The Open Source world is based on many philosophies. A well known member of this community, Eric Raymond, wrote an essay called *The Cathedral and the Bazaar*(CaTB). In this essay he describes the philosophies that he believes explain the reasons why people develop and work on Open Source software.

His philosophies break down into two major themes. Both of these themes focus on having source code that is available for anyone to download online. The two models are known as the Cathedral and the Bazaar. The only difference is that in the Cathedral model, the source code is restricted to a limited number of people between releases and in the Bazaar model there is no such limitation. This means that the latest versions of the code are accessible at all times. (Wikipedia - CaTB)

One of the most interesting aspects of the Open Source community is the high degree of motivated people it attracts, since many of the people who develop Open Source software do not receive any financial rewards from that work. The people making these contributions have different interests as well as various reasons for their motivations. Personally, I have developed and contributed to various Open Source projects. I did this for mainly three reasons: for fun, because I needed feature X, and to become more well known in the community.

Linus Torvalds is credited with the expansion of the Bazaar model(Wikipedia - CaTB). Linus Torvalds, the original author of the Linux operating system said "most of the good programmers do programming not because they expect to get paid or get adulation by the public, but because it is *fun* to program." (Torvalds interview) Therefore, since programmers are going to work on projects regardless of whether or not they are paid, there is no limit to the number of programmers that can work on a project. This also means that the projects can be more more successful than closed source projects.

To summarize, the Cathedral model although Open Source, is still restrictive in that it limits public access to the source code between the major releases. It limits the access to an exclusive group, most likely the project's core developers. The Bazaar model allows for the code to be kept in a publicly accessible location. These different models affect the type of work that is done on the projects and therefore, will affect the end result. Due to the fact that the Cathedral model is more limiting "in the number of eyes on the source code," members of the community are left to improve documentation rather than helping to fix bugs(debugging). However, the Bazaar model allows for more people to have access to the code, so more people are able to debug the code. This leads to more people being able to make improvements and fix bugs because they don't need to request that someone else do it, rather that person(the user) is able to take action!

There are a great number of business models which incorporate the Open Source models. Since the idea of Open Source is to not charge the user directly for the software, "creative" business models have evolved. There are tons of companies that are using the models to try to make money with Open Source such as IBM, Google, Canonical, RedHat, and Novell. These are only some of the largest companies. IBM has grown to become a successful leader in providing support for businesses looking to implement Linux and Open Source in enterprise environments. Charging companies for support is a very common method in which companies can make money using Open Source models.

Canonical, RedHat, and Novell have each developed their own distribution. A distribution can be thought of as the work that an organization and the community have done together in building a complete

Linux system. A distribution incorporates work from the company as well as members of the community and usually even those of their competitors, in improving the software. To understand why companies would want to work together while striving to make money is a complex issue.

The community as a whole has one overall goal to make the best software that is owned by the community. The companies within the community have to make a profit so they can stay in business. So having companies develop software that is owned by the community may sound like it is impossible, but it is not.

The companies that develop and build Open Source software employ people who develop software as well as contribute documentation and various other forms of assistance to the projects. The employees who work in these companies are still members of the community. Usually, the developers and sometimes others are hired due to their reputation from doing Open Source development at another company or in their free time. Once an employee is working with a company they need to coordinate the time spent working on the Open Source project with the needs of the company. In some companies, employees may be allowed to have the flexibility to work on what they want to work on, but this changes from company to company. Further, anything that is included in one distribution and is licensed under **h**e General Public License(GPL) can be included in other distributions of Linux, assuming the license is also GPL. The end result is that the software turns out to be the best that it can be once you have people from the company and the community both contributing to a single project.

The way this translates back into a business model is that now you have a distribution or project that many companies want to use and implement. When those companies go to implement the distribution or project the most likely place they are going to go for help is to the company that developed it. Therefore, these companies will be able to offer a wide range of services such as technical support,

hardware/software customizations, custom development, best practices for implementation, software fixes etc. There really is no limit to the benefits to the companies involved. Thus, the race is on to build the best Linux distribution and the major companies want to have that distribution associated with their name, because of the dollars that will translate as the world switches from Microsoft Windows to Linux.

Wikipedia CaTB "The Cathedral and the Bazaar" - 02/04/08

http://en.wikipedia.org/wiki/The_Cathedral_and_the_Bazaar Torvalds interview - 02/04/08

http://www.firstmonday.org/issues/issue3_3/torvalds/