Application of Open Source Software in Digital Library

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Abstract- **Softwares now-a-days have become the life line of modern day organizations. This paper provides a general history and description of open source software. In the construction of digital libraries, using OSS is a good way to take hold of the key software development technology, including the significant improvement on open source software systems. Softwares simply their tasks and saves a lot of precious time which can be utilized in managing other important issues. Libraries also need softwares if they want to create a parallel digital library with features which we may not find in a traditional library. There are several open source softwares available to create a digital library.**

Index terms- **Open Source Software, Digital Library, Computer Software.**

I.INTRODUCTION

Open source software is computer software whose source code is available under a license that permits users to study, change, and improve the software.

Figure 1

Today's libraries are faced with the challenges of integrating traditional and emerging formats, balancing resource allocation between traditional and upcoming technologies. Because of this need for software and the lack of money available to spend on it, many libraries are left to fend for themselves when it comes to staying up to date with the latest technology. In this paper, information about software for educational institutions introducing digital library concepts is provided.

Figure 2

OPEN SOURCE SOFTWARE

Open source software is software with source code that anyone can inspect, modify, and enhance. Commercial firms tend to restrict access to their source code in order to protect their intellectual property. Copies of the 'binary' are made public; the 'source-code' is not usually made public. The majority of Open source software is distributed freely, making it very cost-effective. Unlike closed proprietary software, OSS can be altered and extended by any developer familiar with the source code. This grants organizations freedom from "vendor lock-in," where they must rely upon a single vendor for updates to their product. Open Source software offers long-term viability because hundreds of developers supporting a widely adopted OSS project can be called upon long into the future.

Figure 3

ADVANTAGES OF OPEN SOURCE SOFTWARE

1   Open source solutions generally require no licensing fees.
2   Source code availability also makes it much easier to identify errors, and to fix them.
3   Obtain the software once and install it as many times and in as many locations as you need. There's no need to count, track, or monitor for license compliance.
4   Continuous improvement does not require users to pay for it. There is no single entity on which the future of the software depends.
5   Using open source software also means you are not locked into using a particular vendor's system that only work with their other systems.

DIGITAL LIBRARY

Digital libraries are systems providing user with coherent access to a very large, organized repository of information and knowledge Digital library is a global virtual library. Digital libraries are defined in many ways, encompassing both analog materials made available digitally and newly created digital content. It is an organized searchable collection in digital format. The digital library is making the library undergo a change in the paradigm of its role to create organize and distribution of information resources.

A digital library is a distributed electronic collection that covers virtually all fields of human endeavor to serve the defined community. Digital libraries are logical extension and augmentations of physical library.
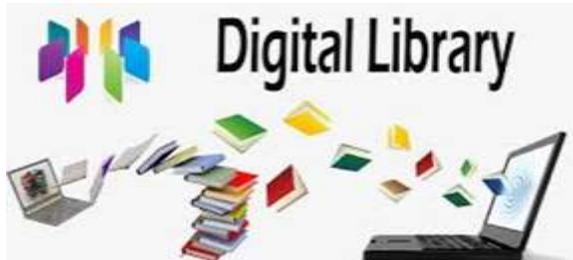

Figure 4

CONCLUSION

The development of OSS in digital library should obey the basic idea which is openness, collaboration

and development. Digital libraries are a key technology for developing countries. Digital library can be created by using open source softwares available free of cost. One of the biggest advantages of the open source model is that all users of the product have the potential to contribute to its development, so long as the required open source talents exist on staff.

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