Business Profile

Introduction

We see today ­­­myriad of commercial based entity supporting open-source software which at the beginning was rarely seen. FOSS was more favoured earlier by hackers or hobbyists who use to write code and build programs in their time for the common good. Commercial based companies were more focused on how they could monetize their software so giving away their products for free goes against the economic principles. But now we see growing number of entities not only giving their software’s for free but also hiring developers to contribute towards Free and open-source software (FOSS) ,in fact numerous open-source software are now released are by commercial based entity.

The aim of this study would be to research on a commercial based entity who are contributing towards open-source software and address questions as to When they started contributing ,what is the driving force behind their decision to contribute to FOSS?, in what way do they support open source and what are their methods of contributing. The selected Organization I would be discussing is IBM.

IBM is one of those companies who have been involved with open source before many open-source companies were even founded (IBM, 2017).During its initial days IBM was not a strong supporter of FOSS and use to strongly support “Intellectual property” for software , patents and licensing so users could not modify or use its source code (Samuelson, 2006). But now it contributes in a big way to open-source projects , it is estimated IBM contributes $100 million towards Linux (Jennifer LeClaire, 2005).

*Why did IBM started supporting FOSS, What is its justifications ?*

*Propriety software requires more resources.* IBM had started to pay more attention to the customer needs and its demands ,it realized that Users want a sustainable and trustworthy software which would be more flexible or tailored according to their changing needs (Samuelson, 2006).

The expenses to develop a commercial software has to be borne entirely by the organization developing it, this would also mean that if the particular software is not a success or has very few takers the organization would be bearing the losses. And if it does attain success ,its success may be short lived as there are other players in the market who would then develop similar products for a lesser price or in time just come up with a much better product for users (Samuelson, 2006).

A commercial Organization in this case has to keep investing more of its time, money and man hours In its software providing support services for it, releasing newer versions of it just to keep it working longer or in some cases just to stay alive.

*Distributed collaborative working.* One of the key benefits of open-source software which also caused many commercial based entities attracted towards it was its style of working which is distributed. The talent pool today is distributed across the globe and people from various areas could work on a piece of software collaboratively , share ideas and contribute towards the development process , modify it and make better versions of it.

Working in a commercial based entity In a closed door with a few engineers limits the software abilities and also increases the development time and processes whereas in open-source work can be distributed among many talented engineers who just enjoy to code (Samuelson, 2006). IBM recognizes this, it states in its open-source community page that it believes in “Giving Back” and also that worlds most daunting problems could be solved by open source and encourages developers to come together and contribute for a positive impact on society (IBM, 2017).

Some additional reasons why a commercial entity shifts its position are :-

* Selling Support Services – A business model where revenue is generated from selling support services for the open-source software developed by companies (Neeshal Munga, 2009)
* Licensing Brand - When an Organization develops an open-source software the licensing or trademark rights are retained by the organization and are used to generate revenue when other entities use them to create derivative products.
* Two components - A software has two components or versions commercial and OSS, users can so choose to upgrade their software from OSS to commercial one which the company can then charges them for (Neeshal Munga, 2009).

*How does IBM contribute?, what are their contributions up till now ?*

* Its first contributions were from its engineers towards the Linux kernel , it then also assisted in setting up the Linux foundation and with patent pledges.
* They supported in the creation of the apache software foundation and also dedicated resources towards the development of apache web server projects (IBM, 2017).
* Eclipse foundation whose missions is to promote or advance the use of open-source software and has over 360 projects, its creation was led by IBM who contributed by writing code, providing developers and with legal help for licenses.
* They along with sun micro systems assisted in its earlier days to setup the java Language and its runtime and also helped in making the Java development kit the premier open-source java.
* Since the inception of cloud-based development IBM has been contributing extensively towards it with numerous examples :-
  + Cloud foundry – deploying enterprise cloud applications and created an open governance model for it leading to creation of Cloud foundry foundation (IBM, 2017).

Some of their other contributions also include OpenWhisk , Docker , Kubernetes , Istio. They have been encouraging developers to come together and use their code, all of their open-source projects, code, documentation can be pulled from their git hub repository they ask engineers to solve their problems , clients and developers to just improve their programming skills. AI, blockchain to operating systems are a few example type projects in their repositories (IBM - Open Projects, 2017).  
  
IBM is not only involved in the developmental process of software to make them open source but also works towards to protect the right of FOSS developer from patent holder entities. For this they co-founded the open inventions network which provides protection to open-source projects.

*So how does IBM make money by supporting in all of these open sources and contributing towards it ?* They understand that commercial software is expensive than open source so when they encourage its use they are also lowering the cost of their components or computer and services and the user pays less amount overall (Samuelson, 2006).  
It then provides the customer with applications and services which they built, and user can pay for these.

*What have I learned from this research exercise ?*  Before beginning this exercise, I wasn’t aware why commercial based entities contribute towards open source since this idea goes against the thought of making money from software.

During my research this question has been answered with clarifications and examples , I know understand the business model behind commercial entities pushing and encouraging for open-source software. Also, it was interesting to know about the history of FOSS , why was this idea encouraged by its founders , what benefits it brings for developers and how all of us can use it improve our skills and make a positive impact in the world of development. Because of this essay I now also have a new career path which is open source and how to contribute towards it.

A key learning, I take from this essay is that I always search for best open-source project under various platforms (REACT , Nodejs , ASP.net) etc to learn to code and see how other programmers do coding , and what are the industry standards to follow. I have now understood how to use open-source projects to pull code , read and learn and improve my Development skills.

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