigeria kept in touch with their users through electronic distribution methods, social media, websites, portals, etc. The COVID-19 outbreak, according to Ashiq, Jabeen, and Mahmood. (2022), has altered the environment of libraries and information, but not completely. The COVID-19 has increased awareness of and use of electronic and digital library services, according to Zareef, and Ahmand, (2021), prompting library administration to adopt a new paradigm to meet this new trend. Ishola, Adeyemo, and Babatunde's (2022) opined that although the libraries have put in place measures to ensure the safety of users when they return to the library as the COVID-19 pandemic flattens, there is still a palpable anxiety among academic librarians in Nigeria about their safety.

Zooming in, Aboyade (2020) avers that the Nigerian university and college libraries' resources and services were being underutilised during the COVID-19 pandemic. She mentioned that limited access to information was one of the issues working against using an academic library. Speaking about library services during the COVID-19 pandemic, Abdulrahim (2020) stated that librarians' responsibilities during the pandemic include promoting public health awareness and preventive measures, giving researchers, clinicians, and faculty access to the most recent research and evidence, and offering users basic library services in the

event of a lockdown. She emphasized that the City Library in Abuja - a public library serving the Federal Capital Territory - provides its users with a wealth of reading resources accessible online or via mobile devices, and that the library staff was in touch with members to provide more information on how to access these resources remotely. Similar to this, Alli (2020), in her reflection on the COVID-19 Epidemic and the roles of library and information workers, emphasized the need for librarians giving their clients connections to helpful online resources. Although Osuikwe (2020) noted that our society is changing, the COVID-19 pandemic presents a fresh challenge for education, information sharing, and knowledge development. She emphasized that how we respond to these new difficulties will determine whether libraries become a part of the “new normal” or whether they are quickly forgotten.

According to Yusuf and Gatiti (2020), librarians’ responsibilities during a pandemic include assisting teachers and researchers by sharing information on the most recent findings in literature and research as well as attending to the requirements of library users. According to Jaeger and Blaabk (2020), library electronic information sources provided users with access to sources during the COVID-19 pandemic-related lockdown. Though Toyo (2017) and Agyekum and Ossom (2015) had earlier reported from their studies that the utilization of electronic databases in Nigerian library environment is hindered by access barriers.

The pandemic called for modification of online services, noting of the services that can no longer fly, and observing COVID-19 protocol in the entire library environment to ensure staff and user safety. Anunobi (2020) provided answers to what services libraries can inject to consolidate relevance amid the pandemic. According to IFLA (2020), the main concerns among library and information science professionals as their libraries provide services during the pandemic are the risks of infection from touching surfaces that contain coronavirus and from coming into contact with potential infected library users. They recommended, among other things, following the general advice on keeping hands clean and avoiding touching faces.

According to Laden, Haruna, and Madu (2020), academic libraries’ involvement in the COVID-19 Pandemic includes giving their user community access to web-based services and sources such electronic books and journals. When learning institutions resume in the midst of the COVID-19 pandemic, Ifijeh and Yusuf (2020) urge library and information science professionals to be creative in the provision of library services. In view of the upcoming changes in teaching methodology brought on by the Covid-19 epidemic, they emphasized that responsive library website design, adoption of the blended librarianship model, and usage of social networks are ideal practises to pursue to secure a place for libraries in Nigeria. Hinchliffe (2020) claimed that because libraries have been developing their information communication technology infrastructure over the years and have been operating hybrid libraries, which

combine digital and traditional physical library services, they are in a useful and advantageous position to respond to the COVID-19 Pandemic. He added that he is impressed that, despite the complete closure of the majority of physical libraries, librarians are still able to provide essential services.

### III. METHODOLOGY

The study adopted the qualitative research design of the case study type to investigate library services amidst the COVID-19 pandemic, in the case of remotely exploitable databases in two selected university libraries in Nigeria. Nworgu’s (2015) define case study research design as an extensive study directed towards a comprehensive understanding of a given social unit - which might be an individual, group of individuals, community, or institution - supports the decision to use this methodology. The two foremost university libraries (Kenneth Dike Library, University of Ibadan and Hezekiah Oluwasanmi library, Obafemi Awolowo University) were selected based on being premier university libraries, hosted in a website, and accommodates E-resources that are remotely accessible.

The study adopted the interview method to elicit data from two key informants (E-resource librarians) in both university libraries. An interview schedule was drafted based on the objectives of the study. The schedule contained seventeen main and probing questions which require objective and subjective responses. The interview responses were analyzed using thematic analysis. In so doing, the researchers familiarized with the data retrieved, generate initial codes from the responses based on the various objectives of the study, set code into themes or broader concepts that relate to the study. Thereafter the researchers’ patterns within these themes and place them in the perspective of the study and presented the interview results in table and prose, according to the study’s objectives.

### IV. PRESENTATION OF RESULTS

#### *A. Background Information*

The resources of Kenneth Dike library, University of Ibadan are hosted in the university’s main website, while Hezekiah Oluwasanmi library, Obafemi Awolowo University has a standalone library aside from the university’s main website, where its resources are housed. However, both websites are interactive with both free and proprietary electronic resources.

*Objective 1:* Determine the library Electronic databases remotely exploitable to users.

*Result:* All Electronic databases of both libraries are exploitable to users through the library’s website. Some are subscription-based while the others are free/open-access databases. Table I below gives a succinct list of specific Electronic databases remotely accessible to users in both libraries.

TABLE I ELECTRONIC DATABASES REMOTELY EXPLOITABLE TO USERS

Sl. No.	Kenneth' Dike Library	Hezekiah Oluwasanmi Library
1	Directory of Open Access Journals (DOAJ)	The New England Journal of Medicine
2	The Essential Electronic Agricultural Library (TEEAL)	ALUKA
3	JSTOR	Royal Society Journals Online
4	Nature Journals	
5	Directory of Open Access Books (DOAB)	Directory of Open Access Journals
6	BIOMED Central	PLOS
7	INTECH	EIFL.net free e-resources
8	ERIC	Directory of Open Access Books
9	POPLINE Bookboon	Hathi Trust
10	Emerald	Biomed Central
11	Springer	Highwire Press
12	Web of science	UWE Library Services (Free Law Journals)
13	Research4life (AGORA, HINARI, ARDI, OARE)	SciELO
14	JSTOR	Zlibrary
15	BIOONE	EIFL.net free e-resources
16	BIOMED Central	Pubmed Central
17	African Journals Online	UWE Library Services
18	Nature journals	Springer science

*Objective 2:* Find out the reasons why remotely exploitable Electronic databases are so formatted.

*Result:* The Electronic databases of the university libraries studied are so formatted to provide remote access to the information resources.

*Objective 3:* Find out Electronic databases the libraries subscribe to

*Result:* University libraries under study subscribes to Emerald and Science Direct, Springer, ebrary, EBSCOHOST, Jstor, ALUKA, PROQUEST, WEB OF SCIENCE and Research4life. However, they are all IP regulated, except research4life of KDL.

*Objective 4:* Find out Electronic databases on IP regulation and reasons why IP regulated resources are so formatted.

*Result:* Some of the Electronic databases of the university libraries are IP regulated and are not accessible outside the university premises. They include Springer, Jstor, PROQUEST, Emerald, Ebrary, Web of science, Nature books, PROQUEST and TEEAL.

The E-resources are IP regulated in order to restrict its usage within the university premises, policy of the database owners or their intermediaries, library policies and avoiding misuse. Also, for security resources such that only those authorized by the subscribing institution can have access to the resources.

*Objective 5:* Determine the challenges to the utilization of remotely exploitable Electronic databases.

*Result:* Users encounter challenges in the use of remotely exploitable Electronic databases which could hinder effective utilization and possible chances of meeting their information needs. Such challenges as revealed from the interview include slow Internet connectivity, lack of finance for data subscription, and poor electricity supply to power electronic gadgets used in accessing such resources.

*Objective 6:* Determine the challenges to the utilization of IP regulated Electronic databases.

*Result:* The main challenge to the utilization of IP regulated is limited access which deprives users of access to required information and deters the university libraries from achieving their objectives.

## V. DISCUSSION OF FINDINGS

According to Jaeger and Blaabk (2020), who believed that electronic information sources from libraries made sources available to users during the lockdown caused by the COVID-19 pandemic, the finding on the library electronic databases remotely exploitable to users is consistent with their findings. and Abdulrahim (2020), who emphasized that the City Library, Abuja - a public library serving the Federal Capital Territory - provided its users with a wealth of reading resources that were accessible online or through mobile devices.

Additionally, the study found that the university libraries' electronic databases are set up to allow for remote access to the information resources. These results concur with those of Jäger and Blaabk (2020), whose earlier research showed that libraries' electronic information resources provided users with access to sources during the COVID-19 pandemic's resulting lockdown.

A functional E-library and subscriptions to important databases like JSTOR, Aluka and Science Direct, springer, ebrary, science direct, and research4life were found in both libraries, according to the study. Except for research4life, they are all subject to IP regulations. These results agree with those of Jaeger and Blaabk (2020), whose study recognised the availability of library electronic information sources during the COVID-19 pandemic-related lockdown, and Ishola, *et al.*, (2016), who believed that university libraries in Nigeria's success in service delivery and accreditation exercises depends heavily on their use of an electronic database and subscription. The results of objective 4, which is to identify electronic databases on IP regulation and the rationale behind why such resources are formatted in a that way. The results are in line with earlier findings from (2015, Adeleke and Toyo, 2017), which emphasized that some electronic databases were closed-access and required a subscription fee from the library in order for their user community to access and use them.

The use of electronic databases is restricted by IP regulations that protect intellectual property, library policies, database owners' or their intermediaries' policies, and misuse prevention. Additionally, for security purposes, so that only those who have been authorised by the subscribing institution can access the resources. This result also accords with earlier findings from Toyo (2017) who reported from her studies that the utilization of electronic databases was hindered by access barriers. In the same vein, the study revealed challenges with using electronic databases that are IP regulated and remotely accessible. If libraries want to build a strong culture of online library service and build on the COVID-19's successes, as suggested by Ishola-Isiwele, (2021), then these challenges will need to be adequately addressed.

## VI. RECOMMENDATIONS

1. Library managers should adopt best practices in providing users with remote access to their E-resources.
2. Library managers should reappraise their memorandum of understanding with E-databases aggregator, allowing all their E-resources to be remotely accessible to library users, thereby limiting users' contact with their physical library environment amid the COVID-19 Pandemic.
3. As the libraries reopen amid the COVID19 pandemic Libraries should give more attention to digital library services and remodeling library operations.
4. Universities and its proprietor should provide more funding for libraries.

5. Academic library managers should ensure that both staff and library patrons observe COVID19 protocol when in their library environment.
6. As the libraries reopen amid the pandemic, librarians should consider the use of artificial intelligence to reduce users' physical contact with library materials and objects.

## VII. CONCLUSION

Based on the findings of the study, it can be concluded that both libraries have a functional E-library and subscribed to key databases. However, the subscribed electronic databases are IP regulated, except research4life of KDL. The study also revealed that both libraries' websites are connected to open source databases which are remotely accessible to library users. The more the library patrons access the library e-resources the better the knowledge acquired by users for their personal and academic development, invariably helping the parent institution fulfil its objectives. The study reinforces the need to embrace the change in the global architecture of library services in the wake of the COVID - 19 pandemic and make all their E-resources remotely accessible to users.

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