



The Role of Automation in the Development of Public Libraries

Irieguna Solomon (CLN) & Fatade T.A

Department of Library

D.S Adegbenro Ict Polytechnic, Itori-Ewekoro

Ifo, Ogun State, Nigeria

Emails: iriegunasolomon@yahoo.com, damselt@gmail.com

Phone: +2348131647518, +2347064444874

ABSTRACT

The emergence of technology in a global perspective has redefined the various ways corporations, academic institutions including government agencies manage their affairs. In the world today, organization including government agency are taking advantages of the many opportunities provided by automation and its technological devices. To public libraries, automation presents an opportunity to provide value added information services and access to a wide variety of digital based information resources to their users. The subject was made up of the entire members and staff of Delta state public library, while a population of twenty- four was for data analysis. The data analysis clearly shows the various roles and problems of automation in public libraries. Thus, the aim and implication of this research work is to enable public libraries to know the effect of automation to their operations, functions and services.

Keywords: Automation, Public Library, Role of Library Automation.

iSTEAMS Proceedings Reference Format

Irieguna Solomon (CLN) & Fatade T.A (2019): The Role of Automation in the Development of Public Libraries. . Proceedings of the 17th iSTEAMS Multidisciplinary Research Conference, D.S. Adegbenro ICT Polytechnic, Itori-Ewekoro, Ogun State, Nigeria, 21st – 23rd July, 2019. Pp 281-286.
www.isteam.net - DOI Affix - <https://doi.org/10.22624/AIMS/iSTEAMS-2019/V17N1P27>

1. INTRODUCTION

A library can be seen as a collection of print and non-print materials acquired and organized for reading, studying, and consulting by users or patrons. It can also be seen as a building that housed various collections of information resources which comprises of both print and non-print that are organized to ease accessibility and retrieval. Having said that, library automation can be seen as the direct application of computers and other related technological devices in the operation and activities of the library which are traditionally carried out before by librarians. According to Tiamiyu (2000), library automation involves the use of computers as productively enhancing tools to perform some of all the data and information processing task, rather than manual handling, manipulating, storage, retrieval and dissemination of information.

Automation is the direct application of machines to do work that was previously done by manual means. Automation has added new dimension to every aspects of life and the public libraries are no exception. The use of technological and electronic innovations through computers has opened new horizons to public libraries and made new automated and electronic devices, methods and services available to users or patrons. According to the new International Webster's Comprehensive Dictionary (2003), automation is the application of fully automatic procedures in the efficient performance and control operations involving a sequence of complex, standardized or repetitive process on a large scale.



Similarly, Madu (2004), further said, automation is a self moving by complex and concealed machinery. Therefore it is a device that works automatically. Encyclopedia Britannica (2005), sees automation as a technology concerned with performing a process by means of programmed commands combined with automatic feedback control to ensure proper execution of the instructions. The result system is capable of operating without human intervention. Automation is the visual appeal and then to inspire surprise and awe through the apparent magic of their seemingly spontaneous movement.

Automation is any of the various mechanical object that is relatively self operating after it has been programmed or set in motion. The various mechanical objects that are being refer to here are those based on computers and related technologies which are frequently called Information Communication Technology (ICT). The initial contact between these technologies and information system are obvious since they provide apparent solution to general and specific problem that arises to a greater or lesser extent in the use or implementation of any information system, data storage and access following guidelines quickly and error free data processing. Initially, numerical data, but later all kinds of data automatic communication between processed. The term automation is also applied to a class of electronic devices either theoretical or real that transform information from one form into another on the basis of predetermined procedures or instructions.

Automation which comprises of computers and other related devices has through its roles improved established systems and services through technological innovations in developed countries. This same technological innovation has enabled developing countries like Nigeria to establish new information system in order to catch up with the modern world and communicate in terms of information storage and supply. Automation provides many advantages over traditional library methods. In nearly all libraries especially public libraries, automation provides new services that are either impossible or very difficult to offer by means of traditional methods. Automation oriented services in public libraries are of various kinds. Such services are library cataloguing systems which include acquisition, reference, bibliographic services, inter-library loan etc. The patrons of library card catalogue will appreciate how fast the retrieval, search and printing in automated environment. Another is the house keeping operations and networking which involves software that can handle all the housekeeping operation of the library such as acquisition, circulation and serial control though creating a network within the library or becoming part of the existing network of the library.

From the above it should be pointed out that it is highly recommended for the relevance, role, and development of libraries most especially in Nigeria, automation should be declared an esteem priority with adequate funding and support. Libraries cannot be truly a part of information age or global village without the active participation and utilization and development of automated facilities to render efficient and effective services in terms of information to its users or patrons in the society.

1.1 Statement of Problem

The research work is undertaken to investigate the role of automation in developing public libraries. The role of traditional or manual methods in rendering services by public libraries are error prone and it causes delay in their operations and development.

1.2 Purpose of the Study

- (i) To know the various roles of automation in public libraries
- (ii) To know the problem militating against automation in public libraries
- (iii) To know the prospect of automation in public libraries.



1.3 Significance Of The Study

This research work after examining the role of automation in the development of public libraries and the various research question posed by the researches will contribute to knowledge and information. Furthermore, this research work will act as a guide to present and future librarians and information scientist or specialist in their various fields or endeavors.

1.4 Research Questions

On the basis of the research work, the research intend to ask the following questions such as:

- (i) What are the various roles of automation in public libraries?
- (i) What are the problem militating against library automation?
- (ii) What are the prospects of library automation?

2. THE ROLES OF AUTOMATION IN PUBLIC LIBRARIES

Computers and advanced technologies have made it possible to enhance services in diverse industries including libraries. Through library automation, in-house collections and resources can be computerized, spread sheet and databases can be automated, CD-ROM can be provided in-house and the internet can be made available to patrons. To public libraries, automation presents an opportunity to provide value added information services and access to a wide variety of digital-based information resources to their users. Furthermore, public libraries are also using automated devices such as Information and Communication Technologies (ICTs) to automate their core functions, implement efficient and effective library co-operation and resource sharing networks, implement management information systems, developed institutional repositories of digital local content, and digital libraries, and initiated automated based capacity building programs for library staff and information literacy programs for library users (Chisenga, 2004).

1. **Automation Enables The Organization Of Information For Use:** Traditionally, computers in libraries have been used and are still being used by a large number of libraries to automate (replace manual operations by computerized methods) all or some of the following core library's activities such as acquisitions and budgets, cataloguing, circulation control, serials control, on-line public access catalogue (OPAC) etc (Chisenga, 2004) In addition to the roles of automation in libraries according to Rosenberg (2005), public libraries are also using Information and Communication Technologies (ICTs) to execute a variety of office operations such as word processing, accounting, database management, and communication (i.e. using electronic mail), using off the shelf software applications such as Microsoft office suite, lotus, SmartSuite and Corel World Perfect Office.
2. **Automation also enables Remote Hosted Library System (RHLS):** This is true in the sense that the internet and the World Wide Web (WWW) have provided a different dimension to traditional library system. Traditionally library(s) have installed manual systems located within their premises or their working station. Thus, as rightly stated by Chisenga (2004), automation has now made it possible for suppliers of automated library systems to host the system on their computers which allow libraries which do not have adequate automated devices or simply do not want to maintain their own system to use the system. Therefore, public libraries using the internet and web are able to conduct library functions such as processing of acquisitions, cataloguing, issuing of loans and provision of access to the OPAC remotely, while the supplier of the system takes care of software upgrading, security, system management and maintenance.



3. **Networked Digital Information Resources:** Automation have made it possible for libraries to provide their users with access to networked digital information resources, i.e. On-line database, electronic scholarly journals, encyclopedias, public government information etc provided by various publishers or suppliers. Thus, in cases where information resources are supplied by commercial suppliers public libraries are negotiating agreement on behalf of their users for the right to access these resources. Library users (public) connect to network information resources using web browser running on workstation in their offices or at home, or public workstations located in the library or cyber cafes. With the use of automation, it is now possible for public libraries to provide customized information services delivered directly to their users desktops and this being achieved using portals which are defined as web-based application accessed over the internet, intranet or extranet, that provide a personalized and adaptive interface which enables the user to discover, track and interact with other people, applications, services and information relevant to their interests (Chisenga 2004, Morrison 2000).
4. **Interlibrary Lending and Electronic Document Delivery:** As opposed to the traditional interlibrary lending system which relies on postal services to deliver print based document to users, automated based interlibrary lending systems uses electronic network to deliver copies of journals articles and other documents in digital format (mainly portable document format (PDF) to users desktops thereby making it possible for the library to scan articles, photographs and other documents directly using software's such as File Transfer Protocol (FTP) or E-mail and convert them to PDF for easy patron delivery. The major implication of this arrangement is that it is now possible for library users to get their articles requested through interlibrary system within the shortest time.
5. **Library Co-operation and Resource Sharing:** Libraries have long history of co-operating and sharing resources, especially in the creation of union catalogues or sharing bibliographic records which also help in locating materials for interlibrary lending. Thus, in this manual library environment, the public libraries contributed library catalogue cards to a central catalogue which could only be accessed by visiting the library or institution where it is hosted (Chisenga, 2004). But with the uses and application of automated facilities, public libraries have been able to utilize software system base on international standards and this allows for real time interaction between different public libraries system and computers distributed over wide and local area network using various standard such as Z39.50, and the internet and World Wide Web protocols. This has made it easier for libraries to share bibliographic records or develop common OPACs, share the use of public library systems, and conduct electronic document delivery in seamless environment (Rosenberg, 2005).



3. CONCLUSION

However, based on the findings, it is believed that the role of automation is of high importance to the development of public libraries due to its immense roles in the operations, functions, and services in public libraries. Though, some public libraries are still on the verge to, or fully automate their activities. This has resulted to various delays in terms of development, functions, operations, service etc on the part of users and the public libraries itself. Thus, this research work portrays some of the roles of automation in public libraries which includes organization of information for use, networked digital information, inter-library lending and electronic document delivery, library co-operation and resource sharing etc.



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