Open Source Sustainability: 10 October 2005

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OSS Watch

In this talk

- What is OSS Watch?
- What does "open source" mean?
- What does "sustainability" mean?
- Planning for sustainability
- Can an open source project have closure?
- Tips for sustainability

OSS Watch: the UK open source software advisory service

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OSS Watch provides unbiased advice and guidance on free and open source software for UK higher and further education.

- strategic IT decision-makers
- IT managers and technical staff
- software developers
- academic end-users

OSS Watch is funded by the Joint Information Systems Committee (JISC) and based within the Research Technologies Service at the University of Oxford.

Promoting awareness and understanding

OSS Watch is *not* an advocacy group. There are many other groups across the world who fulfill the advocacy function, e.g.:

- Free Software Foundation
- Open Forum Europe
- SchoolForgeUK
- and many more

OSS Watch's role is to promote awareness and understanding of the legal, social and economic issues that arise when educational institutions engage with free and open source software.

Resources

OSS Watch commissions and writes material on:

- strategy and policy
- open standards
- intellectual property rights (IPR), licensing and patents
- sustainability and support
- open source software development
- building communities
- examples of open source software
- case studies

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Sustainability conference - April 2006

OSS Watch's key focus for 2005-6 is *sustainability*.

- 10-12 April 2006 Sustainability and Open Source Software Oxford

Mark your diaries

What does "open source" mean?

Open source software is software released under an Open Source Initiative (OSI) certified licence.

There are currently 58 OSI certified open source licences.

Why OSI?

The OSI is not a legislative body. Its authority resides entirely in the fact that the open source community

- recognizes it as the maintainer of the Open Source Definition (OSD)
- is willing to participate in the OSI certification process
- has not set up a viable alternative

What about self certification?

You can call yourself the president of the United States, if you like.

What matters is what other people will call you.

The Open Source Definition (OSD)

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The OSD has its origins in the Debian Free Software Guidelines (DFSG). The DFSG forms part of the Debian Social Contract.

OSD criteria

- free redistribution
- source code
- derived works
- integrity of the author's source code
- no discrimination against persons or groups
- no discrimation against fields of endeavour
- distribution of licence
- licence must not be specific to a product
- licence must not restrict other software
- licence must be technology-neutral

Open source in the UK

The principal document setting the context for open source in the UK is

- Open Source Software: Use within UK Government, version 2, 28 October 2004

Also of note:

- Open source software trials in government - final report, 28 October 2004
- Becta report on open source software in schools, 13 May 2005
- Open Source Academy - funded by the Office of the Deputy Prime Minister (upcoming)
- JISC open source policy (upcoming)

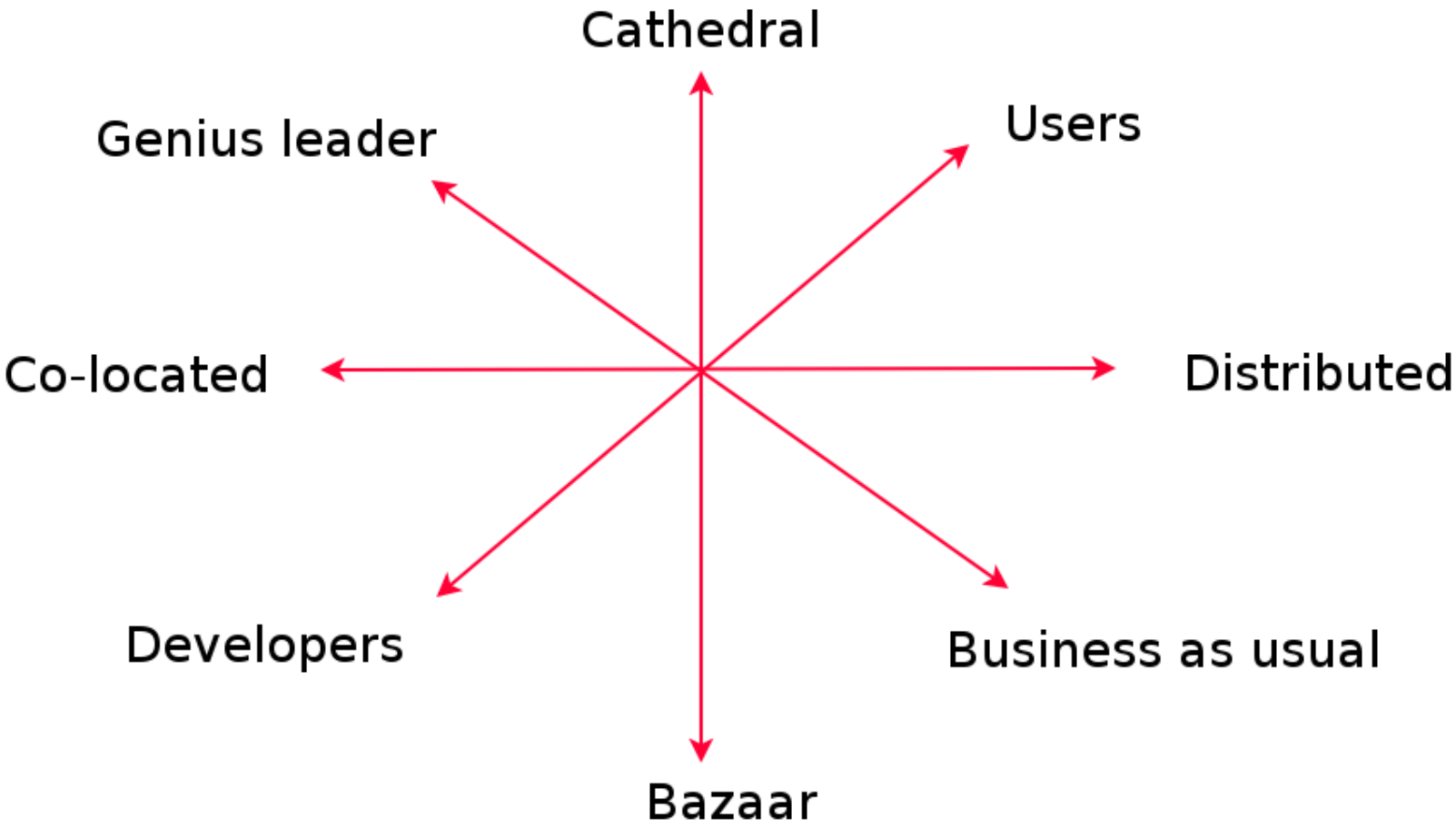
What does sustainability mean?

Sustainability applies to

- projects
- people
- funding streams
- technology
- standards
- institutional interest/commitment
- development model
- user community

Sustainability does not necessarily mean eternal life.

Open source projects



Open source project types

There are almost as many different project types as there are projects.

- single individual
- small group of volunteers
- consortium of institutions
- corporate development
- etc.

Sustainability and exploitation

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Government policy requires and JISC best practice encourages projects to decide upon an exploitation route before it begins.

This is really a challenge to think through the sustainability of a software project before accepting the first line of code

Planning for sustainability

Planning is just as important for open source projects as for any other project.

Before you begin, do you know whether your project will want to

- build a developer community
- build a user community
- seek commercial exploitation
- be a demonstration project only

Code planning

As well as planning the overall project, you will want to plan to

- utilitize open standards for data formats and interchange
- re-use existing components, e.g. don't write your own XML parser, embed Xerces
- don't just consume - get yourself established as a consumer *and* a provider early on so that others have a stake in your continued existence
- write good code!

Planning for growth

Many small projects do not anticipate the possibilities of growth:

- code becomes unmanageable
- new partners/contributors require more sophisticated intellectual property rights (IPR) management
- user community demand swamps the development team
- overburdened lead developer may not cope (hackers are people too!)

IPR management

Who owns the code that is being created in your project? Only the owner of the intellectual property can license it for use by others, or change the licensing if a project needs to alternate route for development.

The OSI certified licence you choose will have an impact on the kinds of communities that can arise around your project, and thus on the sustainability models it is party to.

IPR management (2)

Open source projects need to follow best practice in software development such as IPR tracking. Does your project have

- an IPR registry
- an IPR gatekeeper
- a clear decision about which open source licence it will be using
- sufficient knowledge to determine which other open source licences are compatible with your choice of licence (if you are mingling code from projects other than your own)
- a clear understanding of how mingling your code will limit your future flexibility (or not)

Closure

In project management terminology, projects usually have 4 stages:

- initiation
- planning
- execution
- closure

Do open source projects ever achieve closure?

Closure (2)

If you don’t know when your project finishes, how do you know where you are at any point within it?

Software projects usually have many points of closure. Effectively the project then gets handed on to someone else and becomes a new project.

Preparing to hand on is a way of preparing for sustainability.

Tips for sustainability

- put your IPR house in order first
- plan how to grow (before you start)
- plan for contribution (if that is what you want)
- plan for closure (and for handing on)