



Simon Bailey

The efficiencies and drawbacks of adopting free software

Should local authorities be open to open source?

I must admit that I'm still intrigued by the project bid for funding from the Local Digital Fund for a Revenues and Benefits IT system feasibility study.

The bid by Teignbridge, Exeter, East Devon, Basildon, Brentwood and Sedgemoor Councils was for funds to create a feasibility project that aimed to test the following: -

1. Can an open source in-house system be developed and successfully supported by local authorities (LAs)?
2. Are the current offerings from suppliers meeting users' needs?
3. Are there any cross-authority benefits from having an in-house system that cannot be realised through the supplier market?
4. Is a modern approach to supporting a function like Revenues and Benefits able to be delivered by a set of components, made interoperable by standards and APIs, so that councils can jointly build solutions on a digital platform? LAs could then choose to plug in other local and national components, for example those from the GDS, like Pay, Notify and Verify, to offer joined up services to customers. New opportunities may then open up for data sharing, third-party apps, self-service, automation and artificial intelligence.

It will be extremely interesting to see the outcome of this project especially in relation to the creation of an open source solution.

But what exactly is an open source solution and what examples are there in current use? Basically, a program is open source if its source code is freely available to its users. Users can then take this source code, modify it and distribute their own versions of the program. Anyone can use the program for any purpose.

The government has detailed that it sees the typical benefits of open source software as including lower procurement prices, no license costs, interoperability, easier integration

and customisation, fewer barriers to reuse, conformance to open technology and data standards; and importantly freedom from vendor lock in.

The Gov.UK web sites also highlights the following benefits of open source software in that it:-

- solves common problems with readily available open source technology
- saves time and resources for customised solutions to solve rare or unique problems
- provides for lower implementation and running costs
- allows open source and closed source (proprietary) software to work together.

Additional benefits for open source software have been identified as:

- its quality can be easily and greatly improved when its source code is passed around, tested, and fixed
- it offers a valuable learning opportunity for programmers. They can apply skills to the most popular programs available today
- it can be more secure than proprietary software because bugs are identified and fixed quickly
- since it is in the public domain and constantly subject to updates, there is little chance it can become unavailable or quickly outmoded - an important plus for long-term projects.

Good examples of open source projects are:

- Mozilla's Firefox web browser
- Python programming language
- Linux
- Open Office.

However, some authorities have found that open source software does have drawbacks. One area of major expense for LAs is the use of Microsoft Office. There are free alternatives such as Open Office. However, one authority that looked at an open source alternative to Microsoft Office

found that Microsoft was cheaper due to staff being familiar with the product and the way the software was deployed in the thin client model used by the authority. Often training costs outweigh any savings in licence fees.

Other authorities have looked at Open Office and found the product was not sufficiently compatible with other systems used.

However, some authorities are using open source software such as the Linux operating system and running software for Human Resources and Customer Relationship Management on this platform.

So, will open source software be the panacea to the current oligopoly of the three major providers in the Revenues and Benefits area?

It is argued that big legacy IT systems present a significant challenge to genuine service transformation in Revenues and Benefits. They can often be a reason why authorities struggle to deliver important and ever-changing services in collecting local taxes whilst also ensuring that benefits are paid to those who need them. Very often the large legacy systems are slow to react to changes in legislation in today's localism agenda that LAs find themselves operating in. Authorities might look to change suppliers but often that isn't the real answer as they find themselves just replacing the problems of one system with issues in the new system.

It may be reasoned that Revenues and Benefits software is too big or too complicated to be replaced with open source software, but this may not be the case. Let's not forget that companies like Amazon, Google and Facebook all use open source software to run their services. If these companies trust and use open source software, then why can't LAs?

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