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DOI: 10.26140/anie-2020-0901-0033БИБЛИОТЕЧНАЯ СИСТЕМА УПРАВЛЕНИЯ И ЕЕ
ВЛИЯНИЕ НА ДИГИТАЛИЗАЦИЮ

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Аннотация. В статье рассматриваются основные области системы управления библиотекой и ее влияние на цифровизацию. Проанализированы особенности и преимущества системы управления библиотекой. OPAC объясняется как онлайн-база данных для библиотечных ресурсов. Были идентифицированы и оценены различные типы программных решений для управления библиотеками, таких, как Koha, Evergreen, Bibliotek, Openbiblio, Invenio, Pmb, Opals, Newgenlib. Сегодня значимость библиотек и библиотечных работников сохранится в том случае, если цифровые инструменты овладеют печатными материалами, так же, как они выживали на протяжении тысячелетий, адаптируясь к способам документации и потребностям лиц, ищущих в то время информацию. Поскольку онлайн-базы данных продолжают развиваться, библиотекари будут по-прежнему играть активную роль в обеспечении людей необходимой информацией. Тогда библиотеке, возможно, не нужно будет размещать столько книг и печатных архивов, чтобы ее могли просматривать ученые и читатели. Тем не менее она все равно будет служить местом, где люди будут искать знания.

Ключевые слова: библиотека, управление, цифровизация, программное обеспечение, технологии, разработка.

THE IMPLEMENTATION OF LIBRARY MANAGEMENT SYSTEM
AND IT'S IMPACT ON DIGITALIZATION

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Abstract. This article describes the key areas of the Library Management System and its impact on the digitalization. Besides that, the main features and advantages of the library management system have been analyzed. OPAC has been explained as it is an online database for library resources. Different types of Library Management Software solutions such as Koha, Evergreen, Bibliotek, Openbiblio, Invenio, Pmb, Opals, Newgenlib have been identified and evaluated. Today, libraries and the role of librarians will survive as digital tools take over printed material, the same way they have survived across millennia by adapting to the modes of documentation and the needs of information seekers at the time. As online databases continue to develop, librarians will still serve an active role in connecting people with the information they need. While a library might not need to house as many books and print archives for scholars and readers to sift through, it will still serve as a space for people to come to seek out knowledge.

Keywords: library, management, digitalization, software, technology, development.

Introduction

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. With the increasing advancement of cutting-edge technologies, like tabs and mobiles, Library Management has become very simple and easy to use. The Library Management System allows customers to manage all the activities and work related to the library on one platform.

Overview of the Library Management System

Library Management System is software used to manages the catalog of a library. This helps to keep the records of whole transactions of the books available in the library. The library management software is highly reliable and very easy to use. It fulfills all the requirements of a librarian. There are many features that help librarians to keep track of the books available as well as the ones issued. Thus, a library management system reduces manual work and facilitates a smooth flow of day-to-day activities by negating errors and maximizing profits.

The main features and advantages of the library management system are:

- Manage the complete management of the entire library through the software's easy interface;
- It removes the manual process of issuing books by easy and simplified book saving time and effort;
- The librarian can issue, return and reserve book for a particular customer through the software's interface;
- The software automatically shows fine levied by automatically counting days from the date of issue in case of late return of book;
- It is easy to add, update, and view library items online.

There are different kinds of library management system

software so it is significant to select the useful one. Over the years, these software solutions have also matured in their functionality and usability and have efficiently adapted to the changing requirements. Some of the best library automation software enables in managing the whole library workflow through an easy-to-use, simple and interactive interface. By using this software, a librarian can handle basic to complicated functions of a library right from collection till controlling bibliography.

1. The implementation of the Integrated Library System

Integrated library systems (ILS) were often known as library automation systems or automated systems in the 1970s and early 1980s. Before the advent of computers, libraries usually used a card catalog to index its holdings. Computers were used to automate the card catalog, thus the term automation system [1, p.4]. Automation of the catalog saves the labor involved in resorting to the card catalog, keeping it up-to-date concerning the collection, etc. Since the late 1980s, windows and multi-tasking have allowed business functions to be integrated. Instead of having to open up separate applications, library staff could use a single application with multiple functional modules.

An integrated library management system is an electronic program that helps librarians and users to circulate and catalog items, manage patron activity, track item movement as well as interact with databases from other libraries or institutions, amongst other functions. The benefits of using a library system are immediate and obvious. By automating processes that would otherwise have been done manually, an ILS can exponentially increase the productivity of your library.

An ILS also includes an Online Public Access Catalogue (OPAC). This is an online database of your library resources which you can use to locate and promote resources and

services in the library. Ideally, the school community has access to the OPAC from the homepage of your school's website and/or Learning Management System (LMS).

An Online Public Access Catalog -is an online database of materials held by a library or group of libraries. Users typically search a library catalog to locate books, videos, and audio recordings owned or licensed by a library. The newest generation of library catalog systems are distinguished from earlier OPACs by their use of more sophisticated search technologies, in particular, faceted search and features aimed at greater user interaction and participation with the system, including tagging, reviewing, and RSS feeds.

They are usually, although not always, independent of the integrated library system, with modules or drivers that allow for the synchronization of data between the two systems. While older online catalog systems were almost exclusively built by ILS vendors, libraries are increasingly turning to next-generation catalog systems built by enterprise search companies and open source projects led by libraries themselves. As Shanmugam (2012) stated, "Libraries in universities are now moving from the manual retrieval system in terms of traditional card catalog to the use of OPAC as an information retrieval system characterized by short bibliographic records, mainly of books, journals, and audio-visual materials available in a particular library" [8, p.1]. The OPAC has greatly influenced the very nature of libraries and users of information resources by opening them to a variation of portals through which they can access and retrieve information. Furthermore, (Ozonuwa et al, 2018) emphasized that OPAC has revolutionized the traditional accessibility to resources of libraries in general and academic libraries in particular. It is an interface of information retrieval system which assists information searchers to access resources of libraries using several access points [7, p.83].

2. Library Management Software

Library Management Software is an application that allows the automation of libraries and book databases. The software is commonly used by libraries and librarians to be able to manage and access their library resources through a single, computer-based platform. Such an application makes it easy for library staff to manage books and records. Self-service or web-based library management application allows users to efficiently search online libraries for the desired book or material and read it online.

The best library management software solutions are the following:

KOHA
EVERGREEN
BIBLIOTEQ
OPENBIBLIO
INVENIO
PMB
OPALS
NEWGENLIB

KOHA- Since the original implementation in 1999, Koha functionality has been adopted by thousands of libraries world-wide, each adding features and functions, deepening the capability of the system. With the 3.0 release in 2005 and the integration of the powerful Zebra indexing engine, Koha became a viable, scalable solution for libraries of all kinds. LibLime Koha is built on this foundation. With its advanced feature set, LibLime Koha is the most functionally advanced open source Integrated Library System (ILS) on the market today [5].

The Evergreen Project-developed an open-source ILS, used by more than 2,000 libraries around the world. The Evergreen Project was initiated by the Georgia Public Library System in 2006 to serve their need for a scalable catalog shared by (as of now) more than 275 public libraries in the state of Georgia. After Evergreen was released, it has since been adopted by several library consortia in the US and Canada as well as various individual libraries and has started being adopted by libraries outside of North America [3].

BiblioteQ developed using the Qt4 compiler, BiblioteQ

facilitates cataloging books, magazines, research papers, Journals, videos and so on. Right from adding a new item, till logging dead stocks, this library automation system stands can act as a powerful tool for all types of libraries.

OpenBiblio is an easy to use, automated library system written in PHP containing OPAC, circulation, cataloging, and staff administration functionality.

Invenio is a framework with which one can build repository solutions. Scalability and safety are the two key strengths of Invenio. It offers complete visibility across the lifecycle of the content.

Probability-Based Matching (PBM) is a Windows-based library search system that performs computerized identification of mass spectral unknowns against reference libraries of mass spectra. It features a (PBM) algorithm that can perform sub-second searches of large databases, probability ranked match reliabilities, graphic display of chromatogram+MS data and search results, and graphic display of chemical structures.

OPALS are a proven, open-source automated library system. Whether your library has hundreds of resources or millions, there is likely a library just like yours that has adopted OPALS. Well over 2000 libraries around the world use OPALS every day to manage library resources[6].

NEWGENLIB- is fully web-based integrated library management software that runs on distributed computers through a network or server. It can also run on local area networks without access to the Internet, although some of the advantages of using it via the web will be lost. It uses some well supported and widely-used, reliable and well tested open source components like PostgreSQL, Apache Tomcat, and Solr Lucene. NewGenLib is entirely Java-based, platform-neutral, and uses the following related software technologies in its presentation, web server and database layers [4, p.46].

Conclusion

Recently, technological changes have transformed the role of the library management system. Tremendous growth of the Internet and Mobile technologies contribute and impact immensely in libraries and their operations and services. Expansion of collections and services are required to meet the challenge, brought by modern technologies. In order to achieve long-term success in library management, it is indispensable to effectively implement library management software. Before using any library, management software or application librarians should pay attention to its features and advantages. Today's librarians should recognize the modern trends and technologies; put effort in order to help libraries to be more digital. The digitalization of libraries plays an important role in managing libraries for a sustainable future.

REFERENCES:

1. Akeroyd, J. and Cox, A. (1999). *Integrated Library Management*. VIVE 29 (2), pp.3-10. [Online]. Available at: <https://www.researchgate.net> (Accessed: 25.12.2019)
2. Esarada, E.R. and Okolo, E.S. (2019). *Use of Online Public Access Catalogue (OPAC) in selected University Libraries in South Nigeria. Library philosophy and practice e-journal* 4 (23), pp.1-23. [Online]. Available at: <https://www.researchgate.net> (Accessed: 04.01.2020)
3. Evergreen. (2019). *Overview of the Evergreen community*. Available at: <https://evergreen-ils.org> (Accessed: 26.12.2019)
4. Giri, R., Sengar, D.S (2011). *Use of open source software in the learning resource centre of Indira Gandhi Institute of Technology: a case study. Annals of Library and Information Studies* 58(1), pp. 41-48. [Online]. Available at: <http://nopr.niscair.res.in/handle/123456789/11555> (Accessed: 28.12.2019)
5. KOHA. (2019). *About Liblime KOHA*. Available at: <http://www.koha.org/> (Accessed: 25.12.2019)
6. OPALS. (2019). *Open-source Automated Library System*. Available at: <https://opalsinfo.net/> (Accessed: 27.12.2019)
7. Ozonuwa, S.O., Lateef, B.E. and Nwaogu, O.H. (2018). *Use of Online Learning Resources by Students. Covenant Journal of Communication* 5(1), pp. 82-96. [Online]. Available at: <https://pdfs.semanticscholar.org> (Accessed: 23.12.2019)
8. Shanmugam, T. (2012). *Use of E-resources by the Students and Researches of Faculty of Arts, Annamalai University. International Journal of Library Sciences* 1 (1), pp.1-7. doi: 10.5923/j.library.20120101.01

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