

Free and Open Source Software, Part II

Part I of this article sought to explain the full meaning of open source software, while describing some of the advantages of free and open source software and advocating the need for developing countries such as Ghana to leverage these open source technologies to help in achieving its developmental agenda. Part II would seek to delve into the disadvantages if they exist and try to make a case for FOSS and lastly try to enumerate certain necessary steps governments need to take to implement free and open source software.

Despite the enormous advantages, FOSS may not always be the cheapest the options just because it is free or almost free to obtain and free to share. It does require training and maintenance. Microsoft and other proprietary software companies have done a good job of making their software interactive enough and easy to use and learn. In essence it is easy to become a proprietary savvy. Open source software came about because the developer community wanted cheap or free software code they could use and play around with. This led to the formation of Free Software Foundation which built upon a Unix-like kernel which was written by Linus Torvalds, a Finnish student. This gave birth to the Linux operating system. Because this was particularly targeted towards the development community, it made usage by ordinary computer end users virtually impossible. It was hitherto imperative to undergo some form of training to use Linux. It is a fact that many African and other developing countries do not yet have large numbers of software developers to modify, adapt and support FOSS applications, hence this disadvantage.

Even though this perception still exists, it should be noted that the development community has done a great job in building robust software which are easy to use and incorporate lots of other software. For instance, Ubuntu is one of the Linux flavors which is free to obtain and free to share and incorporates almost all software a computer needs. When it is installed, it comes with open office, which is the equivalent of Microsoft Office and so many other proprietary equivalent software that you would otherwise buy if you are using Windows.

Another case against open source software is that some products such as RedHat and other dozens of other distributions of Linux are commercial distributions. It has been estimated certain Linux applications can cost between \$2,500 and \$18,000. If open source can be this expensive and would need training, then why not just use the proprietary software?

Some persons have also argued that it is important that the market be allowed to decide which software was competitive. Robert Kramer, Vice President of the Global Public Policy of the Computing Technology Association (ComPTIA) says:

'Our principal position is that governments need not undertake to pass legislation or enact rules that limit their choices to one or the other. In fact, the idea of having a rich set of choices in software that adds both the opportunity of open source and those in the commercial software area is really the way to go. If open source is already competitive, then you don't need to have government procurement policies that are targeted towards open source or for that matter targeted towards any particular kind of software.' Apache and Linux have proven FOSS can be competitive in the market place of software. Apache dominates its market: more than 61.44 per cent of web servers ran apache as of November 2006 and it continues to grow relative to proprietary software. Linux has also emerged as a robust and stable operating system, used by over 20 million people and still counting. It has been estimated that the annual growth rate in the number of users is nearly 200 per cent.

If FOSS has proven to be the most viable option to go for governments in the developing world, what steps do these governments take in implementing FOSS for the greater good of all?

After governments have been made aware of the advantages of using FOSS as against proprietary software, the next step is for governments to formulate effective policies to help in the implementation of open source software. In putting forth these policies, the issues of technical performance, security, cost and others pertaining to the selection, implementation, support and enhancement of FOSS IT systems have to be addressed, and predominantly on the basis of direct cost/performance issues.

Subsequent to the adoption of these policies, additional research and consultation pertaining to FOSS have to take place on a national and international level across a wide spectrum of stakeholder groups. It has also become recognised internationally that issues of open content are part and parcel of the issues of open technology, and therefore that Open Content (OC) must be included within FOSS policy.

For Ghana and other African nations to implement FOSS, documents (policies) that make the use of Open Standards a non-negotiable base for ICT in the public sector in order to promote interoperability and to promote universal access to online government services without prohibitive costs, license restrictions or similar barriers; to minimise the risk of lock-in to specific vendors of ICT products and services; and to lower the entry barriers for local developers who can offer ICT solutions for use in the public sector must be formulated. The same can, of course, apply to the non-governmental sector.

More importantly, a multi-stakeholder group should be drawn from the public sector, all spheres of government, the private sector and academia with significant depth and breadth of experience and expertise in the range of relevant issues, to issue a declaration with specific policy and strategy recommendations.

Lastly, this article enumerates certain policy recommendations that need paying attention to. Governments should implement FOSS unless proprietary software is demonstrated to be significantly superior. Whenever the advantages of FOSS and proprietary software are comparable, FOSS will be implemented when choosing a software solution for a new project. Whenever FOSS is not implemented, then reasons must be provided in order to justify the implementation of proprietary software. Government should migrate from using proprietary software if it is found a comparable FOSS exists. All new software developed for or by governments should be based on open standards, adherent to FOSS principles, and licensed using a FOSS licenses where possible. Also, governments should ensure all government content and content developed using government resources are made open content, unless analysis on specific content shows that proprietary licensing or confidentiality is substantially beneficial.

The most important point to note however is for governments to ensure the implementation for such policies as they may be the only way to reduce the cost of acquiring and maintaining software.