



## **Essentials of Electronic Information Resources for Information Service Delivery in Academic Libraries in the Contemporary Society**

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### **Abstract**

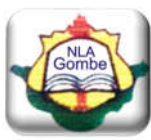
*The advent of Information and Communication Technologies (ICTs) had brought unprecedented growth within the academic community especially with explosion of electronic information resources (EIRs) which has made a clear impact in almost every area of academic task and information service delivery. As such, the academic libraries have undergone a rapid change leading to new ways of information acquisition, generation and dissemination. It's based on this, the paper highlights on the concepts of electronic information resources, organization of electronic information resources in academic libraries. The paper also discussed the benefits of electronic information resources in information service delivery in academics and challenges facing the access and use electronic resources in information service delivery. The paper concluded that, various types of EIRs, benefits and challenges were identified and discussed which available academic libraries are for accessed and used the resources in their learning and research activities. The paper advocated for prompt strategic means to improve access and use of the resources through information literacy skills users training in this era. The paper recommended that, more funds should be allocated to service infrastructure to enhance and upgrade technical architecture for easy access to EIRs.*

**Keywords:** Electronic Resources, Academic Libraries, Information Service Delivery, Information Society.

### **Introduction**

Library is an indispensable organization in every tertiary institution. Libraries are essential to learning, research, generation and preservation of knowledge as well as dissemination of information. Academic libraries are facilities attached to tertiary institutions such as universities, polytechnic institutions, colleges of education, colleges of agriculture, colleges of technology and also research institutes (Abbas, 2014). Anunobi, and Okoye, (2018) emphasizes that preservation and access to knowledge and information is the main mandate of academic libraries alongside supporting the mission of their parent institutions which is teaching, learning and research.

Academic libraries are at the forefront of providing information services to their respective communities which comprises of students, lecturers, and researchers in order to support their teaching, learning and research needs. Library resources and services enhances sufficient in quality, depth, diversity, and currency to support the institution's curriculum. As such academic library is often considered the most important resource center of the parent institution. Academic libraries provide access to the various resources: print, non-print and digital resources, as access to information is imperative to successful conduct of research,



administrative, quality control and teaching in the academic system. With the emerging of information technologies, information service delivery continued to change from the traditional library service delivery to contemporary information service using automated, electronic, virtual and digital information system (Saeed and Sheikh, 2011). It has also transformed most traditional library services into hybrid libraries storing most of their resources in both print and electronic formats. It has radically impacted the field of Library and Information Science to such an extent that access to information is now at fingertips.

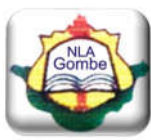
Mutshewa (2014) asserts that traditional libraries stored different types of information resources in different formats in their buildings. Various tools and guides to locate these resources were available only when a patron physically visited the library. The advent of electronic information resources has played and still playing a vital role in complementing and supplementing the paper-based information resources in academic libraries. An electronic library is basically a library that consists of materials and services in electronic format rather than the print format. International Federation of Library Associations and Institutions (IFLA), define electronic information resources as those materials that require computer access, Digital video Disc (DVD), Online Public Access Catalogues (OPAC), electronic books, electronic journals and electronic index (Hallam, 2016). They are accessed remotely via the Internet facility.

Some of the most frequently encountered types are: e-journals, e-books, full-text (aggregated) databases, indexing and abstracting databases, reference databases (biographies, dictionaries, directories, encyclopedias, etc.), Numeric and statistical databases, E-images, E-audio/visual resources (IFLA, 2012). Edem and Egbe (2016) emphasized that electronic information resources offer academics more especially students, lecturers a chance to access relevant and current information from different subject areas. They are available at any point of time of the day, provide hyperlinks to other resources (inter-library lending), (Tekale, 2016).

Chandra, et.al., (2014) studied Use Pattern of E-Resources among Faculty Members in Arts and Science Colleges. The findings indicated that most of the respondents were aware of e-resources available in their college library. They have accessed e-resources for their study and research purpose. Majority of the respondents opine that e-resources are useful. Padma (2014), stated that electronic information resource is resource which requires computer access or any electronic product that delivers a collection of data, be it text referring to full text bases, electronic journals, image collections and other multimedia products. Electronic information resources are used for academic and research activities in higher educational institutions Iwehabura, (2009).

### **Concept of Electronic Information Resources (EIRs)**

Generation and acquisition of information resources are vital to virtually every aspect of human endeavor. Libraries and information centers exist specially to provide information services to its host communities. These information resources and services are records which libraries keep for the benefits of its patrons. Now adays electronic information resources are seen as online information resources that include bibliographic databases, electronic reference books, search engines for full text collections, digital collections of data and data sets. Electronic resource is very broad term which means all electronic products that delivers collection of data like text, numerical, graphical, or time based, as commercially available resource and the types of documents in electronic form which are made available to the library and information users by a computer-based information access system. Therefore, the digital resources such as online journals, online books, online databases, e-articles, e-reference sources, e-newspapers', and offline ddbases are taken up for the studies (Vikky, and Shyamu, 2022).



According to Jotwani (2014) electronic resources are documents in electronic form that can be accessed via electronic transmission and include which e-books, e-journals, e-newspapers, magazines, archives, theses, conference papers, examination papers, government papers, research reports, scripts and monograph. These resources have become critical part of the learning environment, particularly in the higher education, and bring tremendous benefits to organizations and individuals to perform their work more effectively and efficiently.

The effectiveness and efficiency of the library depends largely on the satisfaction derived from the services rendered, libraries can only satisfy their clients' need when they find what they want effortlessly. Abdulmumin (2010) opined that the advent of information and communication technology has accelerated availability and usage of electronic resources in the modern time. This global development has posed challenges to libraries and information institutions in their attempt to meet information needs of user in the digital era.

### **Organization of Electronic Information Resources in Academic Libraries**

In a modern digital library information system, the professional should have skills like computing, database management, networking, and other management skills relating to IT environment. Therefore, the system manager should keep in mind the following points while organizing the e-resources:

- to include those resources either in OPAC or to make different list for browsing;
- to organized accessing under a separate authority;
- to provide access either by alphabetical or under specific subject headings;
- to organize the e-resources within the context of other resources and websites;
- to check the method of access to e-resources, abstracting or full.

Since most of the user's search the resources under subject heading predominantly, organization of resources should be in such a way that the users could be able to retrieve different sets of information or records. The provision of adequate and efficient electronic resources in our academic institution's libraries enhance rapid national development, researchers, lecturers, and students can adequately have access to global literature, communicate with world current happening within a particular area.

### **Benefits of Electronic Information Resources in Information Service Delivery in Academics**

The integration of electronic information resources in academic libraries is beneficial as they are remotely accessible and available around the clock. Electronic information resources (EIRs) are significant to researchers, scholars and writers in this contemporary period. The roles they play in enhancing and supporting research cannot be over emphasized. They have, in addition, become indispensable in the present-day teaching, research and learning processes, particularly in higher institutions of learning. The adoption of e-resources has made great advantage over the library services. In fact, most of the users are satisfied with such facilities since they can easily retrieve their required information within a short period of time.

The electronic resources enable academic libraries to benefit from shared storage and easier integration to teaching, learning, research as well as Virtual Learning Environments (VLEs). Naik, (2009) states that "the potentiality of the e-resources is huge, do not occupy physical space, elimination of time, space, cost limit, easy archiving of the content and organized subjectively and available 24 hours a day, 7 days a week, among others". Another benefit of electronic information resources promote efficiency in dissemination of information for various purposes in undertaking any kind of academic task. Ellis and Oldman (2005) opined



that EIRs are more of a tool to assist in conduction research, report and any other relevant task that need information via internet; and a way of scanning a lot of materials quickly easily. This act of providing access to electronics resources by the academic libraries to fast track the delivery of information via electronic media in referred to as electronics information services (Thaunskodi, 2012).

Adeloye (2002) argued that the use of electronic resources helps to provide access to information for problem solving and decision making among students, library staff, and academicians information need very fast and easy. Dadzie (2007) maintained that electronic resources are invaluable research tools that complement the print – based information resources in a traditional library setting. Their advantages according Dadzi (2007) include: access to information that might be restricted to the user due to geographical location or finances, access to more current information, and provision of extensive links to additional resources. Hence, electronically stored information accessed through electronic resources, could facilitate knowledge sharing among student and academic, promote information dissemination and contribute positively to the teaching and learning process in the academic cycle.

### **Challenges of the Access and Use Electronic Resources for Information Service Delivery**

Numerous studies have been conducted on the challenges of access and use of electronic information resources particularly in higher institutions globally. However, academic libraries face numerous of challenges as they seek to continue offering the high level of services that users have come to expect. However, it is vital to recognize that regardless of the provision of EIRs and their immense contributions to higher education, their effective utilization is being hampered by varying factors, especially in developing nations which include; poor funding for higher institutions, exorbitant cost of Information and Communication Technology (ICT) infrastructure, poor internet connectivity, unfavorable foreign exchange and many others (Fatoki, 2014; Adeoti-Adekeye 2017).

Ogunsola (2004) on the other hand, reported that inadequate manpower, unreliable electricity supply as the major challenges Nigerian libraries faced in utilizing electronic information resources. Iyabosa and Adomi (2018), examined the awareness and use of EIRs by pre-clinical medical students in universities in South-South Nigeria through a descriptive survey method, the study revealed among others; slow Internet connectivity, epileptic and erratic power supply as well as exorbitant cost of access to the Internet as the foremost impediments affecting the use of EIRs in the studied institutions. Also, in another similar study, Sambo, Ntogo and Eda (2022), investigated the challenges faced by undergraduate students in the use of EIRs in universities in Southwest Nigeria through a quantitative approach with survey method. The study found that cost of access, poor power supply, absence of proper maintenance as well as poor funding as the major problems confronting the use of EIRs in universities.

Abubakar and Yar'adua (2021) on the other hand, explored the use of electronic information resources (EIRs) in academic libraries in Katsina State, Nigeria through a quantitative approach. The research found that scarcity of computers, slow Internet services, erratic power supply as well as insufficiency of searching skills as the major challenges affecting EIRs use in the academic libraries studied.

According to Okiki and Ashiru (2011) the major problems encountered by users in gaining access to and use electronic information resources is slow internet connectivity, frequent incessant power outage and too few computers with internet facilities. The factors that impede effective utilization of electronic resources were large mass of irrelevant information, the need to filter the results from search, download delay, failure to find information and inadequate or



lack of search skills. Another challenge lies in the nature and characteristics of some of the new resources. While, Nwakanma, (2018), stressed that there is a need for additional training to augment the traditional skills knowledge base with a competency in electronic information resources use.

Adebayo (2013) examined the challenges associated with cataloguing electronic resources in university libraries in Southwest Nigeria and highlighted some challenges associated with cataloguing electronic resources such as lack of adequate physical description of some electronic resources, inadequate workflow in cataloguing sections, copyright issues among others. Poor network connectivity is the major problem faced by the users as it has direct influence on the entire work flow in terms of productivity. Measures should be taken to enhance the network connection for more qualitative results.

Based on the foregoing, it is clear that there are many impediments affecting the use of EIRs that comprises inadequate searching skills, scarcity of ICT infrastructure and inadequate awareness as the major reasons for their lack of usage. It is important to note that the use of EIRs is solely contingent on a number of factors that include acquisition of proper and comprehensive searching skills as well as having up to date training and familiarity with them. In addition to all these, information literacy skills of users are developed through various ways, especially in the academic setting, and therefore, strong synergy between academic staff and library could bountifully improve and enhanced usage of EIRs by the students (Urquhart, 2018).

### **Conclusion**

In conclusion note, it's clear that electronic information resources (EIRs) are vital and can't be overemphasis hence most of the academic libraries have now shift the provision and dissemination of e-resources for effective academic activities more especially in tertiary institution. The overall conclusion various types of EIRs, benefits and challenges were identified and discussed which are available academic libraries for accessed and used the resources in their learning and research activities. AS e-resources vital information carriers' useful resources that facilitate teaching, learning, research as well as scholarly activities in which academic libraries are turning for effective service delivery.

The paper additionally concludes that, some studies within the review reveals that slow internet connectivity, insufficiency of constant power supply, scarcity of computer terminals, lack of ICTs skills are some of the major factors working against smooth access and use of EIRs. While, the virtual environment of the internet and new information technologies, had impacts to educational resources are being produced, distributed and accessed in digital form mainly for academic consumption.

### **Way forward**

For effective and good management of electronic information resources in academic libraries the following were made as the way forward:-

- Academic libraries should provide information service system, infrastructure such as software, hardware, internet facilities and other physical equipment which will deliver easier, faster and comprehensive access to information.
- Academic libraries in the digital age need to enhance and upgrade current technical architecture for electronic information resources to be accessed promptly.
- There is need for more efforts to improve the extent of access and use of EIRs in the academic institution.



- Organizing appropriate user education more especially information literacy skills for better access and use of the available EIRs by users.

## References

- Abbas, K. D. (2014). Automation in Nigerian University Libraries: Mirage or Reality? *Information and Knowledge Management*, 4 (4). Retrieved February 12, 2015 from [www.iiste.org](http://www.iiste.org)
- Abubakar, B. M. & Yar'adua, K. I. (2021). The use of electronic information resources in academic libraries in Katsina State, Nigeria. *University of Ibadan Journal of Library and Information Science*, 4 (1), 27- 44
- Abubakar, B. M. & Mamman, H. A. (2020). Utilization of electronic information resources by students of tertiary institutions in Taraba State, Nigeria. *Journal of ICT Development, Applications and Research*, 2, 36 – 47.
- Abdulmumini, A. (2010). Exploring the role of digital academic libraries. *Library Rev.* 56 (9), 821- 827.
- Ahmed, H. (2007). Strategies for accelerated rural and community development at local government level. *The Nigerian Journal of Administrative Studies*, 5 (3), 64 -77.
- Anunobi, C. V., & Okoye, I. B. (2018). The role of academic libraries in universal access to print and electronic resources in developing countries. *Library Philosophy and Practice (e-Journal)*, 189
- Chandra, K., et.al., (2014). A study on use Pattern e-resources among faculty members in arts and science colleges in Chennai. *Journal of Advances in Library and Information Science*, 3(1), 1-5.
- Dadzie, & Perpetwa, S. (2005). Electronic resources: access and usage Ashesi University College. *Campus-wide Information systems*. 22 (5). 34-46
- Edem, N. B., & Egbe, N. (2016). Availability and utilization of electronic resources by postgraduate students in a Nigerian University Library: A case study of University of Calabar, Nigeria. *In Information and Knowledge Management*, 6 (2), 60 - 69
- Fatoki, O. C. (2014). Impact of library resources and Internet on undergraduate students' research: *University of Ibadan, Nigeria, Nigerian Libraries*, 38 (1), 21-33.
- Hallam, S., & Papageorgi, I. (2016). Conceptions of musical understanding. *Research Studies in Music Education*, 38(2), 133–154. <https://doi.org/10.1177/1321103X16671037>
- IFLA. (2012). Key Issues for e-Resource Collection Development: *A Guide for Libraries*. IFLA. 34.
- Iwehabura, S. (2009). The use and impact of electronic resources at the University of Lagos. *Library Philosophy and Practice*. Available. [www.webpages.uidaho.edu/~mbolin/egberonbe.html](http://www.webpages.uidaho.edu/~mbolin/egberonbe.html). 15 Sept. 2009)
- Iyabosa, E. & Adomi, E.E. (2018). Awareness and use of electronic information resources by pre-clinical students in universities in South-south Nigeria. *University of Benin Journal of Humanities*, 6 (1), 155-171



- Jotwani, N. (2014). Use of e-resources by the faculty members: A case study. *International Research: Journal of Library & Information Science*, 3 (3), 459 - 469.
- Mutshewa, O. (2014). Professional skills required by Nigerian Library/ information centers of the future. *Nigerian Libraries*, 31 (1&2): 1-11. Oghator, E. & Okoobo, R. (2000). Towards sustainable development in under develop countries: foreign assistance revisited. *The Nigerian Journal of Administrative Science*, 5 (10), 201 - 208.
- Okiki, O. C. & Ashiru, H. (2011). Electronic information resources awareness, attitude and use by academic staff members of University of Lagos, Nigeria. Retrieved May 23, 2015, <http://digitalcommons.unl.edu/liphiprac/828>
- Sambo, A. S., Ntogo, G. G. & Eda, R. (2022). Challenges facing undergraduates in the use of electronic information resources in universities in Southwest Nigeria. *Handbook of Research on Emerging Trends and Technologies in Librarianship*. DOI: 10.4018/978-1-7998-9094-2.ch021.
- Tekale, R. B. (2016). User perception of usability of electronic resources among faculty members of colleges in Parbhani: A Survey. *The South Asia Academic Research Chronicle*, 3 (8), 9 - 18. <https://www.researchgate.net/publication/311372195>
- Thanuskodi, S. (2012). Use of e-resources by the students and researchers of faculty of arts, Annamalai University, *International journal of library science* 1 (1): 1-7
- Padma. P. et al. (2014). Awareness and use of electronic resources by the engineering. *E - Library Research Journal*. 2 (10). 112- 122
- Ray, K. & Day, J. (1998). ‘Student Attitudes towards electronic information resources’. Retrieved [http://information.net/ir/4-2/paper 54html](http://information.net/ir/4-2/paper%2054.html) on march 20>, 2010.
- Ukpebor, C. O. (2012). Availability and use of electronic resources in African universities: The Nigerian perspective.
- Vikky, K. A. & Shyamu, P. (2022). Electronic information resources in library and information science: a critical study. *International Journal of Research in Library Science (IJRLS)* 8 (1), 120- 127 DOI: 10.26761/IJRLS.8.1.2022.1503