**Technical report on open source**

**open source**:

The term open source refers to a source that is available openly and can be modified and enhanced with all public services and licensing agreements available.Since the source code of an open source program can be modified by anyone, it makes sense that the software is also free to download and use.It helps in attaining the implementation of software in different platforms and improve its features.

**Open source software:**

Open source software is software with source code that anyone can modify and enhance.Source code is the part of software that most computer users do not ever see;

it is the code computer programmers can manipulate to change how a piece of software a program or application works.

Programmers who have access to a computer programs source code can improve that program by adding extra features to it.

**Open source development:**

open source software development is a proces by which the freely available source code gets developed with intended results and obtaining in different platforms and having high usability appraoach of attaining a software development the open source development is done usually with in a softwre source for better improvment in the existed source code.

For developing a project in the open it fisdtky acqires and seeks the permisions ofthe licensing aggrements.

**Advantages:**

1. It’s generally free – it has been estimated that open source software collectively saves businesses $60 billion a year. These days for virtually every paid for proprietary software system you will find an opensource version.

2. It’s continually evolving in real time as developers add to it and modify it, which means it can be better quality and more secure and less prone to bugs than proprietary systems, because it has so many users poring over it and weeding out problems.

3. Using open source software also means you are not locked into using a particular vendor’s system that only work with their other systems.

4. You can modify and adapt open source software for your own business requirements, something that is not possible with proprietary systems.

**History:**

The “open source” label was created at a strategy session held on February 3rd, 1998 in Palo Alto, California,shortly after the announcement of the release of the

Netscape source code.he strategy session grew from realization that the attention around the Netscape announcement had created an opportunity to educate and

advocate for the superiority of an open development process.he conferees believed the pragmatic, business-case grounds that had motivated Netscape to release theircode illustrated a valuable way to engage with potential software users and developers, and convince them to create and improve source code by participating in an engaged community.

The conferees also believed that it uld be useful to have a single label that identified this approach and distinguished it from the philosophically- and politically-focused label "free software.

" Brainstorming for this new label eventually converged on the term "open source", originally suggested by Christine Peterson.

**Model of open source**:

The open-source model is a decentralized software development model that encourages open coolobration,Successful open source communities have developed processes where code canbe submitted and integrated asynchronously, communication is well documented, and features are integrated in small increments to catch issues early in the development cycle.

**The Professional Services Model. ...**

• The Software-as-a-Service (SaaS) Model. ...

• The Open Core Model. ...

• The Proprietary Software Model. ...

• The Drug Pusher Model.

**Methods of open source:**

the basic methods in open source are as follows:

* waterfall methodology

• extreme programming methodology

• various types of agile methodology

• scrum methodology

Upon researching how open source projects have succeeded, a set of

principles that could be considered the tenets of the open development

method start to emerge

**Types of open source projects:**

• Several types of open-source projects exist.

• First, there is the garden variety of software programs and libraries, which

consist of standalone pieces of code. Some might be dependant on other open source

projects. Example of this project include the Linux kernal, the Firefox web browser and

the LibreOffice ofice suite of tools.

• Another type of open source project is Distribution. Distributions are collections

of sftware that are published from the same source with a common purpose. The most

prominent example of a Distribution is an operating system. There are many Linux

distributions such as Debain, Fedora core, Mandriva, Slackware, Ubuntu etc.

• There are other distributions like ActivePerl, the Perl programming language for

various operating systems and Cygwin distributions of open source programs for

Microsoft Windows.

• Other open source projects like the BSD derivatives, maintain the source code

of an entire operating system, the kernal and all of its core components in one revision

control system; developing the entire system together as a single team.

• Eclipse Che

• Free CAD

• Gnu Cash

• Kodi

• Open Aps

• Round cube

• Open Aps

• Round cube

• Open Toonz