

## The software industry and developing countries

## Valuable Effort

A recent report highlights some advantages as well challenges for implementing free software in developing countries. *By Jon "maddog" Hall*

**T**he United Nations Conference on Trade and Development (UNCTAD) recently released a flagship report called "Information Economy Report 2012: The Software Industry and Developing Countries" [1]. Over the years, I have been privileged to travel to a lot of "developing countries," first for Digital Equipment Corporation, and later under the auspices of various companies, NGOs, and agencies. At first, I talked a lot about the technical aspects of Free Software, but then I started thinking about the economic values and how people could either make money or save money with Free Software. I was happy to see that many of the arguments I have given for the use of FOSS appeared in this report, with real numbers to back up what I espoused.

I was also happy that several initiatives I have influenced over the years made it into the report – for example, the "Malaysian Public Sector Open Source Software Programme" launched in 2004. I traveled to Malaysia in 1993 to participate in developing that plan and reviewed several copies before it was delivered. The report also mentioned FOSSFA, the Free Software and Open Source Foundation for Africa, in whose events I have participated several times.

Issues around software piracy affecting the adoption of Free Software were mentioned, as well as issues about balance of trade for software that was purchased legally. The report also discussed the "brain drain" of trained software people to countries where software development is a large industry, as well as the lack of ability for countries without trained IT people to attract various industries. I have been preaching about these issues (as have other people in the FOSS space) for many years, so it was nice to see an agency like UNCTAD write about it in their report.

It would have been nice if a couple of things had been clarified before the report was issued. For example, the discussion on software piracy costs came from reports of BSA, Business Software Alliance (which the UNCTAD report incorrectly called the "Software Business Association"). The BSA correctly reported about US\$ 140 billion as the value of unlicensed PC software in 2010. In the same section, the report mentioned that 40 percent of PC software in developing countries was not properly licensed.

## INFO

- [1] UNCTAD Report:  
[http://unctad.org/en/PublicationsLibrary/ier2012\\_en.pdf](http://unctad.org/en/PublicationsLibrary/ier2012_en.pdf)

What the report did not stress was that typically the lower the GDP of the country, the higher the piracy rate. So, in countries with very low GDP, the piracy rate could be as high as 96 percent (also according to reports from the BSA). Additionally, even when the software is licensed properly, the likelihood of a person or company in a developing country being able to afford a service contract or an extension to the software is slim. Of course, if the software is pirated, it becomes very tricky to ask for bug fixes or training. If the pirates were to switch to FOSS, they would find that it is very hard to steal something that is freely given, and they would find that changes and fixes to the software could be obtained through a software developer in their own country and paid for on their own economic scale, thereby strengthening the concept of the value of a programmer's work.

The report also referred to the improper use of copyrighted software as piracy when they meant the use of "improperly licensed software." In many "developed countries," software is automatically copyrighted, so the real issue is that the licensing is not followed properly.

The UNCTAD report failed to cover one issue: embargo. Countries such as Cuba and Iran cannot use software from the United States because of embargoes against them. Countries should be able to sustain themselves, whenever possible, on issues such as critical software. Also, I would have liked more discussion about the added value of a FOSS solution when it is tailored to the end customer's needs, compared with the proprietary solutions that cannot be changed by local programmers.

With these few considerations, the UNCTAD report does an outstanding job overall. It contains many nuggets of information you can use to justify the use of FOSS to your manager or co-workers, even if you live in a "developing country" like the United States. ■■■

