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INTEGRATED LIBRARY SYSTEM VIA SAAS PLATFORM FOR LIBRARIES: AN OVERVIEW

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ABSTRACT

This paper presents an overview on cloud based library software as a service (SaaS). The benefits of selecting an integrated library system (ILS) via the software as a service hosted delivery model versus a locally installed system. The further use of cloud computing in libraries and various library system vendors providing cloud services.

Key words: Cloud Computing, SaaS, ILS.

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1. INTRODUCTION

Technological developments have influences virtually every facet of library operations and services. Cloud computing is a technology delivery model that provides pervasive and on demand applications and services by utilizing online and remote resources that can be positioned with minimal management or service provider intervention [1]. Software as a Service (SaaS) is one of the service platform of cloud computing in which the software is hosted by a service provider and accessed by the clients online.

Many libraries are in the process of improving and replacing the existing or traditional ILS with the new library services platform. The basic difference between the traditional ILS offering and the new library services platform is that the products were largely designed around the management of print collections. As libraries are shifting towards digitization and are accommodating digital collections, the traditional ILS products are unable to be reconfigured well enough to smoothly and efficiently handle the integration of all the workflows that are different but necessary for both print and digital [2].

At the same time there is an ongoing desire to improve services for users to access library information. The pressure from users to embrace new technologies causes libraries to look more closely into cloud computing [3]. Other key factors are the saving of money on hardware procurement and rich electronic resources; up-gradation of software and its security. Here the SaaS has been widely accepted by the libraries.

2. WHAT IS SAAS?

Software as a service (SaaS) is a Cloud service providing remote access to software and its functions [4]. SaaS is simply providing any form of software or application as service. The service includes basic infrastructure and platform need to run the software, It eliminates the need to install software on the users local device, clients can access an application on the cloud using the Internet. Multiple users can use the software simultaneously i.e. SaaS allows virtualization and multi-tenancy.

In addition SaaS encourages a subscription model rather than a purchasing model. Users of software need not handle the purchase of license for each software they need. They are not required to handle the installation, set-up and often daily updates and maintenance. Unlike traditional software applications it is required to purchase the software package and install it on the computer before using it. Thus traditional software usage are limited to backup ,storage and print only. While using SaaS , organizations or clients simply needs to subscribe to a number of users they need concurrently working on the software on the cloud. Examples of SaaS include Twitter, Facebook, Microsoft 365, Salesforce and Google apps etc.

3. SAAS ILS AGAINST TRADITIONAL ILS

The benefits of selecting an integrated library system via the software as service delivery model versus a locally installed ILS are as follows:

Table 1

Decision Factors	SaaS Based ILS	Traditional ILS
Cost	Totally integrated into one database, no extra costs.	In in-house systems there are many modules, multiple vendors thus increase the cost for each.
Off campus Access	Availability is committed 24×7×365.	Third party software required, at an additional expense.
Hardware and software Requirement	No servers to buy, SaaS provider manages data for the library.	Costly hardware and software are required for operations.
Upgradation and Updation	It assures timely implementation of new releases and patches.	It requires technical staff to come and implement the updates and upgrades.
Technical Staff	There is no need for technical staff to maintain and manage the applications and routine activities	Technical personnel are required for the routine activities
Data Safety	Depending on the terms of contract ,it assures a guaranteed level of service with regard to reliability, scalability and security.	Again tech-savvy staff must be provided additional time and expense.

4. EVALUATIVE CRITERIA FOR SAAS BASED ILS

Today there are various Cloud based platforms available for the libraries. Libraries can choose the best suitable platform depending on the type, need, operations and size of its users.

The librarians can evaluate the available platforms on the basis of following criteria:

4.1. Features

- Multi-tenancy – It is an architecture in which a single instance of a software application serves multiple customers.
- Security Certifications: While procuring a new cloud computing or Saas Library management system, make sure the vendor meets some certified standards of security, There are two particular standards i.e a) ISO/IEC 27001 and b)SAS70/SSAE16.
- Costs : Cost of implementing SaaS based LMS and recurring benefits to the libraries in future.
- Availability: The services must be provided by the vendor 24×7 .

4.2. Customer Types Targeted

While going for SaaS based ILS one must consider the type of libraries, needs of users, i.e either selecting for small academic library, a medium sized special library or a large public library.

4.3. Functionality: Other major aspect for selecting an ILS are it should be bundled with various functionalities that are as follows

- All housekeeping operations i.e from selection, acquisition to cataloguing and circulation
- Report generation
- ILL
- Knowledgebase
- Open APIs (Application Programming Interface)
- Mobile support
- Streaming Video support
- Multilingual subject heading support
- RDA Support (Remote Data Auditing for big data storage in cloud computing)
- E-book Support
- FRBR Support (Functional Requirements for Bibliographic Records)

5. VARIOUS SAAS BASED LIBRARY SERVICES PLATFORMS

5.1. Alma by Ex Libris

The Ex Libris ILS platform enables the library to deliver the experience and services required to keep up with escalating user expectations. Alma is next generation library services platform. Alma is the solution a library needs and is designed to handle all resource types. Alma is designed to ensure that the entire collection can be managed through a single interface including electronic, print and digital [5]. In addition it supports library collaboration with different consortiums. Alma's cloud based multitenant architecture provides significant savings in maintenance and IT support costs. Its functionalities includes selection, print management, digital asset management.

5.2. World Share Management Services (WMS) by OCLC:

WMS is built by OCLC and is designed for all types and size of libraries. The product uses all the data available in worldcat, the worldcat knowledgebase, the worldshare information centre; the worldcat registry and other centralized repositories [6].WMS uses a multitenant web-native platform and employs internal knowledge bases to provide consolidated workflows for the management of print and electronic resources. OCLC added a analytic tool to WMS which has similar functionalities to Alma.

5.3. Intota by ProQuest

Intota is a library service platform designed to address key needs of today's libraries. It offers multitenant software operations, shared data capabilities as well as fully supports analytics which allows library to use data to understand and predict the needs and services they can offer to them [7].

Overall, Intota is a total re-conceptualization on selection, acquisition, description (cataloging), fulfillment, a knowledgebase and discovery. Intota gives improved return on investment (ROI) and enables easy, efficient and unbiased access to library's collection.

5.4. SirsiDynix Integrated Library Systems

SirsiDynix offers its products to all library types. Horizon and Symphony are two platforms developed by SirsiDynix.[8]

Horizon : It provides a stable ,proven platform for the Blue Cloud LSP. Blue Cloud augments Horizon's Open database, powerful MARC editor and intuitive merging tools with web based clients and additional features designed for contemporary libraries.

Symphony: The Symphony ILS meets this demand with a robust, multi-tier architecture supported across many hardware platforms, operating systems and databases, along with an industry-leading Software as a Service (SaaS) hosted option that gives the customers the flexibility to meet changing IT requirements.

5.5. Liblime Koha

It is the world's first and most advanced open source integrated library system backed by Liblime. With a web-based interface and intuitive self service tools; Liblime Koha delivers an outstanding solution to libraries of all types and sizes.

No software installed on desktop and noservers required in the libraries. It is completely web-based and built on MYSQL, all data is readily accessible to all users via a web browser [9].

6. CONCLUSION

From the above discussion it can be concluded that Librarians must think about when moving to any of these platforms, by focusing on the users' needs and services to be provided to them. While implementing any SaaS based ILS, Libraries must evaluate the system on the basis of financial benefits accrued in the future; in addition to data storage, data safety, off campus access and maintenance as compared to traditional ILS.

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