

# Knowledge Sharing and Development under FOSS

Presented by

## Students' Forum for Free/Open Source Software (SF-FOSS)

Knowledge the best gift that you can give to any human. It's the gift that would remain with the person for lifetime. Whenever you try to use it, it would multiply. The beauty of knowledge has been the sole reason of the most marvelous creations of the world. It's something that has infinite speed of flow and reach.

### A walk through time

The process of imparting knowledge and gaining knowledge are as old as the mankind. Even **prehistoric men** shared their experiences to come to a remarkable solution to a problem. The process of imparting knowledge is as old as the *Ramayana*, the *Vedas* or the *Civilizations*. According to our mythology, knowledge was imparted by the *gurus* to the all the disciples alike without expecting anything in return. Even in the civilizations, people worked together to gain more and more knowledge. The fact is easily proves that God created us as a social animal that always worked for the society and benefitted from the society. The communal feeling of common joy and common celebration was the best feeling that people lived for.

Then came in the era of inventions and **industrial revolution**. Various developments took place that was a boon for the society. Products and inventions made life more comfortable. Development of paper, construction technology, engines, etc. clearly proves the point.

Then came in the era that people realize as the most dominating and major era of the world. This was the **IT revolution**. Many companies opened and made technology, products and software. Competition between companies encouraged them to develop more and more. IBM, Microsoft, Google, Intel, Sony, Yahoo are just to name a few. While the world was enjoying their fruits, nobody realized the massive attack this revolution would have on the society. People became individualists rather than socialists and the community feeling had been completely vanished. A person at that time could not gain knowledge or any information because of licenses, copyrights, etc. The people had to invest huge amount of money to gain something. The freedom of development had been lost.

The condition of the **software** was even more miserable. A person even on buying software could not have any right to see its underlying technology or better called the *source code*. The developers hid every information and hence it was impossible for a new person to work over any existing technology. Development was only a game of the big IT jargons and not the common developers. The software was caged into the shackles of licenses where it was denied the freedom of growth.

As it is said, every night has a morning, the autocracy of these proprietary developers ended by a vision of a set of people who coded for free. They called themselves **the hobbyists** and developed and released code freely. They visualized a business model that would change the foundations of the proprietary software. These included *Richard Stallman, Linus Torvalds, Eric Raymond* and many others. This led to the foundation of *Free/Open Source Software* which began dominating the market and may even wipe out proprietary software into the future. The message was clear, the world has awakened and the communal feeling started.

The essence of this is clear from the words of Richard Stallman, who explained the essence of communal feeling by the example of children. He said that a child is told to share his lunch with others. Proprietary software is like telling him that he would be punished if he shared his lunch.

## **All the fuss about FOSS**

Open Source Software can be defined as computer software for which the human readable *source code* is made available under a copyright license that meets the Open Source Definition. This permits users to use, change, and improve the software, and to redistribute it in modified or unmodified form. It is very often developed in a public, collaborative manner. This means that whenever you take software under open source, you can demand its source code, learn from it, modify it and return it back to the society.

Open source development always gives you a **feeling of community**. It is as if you are taking from the community and returning back to the community. This is the best feeling of communal growth for any open source developer. In open source you **never code anything new**, anything existing. You always take existing modules and integrate them. What is left is coded and added to the library. Open sourcing provides a huge **market of millions of people** where people are eagerly waiting to download your software, review it, send feedbacks etc. This is because it's all free. The market penetration of open sourcing products is immense.

If you think that open sourcing does not **pay you**, you are wrong. Open sourcing business is always done as a hobby by the self-will and motivation of people. But you can always charge for the services you provide, not the software. Red Hat earns enormously by the RHCL courses it provides. Shuttleworth Foundation is another example of making money from open source.

There are enormous products in open source domain that are dominating the market. These include PHP, MySQL, Debian, SUSE, Ubuntu, Apache, Wikipedia, etc. Their success stories talk about the potential that open source has. You would not be spending a single day without FOSS products. Majority of Web servers, Web browsers, databases, development tools, security protocols are all open source

## **FOSS and knowledge**

Knowledge can never be generalized to a set of domains. It rather extends over multiple domains. Some of these are technical skills, management skills, personality, social skills, skills of an artist, spiritual skills, traditional skills (carpentry, plumbing) etc. Person having anything in any of these domains would be able to impart knowledge to the other person. Hence all these are

dimensions of knowledge. Open source works in all these dimensions. It enables a person to freely impart his skills to others.

Proprietary thinkers always encourage the artists to copyright their creation so that it is un-editable; they encourage the chiefs to hide the recipe, etc. The open sourcing in these domains works for spreading of these skills freely. The creation of Creative Commons license, formed when a group of artists refused to copyright their creation is one move of the various open source.

We stand for the free spread of knowledge. We pioneer the freedom of knowledge to go, expand, rise, flow, develop and reach everywhere. We stand for the spreading of knowledge... unrestrained.

The biggest example of this is Wikipedia. This was an idea of having an open source encyclopedia by Jimmy Wales and Larry Sanger. The concept was to make people contribute and edit a whole encyclopedia without peer review. The rival to this were the encyclopedias that were existing and had huge bulk of information that covered big volumes. People contributed to this cause more and more and very soon a big and comprehensive encyclopedia was ready that easily defeated its rivals. This was a record in its own for making an encyclopedia at the shortest time.

Wikipedia was the first Web 2.0 service started in 2001 and is presently the most read encyclopedia. Any student or teacher may be easily able to exemplify its impact. Wikipedia has currently 10 million articles in 23 languages. A quarter of them are in English. It has countless number of people all around the globe who actively contribute to it.

### **About Students' Forum for Free/Open Source Software, ABV-IITM, Gwalior**

Looking at the potential and impact of open source, ABV-IITM set up a dedicated forum in the institute that works for the promotion and development of open source inside the institute as well as outside. It works for the development of the society as well, as the society is always an integral part of the country. It organizes expert talks, works for software development, social activities, promotion of open source by media and informal events.

### **Conclusions**

It is important to realize that this article could not have ever been possible without valuable contributions from the internet that were freely available. Hence free open source movement is used by everyone everywhere, no matter how hard you avoid. The major challenge is to bring the maximum under this domain.

The forum stands for freedom. Freedom of every kind those are indispensable for the development of the mankind. The forum works to give complete freedom to people so that they may develop to their maximum. This includes the freedom of software, skills and knowledge.

The motto of the forum to spread knowledge unrestrained would be only possible by the active support of all sections of the society that we strive to get.

For details please visit: <http://sf-foss.iitm.ac.in>