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The Future Role of Smart Libraries for Smart Users: An Overview

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ABSTRACT

For libraries to provide information services and work as a collection center that can meet various needs, they must create a continuous information system based on new information and communication technology. There is also a need to develop mobile services using portable devices such as smartphones and tablets and information systems including cloud computing, Software as a Service - SaaS, annotations, and the Library 2.0 concept. This article describes a data library using artificial intelligence and cloud computing. The information system developed in this study adopted the concept of cloud computing as SaaS to prevent the change of the mobile library service paradigm and the explosive growth of electrical equipment. Advantages of this architecture include resource sharing, multitenant support, and metadata configuration and support. When necessary, user support is provided in the form of software. Performance reviews and TTA certifications were conducted to evaluate the effectiveness of the design process. The results supported by the performance test are that the processing time for at least 100 MB is approximately linear and the average overhead is only less than two. The system also passed Level 3 or above in certification tests including SaaS development, performance and application functionality. This article aims to discuss new technologies that come together to create smart libraries. Smart libraries are new-generation libraries that integrate smart devices, smart users and smart services.

KEYWORDS: Libraries, Smart libraries, Smart users, resource sharing, smart generation, amazing skill.

INTRODUCTION

In a smart world with a smart generation, why can't we take a big step towards "smart libraries"? This problem has been around for a while because, in the last few years, many school leaders have moved away from traditional management methods. Libraries are at the center of this technological revolution. Understanding its benefits is important for schools to choose the "smart library" concept. What is this "smart library"? How does it help school management turn students into smart students? We will talk about all of these in a new blog post.

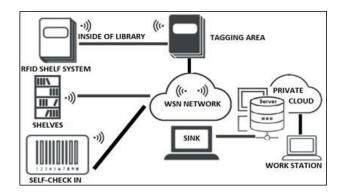
Smart library is also another amazing skill because it is known as a practical and advanced library that takes care of the latest updates. The concept was designed to encourage library use and encourage frequent visits. As you can see, this is completely different from a normal library installation. If you focus on the key difference between these two types, smart libraries can operate without requiring staff. It promotes a stress-free workplace where you don't have to worry about data and storage due to loss or errors. This smart system creates automatic work in schools, libraries and other institutions or organizations. The solution can be implemented independently or integrated with other software. Smart library or library management is the best way to develop end-to-end libraries. His influence doesn't end there. Maintenance of data storage of records of all kinds of data, publication guide, recovery, recycling, report information, high-level automatic payment, etc. It can easily perform many management functions, including.

WHAT IS A SMART LIBRARY?

Libraries with "smart library" technology can be opened to library users without staff. The technology can remotely control libraries, including automatic doors, lighting, self-service kiosks and public computers. This allows us to extend the library's opening hours so more people can use the library at a time that is convenient for them.

CHANGES IN LIBRARIES - SMART LIBRARIES:

The combination of digital information storage technology and information communication technology can change the concept of building libraries and turn them into digital libraries. A country can be a leader in establishing an electronic library called a smart library for the benefit of all citizens in the country. The conceptual model of the centralized national smart library system is shown in Figure 1. In the smart library, the entire library is automated and the central library provides services electronically to all public, academic and research libraries by digitizing all information. These local libraries should have e-reading machines so that readers can store information based on search engines. Such local library patrons will go paperless. This concept turns local libraries into electronic resource providers. Users can get information from e-books, e-newspapers, e-magazines, and e-magazines and return them by searching. The advantage of such libraries is that they can reduce the cost of maintaining a resource-rich library without the need for physical copies. Developing countries should have such libraries to meet the information needs of their citizens. According to the smart library model, the national government can use the national budget in the central smart library, as well as generate revenue for the system by paying subscription fees from each library or user in the villages.



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CHARACTERISTICS OF SMART LIBRARIES

1. Services of Smart Library

Intelligent libraries offer technological advancements through smart services like RFID, mobile and wireless access, remote assistance, semantic web, and artificial intelligence. This includes the Internet of Things, machine translation, voice and image recognition, natural language processing, and augmented reality to enhance experiences when engaging with cultural heritage.

2. Users of Smart Library

Smart libraries cater to intelligent users. In the library setting, this idea of intelligent users can be interpreted in two levels:

a. Community of Smart library

The smart user concept encompasses not just the intelligent citizen who uses SL services, but also the library staff, their expertise, and career advancement. Library staff are considered smart individuals, particularly in tasks such as information and data production and analysis or managing discovery tools.

b. Creation of the Information

Intelligent users contribute to the knowledge and information available to both users and library staff. The library user plays a role in generating knowledge and collaborating with other users and staff. The smart library user is involved in creating, enhancing, and exchanging information and knowledge.

3. Governess of Smart library

The third aspect of a smart library involves institutional and political aspects. Smart governance emphasizes the community's role in recognizing the value of information technology in advancing the library and reinventing libraries for a new environment. Institutional readiness and community involvement are crucial for the prosperity of smart cities. Smart governance in libraries encompasses features such as collaboration, cooperation, partnerships, citizen engagement, and participation, aligning with the principles of smart governance in urban settings.

4. Places of Smart Library

The fourth characteristic pertains to the physical layout and ambiance of the library. Broadly speaking, this aspect is often termed a "smart environment" and environmental surveillance. There are two distinct elements to consider: The idea of a green library is also defined by the library's ecosystem. This includes aspects such as adhering to sustainable construction rating systems, waste disposal, the presence of natural surroundings, a lack of pollution, and sustainable resource management. Sustainable architecture and environmental engineering are key components of this aspect.

FUTURE COMPONENTS OF SMART LIBRARIES:

a) The Importance of Evaluating E-Book Suppliers:

"Even the longest supplier/library relationship should not be taken lightly. Supplier evaluation should not be limited to contract renegotiation or the supplier's poor performance should be regularly uncovered. Rather, it should be a

routine process" Saponaro and Evans (2019). Over the past decade, with the popularity of smartphones, tablets and other portable electronic devices, the reading habits of library users have quietly shifted from reliance on traditional books.

Smart Books The origin of the library: the rapid replacement of physical collections:

The concept of a "smart library" was proposed and used by Aittola et al. As early as 2003, the Oulu University Library in Finland had such guidelines. At that time, "smart" allowed users to search for books, find books quickly, find books, etc. Refers to a library that uses wireless LAN technology to provide electronic maps for the best way to achieve this (Aittola et al., 2003). With the emergence of new technologies, in 2010 Yan (2010) defined the knowledge base of this library as a service.

b) Research steps

The research is divided into the following steps. The first step is to develop a benchmark to evaluate traditional ("non-smart") and "smart" e-book services. Indicators were extracted from previous data and incorporated into the framework. The framework is then presented to e-book sellers and they are asked to evaluate their services. Then analyze the e-book sellers' data to create a new index, which is used to derive.

c) Indicator index

The value index of resources collected from e-book products and resources. The quality of each platform is normalized by equation 10 for approximately three Annual new e-book rates, average annual growth of e-books, frequency of e-book updates, and all partners of the publisher/units. price evaluation is a buying book.

d) Source collection

CXstar, JD Reader and Superstar are in the top three; This shows that our e-book platform provides more resources - compared with other manufacturers, the quality of each platform is more available according to the needs of universities, most of the new books released in the last three years are high. On average, a large number of new e-books are published every year and the frequency of the List is greater.

ESTIMATED TIME CHANGE:

The National Central Smart Library concept can be implemented according to the political decision of the central government. The central government of the country may decide to formulate policies regarding the provision of free information/digital services to all citizens of the country. The open-access online data publishing model makes it possible to limit the publication of scientific articles to the world via the Internet. Therefore, everyone can access all publications within the scope of open access. Open access to books and journals in all areas of society is essential to the advancement of progress and equality in any country. In 2020, all journalists and book publishers around the world are expected to receive the new open-source code. Therefore, if the government plans to use high-speed information and communication technology to support central smart libraries and customer service providers, the National Smart Library will provide public access to free educational and research materials for everyone by 2020. Implementation of the Universal Resource Center (URC) will take more time due to legal issues and payment for a free exchange of information in many countries.

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CONCLUSION

The methodology developed in this study provides a more comprehensive and integrated method for libraries to evaluate e-book services than was previously possible. The framework combines past research and existing expertise on traditional and smart libraries. It solves the usability and operation problems of e-book providers. This approach allows librarians to evaluate and select services for users more safely and effectively and advances in information and communication technology offer new opportunities for innovation in the traditional library model. Using the most advanced technology, countries can transform their physical libraries into physical libraries to provide information quickly and meet the needs of people and students in the country and around the world without discrimination. The global service provider is planned to be an innovation in the development of technology for the free sharing of information without the ability of everyone in the world.

REFERENCES

- [1] Baryshev, R. A., & Babina, O. I. (2016). Smart library concept in Siberian federal university. *International journal of applied and fundamental research*, (1), 16-16.
- [2] Gul, S., & Bano, S. (2019). Smart libraries: an emerging and innovative technological habitat of 21st century. *The Electronic Library*, *37*(5), *764*–*783*. doi:10.1108/el-02-2019-0052.
- [3] Nam, T., & Pardo, T. A. (2011, June). Conceptualizing smart city with dimensions of technology, people, and institutions. In *Proceedings of the 12th annual international digital government research conference: digital government innovation in challenging times* (pp. 282-291).
- [4] Schopfel, J. (2018). Smart libraries. Infrastructures, 3(4), 43.
- [5] Shah, A., & Bano, R. (2020). Smart Library: Need of 21 st Century. Library of Progress-Library Science, Information Technology & Computer, 40(1).
- [6] Aithal, P.S. Smart Library Model for Future Generations. Int. J. Eng. Res. Mod. Educ. 2016, 1, pp. 693–703. Available online: https://ssrn.com/abstract=2822978 (accessed on 4 July 2018).
- [7] Chou, Sean: Why you need to know the difference between AI and Automation. O'reilly Artificial intelligence newsletter, CMS WiRE; September 2019, pp. 1-4.
- [8] Giffinger, R.; Fertner, C.; Kramar, H.; Kalasek, R.; Pichler-Milanovic, N.; Meijers, N. Smart Cities Ranking of European Medium-Sized Cities; Centre of Regional Science (SRF), Vienna University of Technology: Vienna, Austria, 2007; Available online: http://www.smart-cities.eu/download/smart_cities_final_report.pdf (accessed on 14 June 2018).
- [9] Hess, E.: The Internet of Things-Implication for the library, https://compendium.ocl-pa.org/pa-forward-the-internet-of-things-implications-for-the-library, accessed at 2016/4/12.
- $[10] https://irexgl.wordpress.com/2012/08/28/ \ what-defines-a-modern-library-exciting-conversations-emerging-from-the-international-young librarians-academy-in-ventspils-latvia/$
- [11] https://pdfs.semanticscholar.org/a060/ c58e0787700e6e470e6fe8a6dd64bc3e598d.pdf.
- [12] Jerkov, A.; Sofronijevic, A.; Stanisic, D.K. (2015). Smart and Sustainable Library: Information Literacy Hub of a New City. In Proceedings of the European Conference on Information Literacy ECIL, Tallinn, Estonia, 19–22 October 2015.
- [13] Lohr, Steve (2019). At Tech's leading edge, worry about a concentration of power, O'reilly newsletter. The New York Times; March, 2019. 1-3p.

- [14] Morgan, J. (2014). A simple explanation of the Internet of Things,
- www.forbes.com/sites/jacomorgan/2014/05/13/simple-explanation-internet-things-that-anyone-can-understand.
- [15] Nam, T.; Pardo, T.A. (2015). Conceptualizing smart city with dimensions of technology, people, and institutions. In Proceedings of the 12th Annual International Digital Government Research Conference: Digital Government Innovation in Challenging Times, College Park, MD, USA, 12.
- [16] Passey, Arvind (2019). AICTE Believes; Education Post, A New High in Education, July 2019; pp. 16-24. Smart Libraries Newsletter. Available online: https://journals.ala.org/index.php/sln/index (accessed on 4 July 2018).
- [17] Zhao, "Personalized recommendation by using fused user preference to construct smart library," Internet Technology Letters, vol. 4, no. 3, p. e273, 2021.
- [18] Z. Jing, "Application of data mining based on computer al-gorithm in personalized recommendation service of univer-sity smart library," Journal of Physics: Conference Series, vol. 1955, no. 1, Article ID 012008, 2021.
- [19] Z. Shu, "Research on the characteristics and guarantee system of smart library," in Proceedings of the 2021 International Conference on Internet, Education and Information Technology (IEIT), pp. 195–198, IEEE, Suzhou, China, April 2021.
- [20] Z. Chen, M. Zhou, and L. Feng, "Analysis of the smart library construction in colleges based big data and artificial intelligence," Journal of Physics: Conference Series, IOP Publishing, vol. 1955, no. 1, Article ID 012017, 2021.