

WEB RESOURCES AND UTILIZATION OF ELECTRONIC MATERIALS IN NIGERIAN UNIVERSITY LIBRARIES

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ABSTRACT

The study assessed web resources and utilization of electronic materials in Nigerian university libraries. Libraries are nowadays using web environment to provide high quality information for their users mostly in digital format. The internet and web technologies has created a new and unprecedented environment to universities libraries, businesses, educational institutions, and individuals enabling them to webcast any information using multimedia tools. The frequent use of electronic materials in libraries can change the library system to be more effective. The Nigerian university libraries have adopted in using the most recent available technologies for information collection and preservation and have adopted web sites in this era of technology boom. The study concluded that there is significant influence of website, online databases and search engines on utilization of electronic materials and it can also encourage students to utilize the library and the various electronic materials. The educational implication is that government and educational stake-holders will now see the need of providing various electronic materials and web resources in university libraries. One of the recommendations made was that in other for the use of electronic information resources to be effective, there is a strong need of creating awareness to the potential library users through acquisition and setting up of websites in the library.

KEYWORDS: Web Resources, Electronic Materials, Libraries and Nigerian University.

INTRODUCTION

University libraries are categorized under academic libraries, established with the primary goal of providing information to students, staff and workers of the university community. One of the objectives of university libraries is to develop and maintain collections of information resources in all formats such as print and non-print; and to make these information materials available and accessible to its target users. Consequently, it is the duty of the university library to identify the information needs of its users and ensure availability of information materials in these libraries for immediate use. Information materials in the University of Uyo Library are taken closer to the users through Faculty Resource Centre of which Faculty of Education Resource Centre in this case disseminates information for students and researchers in the Faculty of Education. Unfortunately, the scenario on ground is not encouraging as expected because according to Abdulmumin, (2020), many African students enter the university without ever using any library either in primary or secondary schools.

One way of ameliorating the situation is for the university libraries to acquire and maintain collections that include not only printed materials but also reproductions, maps, photographs, microfiches, CD-ROMs, computer software, online databases, web, internet, electronic books, e-journal and other media. Halsey (2022) supports that libraries should as a matter of urgency feature telecommunications links that would enable students' effective utilization of information at remote sites.

Libraries are nowadays using web environment to provide high quality information for their users mostly in digital format, but their most important role lies in numerous and enriched libraries services. The internet and web technologies created a new and unprecedented environment to governments, businesses, educational institutions, and individuals enabling them to webcast any information using multimedia tools. Web resources also known as World Wide Web (www) can provide information about anything, anyone, and anywhere. It seems that everyone is on the WWW, especially information materials and resource providers. It has also changed the concepts of "time-honored" and scholarly visits to physical libraries with desktop access to library resources and services available virtually. Libraries have always tried to use the most recent available technologies for information collection and preservation and have adopted web sites in this era of technology boom.

A website is a collection of related web pages, including multimedia content, typically identified with a common domain name, and published on at least one web server. According to Heimlich, (2020), websites are used for various activities like: web searching, finding resources and e-mailing. Furthermore, the author consented that those who use the web at home for work report a greater use of the internet for a variety of tasks rather than those who use the web primarily at work. Heimlich also

opined that the faculty who use electronic sources and/or the web achieve greater scholarly productivity. It has been found that there is a positive relationship between the frequency of the use of technology and publications.

As Afolabi (2018) pointed out, online databases are the most effective way to provide access to electronic books/journals in libraries, which is usually subscribed for before access can be granted for usage. Online databases are a collection of electronic sources (e-journal/e-books) by publishers from various fields and disciplines. Some of these databases are provided free of charge to libraries in developing countries by their publishers or vendors. Some of these include National Agricultural Research Institute (NARI), and Access to Global Online in Agriculture (AGORA), etc. Access to these databases provides researchers and students with thousands of scholarly articles in their fields of specialization or research. For students to utilize the growing range of electronic resources they must acquire and practice the skills necessary to exploit them, (Fatoki, 2014).

According to Sawyer and Williams (2023), a search engine is an information retrieval software program that discovers crawls, transforms and stores information for retrieval and presentation in response to user queries. Search engine is also a web-based tool that enable users have access to local information on www. He went on to enumerate that there are three types of search engines, namely: those that are powered by robots (called crawlers, ants or spiders); and those that are powered by human submissions; and those that are a hybrid of the two. Human-powered search engines rely on humans to submit information that is subsequently indexed and catalogues. Only information that is submitted is put into the index.

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. Ambrose and Mohamed, (2023) notes that the library and information landscape has been transformed from the onset of the digital era and today, traditional libraries have changed their role to serve as 'knowledge Centre's with priority on value added electronic information services. Academic institutions are focusing on services which compliment as cutting-edge technology. Such institutions have changed their contemporary outlook towards the functions, operations and services of the academic libraries. The traditional environment has been rapidly changing to an electronic one and the demand for e-resources among academic and research communities has increased manifold over the years. However, the literature reveals that there is a dearth of studies on the utilization of e-resources and the World Wide Web in the context of academics, researchers and students across the globe (Ambrose et al, 2016)).

According to Ambrose, et al (2016), the revolution in Information and Communication Technologies (ICTs), particularly the web, is exerting profound effects on information-based services. The proliferation of new technologies gives rise to a number of challenges for teaching, learning and research. Notable, among these are those associated with the adoption and institutionalization of these emerging technologies in teaching, learning and research. As a result, in the last few years, there have been many initiatives to enhance the developed and developing countries capacity to harness this technology in reshaping their educational sectors in ways that are consistent with current knowledge societies. The World Wide Web, therefore, has created the possibility of establishing alternative models for the dissemination of information.

Ambrose, et al (2016), went further to say that, the use of electronic Materials implies the extent to which the library users make effective uses of the library electronic resources. In view of this development, librarians conceived the idea of educating the library users in finding and locating information they need on their day-to-day activities. Effective use of electronic resources is possible if the processes of accessibility are cheap, unambiguous, relevant, nearer to people, and in line with their level of sophistication, literacy and understanding. Therefore, the ultimate purpose of using information is to satisfy the information seeker's need as user's needs are varied their satisfaction amounts to a high-level achievement. In other for the use of electronic information resources to be effective, there is a strong need of creating awareness to the potential library users through acquisition and setting up of websites in the library.

STATEMENT OF THE PROBLEM

Before the emergence of technology, traditional libraries provided information services basically through print resources. With this, students had limited access to information because they were confined to particular library collection at their disposal. The story is different today, with the coming to existence of electronic resources, students have limitless opportunity and access to information resources in diverse format to satisfy their information need.

However, it has been personally observed that some users visit the library and only make use of the traditional books, and also do manual information search, while very few uses electronic resources to access information. Based on this observation, the researcher seeks to investigate the influence of Web resources on Students Utilization of electronic Materials in university libraries.

PURPOSE OF THE STUDY

The main aim of the study is to examine Web Resources and Students Utilization of electronic Materials in university libraries. The following are the specific objectives of the study.

1. To assess the influence of web site on students' utilization of electronic Materials in university libraries.
2. To ascertain the influence of online database on students' utilization of electronic Materials in university libraries.
3. To determine how search engine influence students' utilization of electronic Materials in university libraries.

RESEARCH QUESTIONS

The following research questions were formulated in line with the objectives of the study.

1. Is there any influence of web site on student's utilization of electronic Materials in university libraries?
2. Is there any influence of Online Database on students' utilization of electronic Materials in university libraries?
3. What is the influence of search engine on students' utilization of electronic Materials in university libraries?

HYPOTHESES

1. There is no significant influence of website on students' utilization of. electronic Materials in university libraries.
2. There is no significant influence of Database on students' utilization of electronic Materials in university libraries.
3. There is no significant influence of search engine on students' utilization of electronic Materials in university libraries.

LITERATURE REVIEW

CONCEPT OF WEB RESOURCES

Web resources also known as the World Wide Web is one of the widely used internet services. Specialized software called a web browser is needed to make use of the features of the www. The World Wide Web is divided into millions of sites called websites. Websites are files made of groups of pages designed and set up by companies or individuals who wish to communicate with internet users throughout the world. Each website has its own unique address, which is called Uniform Resource Locator (URL). Rasmuson (2015) explains that the World Wide Web has become a popular medium for publishing and retrieving information of all kinds. It is now the most used platform for delivery of digitized information. According to Xu, et al (2023), the World Wide Web is a system of hyperlinked documents allowing graphical access to the internet and contains a wide variety of multimedia web pages. The world wide web also enables the hosting of several academic and other databases that contains millions of scholarly information and it also gives opportunity for searching the web, sites and databases to access information and all these are known as web resources.

The use of the web resources in libraries and Resource Centers have a lot of benefits such as enabling students use electronic resources by providing hypertext links between documents which students navigate to retrieve information. It provides access to a wealth of information on virtually any subject. It provides current and timely information to users. The www integrates text, sound, image and video which are hardly found in print resources. It also offers flexibility regarding where and when information can be accessed, unlike print library collections which are used in a specific place. However, Kibbee (2022), states that the World Wide Web has pitfalls which include: lack of authority for materials which leads to grammatical errors and miss spellings found in Web documents; inability to locate quality materials due to enormous publishing of low-quality resources on the web; instability of websites due to heavy traffic which causes delayed access and high cost of purchasing soft-wares and other web documents.

Dadzie (2015) mentioned some of the advantages and disadvantages of World Wide Web.

ADVANTAGES

- The use of World Wide Web and the Internet has proven to be a great help in the world today. That is because one can learn anything through this medium from far and wide and in different field of one's preferred choice of studies.
- Through the use of World Wide Web and the Internet one can make good money sitting in his/her house doing some work on the internet, example website designing, YouTube channel, e-book. In addition to this, selling on e-commerce platforms can help you make a lot of income and improve your living condition.
- Through the use of World Wide Web and the Internet, online banking is made possible. One can now sits at the comfort of his home to transact banking business and this saves a lot of time, stress and energy. A lot of people in the world nowadays prefer to do their shopping online because of the hazard experience through travelling and this is made possible through the use of World Wide Web. This development also makes life very easy and more meaningful.
- Social websites, video calls or gaming's are still part of the gains of using World Wide Web. Through World Wide Web someone can watch interesting and current movies online at and whenever you desire to do so conveniently.

The author also stated the Disadvantages of using World Wide Web below:

- (i) Unlimited pornographic pictures; today the younger generation is exposed to uncensored adult scenes such as violent movies, pornographic pictures and the likes and this has brought about incessant rapes, robbery, cultism and a host of other vices.
- (ii) With the help of the World Wide Web, you can interact with your friend's right from far and wide. A lot of people use this for a long time so that their mental state causes them problems. Aside from wasting away valuable time for studies, young people are easily corrupted in the process.
- (iii) The constant use of this gadgets, whether a laptop or mobile phones, emit a lot of radiation which causes at a long run a very bad effect on our brain as well as problems like anxiety. It also brings about fatigue and tension to the brain.
- (iv) A lot of scam and other crazy things come from the use of world wide web nowadays. Example: fake news that have fanned the ember of disunity, cyber-crimes, Ponzi

businesses aimed at dubbing people of their hard-earned money have been on the increase as a result of the use of world wide web.

CONCEPT OF ELECTRONIC MATERIALS UTILIZATION

As pointed out by Mohamed (2023), electronic materials utilization refers to the frequency with which students use the e-resources in the library to satisfy their information needs. It is also the degree in which an electronic material is being consulted. Dadzie (2015) observed that electronic journals, online databases, e-books, web-based resources and a variety of other electronic information resources are fast replacing the traditional services of modern libraries. The author further explained why students therefore utilize electronic resources in the library more than print materials because of its benefits which include: encouragement of easy communication, improvement in academic performance, enhancement of academic assignments/research works and a host of other benefits. Dadzie mentioned that electronic resources are invaluable research tools which explained the wide utilization by students in recent time.

In his contribution, Tenopir (2023) explained 'utilization' as an activity which measures the worth of an item to a library or information system. Utilization is the single criterion which could be used to determine the reason for retaining a document within the collection of a library, and utilization is essential in guiding the collection development effort of a library for users' satisfaction. To this end, Dadzie (2015) suggested that academic libraries specialists should be technically and professionally trained in the art of information management in order to appreciate the importance of information as an ingredient in all human endeavor and human development/survival. This is so because information today is a commodity, packaged and sold at obtainable price and it is regarded as vital source that must be made to achieve organization goals and management option in survival technique. More so, the need to have adequate electronic information resources at the appropriate level for programmes offered in the university should be the trend to enable the institution support the intellectual, cultural and technical development of students enrolled in the Nigerian universities.

Consequently, Tenopir (2023) is of the opinion that academic libraries should be involved in the provision of all kinds of information resources for their clients as this plays a vital role in transmission of knowledge to them using the development of science and technology. The author further supports that record of man's achievement come in a wide variety of forms and each is capable of giving information in its own unique way and even complementing the other.

Dadzie (2015) posited that electronic information materials can be accessible through the use of telecommunication and information

technology. It enables access to information and services by minimizing the barriers of distance and cost as well as the usability interference

WEBSITE AND STUDENTS' UTILIZATION OF ELECTRONIC MATERIALS

Generally, libraries nowadays are using web environment to provide high quality information for their users mostly in digital format, but their most important role lies in numerous and enriched library services. As Mohamed (2023) stated, the web and internet technologies created a new and unprecedented environment to governments, businesses, educational institutions, and individuals enabling them to webcast any information using multimedia tools.

The World Wide Web (www) can provide information about anything, anyone, and anywhere. It seems that everyone is on the www, especially information sources and resource providers. It has also changed the concepts of scholarly visits to physical libraries with desktop access to library resources and services available virtually. Libraries have always tried to use the most recent available technologies for information collection and preservation and have adopted web sites in this era of technology boom.

Brower (2023), records how links can transform a website into "a house in which every single window is also a door". He further describes the development of the library website at the University of Nevada, Las Vegas (UNLV) Libraries, which became operational in 1996. Today, very few libraries are without a presence on the web. As the number of library websites grew, it was necessary to evaluate them. According to Muhammad (2023), the designing of a library website is an evolutionary process. As "good" design principles continue to evolve, so too should library websites and website evaluation should be incorporated into general web management principles. Xu, et al (2023), stated that a library's website is a powerful gateway that can provide information to patrons, but often users access Google or other sources for information even though library websites provide more authentic, reliable and organized information and internet sources than the "general" internet. Previous analyses of library website contents have viewed a number of factors related to navigation, access, speed, general library information, mission statements, collection, resources and services, catalogue access, electronic resources, contact information and other interactive services such as RSS feeds, chats with a library. Generally, online database enables students retrieve electronic resources for research, term paper, assignment, etc as it provides access to articles in magazine, newspaper, readers' guide, etc for students. The usefulness of website to students is many, the web and internet technologies has created a new and unprecedented environment to governments, businesses, educational institutions, students and individuals enabling them to webcast any

information using multimedia tools. This has helped students a lot in their assignments and other academic works.

ADVANTAGES

- (i) Having a website means customers are always able to find you anytime and anywhere. Even outside of business hours, your website will continue to find and secure new customers. It offers the user convenience as they can access information needed readily with no added pressure to buy.
- (ii) A website provides a quick and easy way of communicating information between buyers and sellers. You can list your opening hours, contact information, images of your location or products and contact forms to facilitate enquiries from potential customers or feedback from existing ones in an effective and cost-efficient way to promote your business.
- (iii) In today's world, potential customers would likely be distrusting of any business that does not have a telephone, website and email address. These are useful tools to share crucial information about your business. That is why, having a good quality, easy-to-use website makes customers feel comfortable using your services as they will assume same positive experience will play out in all areas of your business.
- (iv) Using the website to sell goods and services cut large operating overhead cost and this will allow you to sell your goods at lower prices giving your business that real competitive edge over others.
- (v) Websites are great ways of providing a place that potential investors can be referred to. It shows what your company is about, what it has achieved and what it can achieve in the future.
- (vi) Advertising on Facebook give you the power to reach customers with much more accuracy and reliability than with traditional offline advertising methods. The importance of advertisement through your website cannot be over-stressed.

The author further highlighted some of the disadvantages of using website to include the following:

- (i) The information on your website might be unreliable if not updated on a regular basis. You need to ensure that changes are made when necessary and have disclaimer

- with regards to the reliability of the information contained within.
- (ii) A website that crashes is not good for anyone and unreliable connection could also mean plummet in a website search engine ranking.
 - (iii) Another disadvantage of website is difficulty in reaching the right people. Competition within your market may be strong and the battle for the illusive top spots on Google maybe a difficult one, against a wealth of other businesses in your sector.
 - (iv) With a contact form or your email address published on your website, you will soon find your inbox fill up with spam emails unless you use Form Guard or a captcha tool.
 - (v) Website attracts bad publicity in that if a customer is unhappy with your service or products, then they may vent their frustrations online and reference your website in their review/comments. This could be potentially damaging, hurting both your reputation and your search engine ranking

ONLINE DATABASE SERVICES AND UTILIZATION OF ELECTRONIC MATERIALS

According to Larson (2017), databases are structured to facilitate the storage, retrieval, modification, and deletion of data in conjunction with various data processing operations. Typically, the user provides a string of characters and the computer searches the database for a corresponding sequence and provides the source material in which those characters appear. A user can request, for example, all records in which the contents of the field for a person's last name are the word Smith. Since the database used for searching academic publications most often contains bibliographic (that is, title, authors, abstract, keywords, etc.) information they have is often called bibliographic databases.

Afolabi (2018) added that an online database is accessible from a local network or the internet, as opposed to one that is stored locally on an individual computer or its attached storage (such as a CD). He further stated that, online databases are hosted on websites, made available as software as a service-products accessible via a web browser. Fatoki (2014) agreed that they may be free or require payment, such as by a monthly subscription. Some have enhanced features such as collaborative editing and email notification. As the author continued, he stated that an online database consists of published journals, newspapers, books, reports, image collections, magazines, etc. Students and instructors in higher education are expected to retrieve, utilize and apply information in their chosen field of study. General subject databases that

provide access to articles in magazines, newspapers and journals such as EBSCO host's Academic Search, Master File, Wilson's Omni File, Readers' Guide, and ProQuest's Newspapers are also available to guide students in their researches. Subject-specific online indexes, which have largely replaced their paper-based predecessors, are bibliographic tools essential for higher-level course work and faculty research, Abdulmumin (2020). For convenience, the term "databases" will be use in this article in its broadest sense, referring to both indexes and full-text databases. These are large collections of machine-readable data that are maintained by commercial agencies and are accessed through communication lines. Many libraries subscribe to them for easy access and use of current information. The disadvantage of this is that only bibliographic data is presented and not full text. The information cannot be accessed when the system is down for any reason. Example Ei Compendex, SciFinder Scholar, Web of Science, Current Contents. As Olorunsola and Adeke (2021) noted that organizations such as United Nations (UN) provide free access or discounted access to journals and databases through programmes like: Access Global Online Research in Agriculture (AGORA); Electronic Information for Libraries Network (EIFL.NET); Health Inter-Network Access to Research Initiative (HINARY), etc. All these offer ample opportunities for libraries to subscribe for more databases.

Abdulmumin (2020) outlined the following advantages of Online Database Service:

- An online database can be accessed from the web browser from anywhere in the world and it is much easier to host an online database.
- A web-based-database can hold data and is totally elastic in nature. Its storage space is inelastic
- It has the capacity to process search results that are sorted, ranked, reported, exported, etc. in integration with intranet/portal, etc
- Database has highly focused information that is actionable according to users' need.

The author further enumerated the following as disadvantages of Online Database Service

- (i) When there is no internet connection, there will be no access equally to the database. Hosting a database online takes a more complex server than many companies or schools want to operate and many of the processes required to operate a database are difficult for online servers and applications to operate.
- (ii) Subscription and per user pricing require one big lump sum to install a software.

- (iii) The cost of operating and developing a database for online application and operation can be fairly expensive. This also requires a vast amount of server space which is equally expensive to run.
- (iv) Online databases incur more security risks because it is easier to hack, receive viruses and other malware than offline databases.
- (v) In online databases, the search terms must be exact to bring up results and this can be frustrating for someone who does not know the exact phrasing to search for.

SEARCH ENGINES AND UTILIZATION OF ELECTRONIC MATERIALS

In today's modern world, people are using different technology for different purpose. Search engine is also an invention of the modern era where people search for different things for different purpose. Generally speaking, people use search engines for one of three things namely: research, shopping, or entertainment. Someone may be doing research for restoring his classic car or looking for a place where parts for such classic cars are sold. Search engines are now part of our daily life, whether it is for carrying out research for Xmas presents or search for the nearest coffee shop or for the best hotel with modern facilities in a particular town or even for online shopping for your home, friends or businesses. Whatever it is that anybody wants, people are more and more dependent on search engines to get answers to their everyday queries.

Greenberg (2015) agreed that search engines have become an active part of our lives because these days, search engines are performing more than just one task. In our automated world, information is power, this explains why on a daily basis we come in contact with millions of small fact and figures which we utilize to improve our lives. Some of this information we require for immediate use while some we do not. The fact remains that search engines help us enormously to recall and retrieve critical pieces of information as and when we so desired them. The author contributed further that search engine basically act as filters, allowing the users to search the internet for information using keywords. Without it, the information in the internet could essentially become indecipherable and out of reach too to the end users. The main goal of search engine is to facilitate in the provision and the retrieval of relevant information to satisfy user's needs in addition to other important roles play by it. By way of a definition, Kreyche (2023), defined search engine as: a programme when initiated by a search command from a user interface examines a body of data for items satisfying the search criteria and returns the items or their locations to the interface. The data could be, so to speak, a literary database or information about very large numbers of World Wide Web site which includes: Google, Bing, Baidu and

Yahoo as good examples of web search engine, Kreyche (2023). There are very many search engines commonly used and best known in the world. According to Greenberg (2015), the following search engines are some of the regulars in the world scene and they are listed in no particular order:

- **Google**

Google Search Engine is the best search engine in the world and is it also one of the most popular products from Google. Almost 70 percent of the search engine market has been acquired by Google. The technology giant is always evolving and looking to improve the search engine algorithm to provide best results to the end users. Although Google appears to be the biggest search engine there are others still coming up as well

- **Bing**

Bing is Microsoft's answer to Google and it was launched in 2009. Bing is the default search engine in Microsoft's Web browser. At Bing, they are always striving to make it a better search engine, but it got a long way to go to give Google competition. Microsoft's search engine provides different services including image, web and video search along with maps. Bing introduced places; this is a great platform for business to submit their details to optimise their research results.

- **Yahoo**

Yahoo and Bing compete more with each other than Google. A recent report on market share for mobile, browsers, operating systems and search engines shows that Yahoo have market share higher. Although a leader as a free email provider, this is declining significantly though with their recent acknowledgement that user details and passwords were hacked last year dwindle the confidentiality of users.

- **Baidu**

Baidu is the most use search engine in China and was founded in 2000 by Chinese Entrepreneur, Eric Xu. This web search is made to deliver results for website, audio files and images. It provides some other services including maps, news, cloud storage and much more.

- **AOL**

Originally known as America Online. It is an American web portal and online service provider based in New York City. It specializes in the provision of News, Sports, Weather, Entertainment, Local and Lifestyle – AOL is also among the top search engines. They are the ones who send out CD's which you load on your PC to install their browser and modem software. Once the pre-eminent player, they now have an improved

market share. It was started back in 1983 as control Video Corporation and was named America Online in 1991 and in 2009 as AOL Inc. AOL is a global mass media company which is based in New York.

- **Ask.com**

As the name implies, this is a question-and-answer community where you get the answers for your numerous questions. Ask.com integrates a large amount of archive data to answer user's questions. Since its dependents on archive, most of the time the answers are not always very current compare to what you get from google, Bing and Yahoo which are up to date in their information provision.

- **Excite**

Excite Online Services are leading online retail venture specialists, building global online businesses since 1992. Excite is an online service portal that provides internet services like email, search engine, news, instant messaging and weather updates. This also provides us with the latest trends, topics, etc. Adam & Eve acquired Excite Online Services on 2019 for an undisclosed amount.

- **DuckDuckGo**

This is not a popular search engine, unlike Ask.com, they are quite open about how they use to generate search results. They mostly partnered with Yahoo, Bing and Yummy and were founded in 2008 by Gabriel Weinberg in California.

- **Wolfram Alpha**

This is a search engine which does not give list of documents or web pages as search result. Results are based on fact and data about the query. Their mission statement is to make all systematic knowledge computable and broadly accessible to their users.

- **Yandex**

This is mostly used in Russia. Yandex also has a great presence in Ukraine Kazakhstan, Belarus and Turkey. It provides services like Yandex maps, Yandex music, Online translator, Yandex money, spam, mail sorting, highlighting of email from real people, Yandex support and many other services.

- **Lycos**

Lycos has a good reputation in search engine industry. Its key areas served are email, web hosting, social networking, and entertainment websites. Lycos Inc., is a web search engine and web portal established in 1994 out of Carnegie Mellon University.

- **ChaCha**

This is a human guided search engine and was founded in 2006. You can ask anything in its search box and you will be answered in real time. ChaCha also provides mobile search and marketing services. You can also install its mobile apps on iPhone, iPad and Android. It is a free service that pays an online workforce to research and answer user's questions.

Sequel to above, there are many benefits of using search engines by the end users for the retrieval of their information needs which cannot be overstressed. Jansen and Reich (2020) and Greenberg (2015), discuss some of the benefits of using search engine to include but not limited to the following:

- (i) The benefits of search engines to users are invaluable. It offers a wide variety and quantity of information resources to users which enable them to solve their numerous problems.
- (ii) The growing sophistication of search engine software enables users to precisely describe the information that they seek and also receive answers.
- (iii) The large number and variety of search engines enriches the internet, making it at least appear to be organized and easy for users.
- (iv) The purpose of a search engine is in the name; it is for users to search for what they want and have the search engine do the work of finding the information for you.
- (vi) They have the job of searching the web to find what the user wants.

To get users really familiar with the different search tools available to them, Ortiz-Cordova and Jansen (2022), educated users on not only the available search tools to use but also on the procedures to get going in the retrieval of their information needs. These tools are;

- **Web Search Engines**

A web search engine produces a list of pages and files listed on the web that contain the terms in a query. Most search engines allow the user to join terms with Boolean languages like “and”, “or” and “not” to refine queries. The Web is largely unorganized, and the information on its pages is of greatly varying quality, including commercial information, national database, research reference collections, and collections of personal material. Search engines try to identify reliable pages by weighing, or ranking them according to the number of other pages that refer to them; by identifying authorities to which many pages refer; and by identifying hubs that refer to many pages. These techniques can work well, but the user must still exercise skill in choosing appropriate combinations of search terms.

- **Discovery Services**

There are many electronically available library resources and libraries nowadays that use certain discovery tools to make it easier for users to discover and access these resources. The discovery tools can search many e-resources simultaneously via a query from a single search box. In most cases, discovery services only allow access to resources that a library is authorized to use through paid subscription, open access licenses or the public domain.

- **Web OPAC**

This is known as web online public access catalogue and it contains information about the different books and journals available at the library. In a modern library catalogue, there are often possibilities to make reservation between different libraries within a library network. In a library catalogue you can search for titles, author/editors, and sometimes keywords and index of books but, usually, you cannot search for articles in a library catalogue from anywhere in the world as long as you have user privileges and access.

As it stands, it is believed that for ready answers to your different queries and in order to reach your targeted business audience/customers, it is recommended that you do well to select a suitable search engine to navigate the world with ease and get satisfactory results accordingly. Whatever it is that anybody wants, people are more and more dependent on search engines to get answers to their everyday queries and students generally are no exception.

RESEARCH METHODOLOGY

The research design that was used for this study is the descriptive survey research design the sample of the study consisted of 363 students that are registered users of the Akwa Ibom State University Library. The instrument for data collection for this study was a researcher-structured questionnaire titled: "Web Resources and Students Utilization of Electronic Materials Questionnaire (WRSUEMQ)." The instrument was subject to face validity by LIS professional and test and measurement experts. The researchers administered the questionnaire by themselves and the data collected were analyzed using mean and standard deviation to answer the research question and t-test to analyze the hypothesis.

RESULTS, FINDINGS AND DISCUSSION

Result of Research question 1

Is there any influence of web site on utilization of electronic materials in University Library?

Table 1: mean analysis of response on the influence of web site on utilization of electronic materials in University Library.

Variables	N	Mean	SD
Availability/ Use of Academic Web sites	103	33.28	4.87
Influence on Utilization of E-materials	103	32.02	5.33

The analysis of data in table 1 shows the mean response of users of the influence of academic web sites on the utilization of electronic Materials in university libraries. The mean response shows that academic websites actually have an influence on the use of electronic Materials in University Library.

Result of Research question 2

Is there any influence of online database on utilization of electronic materials in University of Uyo Library?

Table 2: mean analysis of response on the influence of online databases on utilization of electronic materials in University Library.

Variables	N	Mean	SD
Availability/ Use of online database	363	34.46	4.73
Influence on Utilization of E-materials	363	32.02	5.33

The analysis of data in table 2 shows the mean response of users of the influence of online databases on the utilization of electronic Materials in university libraries. The mean response shows that online databases actually have an influence on the use of electronic materials in University of Library.

Result of Research question 3

Is there any influence of search engines on utilization of electronic materials in University of Library?

Table 3: mean analysis of response on the influence of search engines on utilization of electronic materials in University Library.

Variables	N	Mean	SD
Availability/ Use of search engines	363	33.73	4.88
Influence on Utilization of E-resources	363	32.02	5.33

The analysis of data in table 3 above shows the mean response of users of the influence of search engines on the utilization of information resources in university libraries. The mean response shows that search engines actually have an influence on the use of electronic materials in University Library.

Result of Research Hypothesis 1

There is no significant influence of web site on utilization of electronic materials resources in University Library.

Table 4: Dependent t-test analysis of response on the influence of web site on utilization of electronic materials in University Library.

Variable	n	mean	SD	t-crit	t-cal	df	Decision
Availability/ Use of Websites	363	33.28	4.87	1.98	3.12	102	Rejected

Influence
on Utilization
of E-materials 363 32.02 5.33

Significant at .05 level, df= 362

In table 4 above, the analysis of hypothesis III revealed that the calculated value (t-Cal) of 3.12 is greater than the table value (t-table) of 1.98 at 362 degree of freedom and at 0.05 level of significant. Thus, the null hypothesis 1 was rejected. This therefore implies that there is significant influence of websites on students' utilization of electronic Materials in university library.

Result of Research Hypothesis 2

There is no significant influence of online database on utilization of electronic materials in University Library.

Table 5: Dependent t-test analysis of response on the influence of online databases on utilization of electronic materials in University Library.

Variable	n	mean	SD	t-crit	t-cal	df	Decision
Availability/ Use of online databases	363	34.46	4.73	1.98	6.66	102	Rejected

Influence
on Utilization of
E-materials 363 32.02 5.33

Significant at .05 level, df=362

In table 5 above, the analysis of hypothesis III revealed that the calculated value (t-Cal) of 6.66 is greater than the table value (t-table) of

1.98 at 362 degree of freedom and at 0.05 level of significant. Thus, the null hypothesis 2 was rejected. This therefore implies that there is significant influence of online databases on students' utilization of electronic Materials in university library.

Result of Research Hypothesis 3

There is no significant influence of search engines on utilization of electronic materials in University Library.

Table 6: Dependent t-test analysis of response on the influence of search engines on utilization of electronic materials in University Library.

Variable	n	mean	SD	t-crit	t-cal	df	Decision
Availability/ Use of search Engines	363	33.73	4.88	1.98	4.40	102	Rejected
Influence on Utilization of E-materials	363	32.02	5.33				

Significant at .05 level, df=362

In table 6 above, the analysis of hypothesis III revealed that the calculated value (t-Cal) of 4.40 is greater than the table value (t-table) of 1.98 at 362 degree of freedom and at 0.05 level of significant. Thus, the null hypothesis 3 was rejected. This therefore implies that there is significant influence of Search engines on students' utilization of electronic Materials in university library.

DISCUSSION OF FINDINGS

Influence of websites on students' utilization of University Library

The result of data analysis shown in tables 1 and 4 which answered the research question 1 and tested the null hypothesis 1 respectively revealed that there is significant influence of websites on students' utilization of university library. This finding is in-line with Brower (2023) are as follow: Having a website means customers are always able to find you anytime and anywhere. Even outside of business hours, your website will continue to find and secure new customers. It offers the user convenience as they can access information needed readily with no added pressure to buy. A website provides a quick and easy way of communicating information between buyers and sellers. You can list your opening hours, contact information, images of your location or products and contact forms to facilitate enquiries from potential customers or feedback from existing ones in an effective and cost-efficient way to promote your business. In today's world, potential customers would likely be distrusting of any business that does not have a telephone, website and email address. These are useful tools to share crucial information about your business. That is why, having a good quality, easy-to-use website makes customers feel comfortable using your services as they will assume same positive experience will play out in all areas of your business. With all these usefulness and importance of the website's students would gladly use the electronic Materials in university library as it would help them to while studying keep tab on other activities in other areas of life like business, sports leisure etc.

Influence of online databases on students' utilization of Electronic Materials University Library

The result of data analysis shown in tables 1 and 4 which answered the research question 1 and tested the null hypothesis 1 respectively revealed that there is significant influence of online data-bases on students' Utilization of university library. This finding is corresponded with that of Fatoki (2014) who stated that an online database consists of published journals, newspapers, books, reports, image collections, magazines, etc. Students and instructors in higher education are expected to retrieve, utilize and apply information in their chosen field of study. General subject databases that provide access to articles in magazines, newspapers and journals such as EBSCO host's Academic Search, Master File, Wilson's Omni File, Readers' Guide, and ProQuest's Newspapers are also available to guide students in their researches. This shows that with the presence of online databases students would be encouraged to utilize the electronic Materials in university library for their various researches.

Influence of search engines on Students' utilization of Electronic Materials University Library

The result of data analysis shown in tables 1 and 4 which answered the research question 1 and tested the null hypothesis 1 respectively revealed that there is significant influence of search engines on students' utilization of electronic Materials in university library. This finding is supported by Greenberg (2015) who agreed that search engines have become an active part of our lives because these days, search engines are performing more than just one task. This indicates that students who multitask in order to be able to achieve their ever-busy educational pursuit can use the search engines and that it can also encourage students' utilization of electronic Materials in university library.

CONCLUSIONS

Based on the findings of the study, the following conclusions were made:

- There is significant influence of websites on students' utilization of electronic Materials in university library.
- Similarly, online data-bases have significant influence on students' utilization of electronic Materials in university library.
- In the same vein, the study revealed that there is significant influence of search engines on students' utilization of electronic Materials in university library.

The findings of the study revealed that there is significant influence of website, online databases and search engines on utilization of electronic materials and it can also encourage students to utilize the library and the various electronic materials. The educational implication is that government and educational stake-holders will now see the need of providing various electronic materials and web resources in university libraries.

RECOMMENDATIONS

- For the use of electronic information resources to be effective, there is a strong need of creating awareness to the potential library users by acquisition and setting up of websites in the library.
- For students to utilize the growing range of electronic resources they must acquire and practice the skills necessary to expose them.

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