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Emerging Challenges to Effective Library Automation and An E-Library: The Case of Emmanuel Alayande College of Education, Oyo, Nigeria

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Abstract

This paper discusses the library automation and e-library project of Emmanuel Alayande College of Education, Oyo, Nigeria. It examines the evolution of the college, the planning process and the implementation of library automation and e-library/Internet facilities. The paper looks at different phases to which the project was divided and provides a detailed overview of how each phase was designed and executed which can help librarians make decisions about automation and e-library projects. Few of the challenges encountered are highlighted and solutions proffered.

Keywords: College libraries; library automation; e-library/Internet; software package, information and communication technology (ICT).

Introduction

Emmanuel Alayande College of Education, Oyo is one of the foremost teacher colleges of education in the Nigeria. It was formally established as a Grade II Teachers' College by the Church Missionary Society (CMS) in 1896. The College was upgraded to a campus of the Oyo State College of Education, Ilesa in 1980. The College gained full autonomy as a full fledged College of Education in October, 1985. The College was renamed Emmanuel Alayande College of Education Oyo in 2000. The College has consistently been expanding its activities and programmes to meet the contemporary teacher personnel needs of the state. The College presently metamorphosed to degree awarding institution engaging in not only regular Nigerian certificate in Education NCE and bachelor degree in education programmes but also sandwich part-time programmes.

The College library was established in 1982 to be the hub of intellectual excellence in support of teacher education in the college. The College is reputed to be the oldest and best teacher training institution not only in South West, Nigeria and indeed the entire country with about 25,000 students. The college library has a total collection of about 30,000 volumes of books, comprising text and reference books, journals, magazines, newspapers, conference proceedings, mimeographs, research projects etc. It operated a centralized library system. For more than three decades of its existence, the college operated a manually-driven routine services of acquisitions, information processing, classification, storage, retrieval and circulation. However, in the last five years, the college library started preparing for automation and e-library service to conform with the world prevailing Information and Communication Technologies (ICT) demand. It is in the light of this, that this paper discusses the efforts of the library in preparing for library computerization which involves library automation and e-library/Internet services. The paper describes

the preliminary planning process for the installation of e-library/Internet facilities and library automation. The paper also looks at the emerging challenges therefrom.

Government Efforts in Computerization of Tertiary Institutions in Nigeria

Colleges of Education unlike Polytechnics and Universities did not attract government funding and recognition in the area of computerization drive. State owned colleges of education further suffered funding neglect occasioned by poor funding posture and low financial strength of the state government nationwide. University library computerization in Nigeria has been in the pipeline since 1970s, although concerted efforts began in the late 1990s (Abubakar, 1971). The need for library automation and computerization with Internet facilities as instrument for intellectual development is highly appreciated at university level. Nok (2006) notes that university library automation in Nigeria started in late 1980s and were at various stages of automation of library services. National University Commission (NUC), a federal government agency that supervises and disburses fund to all the federal universities in Nigeria made giant stride by initiating projects aimed at computerizing university services across the country. Efforts at computerizing university have taken different approaches and dimensions. At a stage Management Information System (MIS) and Nigeria Universities Network (NUNET) projects were initiated. This was followed by Nigerian virtual library project for higher institutions which was sponsored by United Nations Educational Scientific and Cultural Organization (UNESCO) in 2003. This project was to exploit Information and Communication Technologies (ICT) application in dispensing library services for academic development.

There is therefore a wide gap between level of automation and computerization of university libraries and college libraries in Nigeria. Unlike the known efforts of the NUC in computerizing university libraries, little or no effort is made by the National Commission for Colleges of Education (NCCE) along this direction. NCCE is the regulatory body for all colleges of education nationwide. Assessing the level of development of library automation and virtual library in colleges in four tertiary institutions, Gbadamosi (2011) notes that library automation and virtual library are yet to be given adequate attention they deserve by various institutions. Though, it is hereby noted that the Federal Government through the National Communication Commission (NCC) under Millenium Development Goals Programmes (MDGS) initiated computerization projects to cover colleges of education nationwide. This project was poorly executed.

Literature Review

The emergence of information communication technologies (ICT) have revolutionized access to information for the business world, education, intellectual development, recreational and sport as well as social development. Ogunsola (2004) lists information communication devices to include e-mail, world wide web, file transfer protocol (FTP), urnet and telnet. Libraries all over the world have benefited tremendously with ICT initiatives and applications thus changing the traditional ways of library operations. These ICT initiatives are made possible through digital technology. According to Kennedy and Davis (2006) digital technology is of importance when information is to be gathered, store, retrieved and evaluated. In order to bridge the gap between traditional and modern methods of information storage, retrieval and provision in digital age Nkanu (2010, p. 2 of 16) submits that the use of ICT in library operations must be seriously emphasized.

Full integration of digital technology or e-library into the library operations would bring about effective utilization and dissemination of information to users. In this wise, information accessibility will not be restricted to a physical location. Nkanu (2010, p. 3 of 16) notes that digital library (e-library) is a library that stored information electronically and made accessible to users through electronic systems and networks, but having no single physical location. In this case, library has an existence in virtual reality or a bookless space. E-library according to University of Manitoba (2006) refers to all the library resources that are available online through computers and databases. A digital library according Raval (2005) is regarded as computer-based information system for acquiring, storing, organizing, searching, distributing and displaying digital materials for end-user access not necessarily network-based. Reza (2006) citing Borgman 1999 describes digital libraries as a set of electronic resources and associated technical

capabilities for creating, searching and using information. They are an extension and enhancement of information retrieval system that manipulate digital data in any medium (texts, image, sound or dynamic images).

Nigerian libraries are enmeshed in traditional methods of acquiring, storing, preserving, disseminating and utilization of information. The changing trend in digital age has made it imperative for Nigerian libraries now to develop ways on how to manage access materials in electronic format and effectively share them, since the digital age has provided a platform on which they have to share their resources (Nkanu, 2010 p.4 of 16). Most Nigerian libraries suffer from work inertia to an extent that library personnel are reluctant to changing over to computer device applications to their operations.

Nigeria libraries have to catch up with opportunities offer by the (ICTs). The development of Internet in the digital age provides countless ways of accessing and using libraries electronically in respect of service delivery, information acquisition, census, processing and selective information and knowledge management. It must be noted that the revolution in ICT infrastructure in computerized environment is changing the posture, level and depth of interaction between librarians and clientele. It is now enhancing affordable access to easy information retrieval as well as enabling libraries to cooperate with one another. According to series of researches carried out on the use and users of electronic library resources Tenopir (2003) observes that libraries in United States prefer digital collections for reasons including but not limited to linking digital journals, access can be from home, office or dormitory whether or not the physical library is open; users can get usage statistics that are not available for print collections; digital collections save space and are relatively easy to maintain.

The role of a digital librarian has been assessed. Sreenivasulu (2000) submits that a digital librarian acts as guardian of the information super highways and acts as symbolic human-machine guru. Digital librarian also plays significant roles in information retrieval, content delivery, navigation and browsing. In order for a system or digital librarian to effectively assist users to optimumly utilized the digital library, Bawden (2004) opines that both formal education and continuing development training are adapting to cover aspects of the digital environment both in the UK and Slovenia.

Nigeria libraries should be ready to identify problems which should be seen as challenges in digital/e-library project. This is so because digital/e-library initiatives all over the world are bedeviled with surmountable challenges. Sujatha and Ambedkar (2008) identifies problems associated with digital libraries in India to include lack of clear cut policy at national level; outdated software and hardware and difficulty in upgrading the same; non-standard technical activities, data description and transmission characteristics; lack of proper preservation policy among others. The problems facing the virtual library project in Nigeria have been over-flogged in literature. The implementation of library automation/digital/e-library faces varied problems and challenges which may differ from institution to institution depending on the disposition of the institution to ICT application, funding and technical expertise of the librarians anchoring the project. Ogunsola and Okusaga (2008) write that the telecommunication network in Nigeria is found to be inefficient and less reliable than networks in other regions of the world as a result of inadequate telecommunication gadgets as well as poor value system; also the inadequate management and technical experts and low level of computer literacy are militating factors. These problems could be surmounted by instituting long-range planning to develop and implement virtual library project. Idowu and Mabawonku (1999) say same of the challenges facing automation and e-library include high cost of Internet access; the ineffective configuration of the library networks; the absence of a critical mass of trainers; the lack of reliable and permanent sources of power.

Fabunmi (2009) and Etim (2006) highlight some of the pressing challenges and problems. While Fabunmi says that virtual library project requires spending huge money on computer hardware and software, licensing, training of librarians in new technologies. Etim (2006) citing Ifidon (2002) establishes institutional weakness, lack of professional training programmes and implementation delay and funding as militating challenges. E-library/virtual libraries are very useful for diverse purposes thus its usefulness outweigh the problems or challenges it may pose. Fabunmi (2009) notes that virtual libraries could

provide access to CD-ROM, Internet subscriptions, lists of annotated web links, work products such as proprietary databases e.g. Lexis Nexis, Westlaw.

Emmanuel Alayande College of Education e-Library and Library Automation Experience

The computerization project of the college library was conceived to be executed in five phases. The phases are: e-Library/Internet facility procurement and installation; Distribution of Internet signals and bandwidth and system administration; Selection and Installation of automation software package; post installation training of staff; Retrospective conversion of date and library automation project. The implementation of e-library/Internet facility and library automation is capital intensive and requires high technological skills in respect of engineering design, system configuration and bandwidth administration and librarian dexterity in using the system.

Phase 1: E-library/Internet facility procurement and installation

The college first conceived the idea of installing Internet facility in the college library in 1998. Few computer sets were procured. Dial-up technology was adopted. The project could not be sustained due to poor technical know-how on the part of the engineer handling the project and the end-user (the college library staff). As part of the efforts to re-activate the project, academic librarians and library officers were sponsored to series of workshops and conferences in order to have a fair grasp of the technicalities involved in library automation and e-library.

Since 2008, part of Education Trust Fund (ETF) library intervention was devoted for the procurement of computer sets and its accessories. The college ICT committee sat several times to determine the requirements of the computer and network cabling system to be connected to the CISCO 2811 series switches in the management information systems room (server room). The computer sets and other accessories procured with ETF fund underwent due process. It is hereby noted that special permission was sought from ETF office to wholly spend the entire 2009/2010 merged ETF fund on library automation/e-library project. Table 1, shows the list of items and the quantities supplied through ETF fund, National Communication Commission (NCC) via Zinox Technologies Ltd in Lagos, Nigeria and the college.

S/N	Quantity	Item	Source
1.	13	5 Dell Laptop Computer Sets	ETF
2.	3	8 Hp Laptop Computer Server Machines	ETF, NCC
3.	1	Application Software (Koha)	ETF
4.	1	LaserJet (5200 DTN) Printer	ETF
5.	1	Mass and Satellite dish	College
6.	2	CISCO (2811 Series router CISCO router (1700 Series)	College
7.	3	Radio link Ubiquiti Radio (2)	College
8.	30 100	Desktop Computers Desktop Computers and furniture stands	College NCC
9.	1	Internet Modern	ETF
10.	3	D link Switch	ETF
11.	1	Bandwidth Manager inverter	College

Other additional accessories procured include: 2 D link switch (24 ports), provision of network cabling for internal services, 13 switch ports, 4 racks and civil works.

Phase 2: Distribution of Internet signals and bandwidth/system administration

The initial e-library/Internet project was conceived to be distributed to each workstation through a central control wireless system, which was installed by Zinox Technologies, Lagos. The signal was deployed through a shared bandwidth. The shared bandwidth could not power effectively the entire 100 desktop computers that was centrally located. Arising from slow downloading period occasioned by small size

bandwidth, the college migrated to a 1024/1024kpbs bandwidth. This was deployed by EM West Africa, Lagos. The new ISP (EM West Africa) services seem to be efficient but the cost of bandwidth subscription is very exorbitant. The college was unable to sustain the subscription of N3million quarterly hence there was need to look for better and cheaper technology.

The college therefore migrated to a fiber optic technology option provided by IPNX, Lagos. Fibre optic technology provides a faster, cheaper and more stable bandwidth signals. However, the migration required the provisions of basic infrastructures such as 140ft mass, CISCO (2811 series) and some other accessories and logistics. The take off contractual bandwidth subscription agreement between IPNX and the College was 2 megabytes/ 2 megabytes. The college intended to distribute the signals to all schools, sandwich office, other service units. It is in the future plan to extend the services to second campus of the college.

The college automation/e-library project is connected to three servers. The main server which has higher memory capacity is to serve as an interface between the other two servers. The other two servers are connected to application software (Koha) and Internet server. These two are networked to the main server. The network administrative centre is manned by a trained system administrator and two support assistants. The network administrative centre houses main server, two backup servers and shared devices like printers, scanners etc. The giant LaserJet (5200 DTN) printer is connected to the main server. In order to ensure constant supply of electricity, inverter of appropriate capacity is procured and installed to provide an alternative source of power.

The system administrators are to ensure that the servers are ready and signals distributed to all the workstations. Network challenges are addressed promptly and where a system develops minor faults, they are to rectify such faults with minimum lost of time.

Phase 3: Selection and installation of library automation software package

The library defined clearly the goal and objective of the library automation and computerisation which is to provide wide access to digitized library collections, using computer based skills to dispense library services to the end-users. College library management decides on application software that could support integrated library management system. The application software to select must be assessed to determine its scope and capacity that will be suitable to achieve library goal. There are a long list of application software packages in the market. Few of these softwares are UNESCO micro CDS/ISIS, TINLIB, Konlib pro-library manager, X-lib, Alice for window, Integrated Library Software Koha, Greenstone, Glass e.t.c.

Using a well-drawn parameters as given by Adekanye (2011) the software packages were assessed. According to Adekanye (2011) the suitability of a package could be assessed based on the following:

- Producer/vendor reputation and reliability base on the performance of previous installations
- Software functional flexibility and expandability
- Indexing and searching capabilities
- Interactivity of input and output interfaces
- System security provisions
- Good system documentation and manuals
- Cost
- Scope of customer training
- Possibility of system upgrading
- Compliance with the Internet

The library finally settled on Koha, because it is powerful and easy to use. Again, The library wanted it because of the readiness of the vendor to provide continue support and the fact that it is being adopted not only in public tertiary institutions but also in private institutions in South West.

With many institutions adopting Koha, it is believed that users' group could be formed in future to identify common problems and proffer solutions to them, thus the vendor/producer could be kept on its toes to continue to improve on the software. Besides, the package upgrading and renewal process does not require any financial commitment once it is connected to the Internet.

Phase 4: Post installation training

The installation of Koha integrated software is the first leg of the automation project. The success of it is determined by the staff and students proficiency in its use. Therefore, a week post installation training was organized by the vendor. The first day of the training was devoted to the installation of software and setting up and preset into the server. Koha is made up of operational modules, each module takes cognizance of peculiarities in each of the workstations. The various categories of staff that are involved in library service delivery network participated in the training sessions. The library assistants, library officers, computer word processors and academic librarians are involved in the training. Each of the cataloguing, acquisition, circulation, reference, serials, OPAC and report modules were extensively treated. A training session was devoted to general view of the training sessions with interactive questions and answers. Participants were rigorously drilled in practical sessions to ensure the mastery of data inputting, effecting correction skills, generating reports and so on.

Automation of workstations follows e-library/Internet installation. The training sessions were made easy because participants can input data using local area network as well as linking up the Internet where necessary. Thus, it is possible to cull the names of the users from college portal already installed in the Koha server memory.

The last day of the training was devoted to the training of system administrators. They required special training because they are to take charge of internal working mechanism of the systems, servers, Internet signal monitoring and general functioning of the systems and maintenance.

The Koha library software promoter – the projectlink exposed the staff to the necessary skills that are sufficient enough for the take off of the operation of the software. The Library again counts on the assurances given by the vendor and their readiness to assist when the need arises. The library management appreciates the need for capacity training thereby encouraging each participant without basic skills in computer appreciation to enlist in part-time computer training to raise their proficiency in computer applications. It is hereby noted that library management created an in-house programs and training sessions whereby resource persons are engaged in the training of staff.

Training Library Users

The cabinet which houses catalogue records serves as a gateway to the bibliographic information of the college collections. But in automated environment, Online Public Access Catalogue (OPAC) replaces catalogue cards and serves as gateway to access bibliographic data of the library. Library Integrated Software (Koha) is housed in one of the server, which is connected to the computer terminals. These computer terminals are conspicuously displayed in the open space in the library. To effectively interact with the library intellectual materials, users should be able to operate the computer terminals. These computer terminals are networked and linked to the main server and e-library server. The main server serves as an interface between software server and Internet server. It is therefore desirable that the users should be trained in the act of operating OPAC. The library intends to organize special training for the students which will include how to search OPAC with minimum supervision. The user-friendliness of the Koha package as well as inclusion of inquiry (OPAC) easy guide into the college library guide book for ease of reference by the users will further equip the users with appropriate search skills.

Post Installation Training Problems

In the course of operating the Koha software package, some problems were encountered during post installation usage. There is a long time lag between period of training in the Koha modules and the actual time the librarians put the modules into use. Most of the skills might have been forgotten.

Staff tend to quickly forget the skills due to the short time training period employ by the vendor. Trainers should allow sufficient time for practical works and there should be considerable follow-up training.

Training of non-librarians especially the library assistants posed two problems. One, they are not familiar with technical terms with which the software is programmed. Secondly, they were not showing enough commitment and dedication not only during the training but thereafter. Non-professional librarians' rate of grasping the training skills was very low.

Because Internet facility through the e-library is already in place, vendor found it easy to train the staff module by module. The names of the students are obtained through the college portal. Switching over to the Internet posed problem to some categories of staff who were not familiar with Internet use.

Phase 5: Retrospective conversion of data (Ongoing)

The College library has completed its cycle of automation and e-library/Internet project. All the workstations were linked to a local area network. Even the special collection unit (serials) which houses the newspapers, magazines, journals and other government publications was linked. The major assignment is how to convert the existing 30,000 card catalogue records into digital format. The task ahead are the developing of library website, and virtual databases of intellectual materials through subscription or access to free databases.

The beauty of the mechanism of Koha software is that each of the module works independently and mutually too. By this, data in each of the workstations can be keyed in independently off-line and on-line. The library began automation in June, 2011; all new books catalogued from that date were keyed in directly to the library database. It is being encouraged that all library workforce should be actively involved to ensure mastery of the act and full coverage of the data.

Since e-library/Internet facilities are put in place, the way services are done has changed. The services to the users keep expanding on daily basis. Access to the e-library/Internet environment is strictly on purchase of air time. This is made possible because a regulatory timer software has been installed on the Internet server. The revenue generated via the purchase of air time though very little is to sustain and maintain the centre. Users are not allowed to devote their air time for social browsing. In strong terms, users are not allowed to watch pornographic films, football matches etc. The Internet access is strictly to encourage intellectual searching, researching and studying. The services provided at the centre are summarized thus:

- online registration
- checking of results
- information packaging for project/research writing, assignments e.t.c
- printing of documents
- social Internet browsing such e-mailing, face-book and blogs.
- assisting users on how to census for relevant information from the Internet
- access to free open online journal articles e.g e-books, e-journals or access to journal by subscription
- access to international databases using college library as gateway e.g jstor database and its auxiliaries.

Koha is packaged in modules. The services which each of the modules can do are highlighted thus:

- (a) Circulation Module
 - check out or issue out books (charging)
 - check in or return of books (discharging)
 - compilation of overdue books
 - calculation of overdue fines
 - generation of circulation related reports and statistics e.g daily record of readership, book consulted
- (b) Cataloguing Module
 - catalogue searching using Z39.50 for copy cataloguing
 - adding of bibliographic records
 - verifying existing titles to determine the status of the new book to catalogue
- (c) Acquisition
 - management of vendors records
 - generating newly selected books including online book selection
 - generating receipt reports.
- (d) Online Public Access Catalogue (OPAC) Module
 - This module is particularly relevant to users navigating their search for relevant intellectual materials
 - checking of available books in the library and accessing the library virtual databases
 - librarian can use this module to manage user account e.g view and renew over dues, view fines owed by users.
- (e) Report Module
 - This module is essentially used to generate various reports such as acquisition statistics, patron statistics, cataloguing statistics, circulation, reference, serial statistics.
- (f) Serial Module
 - online cataloguing of serials and other periodicals
 - generating indexes for newspapers, journals and magazines
 - information and knowledge management in serials and other periodicals
 - free open source articles online

Challenges and Prospects of Computerised Library Services

The computerisation of the college is not without its challenges. There is the challenge of optimally utilizing small fund allocation to address wide segments of the automation areas. The committee handling the project had to accommodate areas not budgeted for and yet not compromising quality job delivery.

Library automation and e-library project require vast knowledge in the areas of computer engineering, civil engineering, computer networking and software installation and training. By implication, these specialists are to be brought together and coordinated to ensure success at the end. Librarians of 21st century, should brace up to overcome the gap in computer application and use which is presently constituting a cog between them and system analysts. Librarians must be good in the area of Internet signal deployment and bandwidth assessment and sizes. In order to circumvent these challenges, there must be drastic attitudinal change in the way librarians leave the entire library automation and e-library installation project in the hands of computer experts.

One other big challenge is in the area of continue sustaining bandwidth subscription. It is a fact that Internet facilities can only be sustained through subscription to the appropriate bandwidth size that could power the number of computers and the level of Internet usage. Therefore, the institution must be prepared to fund the facilities regardless of the revenue generation therefrom. E-library/Internet facility is now a backbone for any meaningful research in academic environment.

There is the challenge of daily and routine maintenance of computer sets that are connected to the servers. There is the urgent need to employ a system librarian/analyst who will take charge of overseeing the system administration. This is very important as the college plans to gradually expand Internet service to all schools and service units. Besides, the system librarian/analyst will ensure that appropriate volume of Internet signals are received and utilised using appropriate bandwidth software manager to monitor it. Again, minor repairs of computer sets and quick response to networking problems fall within the preview of this expert.

The college plans to increase the 2 megabytes size of bandwidth currently under subscription to 4 megabytes. This has the potential of extending the Internet coverage to the school of Vocational and Technical Education. School of vocational and Technical Education is a separate campus few kilometers within the town.

Full scale library automation and Internet services to cover the entire college would raise the intellectual development of staff and students and the college image in the academic world will be enhanced. It is intended that all the offices of academic staff will be connected to the Internet thus the staff will be able to support their teaching and research drive without their physical presence in the library. Effective deployment of Internet signals to academic staff will attract corresponding monthly charges. Revenue from such services could be used to sustain bandwidth subscription.

Lack of steady funding of library services poses serious challenge to the sustenance of automation/e-library project. Poor funding is a major challenge to libraries in Nigeria (Nok, 2006). Federal university libraries receive better funding attention than state college of education libraries. The fact that there is a budgetary allocation of 10% of the recurrent budget for library development at university level put their libraries at a better stead than state college libraries without any funding policy direction. The funding situation is so worrisome that books and journals are obsolete, equipment and furniture are dilapidated, personnel are scanty, and poorly trained. There is complete absence of oversea training for college library staff. This scenario further testifies to the glooming and precarious financial situation of the funding support for automation/e-library project at college level. The college is riggling out by devoting Tertiary Education Trust Fund allocation for library to fund automation/e-library project. TETF is a federal government agency charged with collection of education taxes from multi-national companies and spend same to intervene in the development of tertiary education nationwide.

The erratic power supply remains a source of concern in sustaining automation/e-library facilities. Computer experts say Internet facilities are better placed on continuous power supply. This will ensure steady current supply to the equipment and equipment damage through power surge will be minimized. This problem is being addressed with the installation inverter equipment to provide alternate source of power.

There is a wide knowledge gap of the staff in computer appreciation and application. Many of the college library staff are not computer literate and where they are, they are not versatile in applying the skills as being demanded in automation/e-library environment. College staff are reluctant to change from traditional ways of dispensing library services to application of modern Information Technology (IT) and indeed they suffered computer phobia. In order to overcome this challenge, the college library will need consistent technical support training and re-training of staff in-house, within and overseas training. Because the equipment undergo revision and repackaging continuously, staff training should be provided for in the college budget and back up with fund on annual basis.

Recommendations

The implementation of automation/e-library project should not be restricted to any category of staff. All the staff that are involved in the service provision chain should have access to computer sets and they should be exposed to training and retraining in manipulating the Koha automation software and Internet operations. Library users including staff and students should be trained and retrained in the act of utilizing automation/Internet facilities and OPAC to access information in the library. E-library/Internet facility is the intelligence site linking the college to the intellectual world. The equipment should be consistently sustained by adequately providing for Internet subscription and maintenance of the facilities and equipment. Library users particularly students are shifting their search for information via hard copies to accessing information from soft sources i.e surfing information from the Internet.

It is being recommended that bibliographic summary of library collections could be programmed into all the systems such that users will compulsorily interact with these pieces of bibliographic information of its collections on all the college library systems and can be posted to the college facebook site as a way of publicity and exhibitions.

Conclusion

The lack of steady funding pattern for college libraries notwithstanding, libraries have to find ways of sustaining the automation and e-library projects. Part of the TETF fund allocation for library development is being earmarked for bandwidth subscription and maintenance. Presently, the e-library/Internet facilities are functioning effectively. The library automation is gradually taking shape. The library services to the users are gradually changing to Internet-driven and digital collections are given priority.

The library is restructured to reflect the way services are being coordinated. For instance, the library is structured into six sections namely: readers' service, technical services, collection development, e-library/management information system, bindery section and special collection (serials). The e-library takes charge of management information system including system administration and maintenance. The library plans to digitise its collections with time. It is in the pipeline to connect all schools and service units with Internet services. The library appreciates the enormity of this task hence requires the immediate employment of system analyst/librarian. This expert will be able to take up the technical challenges that may arise from distributing Internet signals to all schools and offices.

References

- Abubakar, Iya (1971). The Library and the Computer Annual Conference Lecture Delivered at the 10th Nigerian Library Association, Jos.
- Bawden, David (2004). Education and training for digital librarians: A Slovenia/UK Comparison. www.emeraldinsight.com/Dol.253x.htm
- Etim, F. E. (2006). Resource Sharing in the Digital Age: Problems and Prospects in African Universities. *Library Philosophy and Practice* 9(1) Available: unllib.unl.edu/LPP/lppv9n1.htm
- Fabunmi, B. A. (2009). Challenges and Prospects of Virtual Libraries in Universities in Nigeria. *European Journal of Scientific Research* 33 (1) Available: <http://www.eurojournals.com/ejsr.htm>
- Gbadamosi, B. O. (2011). Assessing Library Automation and virtual library development in four academic libraries in Oyo, Oyo State, Nigeria. *US-China Education Review* 8(5): 713. Available: <http://www.davidpublishing.com>
- Idowu, A. O and Mabawonku, I. (1999). Information facilities and applications in some Nigerian Research University Libraries. *African Journal of Library, Archives and Information Science*. Vol.1 p.28-33

Kennedy, G and Davis, B. (2006). *Electronic Communication Systems*. 4th ed., New Delhi. Tata McGraw-Hill Publishing Co. Ltd. P517

Nkanu, H. O. (2010). Digital Divide: Bridging the gap through ICT in Nigerian Libraries. *Library Philosophy and Practice*. at <http://webcashe.gorgleusercontent.com/search?pp.2of16,3of16,4of16>.

Nok, Grace (2006). The challenges of computerizing a University Library in Nigeria: The Case of Kashim Ibrahim Ibrahim Library, Admadu Bello University, Zaria. *Library Philosophy and Practice*, 8(2). Available: <http://digitalcommons.unl.edu/cgi=1078&context=libphiliprac.pdf>

Ogunsola, L. A. and Okusaya T. O (2008). Establishing virtual libraries in African Universities: Problems and prospects. *Ozean Journal of Social Sciences* 1(1): 48

Ogunsola, L. A. (2004) .Nigeria University libraries and the challenges of globalization: The way forward. *Electronic Journal of Academic and Special Librarianship* 5(2-3): 5.

Raval, C. N., & Dalwadi, Mahesh (2005). Role of Storage devises in digital library environment. Available: www.shodhganga.inflibnet.ac.in/dxml

Srinivasulu, V. (2000) .The role of a digital librarian in the management of digital information Systems. Emerald Electronic Library. www.emeraldinsight.com/journals

Sujatha, Gurram and Ambedkar, B. R. (2008). Digital Library Initiatives in India: A proposal for open distance learning. Available: http://www.iatul.org%2Fdoctrinary%2Fpublic%2FConf_Proceedings%2F2008%2FSujathaGurram.pdf

Tenopir, Carol (2003) Use and Users of electronic Library Resources: An overview and analysis of recent research studies. Available: <http://www.clir.org/pubs/abstract/reports/pub120>

University of Manitoba (2006). What is E-Library? Virtual Learning commons. Available: <http://www.umanitoba.ca/virtuallearningcommons/index.php?action=page&id=445>