Fifteen Years to Open Source

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You can’t change an organization, states the first rule of change management, unless that organization can be changed. More to the point: you can’t change an organization unless its structure lets you promulgate new policies, implement those policies, and assess their outcome. While this idea might seem self-evident, it has been the shoal on which many companies have foundered. It’s also the key reason that the US government didn’t embrace open source software until this past summer, and why any real change in government IT systems will be a long time coming.

For decades, US government officials have known that they needed a better way to procure software. Recent figures suggest that the government spends $6 billion dollars per year on new software and yet has no way to determine how much of that software is redundant, obsolete, or incompatible with existing systems. Furthermore, there’s no way of directing that procurement toward common systems or open source software. For the past 60 years, the US government has relied on a dispersed procurement model to encourage industry experimentation. Many agencies have supported innovative development over this period, but that innovation has rarely spread beyond the developing agency.

Nearly 15 years ago, I listened to a group of government IT directors express their frustration with federal software procurement. One in particular said that if he were in charge, the government would be required to use open source development for all of its projects. He began his speech angry and defiant, but ended it tired and resigned. He prophesied that nothing would change because of politics.

Indeed, politics have shaped software procurement—but this has more to do with institutional than with electoral politics. At some level, the politics of software procurement is the politics of special interests. There are too many groups—ranging from software vendors to government agencies—interested in maintaining the status quo. They have many reasons to defend their independence, and, until recently, there has been no central organization to challenge that independence.

In 2002, in an effort to reform the software procurement process, Congress created the Office of E-Government and Information Technology (E-Gov), to be headed by the federal Chief Information Officer. However, the first CIO, Vivek Kundra, wasn’t appointed until 2009 by the Obama administration. Kundra organized a council made up of information officers across all agencies, but had no real authority over system procurement until Congress modified the US Code in 2014 to give him that authority.

It took a total of 15 years, and multiple public hearings and debates, for the office to issue new policies on software procurement, which happened within the last six months under current federal CIO Tony Scott. The first change requires agencies to utilize organizational licenses whenever possible. The second requires agencies to utilize open source software, with the goal that 20 percent of all government software should be open source. However, neither policy garnered much attention when announced, as both draw from ideas that are common in industry.

Of course, software procurement isn’t the same thing as procuring desks or vehicles or even buildings. Software shapes how an organization works. Hence, the effect of either policy might not be seen for years. The impact of the open source policy will be particularly hard to assess as it requires agencies to engage the open source communities, government employees to “contribute back” to open source projects, and open source developers to “provide feedback on, and make contributions to, the source code.” The current government structures might not easily support that kind of dialogue. We can only hope that it won’t take another 15 years to create the right kinds of structures.