

## Why Open Source is Good for Your Economy

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## What is the primary reason to assert that Open Source is good for (almost) any economy?

It is no secret that software is everywhere. No traditional product has remained untouched, whether the product is being produced using software or whether software is an integral part of it. As part of this wave of digitization, established vendors from outside the software industry need to avoid that someone else will reap all the profits from their products. That someone else would be software companies that supply needed components. In particular, software platforms can have such network effects that their providers can reach a monopoly position so that dependent vendors who need the platform will face a diminishing profit margin.

One counter action for traditional product vendors is to build up software development capabilities and develop the software components they need themselves. And one certainly should do so to not be left behind. Sadly, some ecosystems, most notably Silicon Valley, are so far ahead on the curve that a pure game of catch-up will be hard to play except for the most determined companies and economies.

How do you view the prospects of national level or international partnerships in developing open source components?

Right. A better strategy is to take the outsize profits out of the software industry by replacing closed source software components with open source software components. Such open source components can be developed jointly with other companies and even between countries. A good organizational form to make such joint work sustainable are open source user consortia. A long running example is the Kuali Foundation, which guides the development of software needed for operating universities. Another more recent example is the German openKONSEQUENZ cooperative, which guides the development of software needed for the smart (energy) grid. I initiated and helped setup this second example.

Many more are in the making. At the recent Open Source Leadership Summit, the Linux Foundation announced several more "foundations" like the ASWF, a foundation-like project with its own governance to guide the development of software needed to produce movies, and LF Energy, a foundation-like project to guide the development of software for long-distance energy network operators. The Eclipse Foundation, another umbrella open source foundation, offers several "industry working groups", which are also foundation-like projects. Examples domains covered by the Eclipse Foundation are the automotive, the geographical, and the science domain.

What should be the role of the governments in supporting the open source components?

It is not always easy for non-software companies to actively shape their software future. For this reason, governmental support and policies can be helpful in the form of education and organizational support. Once companies understand the impact of reducing their dependency on foreign software vendors by way of community open source software, however, important gains can be made that strengthen both the companies in need of the software as well as the local supporting software industry.

Could you summarize the advantages of open source software in oil and gas, tourism and services sectors for a country like the Sultanate of Oman?

Oil and gas products, beyond the physical product, require software to be delivered. This is even more true of tourism as a product. In the development and operation of this software, open source components can play an important role in replacing expensive closed source components from foreign vendors. When you replace those expensive components with cheaper open source components, you avoid the erosion of your profit margin by gaining freedom from vendor lock-in. In addition, you get the freedom to innovate faster and better than before. For these reasons, the Omani government should support the creation of open source software and a local ecosystem of developers.

