ELECTRONIC RESOURCES AND UTILIZATION OF ALVAN IKOKU FEDERAL UNIVERSITY OF EDUCATION LIBRARY, OWERRI

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Abstract

This study examined electronic resources and utilization of Federation Alvan Ikoku Federal University of Education Library, Owerri. To carry out the study, Expost Facto research design was adopted and the study was carried out in Alvan Ikoku Federal University of Education, Owerri State. The target population for the study comprised all students, lecturers and the university librarians. Stratified sampling technique was used to select 200 students, 20 lecturers and 4 librarians in the University. This gave a total of 224 respondents, which formed the sample size for this research. The instrument used for data collection was a structured questionnaire titled "Electronic Resources and Utilization Questionnaire (ERUQ)". Face and content validation of the instrument was carried out by an expert in test, measurement, and evaluation in order to ensure that the instrument has the accuracy, appropriateness, and completeness for the study under consideration. The reliability coefficient obtained was 0.88, and this was high enough to justify the use of the instrument. The researcher subjected the data generated for this study to descriptive analysis to answer research questions and regression analysis to test the hypotheses. The result of the data analysed revealed that there was a significant influence of e-journals and e-books on utilization of electronic information resources. Based on these findings, one of the recommendations made was that, to improve the utilization of e-journals, Alvan Ikoku Federal University of Education Library should invest in a more diverse collection of e-journals relevant to various fields of study. The study concluded that the shift from analog to digital has transformed information access significantly, impacting library and information services in education.

Keywords: Electronic Resources, Utilization, University, Education, Library

Introduction

Digitizing information has signaled tremendous information shift from analogue to digital. This has affected many facets of life, including the educational sector of which the library and information science field is categorized under. Therefore library and information services are also changing to accommodate the digital upsurge. With the upsurge in digital publishing, University libraries are not only acquiring reading materials in print but are also acquiring them in electronic form and providing access to them to enable information usage by users in the academic community. This is sequel to the role of library management in creating a balanced atmosphere between library manpower and technological and educational advancements(Obot, Bamgbose, & Okoro, 2018).

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Electronic resources are materials which consist of data or computer programmes encoded for reading and manipulation by computer by using a peripheral device directly connected to the computer, such as CD - ROM drive, or remotely via a network, such as the internet (Reitz, 2004). They are information resources which are stored digitally and accessed through systems and networks (Thanuskodi, 2012). With the increasing growth and knowledge of e-resources, it is observed that many traditional academic libraries are gradually moving from print resources to electronic resources or are incorporating the two for easy access and effective utilization of resources.

Electronic information resources are digital formats of print resources which form an integral part of a library's collection in this technological era and are mainly operational with the aid of computers, desktops or mobile devices such as Ipad, laptop and smartphone in the library or anywhere else for the purpose of teaching, learning and research. Anand (2014) stated that they can be said to be resoruces which require computer access or any electronic product that delivers a collection of data, such as full text bases, electronic journals, image collections, other multimedia products and numerical, graphical or time based, as a marketable product with an available title that has been published or that is intended to be published. The author stated further that these may be delivered on CD ROM, on tape, via internet etc.

Electronic resources are open up opportunities for manipulation and easy searching, making access to information easy and creeper, allowing for down loading and storage. This of course has made e-resources very popular and adaptable, thereby leading to the development of our society. Types of electronic resources include but are not limited to e-books, e-journals, database, CDS/DVDS, e-conference proceedings, e-maps, e-Newspapers, e-Reports, e-Manuscripts, e-Pictures/e-Photographs, e-Theses, e-Internet/websites-USENET, FAQS, Newsgroups, list servs, subject Gateways.

With the advent of technology and electronic resources, access to journals which had hitherto been in print is enhanced and e-journals are now made available and accessible to library users through computers, internet, digital libraries or related electronic networks for teaching, learning and research purposes in academic libraries, Hundreds of thousands of monographic materials, journals and learning resources are now available in electronic form which can be accessed globally thereby elevating the use of information and literature in all fields of human endeavour (Khan, 2016). Electronic journals are journals in which all phases of preparation, adjudging, collection and circulation are done electronically (Prytherth, 2005).
Electronic books are electronic versions of printed books and usually require an electronic device to read. Electronic books is any electronic, irrespective of its size and number, excluding journals made available in digital form for handheld devices or desk-supported screens (Chris *et al*, 2002).

Statement of the problem

The upsurge in electronic information resources provision by librarian and utilization by patrons in University libraries has tremendously transformed information dissemination. However, from observation, it is seen that there is either impending availability or underutilization of such resources in University libraries, thereby making them have little access to relevant and reliable information for studies and research activities. To invalidate these challenges entails the infusion of electronic resources to be utilized by students in Nigerian University libraries. Therefore this study aims to evaluate electronic resources and their utilization in Federal University of Education Library, Owerri.

Utilization of electronic resources encompasses the extent of utilization of such resources. Electronic resources are used for many reasons (Norch and Adzakpa, 2022) such as project writing, term papers, gaming, reading for examinations, tutorials general knowledge etc. in spite of these benefits in utilizing electronic resources, Alabi (2021) asserted that electronic resources are not

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maximally utilized in Nigerian Universities due to a multiplicity of reasons. It is based on this that this research seeks to examine the influence of electronic resources on the utilization of electronic information resources in Federal University of education, Owerri.

Purpose of the study

1. To examine the influence of e-journals on utilization of electronic information resources by library users
2. To examine the influence of e-books on utilization of electronic information resources by library users.

Research questions

1. What is the influence of e-journals on utilization of electronic information resources by library users?
2. What is the influence of e-books on utilization of electronic information resources by library users?

Research Hypotheses

1. There is no significant influence of e-journals on utilization of electronic information resources by library users.
2. There is no significant influence of e-books on utilization of electronic information resources by library users.
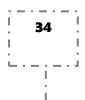
Significance of the study

The findings of this study will be significant to University management as it will impose on them the need to increase financial allocate to the library and subscribe to electronic resources in order to enhance the utilization of such resources by library users for their extensive academic and research needs. It will be of immense benefit to the University library management to mount sensitization programmes that will encourage users to make adequate use of electronic like e-journals and e-books personal their information academic and research needs.

Literature Review

As mentioned by (Okon, Bassey, Eddiong & Jato, 2023) electronic materials also known as e-resources have become a sign of the modern age and is an invaluable tool for teaching, learning and research. Electronic resources are materials that may require the use of peripheral devices connected to a computer, such as CD-ROM drive or a connection to computer network e.g the internet. They are resources that are generated through some electronic medium and made accessible to a variety of users, in, around and out of the library environs through some electronic machine or internet (Saye as cited in Edogiawerie, 2020). Such resources include OPAC, CD-ROMS, Online – Databases, e-journals, e-books, internet resources, and so on.

Libraries have witnessed drastic changes very recently, particularly in how information is produced, managed and circulated as occasioned by ICT (Emezie, *et.al* 2023). ICT has influenced diverse facets of the economy and academic institutions are not an exception, as it is used for both academic and administrative duties. ICT has signaled a significant change in teaching, learning and researching. Therefore ICT has laid a firm foundation for its adoption by libraries and the use of electronic resources. This has made it imperative for libraries to match both print and non-print resources. The print collections are basically physical books while the non-print collections include

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CD-ROM/DVD, online full text electronic journals, databases, and e-books (Adeleke and Nwalo, 2017).

With the advent of ICT and electronic resources, access and utilization of information is enhanced as library users in the University community can access available information in real time through computers, the internet, digital libraries, and related electronic networks for study and research. Therefore, in the evolving electronic information milieu in Nigerian Libraries, electronic resources now provide footpaces for accessibility and utilization of information as they are viewed to have useful consequences on research productivity (Ani *et al*, 2015). In a similar view, Khan (2016) was of the view that a multiplicity of books, journals, learning materials and databases, are now accessible from everywhere in the country, thereby heightening the use of information, literature as well as enhancing efficiency in information services provision.

The benefits of the utilization of electronic resources like e-journals and e-books are enormous as it helps users meet their information and academic needs. Library users in the University community, utilize information resources for a variety of purposes ranging from their personal information needs, research and academic needs to health needs. Electronic resources make search for a variety of resources and downloaded to be read on a later time possible, they are regularly and easily updated, it can be accessed in real-time or at anytime, unlike the physical resources that have scheduled time for library opening hours. They also offer maximal access to information resources and offer computer and media literacy for enhancing human capital potential for employability. Trajkovski (2018) also views an e-journal to be a serial publication that is published in electronic format and outlines its benefits over conventional printed journals thus, fulltext content searching on a multiplicity of topics, global access, sharing through emails, downloading and printing, availability of materials images and audio visual link's that lead to related resources and interactivity of the journals with editors through e-mails.

Despite the many advantages on using electronic resources, Oyeniyi, *et al* (2020) in their study on evaluation of the availability and usage of electronic resources revealed that only a relatively few students accessed resources in the University library, most were not fully aware of the availability of such resources and the available e-resources were not always accessible. In a similar vein, Nnadozie et al. (2019) in their study, found out that while the availability e- of resources was sporadic, accessibility and frequency of use of online information services were abysmally low and attributed this to impending availability and accessibility of e-platforms in the libraries surveyed, including inadequate ICT facilities, slow bandwidth, poor funding and high cost of internet subscription.

Dukper, *et al* (2018) in their study, revealed that users' awareness level of electronic resources through social media was very low as majority (61%) of them interviewed indicated they were unaware of the existence of electronic library resources in the school because they had no prior knowledge of its existence, and resorted to the use of the conventional library system for their research.

The term "library" comes from the Latin liber, meaning "book." In Greek and the Romance languages, the corresponding term is bibliotheca. It is a collection or group of collections of books and other print or nonprint materials organised and maintained for use such as reading, consultation, study, and research. As mentioned by Bassey & Owushi (2023), a library is a repository of information and knowledge, typically in the form of books, journals, and other printed materials, that is organised and made available for use by members of a community. Libraries are found in academic institutions, public buildings, and private organisations, and they serve a variety of functions, including supporting research and education, preserving cultural heritage, and promoting literacy and lifelong learning. A library is a collection of resources that are organised and made accessible to the public for use and information. Libraries can be physical spaces, virtual

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spaces, or both. They can contain a variety of materials, including books, manuscripts, journals, recordings, films, and more. Libraries also provide services, such as access to librarians who can help users find information. Libraries store books and other information sources. They make it easier for people to get access to them for various purposes. Libraries are very helpful and economical too. They include books, magazines, newspapers, DVS, manuscripts, and more. It is a place set aside to contain books, periodicals, manuscripts, publications, and other materials for reading, viewing, listening, studying, or referencing as a room or sets of rooms or buildings where books may be read or borrowed. According to Bassey & Esiere (2022), a library is a place where a huge collection of books and resources is available that can be accessed by the users. It acts as a brain for the institutions. According to Effiong, Bassey, and CLN (2024), for library operations to be successful, library services must rely not only on their physical resources but also on their electronic resources. In academic libraries, electronic resources have become essential tools, aiding students, researchers, and faculty members in accessing up-to-date and comprehensive data without the geographical and physical limitations of traditional resources. Libraries have expanded their roles by providing access to these electronic resources and training patrons in effective digital research skills.

As mentioned by Nmecha and Bassey (2020), libraries in the 21st century have taken different dimensions from what they used to be. There has significantly been a shift from face-to-face services to electronic services. Access to numerous electronic databases, e-books, and academic journals, which are essential for students and faculty in an era where digital literacy and accessibility to current information are key. These resources allow students to access a range of materials across disciplines, supporting their learning and fostering a more dynamic academic experience. Moreover, for faculty members, electronic resources enhance teaching materials, providing current, evidence-based information that enriches their lectures and research. Bassey and Igajah (2017) mentioned that electronic resources entail the provision of resources to library users online. The utilisation of electronic resources depends on factors such as availability, ease of access, digital literacy among users, and the support provided by library staff in guiding patrons. Bassey (2018) further mentioned that technology has enhanced the landscape of library service provision, which has led to the provision of electronic library services.

University libraries play a critical role in supporting students' academic success by providing access to essential resources that facilitate learning, research, and the development of scholarly skills. With the continuous evolution of higher education, university libraries have adapted to the changing academic environment by offering a diverse array of both physical and digital resources. Libraries have long been integral to the academic experience, serving as centres for research, study, and the development of intellectual capabilities. The range of resources available in university libraries—from textbooks and scholarly journals to specialised databases and multimedia tools—is designed to support students across various disciplines. According to Bassey & Bantai (2021), the library helps one find the best source of information, whether it is a book, website, or database entry.

University students' library usage has evolved due to digital transformations and COVID-19 challenges, incorporating digital libraries, online databases, and technological tools to support academic needs. A notable study conducted by Martzoukou (2021) highlights how the pandemic accelerated the shift to digital resources, enabling students to access a wealth of materials remotely. Libraries are becoming more inclusive and accessible, bridging gaps for students and providing digital literacy, a crucial skill in higher education. Effective library management is essential as it contributes to the improvement of teaching and learning, which is essential in improving the quality of education and teaching that students receive (Bassey & Daniel, 2024).

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Library managers foster community, facilitate remote learning, and ensure continuity of services during crises by organising resources and services tailored to students' digital access needs. Access to information is central to national development. The emergence of information and communication technologies (ICTs) has brought significant transformation in accessibility and utilisation of information in libraries and other information retrieval systems (Igajah & Bassey, 2021). University libraries are transforming into digital information centres, enhancing digital literacy and accessibility for students, catering to their technology-driven learning preferences.

Methodology

To carry out the study, Expost Facto research design was adopted and the study was carried out in Alvan Ikoku Federal University of Education, Owerri State. The targeted population for the study comprised all students, lecturers and the university librarians. Stratified sampling technique was used to select 200 students, 20 lecturers and 4 librarians in the University. This gave a total of 224 respondents, which formed the sample size for this research. The instrument used for data collection was a structured questionnaire titled "Electronic Resources and Utilization Questionnaire (ERUQ)". Face and content validation of the instrument was carried out by an expert in test, measurement, and evaluation in order to ensure that the instrument has the accuracy, appropriateness, and completeness for the study under consideration. The reliability coefficient obtained was 0.88, and this was high enough to justify the use of the instrument. The researcher subjected the data generated for this study to descriptive analysis to answer research questions and regression analysis to test the hypotheses.

Results and Discussion

Research Question 1

Research Question 1 sought to examine the influence of e-journals on utilization of electronic information resources by library users. To answer the research question, percentage analysis was performed on the data, (see Table 1).

Table 1:   Descriptive statistics of the influence of e-journals on utilization of electronic information resources library users

Variable	N	Arithmetic mean	Expected mean	R	Remarks
E-Journals		16.88	12.5		
	224			0.93*	*Strong to Perfect Relationship
Information Resource Utilization		18.09	12.5		

Source: Field Survey

Table 1 presents the result of the descriptive statistics of the influence of e-journals on utilization of electronic information resources library users. The two variables were observed to have Strong to Perfect Relationship at 93%. The arithmetic mean as regards e-Journals (16.88) was observed to be higher than the expected mean score of 12.5. In addition to that, the arithmetic mean for Information Resource Utilization (18.09) was observed to be greater than the expected mean score of 12.5. The result therefore means that there is significant influence of e-journals on information resources utilization. The findings of this research align with Trajkovski's (2018) view, who highlighted the advantages of e-journals—serial publications in electronic format, over traditional

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print journals. According to him these benefits include full-text content search across numerous topics, global accessibility, easy sharing via email, and the ability to download and print content. Additionally, e-journals often provide access to multimedia resources (such as images and audio-visual links) and offer interactivity through email communication with editors, thereby enhancing user experience.

Research Question 2

Research Question 2 sought to examine the influence of e-books on the utilization of electronic information resources by library users. To answer the research question, percentage analysis was performed on the data (see Table 2).

Table 2:   Descriptive statistics of the influence of e-journals on utilization of electronic information resources library users

Variable	N	Arithmetic mean	Expected mean	R	Remarks
E-books		14.79	12.5		
	224			0.90*	*Strong to Perfect Relationship
Information Resource Utilization		18.09	12.5		

Source: Field Survey

The above table 2 presents the result of the descriptive statistics of the influence of e-books on utilization of electronic information resources by library users. The two variables were observed to have Strong to Perfect Relationship at 90%. The arithmetic mean as regards e-books (14.79) was observed to be higher than the expected mean score of 12.5. In addition to that, the arithmetic mean for Information Resource Utilization (18.09) was observed to be greater than the expected mean score of 12.5. The result therefore means that there is significant influence of e-journals on information resources utilization. This study is in collaboration with the opinion of Khan (2016) who stated that a multiplicity of e-books, e-journal, learning materials and databases, are now accessible from everywhere in the country, thereby heightening the use of information, literature as well as enhancing efficiency in information services provision.

Hypothesis one
1. There is no significant influence of e-journals on utilization of electronic information resources. In order to test the hypothesis regression analysis was used to analyse the data (see Table 3).

Table 3
Regression analysis of the influence of e-journals on utilization of electronic information resources

Model	R	R Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.934a^	0.873	0.872	0.609	0.873

Significant at 0.05 level; df =222; N =224; critical r–value = 0.139

Table 3 shows that the calculated R-value 0.934 was greater than the critical R-value of 0.139 at 0.5 alpha level with 222 degree of freedom. The R-square value of 0.873 predicts 87% of the influence of e-journals on utilization of electronic information resources. This rate of

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percentage is highly positive and therefore means that there is a significant influence of e-journals on utilization of electronic information resources.

Hypothesis two

There is no significant influence of e-books on utilization of electronic information resources. In order to test the hypothesis regression analysis was used to analyse the data (see Table 4).

Table 4

Regression analysis of the influence of e-books on utilization of electronic information resources

Model	R	R Square	Adjusted R Square	Std. error of the Estimate	R Square Change
1	0.908a^	0.824	0.823	0.717	0.824

Significant at 0.05 level; df =222; N =224; critical r–value = 0.139

The table 4 shows that the calculated R-value 0.908 was greater than the critical R-value of 0.139 at 0.5 alpha level with 222 degree of freedom. The R-square value of 0.824 predicts 82% of the influence of e-books on utilization of electronic information resources. This rate of percentage is highly positive and therefore means that there is a significant influence of e-books on utilization of electronic information resources.

Conclusion

The shift from analog to digital has transformed information access, significantly impacting library and information services in education. College of Education libraries now offer resources in both print and electronic forms, enhancing information availability. Electronic resources, which include e-books, e-journals, databases, and more, enable easy searching, downloading, and storage, making information more accessible. The rise of technology supports global access to academic resources, facilitating teaching, learning, and research. This shift has enriched academic communities, ensuring effective utilization of information in various fields and aiding in societal development through enhanced information access. The findings from the data analysed concluded that there is a significant influence of e-journals and e-books on utilization of electronic information resources.

Recommendations

1. To improve the utilization of e-journals, Alvan Ikoku Federal University of Education Library should invest in a more diverse collection of e-journals relevant to various fields of study. Additionally, the library should provide regular workshops and training sessions to teach users effective search techniques and familiarize them with different journal platforms. This will increase library users' confidence and competence in accessing and utilizing e-journals for research and academic purposes.
2. To maximize the impact of e-books, the library should expand its e-book collections to cover a wider range of subjects aligned with the University's curriculum. Promotional campaigns, such as e-book showcases and digital guides, could increase awareness among students and faculty. By integrating e-books into classroom and study practices, the library could encourage regular usage, ensuring users benefit from accessible and up-to-date learning resources.

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