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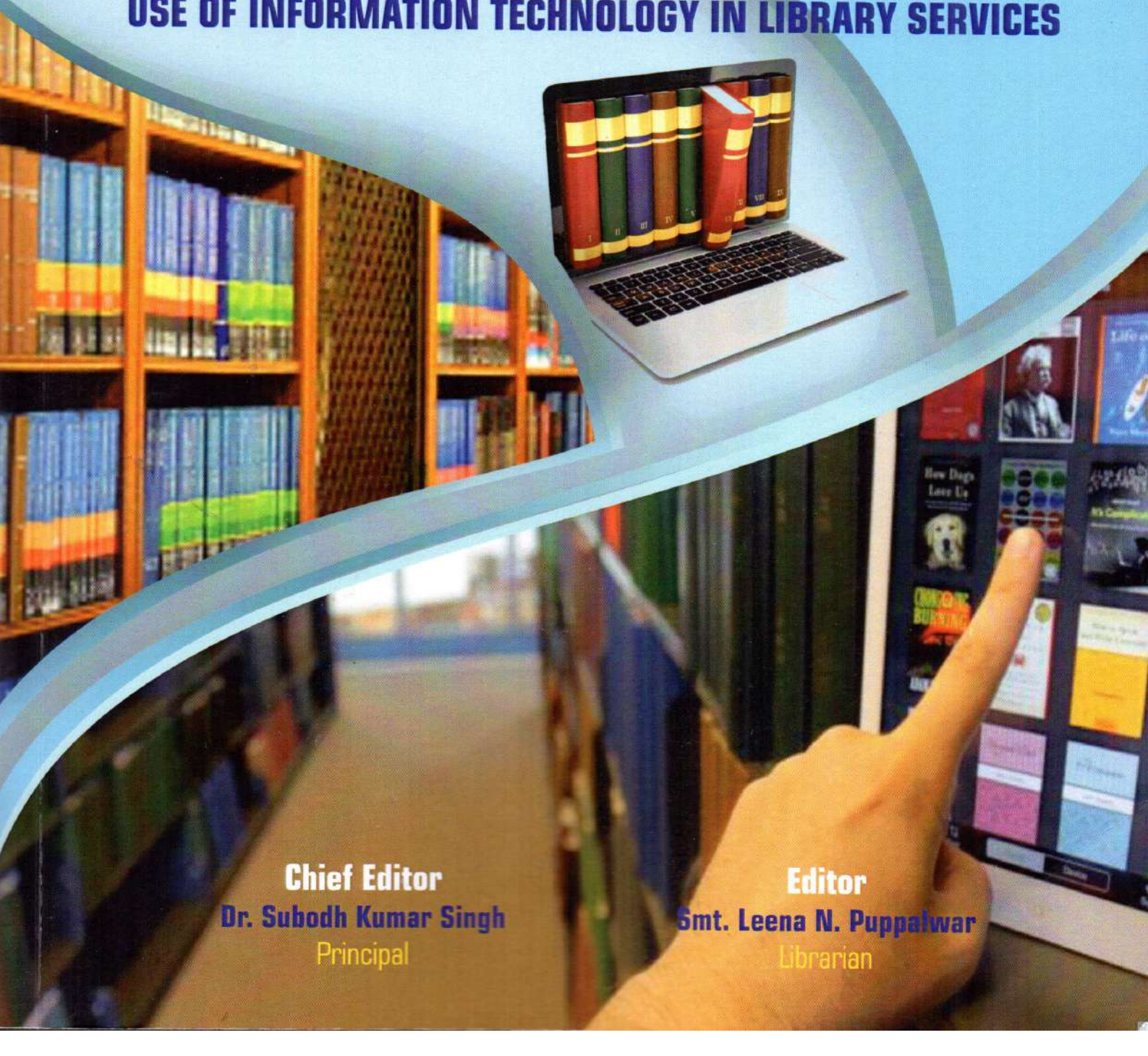
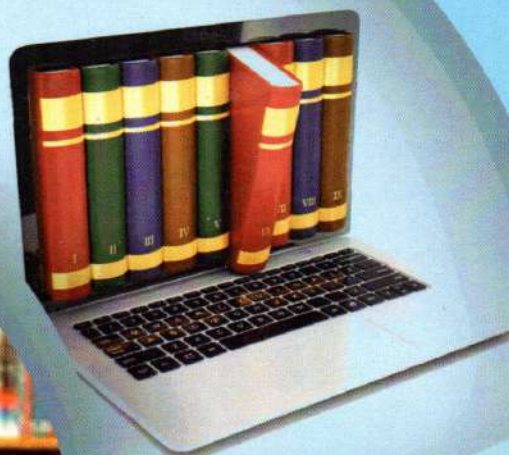
# SCHOLARLY RESEARCH JOURNAL FOR INTERDISCIPLINARY STUDIES

APRIL-JUNE, 2021, VOL- 10, ISSUE-56

Special Issue of Department of Library ,  
Lokmanya Mahavidyalay Warora, Dist. Chandrapur (MS)

on

## USE OF INFORMATION TECHNOLOGY IN LIBRARY SERVICES



**Chief Editor**

**Dr. Subodh Kumar Singh**  
Principal

**Editor**

**Smt. Leena N. Puppalwar**  
Librarian

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FOR INTERDISCIPLINARY STUDIES**

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### **Principal's Message.....**

Lokmanya Mahavidyalay, Warora, Dist. Chandrapur, run by Lok Shikshan Sanstha, Waroda and affiliated to Gondwana University, Gadchiroli faced NAAC and was assessed and accredited with 'C' status in the first cycle in 2010 and 'B' in the second cycle in 2017. The college could do much in such a small period simply because of the unhindered guidance and support from Prof. Shirkant Patil, President, Principal Anil Dongre, Vice-President, the Secretaries Shri Shrikrishnaji Ghadyal Patil and Dr. Milind Despande and honorable members of Lok Shikshan Santha, Waroda. It is only because of their candid and unfailing support that the college could take the shape that it has today. However, the active and enthusiastic support of the faculty and members of administrative staff cannot be down-played. The entire success story of the college has, in fact, been essayed by the teachers, administrative staff, and the students, who leave no stone unturned for the desired output.

Today, education and research are highly interdisciplinary. Research as a careful critical inquiry of examination in seeking facts or principals or new knowledge through a systematic scientific and analytical approach in any branch of knowledge. Lokmanya Mahavidyalaya has constituted a research committee to promote, monitor and address the issue of research.

It is matter of great pleasure to note that the Department of **Library** has organized One-Day National E-Seminar on June 28, 2021, Monday, with the academic objective to deliberate upon "**Use of Information Technology in Library Services**". Participation of intellectuals and academicians form across the country with defiantly make the endeavor of the department and those who take pains in making it succeed, fruitful.

Obviously, efforts of the Department of **Library** will open up new vistas, and prove to be a step forward in the field of research and new learning. As the chairman of organizing committee, I express satisfaction for the seminar and academic exercised an extend my best wishes to virtual conference. Research Paper are invited form scholars and academicians form the different part of the country. These papers are published in an International Peer Review, Refereed **Scholarly Research Journal for Interdisciplinary Studies with ISSN 2319-4766, Impact factor 7.380.**

I am sure the ideas expressed in the research paper will open up new areas of quality enhancement of higher education.

**Dr. Subodh Kumar Singh**

Principal



### **Editorial.....**

Our age is known as the age of Information Technology. Information technology is playing an increasingly important role in every field in also library services with the help of Information Technology published literature can be stored safely and retrieved. Whenever needed, Information Technology facilitate the free flow of information, effective service.

Therefore, it is important to discuss about the use of information technology in library services so the department of Library of Lokmanya Mahavidyalaya Warora, Chandrapur has organised one-day National seminar on 28 June 2021 on the topic of "**Use of information Technology in Library Services.**"

The paper of this topical importance and relevance through analytic base are invited from academicians from various parts of the country which is publish then in an **International Peer Reviewed and Refereed Scholarly Journal with ISSN 2319-4766 with impact factor 7.380.**

I am grateful to the keynote speaker for this e- seminar, Dr. Shriram Rokade (Principal at Commerce College Ralegoan, District Yeotmal) for his valuable keynote speech. It is a matter of great pleasure and privilege for me to extend warm regards to Dr. Manish Vajpayee (librarian, Dr Ram Manohar Lohiya National Law University, Lucknow) who was the resource person and Inspirational speech for this e-seminar. I am also grateful to Dr. Nandkishor Motewar (librarian Gondwana University, Gadchiroli) for his valuable suggestions and chairperson for second session of e-conference paper presentation. I am also grateful to Prof. Shrikant Patil (President of the Lokmanya Mahavidyalaya, Warora) inaugurating the session. I am also thankful for the

valuable guidance of Dr. Subodh Kumar Singh (principal Lokmanya Mahavidyalay Warora) who was chairperson in inauguration session .I express my thanks to all concerned.

**L. N. Puppalwar**  
Librarian,  
Lokmanya Mahavidyalaya  
Warora, Chandrapur

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**ELECTRONIC INFRASTRUCTURE: OPEN SOURCE SOFTWARE USE IN LIBRARY****Prof. Shingade D. I.**

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**Abstract**

*Today's technology is the modern web based technology. Now all the member/staff/faculty uses the internet, through the computer, mobile phone or etc. So that's why easy to handle the computer operating system. Library automation is one part of the new technology and the automation is depending among the software. For ex. open source software, free software and Commercial software. This paper describes and discusses various open source software free available for the library automation. The results indicate that different types of open source software are better for different types of commercial library software's as their goals and achievements are different. Open source software use through the license copy.*

**Key-Words:** *Open Source Software, Information Technology, Library Software, Drupal, Features of Open Source, Library Service.*

**Introduction:**

Open Source Software is the software created by programmers who want to share their source code, which is part of a program that is readable by anyone who finds it useful. According to Wikipedia "Open source software (OSS) is computer software that is available in source code from for which the source code and certain other rights normally reserved for copy right holders are provided under a software license that permits users to study, change and improve the software". "Open source refers to the software in which the source code is freely available for others to view, amend and adapt. It is maintained by a team of developers cutting across the institutional and national boundaries".

-Richard poynder.

In general open source is the free access to the design, development of the source code of particular software open source, the license of a program must guarantee the right to read, redistribute, modify and use it freely. Open source software is the best option for the library automation. Because many types of OSS are available in the market such as KOHA, DSpace, NewGenlib, Zoomala, Moodle, Evergreen, PMB Greenstone. This all software available free of cost. So many problems with the commercial vendors regarding their maintenance and annual rates. And this types of integrated software available in market cost in lakhs. To copy up with the need of college librarians should adopt the new technology tools to provide right information at the right time. That's why save the time of the reader. Open Source Software is software that allows users access to its source code. It allows users to modify the program according to need and to develop new code that improves the application a common misconception about OSS is that it is free of cost. While this is sometimes the case, the cost of OSS is often found in support services rather than in product acquisition. This fact sheet provides information about the value and potential cost associated with adopting Open Source Software discusses the relationship between Open Source Software and open government and provides questions to be asked when evaluating Open Source Software.

**What is Open Source Software?** Open Source Software is software like any other, however it is distinguished by its license, or terms of use, which guarantees certain freedoms, in contrast to closed proprietary software which restricts these rights. Open Source Software guarantees the right to access and modify the source code and to use reuse and redistribute the software, all with no royalty or other costs. In some cases, there can be an obligation to share improvements with the wider community, thus guaranteeing global benefit.

**UNIX:** UNIX is the first stage of open source. In the year 1950 to 1960, Computer technology and software was introduced to work in the educational and special industrial institutions.

**Open source Software Licensing:** A license defines the rights and obligations that a licensor grants to a license. Open source licenses grant licensees the right to copy, modify and redistribute source code.

**OSS Attributes:**

1. Source code must be include.
2. Distribution of license.
3. License must be technology-neutral.
4. License must be specific to a product.
5. Integrity of the author's source code.

**Cost of Open Source Software:** Open Source Software and its supporting code are generally free of cost to download, use, and modify; however, services related to Open Source Software. Might not be individuals and for profit businesses can charge for specialized training or for developing new extensions to the core Open Source Software code.

**Ranganathan's five laws VS Open Source Library Software:** According to Mentor Cana used the term 'Software' as a basic element as Ranganathan's basic elements is book. Both book and software contains objective knowledge.

Type	1 <sup>st</sup> law	2 <sup>nd</sup> law	3 <sup>rd</sup> law	4 <sup>th</sup> law	5 <sup>th</sup> law
<b>Book</b>	Books are for use	Every reader his/her book	Every book it's reader	Save the time of the reader	Library is growing organism
<b>Software</b>	Software is for use	Every use his or her software	Every software it's user	Save the time of the user	A software library is a growing organism

(Source <http://www.kmentor.com/socio-tech-info>)

**Features of Open Source:**

1. **Free circulation:** Any user can use Open Source Software and pass it on as often he or she wishes.
2. **Availability of source code:** The Software low cost is available with its source code.

**Some Open Source Library Software:**

Open Source Software is computer software for which the source code and certain other rights normally reserved for copyright holders are provided. This permits users to use, change and improve the software, and to redistribute it in modified or unmodified form.

**1. Moodle:** The word Moodle was originally an acronym for which is mostly useful to programmers and education theorists. Moodle was created by Martin Dougiamas. A web communication technology administrator at Curtin University, Australia who has graduate degree in Computer science and education. The word Moodle is actually an acronym for Modular, Object-oriented Dynamic learning environment, although originally the M stood for 'Martin's named after Martin Dougiamas, the original developer.

Moodle has been evolving since 1999. The Moodle version is 1.9.7., which was released in November 2009. It has been translated into 80 different languages. Moodle is a software package for producing Internet-based courses and web sites.

**Features:**

1. Activities.
  2. Resource types.
  3. Question types.
  4. Data field types.
  5. Graphical themes.
  6. Content filters.
- 2. Brihaspati:** Brihaspati software established in 2008 in India. The organization is dedicated to developing high quality, user friendly software products for all platforms, to provide full service for affordable off share web site design, for Open Source Software. Brihaspati is implemented in Java using Turbine, an open source framework, as secure web application. In the current distribution, we have English, French, Hindi, Bangla and Marathi as supported languages.

**Features for all users:** (Admin, Instructor, Student, Author). Anybody can access all these features:

1. Calculator.
  2. Glossary.
  3. Search engine.
  4. Calendar.
  5. Repository browser.
  6. Task manager.
- 3. Plone:** Plone is a free and open Source content Management System built on top of the zope application server plone can be used for in principle any kind of website, including blogs, internet sites, web shops and internal websites. The plone project was begun in 1999, by Alexander Limi, Alan Runyan and Vidar Andersen. The first version was released in 2001. The increase in community led to the creation of the annual plone conference in 2003, which is still running today.

**Features:**

1. In line editing.
  2. Working copy support.
  3. Link.
  4. Reference integrity checking.
  5. Automatic locking and unlocking, collaboration and sharing .
  6. Work flow capabilities.
  7. Authentication back-end.
  8. Full text indexing of word and PDF documents.
  9. Collections.
  10. Wiki support.
- 4. Greenstone:** Greenstone is produced by the New Zealand Digital library project at the University of Waikato, and has been developed and distributed in cooperation with UNESCO and the human info in Belgium. It developers received the International federation fir information processing's 2004 names award for contributions to the awareness of social implications of information technology, and the need for an holistic approach in the use of information technology that takes account of social implications.

**Features:**

1. Small bronze star in the top right corner of a page indicates that the content is featured. (Krishnamurthy, M. 2007).

**5. SCORM: (Sharable Content Object Reference Model).**

SCORM Software located in India Ahmadabad Maduvan Infotech Pvt. Ltd.

MINFO started its full flagged operation in 1995, and has undertaken mission critical projects and product development on niche technology domains for global and Indian orients to their complete satisfaction.

**Features:**

Three types of user registration:

Open, Approval, Required or closed

1. Publish SCORM catalog.
2. Launch and track courses.
3. E-learning software keeps track of bookmark.
4. Scores and results of individual questions.
5. Online reports.
6. Full support for SCORM 1.2.
7. Place learners in groups.
8. Easy to use.
9. Customizable.?
10. Upgradeable.
11. Multilingual.

**6. Caroline:** Caroline is an open source e-learning and e-working platform allowing teachers to build and collaborative activities and the web. Translated into 35 languages, carline has a large worldwide user and developer community.

**Features:**

1. Publishing documents and files accessible to the users.
2. Creating directories and un-directories together files.
3. Creating hyperlinks and building your own HTML pages.

**Conclusion:** Today's age is the information explosion. It demands all the librarians to organize and provide right information to the right user at the right time. This paper consist that the basic overview of Open Sources Software and how libraries can be utilized by using Open Sources Software. No any software is perfect. The role of library software is cannot be neglected in the field of software development.

**References:**

- Open Source and Rangnathan's five laws of library science by Mentor Cana.*  
<http://en.wikipedia.org/wiki/moodle>. Accessed on 26/04/2021  
<http://docs.moodle.org/en/about>. Accessed on 26/04/2021  
<http://www.kmentor.com/socio-tech-info>. Accessed on 26/04/2021  
Krishmurthy, M., 2007.  
<http://www.caroline.net/> Accessed on 26/04/2021  
<http://en.wikipedia.org/wiki/open-sourcesoftware>. Accessed on 28/04/2021  
St. Laurent, Andrew M. (2008). *Understanding open source and free software licensing* O'Reilly media. P-4  
<http://opensource.com/resources/what-open-source> Accessed on 28/04/2021  
<http://www.brihaspatisolution.co.in/brishaspati/> Accessed on 02/05/2021  
*Educause quarterly* No. 2. Year 2008. P-37  
[www.library.ca.gov/crb](http://www.library.ca.gov/crb) Accessed on 02/05/2021  
Garate, Archana (2010) "Open source software" *dnyangangotri*, Sep-2009 to Feb 2010.