

Design and Development of Library Website through FOSS: A Marketing Tool for LIS Products and Services

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ABSTRACT

With the emergence of WWW/web 2.0 and application of the same in every field, the expectations and demands of the users from LIS professionals have been changed. ICT is the boon of 21st century in every field. Now users want e-resources and library without wall with 24x7x365 access. Changing mindset of users and the form of documents and requirements it is very important for LIS professionals to change their self and their library services also. Therefore, it is the demand of the digital era to have a library website to provide best services accordingly to its local and remote users and it can be also used as a marketing tool to promote the library and its services as other commercial organizations like Alibaba, Snapdeal, Flipkart, e-bay etc are doing to get success. Designing website with proprietary/commercial software is not an easy task due to the high cost. Purpose of this paper is to make LIS professionals aware of availability of Web 2.0 tools, Free and Open Source Software (F/OSS) instead of proprietary/commercial software and designing and development of website with the help of F/OSS so that maximum library may perhaps be benefited which are already facing the financial crunch and authors also tried to make understand how library website can be utilize as marketing tool with ease.

Keywords: Free and Open Sources Software (F/OSS), Library Website, Design, Web Design Tools, Computer Programming Languages, Marketing Tools, Web 2.0 tools

Introduction:

We are living in the age of competition and organizations have no time to make users known manually about the products and services provided by them. It is very tough to reach maximum people and make them aware about the products and services of the organization in short period of time and the result; website is emerging as a marketing tool to promote its products & services and to reach the targeted audience globally and locally in less time. A

website is nothing, but just a collection of interlinked, subject related web pages which can be created with the help of some computer programming language such as HTML (HyperText Markup Language), DHTML (Dynamic Hypertext Markup Language), XML (EXtensible Markup Language), XHTML (EXtensible Hypertext Markup Language), Java, JavaScript, CSS (Cascading Style Sheets), PHP etc for an individual, a business house, Industries, academic organization etc. On the basis of the performance, the website can be categorized in two types, Static Website (can be build with few HTML page and content is not expected to upgrade on regular basis) and Dynamic Website (contain client-side scripting or server-side scripting to make changes in content and websites are upgraded on regular basis). Website came out in 1990s with the emergence of new protocol known as HTTP (HyperText Transfer Protocol) and the growth and development of ICTs (Information and Communication Technology) and World Wide Web (also known as W3 or WWW, term coined by Tim Berners-Lee in 1990s).

According to Ane's encyclopaedic dictionary of library and information science

Website: - "A group of related, interlinked web page installed on a web server and accessible 24 hours a day to internet users equipped with browser software. Most website is created to represent the online presence of a company. Organization, or institution, or are the work of a group or individual. The main page or welcome screen, called the home page, usually displays the title of the site, the name of the person (or persons) responsible for creating and maintain it and date of last update"

Webpage: - "A document usually written in Hypertext markup Language (HTML) that can be accessed on the internet. Web page can contain information, graphic and Hyperlink to other web pages and files"

According to concise oxford English dictionary: - "Computing a hypertext document accessible via the world wide web"

According to Harrods's library Glossary: - "A set of web pages with a particular focus e.g organizational personal or subject"

Web pages: - "Any information made available in electronic form on the world wide web marked up using HTML and often incorporating graphic. These are no real technical limit to the size of an individual web pages and it varies tremendously moving from one set of pages to another. Most designers attempt to divide their content into easily digestible chunks and bring these together using the HTML 'link' command".

There is some standard component for any kind of website:

- **Home page:-** is the main page of any website which contains the outline of information available on particular website, also known as an entry page.
- **Page layout:** - good layout is important because it helps users to find information easily with comfort; an awful layout makes a website cramped and hasty.
- **Navigational Tools:-** help visitors to access the content of the website clearly and consistently.
- **Interactive interface:** - an interactive interface provides two way communications and do not make bored to its clientele.
- **Logo of organization:-** is the unique identity of any organization which also reveal the mission, vision of the organization.

- **Site map**:- is simply the list of pages on the particular website in alphabetical order.
- **Search facilities**:- help users to retrieve the required information in less time.
- **Feedback/Contact Form**:- help the host to get the feedback of the users and get suggestions for the betterment of the website.
- **Copyright information**:- can be displayed at the bottom of the website. Copyright declaration help to take legal action against the violation of the copyright law

Other Components:

- **Web hosting**: - is required to make the web content accessible, hosting is actually the physical place where the website and computer (also known as server) can be located
- **Domain name**: - is the unique identity or the URL (Uniform/Universal Resource Locator) of any website through which website can be accessed on internet or WWW. Some example of top level of common domain name significance are:
 - **.com** is for commercial website e.g. www.snapdeal.com, www.amazon.com, www.flipkart.com etc
 - **.edu** is for educational institute e.g. www.educause.edu, www.jnvu.edu.in,
 - **.ac** for academic organizations e.g. www.du.ac.in, www.ignou.ac.in, www.inflibnet.ac.in, etc
 - **.in** for country India
 - **.net** is for network infrastructure machines and organizations. e.g. www.kompozer.net
 - **.org** is for miscellaneous, usually non-profit organizations. e.g www.wikipedia.org, www.dknmu.org,

Library Website:

Library website is nothing but a two way communication platform where Librarian tells something about library itself with lot of information like; resource availability, accessibility, timings, staffs, rules & regulations which help users to use library and its resources with comfort and at the same time librarian get suggestions from users side which helps librarian to short out the lacunas which makes their users uncomfortable. It works like a tool for librarian as well as the users. Library website can be access with the help of internet or World Wide Web (also known as WWW and W3) locally and globally and 24x7x365. Library website can be treated as marketing tool for LIS product and services. It also helps to announce its services and activities to its user. Design, development and maintenance of interactive library website require technical ability (such as knowledge of computer programming language's e.g. HTML, DHTML, XHTML, XML, Java, JavaScript, CSS,) money and time as well.

A Library website must display the following information;

- Library hours
- Policy information
- Library collections in detail
- Staff directory etc.

According to Karen Diaz (1998) "The library Web site can and by default does play a variety of roles. First, a library Web site often serves the role of a library workstation, both for the users and for the librarians serving them. This necessitates a presentation and organization that allows users to know all that the library has to offer electronically, and in a way that makes sense. It is a tool that will help to speed up or slow down the reference librarians' work in assisting patrons to find information. It is a tool that will help or hinder the user in

expanding research or in finding the answer to a very simple question, such as how determine if the library has a particular book and where it might be found.”

Role of Library Website:

Due to outburst growth and development in the field of Information and Communication Technology (ICTs) in 21st century the demand, access and use of e-document/e-resources is increasing by leaf and bound, resulting shifting from access of physical documents to e-document. There was a time when users always visit library physically and access print document to satisfy his/her information-need but ICTs brings incredible change in the user’s mindset and excitement of using print documents is shifted towards digital resources. Availability of huge e-document/e-resources with 24x7x365 access of these resources and changing needs and demands of the clientele, user have very less reason to visit the library for physical documents. It’s the duty of LIS professionals to convert the traditional library into e-library and also the prime responsibility to provide the accessibility of high-quality/filtered e-resources/information to them, which is only possible through library website. The most important role of library website is to help the LIS professional and users to access/retrieve the library resources in more convenient and comfortable way. Users do not need to visit library every time because e-resources/information is accessible with the help of internet at anytime and anywhere. As we all know that library is non-profit organization and always faces the fund problem and like another organizations it also needs to reach maximum targeted people with its products and services. To increase the usability of library e-resources, library website can be used as a marketing tool as well as resource locating center. Library website helps the LIS professional to overcome the financial problem by utilizing website as a marketing tool for LIS products and its services.

Library website is able to provide:-

- 24/7/365 access
- Decrease human errors
- High quality
- High speed
- Increase the ability to select the e-resources
- Search facility
- Local and global access of library
- Updated information

Tools/Technical expertise required and F/OSS for Design and Development of library websites:-

Proprietary/Commercial Software	Free/Open Source Software
Raster/Vector Image Graphics Software	
Adobe Photoshop CS5	GIMP, 2.Krita, 3.Pixlr (Raster Graphics Software)
Adobe Illustrator CS5, CoralDraw X8	Inkscape, 2. Apache OpenOffice DRAW, 3. Creative Docs. NET 3.x , 4. Karbon (Vector Graphics Software)
Web Designing and Development Tool Kit	
Adobe Flash CS5	OpenLaszlo 4.9.0, 2. OpenOffice Impress 3.0
Adobe Dreamweaver CS5, FrontPage	Aptana Studio, 2. Microsoft Expression Web, 3. KompoZer

Computer Programming Languages
HTML 5.0, XHTML, DHTML
web application development with JavaScript
Advanced Java with JQuery
CORE PHP fundamentals
My SQL Database
CSS (Cascading Style Sheets)

Methodology:

During writing this article authors have consulted many books and browsed many websites to collect, read and analyzed some articles so that maximum related knowledge can be organized in this single place. Authors also have, and shared some practical knowledge of different F/OSS which are very helpful to LIS professionals to change traditional library as per demand of this era.

Free and Open Source Software (F/OSS) for Design and Development of Library Websites:

Raster/Vector Image Graphics in websites: The purpose of the raster/vector graphic software is to deals with the work which is related to images such as to prepare banner, footer and header etc for websites. It also helps to show the photo of organization in dynamic style on the website. This software helps to draw the outline/blueprint of the website and gives the idea about the placement of content in the website.

- Raster images also known as raster graphics which are digital images and made with tiny rectangular pixels. Sometimes it also called bitmap graphics.
- Vector images also known as vector graphics. To produce images in computer, vector graphics use polygons. Vector graphics are not composed with grid of pixels such as other images composed i.e. JPEGs, GIF, and BMP. The characteristics of vector graphics is to comprised the path which is defined by a start and end point, including other points such as curves and angles.

GIMP: GIMP is the alternative or replacement software of Adobe Photoshop which short name is GNU Image Manipulation Program. It is a freely distributed program. GIMP software can run on the platform such as Windows, Mac or Linux. This software falls under GNU General Public License. The first beta version of this software GIMP 1.0 was released in the month of November 1995 by Peter Mattis. The latest version of this software GIMP 2.8.2.0 was released on 01 January 2017.

The following image related task can be performed with this software. This software can be downloaded through the following link <https://www.gimp.org/downloads/>

Photo retouching, Image composition, Image authoring etc



Image URL: <https://screenshots.en.sftcdn.net/en/scrn/11000/11503/gimp-19.jpg> Accessed on 11 April 2017 at 15:00

Krita:

This F/OSS software can be used as a replacement to Adobe Photoshop. The root of Krita software can be traced by Matthias Ettrich's at the 1998 Linux Kongress. This project was started by the KDE community in 1998 and is still part of the KDE community. KDE is an international community working together to create free and open source software for users all over the world. Krita software can be run on the platform such as on Microsoft Windows, GNU/Linux, Mac OS. The latest version 3.1.2 of this software was released on 01 February 2017, Wednesday. The latest version of this software (32 bit or 64 bit) can be downloaded from the following link <https://krita.org/en/download/krita-desktop/>

Krita is F/OSS painting tool which is designed to perform the following tasks

- Artists
- Illustrators
- Matter
- Texture artists
- VFX industry

Image URL: <http://static.filehorse.com/screenshots/imaging-and-digital-photo/krita-screenshot-01.jpg> Accessed on 11 April 2017 at 15:00

Pixlr:

This software can be used as a replacement of Adobe Photoshop software. This is a cloud-based set of image tools and utilities, including a number of photo editors, a screen grabber browser extension and a photo sharing service. The suite was intended for non-professionals; however, the apps range from simple to advanced photo editing. It can be used on PCs and on smart-phones or tablets. Pixlr was founded in Sweden in 2008 by Ola Sevandersson. On 19 July 2011, Autodesk announced that they had acquired the Pixlr suite and Sevandersson had joined the company. (Wikipedia)

Autodesk Pixlr can be run on Microsoft Windows and on Mac platform as well. This is an excellent free photo editor that allows you to easily apply filters, effects and modifications to your images. It is very useful for editing photos without having an expertise.

URL: <https://autodesk-pixlr.en.softonic.com/#app-softonic-review>

Image URL: <http://andreasviklund.com/wp-content/uploads/2011/09/pixlr-editor-screenshot.jpg> Accessed on 11 April 2017 at 15:00

Vector Graphics Software:-

Inkscape 0.92.1

This is an Open Source vector graphics editor software, similar to Adobe Illustrator, Corel Draw, Freehand, or Xara X. Inkscape is able to support different formats such as the flexible SVG (Scalable Vector Graphics) format file generation and edition, live watching and editing the document tree in the XML editor, PNG, OpenDocument Drawing, DXF, sk1, PDG, EPS and Postscript export formats, command line option for export and conversions etc. Inkscape 0.92.1 is can be used to create wide variety of graphics such as icons, diagrams, maps, web graphics and illustrations so that software is being used by the graphics professionals. Inkscape is Free and Open Source Software licensed under the GPL. Inkscape 0.92.1 software can run on the platform (32 bit and 64 bit) such as on Microsoft Windows, GNU/Linux, Mac OS. The latest version of Inkscape 0.92.1 (32 bit and 64 bit) cab be download from the following link <https://inkscape.org/en/download/windows/>

This software has following wonderful tools.

Image URL: <https://media.inkscape.org/media/resources/file/inkscape-0.48-multipath.png> Accessed on 11 April 2017 at 15:00

Apache OpenOffice:

Originally created as "StarOffice" by StarDivision and after further developed as an Open Source product under the name "OpenOffice.org" at Sun Microsystems. The project continued development later Oracle Corporation acquired Sun Microsystems in 2010. OpenOffice entered the Apache Incubator in 2011 and graduated as an Apache Top-level Project in October 2012. Version 8 releases have been made under the auspices of the ASF, with more than 200 million downloads recorded to date.

URL: https://blogs.apache.org/foundation/entry/the_apache_openoffice_project_announces
Forest Hill, MD —12 October 2016— Apache OpenOffice, the leading Open Source office document productivity suite, announced Apache® OpenOffice™ v4.1.3. Apache OpenOffice DRAW is an open sources office application and personal productivity software which can be run on various platforms (32 bit of 64 bit) such as Windows, Linux, and Mac. The latest version is more secure and available in 41 major different languages. Till today, this software have more than 200 million downloads, OpenOffice includes a word processor ("Writer"), a spreadsheet ("Calc"), a presentation editor ("Impress"), a vector graphics editor ("Draw"), a mathematical formula editor ("Math"), and a database management program ("Base"). The software can be download from the link: <https://www.openoffice.org/download/index.html>

Key feature of Apache OpenOffice 4.1.3

- Key security vulnerability fixes;
- Support for new language dictionaries;
- Numerous bug fixes, including installer and database support on Mac OS X

Image URL: <https://www.openoffice.org/product/pix/draw-big.png> Accessed on 11 April 2017 at 15:00

Creative Docs .NET 3.x:

This is good alternative or replacement software of Adobe Illustrator CS5, CoralDraw X8 which is design and developed by Epsitec SA, a Swiss. Creative Docs .NET can run on the following platform (32 bit or 64 bit) Windows 2000, XP, Server 2003 or Vista. This software is vector-based graphic design tool and can support flow charts, plan, illustrations, posters and manuals etc. with high capacity interface. The full-featured version of Creative Docs .NET 3.x is available freely and can be directly downloaded from its website i.e. <https://www.creativedocs.net/downloads/files/>

Image URL: <https://www.creativedocs.net/screenshots/images/screen2-b.png> Accessed on 11 April 2017 at 15:00

Karbon:-(formerly known as Karbon14, Kontour, and KIllustrator) is a free vector graphics editors software. It is a product of Calligra Suite which is an integrated graphic art and office suite by KDE. Karbon is able to create photorealistic vector images or illustrations, logos, clipart etc. Karbon is a vector drawing application with user friendly interface which is easy to use and highly customizable and extensible. The download link for Karbon is. <https://www.calligra.org/karbon/>

Image URL: <https://www.calligra.org/wp-content/uploads/2009/05/karbon-gearflowers.png> Accessed on 11 April 2017 at 15:00

Web Designing and Development Tool Kit

OpenLaszlo 4.9.0:

OpenLaszlo software is an good alternative of Adobe Flash software and it was also known as Laszlo Presentation Server or LPS. It is discontinued open source software for the development and delivery of waste internet applications. This software can be run on Window, Mac, Linux and Unix platform. The software was released under the Open Source Initiative certified under Common Public License (CPL). New feature of this software is able to create and deploying mobile applications and recommended platform for all application development in the SWF8, SWF10, and DHTML runtimes.

Image URL: <http://img.brothersoft.com/screenshots/softimage/o/openlaszlo-311017-1260926435.jpeg> Accessed on 22/04/2017 at 11:00

OpenOffice Impress 3.0:

Impress can be used as a replacement of adobe flash software and outstanding tools to create multimedia presentations. OpenOffice.org also known as OpenOffic. It is a discontinued open-source office suite. Impress is able to create 2D and 3D animation, special effects, clip art and high-impact drawing tools. This software can be run on Linux, Microsoft Windows and Mac. This software is available under the GNU Lesser General Public License version 3 (LGPL).

Aptana Studio 3:

Aptana Inc is an organization that makes web application tool for web 2.0 and Ajax for the operation of variety of computer programming languages (such as JavaScript, Ruby, PHP and Python). Aptana's main products include Aptana Studio, Aptana Cloud and Aptana Jaxer. For the building of web applications Aptana Studio 3 is great alternate to Adobe Dreamweaver CS5. Aptana Studio is an open source Integrated Development Environment (IDE) which supports the JavaScript, HTML, DOM and CSS with code-completion, outlining, JavaScript debugging, errors and warning notifications and integrated documentation. Aptana Studio 3 also supports Ruby on Rails, PHP, Python, Perl, Adobe AIR, Apple iPhone and Nokia WRT (Web Runtime) through additional plug-in. This software tested entire web application in single environment and also support the latest browser technology such as HTML5, CSS3, JavaScript, Ruby, Rails, PHP and Python which make this software much faster and customizable. Latest version of Aptana Studio 3 can be download from this link <http://www.apтана.com/>

Image URL: <http://www.apтана.com/images/product/S3-3-lrg.png> Accessed on 11 April 2017 at 15:00

Microsoft Expression Web 4.0.1460.0:

Expression Web is a full-featured professional tool for designing, developing and publishing compelling, feature-rich websites that conform to web standards. The latest version of this software was released on December 2012. Microsoft Expression Web 4 is web designing software and HTML editor design and developed by Microsoft. It is available free of charge from Microsoft. This software can design and develop web pages with the help of JavaScript, PHP, ASP.NET, CSS3, AJAX, XHTML and HTML5. Expression Web makes it faster and easier to design, develop and maintained websites. Free version of Expression Web is not eligible for Microsoft technical support. Latest version of this software is available on <https://www.microsoft.com/en-in/download/details.aspx?id=36179>

Image URL: http://i1-win.softpedia-static.com/screenshots/Microsoft-Expression-Web-Designer_1.png Accessed on 11 April 2017 at 15:00

KompoZer 0.7:

This is an open source WYSIWYG HTML editing software and good alternative of Dreamweave/FrontPage. This supports 21 different international languages. The editing skill of KompoZer's WYSIWYG makes this software different from others commercial or F/OSS. KompoZer allowed split code-graphic view and direct code editing as well. This is a complete web authoring system that incorporate easy use of WYSIWYG web page editing and web file management too. The highly and easy to use interface make software ideal for non-technical computer users who want to develop an professional-looking, attractive website without any knowledge of HTML or computer programming language coding. This software allow to run software on different platform (32 bit or 64 bit) such as on Microsoft windows, GNU/Linux, Mac OS X. Download facility is available on <http://www.kompozer.net/download.php>

Image URL: - <http://www.kompozer.net/photos/image1.png> Accessed on 11 April 2017 at 15:00

Computer Programming Languages:

Programming languages is formal computer language which are drafted to give instruction to machine and to make communications with computer. In short, programming languages are understandable by computer or which can control the action of machine. The role of programming languages is to create a set of programmes to control the machine or to express algorithms. It is also known as, a vocabulary and set of grammatical rules for commanding the computer to perform some specific task. There are so many computer programming languages available which are used in the design and development of website. The essential and important programming languages are:

Advanced Java with jQuery: Java is computer programming language which was developed by Sun Microsystem in the 1980s. Java is highly popular and widely used computer programming language to design and development of website or web development. This is a language which is class-based, object-oriented and concurrent languages. jQuery is a JavaScript library which allowed web developer to add extra performance to the website and also used to simplify the client-side scripting of HTML. It is free, open source software available under MIT license. It is widely used to simplify event handling, HTML document traversing, Ajax interaction and animation for speedy website development

CORE PHP fundamentals: - The acronym "PHP" is known as PHP Hypertext Processor Language which is free and server side scripting language that is design not only for web development but general purpose programming platform as well. PHP is an HTML embedded web scripting programming language so that PHP code can be added into the HTML of web page. A lot of PHP syntax is taken from other programming languages such as Perl, C, and Java etc. PHP languages can be used to write dynamically generated pages quickly and easily.

CSS (Cascading Style Sheets): - is used to format the layout of web pages and to describing the presentation of a document written in a markup language. With the help of CSS it is possible to give uniform look across multiple pages of website. CSS make it possible to change in font size, font name, font style, cell padding, margin, hover and color etc of each page at one click. The language syntax is almost similar to HTML and XHTML.

HTML 5.0, XHTML, DHTML: - HTML is a markup language known as Hypertext Markup Language which is used for the presentation and management of content and also used for standardized system for adding text file, graphics, dynamics files and hyperlink effects on the World Wide Web. This is fifth and current version of HTML standard. It was announced in October 2014 by the World Wide Web Consortium (W3C). DHTML is a Dynamic HTML which is an umbrella term for collection of technologies and used for dynamic and animated web pages on the other hand Extensible Hypertext Markup Language (XHTML is part of the family of extensible markup language and it is an advanced version of HTML

Web Application Development with Javascript: - JavaScript is an interpreted programming or script language which is widely known as most dynamic, high-level, untyped and interpreted programming language which is used in design and development of websites and games as well. Javascript is a programming language from Netscape which borrowed lot of its syntax from C language. This programming language is capable to control

the browsers, editing the displayed content on a document, allowing client-side scripts to communicate with users

Creating website using Web 2.0:-

Widely known as read and write web and described W3 websites which focused on usability, interoperability and user generated content for end users. Library Blog/ website can be created with the help of web 2.0 tools such as www.blogger.com and www.wordpress.com/ etc.

Blog (free publishing)

A blog is a discussion or informational website which is published on the W3 consisting of discrete, often informal diary-style. Text entries, posts are typically displayed in reverse chronological order, so that the most recent post appears first at the top of the web page. Information is stored in reverse chronological order.

Wordpress 4.7.3: Wordpress is a free publishing software and content management system (CMS) which is popular in America. The software is open-source, allowing developers to create a wide array of plug-ins, themes and widgets. Wordpress is widely considered easy to use and is the CMS of choice for almost 75 million websites. WordPress 4.7.3 is now available in two versions of the software. One version is hosted on a cloud and accessed via the Wordpress.com site. The other (ww.wordpress.org) is available and can be downloaded onto a private server or host. Technical and community support is provided by Wordpress and the Wordpress forums. URL: <http://www.investopedia.com/terms/w/wordpress-cms.asp>

Webs: It was established by three brothers with one goal in mind to help people to be online without technical skills or a big budget. Build a professional website fast with beautiful, flexible templates and an intuitive drag-and-drop interface. <http://www.webs.com>

Weebly: Over 40 million people around the world have already used Weebly's website builder and advanced e-Commerce tools to create the perfect site. Cutting edge mobile apps make it easy to track performance, interact with visitors and manage store orders from anywhere. <https://www.weebly.com/in>

Wix: It is the brainchild of our 3 founders: Avishai Abrahami, Nadav Abrahami and Giora Kaplan. Like many great ideas, it was discovered through accidental fate (on the beach). While constructing a website to be the basis of another start-up idea, and discovered that creating their own website was difficult, frustrating and very costly. It was the unbearable experience that led them to a light bulb moment and builds a platform which changed the situation and empowered anyone to create their own website with no coding or designing skills needed. Better yet, make it free. In 2006, Wix was born, forever changing the way people create their web presence. With over 100 million users across 190 countries, anyone who wants has total freedom to create their own stunning website. <http://www.wix.com>

Yola: It was born in Cape Town, South Africa in 2007, the pet project of Vinny Lingham, the pioneer behind innovative digital marketing company Click2Customers. And we still bring that special, welcoming Cape Town flavor to everything we do. <https://www.yola.com/>

Webnode: It is an amazingly simple website builder. Launched in 2008, it has already helped over 27 million users to create their own websites. It doesn't matter if you need a professional website for your company, a beautiful portfolio or a user-friendly e-shop, you have the right tool to build the website just the way you want. <https://us.webnode.com/>

Conclusion/Recommendation

In the age of digital era libraries have to have run with the changing culture and for that it has to move towards print to electronic and manual to computerized. To provide 24x7x365 access with updated information and also for the promotion of the same library website is very important for this era. As we all know that library is non-profit organization where as designing and hosting of library website is costly venture, authors have not only focused on how to design and develop library website but also find out many other options which are cost affective. It is being suggested that LIS professional must have ability to use web 2.0 tools, which required basic skill about computer with internet connectivity such as blog by www.blogger.com or WordPress by www.wordpress.com etc to create library website, which will help them to provide 24x7x365 access of digital content and also help to promote LIS products and services to its local and global users and make them more confident to save their existence in this digital era as well.

References

1. Diaz, Karen. "Role of the Library Web Site." *Reference and User Services Quarterly* 38.1 (1998): 41–43.
2. Laura Manzari and Jeremiah Trinidad-Christensen. "User-Centered Design of a Web Site for Library and Information Science Students: Heuristic Evaluation and Usability Testing." *Information technology and libraries* 25.3 (2006): 163–169.
3. Manikandan, J., Yuvaraj, M. P., & Neelakandan. "Design and Hosting of Library Website Using Open Source." N.p., 2013.
4. National Skills Development Corporation. "Certificate Programs in Web Design and Development." *nkdc*. N.p., 2011.
5. Theodore Frick, Bude Su and Yun-Jo An. "Building a Large, Successful Website Efficiently through Inquiry-Based Design and Content Management Tools." *TechTrends* 49.4 (2005): 01–12. Web.
6. Sankar, Vimal kumar V and Deepak. "Creating Library Website Using Open Source Content Management System." N.p., 2007.
7. Satish, S "Content Management Software – Drupal : Open Source Software to Create Library Website." *In International Conference on Library Space–Content Management for Networked Society*. N.p., 2014. 18–20.
8. Raward, Roslyn. "Academic Library Website Design Principles: Development of a Checklist." *Australian Academic & Research Libraries* 32.2 (2013): 123–136.
9. Mattis, Peter. "GIMP." N.p., 2017. Web. 14 Feb. 2017.
10. Inkscape. 2017. N.p., n.d. Web. 15 Feb. 2017.
11. Aptana Studio. N.p., 2017. Web. 16 Mar. 2017.
12. KompoZer. 2017. N.p., n.d. Web. 22 Mar. 2017.
13. Ettrich's, Matthias. "Krita." N.p., 2017. Web. 30 Mar. 2017.
14. Pixlr. N.P., 2017. Web. 16 Apr. 2017.
15. Microsoft Expression Web. 2017. N.p., n.d. Web. 16 Apr. 2017.
16. Karbon. N.p., 2017. Web. 20 Apr. 2017.
17. Apache OpenOffice. N.p., 2017. Web. 20 Apr. 2017.
18. OpenOffice Impress 3.0. N.p., 2017. Web. 20 Apr. 2017.
19. OpenLaszlo 4.9.0. N.p., 2017. Web. 20 Apr. 2017.
20. Creative Docs .NET 3.x. N.p., 2017. Web. 22 Apr. 2017.

