Open Source Technologies that improve Librarianship: The finest option at low-cost-no-cost

*Chintan K Pandya**

Abstract

Personal productivity or office management is very important for professional development in libraries. Technologies are becoming more useful for the improvement of productivity in the day-to-day library operation and make the functions smoother. It has been observed that some of the public libraries are underperforming their duties due to financial crisis. Sometimes, it happens that librarians are not able to accomplish certain library operations due to unavailability of technologies in the library. It is not that the librarians are not techno savvy, they have good command over technology operations in library, but due to low budget; school or public libraries are not able to procure licensed copies of library software and other office technologies. Here, I have listed various Free and Open Source technologies that can help smoothen library operations at NO COST!

Keywords: Open Source Technologies, Librarianship, Ubuntu, E-Granthalaya, LibreOffice, PDFCreator, CamStudio, Audacity, Moodle, Wikidpad, FreeMind, Portable Apps.

Introduction

Most of the time we hear the terms Productivity, Improvement, Performance, Librarianship etc. These words demonstrate the progress of professionalism. The term 'Productivity' is generally used in context to the manufacturing sectors, but it is also replicated at librarianship and various service sectors where librarians are using computers and technology peering the library operation. One could think of improving productivity of librarians (also known as information workers) by improving various qualities i.e. typing speed, organize e-data, file management, office application tools, poster design, e-learning tools etc.

It has been observed that library professionals could not perform better due to unavailability of technology resources. For example, majority of public and school libraries have desktop computers but don't have library management software. Now a days, desktop computers are getting cheaper and library software are getting more expensive. Government and school management doesn't have provision for the budget for library technology. So what is the solution? Should librarians wait till the release of budget and buying expensive technology? Or find some other alternative? Even it's the duty of the librarian to save money by avoiding paying license fees of certain software which can be available freely. The following free and open source technologies could help librarians to perform better and improve their productivity in librarianship.
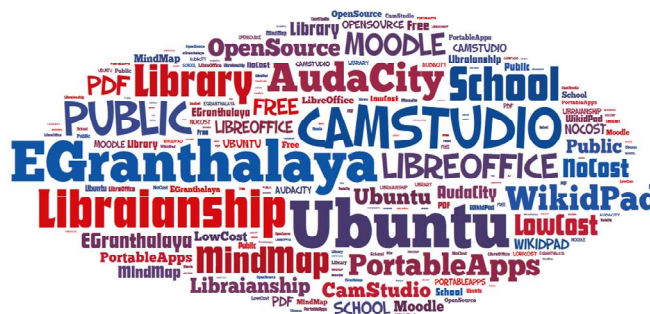

Figure 1.Various open source technologies

*Librarian, Gujarat Power Engineering and Research Institute, Mehsana.
E-Mail Id: pandyachintan@gmail.com

Operating System is the basic requirement of any computer. Majority of the world population are using commercial Microsoft windows operating system i.e. Windows XP, Windows 7, Windows Vista etc.These operating systems are quite expensive. Linux was already established as an enterprise server platform. But Linux, the free software was still not a part of everyday life for most computer users. "Canonical" has established Linux projects – Debian-and set out to create an easy-to-use Linux desktop, the **Ubuntu**. The vision for Ubuntu is part social and part economic: free software, available free of charge to everybody on the same terms, and funded through a portfolio of services provided by Canonical.

The first version of Ubuntu was based on the GNOME desktop. It has since added a KDE edition, Kubuntu, and a server edition. All of the editions of Ubuntu share common infrastructure and software. The key features make Ubuntu a unique platform that scales from consumer electronics to the desktop, and into the cloud for enterprise computing. Even software developers can work on their desktop of choice, and smoothly deliver code to cloud servers running the stripped-down Ubuntu Server Edition.

- **'Ubuntu'** can be downloaded from the website http://ww.ubuntu.com.

E-Granthalaya

Varieties of Library Management Software are available in the market under requirement of different categories i.e. School, Public, College, Corporate, University, Client and Server version. SOUL, Libsys, Librarian, and Alice are the best examples of commercial software. We still have an alternative option that is the E-Granthalaya, developed by National Informatics Centre, Government of India.

Using this software, the libraries can automate in-house activities as well as user services. The software can be implemented either in stand-alone or in client-server. The software provides LAN/ Web based data entry solutions for a cluster of libraries where a centralized/ common database can be created with Union Catalog output and Web OAPC interface. E-Granthalaya also supports variety of languages. The software has a limitation over the operation systems that it can run on Windows platform only. All the best features are available at zero cost.

The **'e-Granthalaya'** software can be obtained from any NIC by sending the official letter. For more information, please visit http://egranthalaya.nic.in/.

Many people in the world are using MS-Office to prepare office documents in their day-to-day life. We can imagine that the computer without MS-Office would become miserable. Now, we have two options either buying the expensive licensed copy of MS-Office or use 'LibreOffice' application which is free.

Apache 'LibreOffice' is the leading open-source office software suite for word processing, spreadsheets, presentations, graphics, databases and more. It is available in many languages and works on all common computers. It stores all data in an international open standard format and can also read and write files from other common office software packages. It can be downloaded and used completely free of charge for any purpose.

- **'Open Office** can be downloaded from the website http://www.libreoffice.org.

PDF Creator

Most of the librarians are using MS-Office as a primary application for creating documents, worksheets and presentations. Whenever we circulate any office files, it is suggested to do it in PDF format since it is widely accepted and user-friendly format. So converting MS-Office documents to PDF requires the license version of 'Adobe Professional'. But 'PDFCreator' is absolutely free and open source which helps to convert office documents in PDF format. The latest version of MS-Office application has the feature to convert documents into PDF files but one can't create PDF files that are password protected or the ones from which text cannot be copied. Thankfully, there exists PDFCreator, which provides various features without any cost or hassles. This application installs as a printer, so when we are ready to convert MS-Office documents or even websites (HTML Documents) into a PDF documents, just need to select the printer option and the PDFCreator dialogue box (as shown in the figure) will open where one can set various parameters and convert the PDF at the end.

- **'PDFCreator'** can be downloaded from the website: http://www.pdfforge.org.

Creating a small video presentation is a very common task for every librarian. Instead of giving the same presentation repeatedly, we can create and record a standard video presentation. The video can be further re-screened whenever required. For example, a librarian needs to give new user training or library orientation. **'CamStudio'** is able to record all the screen and audio activity on computer. It will allow creating AVI video files. It also has built-in Shockwave Flash videos (SWF) Producer which allows you to convert AVI files into bandwidth-friendly Shockwave Flash videos (SWFs). One can also add screen captions to recordings with the unique Video Annotation feature. One can even personalize videos by including a webcam movie of yourself "picture-in-picture" over your desktop.

- **'CamStudio'** can be downloaded from the website: http://camstudio.org/.

Audacity

Another add-on application to CamStudio is Audacity. Audacity is a free, award-winning open source software for recording and editing sound. It will allow fast multi-track audio editing and recording. It also supports various audio file formats i.e. WAV, AIFF, Ogg, MP3 etc. It also has features of envelope editing, sound mixing, built-in effects and plug-ins etc. One can record audio from microphone, tapes, CD or files from the hard disk, HTTP etc.

- **'Audacity'** can be downloaded from the website http://audacity.sourceforge.net.

Moodle

Moodle is one of the most popular Course Management System (CMS), also known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE). It is a free web application that a Librarian can use to create effective online training, library orientation and demonstration learning sites. It is built with PHP & uses MySQL or PostgreSQL to store data. It has powerful course management features that cover creating lessons, assignments, quiz, documents & more. It has various modules that help students

and teachers to interact with each other like chat, forum, survey or workshop.

- **'Moodle'** can be downloaded from the website http://moodle.org/.

Wikidpad

How do we manage all of the random bits of information in our personal and professional life? Word documents, text files, Microsoft Outlook folders/ notes. If we are an expert user, maybe we have a weblog, or a personal database, or possibly an outlining application. Where do we note the issues discussed in the library committee meetings, suggestions and feedback, any details while listening to the phone etc. Wikidpad is created to address these issues of professional information and knowledge management. Human mind keeps thinking and many ideas and thoughts come in our mind, but we never write it. So here Wikipad provides a place to manage the massive amounts of information we stuff in our heads, or on computers.

Wikidpad is a free and an open source software, like notebook for storing your thoughts, ideas, todo lists, contacts, or anything else you can think of to write down. One can use quite often to prepare the draft of the articles. This is basically a personal wiki wherein the contents are stored on your machine. You can consider it as a notepad with some advanced features. Using wiki syntax option, one can create a hierarchy of the documents. It is a very popular tool to draft raw articles, blogs, write and rewrite the text and creating hyperlinks.

- **'Wikidpad'** can be downloaded from the website http://wikidpad.sourceforge.net.

A mind map is a diagram used to visually outline information. A mind map is often created around a single word or text, placed in the center, to which associated ideas, words and concepts are added. Major categories radiate from a central node, and lesser categories are sub-branches of larger branches. FreeMind mapping software can be used to organize large amounts of information, combining spatial organization, dynamic hierarchical structuring and node folding. If you love to prepare mind maps to take notes during a training program or while reading a book, you will find FreeMind software quite useful. Actually,

there are quite a few software tools available to prepare mind maps, but 'FreeMind' stands superior with all its features. The best part of this software is that one can prepare mind maps using just the keyboard. The software also allows you to export the mind map documents to image format such as PNG etc.

> **'FreeMind'** can be downloaded from the website http://freemind.sourceforge.net.

Portable Apps

Organizing computer data and files is becoming a crucial task for everyone. We librarians can find a book from the stack but cannot locate file or document from the hard disk or pen drive, because we create files and store it in unorganized manner. Portable Apps is the software which is similar to an operating system which installs on the pen drive. It also allows installing other application software like FireFox, OpenOffice, VLC media etc… One can then use this pen drive on any PC and launch favorite applications and files.

- **'Portable Apps'** can be downloaded from the website http://www.portableapps.com.

Conclusion

Open Source has grabbed the computer industry's attention. It is not wrong that the world is moving towards the open source technology. Open Source is becoming a viable mainstream alternative to commercial software. Android application for mobile, Drupal, Joomla and various free application developed by the Google has shown a tremendous revolution towards the open source world. It is the duty of the librarian to identify the right and appropriate resources and technologies for libraries.

Disclaimer

The entire article is prepared on the basis of trial and error, actual experiments, comparison between software and website. The author found large numbers of software available for office productivity. By evaluating some of them (both open source and commercial), the author has finally selected the following software technology, not because it is freely available but also because it was found to be superior to other tools. There may be other good free software which may not have come to the notice.

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