GLOBAL ACADEMIC JOURNAL OF LIBRARY AND INFORMATION SCIENCE (GAJLIS)
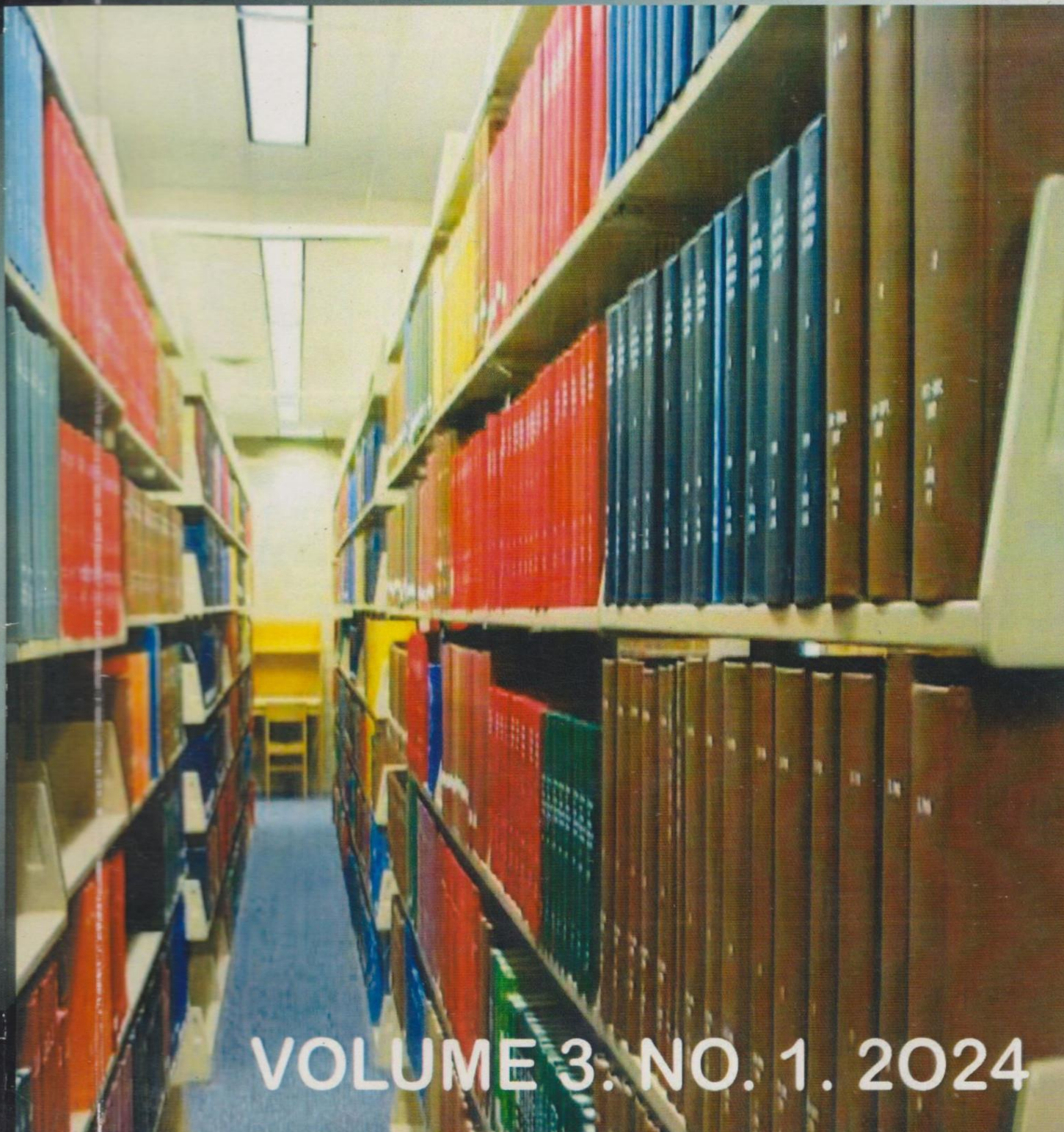
A CRITICAL ANALYSIS OF LIBRARY MANAGEMENT SYSTEM DESIGN AND IMPLEMENTATION: THE STRATEGIES AND PROSPECTS

By

Mbuotidem Umoh Esq. Ph.D

Ime Umanah Law Library,

University Of Uyo, Uyo,

Akwa Ibom State, Nigeria

Abstract

The study was to investigate a critical analysis of library management system design and implementation: the strategies and prospects. Library management is a sub-discipline of institutional management that focuses on specific issues faced by libraries and library management professionals. It encompasses normal management tasks as well as intellectual freedom, anti-censorship, and fundraising tasks. The study discovered that library management system gives us the complete information about the library. We can enter the record of new books and the details of books available in the library. We can issue the books to the students and maintain their records and can also check how many books are issued and stock available in the library. Conclusion was made in the study Library management system manages and stores books information electronically according to student's needs. The system helps both students and library manager to keep a constant track of all the books available in the library. It allows both the admin and the student to search for the desired book. In the Library Management system, the librarian can add/update/remove the student and book details into the database. One of the recommendations made in the study was that library owners should organize and offer in-house computer training programs for librarians. Besides, they should endeavor to make adequate provision of information and communication technology equipment in order to aid library management.

Keywords: Library Management System, Design, Implementation, Strategies and Prospects

Introduction

Library refers to a structured collection of information sources that are made accessible to the people. Library usually holds the information physically or in a digitized format. In the previous period, the access of library frequently used in the library room as the technology developed the access mode changed to computer system (Beynon-Davies, 2002). Library is a fast-growing organism, however; the olden methods to maintain library systems are not dynamic and effective. The application of the modern system has become indispensable for prompt to retrieval and dissemination of information and improved service for the users. Library management is a sub-discipline of institutional management that focuses on specific issues faced by libraries and library management professionals. Library management encompasses normal management tasks as well as intellectual freedom, anti-censorship, and fundraising tasks. Issues faced in library management frequently overlap those faced in management of non-profit organizations (Sharma et al., 2005). Library Management System is an application that portraits library system which could be generally small or medium in size. It is used by the librarian to categorically manage the library by the virtue of using a computerized system where he/she can record various transactions like issue of books, return of books, addition of new books, addition of new students etc. (Ashutosh and Ashish., 2012).

GLOBAL ACADEMIC JOURNAL OF LIBRARY AND
INFORMATION SCIENCE (GAJLIS) JULY, 2024, VOL. 3 NO.1.
ISSN: 2751-1177, UNITED STATE

Mbuotidem Umoh Esq. Ph.D

Library Management system gives us the complete information about the library. We can enter the record of new books and the details of books available in the library. We can issue the books to the students and maintain their records and can also check how many books are issued and stock available in the library. A library management system usually comprises a relational database, software to interact with that database, and two graphical user interfaces (one for users, one for staff). A library management system is a system for a library resource planning, used to access the documents held, orders, payment or lending all made by the clients. Library management system (Adamson et al., 2008) is an enterprise resource planning system for a library, used to track items owned, orders made, bills paid, and users who have borrowed. Library Management System supports the general requirement of the library such as the acquisition, cataloguing, circulation and other sections. A library management system usually comprises a relational database, software to interact with that database, and two graphical user interfaces (one for users, one for staff). Most integrated library systems, separate software functions into discrete programs called modules, each of them integrated with a unified interface.

Concept of Library

The library refers to a documentation system that gathers, organizes, retrieves, and disseminates recorded information with the aim of communicating knowledge to its users. Such a system pursues objectives in the documentation field proper corresponding to its customers' priority information needs. According to New World Encyclopedia, (2022) a library is a collection of information, sources, resources, and services, organised for use and maintained by a public body, an institution, or a private individual. In the more traditional sense, it means a collection of books. A library is a place set apart to contain books, periodicals, and other material for reading, viewing, listening, study, or reference, as a room, set of rooms, or building where books may be read or borrowed (Dictionary, 2022). It is also a collection of manuscripts, publications, and other materials for reading, viewing, listening, studying, or referencing. This collection and services are used by people who choose not to or cannot afford to purchase an extensive collection themselves, who need material no individual can reasonably be expected to have, or who require professional assistance with their research. The term "library" has itself acquired a secondary meaning: a collection of useful materials for common use, and in this sense is used in fields such as computer science, mathematics and statistics, electronics, and biology. Library refers to a growing area of interactive and social tools on the web that create and share dynamic content. A "library" refers to the collection of books or a building where a collection of books, periodicals, musical scores, music, and film recordings are stored (Merriam-Webster, 2021). A library is a place in which literary, musical, artistic, or reference materials (such as books, manuscripts, recordings, or films) are kept for use but not for sale.

A library is a collection of resources in a variety of formats that are organised by information professionals or other experts who provide convenient physical, digital, bibliographic, or intellectual access and offer targeted services and programmes with the mission of educating, informing, or entertaining a variety of audiences and the goal of stimulating individual learning and advancing society as a whole (American Library Association, 2019). The term "library" has itself acquired a secondary meaning: a collection of useful materials for common use, and in this sense is used in fields such as computer science, mathematics and statistics, electronics, and biology. Libraries have been around for a very long time and have traditionally been seen as collections of information and services. Libraries have always played a significant role in enabling people to engage with all kinds of information and knowledge resources. A library is a collection of materials, books, or media that are easily accessible for use and not just for display purposes. It is responsible for housing updated information in order to meet the user's needs on a daily basis. A library is a physical location, a virtual space, or both that provides physical (hard copy documents) or digital access (soft copies) materials (Wikipedia,

GLOBAL ACADEMIC JOURNAL OF LIBRARY AND
INFORMATION SCIENCE (GAJLIS) JULY, 2024, VOL. 3 NO.1.
ISSN: 2751-1177, UNITED STATE

Mbuotidem Umoh Esq. Ph.D

2022). A library refers to a place in which literary, musical, artistic, or reference materials (such as books, manuscripts, recordings, or films) are kept for use but not for sale. Any evaluation project presupposes a view of the nature and objectives of a library. Library buildings often provide quiet areas for studying, as well as common areas for group study and collaboration, and may provide public facilities for access to their electronic resources; for instance: computers and access to the Internet (Wikipedia contributors, 2022). The library's clientele and services offered vary depending on its type: users of a public library have different needs from those of a special library or academic library, for example. Libraries may also be community hubs, where programs are delivered and people engage in lifelong learning.

Concept of Library Management

Library management is a sub-discipline of institutional management that focuses on specific issues faced by libraries and library management professionals. Library management encompasses normal managerial tasks as well as intellectual freedom and fundraising responsibilities. Issues faced in library management frequently overlap with those faced in managing non-profit organizations (Wikipedia, 2022). The basic functions of library management include overseeing all library operations, managing the library budget, planning and negotiating the acquisition of materials, handling interlibrary loan [ILL] requests, overseeing fee collection, event planning, fundraising, and managing human resources. According to Henry (2006), cited by Bassey & Esiere (2022), some managerial activities in the library include;

Planning: Planning includes formulation of goals, objectives, decision making for future, strategies, policies, and effective planning.

Organizing: Organizing includes departmentation, line and staff functions, decentralization, committees and group decisions, and effective organizing.

Staffing/Commanding: It includes selection, job description, appointing personnel, appraisal, developing library managers and organizational development.

Leading (Coordinating): It deals with human factor, motivation, leadership, and communication.

Controlling: It includes system and process of controlling, control techniques, control of overall performance, and effective managing

Library management refers to the adaptation of principles and techniques of management to the library situation. It includes decision-making and getting the work done by others. The five fundamental management functions are: planning, organising, staffing, leading, and controlling. An important aspect of library management is planning and maintaining library facilities. According to Hawthorne (2011), successful planning is defined as active planning that ensures an organisation will have the right people in the right place at the right time for the right job. The Library Management System maintains the record of books in the library and controls the issue, purchase, and return processes of the books in the library. Library management involves the following functions, which clearly show the scope of management, i.e., directing, organizing, evaluating, staffing, coordinating, reporting, budgeting, and innovating (LISBDNETWORK, 2013). Libraries have an important role to play in facilitating access to information for learning, education, and training. It is a well-known fact that a well-managed library is a successful library. Library management means efficient and effective management of material (information sources), machinery, men (human resources), technology, and

GLOBAL ACADEMIC JOURNAL OF LIBRARY AND
INFORMATION SCIENCE (GAJLIS) JULY, 2024, VOL. 3 NO.1.
ISSN: 2751-1177, UNITED STATE

Mbuotidem Umoh Esq. Ph.D

money to meet the objectives of the library. Thus, the librarian as manager performs all the functions of a manager or administrator.

Concept of Library Management System

A library management system is software built to handle the primary housekeeping functions of a library. Libraries rely on library management systems to manage asset collections as well as relationships with their members. Library management systems help libraries keep track of the books and their checkouts, as well as members' subscriptions and profiles (Educative, 2022). Library management systems also involve maintaining the database for entering new books and recording books that have been borrowed with their respective due dates. The purpose of a library management system is to operate a library efficiently and at reduced costs. The system being entirely automated streamlines all the tasks involved in the operations of the library. The activities of book purchasing, cataloging, indexing, circulation recording, and stock checking are done by the software. Such software eliminates the need for repetitive manual work and minimises the chances of errors. According to IGI Global (2022), a library management system (LMS) is also called an automated library system. It is defined as software that has been established to manage the basic housekeeping functions of a library. LMS helps provide information on any book present in the library to the user, as well as the staff number. It also keeps track of books published, given in return, and added to the library. The library management system is software that manages the manual functions of a library. The software helps manage the entire library operation, from maintaining book records to issuing books (Hodusoft, 2022). In addition, it allows streamlined management of fine details of books such as author name, edition, and many other important details. So, it is easier to search for books and find the right materials for students and the librarian.

A library management system is software that is designed to manage all the functions of a library. It helps librarians maintain the database of new books and the books that are borrowed by members, along with their due dates (Master-Soft, 2021). A library management system refers to the adaptation of principles and techniques of management to the library situation. It includes decision-making and getting the work done by others. The purpose of a library management system is to operate a library efficiently and at reduced costs. The system's being entirely automated streamlines all the tasks involved in the operations of the library (Anurag, 2020). The activities of book purchasing, cataloging, indexing, circulation recording, and stock checking are done by the software. Such software eliminates the need for repetitive manual work and minimizes the chances of errors. Library management systems are designed to manage the movement of books and maintain records of the members in a library. The software solution is designed based on the system requirements, the people involved, the content of the operation, and the activity to be performed. The library management system refers to the overarching database for the library service, which contains book stock and library membership records (Law Insider, 2021). A library management system is an example of an information system. An information system, whether it is computerized or not, is a system that represents objects in a physical system, for example, information resources in a library collection. The catalogue discussed in the last chapter is a system that represents the actual information resources of a library, whether that representation consists of marks on a card, marks on a microfiche sheet, or data stored in a computer (School Software, 2022). The term "library management system" is the one most commonly used by librarians and system vendors to describe the systems that perform acquisition, cataloguing, and circulation functions. It has generally replaced earlier terms, such as "library housekeeping system," which used to be in common use in British literature and indicated that this kind of system is used to handle a library's day-to-day transactions.

Library management techniques

Mbuotidem Umoh Esq. Ph.D

Modern library management techniques are an integral part of the process of managing any library. The concept of library management techniques can be summarized as a computer-based library management system, which can control all functions belonging to the library field such as indexing, retention, trading, inventory verification, and other frequent routine tasks so that it performs them quickly and systematically (Leo, 2022). Managing a library is an enormous task that has now required that people earn advanced degrees in other to know how to plan, organize, collect and disseminate information.

Tips that will guarantee an effective and efficient management of a library:

1.   Know what it means to manage a Library; Managing a library is much more than sitting behind a desk and waiting for individuals to declare interest in any material or even sign out stuff. Library management involves a lot of stuff like planning, making decisions concerning the library's goals, organizing; assembling, and if need be coordinating human and other resources required to actualize the library's goals; controlling; monitoring the various performances of the library, and even leading by way of putting efforts to stimulate high performance.

2.   Define the objectives of your library; You need to know and state clearly the reason for running your library. This may require that you have knowledge of the people and various knowledge gaps your library is expected to serve, the various categories of books which your library will have in its possession, likely materials that will fascinate your audience, and book selection policies, as well as your pricing model should you offer membership facilities (JD, 2018).

3.   Make provisions for maintenance of library; While it is important to have well stocked books, not updating your collections on a regular basis will make them unappealing to readers. A number of procedures may also help in maintaining a library and preserve its materials against decay or deterioration. These include dusting and cleaning, which should be carried out on a regular basis with adequate air and sunlight exposure. Other procedures include carrying out pest control, paying attention to the environment in which the library operates, and replacement of renewable resources like fixtures and fittings and worn out seats.

4.   Be creative; It is important that you design strategies and games that can engage library users. Since users are generally inclined to book games and quizzes, you can form a club or category for people according to their taste for materials. This can be engaging and fun, and can help to retain and encourage people to frequent the library.

5.   Create connections; As a librarian, it is important to create a form of bond with individuals and institutions that can support your constant need for materials. Seeking partnership or fellowship with them will not only encourage the exchange of ideas, but will also provide a source for new materials for your library, especially if such individuals or institutions have a thing or two to do with books.

6.   Updating to the latest trend; Technology has had a huge effect in the library system, and so getting the technological equivalent of certain resources in the library will not only provide an alternative source of knowledge, it can also add to the zeal to use the library facility. Keeping up to date with the latest practices in library management can also help ensure that you maintain the appropriate standards.

Types of library management system

Libraries have a crucial role to play in the education industry worldwide. Schools, colleges and other educational institutes rely greatly on their libraries for all relevant information (Nayyar, 2022). Library

Mbuotidem Umoh Esq. Ph.D

management software is designed to handle the primary functions of a library. It stores, organizes, shares and retrieves all data and other relevant information essential to performing day-to-day operations of the library. Here, are some of the list library management system;

1.   Insignia Library System; Insignia Library System is a high-end scalable and fully integrated library automation system. It is of immense use for K-12, academic, public and special libraries. Insignia Library System is the most comprehensive library system and can be successfully installed for a single site as well as a consortium of libraries. The system is designed with a reliable, intuitive interface. The system is designed with a reliable, intuitive interface. Insignia library management system helps users to open multiple windows and multiple modules at once. This library automation system is quite user-friendly. Users can conveniently access any feature in this system with the click of a button. Insignia Library System is an enterprise resource planning system that can effectively track items owned, bills paid, and orders generated.

2.   Accessit Library; Accessit Library is not just a means of information, it is a state-of-the-art online library management system used to search the catalog and borrowing materials. Let's understand the software a little more in detail. It is designed to help schools build a connected community of learners (Nayyar, 2022). Accessit Library is a quick and convenient school management system for library. It fosters the love for learning, reading and discovering interesting facts each day.

3.   webLIBRARIAN; webLIBRARIAN is a complete web-based library management and automation software. Cataloguing is a key function of webLIBRARIAN. Cataloguing of CDs, Annual Reports, Books, Journals, Magazines, etc. becomes a reality with this library management software.

4.   Genesis G4; The Genesis G4 Library Automation software founded by Library Resource Management Systems in 1989. Circulation, cataloging, inventory, reporting (simple & customizable), and borrower management are its key functions. It comes with an extensive training module via documentation, live online, webinars and in-person sessions to ensure hassle-free implementation (TrustRadius, 2022).

5.   G-Library (Gayatri Library Management); Developed by Gayatri Software, Gayatri Library Management software takes care of the entire process of library management in schools, colleges and other educational institutes. It provides Information related to dues to be cleared by any member, the total number of books available and about other expenses. G-Library uses excel for bulk uploading of periodicals, books and members. GLIB provides quick and easy data backup with the click of a button.

The Strategies for Library Management System Design and Implementation

Library management system help to maintain catalogue, acquisition register, assets register, reports, and integrates barcode, RFID, smart cards and biometric system (Siriam, 2015). Here are the five strategies to improve library services:

•   Member Management; Students, faculty and staff can create profiles including demographic information and provide convenient access to library resources and information through multiple channels including website, email, chat, messaging and push notifications from mobile devices such as iPhone and Android. Members can view issues, returns, fines, notices and reminders, as well as search and reserve books and other materials.

•   Automated Circulation & Control; Discard large collection of books with low circulation Automated library management system enable academic libraries to configure and customize rules for circulation. Librarians can simplify circulation and assign tasks to issue books, magazines journals and

GLOBAL ACADEMIC JOURNAL OF LIBRARY AND
INFORMATION SCIENCE (GAJLIS) JULY, 2024, VOL. 3 NO.1.
ISSN: 2751-1177, UNITED STATE

Mbuotidem Umoh Esq. Ph.D

make a check out. They can send automatic email notifications and SMS alerts to remind patrons on overdue return of library materials including automatic calculation of fine. Different kinds of reports can be automatically generated on total number of library materials on circulation

• Next Generation Cataloguing; Librarians can configure and create a customized catalogue for books and other resources based on physical, electronic and inter-library items. Advanced search and sort options enable patrons to find library items using different criteria and provide an easy way to check the status in real-time. Barcoding enable users to find the book's exact location and number of books available in real-time, as well as print library cards.

• Student Driven Acquisition; Automated school libraries identifies an inevitable trend to shift to streamline libraries with value-based library collections. It paves way for improvement in the quantity and quality of materials and make outdated books and materials in the library collection redundant. Normally the procurement of library material is time-consuming, complicated and costly. The fully automated library procurement process is highly reliable and enable librarian to manage vendors and supplies with improved performance and fast response time to save time and money.

• Mobile Library Landscape; Students can conveniently access the library collections from classroom, campus and from anywhere. Librarian can schedule programs using events calendar and share with members. Creatrix Campus offers an integrated cloud-based library management system which will transform school libraries and improve student lives. The library automation solution can reduce librarian's workload and improve efficiencies in the areas of cataloging, acquisition, circulation, and help students and staff to access resources or search for the right information in a safe and secure way.

Prospect of Library Management System

A library management system is an example of an information system. An information system, whether it is computerized or not, is a system that represents objects in a physical system, for example, information resources in a library collection. The 'library management system' is the one most commonly used by librarians and system vendors to describe the systems that perform acquisition, cataloguing and circulation functions (MyEdu, 2019). It has generally replaced earlier terms, such as 'library housekeeping system' which used to be in common use in the British literature and indicated that this kind of system is used to handle a library's day-to-day transactions. The change in terminology perhaps reflects the fact that these systems also perform management reporting, thus supporting higher levels of library management than the transactional subsystems.

The library management system is a software to manage manual functions of a library. The software helps to manage the entire library operations from maintaining book records to issue a book. In addition, it allows streamlined management of fine details of books such as author name, edition, and many other important details. So, it is easier to search for books and find the right materials for students and the librarian. Library management system assist the librarians to work easily. The LMS supports the librarians to encounter all the issues concurrently. The users need not stand in a queue for a long period to return/borrow a book from the library. The single PC contains all the data's in it (Bao, 2011). The librarians have to assess the system and provide an entry in it. Through library management system, the librarian can find the book in the bookshelves. The library management system supports the librarian to add/view/delete/update details from the library stock (SchoolSoftware, 2022). A library management system is used to maintain library records. It tracks the records of the number of books in the library, how many books are issued, or how many books have been returned or renewed or late fine charges, etc. You can find books in an instant, issue/reissue books quickly, and manage all the data efficiently and orderly using this system. The purpose of a library management system is to provide

Mbuotidem Umoh Esq. Ph.D

instant and accurate data regarding any type of book, thereby saving a lot of time and effort. One of the function of the library management system are to realize the automation of the management of library borrowing and return of books the timely addition and destruction of books and the update of users and book information.

Design and Implementation of Library Management System

Design and implementation of library management system processes facilitate the designing, development, implementation and maintenance of library management systems (Sheppy, 2018). The main objective of library management design is to produce logical and physical designs models of the library system. Some library design models are listed below;

- Systems Analysis and Design; System analysis through understanding and specifying in detail what a system should do and how the components of the system should be implemented and work together. System analysis and design solve business problems through the requirements of information systems and designing such systems by applying analysis and design techniques. System analysis and design is the most essential phase in the development of a system since the logical system design arrived at as a result of systems analysis which is in turn converted into physical system design.

- Database Design; Database is any collection of data, or information, that is specially organized for rapid search and retrieval by a computer. Databases are structured to facilitate the storage, retrieval, modification, and deletion of data in conjunction with various data-processing operations. A database is stored as a file or a set of files on magnetic disk or tape, optical disk, or some other secondary storage device. The information in these files may be broken down into records, each of which consists of one or more fields (Studytonight, 2018).

Figure of a Database Design

- ER Design; Entity Relationship (ER) models have played a central role in systems specification, analysis and development. It is clear that the physical objects from the precious section: the borrower name, dye date, book name card, authors, etc., Correspond to entities in the Entity Relationship model, and the operations to be done on those entities. However, a good design will minimize redundancy and attempt to store all the information in as small a space as possible.

Figure of an ER Design

The Challenges of Library Management System Design and Implementation

In the modern age, library management system is suffering from many problems including a lack of space, ineffective staff, and improper management. Without a proper system in place, most libraries portray a quite haphazard picture to the readers.

Mbuotidem Umoh Esq. Ph.D

• Sustainable funding; The Library needs content financial support for managing digital information and provide instant access to the users. Funding for libraries are most frequent problem faced by professionals without essential fund they are not able to manage, transfer, and disseminate information effective in this present days.

• Unspecialized staff: Any Institution who have design digital library they must have a knowledgeable and skillful staff. They also have a technical knowledge for handling digital equipment's as well as digital information. In the digital library management has challenge to professional and skillful staff for keep library update and implement new activities Muqueem, Shaista (2007). The library professional also have challenge to constantly update their own knowledge and skills base as to work in today's rapidly changing digital environment

• Inadequate library facilities; Globally, libraries and their umbrella institutions are confronted with a huge share of difficulties in keeping up with the cost of commercial library management systems and their attendant licenses. Libraries in the less developed economies are worse disadvantaged. These libraries are economically disadvantaged and are often unable to even afford acquiring modest requisite equipment for internal staff and patron use

• Library automation: Automating library operations is primarily aimed at improving the level of service and quality of output and fulfilling the needs that cannot be achieved by manual systems. It is evident that few libraries have automated their services due to inadequate funding to libraries, insufficient executive appreciation of libraries' role in the institutional structure, motivation factors among library managers and lack of local ICT skills. Libraries will have to implement automated library management systems capable of serving end users effectively, efficiently able to support library collaboration (Lee, 2011).

• Deficient Management Data; Unfortunately, poor data library management systems often lead to creating multiple libraries, sometimes due to multiple tools, which results in data inconsistency and unreliable lifecycle state information. This not only impacts the cost and quality of your products, but also takes a toll on the productivity, efficiency, and collaboration of your team.

• Time Wasting: User time are wasted as a result of searching for a book that has been borrowed by a user whose record cannot be traced on the paper records.

• Lack of ICT: Lack of ICT skills is a major problem facing librarians and library users People need to be educated in technology. Technology is becoming pervasive so there is a need for knowledge acquisition among librarians to be able offer efficient services in the emerging ICT era (Haneefa, 2007). Due to the lack of use of internet and technology, the library work has become very slow and discouraging thereby the needs of ICT in library management system makes library users meet with speed and accuracy.

• Inadequate library space; Library user are frustrated with library space, outdated fittings and furnishings plus inflexible layouts limit. Inadequate library space limit library function and activities thus making the library less usable and convenient.

Conclusion

The study concludes that Library management system manages and stores books information electronically according to student's needs. The system helps both students and library manager to keep a constant track of all the books available in the library. It allows both the admin and the student to search for the desired book. In the Library Management system, the librarian can

Mbuotidem Umoh Esq. Ph.D

- Sustainable funding; The Library needs content financial support for managing digital information and provide instant access to the users. Funding for libraries are most frequent problem faced by professionals without essential fund they are not able to manage, transfer, and disseminate information effective in this present days.

- Unspecialized staff: Any Institution who have design digital library they must have a knowledgeable and skillful staff. They also have a technical knowledge for handling digital equipment's as well as digital information. In the digital library management has challenge to professional and skillful staff for keep library update and implement new activities Muqueem, Shaista (2007). The library professional also have challenge to constantly update their own knowledge and skills base as to work in today's rapidly changing digital environment

- Inadequate library facilities; Globally, libraries and their umbrella institutions are confronted with a huge share of difficulties in keeping up with the cost of commercial library management systems and their attendant licenses. Libraries in the less developed economies are worse disadvantaged. These libraries are economically disadvantaged and are often unable to even afford acquiring modest requisite equipment for internal staff and patron use

- Library automation: Automating library operations is primarily aimed at improving the level of service and quality of output and fulfilling the needs that cannot be achieved by manual systems. It is evident that few libraries have automated their services due to inadequate funding to libraries, insufficient executive appreciation of libraries' role in the institutional structure, motivation factors among library managers and lack of local ICT skills. Libraries will have to implement automated library management systems capable of serving end users effectively, efficiently able to support library collaboration (Lee, 2011).

- Deficient Management Data; Unfortunately, poor data library management systems often lead to creating multiple libraries, sometimes due to multiple tools, which results in data inconsistency and unreliable lifecycle state information. This not only impacts the cost and quality of your products, but also takes a toll on the productivity, efficiency, and collaboration of your team.

- Time Wasting: User time are wasted as a result of searching for a book that has been borrowed by a user whose record cannot be traced on the paper records.

- Lack of ICT: Lack of ICT skills is a major problem facing librarians and library users People need to be educated in technology. Technology is becoming pervasive so there is a need for knowledge acquisition among librarians to be able offer efficient services in the emerging ICT era (Haneefa, 2007). Due to the lack of use of internet and technology, the library work has become very slow and discouraging thereby the needs of ICT in library management system makes library users meet with speed and accuracy.

- Inadequate library space; Library user are frustrated with library space, outdated fittings and furnishings plus inflexible layouts limit. Inadequate library space limit library function and activities thus making the library less usable and convenient.

Conclusion

The study concludes that Library management system manages and stores books information electronically according to student's needs. The system helps both students and library manager to keep a constant track of all the books available in the library. It allows both the admin and the student to search for the desired book. In the Library Management system, the librarian can

GLOBAL ACADEMIC JOURNAL OF LIBRARY AND
INFORMATION SCIENCE (GAJLIS) JULY, 2024, VOL. 3 NO.1.
ISSN: 2751-1177, UNITED STATE

Mbuotidem Umoh Esq. Ph.D

add/update/remove the student and book details into the database. Library Management system gives us the complete information about the library. We can enter the record of new books and the details of books available in the library. Library Management System supports the general requirement of the library such as the acquisition, cataloguing, circulation and other sections.

Recommendation

1.   Library owners should organize and offer in-house computer training programs for librarians. Besides, they should endeavor to make adequate provision of information and communication technology equipment in order to aid library management.

2.   Library management system suffers from lack of financial support by government therefore, government should provide ample financial support to libraries.

3.   Newly engaged staff must be well acquainted with the library management system through intensive formalized training sessions before their commencement.

REFERENCES

Adamson & Veronica. (2008). JISC & SCONUL Library Management Systems Study Sheffield, UK: Sero Consulting. p. 51.

American Library Association (2019). Definition of a Library: General Definition. Available at: https://libguides.ala.org/library-definition

Anurag, D. (2020). Library Management System: What is the Purpose of a Library Management System? Available at: https://www.skoolbeep.com/blog/library-management-system/

Ashutosh, T & Ashish, S. (2012). Online Library Management System. IOSR Journal of Engineering (IOSRJEN). Vol. 2 (2), pp. 180- 186.

Bao, S., Jiangwei, F. & Ling, L. (2011). "A Study on How to Construct the Prediction Model of Library Lending of University Library", International Conference on Information Science and Technology.

Beynon-Davies, P. (2002). Information systems: An introduction to informatics in organizations. Palgrave Macmillan.

Dictionary (2022). Concept of library. Available at: https://www.dictionary.com /browse/library

Educative   (2022).   Design   a   Library   Management   System.   Retrieved   from: https://www.educative.io/courses/grokking-the-object-oriented-design-interview/RMIM3NgjAyR

Haneefa, M. (2007). Application of information and communication technologies in special libraries. Library Review, 56(7), pp.603–620 from https:// doi.org/10 .1108/0024 2530710775999

Hawthorne, P. (2011). Succession planning and management: A key leadership responsibility emerges. Texas Library Journal, 87(1) Pp 8–12. Bassey, M. M. & Esiere, E. U. (2022). A Critical Analysis of the Prospects and Challenges of Android Library Management. Intercontinental Academic Journal of Library and Information Science, 4(1) Pp. 11-20

Hodusoft (2022). Importance of Library Management System for Education Institutes. Available at: https://www.myeducomm.com/blog/importance-of-library-management-system/

GLOBAL ACADEMIC JOURNAL OF LIBRARY AND
INFORMATION SCIENCE (GAJLIS) JULY, 2024, VOL. 3 NO.1.
ISSN: 2751-1177, UNITED STATE

Mbuotidem Umoh Esq. Ph.D

IGI Global (2022). What is Library Management Systems? Available at: https://www.igi-global.com/dictionary/library-management-systems/76207

JD, (2018). 10 Library Management Tips for Running a Great Library. Available at: https://jobdescriptionandresumeexamples.com/10-library-management-tips-for-running-a-great-library/

Law Insider (2021). Library Management System Definition. Retrieved from: https://www.lawinsider.com/dictionary/library-management-system

Lee, Matt (2011) What is free software and why is it so important for society. Available: http://www.fsf.org/aboutlwhat-is-free-software

Leo A. (2022). Practical Tips for Successful Library Management. Available at: https://www.alastore.ala.org/content/practical-tips-successful-library-management

LISBDNETWORK (2013). Definition of Library Management. Available at: https://www.lisedunetwork.com/definition-of-library-managemen/

Master-Soft (2021). Library Management System Software: Effectively Manage, Track, and Perform Daily Library Operations with Ease. Retrieved from: https://www.iitms.co.in/library-management-system/

Merriam-Webster (2021). Library. Available at: https://www.merriamwebster.com/dictionary /library

Muqueem, S. (2007). Changing role of library professionals in the digital environment. Retrived from: https://www.researchgate.net/publication/277716066

MyEdu (2019). Importance of Library Management System for Education Institutes. Available at: https://www.myeducomm.com/blog/importance-of-library-management-system/

Nayyar, V. (2022). Library Management System: How to Enhance the Efficiency of Librarians. Available at: https://www.techjockey.com/blog/top-10-library-management-system-enhance-efficiency-librarians

New World Encyclopedia (2022). Introduction of Library. Available at; https://www.newworldencyclopedia.org/entry/Library

School Software (2022). Library Management System. Available at: https://www.schoolsoftware.com.ng/library-management-system/

SchoolSoftware, (2022). Library Management System. Available at: https://www.schoolsoftware.com.ng/library-management-system/

Sharma, C. K., Singh & Khiran. (2005). Library Management System. Available: en. wkipedia. org/wiki/Library_management.

Sheppy. (2018). CSS: Cascading Style Sheets. Retrieved from MDN web docs: https://developer.mozilla.org/en-US/docs/Web/CSS

Siriam (2015). 5 strategies for improving school library services. Available at: https://www.creatrixcampus.com/blog/5-strategies-improving-school-library-services

Mbuotidem Umoh Esq. Ph.D

Studytonight. (2018). Normalization of Database. Retrieved from Studytonight: International Journal of Computer Applications (0975 – 8887) Volume 182 – No. 13, September 2018

TrustRadius (2022). Library Management Systems. Available at: https://www.trustradius.com/library-management

Wikipedia (2022). Library management. Available at: https://en.wikipedia.org/wiki/Library_management

Wikipedia (2022). Library. Retrieved from: https://en.wikipedia.org/wiki/Library

Wikipedia contributors. (2022). Library. In Wikipedia, The Free Encyclopedia. Retrieved from https://en.wikipedia.org/w/index.php?title=Library&oldid=1116054057