



Final Report

Addressing the Information Needs of Nigerian Researchers, Scholars, and Students: A Planning and Training Program for MacArthur University Librarians, Phase II



Ibadan University



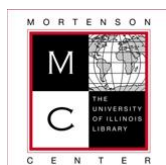
Port Harcourt University



Bayero University



Ahmadu Bello University



Mortenson Center for International Library Programs
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Introduction

In 2006, the John D. & Catherine T. MacArthur Foundation gave the Mortenson Center for International Library Programs at the University of Illinois a grant to provide professional development and technical assistance to four university libraries in Nigeria. This grant was one small piece of MacArthur's grant making strategy, which was focused on the institutional strengthening of four universities in Nigeria. The purpose of the grant was to improve the information and access to the information needed for the researchers and students at each of the universities. During this same period, the Carnegie Foundation also funded the Mortenson Center to work with two additional university libraries at Carnegie-funded institutions.

The MacArthur grant, as well as the Carnegie grant, was renewed in 2008 for an additional three years in order to build on key initiatives and ensure the sustainability of the universities' accomplishments. This report will document the last three years of work, will summarize some key elements of the journey, and will highlight the accomplishments of individual institutions and their emerging network.

The Mortenson Center team used a variety of strategies in this project:

1. assisted the university libraries select and implement a new automated library management system;
2. promoted access to valuable electronic resources;
3. planned professional development both in the United States and in Nigeria for staff from all four institutions
4. visited each institution an average of two times a year to discuss the status of the project and to assist with challenges.

The past six years have been an incredible journey with many successes, detours, and difficulties. What has been accomplished is due to the dedicated leadership and hard work of many Nigerian Librarians and staff. The support of the MacArthur and Carnegie Foundations had had a profound impact on these university libraries in Nigeria.

The Mortenson Center also emphasized the need for cooperation amongst the institutions and worked closely with the Nigeria ICT Forum of Partnership Institutions, and its respected director Dr. Aminu Ibrahim, to develop and support the ties between the institutions and with ICT staff.

Also, it is important to note the incredible assistance the Mortenson Center staff received from the staff of MacArthur office in Abuja, Nigeria. Without the wise counsel of Dr. Kole Shettima and the support of his competent and organized staff, this project would not have traveled as far as it has.

Mention should also be made of the support given to Mortenson Center activities by the Information Resource Center of the U.S. Embassy in Abuja and by the Nigerian Library Association.



Project Accomplishments

The main purpose of the project was to improve user access to research and scholarly materials at university libraries in Nigeria.

- Ahmadu Bello University (ABU)
- Bayero University (BUK)
- University of Ibadan
- Port Harcourt University (PH)
- University of Jos (Carnegie funded)
- Obefemi Awolowo University (Carnegie funded)

Activities were grouped under three main goals.

I. Implementation of a new library management system

- Increase the number of records in the library management system so that users can find and check out library materials
- Provide remote access to library holdings via the Web
- Provide remote access to electronic journals via the Web

II. Development of a more skillful and knowledgeable library staff

- Train library staff on technical standards, networking, systems administration, and library management
- Advocate for the creation and use of institutional repositories

III. Development of a resource-sharing network

- Develop and institutionalize a library network

I. Implementation of a New Library Management System

In 2006, when the first phase of this project began, two of the libraries were using a school library system that did not meet international standards and was barely functional. In addition all the institutions suffered from a lack of reliable electrical systems and had 2MB or less bandwidth to the Internet by institution. The two primary purposes of the new library system were to make library collections and resources readily available to the users, and, through its implementation and use, to help give staff the technical and organizational skills necessary to implement a virtual library. There have been several measurable achievements.

1. **Vendor selection was done as a group** by the university librarians. For the first time in Nigeria, the librarians were engaged in the selection and had a chance to review and select from three excellent library management vendors, Ex Libris, Sirsi/Dynix, and VTLS, after hearing presentation from all three vendors. The Mortenson Center has pre-selected the three vendors after they agreed to the following guidelines:
 - a. The software should be made available essentially at cost.
 - b. The company should be willing to sign a five year contract.
 - c. All software leasing and support costs should be front-loaded.
 - d. A support office should be established in Nigeria.

VTLS was selected. It is important to note that the vendor selection process was highly visible and genuinely transparent, two characteristics that were foreign to the university librarians. Frequent and clear communication was critical to making a final selection that all agreed with. The selection process served as a model for subsequent inter-institutional cooperation, and for much of the implementation decision-making that followed. Since the MacArthur grant started a bit after the Carnegie grant, the Carnegie directors took the lead in this selection but they quickly invited their colleagues to join and participate in the decision.

2. **Enlisting the support of University Administrators and Officials** was a monumental promotional task. Most of the university libraries were weak after years of benign neglect and did not have the recourses or the knowledge to support the requirements of a strong research institution. After many meetings and with early signs of progress, University Administrators and Officials were made aware and became supportive of the project, and subsequently became determined to find the resources and support needed for successful implementation.
3. **Signing contracts for both software and hardware** was the first hurdle of the journey. All the University Librarians worked together with VCs, DVCs, and bursars to get the contracts signed and the equipment purchased. It was the first visible sign that support for the project existed and was growing.
4. **A local support office for the VTLS company was established at the University of Ibadan.** The university librarians worked together with VTLS to determine the process of selection of both the individual to staff the office and the location of the office. Again, the entire selection was above board and transparent. Mrs.

Olayinka Fatoki, a systems librarian from the University of Ibadan, was selected and the office located at the University of Ibadan. The coordinator provides technical support and training, arranges VTLS user meetings, and manages two listservs that are hosted by the Nigeria ICT Forum

5. **Three institutions have made progress on converting their bibliographic records to the new system.** The conversion is hard work and slow-going: the library staff not only convert existing manual records into a standard electronic format, but they must also enhance those records to meet international standards, as well as put barcodes on the books and enter item-specific information on each bibliographic record so that books can circulate and their status and location will be visible online.
6. **Libraries are increasing their Web presence and providing better access to e-resources.** All the libraries provide better access to electronic resources and most do so through Web-based information portals. In three of the four institutions, the libraries have created a vibrant web presence through which resources are available on the Web. In the other two institutions, users must still be on the campus intranet to access library resources. At most of the institutions, faculty and students are making extensive use of e-resources.
7. **All four university libraries turn in monthly reports to VTLS documenting their progress and recording their challenges, most of them on a monthly basis.** The reports are such a departure from business as usual at the universities that getting them institutionalized and produced on a regular schedule came only after many hours of discussions and meetings. To the extent that libraries have normalized these reporting procedures, these reports are a very visible sign of accountability and perhaps one of the most convincing indications that the project will continue.
8. **Library and campus-wide networks have been created and strengthened.** In 2006, the network infrastructures of the libraries were primitive or non-existent. All the libraries have significantly increased both the capacity and reliability of their networks. At the same time, the campus ICT departments have made significant strides in laying fiber optic cable throughout the campuses and increasing intranet bandwidth capacity and stability.



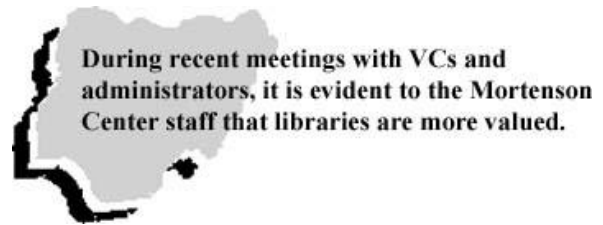
It is important to note that the vendor selection process was highly visible and genuinely transparent, two characteristics that were foreign to university librarians.

9. **The libraries have improved power reliability.** In 2006, the university libraries lacked power in the evenings and had only power sporadically, if at all, during the day. Over the years, the Mortenson Center team and the librarians advocated for reliable power, without which an automated system and Web resources are useless. Today all of the libraries have back-up generators which provide them with much more reliable power during working hours. (Note: It is hard to assess how the recent federal government's fuel policy might impact electrical service to the libraries, since they rely heavily on diesel-run generators.)
10. **All the libraries have access to significantly increased Internet bandwidth.** Here it is evident that the work of the Bandwidth Consortium (BWC) has had a very positive impact on universities and the librarians have been effective in convincing university administrators of their bandwidth needs. In particular the Nigeria ICT Forum has been a valuable partner in supporting the bandwidth requests of the librarians.

II. **Development of a More Skillful and Knowledgeable Library Staff**

1. **Librarians are more focused on the needs of their users and customer service.** The librarians are well aware that libraries feature heavily in the national ratings of Universities. They also are designing services that meet the needs of their users and responding to current trends in the field.
2. **All the libraries have dedicated library systems staff.** Library management systems and local area networks are complex and require constant attention and care. When this project began few of the institutions had staff members who were able to administer this new system or their library Local Area Network (LAN). That is no longer the case.
3. **Catalogers are up-to-date on international standards and connected to colleagues and databases around the world.** The cataloguing team is critical to the success of a new library management system. The team members input the content. The catalogers have learned to take advantage of the work of their colleagues around the world and often simply download records of materials that they own from other libraries. It is a cost-efficient and effective manner for moving the project along as quickly as possible.

4. **The librarians have project management skills.** The libraries that have been the most successful with the project all have strong project management teams led by skillful project managers. This approach is new to the librarians and they have taken well to the coaching that they have received.
5. **Librarians are taking the lead** during the Mortenson Center visits and on campus. In 2006, the Mortenson Center staff set agendas, coordinated the logistics of the visit, and determined the content of the training. In 2011, the reverse was true. The librarians set the agendas, decided on meetings and content of training, identified successes and challenges and engaged in very vivacious and interesting conversations about library-related topics. The librarians are much more self-confident, sure of their voices, and informed about how they will proceed and what they will need for support. And during recent meetings with VCs and administrators, it is evident to the Mortenson Center staff that libraries are more valued.
6. **Bolstered by the success of their efforts, librarians are turning to other projects, including institutional repositories.** Institutional repositories are a digital system for collecting, preserving, and disseminating the intellectual output of an university. Building such systems is an exciting step for librarians and their users and will soon create a mechanism for users around the world to locate and access the research work of faculty in Africa.



III. Development of a Resource-Sharing Network

The librarians from all six of the Nigerian university libraries implementing the VTLS system are participating in a robust network. Before the arrival of the library management system project the university library directors participated in a network, but it was not open to other staff members. The Mortenson Center staff wanted to develop a sustainable network among the staffs of the library. With the assistance and support of Dr. Aminu Ibrahim, it was decided to have the librarians participate in the annual ngNOG Forum meetings and workshops, which had previously been dedicated to the work of university, government, and private sector ICT units. This bold move, which built on an existing network outside of the libraries, had a profound and positive impact on the librarians and their communities.

At the first ngNOG Forum they attended, the librarians held a VTLS Users Meeting and recognized the need for regular meetings to discuss the project and share successes and

failures. Subsequent to this first meeting, the librarians decided to continue to meet on their own. They have met three times and the next meeting is scheduled for June 2012. Documents from their last meeting are in the appendices.

The ngNOG Forum also proved to be a great opportunity for librarians to meet with their ICT colleagues in a neutral setting. The librarian/ICT staff discussions at the Forum meetings resulted in better communications on most campuses. At the last ngNOG Forum gathering, the ICT Director of the hosting institution specifically mentioned the accomplishments of libraries in his opening speech. Strong relationships between the ICT units and libraries are a good harbinger of sustainable library projects.

As a result of their newly acquired expertise and self-confidence--acquired through Mortenson Center and Nigeria ICT Forum sponsored training and professional development opportunities-- many librarians at the MacArthur grantee institutions have provided professional development and technical assistance to their colleagues at other Nigerian universities.

1. Current Status of Library Project at Four MacArthur Institutions

Institutions	ABU	BUK	Ibadan	PH
Automated Library Catalogue	X	Only on Intranet	Launched but Not Functioning	X
Circulation	X			
Website	X	On Intranet	X	X
Access to Remote Resources	X	X	X	X
Institutional Repository	X		X	
Digitization Projects	X	X	X	



Ahmadu Bello University (ABU)

Kashim Ibrahim Library

The Kashim Ibrahim Library has a large collection. Since 2009, they have had an electronic catalog growth of over 568%. 36% of their materials have been barcoded, meaning the materials are ready for circulation. They have begun to implement the circulation module.

They have been successful and are a model for other institutions.

Audit Report as of December 31, 2011

Activities	Status
Size of collection*	489,024
Number of bibliographic records **	135,090
Percent of items in bibliographic format	27.6%
Percent of growth in bibliographic records since start of project	596%
Number of items barcoded ready for circulation **	164,689
Percent of items ready for circulation	36%
Circulation	2489 users registered. They are in negotiations with MIS on campus to get database of records of all students
Institutional repository	Reinstalling Dspace using UNIX is in pipeline; after reinstallation theses and dissertations will be uploaded
Electronic resources	See additional information in this section

Digitization of theses and dissertations	4000 digitized waiting to be uploaded
Power	Much improved but not always dependable

***This count has not been confirmed though a recent inventory**

****Please note that there may be only one bibliographic record for several copies of that same item, which explains why the number of bibliographic records is lower than the number of items barcoded.**

1. Statistics on the use of electronic resources in 2011

(a) CD – Search:

Table (a) i

S/N	CD Search Usage	Total
1.	Staff	24
2.	PG Students	141
3	UG Students	613

Table (a) ii

S/N	CD Search Resources	Total
1	Data on CD	35
2	Encarta	546
3	Britannica	131
4	Watchtower Library	47

(b) Virtua OPAC (online catalog):

(1) OPAC Search Statistics: 598366

(2) Vectors iPortal Connection Statistics: Total Portal Sessions 4456

(c) Online Resources (Hinari, Agora,etc.): 307 trained on the use of E-resources

(d) MTN Foundation Universitiesconnect

S/N	Faculties	Total Usage
1.	Administration	45
2.	Agriculture	404
3.	Arts	4696
4.	Diploma	396
5.	Education	6324

6.	Engineering	3118
7.	Environmental Science	1827
8.	Law	9
9.	MBA/PHD/MSc.	530
10.	Medicine	1149
11.	PG Students	200
12.	Pharmaceutical Sciences	284
13.	Sciences	6364
14.	Social Sciences	7106
15.	Staff	1
16.	Veterinary Medicine	130
17.	External Users	0
	TOTAL =	\$32,583

(f) Media and Public Relations:

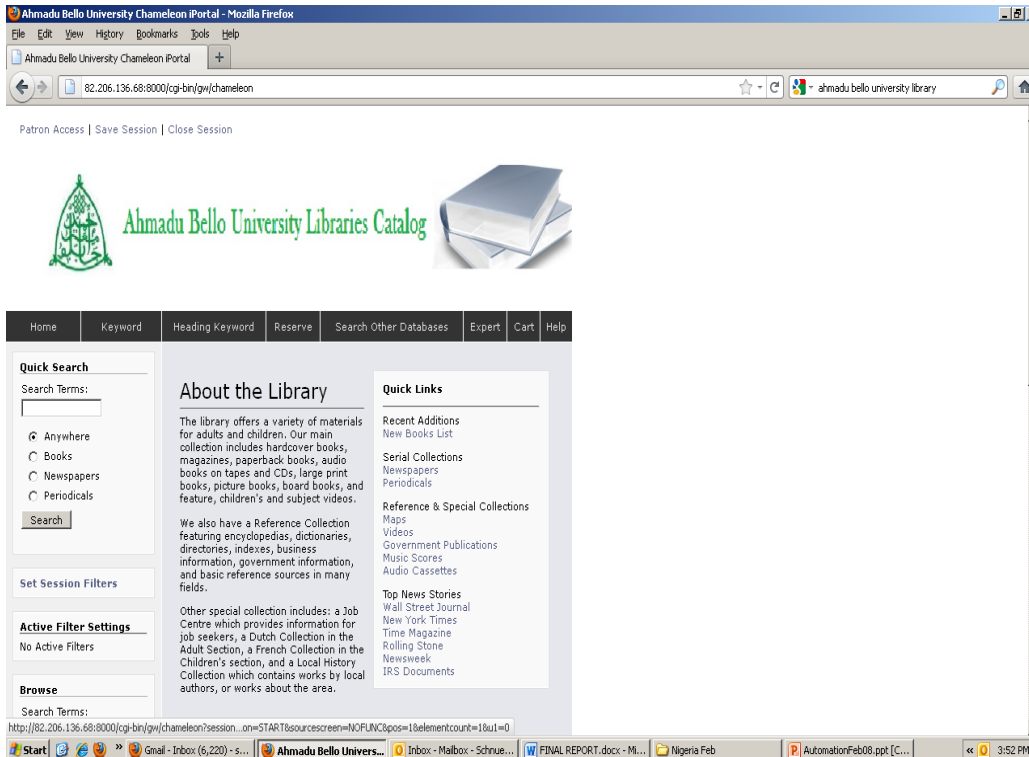
S/N	Services	Total
1	Special services to students on orientation	2101
2	Number of materials consulted	2872
3	DSTV: Number of users	24682
4	Photographic services	490



Launching of new library management system at Library in February 2010



Well organized library site



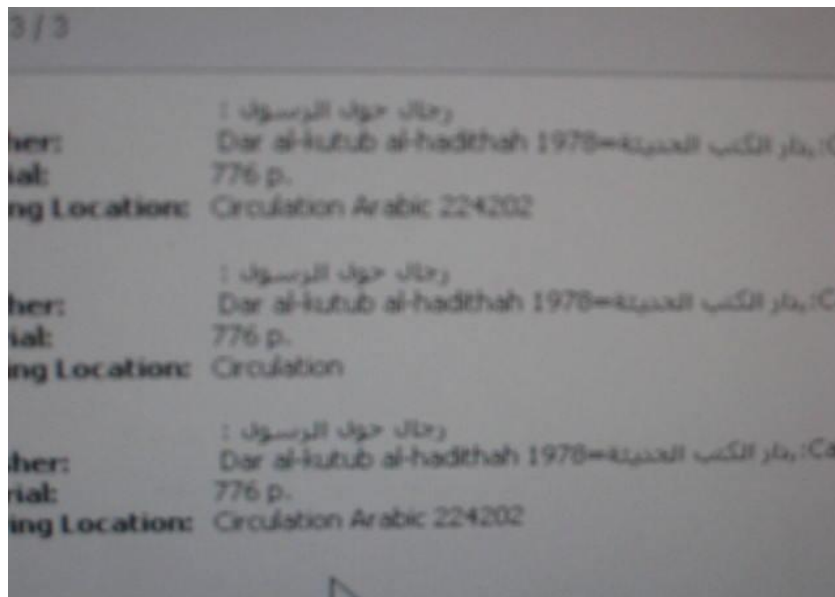
Users can access the library site remotely and search the library catalog.



Well organized, easy to access electronic resources, including links to online radio shows and local newspapers.



Promotion of library events and services.



Librarians using Arabic script to catalog materials.



Catalogers working on adding bibliographic materials to the library catalog.

Future Steps

The project management team is well organized. Because of the size of their collections and staff, they will need additional licenses from the VTLS company and are currently discussing the issue with the company. They want to add patron records to the library system and are finding that obtaining clean records from the campus Management Information Systems (MIS) has been challenging, but they hope to do so in the near future.

The staff of the Kashim Ibrahim library has done an excellent job with the project and they have been a model for the other universities. They have a strong library administrator, diligent and hard-working team manager and team members, and a dedicated and talented system staff. They also have a vibrant and heavily used library website.

They have a well-organized schedule for training librarians and staff who are not located in the main library. The training, which started in January, is due to geared for all satellite and departmental librarians.

ABU has hosted two out of the three User Meetings and shows an incredible dedication to building a library network. They have a very active and engaged electronic resources librarian and are actively promoting the use of these resources.

A new director will most likely be hired in 2012 and the continued success of the project will depend on strong leadership from that office.



Bayero University

Bayero University Library

The progress of the Bayero University Library on the VTLS project has been slow. They have an excellent and committed library systems team however there does not seem to be as strong a level of commitment in the cataloging unit. To succeed the catalogers need leadership, resources, and a plan. Bayero University Library has also been plagued by intermittent access to the Internet, due to changes in IP providers on campus.

However there are several other exciting developments at Bayero University Library. First of all they opened the new addition to the library, complete with two computer labs and a server room. They are also providing access to excellent electronic resources and the users are taking full advantage of the resources.

Audit Report as of December 31, 2011

Activities	Status
Size of collection*	233,950
Number of bibliographic records **	76,212
Percent of items in bibliographic format	32% however the library catalog can only be accessed through university Intranet, no access to Internet yet due to change in IP providers
Percent of growth in bibliographic records since start of project	1%
Availability of library catalog to the public	Waiting for IP address, only available on Intranet
Number of items barcoded ready for circulation **	1302
Percent of items ready for	1%

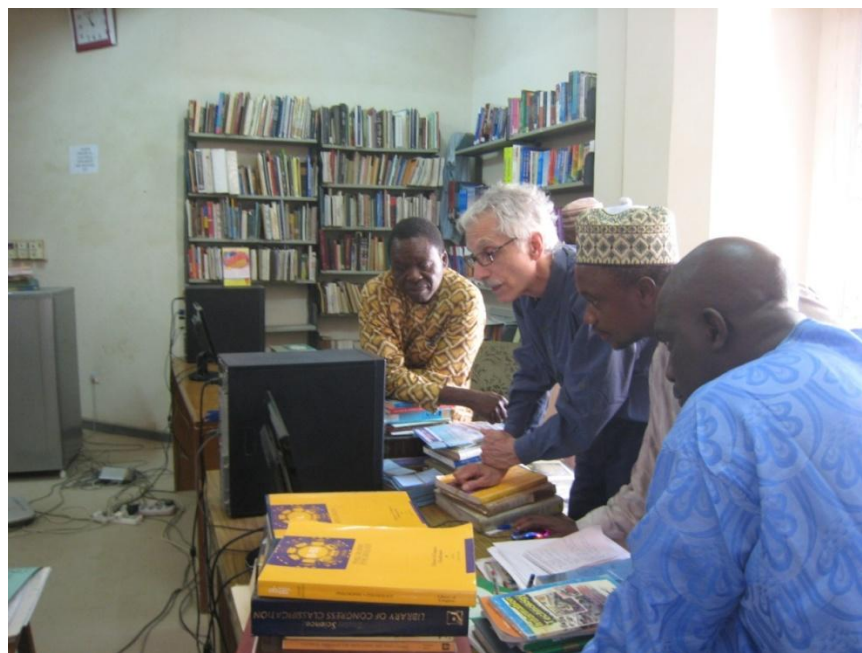
circulation	
Circulation	2026 patron records
Institutional repository	Have created a Dspace server for a JSTOR Arabic Digitization project
Electronic resources	Users take full advantage of the computer lab that offers access to electronic resources – in 2011 519 users did 4501 searches on EBSCO Host
Power	Power supply still erratic

***This count has not been confirmed though a recent inventory**

****Please note that there may be only one bibliographic record for several copies of that same item, which explains why the number of bibliographic records is lower than the number of items barcoded.**



Librarians in new computer lab used to access electronic resources.



David Dorman, from the Mortenson Center team, works with catalogers.

Future Steps

A new University Librarian has just started at the Bayero University Library. If he provides the needed leadership, then the librarians are ready to move forward. The top issues that need to be addressed are connecting the library server to the Internet and providing leadership and accountability for the Cataloging team. Right now the library catalog is not very useful to users. However, the electronic resources are up and running and provide support to those engaged in research.



University of Ibadan

Kenneth Dike University

Unfortunately there has been almost no progress on the project at the University of Ibadan. It is most disappointing since the VTLS coordinator is located at this university.

The new automated library catalog was launched in September 2010; however the few records that were available in the database did not have location information. Since then the system has been shut down due to server problems and no access to the Internet.

Recently Ibadan has signed an agreement with JSTOR to work on a digitization project.

Audit Report as of December 31, 2011

Activities	Status
Size of collection*	721,000
Number of bibliographic records **	No records have been added since 2009 – started with 59914
Percent of items in bibliographic format	5%
Percent of growth in bibliographic records since start of project	0%
Availability of library catalog on the Internet	Launched in fall 2010 but is currently not working, library is not connected to Internet
Number of items barcoded ready for circulation **	0
Percent of items ready for circulation	0%

Circulation	Not started
Electronic resources	Working on a project with JSTOR to digitize library materials
Power	More stable

***This count has not been confirmed though a recent inventory**

****Please note that there may be only one bibliographic record for several copies of that same item, which explains why the number of bibliographic records is lower than the number of items barcoded.**



New website but no connections to library catalog and few to electronic resources.



Reading room at the University of Ibadan Library.



Future Steps

Recent communication with the University Librarian indicates that he hopes to have the library connected by direct optic fiber to the ICT unit by April 2012, this would be great news. The VTLS server is currently down. VTLS is waiting for the server to be connected to diagnose and repair the problems.

Once the catalog is up and running the director predicts that it will be connected to their new library website at www.library.ui.edu.ng. He is also hopeful that the catalogers will soon start entering data into the library catalog.



University of Port Harcourt

Donald Ekong Library

There has been an amazing change at the Uniport Library and much to celebrate. They have a new library building, are connected to the Internet, have a stable power source, and have made great progress on the project.



Status of library building in 2005



Library in 2011

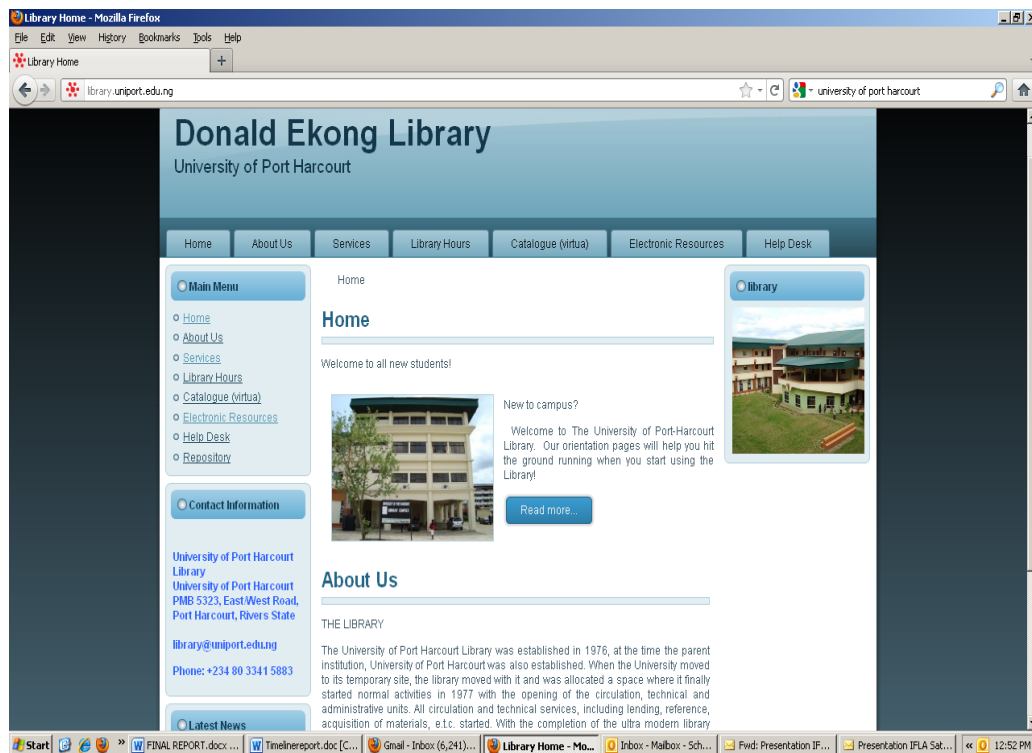
Audit Report as of December 31, 2011

Activities	Status
Size of collection*	92,000
Number of bibliographic records **	21254
Percent of items in bibliographic format	23%
Percent of growth in bibliographic records since start of project	401%
Number of items barcoded ready for circulation **	21254
Percent of items ready for circulation	23%
Circulation	Not yet started
Institutional repository	
Electronic resources	Classroom dedicated to electronic resources
Digitization of theses and	

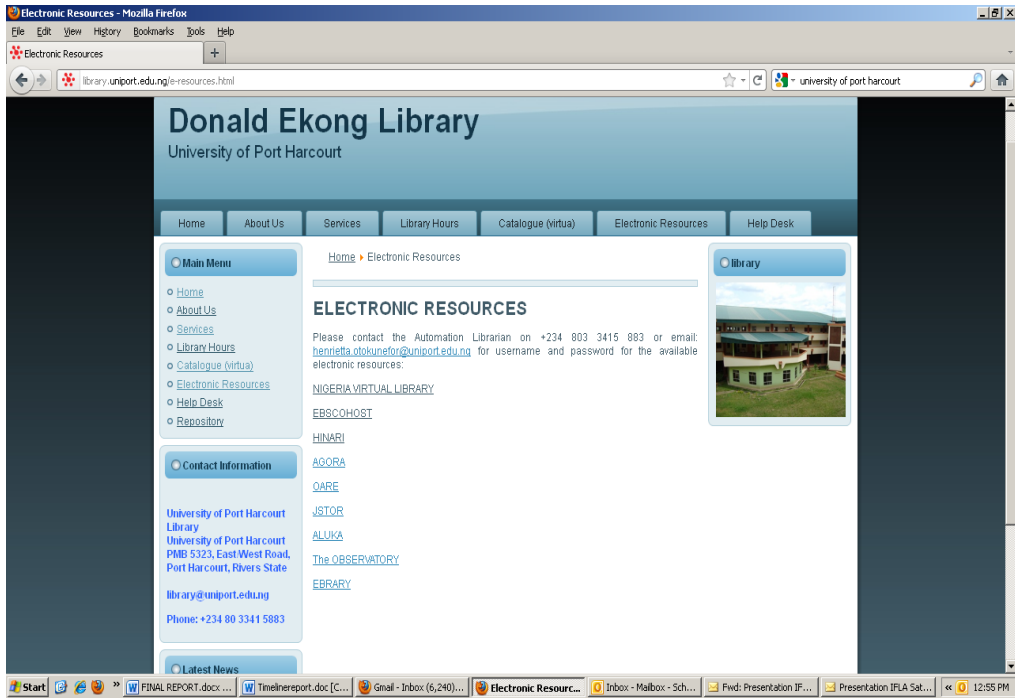
dissertations	
Power	Much improved

***This count has not been confirmed though a recent inventory**

****Please note that there may be only one bibliographic record for several copies of that same item, which explains why the number of bibliographic records is lower than the number of items barcoded.**



Robust website



Remote access to electronic resources.



Materials waiting to be input into the library catalog.



New classroom dedicated to electronic resources, funded by a grant from Elsevier.

Future Steps

There is a new Vice-Chancellor at PH who is very supportive of the library. There is also a new University Librarian, who along with a dynamic project coordinator, continues to push to finish the project.

The project team is currently working on loading patron data to be able to start circulation. While the growth of the catalog has been slow recently due to a strike, they now expect to grow the database as quickly as possible in the next months.

The project manager has just met with the University Grant Implementation Committee and has obtained permission to purchase items that were needed to move the library forward. She is confident that she now has the resources and the support to finish the project.



2008-2011 Professional Development and Technical Assistance Activities

1. Activity Statistics

Activities	Frequency	Number of Participants
European VTLS Users' Meeting	1	2
ngNOG Forums	3	32
Nigeria VTLS Users' Meetings	3	75 (estimated)
Mortenson Center visits and training	5	400 (estimated; met with many of the same group of people at each visit)
VTLS Training	1	12
Training Program at Mortenson Center in Illinois	1	7

2. Chronological Listing of Activities

2009

September

European VTLS Users Group meeting was held in Poland. Two library directors who were not able to attend in 2008 attended supported by MacArthur Funding. At a User Group meeting the participants hear about new updates to software and can also ask VTLS to accommodate some of their needs.

November

ngNOG Forum 2009 - ngNOG is a forum for cooperation and the exchange of technical information among operators of Internet-connected networks in Nigeria. In 2009 a track for librarians was established.

The Mortenson Center, with MacArthur funding, sponsored a total of nine librarians, the University Librarian, the Project Manager and the Systems Librarian from each of the grantee institutions, to attend the 2009 NgNOG Forum workshops held in Ilorin from 9 - 13 November. The Mortenson Center team, Susan Schnuer and David Dorman, attended the meeting and presented.

In addition to meeting with the grantee library attendees to discuss the Project, the Mortenson Center also organized a program for the librarians at the University of Ilorin to discuss automation issues.

The inclusion of the librarians at the ngNOG meeting was well received by all and the librarians asked to attend future ngNOGs.



Librarians from ABU at ngNOG.

2010

February

Nigerian Librarians held a **User's Group meeting in at OAU in Zaria**. Each institution was asked to start turning in monthly reports of their statistics.

ABU launches its new library management system.

March

Mortenson Center Site visit. The Mortenson Center team, Susan Schnuer, David Dorman were accompanied by Mr. Faisal Gali, library systems expert, from Bayero University. Each site had a two day visit to review the successes and challenges of the project. Mr. Gali conducted training on systems management.

June

VTLS user meeting held at Uniport. The meeting ran from June 1-4 and was well attended.

Training Program at the Mortenson Center in Illinois. Seven librarians from MacArthur institutions attended the Mortenson Center African Training & Technology Program at University of Illinois from June 18-July 14. They participated in workshops on Library Marketing and Customer Service, Project Management, Library Software Training with VTLS, and gained hands-on experience with evaluating, scanning, and configuring digital files for digitization projects. They also attended the American Library Association Annual Conference. (Complete List of Participants and Programs in Appendix)

October

ngNOG Forum 2010 - The Mortenson Center, with MacArthur funding, sponsored twelve librarians. In addition, David Dorman and a consultant attended the ngNOG to meet with librarians.

A **VTLS user's group meeting** was also held.

The Mortenson Center arranged for a number of donated O'Reilly books to be handed-out to participants of all six grantee institutions as well as to a large number of other participants and to the Forum secretariat as well. The titles were:

- a. Using Drupal, by Byron, Berry, Haug, et. al. (50 copies)
- b. Javascript: The Good Parts; by Douglas Crockford (25 copies)
- c. Learning XML, Second Edition; by Erik T. Ray (25 copies)
- d. CSS: The Missing Manual, Second Edition; by David Sawyer

McFarland (25 copies)

December

VTLS Training in Nigeria. The University librarians asked for additional training from VTLS on systems administration. The Mortenson Center arranged the training with VTLS and the VTLS officer in Nigeria, Mrs. Olayinka Fatoki. David Dorman, representing the Mortenson Center team, accompanied a VTLS programmer, Tony Stratton, to Ibadan where he taught the use of Linux and Virtual systems administration from Dec 6 -10. All the sites sent their systems administrators, two from each site.

2011

January & February

Mortenson Center Site Visits. The Mortenson Center team, accompanied by Mrs. Olayinka Fatoki of the VTLS office at Ibadan, visited each site to determine progress and discuss future steps.

September

A VTLS Users' Group meeting was held in Zaria. 25 participants attended. The agenda is attached in the appendices. The group decided to meet once a year with the next meeting scheduled for June 2012 in Obafemi Owolowo University.

The new library management system was launched at University of Ibadan.

October

Mortenson Center Site Visits. This was the final visit of the Mortenson Center team to assess progress and help determine future actions. A short report was sent to the University librarians and project managers after this trip. Reports are attached in appendix. All sites were visited.

ngNOG Forum Meeting 2012. The Mortenson Center, with MacArthur funding, sponsored eight librarians, two from each of the grantee institutions to attend the 2011 NgNOG Forum workshops at OAU. The Mortenson Center shipped two free O'Reilly book titles to OAU for distribution to NgNOG participants:

- 50 copies of Using Moodle, Second Edition by Cole and Foster
- 50 copies of Version Control with Git by Loeliger.

In the previous two NgNOGs, there had been a Library Track running in parallel with all the other tracks. This year the Mortenson Center recommended, and the NgNOG planning committee adopted, a schedule which called for the "library track" to be relegated to one day, Friday, so that during the first 4 days the librarians would join whatever track interested them. This was done to better integrate the librarians with ICT staffers.

A VTLS User's meeting was also held at the ngNOG.

December

The Mortenson Center team sent individual library final reports to all six Nigerian libraries. Reports are in the appendices.



Conclusion

The Mortenson Center team alternates between trepidation and confidence when thinking about the conclusion of this project.

During one of our numerous conversations with Dr. Aminu Ibrahim of the Nigeria ICT Forum he said:

“In Nigeria everything is possible, in Nigeria nothing is possible”.

In that short statement he captured the greatness of the country as well as its problems. During the past six years the Mortenson Center team has witnessed both sides.

Has the project accomplished all it set out to do?

The short answer is no. By the end of the sixth year, the Mortenson Center team hoped that libraries would have a much higher percentage of their materials available through their online public access library catalog. We hoped that users would be checking out materials. We hoped that libraries would have stable websites that offer access to the library’s collections remotely. We hoped for reliable power and sufficient bandwidth to support the effective access to remote e-resources. Ultimately, all this work is successful only when the users are able to take full advantage of the library’s resources.

The long answer is the libraries, and librarians, have come a long way since 2005. The change in the six Nigerian University Libraries using the VTLS system from 2005 to 2011 has been radical in spite of unreliable power, insufficient bandwidth, intermittent connections to the Internet, difficult procurement practices, changes in leadership, civil strife, and numerous strikes. While the project has not progressed as quickly as expected, it is still a successful project -- probably one of the most successful of library projects in the past twenty years in these six libraries.

The change in the libraries is physical, attitudinal, and technological. All four libraries have new or remodeled space. This outcome cannot be directly attributed to this project, but certainly other changes in the libraries encouraged university administrators to support physical changes, and the users are happy with the new facilities.

The librarians are no longer demoralized. They have developed many skills and have alternated between jubilation at successes and despair at delays or set-backs. But, they are clear about the need to provide better access for their users to the library's resources and they are well on the path to doing so. The librarians are now able to connect with international colleagues and participate in conversations about current library trends. They will soon be able to share the unique items in their collections with libraries around the world.

But, the real revolution has been with the introduction of new information technologies and the promise they hold for putting the right information into the hands of researchers and scholars when and where they want it. There are new fiber networks on the campuses and the librarians have been tireless advocates about the need for the library to be Internet-connected and for its servers to be up and running at all times. There are computer labs and wireless connections to the electronic resources. There are websites that provide entries into the library's resources. Digitization projects of locally-held materials are under way in most the campuses. Users are taking full advantage of the access to a variety of electronic resources. The libraries are no longer just a place to go and study; libraries are increasingly viewed as a critical link to getting the right information.

What will happen next?

There are many positive forces in Nigeria that can continue to drive the work being done in the libraries, including:

- Informed and supportive VCs and other university officials
- Ongoing support and encouragement from VTLS, an international company that wants to see the libraries succeed and will continue to provide local support and demand monthly accountability
- Librarians who are well-trained and determined to keep the project moving, as well as taking advantage of other library projects that will help them meet the needs of their users.
- Users who are watching the signs of progress with excitement and push for the librarians to move faster and faster.
- Library systems teams who have the capacity to run a library management system, support library LANs, and implement other technological innovations.
- Network of library professionals who regularly come together to share problems and discuss solutions.

- The support and encouragement of the Nigeria ICT Forum, which is committed to working with the librarians and will continue to host their listservs.
- A healthy sense of competition among the libraries that helps to encourage everyone to keep up with their peers. Monthly reports with statistics from all six sites are shared with everyone.
- A national rating system of universities in Nigeria that includes a section to evaluate the accessibility of library resources. This ranking system gives each institution a compelling reason for supporting library services.

There are also negative forces that can slow or stop the work, many of which are out of the control of the librarians:

- All the Academic staff members have just returned from an almost two-month strike. Historically such strikes are numerous, long, and cause great disruption on the campuses.
- Changes in library and University administrators can be difficult if the incoming administrators are not informed about and supportive of the project. Funding continuity depends on the active support of each new university leadership team.
- Civil strife continues to wreak havoc in the country. Completing the project would lose its importance if universities were faced with widespread devastation.
- Finding the financial resources to initiate and/or maintain library projects will be a source of difficulty both for the librarians and the campus administrators.
- Ongoing stable and reliable power and sufficient bandwidth to meet increased demand for library services and information.

Expected Milestones in 2012 and 2013

There are milestones in 2012 and 2013 that will be good indicators of the continued progress and future completion of this project. The monthly reports will continue to detail growth. In June 2012 the librarians are scheduled for another VTLS Users' meeting. In April 2013 the current contract with VTLS expires. The librarians are well aware of this deadline and have started to organize as a group for next steps, they will either need to renew with VTLS or to purchase another system and migrate their current data. If these milestones are met it will be a good indication that the project is vibrant and sustainable.

Future Role of the Mortenson Center

It has been a great privilege for the Mortenson Center to be part of this project. While we know that the time has come for the Mortenson Center team to pass leadership of this project over to the Nigerian librarians, where it rightly belongs, we will also miss the rich and wonderful interaction with our Nigerian colleagues.

We will continue to assist as possible from a distance. In fact, this summer the Mortenson Center is funding two systems librarians (one from BUK and the other from ABU) to attend the Mortenson Center program. These two individuals were invited to attend the 2011 program but could not due to visa issues. The Mortenson Center is funding all their U.S. costs to attend the program in 2012.

The Mortenson Center staff continues to monitor progress and communicate with the librarians. Some of the Universities want to continue the relationship with the Mortenson Center with their own funding. We will be open to discussing this possibility if offered.

Finally, we want to thank the MacArthur Foundation for giving us this unique opportunity to make a difference in Nigerian libraries. We have enjoyed the journey and have appreciated the incredible work that the MacArthur Foundation is doing in Nigeria.

APPENDIX I

Agendas from VTLS User Group Meetings

1ST VLTS Users' Group Meeting
Kashim Ibrahim Library, Ahmadu Bello University. Zaria
15-18 February, 2010

Agenda

Date	Activity	Location
Day 1: 15 February, 2010		ARRIVAL
Day 2: 16 February, 2010		
8:30- 9:00	<ul style="list-style-type: none"> ▪ Registration 	General Session Room
9:00- 9:30	<ul style="list-style-type: none"> ▪ Welcome and Introduction ▪ Opening Remarks- Prof. Z. Mohammed ▪ Nigeria/VTLS Project Report and News, Olayinka Fatoki 	General Session Room
9:30- 10:00	<ul style="list-style-type: none"> ▪ Talk: <i>Project Sustainability</i> – Dr. Benedict A. Oladele 	General Session Room
10:00- 10:30	<ul style="list-style-type: none"> ▪ Story so far...Update from the six Universities (5mins presentation) – <i>Project Managers</i> 	General Session Room
10:30- 11:00	<ul style="list-style-type: none"> ▪ Coffee Break / Informal Discussions 	
11:00 -1:00	<ul style="list-style-type: none"> ▪ Parallel Session 1: Groups I, II, III 	Breakout Room
1:00-2:00		Group Photograph / Lunch break
2:00- 3:30	<ul style="list-style-type: none"> ▪ Parallel Session 2: Groups I, II, III 	Breakout Room
3:45- 4:00	<ul style="list-style-type: none"> ▪ Coffee Break / Informal Discussions 	
4:00-	<ul style="list-style-type: none"> ▪ Parallel Session 3: Groups I, II, III 	Breakout

4:45		Room
4:45-5:00	<ul style="list-style-type: none"> ▪ Wrap-up 	Breakout Room
Day 3: 17 February, 2010		
8:30-9:00	<ul style="list-style-type: none"> ▪ Host Site Tour: <i>Server room, Cataloguing section, OPAC, etc - ABU Project Manager</i> 	
9:00-10:30	<ul style="list-style-type: none"> ▪ Practical Session 1 (by Group) 	Breakout Room
10:30-11:00	<ul style="list-style-type: none"> ▪ Coffee Break / Informal Discussions 	
11:00-1:00	<ul style="list-style-type: none"> ▪ Practical Session 2 (by Group) 	Breakout Room
1:00-2:00	Lunch break	
2:00-3:30	<ul style="list-style-type: none"> ▪ Group Presentations, Questions & Discussions – Mr. J. O. Aina 	General Session Room
3:30-4:30	<ul style="list-style-type: none"> ▪ Village Meeting – Mr. Michael Afolabi 	General Session Room
4:30-4:45	<ul style="list-style-type: none"> ▪ Wrap up – Dr. Adakole Ochai 	General Session Room
4:45-5:00	<ul style="list-style-type: none"> ▪ Vote of Thanks and Closing Remarks – Mr. Chris Ola 	General Session Room
Day 4: 18 February, 2010		

Group I - University Librarians

Group II - Project Managers/Systems Librarians

Group III - Cataloguers/Other Librarians

Agenda for Group Sessions

Parallel Session 1:

Group I: Overview of Virtua project, its conception & implementation – **Dr. M. Katsina**

Group II: Project management: issues & challenges; Server connection, security, providing access to users – **Mrs. Kofo Jagboro**

Group III: MARC tagging, standards and uniformity – **Mrs. Victoria Ajulo**

Parallel Session 2:

Group I: Automation issues, power supply & backup – **Dr. Benedict Oladele**

Group II: Backup, Providing access to satellite campuses, Profiling – **Mrs. Henrietta Otokunefor**

Group III: Data downloads from previous systems, Bibliographic tools e.g. Bibliofile, OCLC, Library of Congress online – **Mrs. Adetoun Oyelude**

Parallel Session 3:

Group I: Relationship between ICT and Library, eResources utilization, funding –

Dr. Adakole Ochai

Group II: Documentation, Online training, Local trainings, Global support – **Olayinka Fatoki**

Group III: Card catalog printing, spine label printing – **Victoria Ajulo**

Practical Session 1:

Group I: Group work – **Prof. Zakari Mohammed**

Group II: Data backup, daily routines, server management, tricks and shortcuts – **Adewale Adedokun**

Group III: Editing downloaded records, creating new records, Z39.50 server connection, Workforms, original cataloguing – **Glory Edet**

Practical Session 2:

Group I: Group work – **Dr. Adakole Ochai**

Group II: Group work – **Dr. Stephen Akintunde**

Group III: Group work - **Mrs. Victoria Ajulo**

Group Presentation Session (90mins)

Each group is to make a 10mins presentation to capture issues, challenges, wishes, thoughts, opinions, questions and comments from the sessions that would help the automation project in the different libraries. 30mins discussion/question time is allowed after all the presentation.

Village Meeting:

- Next Steps? System upgrades
- Next UG meeting – frequency, venue, dates, content/activities
- Maintenance/Support agreement for hardware
- Improving communication
- Mortenson Center visit in March
- Makerere University Library/ Bibliotheca Alexandrina Visit
- Backup options and procedures
- Trainings
- Floating Nigeria VTLS User group website

Zaria
19-23 September, 2011

Sessions Plan

	Time	Groups	Group Leaders
1	Day 1 11-1pm	Systems-Profiling Steps, Challenges and lessons Circulation – Patron registration and services; challenges and successes, conversion styles Cataloguing – Profiler Settings for cute OPACs; getting Item records ready for OPACs	Systems Staff/ Maryam Amartey Rhoda Wusa John Adoga
2	Day 1 2-4pm	Systems – Documentation – the good, bad and ugly Circulation – Location, Patron and Item records: A bundle Cataloguing - Database integrity, growth and speed	Systems Staff/ Maryam Amartey Rhoda Wusa John Adoga
3	Day 2 11-1pm	Systems- Routine Maintenance: Vital signs check and life savers Circulation - Online Public Access Catalogue (OPAC): My patrons and I Cataloguing – Copy cataloguing: how and where?	Systems Staff/ Maryam Amartey Rhoda Wusa John Adoga
4	Day 2 2-4pm	Systems - Infostation and rights to view Circulation - Getting ready for loans and defaulters Cataloguing – Original Cataloguing and Authority records: Doing the right thing	Systems Staff/ Maryam Amartey Rhoda Wusa John Adoga
5	Day 3	Systems – Thin Clients or how? Connecting Patrons to your	Systems Staff/

	11-1pm	<p>database</p> <p>Circulation - Working with the university for regular patron updates</p> <p>Cataloguing- Carrying Serials along</p> <p>Project Managers – Licensing issues, VTLS Global Support, Managing people, OPAC</p>	<p>Maryam Amartey</p> <p>Rhoda Wusa</p> <p>John Adoga</p> <p>Mohammed Tanimu</p>
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APPENDIX II:
Mortenson Center Training Program
Participants 2010

1. Participants

Aminu Shehu Liman – Ahmadu Bello University

Jamil Ahmad Umar – Bayero University

Uwem Ebong – University of Port Harcourt

Hilda Eno John – University of port Harcourt

Cecilia Adewumi – University of Ibadan

Olayinka Fatoki – University of Ibadan

Reuben Ojo – University of Ibadan

2. Activities

- Tour of the Eastern Illinois University Booth Library with descriptions of facilities, library services and workflows.
- Workshop on Library Marketing and Customer Service
- Attend American Library Association Annual Conference
- Leadership Training Workshops – Effective communication styles, creating productive work environments, determining areas for improvement, and fostering collaboration among colleagues.
- Workshops on Open Source Software, Effective Meetings, and Project Management
- Tour of the Book – Workflow of acquisitions and cataloging to see the various procedures for getting a new book into the catalog.
- Digitization Institute at the Illinois State University Library
- Tour of Abraham Lincoln Presidential Museum
- Tour of Amish Country in Arthur, IL
- Library Software Training with VTLS
- Tour of the College of DuPage Library, Naperville Public Library, and Parkland College Library

APPENDIX III:
Monthly VTLS Reports



Monthly Virtua Site Audit Report
(Due on the 25th of each month)

Date	25 th December, 2011	
Library Name	Kashim Ibrahim Library Ahmadu Bello University, Samaru – Zaria	
Location	Nigeria	
Virtua release	2009.3.3	
	Primary VTLS Contact	Information Provider [if not same]
Name	Mohammed Lawal Tanimu	Mohammed Habibu
Email	mltaminu@yahoo.com	sokowochin@gmail.com
Mobile phone	08039680410	08065163039
Total no of items in collection	489,015 current 489,024	

Catalog growth:

Type of records:	Origin: (+ date)	Last Month (as of the 25 th)	Today:
Bibliographic records	47401	132,787	135,090
Authority records	1934	2,813	2,876
Item records with barcodes	66897	161,296	164,844
Items without barcodes	Nil		
Patron records	1520	2,442	2,489

OPAC availability:

URL		
Status (mark your status in RED)	available	<i>If so, describe the reasons here</i>
	Available only in the intranet	<i>If so, describe the reasons here</i>
	Available on the internet http://192.168.180.5:8000/cgi-bin/gw/chameleon	<i>Since...</i>
Customizations (mark your status in RED)	On-going	<i>Describe plans and needs</i>
	Done	<i>Since...</i>

Circulation:

Checkout counts	Last Month: (as of the 25 th)	This Month:
	56	
Do you still checkout manually	Yes or No	<i>If yes, write here how many manual checkouts per month and describe your plan to reduce/abandon the manual transactions</i>

System and Maintenance:

Server Make:	Operating System:	Oracle Version:	Number of Staff User Licenses:
SunFire V245	Solaris 10	10g	20



Monthly Virtua Site Audit Report
(Due on the 25th of each month)

Backup schedule	Daily: ** Weekly: Monthly:	Last done: [25-12-2011]
Number of backup generations retained 10	Daily: ** Weekly: Monthly:	<i>Specify here location and media type</i> <i>In the Server room Tape Drive</i>
Test backup restore	Yes	Last done: [14 th September, 2011] By: [Amartey, Maryam Bologi]
Optimize keyword indexing	No	Script in use: Last done: []
Check server performance [memory use, free space, CPU use...]	Yes	Notes: df -h Prstat: 106 processes running, 608 lwps, load average 0.02, 0.02, 0.05 Vmstat: Swap - 14120072 Free - 5962480 [Load Averages and CPU usage] File System: /dev/md/dsk/d0 7.2G available 50% capacity mounted on / /dev/md/dsk/d6 357M available 98% capacity mounted on /usr /dev/md/dsk/d1 2.5G available 57% capacity mounted on /var /dev/md/dsk/d5 2.1G available 63% capacity mounted on /opt Memory Usage: swap -s 1907952k [used] 14047816k [free] Cd /usr/vtls/clas01/data Ls -alh Total 565028 Sm_tbl_01.dbf @ 226M Sm_tbl_02.dbf @ 227M Md_tbl_01.dbf @ 1.1G Md_tbl_02.dbf @ 1.2G
Check and remove Apache log file	Yes	Notes: Have a script in place that runs weekly which will keep the log for a month



Monthly Virtua Site Audit Report
(Due on the 25th of each month)

Check listener log file	No	Notes: Don't know where to look
Check and delete InfoStation log file	Yes	Notes: Have a script in place that runs weekly which will keep the log for a month
Delete InfoStation temp files	Yes	Notes: Is scheduled in a crontab to run weekly
Delete Vectors temp files	Yes	Notes: Is scheduled in a crontab to run weekly
Review Oracle alert log files	Yes	Notes: I have an idea of what goes on in the listener log file by tailing unto the last 500 lines of the alert_vtls01.log
Monitor batch jobs (i.e.: patron self registration tool)	No	Notes: Have not had a need to monitor any batch jobs

InfoStation / Statistics and Reports:

List of reports in use

Acquisitions:

In use	Yes or No	If No, give reasons here

Serials:

In use	Yes or No	If No, give reasons here

Major outstanding issues: (List all)

- 1.

Major upcoming challenges: (List all)

- 1.



Monthly Virtua Site Audit Report
(Due on the 25th of each month)

BUK20111229		
Date	29th Dec, 2011	
Library Name	Bayero University Library,	
Location	Kano – Nigeria	
Virtua release	2009.3.3	
	Primary VTLS Contact	Information Provider [if not same]
Name	Ibrahim Ahmed Bichi	Abdullahi M. Tukur
Email	ibrahimbichii@yahoo.com	mtm_abdullahi@yahoo.com
Mobile phone	08032844791	08039112133
Total no of items in collection	233,950	

Catalog growth:

Type of records:	Origin: (+ date)	Last Month (as of the 25 th)	Today:
Bibliographic records	76,000 (29.02.2011)	76,212 (29.11.2011)	76,212 (29.12.2011)
Authority records	-	1,055 (29.11.2011)	1,055 (29.12.2011)
Item records with barcodes	-	1,302 (29.11.2011)	1,302 (29.12.2011)
Items without barcodes		74,910 (29.11.2011)	74,910 (29.12.2011)
Patron records		2,026 (28.11.2011)	2,026 (29.12.2011)

OPAC availability:

URL	http://204.106.14.212:8000	
Status (mark your status in RED)	Not yet available	<i>If so, describe the reasons here</i>
	Available only in the intranet	<i>If so, describe the reasons here</i>
	Available on the internet	Since 21st Feb., 2011
Customizations (mark your status in RED)	Pending	Align Interface, Insertion of BUK Name and Logo. Direction of Chameleon to OPAC
	Done	<i>Since...</i>

Circulation:

Checkout counts	Last Month: (as of the 29 th) Nov., 2011	This Month: 31st Dec., 2011
	2,569	1,500
Do you still checkout manually	YES	



Monthly Virtua Site Audit Report
(Due on the 25th of each month)

System and Maintenance:

Server Make:	Operating System:	Oracle Version:	Number of Staff User Licenses:
T1000, X2200, X4200	Unix Sun Solaris 10	Oracle 10	20
Backup schedule	Monthly:	Last done: [date]	
	Daily:	Daily	
Number of backup generations retained	Weekly:	Specify here location and media type	
	Monthly:	LTO3 Tape	
Test backup restore	No	Last done: [date]	
		By: [name]	
Optimize keyword indexing	Yes	Script in use:	
		Last done: 31 st Oct 2011	
Check server performance [memory use, free space, CPU use...]	Yes	Notes:	
		31 st Oct 2011	
Check and remove Apache log file	Yes	Notes:	
		31 st Oct 2011	
Check listener log file	Yes	Notes: March 2011	
Check and delete InfoStation log file	Yes	Notes: 31 st Oct 2011	
Delete InfoStation temp files	Yes	Notes: 31 st Oct 2011	
Delete Vectors temp files	No	Notes:	
Review Oracle alert log files	Yes	Notes: 31 st Oct 2011	
Monitor batch jobs (i.e.: patron self registration tool)	No	Notes:	

InfoStation / Statistics and Reports:

List of reports in use	<ol style="list-style-type: none"> 1. No. of records 2. Item with barcodes 3. Authority recs
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Acquisitions:

In use	No	Have Not started using this module.
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Serials:

In use	No	Have Not started using this module.
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Major outstanding issues: (List all)

Major upcoming challenges: (List all)

1. Cataloguing
2. Customisation of OPAC



Monthly Virtua Site Audit Report
(Due on the 25th of each month)

Date	UPHL 20120125	
Library Name	Uniport Library	
Location	Port Harcourt, Rivers State, Nigeria	
Virtua release	2009.3.3	
	Primary VTLS Contact	Information Provider [if not same]
Name	Henrietta Otokunefor	Uwem Ebong
Email	hocotokunefor@yahoo.ca	Mewuebong03@yahoo.com
Mobile phone	+234 08033415883	+234 08037111142
Total no of items in collection	92,000 items	

Catalog growth:

Type of records:	Origin: (+ date)	Last Month (as of the 25 th)	Today:
Bibliographic records	Direct Data Entry/LOC	21,214	21,254
Authority records			
Item records with barcodes		9,661	9,712
Items without barcodes			Nil
Patron records		Not yet operational	

OPAC availability:

URL	http://libraryopac.uniport.edu.ng:8000/cgi-bin/gw_2009_3_3/chameleon	
Status (mark your status in RED)	Not yet available	<i>If so, describe the reasons here</i>
	Available only in the intranet	<i>If so, describe the reasons here</i>
	Available on the internet	October, 2010
Customizations (mark your status in RED)	On-going	
	Done	<i>Since...</i>

Circulation:

Checkout counts	Last Month: (as of the 25 th)		This Month:	
	None		None	
Do you still checkout manually	Yes or No No	<i>If yes, write here how many manual checkouts per month and describe your plan to reduce/abandon the manual transactions</i>		

System and Maintenance:

Server Make:	Operating System:	Oracle Version:	Number of Staff User Licenses:
	Solaris 10	10	22



Monthly Virtua Site Audit Report
(Due on the 25th of each month)

Backup schedule	Daily: Weekly: Not Operational yet Monthly:	Last done: [date] October 2011 by VTLS
Number of backup generations retained	Daily: Weekly: Not Operational yet Monthly:	<i>Specify here location and media type</i>
Test backup restore	Yes or No Not Operational yet	Last done: [date] By: [name]
Optimize keyword indexing	Yes or No	Script in use: @\$EXE_DIR/./sql/KeywordOptimizeOneHour.sql Last done: [date]: 25/10/2011
Check server performance [memory use, free space, CPU use...]	Yes or No	Notes: root@uniport1 # df -h Filesystem size used avail capacity Mounted on /dev/dsk/c1t0d0s0 14G 6.4G 7.9G 45% / /devices 0K 0K 0K 0% /devices ctfs 0K 0K 0K 0% /system/contract proc 0K 0K 0K 0% /proc mnttab 0K 0K 0K 0% /etc/mnttab swap 13G 1.4M 13G 1% /etc/svc/volatile objfs 0K 0K 0K 0% /system/object /dev/dsk/c1t0d0s6 14G 12G 2.1G 86% /usr /platform/sun4u-us3/lib/libc_psr/libc_psr_hwcap1.so.1 14G 6.4G 7.9G 45% /platform/sun4u-us3/lib/libc_psr.so.1 /platform/sun4u-us3/lib/sparcv9/libc_psr/libc_psr_hwcap1.so.1 14G 6.4G 7.9G 45% /platform/sun4u-us3/lib/sparcv9/libc_psr.so.1 fd 0K 0K 0K 0% /dev/fd /dev/dsk/c1t0d0s1 5.8G 5.7G 1.5M 100% /var swap 13G 32K 13G 1% /tmp swap 13G 40K 13G 1% /var/run root@uniport1 # vmstat kthr memory page disk faults cpu r b w swap free re mf pi po fr de sr s1 s3 s4 s5 in sy cs us sy id 0 0 0 14185944 7031048 58 167 707 0 0 0 45 55 -0 -0 -0 351 1944 1006 4 2 94
Check and remove Apache log file	Yes or No	Notes:
Check listener log file	Yes or No	Notes:
Check and delete InfoStation log file	Yes or No	Notes:



Monthly Virtua Site Audit Report
(Due on the 25th of each month)

Delete InfoStation temp files	Yes or No	Notes:
Delete Vectors temp files	Yes or No	Notes: Script giving me an error message. Pls help me figure out what am not doing right.
Review Oracle alert log files	Yes or No	Notes:
Monitor batch jobs (i.e.: patron self registration tool)	Yes or No Not Operational yet	Notes:

InfoStation / Statistics and Reports:

List of reports in use	Cataloger productivity Items Created List Number of Records in Database New Books List
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Acquisitions:

In use	Yes or No	<i>Configurations still in progress</i>
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Serials:

In use	Yes or No	<i>Want to concentrate on our bib records first. Serials will be done later.</i>
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Major outstanding issues: (List all)

1. Still doing our backup remotely by VTLS pending when our tape drive is replaced.

Major upcoming challenges: (List all)

1. New sets of local IP addresses were assigned to the servers by the ICTC Unit. We are trying to change the IPs on the client computers to reflect the change to enable cataloguing to continue.

APPENDIX IV:
2011 Final Reports Sent to Each Institution

AHMADU BELLO UNIVERSITY

December 2011

The cooperation between the Mortenson Center team, and the University librarian and his staff has been excellent over the past six years. Much has been accomplished and yet there are still challenges ahead. This short report, written by the Mortenson Center team after their last visit in October 2011, summarizes the successes, current challenges, and recommendations for the future. We hope that you will find it helpful.

SUCSESSES

- The library's effort to modernize its operations has the support of the Vice-Chancellor and other administrators.
- ABU has been a leader in developing cooperation amongst the six VTLS libraries by hosting 2 very successful VTLS user meetings.
- ABU staff have an excellent project management system up and running and many of the staff participate in very effective teams.
- The library has a talented and enthusiastic systems team.
- The catalogers are productive, efficient and knowledgeable, and are making good progress in retrospective conversion, they have great leadership. They have made plans to begin cataloging serials titles in November 2011.
- Wonderful progress has been made by the cataloguers in the numbers of items catalogued and barcoded and entered into VTLS.
- Cataloguers have started developing authority records.
- The OPAC is now available on the Internet for remote users.
- The library has gone live with circulation.
- The library has developed a sound strategy for dealing with inadequate server hardware support.
- The library now has continuous power.
- The University is in the final stages of laying fiber optic cable to all campuses and departments, and expects to fully transition from satellite Internet access in the first quarter of 2012. In conjunction with this coming transition, it is taking steps to procure a significant increase in Internet bandwidth at a much reduced cost per megabit than it is currently paying. Intranet bandwidth within the upgraded WAN will be 10 Gbps.
- The ICT Department is very supportive of the library's ICT needs and the systems staffs of the two units work very closely together.
- The librarians have organized many training for staff and users and have begun a very ambitious training program for all 82 departmental libraries.

CHALLENGES

- Most of the 45K+ Alice-for-Windows records that ABU loaded into the Virtua system lack subject headings and are incomplete in other ways. They need to be upgraded.
- The barcode scanners in the cataloging department are not functioning properly, so staff is manually keying in barcode numbers. This slows down item conversion and significantly increases the chance of errors.
- The library's effort to get patron records from MIS and load them into the Virtua system has stalled.
- Systems staff is trying to meet all staff needs while retaining control over the integrity of the database. This situation can, at times, lead to blockages for staff slowing down their efficiency. As everyone becomes more familiar with the new processes in the library we expect that these blockages will disappear.
- Staff and students that attempt to check out material whose catalog records have not yet been entered into the Virtua system are made to wait while the records are converted.
- Some circulation functions such as renewal and the counting of circulation statistics are not considered reliable by the circulation staff.
- The library is facing a shortage of user licenses and will identify funding to purchase additional Virtua licenses.
- Library staff do not have confidence that all, or even most, of the records entered into Virtua represent books that are still held by the library.????

RECOMMENDATIONS

- Crucial for all University Librarians to begin talks in early 2012 about strategies before the end of the VTLS contract in 2013.
- The library should give a high priority to repairing or replacing defective barcode scanners.
- The head of systems should write to its VTLS rep, expressing its desire to be more involved with solving software issues, and describing situations when the systems staff felt excluded from greater involvement.
- The Project Management Team needs to review system use policies (for example, assigning use accounts and the permissions associated with them), as well as Internet access policies, and come up with a set of guidelines that meet the needs of system staff, cataloging staff and circulation staff.
- The OPAC display should be reviewed for usability, and the display profile changed accordingly. For example, the call number and status do not display, and the database is named "Class 01".
- Circulation on-the-fly should be considered for material being checked out by students so that they won't have to wait to check out unconverted material.
- Renewal functionality and circulation counts should be closely monitored, and any problems documented, so that staff can get to the bottom of why these functions appear not to working properly.
- The PM Team need to closely and proactively monitor the process of getting MIS records loaded into Virtua.

- The library should undertake an inventory of one collection of converted records in order to get a sense of what percentage of those records represent missing materials.
- The University Librarian should consider attending and/or sending librarians/ systems staff to the European/African VTLS user group meeting every year.
- The University Librarian should support and encourage the attendance of librarians and library systems staff at the Nigerian VTLS User meetings given how important this consortium is to the success of the project at each institution.
- The University Librarian should support and encourage the attendance of library and systems staff at the annual NgNOG Forum.

BAYERO UNIVERSITY KANO

December 2011

The cooperation between the Mortenson Center team and the University librarian and his staff has been excellent over the past six years. Much has been accomplished and yet there are still challenges ahead. This short report, written by the Mortenson Center team after their last visit in October 2011, summarizes the successes, current challenges, and recommendations for the future. We hope that you will find it helpful.

SUCSESSES

- The library's effort to modernize its operations has the support of the Vice-Chancellor and other administrators.
- Strong cooperation amongst the six VTLS institutions.
- Upgrade of Virtua 2009.3.3 in operation.
- Regular training sessions for staff.
- The library successfully transferred 75,000+ bibliographic records from its discontinued library management system to the Virtua system.
- Item record conversion has begun.
- Beginning in April 2011, over 900 authority records have been entered into the Virtua system.
- The library has developed a strong systems unit of 4 staff that has acquired a great deal of expertise in networking, Linux/Unix, and the Virtua library management system.
- Backups are being done on a regular basis after acquisition of an inverter and tapes.
- An e-library classroom for training and workshops has been established in the library.
- Due to improved NEPA performance and the installation of a library-wide back-up generator, the library now has better power when classes are in session. But at times still suffers from a lack of power.
- The library has a building-wide LAN to which all computers in the library are able to connect.
- The university is in the final stages of migrating from a satellite Internet connection to a fiber optic backbone.

CHALLENGES

- Bibliographic record conversion has not progressed much beyond the initial load of Alice-for-Windows records, and item record conversion is proceeding very slowly.

- There are too few trained people working on retrospective conversion to enable the library to go live with the OPAC or the circulation module in the foreseeable future.
- Additional catalog training is needed.
- Morale appears to be low among the catalogers.
- Manual entry of patron records has begun in lieu of loading patron records from MIS faculty, staff and student records. These manually created records will at some point need to be merged with batch-loaded records from MIS.
- A test restore has not been attempted.
- There are longstanding Virtua software problems that have not been able to be addressed, and catalogers do not have access to remote libraries through the iPortal server, because the two library servers are not connected to the Internet.

RECOMMENDATIONS

- Crucial for all University Librarians to begin talks in early 2012 about strategies before the end of the VTLS contract in 2013.
- The VTLS project will not be considered successful until the OPAC and circulation systems are up and running:
 - Manual input of patron records should be halted and a high priority should be given to getting patron records batch-loaded from the university's MIS dept. This work should be done in collaboration with VTLS staff.
 - The OPAC will not be of much help to the users unless they can find the location of the items in the collection, if the new acquisitions are not in the system and a large percentage of the collection has not been converted
- More staff need to be assigned to retrospective conversion, and existing staff need additional training and documentation to fill in knowledge gaps in the following areas:
 - MARC/AACR2 cataloging standards and practices
 - Sources and access methods for copy cataloging
 - Use of the Virtua cataloging module
 - standard hardware and software troubleshooting techniques.
- Cataloging staff need clearly articulated goals and accountability for their work. VTLS reports can easily document the work that is being done on a daily or weekly basis.
- Staff doing retrospective conversion and new cataloging should be provided with Internet access for copy cataloging.
- A log should be kept of all hardware and software problems reported by catalogers to systems staff, indicating when they were reported and when they were resolved.

- A test restoration should be attempted so that the systems staff has confidence that a restoration will be able to be successfully accomplished in case of system failure or hard drive damage.
- The ICT Department should assign public IP numbers to the Virtua and iPortal servers as soon as possible.
- The university network should be reconfigured to allow all computers on the library LAN to also connect to the university WAN.
- A professional relationship of trust and accountability between the library and the ICT Department needs to be established.
- The University Librarian should consider attending and/or sending librarians/systems staff to the European/African VTLS user group meeting every year.
- The University Librarian should support and encourage the attendance of librarians and library systems staff at the Nigerian VTLS User meetings given how important this consortium is to the success of the project at each institution.
- The University Librarian should support and encourage the attendance of library and systems staff at the annual NgNOG Forum.

University of Ibadan

December 2011

The cooperation between the Mortenson Center team and the University librarian and his staff has been excellent over the past six years. Much has been accomplished and yet there are still challenges ahead. This short report, written by the Mortenson Center team after their last visit in October 2011, summarizes the successes, current challenges, and recommendations for the future. We hope that you will find it helpful.

SUCCESSSES

- The library, in conjunction with five other university libraries, selected the Virtua system and signed a five year implementation and support contract with VTLS.
- The library purchased the needed server hardware to operate the Virtua system.
- The software was successfully installed on the server.
- Over 40,000 bibliographic records created with the Alice-for-Windows program were successfully loaded into the Virtua system.
- The catalogers have identified the work they need to do to successfully convert the manual bibliographic records to electronic format and seem eager to do the work despite problems with their workstations, difficulty accessing the Virtua server, unreliable power, and a lack of project leadership.
- In the past the catalogers have successfully used Bibliofile for cataloging.
- The library received an \$8,000 digitization grant and is now actively digitizing library material.

CHALLENGES

- The Project has been without an acting Project Manager for an entire year, and the last Project Management Team has not held a meeting since November 2010.
- The Virtua server needs troubleshooting and configuration changes, but VTLS is unable to access the server because the server has not been assigned a public IP number, or alternatively, network address translation to provide the server with an internal IP number has not been configured.
- Library staff cannot access the Virtua server without going through the campus network, which at present is connected to the library LAN by wireless, which is slow and unreliable. This lack of direct access also requires every staff person to pay the University network access fee of ₦1,000 per month to do any work with the library management system.
- The library has not yet successfully loaded patron records from the University's MIS database into the Virtua patron database.

- Ibadan, like all the other MacArthur grantees, are seeking ways of funding the continued use of the Virtua system beyond April 2013, when the current support contract expires.
- The library needs to resume providing VTLS and the university administration monthly statistics on system use, including database growth, which has not been compiled since April 2011. When reporting is done, the library should base its statistics on use of the production database, rather than the test database.
- The OPAC is not currently functional.

RECOMMENDATIONS

- A Project Manager should be appointed and the Project Management Team should begin meeting regularly to provide the necessary leadership and coordination for implementing the Virtua system.
- The ICT Dept. should reconfigure the LAN/WAN relationship, so that library staff can access the Virtua server directly, without needing to be routed through the campus network.
- Library Systems staff, working with the ICT department, should strive to identify and eliminate all barriers to efficient retrospective conversion, including malfunctioning workstations, unreliable server access, and poor Internet connectivity.
- The catalogers, led by a strong leader, should be actively engaged in retrospective conversion and should be using the Virtua cataloging module on a daily basis.
- The library systems staff should work with university MIS and VTLS support to extract faculty and student MIS records for loading patron data into the Virtua system.
- The Sun Server/Solaris OS combination that the library selected as the Virtua platform has given rise to a number of challenges. When the time comes to replace those servers, the library should evaluate whether an Intel/Linux platform would be more to its advantage.
- The University Librarian should consider attending and/or sending librarians/systems staff to the European/African VTLS user group meeting every year.
- The University Librarian should support and encourage the attendance of librarians and library systems staff at the Nigerian VTLS User meetings given how important this consortium is to the success of the project at each institution.
- The University Librarian should encourage the attendance of library and systems staff at the annual NgNOG Forum

University of Port Harcourt

December 2011

The cooperation between the Mortenson Center team and the University librarian and his staff has been excellent over the past six years. Much has been accomplished and yet there are still challenges ahead. This short report, written by the Mortenson Center team after their last visit in October 2011, summarizes the successes, current challenges, and recommendations for the future. We hope that you will find it helpful.

SUCSESSES

- The Library enjoys strong support from the current Vice-Chancellor and other administrators and they are encouraged by the progress of the library.
- The library has a solid and knowledgeable systems team of three people who have grown in competence and responsibility.
- The catalogers have become familiar with MARC cataloging standards and practices and are making steady progress converting their bibliographic and item records.
- The ICT Department is supportive of the library's ICT needs and the systems staffs of the two units work well together.
- The library has been an active participant in the Nigerian VTLS Users Group meetings.
- The university has expanded Internet bandwidth to 6Mbps.
- The library has been enjoying a better power supply.

CHALLENGES

- The library is relying on VTLS to do backups remotely because the tape drive is broken.
- The ICT Center experiences power fluctuations and frequent power outages, and does not have adequate power regulation or power back-up equipment to prevent equipment damage and frequent power loss. The ICT center cuts off the power and closes down at 6:00 p.m. every evening.
- Library Access to the campus network and the Internet is slow because a main switch at ICT failed and its back-up is inadequate. ICT does not want to invest the \$100K a new switch will cost until it has adequate power regulation to prevent equipment damage.
- The speed of retrospective conversion is inadequate for full OPAC and Circulation implementation in a timely manner.
- The library has not resumed circulation since it moved to its new building.
- Internet bandwidth is still expensive.

RECOMMENDATIONS

- The Project Management team should meet and monitor implementation progress on a regular basis.
- Replacing the defective backup tape drive and resuming regular backups should be a high priority.
- More staff time and focus should be devoted to bibliographic and item conversion and a timetable for OPAC readiness and readiness to circulation should be established. The bibliographers seemed not to be as engaged with the project as during the previous visit. It might be worth the effort to better understand how to encourage higher productivity.
- A campus-wide fiber optic backbone would be of great benefit to the library as it seeks to deliver information and resources remotely.
- Circulation should resume as soon as possible, both to better serve the campus community and to gauge the library's readiness to begin circulating via the Virtua system.
- The library systems staff should work with university MIS and VTLS support to extract faculty and student MIS records for loading patron data into the Virtua system.
- The Sun Server/Solaris OS combination that the library selected as the Virtua platform has given rise to a number of challenges. When the time comes to replace those servers, the library should evaluate whether an Intel/Linux platform would be more to its advantage.
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