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Open Source Resource for Library and Information Centre for their Service

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Abstract:

Many open source resources available on the web. All are very much helpful to librarians as well as information professionals. This paper tries to highlight some open source resources on library and information science and discussed briefly among them like basic and advanced computer programmes, open source library management systems, open source digital library systems, free web publishing software etc. and try to find out applicability of these resources in library and information centre.

Open Source Resource for Library and Information Centre for their Service

Introduction:

The depth a library can have can range greatly; all depends on how much money that a library gets in budget. The big college libraries obviously get the most due to the fact that they are part of an actual business model that produces a significant amount of money. Public-libraries on the other hand only get what the government gives them, which in lower level of hierarchy can be very little.

For many libraries, organizing their books and other media can not be a comfortable task, especially as the library grows with more material. For long years we have crude **card catalog systems** (including shelf arrangement with Dewey Decimal System) that keep things organized, but difficult to maintain. With today's computing technology, organizing our libraries has never been easier or more efficient. Gone is the card catalog in some libraries, it's much easier to locate a book through an internet connection and reserving it up upon your arrival.

Now just because of the wonderful software solutions that make everything easier to do. It **doesn't mean that every library of our time is using these solutions**. As noted above, many libraries do not have huge amounts of money to utilize. If they have any, they should spend it in the first priority to purchasing additional resources.

Because of this need for software and the installation and training costs associated with any, and the lack of money available to spend on it, many libraries remain outside when it comes to staying up to date with the latest technology. Unless, of course, they embrace the **open source movement** and use some of the countless software solutions available to help out.

Most software that we all use everyday is known as "**proprietary**", which in a nutshell

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means that it costs money and that the actual code of the software is restricted, in that the code of the software cannot be modified, copied, or changed.

Open source software, on the other hand, is quite the opposite. The open source mentality revolves around **sharing and collaboration**, and these two important elements describe open source software perfectly. First and foremost, open source software is free for anyone to have; more importantly, not only is the software free, but it is also free for anyone to copy, hack, modify, etc. This increases the possibilities of a software program's potential because of this free-thinking model. Many large groups of programmers have customized basic open source programs into whatever they deemed necessary, and have in turn given these modifications back to the open source community for free where others can continue to build on their work.

There are many different kinds of open source software solutions out there today that could be embraced by the library. There are basic operating systems and document processing programs. Then there are many web-based content management solutions and database driven organization software. So libraries also using these free, open programs to make their works easier and better. The lack of information regarding open source resources is one of the main problems regarding its use. It is our intension here to outline some of the prominent players in the open source game.

Basic Computer Programs

Ubuntu - the most popular player in the Linux based operating system. (Linux is the open-source answer to Microsoft's Windows operating system; **Ubuntu is a modification of Linux**). Ubuntu is a perfect solution for libraries that need to upgrade their older computers using outdated Windows or for bulk computer purchase require a new operating system. Many libraries feature computers for users to gain access to the OPAC or internet, and that being the only function those computers serve. Instead of paying for all the unwanted things on Windows we can just need to get it free. It might be a little scared at first of a new operating system.

Firefox - One of the first things in this net environment is that we need a browser to surf the web with. Instead of using Internet Explorer (IE) with cost, we can look for the orange looking fox. **Firefox is the Mozilla organizations answer to Microsoft's Internet Explorer web browser**, and has taken the web by storm over the past few years as the biggest competitor to IE in quite some time. Firefox offers a much more secure browsing experience compared to IE. The biggest draw, however, is the modifications that can be made to Firefox through its many plug-in, which can make using the net more constructive.

Open Office - Another component bundled with Ubuntu operating system is a software package known as Open Office. We have used Microsoft's Office products many times before, including "Word", "Excel" and "PowerPoint" programs. Open Office can do the same thing, and we can use both programs to handle each others file formatting (i.e. if someone builds a presentation in Microsoft PowerPoint, then he can edit the same presentation in Open Office). **Open Office also comes with a calculator, draw, and mathematics program as well.**

Thunderbird - Firefox's little brother program, Thunderbird, is the Mozilla foundations **open-source alternative to Microsoft's Outlook Express**, and is a tool in weaning ourselves off of the Windows that we have been so accustomed for so long now. The program works exactly like Outlook, providing with a secure and safe desktop email solution. And just like Firefox, the open source programming community has created free add-ons to make the Thunderbird email client customized to liking. If we absolutely need

a desktop email client (as opposed to a web-based email client like the recommended Gmail), then Thunderbird is the open source program we need.

Songbird - Another open-source platform built off of the Mozilla platform. **Songbird is an open source media player** which we can use to play audio and video files. And just like Firefox and Thunderbird, it can be customized with various themes, plug-ins, and add-ons to make it work differently. Songbird can play any media file format (just in case a bunch of WMA files stored on CDs), features multilingual support, and has an integrated web browser without having to leave the player.

Advanced Programs

GIMPshop - One important but rather expensive software program that is sometimes needed is the ever popular Adobe Photoshop. Because we're cheap and only choosing open-source alternatives, we're going with **Gimpshop, a Photoshop alternative**. While not as feature rich as Adobe's photo manipulation program, GIMPshop is just as easy to use and will take care of any users basic needs (many, unless seasoned Photoshop pros, will only need the program to so basic tasks anyway).

PDF Creator - The PDF file (short for "portable document format") is an industry standard format that everybody uses everyday. The purpose of creating a PDF file is usually to **provide an important document for display that cannot be modified by the reader** (unless permission is given). Many programs exist that will enable us to create our own PDF files, but they require to spend money, which is not in our budget. Instead, we're going to use the open-source PDF creator to take our Open Office files and convert them into professional PDF documents.

Audacity - To record and edit audio Audacity, a cross platform open-source program, does it hopefully. In the digital recording industry, there are hundreds of programs with a wide range of features and capabilities, and can cost heavily. Now, no one expects a library to have big amount recording software installed on their computers, but having a basic program sure does help. Audacity will give the ability to **cut, copy, edit, and splice sounds together in a variety of formats**.

Avidemux - It is a **video editing software program** for users to edit together online video. Avidemux can take care of simple cutting, filtering, and encoding tasks, and work in a variety of file formats. It's not going to produce any elaborate visual effects, but it'll take care of the simple ones and would be a great addition to a library's catalog of resources. We have covered some of the basic and advanced programs that traditionally would set a library back in terms of finances. **By running the above free open sources programs, a library could offer plenty of software resources to it's patrons that if could afford to do in the past**. While these programs are free, some of them (especially the photo, audio, and video programs) may be difficult for the first time or novice user to grasp. It will be up to the librarians and staff to educate them in order to provide their patrons with the know-how to get the most out of these programs (thus providing the greatest resource a library can offer - assistance in retrieving and properly using available tools and information).

In addition to these tools being helpful to a library's patrons, they are obviously very important to the operations of a library as well, and it will benefit each employee to use the same open source programs for library operations as to educate the employee of the ins and outs of each software program, so that knowledge can then be shared with a patron should a question or problem ever arise. But what of the other computing needs of the library? **Obviously we still have some other very important organizing and**

cataloging needs as we addressed earlier. In addition, a library needs to have a strong online presence and offer their knowledge and support through the internet in order to really provide a resource. Thankfully, there are open source solutions for the library to take advantage in these departments as well.

Digital Library System: Another resource is the bibliography prepared by Brenda Chawner as part of her Ph.D. studies at the School of Information Management, University of Wellington, New Zealand. The bibliography was created in October 2002 and was last modified in September 2003. In addition to announcements, journal articles, and Web documents on open source in libraries, it also includes articles on specific open source applications (including Koha, Greenstone, and MyLibrary) and provides links to the Websites for these products. Using Open Source for Digital Libraries we can find a collection of links to Web sites that offer open source and other shareware and free items on the Library Automation Tools. In addition to the links to the MyLibrary, Koha, and Greenstone sites, there are links to OpenBook and the e-smith Linux Server appliance. Another source of links to free software for library systems is the UNESCO Free Software Portal, which has a page of annotated links to software for digital libraries. The now-familiar Greenstone and others are on this list, but additional products include CERN Document Server Software, EPrints Archive Software, and MIT's DSpace. Some of the links on this page are no longer valid, even though the page was supposedly updated on the day visited the site. Librarians interested in using open source software to build a digital library system might want to learn more about the Fedora Project, which is described as an open source digital repository management system. The project, which is funded by the Andrew W. Mellon Foundation, uses the Flexible Extensible Digital Object and Repository Architecture, aka Fedora. Visitors to the site can read about the history of this project that was developed jointly by the University of Virginia and Cornell University; they also can access the support resources, the usage FAQ, and the technical documentation. There are also links to publications on the project and additional development resources. Seriously interested visitors can even download Fedora release 1.2.1.

Integrated Library Systems (ILS)

NewGenLib - Which stands for New Generation Library, is an integrated library system (ILS). It is the product of a 4-year collaboration between the Kesavan Institute of Information and Knowledge Management (KIIKM) and Verus Solutions Pvt. Limited (VSPL), both based in Hyderabad, India. Toward the end of 2007 a business decision was taken to release NewGenLib under the GNU General Public License (GPL). And thus NewGenLib was reborn as a free-and-open source software (FOSS) for ILS.

The code of NewGenLib's functionality is available from SourceForge, the repository of more than 170,000 FOSS projects: NewGenLib on SourceForge. Since NewGenLib is Java-based, it deploys straightforwardly on Linux or Windows platforms. NewGenLib was already a complete ILS prior to going open source. It has modules for

Acquisitions

Cataloguing

Serials Management

Circulation

Administration

OPAC, and

Reports

Koha is a promising full featured open source ILS currently being used by libraries all

sites, corporate web sites, and intranet (internal) web applications. Just like WordPress, Drupal as an ever growing community of users developing add-ons to make the software work better in addition to providing technical support online to answer any of installation or maintenance difficulties.

MediaWiki is the original software that powered the famous Wikipedia, which basically allows users to create and edit information from a very simple to use text interface. Another open source wiki platform is TWiki, a flexible and powerful enterprise wiki that is perfect for project management. These wiki solutions can be used as alternatives to the web publishing methods used above, but can better be used as the library's place to **keep maintenance and training information available** that can constantly be updated as library operations change and develop. It helps keeping the employee and support community of a library up-to-date with the inner workings through a community wiki, where they can go to troubleshoot any problems that may have been already solved once before in the past.

Google is one of the important site for free web publishing. Google has facility to publish huge amount of document free of cost. There has option of downloading word document.

Blogs in the Library Sphere

Librarians have uses blog for their service. Some example of the blogs at Peter Scott's list of Library Weblogs (<http://www.libdex.com/weblogs.html>).

Conclusion

So, it seem that there are some very powerful solutions available today that could be used to create a much more resourceful library, whether it is a large college or government financed operation, or a local community library that before probably didn't do much for that community in the technology department. **By using open source software in the library, money that otherwise would be spent on software solutions can be used for other important resources**, such as purchasing additional media resources (books, magazines, dvds), or can be used to hire educated, technical support that provides patrons with the know how to better use already existing resources. In addition, this free software is constantly being updated, changed, and customized to meet the library's needs.

But there are still pitfalls and hurdles to overcome. **Many libraries are fully integrated into proprietary products and have invested a lot of time and money to make these systems work efficiently.** Other problems involve the installation, maintenance, and training costs associated with adapting to open source software. Usability is an issue that is being addressed by the open source community daily who is working hard to make these free products easier for all to use and maintain.

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