Library Automation: The Nigerian Experience

A Festschrift in Honour of Prof. David Folorunso Elaturoti
Professor of the Centre,
Centre for Educational Media Resource Studies,
University of Ibadan, Ibadan (2002 - 2018)

Edited by
Dr. Rotimi Adesina EGUNJOBI
Dr. Johnson Ayodeji AKERELE

Copyright © 2018 by
Dr. Rotimi Adesina Egunjobi and Dr. Johnson Ayodeji Akerele

ISBN: 978-978-55515-1-8

Published by
First Festschrift Publications,
C/o University Librarian, Adekunle Ajasin University,
Akungba Akoko, Ondo State, Nigeria.
Tel: 08033513154, 08033285670
Email: firstfestschrift@gmail.com

Printed in Nigeria by
Intanitina Gim Publishers, Nigeria
intanitina@yahoo.co.uk
+2348062294493

All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means, electronic, mechanical, photocopying, micro-filming, recording or otherwise, without the written permission of the copyright owner.

TABLE OF CONTENTS

Foreword.....iii
Dedication.....iv
Table of Contents.....v
List of Contributors.....viii

Chapter 1
From 1974 to Date: My Contributions to Nigerian Librarianship
Professor David F. ELATUROTI 1

Chapter 2
Justification, Strategies and Challenges of Automation in School Libraries in Nigerian Educational Environment
Linda I. ANYALEBECHI, Oyemike V. BENSON and Kevin OKORAFOR 10

Chapter 3
Information Technology Policy Awareness and Funding of School Library Automation by Principals in Akwa Ibom State, Nigeria
Emem P. UDOFIA, Ph.D and Daniel A. ALOYSIUS 30

Chapter 4
Achievement and Challenges of Library Automation in the Cocoa Research Institute of Nigeria, Ibadan
Taiwo Elizabeth OGUNJOBI, Ph.D, C.L.N 45

Chapter 5
Challenges of Automation in Nigerian School Libraries
Folasade L. KOLAWOLE 62

Chapter 6
Achievements and Shortcomings of Library Automation in Nigeria
Amina Aminu RAJI and Maryam B. RIBADU 77

Chapter 7
From Library User Education to Information Literacy Skills: The Role of Library Automation in Tertiary Institutions in Nigeria
Joshua Onaade OJO PhD, CLN and Olukemi Titilola OLANIYI 88

Chapter 8
Job Satisfaction, Productivity and Automation of Academic Libraries in Nigeria
Ayooluwa AREGBESOLA and Toluwani EYIOLORUNSHE 106

Chapter 9
Institutional Repositories: An Emerging Trend for Scholarly Communication in Nigerian University Libraries
Abiola Bukola ELATUROTI 123

Chapter 10
School Library Challenges in Nigeria: Theoretical Implications of Emotional Intelligence Theory to Service Delivery
Johnson A. AKERELE, Ph.D., Adeola F. AFOLABI & Robert A. AWOYEMI 144

Chapter 11
Contemporary Library Automation Issues in Nigeria
Esther O. LAWAL-SOLARIN, Goodluck O. ALLISON and Justice I. JUSTICE 162

Chapter 12
Library Automation in the Nigerian Defence Academy: Issues and Challenges
Lawal UMAR, Ph.D., Maimuna IZAH, Ph.D. and Aisha I. MOHAMMED 173

Chapter 13
Library Automation Achievements and Shortcomings in Kashim Ibrahim Library, Ahmadu Bello University, Zaria
Rukayat Tijani IBRAHIM 193

Chapter 14
Appraisal of the Electronic Library Project Implementation at the College Library, College of Education, Ikere-Ekiti, Ekiti State
Omoloye OYEGBAJU 204

Chapter 15
An Appraisal of Automation in the University of Uyo Library
Mercy E. UKPANAH and Uduak U. ENANG 215

Chapter 16
Cloud Computing and Research Publications of Librarians in the Federal University of Technology, Akure
Abel Kayode AFOLABI, Ph.D 229

Chapter Seventeen
Library Automation in Academic Libraries in Nigeria: Achievements and Shortcomings
Bello YERIMA, Haruna Hamman GARTA and Abubakar SAIDU 242

Index 256

CHAPTER ELEVEN

CONTEMPORARY LIBRARY AUTOMATION ISSUES IN NIGERIA

Esther O. LAWAL-SOLARIN, Goodluck O. ALLISON and Justice I. JUSTICE

Introduction

The library is a well-equipped physical environment with information resources arrange in a systematic order and targeted to a defined clientele. Over time, it has metamorphosed from traditional to automated library prior to the advent of Information Technology. Traditional library can be defined as a building established for the purpose of collecting and storing books and related materials for reading and research. The library has succeeded in this era of traditional means of information provision to users of different categories, by way of acquiring relevant collections and organising in an accessible manner to clientele (Saliu, 2016).

The library routines are difficult in traditional librarianship, as processing of collections is tasking, error prone and time wasting. Similarly, the advent of Information Technology meant to complement traditional library has however put pressure on the existence of libraries; as majority of the twenty century citizens of developing countries believed that they can get whatsoever they need as it relate to information resources on the World Wide Web (WWW) and as a result there would be no need for traditional library.

The aforementioned position notwithstanding, Information Technology cannot replace the library in information provision and serene place for conducive study. Rather, the

library can harness the use of Information Technology in its quest to increase productivity and effective service provisions. Irrespective of what library can do with Information Technology, Mutula, (2012) certified that the inadequacy of traditional library services and tools in coping with the detailed requirements of identifying information pertinent to a given problem has forced libraries to automate their functional service areas.

Library Automation

The word "automation" means introduction of automatic equipment or automation system. Harder (1936) used the term automation in relation to engineering industry to mean automatic handling of parts between progressive production processes. The term has been used to describe any operations in which human effort is negligible or substituted with the use of machines. Sindhav and Patel (2014) affirmed that the mechanization of traditional library activities, such as acquisition, serial control, cataloguing, circulation control and so on is called library automation. Library automation also refers to use of computers associated peripheral media such as magnetic tapes, disks, optical media and utilization of computer based products and services in the performance of all type of library functions and operations.

Automation is the process of using the library software for easy and speedy service delivery, while library automation is the general term for Information Communication Technologies that are used to replace manual system in the library (Boateng, Agyemang, & Dzandu, 2014). The main purpose of library automation is to allow librarians and library staff to contribute more meaningfully to the spread of knowledge and information. However, Edem (2016) in her study on adoption of software packages in university libraries

in Nigeria discovered that 75% of university libraries in Nigeria were partially automated, 20% were not automated at all, while a paltry 5% were fully automated. This did not present a good picture of adoption of software packages in Nigerian universities, as the implication is that 95% of libraries in Nigerian universities are either not automated or partially automated. 5% full automation represents a very low level of automation of libraries in Nigerian universities. However, Goulding (2006) observed that in the UK, library users agree that the development level of ICT, particularly the Internet, has encouraged different types of users into library and persuaded people to view the library in a new light.

Moreover, automation is used to reduce the amount of time staff devoted to repetitive (and often less challenging) activities that must be performed in any properly functioning library. Automation has changed not only the face of information but also the information seeking behaviour of the users. Technology demands high level of technical skill from library professionals in order to make maximum use of the new technological tools for effective and better services to the users. Due to the advent of Internet, World Wide Web and proliferation of online catalogue, the role of libraries has taken a new dimension. Rao and Babu (2001) stated that improved efficiency in service delivery, new roles as information intermediary, facilitator, end-user trainer/educator, web organizer and designer, researcher, interface designer, knowledge manager/professional and sifter of information resources; are some of the new and emerging roles for librarians. In view of this, librarians should be knowledgeable in a variety of information sources via automation and follow the new trends and advancements in computers, media and publishing (Career-overview, 2011).

Nok (2006) stated that the Federal Government of Nigeria made several efforts to ensure that library automation becomes a reality and equitable to other libraries of the western world. One of the steps includes the delivery of the Virtual Library through the Internet, CD-ROM, and Wide Area Network (WAN). This laudable project has remained on paper for several years, and subsequently, the federal government formulated a policy on library automation in academic libraries. The policy provided for university libraries to be linked with other renowned academic libraries across the globe to provide access to print and electronic materials. Regrettably, this situation has remained unchanged in that the libraries have remained not automated.

Contemporary Issues of Library Automation in Nigeria

Several issues and challenges exist regarding library automation in Nigeria and these may differ from institution to institution depending on the disposition of the institution to ICT application. Challenges such as funding and technical expertise seem to be the major challenges (Gbadamosi, 2012). Telecommunication networks in Nigeria are considerably less efficient and reliable than networks in other regions of the world as a result of poor or inadequate telecommunication set up as well as poor value system. In addition, the inadequate management and technical experts and low level of computer literacy constitute other challenges (Ogunsola & Okusoga, 2008; Mishra, Thakur & Singh, 2015). Some of these issues are hereby explained:

1. Inadequate Planning

Adequate planning of library automation deals with carrying out feasibility study of the project and not just adopting any software because an existing library is using the similar software; for this will eliminate time, fund and energy

wastage. Hence, Mishrah, Thakur and Singh (2015) affirmed that no project can succeed without a prior feasibility study. That is, the adoption of any system in the library should be based on a wide range of feasibility study attributes to assess the adequacy of the programme. In light of the fact that there are now new hardware and software for library automation, it has become imperative for institutions to determine whether they have adequate resources to operate library automation.

Importantly, Mishrah, Thakur & Singh (2015) stated that proper planning for library automation must include the following:

a. Objective of library;
b. Library finance and budget;
c. System analysis;
d. Identification of main area of library automation;
e. Sources of data/standard format Z39.50, MARC, RDF and so on;
f. Hardware requirements;
g. Software for library automation: commercial or open source software;
h. Skilled professionals;
i. Maintenance and development; and
j. Services through automation.

2. Budget-Cut

The most crucial hurdle for a library in pursuit of automation is to obtain the necessary funds. The initial cost for establishing a computer based system is beyond the reach of most organisations and institutions to consider in developing countries. Generally, any operation requires a considerable financial aid for the purchase of hardware, software and other computer based accessories. Library automation efforts must not only keep expenditure for library automation in mind, but

it must also consider maintenance and development cost for a successful automation process. A year plan for library automation and service must be part of the library automation plan.

3. Shortage of Technology

Many libraries, especially the federal and state libraries, encountered shortage of technology due to shortage of funds for the procurement of ICT infrastructures. Technologies needed are computer information network, computer mediated conferencing, video conferencing as well as digital technologies coupled with integrated library software, Koha Greenstone, Glass etc (Haliso, 2011). The federal and state owned universities would need to receive subvention from the government before these infrastructures could be acquired in their libraries. The poor economic situations in Nigeria have been making acquisitions very difficult compared to private owned institutions which charge high school fees. Using well-drawn parameters as generated by Adekanye (2011), the software packages could be assessed in the area of suitability of package based on the following:

a. Producer/vendor reputation and reliability;
b. Software functional flexibility and expandability;
c. Indexing and searching capabilities;
d. Interactivity of input and output interfaces;
e. System security provisions;
f. Good system documentation and manuals;
g. Cost;
h. Scope of customer training;
i. Possibility of system upgrading; and
j. Compliance with the Internet.

4. Lack of Competent Manpower

Previously, library education curricula were based on the manual practices performed in the service of her clienteles. However, the emergence of Information and Communication Technology requires sharp change in the library science curriculum, which should have a considerable amount of ICT contents to enable graduates face the huge task ahead of librarians in disseminating the information at their disposal via library automation. Library automation project requires vast knowledge in the areas of computer engineering, civil engineering, computer networking and software installation and training (Gbadamosi, 2012). By implication, these specialists are to be brought together to ensure success. Librarians in developing countries should brace up to overcome the gap in computer application and reduce the common divide between librarians and system analysts. A present day librarians must be good in the area of Internet signal deployment and bandwidth assessment. In order to circumvent these challenges, there must be drastic attitudinal change in the way librarians appreciate the entire library automation and e-library system. Dearth of professionally trained and skilled staff constitutes another major challenge. Generally, the level of short staffing is apparent while those on ground have poor computer knowledge. This posed a lot of technical problems to the automation exercises. Consequently, only a few qualified personnel are saddled with the responsibility of managing the system and thus limiting the level of service delivery to clients.

5. Power Supply

Inconsistency of power supply remains a major source of concern in sustaining automation facilities in Nigeria. Steady current supply to the equipment minimises equipment damage through defective power. In order to operate, several institutions in Nigeria now rely on alternative power supply

outside the national grid at cost borne only by such establishments.

6. Education and Training

The level of education is a major drawback as traditional librarianship remains the standard till date. Library personnel find it difficult to cope with the requirements of the electronic age and as such staff training and retraining becomes integral part of library operations. Some libraries have initiated computer literacy training for all staff, yet such trainings are insufficient to cater for what it takes to effectively manage library automation.

Conclusion

The purpose of any library is to provide quality service to its users. Therefore, the current trends of library operations and services require the use of ICTs to facilitate such services. Hence, the challenges discussed above should be born in mind by programme implementers if they are to succeed. Any attempt at automating Nigerian libraries should not be one of trial and error but by organized effort. This is essential because the use of automation in library activities should bring about tremendous positive impact. It is also good that funds to execute and sustain the programme be available, build capacity and drive attitudinal changes. Only such co-ordinated efforts will provide effective and efficient services. Consequently, library staff should be trained and retrained and curricula activities in the library science programmes should incorporate computer related courses. In addition, adequate budgetary provisions should be made to ensure the acquisition of relevant ICT and related equipment and software as well as consistent power supply system.

References

Adekanye, E. A. (2011). Computerization of the Fatiu Ademola Akesode library, Lagos State University. Retrieved November 3, 2017 from http://www.webpages.uidaho. edu/~mbolin /adekanye.htm.

Annan, K. (2005). Statement by H.E. MR Kofi Annan-Secretary General of the United Nations at Tunis; Nov 1, 2005.

Boating, H., Agyemang, F. G., & Dzandu, D. (2014). The pros and cons of library automation in a resource challenged environment: A case study of KNUST library. Retrieved November 3, 2017 from https://search. proquest.com/docview/1738006204?pq-origsite=gscholar.

Careeroverview(2011). Librarian career and job description. Retrieved November 6, 2017 from http://www.careeroverview.com/Librarian-careers.html.

Chisenga, J. (2004). The use of ICTs in African public libraries: A survey of ten countries in Anglophone Africa. Retrieved November 13, 2017. https://scholar.google. com/citations?user =oigNNYAAAAJ&hl=en.

Edem, M. B. (2016). Adoption of software packages in university libraries in Nigeria. Retrieved November 3, 2017 from http:// digital commons. unl.edu/libphilprac/1342.

Gbadamosi, B. O. (2012). Emerging challenges to effective library automation and e-library: The case o

Emmauneul Alayande College of Education, Oyo, Nigeria. Retrieved November 3, 2017 from http://digitalcommons.unl.edu/lib philprac/807.

Goulding, A. (2006) Public libraries as centre for formal and informal learning. *International Journal of Learning* 12(9).

Haliso, Y. (2011). Factors affecting information and communication technologies (ICTS) use by academic librarians in South Western Nigeria. Retrieved November 6, 2017 from http://digitalcommons.unl.edu/Libphilprac/571/

Kamba, M. A. (2011). Implication of ICT's in libraries of higher education institutes: A panacea catapulting library development in Africa. DESIDOC *Journal of library and Information Technology*, 31(1), 65-71.

Kumar, A., & Rani, R. (2014). Automation of library system. *International Journal of Enhanced Research in Educational Development* (IJERED), 2(2), 59-63.

Mishra, A. S., Tharkur, S. K. & Singh, T. (2015). Library automation: issues, challenges and remedies. https://www. academia.edu/12808629/LIBRARY. Retrieved November 20, 2017.

Mutula, S. M. (2012). Library automation in Sub Saharan Africa: A case study of the University of Botswana program. *Electronic Library and Information Systems*, 46(3), 292-30.

Nok, G. (2006). The challenges of computerising a university

library in Nigeria: The case of Kashim Ibrahim Library, Ahmadu Bello University, Zaria. Retrieved December 4, 2017 from http://www.webpages. Uidaho.edu/~mbolin/nok.htm.

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

Rajput, P. S. & Gautam, J. N. (2010). Automation and problems in their implementation: An investigation of special libraries in Indore, India. *International Journal of Library and Information Science*, 2(7), 143-147.

Rao, K. N. & Babu, K. H. (2001). Role of librarian in Internet and World Wide Web environment. *Information Science*. 4(1).

Saliu, U. A. (2016). The development and roles of public libraries in Nigeria Retrieved November 6, 2017 from https:// www.scribd.com/document/46269164/The-Development-and-Roles- of-Public- ibraries-in-Nigeria.

Sharma, S. V. (2007). Library automation software packages used in academic libraries of Nepal: A comparative study. Satitri%20final%20thesis (2).pdf. Retrieved December 6, 2017.

Thompson, E. S. & Pwadura, J. (2014). Library automation at the university for development studies: challenges and prospects. *Journal of New Review of Academic Librarians*. Vol. 2014, Issue 1.