Impact of Social networking/Web 2.0 features in Library management software: a case study of Koha, ILMS

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ABSTRACT

The paper describes the changing requirements and features of modern integrated library management software (ILMS) to fulfill the increasing user needs with the development of technologies. It highlights the users expectations with modern state of the art ILMS and how it influence the library system and services. Paper describes some of the Web 2.0 based social networking features of Koha ILMS which makes it different and popular from any other ILMS in Indian context in present scenario. It also describes the use of such networking tools and some technical detail about its activation and deactivations in Koha ILMS. Paper also attempted to highlight the significance of such tools in library management solutions.

1. INTRODUCTION

Koha a beautiful nomenclature comes from a colloquial language of New Zealand's Maori which means for a gift or donation. It is the world most popular open source integrated library management system developed initially by Katipo communication for the Horowhenua Library Trust in New Zealand, and the first installation went live in January 2000. Koha is a fully featured, scalable library management system. Development is sponsored by libraries of varying types and sizes, volunteers, and support companies worldwide. According to ohloh, it has a very large, active development team and a mature, well-established codebase.

Koha is a true enterprise-class ILS with comprehensive functionality including basic and advance options. Koha includes modules for circulation, cataloging, authority control, acquisitions, serials, lists, patron management etc.. Koha uses a Relational database management system (RDBMS) coupled with an external search engine to provide powerful searching that is truly scalable library standards compliant. It is built using library standards and protocols that ensure interoperability between Koha and other systems and technologies while supporting existing workflows and tools. Web-based Interfaces, Koha OPAC, circulation management and self-checkout interfaces are all based on standards-compliant World Wide Web technologies–XHTML, CSS and Javascript–making

Koha a truly platform-independent solution. Koha is distributed under the Free Software General Public License **(GNU)** version 3 or later. Some of the major features of Koha ILMS are as follows:

- Supports International Standards & Protocol such as MARC 21, z39.50/**SRU etc.** in data export and import process.
- Supports Import/Export data compatible with MARC
- Multilingual & Strong Web OPAC
- Comprehensive advance search
- Flexibility for customizing online public access catalogue according to your library needs
- OPAC can be used as Content Management System
- Printing functions for barcode labels, spines, patron cards and reports
- Create virtual Book Shelf & Course Reserve
- Supports copy cataloguing
- Provision to have branch libraries and Items transfers
- Budget & Fund Management
- Customizable Data Entry Sheet (In different framework) & supports import/export MARC framework(same data)
- It uses MySQL as backend RDBMS and Apache Web server (Open Source Software)
- Support Multiple Instances (One can create more than one library with different database)

Koha is developed by the community support that spread all over the world; many new ideas are shared on the various Koha forums and Bugzilla (a platform where all new features are requested, and any bug available in the current or old versions is reported. Various venders and libraries when work together than many new features grow up, highly experiences team of Koha developers work on each feature and test it well before the release of new features and versions. Some of the major advantages of Koha, ILMS are:

- **Ability to modify to fit local needs:** Though its source code is available it can be customized to suit local needs.
- **No restriction on use:** No vendors restrictions on how the software is used.
- **Cost:** There is no charge for the software itself. But some commercial firms charge the nominal fee for training, customizations, implementation, etc.
- **Free Exchange of Technology:** All Koha users can share the customized codes for mutual benefits.
- **Stable Technologies:** Koha is tested and has demonstrated both stability and scalability, used in thousands of libraries worldwide.
- **Sharing Technologies:** The libraries involve in using Koha share their expertise regarding technical man power and development of solutions fits many libraries.

- **Support:** Koha source code is open which is developed and supported by many libraries so it can be modified as and when to require. Therefore, its development does not depend on the single vendor as in the case of proprietary ILMS.
- **Up gradation:** Koha is frequently upgraded with latest technologies and provide better solutions in comparison to commercial software.

Apart from many advantages author's experiences does not found any serious disadvantage in the implementation of Koha in comparison to other OSS or propriety solution. Hence, as such there is no any disadvantage but how to get maximum benefit from the Koha software depends upon the devotion and availability of technical manpower in libraries as well as commercial service providers in Koha. As far as users of Koha is a concern they are spread all over the globe, and 1000ths of libraries have implemented it successfully like public, special, academic, etc.

2. SOCIAL NETWORKING

A social networking service is an online platform that is used by people to build social networks or social relations with other people who share similar personal or career interests, activities, backgrounds or real-life connections. Social networking services are based on Web 2.0 Internet-based applications where people can share their photos, videos, texts etc. on the social networking platforms Social networking services facilitate the development of online social networks by connecting a user's profile with those of other individuals and/or groups. Most social network services are web-based and provide means for users to interact over the Internet, such as by e-mail and instant messaging and online forums. Some of the most popular social networking sites are facebook, twitter, google plus, YouTube, Pinterest etc.

Social networking tools are now a day's influence all kind of activities of human life like social relation, impact on politics, marketing of products and business, education and so many other sphere of human life. Now a day's many individual/groups use these tools and technology for information dissemination, collection as well as selection of information as per requirements of the clients/users.

3. SOCIAL NETWORING/WEB 2.0 IN ILMS

Now a day's library management software's not only serve the purpose of management of library housekeeping operations and user based some features like transaction and searching's of library resources but apart from this many good ILMS came up with social networking/Web 2.0 based features. Some of the features are really simple syndication (RSS), star rating, posting comment, tagging items, sharing contents to other sites, making reading list etc. These latest advancements helped a lot to library and its user in maximum utilisation of resources as well as directly participate in the library related activities. Next section will discuss about the above features available in Koha

library management solution however many other open source solutions as well as propriety solutions provide these features in their ILMS.

4. SOCIAL NETWORING/WEB 2.0 IN KOHA

Koha is the first and most popular ILMS solution on the globe; it gained its popularity because of its state of the art features, standards and better stability in comparison to other ILMS. Koha provides many Social network/web 2.0 based features. Some of the most popular and useful features are:

- RSS etc.
- Star rating
- Comment
- List creation
- Social network share buttons
- Tagging etc.

4.1 RSS IN KOHA

Really simple syndication or Rich site summary (RSS) is a family of web feed formats used to publish frequently updated works such as blog entries, new book entries, new digital resources added, news headlines, audio, and video in a standardized format. An RSS document (which is called a "feed", "web feed", or "channel") includes full or summarized text, metadata, publishing dates and authorship etc.

Koha provides excellent feature of RSS in on top of all search result and lists created by users like new arrival list, list of individual interest etc. These RSS feed link can be copied in any feed reader to get the latest updated about addition of library resources in the concerns subject interest. Similarly these RSS links can be used to fetch the new publication data from Koha in other website as well as helped in displaying the dynamic new additions scrolling list (Refer http://opac.nitrkl.ac.in/cgi-bin/koha/opac-main.pl). The example of RSS feed example and display format is given in fig.1.

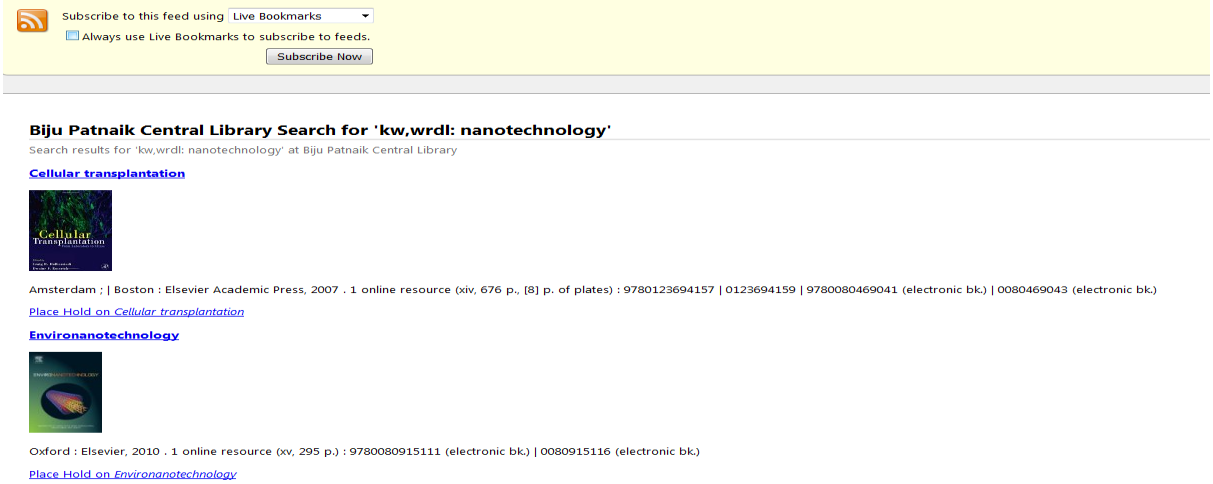

Fig. 1 RSS feed in Koha

4.2 STAR RATING

Now a day's online shopping, business, services etc gives an opportunity to customers to review the products indicating for that they places a 5-star rating system on the website. These star ratings represent aggregated rating and review data for the product, compiled from multiple sources, including merchants, third party aggregators, editorial sites and users. Koha also have the same feature but here users can give rating to library Items i.e. books, journals, audio-visual materials etc. Users have to login for the rating of any library material then they can click on the any of the start out of five, it will reflect total counting of voting/person given rating to that particular library material in two different formats (Simple search page and item detail page) as given in the below screen fig. 2.

Fig.2 Star rating display in Koha simple search page and detail page

4.3 COMMENT ON THE LIBRARY RESOURCES

Product reviews are one of the resources online shoppers trust most when they're researching products and services. The product review/comment feature provides an opportunity to the seller to improve and maximize its selling as the comment/review may be good/bad. Similarly the Koha ILMS provide an option to comment on the individual library materials which may be helpful for the librarians and users to properly evaluate or consult the books. For example a faculty may comment on the book and

redirect its student to refer the particular chapter of this book which may be according to its coming exams/research etc. Koha administrator needs to enable this feature and each comment could be moderated by Koha admin before its publication on the Koha web OPAC. The sample format of comment is given in fig.3.

Fig.3 Display of Comment on the Book

4.4 TAGGING IN KOHA

Tag is a keyword or term assigned to a piece of information (such as an Internet bookmark, digital image, computer file, books etc). This kind of metadata helps describe an item and allows it to be found again by browsing or searching. Tags are generally chosen informally and personally by the item's creator or by its viewer, depending on the system. Tagging was popularized by websites associated with Web 2.0 and is an important feature of many Web 2.0 services. In the language of library science or information science online tagging to public item is refer as folksonomy where users/viewers of library material on the OPAC can assign some keywords to the books like library professionals assign subject heading to the books at the time of cataloguing. Hence this method of assigning keywords may be also called as social tagging, collaborative tagging, social indexing, or social classification.

If this features is enabled in Koha then it provide an opportunity to users of library for such type of subject classification of all the items so that any users can found the material of interest on users point of view i.e. all those reading materials at one place which is indexed by users with similar term/keywords. Further, Koha admin can moderate these tagging on the basis of their relevance before its publication on the OPAC, the sample of tag is shown in fig.4

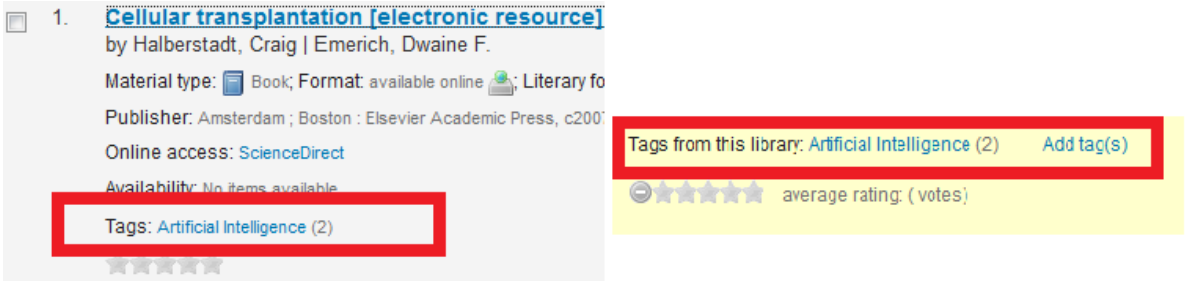

Fig.4 Display of Tags assigned by Users on Simple and detail search page of Koha

4.5 LIST CREATION

List creation is one of the main features/module of Koha ILMS which gives lot of freedom to all library users as well as librarians to create their list of readings, display new arrivals weekly, or any other type of list of library materials which can be shared among all the users or any individual makes the list private for his own use in future. The choice of items in the list may be by single user or it may be collaborative with other OPAC users, any user can add or delete the items from the list depending upon the privilege given by the creator of the list in Koha as shown in the fig.5.

If the list is made public by the creator it will reflect in the top section of the Web OPAC of Koha under the option “Lists”, on clicking the same users will get detail about the list and its contents as display in the fig. 6.

Fig.5 Option at the time of list creation

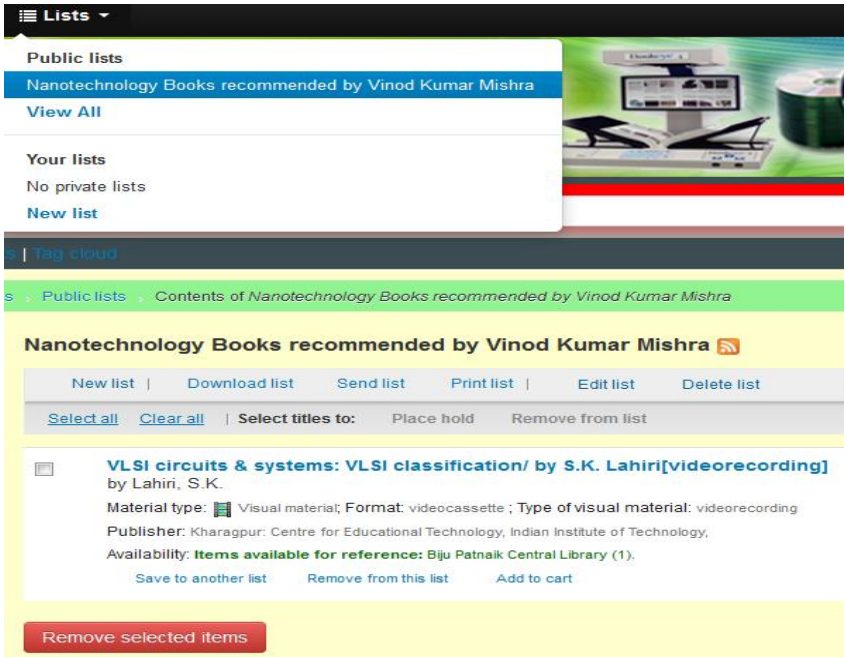

Fig.6 Display of List in Web OPAC

4.6 SOCIAL NETWORK SHARING BUTTON

Now a day's almost all website provide an option to share their products or website pages on various social networking websites for popularity and sharing their ideas with group of peoples on their social networking websites. Koha has the same feature as shown in the fig. 7 through which users can share a particular item on the various social networking websites like Facebook, Twitter, Google plus etc.

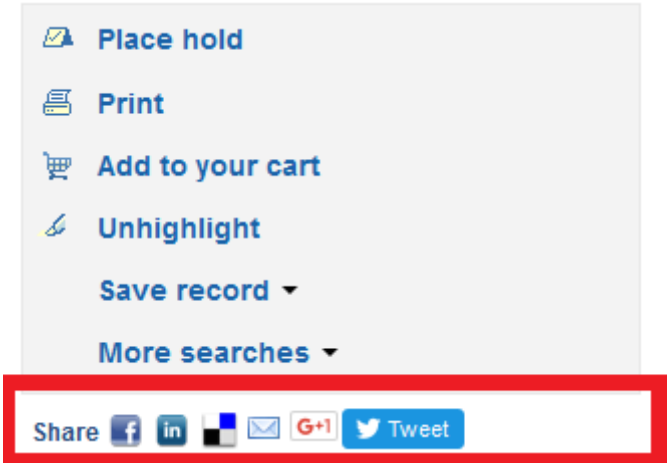

Fig.7 Koha Item sharing option on social networking websites

5. CONCLUSION

The above Web 2.0 and social networking features in Koha ILMS reflects that these technologies are greatly influences every aspect of human life and libraries are not the exception. Similar to many product selling online websites Library management software's are now also trying to incorporate such features for better review and selection of library resources for the end users. Therefore all traditional library ILMS must switch over to modern software solutions as per the user requirements for better visibility and social recognition among users. Software vendors and all such open source solutions should incorporate the features as per the latest trends. Librarians must select the software which provides the above features and ability to incorporate latest technologies in future as per the popularity and demand.

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