



E-LIBRARY UTILIZATION AT THE DELTA STATE UNIVERSITY, ABRAKA, NIGERIA

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Abstract

Purpose: This study was carried out to investigate the utilization of E-Library at the Delta State University Library, Abraka, Nigeria.

Design/Methodology/Approach: Descriptive survey research design was used for this study. The study reported the number of students that patronized the E-Library for a period of six months. The data obtained was from the attendance register of the E-Library for a period of six months usage. The study examined the brief history of the establishment of the E-library, virtual, digital or e-library, advantages and disadvantages of e-library and the stages involved in going virtual. The study equally collated data of utilization of the e-library considering students patronage for research. The data collected were analyzed using Statistical Package for Social Sciences (SPSS) based on students' level of study and faculty of study.

Findings: The study revealed that 400 level (year 4) students utilized the e-library most, the year 4 students ranked 1st among the 6 levels considered as reported in Table I. The study equally ranked Faculty of Science students as the highest faculty of study that utilized the e-library for research, students from Faculty of Education ranked 2nd while students of the Faculty of Arts ranked 3rd among others.

Implication: The role of e-library is so inevitable that the future of libraries worldwide is positively influenced by the level of utilization of e-resources made available by libraries. This becomes so imperative that for any library to operate effectively now and in the future, such a library must provide Internet services as examined in this study considering the patronage by students of the Delta State University, Abraka, Nigeria.

Originality: It is recommended that students of university should patronize E-library to access the Internet and E-resources made available and nobody has carried out a study on this in Delta State.

Keywords: E-Library, Virtual Library, Digital Library, Delta State University, Nigeria

Paper Type: Report and empirical research.

Introduction

The emergence of Internet which has been a quick tool to information access and dissemination has brought about virtual library which offers information resources that are in electronic format. The availability of these electronic resources has much influence on libraries this is because researchers consult more journal articles on the net more often than the printed materials for data gathering. In this regard, for libraries to serve the users effectively in any academic environment, the library needs to operate a virtual library. A virtual library is an electronic library, a library without a wall but a library with computers that keep the library holdings in electronic formats.

Virtual library, e-library or digital libraries are the different concepts that are used to address collection of electronic resources. E-library houses electronic resources subscribed to, by the concerned libraries and also made available to users.

Delta State University is a state owned university with nine faculties namely Science, Arts, Social Sciences, Education and Basic Medical Sciences located at Abraka; Law and Engineering located at Oleh campus, and Agricultural Science with Management Science located at Asaba campus. Automation of the Delta State University library started 2002 where the then University Librarian, Deacon E.O. Ejiko in collaboration with the university management purchased 22 computers with a

server and a backup server. Snippet computer, Benin networked the systems and organized software training on the general use of Microsoft Office. Thereafter in 2003 Urhobo Progress Union, Canada branch purchased X-Lib (library software) to manage the library holdings. The X-Lib is made up of catalogue module, acquisition module, circulation module, report and administrative module. The administrative module handles the systems administration. In 2006, SLAM (Strategic Library Automation Management) was purchased by the subsequent Librarian, Dr. (Mrs.) R.B. Okiy to manage the library holdings.

The Delta State University E-Library was one of the agenda of the then Vice Chancellor, Prof Eric A. Arubayi, a visionary leader, who planned and established the first phase of the E-Library with over 100 computers fully connected to the Internet and made available to both staff and students which was commissioned by the then governor (Dr. Emmanuel Eweta Uduaghan) of Delta State on March 1, 2012. In the same vein, a second phase has 50 computers supported by federal government through Universal Service Provision Fund (USPF) that is specifically

established to have access to the National E-library and to share in the provision of millions of e-books, e-journals which are empowered through the link to upload globally the internal information resources that ease access and dissemination of information resources electronically worldwide. In all, the Delta State University Library has 160 computers which consist of 56 laptops, 44 desktops and additional 50 desktop computers at the E-Library extension unit within the library. They are for university staff and students use while 10 are for the library staffers' use in their various offices.

The establishment of the E-Library has brought great good news and image to the University as the existence of the E-Library has made the University had full accreditation in almost all the academic programmes in the University. The two programmes that had partial accreditation were not facilities related challenges. In this regard, e-library has made the University proud as the National University Commission (NUC) in 2012 as university report indicated this in her 2012 bulletin.



Figure 1: Delta State University, Abraka – Electronic Library Unit (September 2012).

In the E-Library, there is access to Internet by both staff and students of the university. The staff and students have access to resources on the net with special access to some resources (databases) such as eGranary that provide information resources in several disciplines. There is Hinari, a medical database that is mainly used by medical students. There is

access to Ebscohost as subscribed to by the university library, offered by the National University Commission. There is also access to Jstor database but needs renewal due to change in IP address of the server.

1. Ebscohost - It also contain electronic journals of different fields of studies.

To logon: Use the URL:
<https://search/ebSCOhost.com>

User id : ns122727

Password: xxxxxx

2. Hinari- It is a medical database that contains collections of medical resources.

Use the URL :
<http://www.who.int/hinari/en>

User ID : NiE167

Password: 10637

3. JSTOR: The Library has equally been registered with the JSTOR as an institution

Use the URL : <http://jstor.org/>

You can logon to the JSTOR as a staff / student of Delta State University, Abraka Nigeria through:

Login as staff /student of participating university using Delta state University, Abraka, Nigeria

OR You can also create MYSTOR account to enable you access JSTOR and then:
 Browse by discipline

What is a Virtual Library?

The term has been defined by many people in different ways. It is a library in which the holdings are found in electronic stacks. It is a library that exists without any regard to a physical space or location. It is a technological way to bring together the resources of various libraries and information services, both internal and external, all in one place, so that users can find what they need quickly and easily Riccio (2001). Sounds great, right? Well, the virtual library also has its drawbacks and limitations. Schuyler makes this point very clearly with his definition of the virtual library. He likens the virtual library to a popsicle, stating that if the electricity goes off, the cold goes away - and so does the popsicle, leaving a soggy smear on the shelf where something substantial once resided. The virtual library suffers the same vulnerability and the same precarious existence Schuyler (1998)

However, when they work, virtual libraries can be very useful and very diverse in what they contain. The options for what they can include are virtually endless, and become more and more boundless as technology advances. Some

of the content of a virtual library may include, but certainly is not limited to, CD-ROM, Internet subscriptions, lists of annotated web links, internal work products (such as brief banks), proprietary databases (such as LexisNexis or Westlaw) and even web spiders or push technology that deliver targeted research to the user. (2001)

Advantages of Virtual Library

There are numerous advantages of going virtual, these includes:

- It saves time and reduces the physical space taken up by library materials.
- It often adds enhanced searching capabilities in a digital format.
- The library materials are available at the user's desktop, regardless of the physical location of the user.
- It allows the inclusion of materials only available on the Internet or in digital format.
- It provides the user with the capability and opportunity to download and manipulate text.
- It often allows for multiple, concurrent users.
- It eliminates the problem of a book missing from the shelf as user does not borrow books.
- It is less labor intensive as the provision is online.

Although a virtual library does not require as much time as the library staff that files and shelves yet it takes a lot more time from a librarian, especially the systems librarian, to learn how to install, maintain, use the virtual library, the software and databases associated with e-library.

Disadvantages of Virtual Library

With advances in technology, publishers are working and trying to erase the disadvantages of

E-library, however the disadvantages include the following:

- Every database has its own distinct user interface.

- Users need to remember different passwords for different databases.
- The scope of coverage and available archives are often limited.
- There are often difficulties with downloading or printing especially when the files are big or the system is slow or of lower grade.
- Often there is no cost savings, especially when both the virtual and print database are maintained.
- Everything is NOT available in digital format hence the need for digitization.
- There are restrictions, which vary from vendor to vendor, on how the database can be used.
- The virtual library relies on power and computer networks in order to be available for use so without regular light E-library cannot function properly.
- Users cannot spread everything out in front of them and use it all at once. However many window pages can be opened at once although it reduces the speed of processing.
- Users are most comfortable using physical books but online service is better appreciated.

In this era of digital resources, the librarians are most useful, assisting users at figuring out when to stop and how to separate the good information resources from the bad.

Development

In the process of establishing virtual library, there are stages of development that are involved in creating the virtual library, or converting portions of a traditional print library into a virtual library, which can be broken down into seven areas as reported by Roccio (2001):

- The decision-making process
- New training and skills for library staff
- Installation and testing / digitization and uploading of the library resources
- Creating a structure for organizing and accessing materials
- Marketing and promoting materials
- Training users
- Evaluation and reevaluation

The last three are actually a continuous loop. With new users constantly coming and going,

and changes and upgrades being made to the products, marketing, training and evaluating is an ongoing process which helps to build and enhances the services of systems librarians.

Decision-Making Process

The first stage - the decision-making process - is not the same for everyone or every library management. There are three distinct decision-making processes that exist for three distinct groups:

- Users
- Management
- Librarians

Users come at the decision-making process with questions such as:

- Can I use the virtual library like I use the books?
- Can I use the virtual library like I use online databases?
- Do I need to remember a password?
- Can I download and print things easily?
- What is the cost, if any, to the client?
- Will the library still retain the product in print?

Management, on the other hand, sees things quite differently, probably asking questions like:

- How much library space will this allow us to eliminate?
- How much will the e-library cost, compared to the books?
- Can we not just replace all the books with what's on the Internet?
- How much will it cost to subscribe to the net regularly?
- How much does it cost to maintain the E-Library

These are the questions that get posed to the librarian which they are probably used to hear and answer. It is therefore the library management role, to educate institution management and users about what the virtual library means for them. This is much different from what it is for management. For management sometimes, it is a stream of e-mails or phone calls to vendor support, contract negotiations and technical problems but to management that has vision for E-Library it is much more than what people say about it but

an opportunity to equip the library for better information technology skills acquisition and effective electronic information management.

The first question to ask is about the scope and quality of the content. Does the electronic resource fit within the library's existing collection development policy? Is the electronic library providing more (or, in some cases, less) than its print counterpart? What kind of archives is available? Once the scope has been determined, then what about the content? How often is the information updated? Is the content maintained by the vendor or another third party? Finally, a question that I think has been asked but, so far, not many vendors are answering, is what about usage statistics - can you provide detailed usage statistics for evaluation purposes? Holly M. Riccio, (2001)

Secondly, the issue of the ease of use of the resources should be taken into consideration. What kind of help or documentation does the vendor provide for the product? Do they provide printed manuals, online tutorials or toll-free support lines? Are there passwords easy for users to know or remember? Are there different

Analysis and Discussion of Data Collated

The Table 1 above is the analysis of the students of the Delta State University usage of the E-Library based on level of study of students. For the first six months of utilization of the E-library unit after the commissioning in March 2012 when so many students were having lectures, others preparing for examinations and they were not aware fully. In the month of March 2012, 72 students used the E-Library, in the month of April 158 students used it while in the month of May 187 students. Similarly, in the month of June 275 students, in the month of July 410 students while in the month of August 450 students used the E-Library. This gives a total of 1557 students that have used the unit for the period where awareness is not prominent among the students

passwords for each user, or just one for everyone? Does the information resource allow end-user customization? What kind of searching capabilities does the virtual library have? Can searches be modified, saved and rerun? Can the information be browsed as well as searched? Can users print and download documents easily? Can copies be made and disseminated? If so, are there limitations on how they can be disseminated? Can a copy be printed out and saved in the library's archives?

Cost of the E-Library is the third issue but certainly not the least. The question is not just "How much does it cost?" The question comprised of many other specific questions that are all related to the actual overall cost of the E-library project. Does the vendor have a minimum number of users you need to have in order to subscribe to databases? What is the cost for adding users? Can you add single users, or do you have to add users in predetermined increments? Will this require any additional computer hardware or software upgrades? Does the library staff need training to learn new skills? Holly M. Riccio, (2001)

due to examination and the fact that they were occupied with lectures.

Discussing the patronage by level based on the sum and the standard deviation reported, the study revealed that the 400 level students used the E-Library more than any other level; this is indicated by the total of 795 students of the 400 level with 78.9 standard deviation reports which ranked the 1st in the usage of the E-Library. In the same manner, 300 level students ranked 2nd with total of 372 students and 36.2 standard deviation. Similarly, 100 and 200 levels students ranked 3rd with 139 each while the 500 level and 800 level ranked 5th and sixth position respectively. Therefore for the first phase of this report, it indicated that the 400 level students of the Delta State University, Abraka utilized the E-Library for research than the other levels of students in the University.

Table II: Correlations of the relationship between the different users of the E-Library

Users	N	Correlation	Sig.
Pair 1 Year 1 & Year 2	6	.969	.001
Pair 2 Year 3 & Year 4	6	.717	.109
Pair 3 Year 5 & Postgraduate	6	.898	.015

The Table II above revealed that there is significant relationship between the year 1 and the year 2 students. The correlation value of 0.969 was obtained from the statistical analysis. In the same manner the correlation of the relationship between the year 3(300 level) and year 4 (400 level) shows that the students of

these two levels of study patronized the E-library much more than the year 1(100 level) & year 2 (200 level) students, and year 5(500 level) & the postgraduate (800 level) students. The year 3 and 4 students were much more involved in searching for information materials from the library Internet.

Table III: Analysis of Students Usage of the Delta State University E-Library by Faculty of Study

Total Number		Med/ Pharm.	Engineering	Science	Social SC.	Education	Arts
	March (No.)	0	0	40	12	15	5
72.00	% of Total Sum	0.0%	0.0%	5.2%	8.8%	4.3%	3.1%
	Std. Deviation	.	.	.	.	.	.
	April (No.)	10	10	54	21	35	28
158.00	% of Total Sum	13.0%	16.4%	7.0%	15.3%	10.1%	17.4%
	Std. Deviation	.	.	.	.	.	.
	May (No.)	10	8	95	24	25	30
192.00	% of Total Sum	13.0%	13.1%	12.3%	17.5%	7.2%	18.6%
	Std. Deviation	.	.	.	.	.	.
	June (No.)	10	20	160	20	30	35
275.00	% of Total Sum	13.0%	32.8%	20.7%	14.6%	8.6%	21.7%
	Std. Deviation	.	.	.	.	.	.
	July (No.)	5	3	170	30	192	10
410.00	% of Total Sum	6.5%	4.9%	22.0%	21.9%	55.3%	6.2%
	Std. Deviation	.	.	.	.	.	.
	August (No.)	42	20	255	30	50	53
450.00	% of Total Sum	54.5%	32.8%	32.9%	21.9%	14.4%	32.9%
	Std. Deviation	.	.	.	.	.	.
	(March-August)	77	61	774	137	347	161
Total	% of Total Sum	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Std. Deviation	14.838	8.400	81.511	6.824	66.740	17.452

The Table III above revealed that a total of 72 students used the e-library in the month of March 2012 when the e-library was just commissioned. 40 students from the Faculty of Science, 12 students from the Faculty of Social Sciences, 15 students from the Faculty of Education while 5 from the Faculty of Arts. In the month of April, 2012, 158 students used the e-library, 192 students used it in May, 2012 while 295 used it in the month of June. Similarly, in the month of July and August 2012, 410 and 450 students respectively used the e-library. The month of August recorded the highest number of students that used the e-library from the Faculty of Science with 255 students while the faculty of education came 2nd in the month of July with a total number of 192 students. From the Table III, it can be deduced considering the total number of students and the standard deviation based on the faculties. The faculty of science is ranked 1st with 774 students and 81.5 standard deviation while the faculty of education ranked 2nd with 347 total and 66.7 standard deviation. In the

same manner, faculty of Arts was ranked 3rd with total 161 students and 17.4 standard deviation while the faculty of social sciences was ranked 4th with 137 (6.8 standard deviation). The faculty of medicine and pharmacy ranked 5th and the faculty of engineering ranked 6th.

Conclusion

The role of e-library is so inevitable that the future of libraries worldwide is positively influenced by the level of utilization of e-resources made available by libraries, accessible and disseminated by users. This becomes so imperative that for any library to operate effectively now and in the future, such a library must provide Internet services, e-books, e-journals, etc. Therefore libraries worldwide especially in Africa nations must welcome this technological development and key into e-library provision and digitization of their old analogue information resources especially in Nigerian University Libraries.

Recommendations

Based on the findings of the study the following recommendations were made:

1. University students should patronize E-library to access the Internet and E-Resources made available vis and vis E-Library.
2. It is necessary for secondary school students for the purpose of Unified Tertiary Matriculation Examination (UTME).
3. The study reveals the advantages and disadvantages of going digital or virtual
4. Other universities in Nigeria should endeavour to establish E-library.
5. The government should equally help the institutions in training the staff properly and the training should be practically based on how to manage e-library.
6. The national database planned by Nigeria government and powered by Universal Service Provision Fund (USPF) should ensure the E-Resources proposed to be located at the National Library in Abuja that is to link other libraries in Nigeria through the E-Library should be feasible as the link has not function in the libraries concerned for instance Delta State University E-Library has not be accessing it.
7. Training and re-training of staff on E-Library should not be theoretical but should be practically based and should not be a project to make money from the government without impacting skills on the participants.
8. That Nigeria government should provide regular electric power supply without interruption for smooth running of automation and e-libraries in Nigeria.
9. IT staff should be sponsored for practical training in area of database management, network administration and configuration, CISCO equipment like modem and router installation, configuration and management.

References

- Archive of the Law-Lib Electronic Discussion, February, 1993, <http://lawlibrary.ucdavis.edu/LAWLIB/feb93/0061.html>
- Holly M. Riccio, (2001) Features - The Virtual Library - Past, Present & Future
Retrieved April 3, 2012 from <http://www.llrx.com/features/virtuallibrary.htm>
- Schuyler, Michael (1998). "The Virtual Popsicle: Online Libraries, Like Popsicles, are +Vulnerable to Power Failure," 18 Computers in Libraries 28 (February 1998).