

Open Source, E-Government, and Accessibility

â Bruce Perens

â Visiting lecturer, Agder University College

â Vice President, Sourcelabs

The Economics of Open Source are Important for Accessibility

- â Improving accessibility is often difficult to justify economically.
- â That's why legal requirements are necessary, but economics makes them hard to pass.
- â Open Source and government funding are two means to bypass conventional economic requirements for software development.
- â But just because Open Source is different does not mean that it functions outside of

Open Source is Important!

- â It's already the basis of many critical accessibility tools.
- â Many of your efforts can benefit from it more than today.
- â But will our web design policies accommodate Open Source?
- â How can we make sure that we do that, and still be fair to everyone?

An Example

- â Many web sites use Adobe/Macromedia Flash
- â It's a blind-man's misery. What can we do?
- â Adobe has been cooperative in driving Flash to be an open standard.
- â The Open Source GNASH flash plug-in has become viable.
- â It can now be a vehicle for engineering of handicap accommodations.

Why not do it as a corporate partnership with Adobe?

- â This is certainly possible, and they'll help pay for it.
- â The intellectual property issues will be complex.
- â You'll have to operate a gated community to manage IP.
- â But Adobe's revenue does not depend on the player.
- â You can rally many more partners using Open Source, even Adobe.

Who is Paying for Open Source Development?

- â It doesn't, for the most part, happen for free.
- â Main source is user rather than vendor organizations.
- â Reason is enabling technology for business.
- â Open Source are used to distribute cost and risk.
- â Mind-bender - stop using the vendor-centric viewpoint.

Economics and Sustain-ability

- â Key is to understand the difference between differentiating and non-differentiating software.
- â Most software is deployed in a cost center rather than profit center.
- â About 95% of software is never meant to make a profit.
- â But it's essential for business.
- â Most developers of Open Source have a profit center other than software.

Development and Funding Paradigms

- â Retail - very front-loaded, needs investment to distribute cost and risk.
- â Internal and Consultant - only possible means for differentiating software.
- â Open Source - not front-loaded, low investment, distributes cost and risk.

Economics of Research Projects

- â Most software development can not support a viable business.
- â Businesses fail, Sometimes funding disappears, sometimes never appears.
- â How will you assure that your project can survive and grow.
- â Open Source is a good strategy.

Innovation

- â Open Source has shown itself to be capable of generating best-of-breed solutions.
- â Example: Ruby on Rails - highest-performance platform today in terms of utilization of human capital.
- â The vast majority of web sites are served using Open Source.
- â Our own projects are primarily on Open Source languages.

Issue - Multiple Products

- â The web is the most important tool for democracy since Gutenberg.
- â Because it's so important, no one party should be allowed to dominate.
- â It's important to continue to nurture products like Opera and Firefox.
- â Innovation stems from economic function rather than planning.
- â Strategic marketing paradigm of Open Source.

Problems

- â The major problem facing Open Source today is blockage through software patenting.
- â But this is not just an Open Source issue, it's the same for 80% of businesses.
- â The standards we require should have an intellectual property policy compatible with Open Source.
- â But whatever we do should be equally fair to proprietary software.

Economics of Research Technology-Transfer (Exploitation)

- â Is the government funding lawsuits against taxpayers?
- â And if so, is it for a good or bad reason?
- â Products requiring massive capital infusion to develop.
- â Products requiring little capital infusion.
- â What is the optimal technology transfer strategy for a particular product.

Deliberate Closure

- â Expect web pages to become more like other Internet-delivered media as time goes on.

Deliberate Closure

- â DRM and trusted platform are an important component of Vista.
- â Many content providers would like to charge for the "print" function and remove "save page" and "view source" functions entirely.
- â Vista puts the tools to do that in place.
- â We can expect an increase in encrypted-access-only as time goes on.
- â Open Source and small business would be casualties

Solutions

- â I served on the W3C patent policy board.
- â But W3C is only one standards organization.
- â We need for all of the file formats and intercommunication protocols to meet IP standards.
- â Standards should be implementable by anyone, without discriminatory license, royalty or fee.

Solutions

- â Legislative efforts are important.
- â Preference is the wrong approach.
- â Rather it is important to recognize some concrete aspects of IP policy to be rated.