

# Sustainability of repositories - and EPrints

Repositories – Software – Community

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Kultivate Sustainability workshop  
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# What is Sustainability?

(Wikipedia) Sustainability is the capacity to endure

(Dictionary)

: capable of being sustained

: of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged <*sustainable techniques*> <*sustainable agriculture*>

: of or relating to a lifestyle involving the use of sustainable methods <*sustainable society*>

# Funding sustainability for digital projects

1. Those who fund digital resources agree that 'sustaining' these outputs is important, but their definitions and criteria for sustainability vary widely.
2. Grant-makers often identify the sustainable outcomes they would like to see; they often do not, however, ask the hard questions about just how the applicant intends to achieve these outcomes.

Ithaka, Funding for sustainability (2011)

# Sustainability for repositories

“Repositories must attend to the issue of sustainability as a priority, this being primarily about **service, usage and cost.**”

Armbruster and Romary, SSRN, Comparing Repository Types: Challenges and Barriers for Subject-Based Repositories, Research Repositories, National Repository Systems and Institutional Repositories in Serving Scholarly Communication, November 23, 2009

# Repositories: software or interfaces?

- Repositories are essentially a series of interfaces to enable users to accomplish tasks – deposit content, manage content, browse, search
- Most repository users do not code or program (the repository)

# Repository: under the skin

A 'repository' is the CRUD, search and browse application that relies on a database to store the data it uses. (I'd like to term this the 'EPrints' view)

OR

A 'repository' is a place where the data is held, and there may be software on top of that providing access to the data. (Likewise, I'd call this the 'Fedora' view)

Ben O'Steen, Random Hacks blog, 10 December 2007

<http://benosteen.wordpress.com/2007/12/10/defn-repository/>

# Developer Challenge winners at *Open Repositories* conferences

**2008** Moving content between  
repositories using OAI-ORE

**2011** Repository as a service, swappable  
repository interfaces using SWORD

# What have we learned from JISC DepositMO project?

- Deposit of in-progress work becomes more complex as number of documents, versions grows
- Need to do more testing of user interfaces
- Need to understand the repository-user interaction better so we can design and choose better interfaces and support more interaction

DepositMO (June 2010-Sept 2011)

<http://blogs.ecs.soton.ac.uk/depositmo/>



# What is EPrints doing about sustainability?

- EPrints Services
- EPrints 3.3
- Open source software
- EP-tech list

# Resources for Innovation

- JISC (and other) new funding
  - Proposals by ECS or in collaboration with the wider UK repository community
  - “augmenting” project agendas
- Commercial customers
  - New developments are often made available to community
- PhD students
  - application of student research and innovations
- Main resource: the existing team & project portfolio
  - Regular discussion, brainstorming, argument
  - Listen to the community
  - Engage in forums

# EPrints 3.3 (latest version)

## New features

- Research data management
- CERIF – research management
- Bazaar app store <http://bazaar.eprints.org/>
- SWORD v2

First stable EPrints 3.3 release available for download,  
EPrints News, 21 September 2011

<http://eprintsnews.blogspot.com/2011/09/eprints-33-stable.html>

# Add-ons: the EPrints Bazaar

- Browse and search Bazaar from within EPrints

 repository.

 **EPrints Publisher** - version 1.0.8 [Install](#)  
<http://panfeed.ecs.soton.ac.uk>  
A new RSS2 feed optimized for customized magazine viewers like FlipBoard and Pulse. Also contains a cgi script to select featured articles.

 **Names autocompleter** - version 1.0.0 [Install](#)  
<http://names.mimas.ac.uk/>

# Community

What role does community play in repository sustainability or software sustainability?

# Who has a vested interest in the sustainability of EPrints?

- Developers (Southampton)
- EPrints Services
- Repositories (managers and users)
- Projects

# Community

- EPrints 'community' is determined by UK context
  - UK funding pots are smaller
  - Less investment to develop a specific community (£45k)
  - JISC provides national context / meetings in area
  - UKCoRR inter-platform community
  - Technical development led from Southampton
- Expectations
  - We do as much support and bug-fixing as possible (EPrints Technical mailing list)
  - We encourage contribution through plugin architecture
  - We encourage collaboration
  - in terms of innovation, programming, support, funding etc.

# Should You Donate To Open Source Projects?

“ Research shows that many open source projects are deeply dependent on community members who are paid to work on the code. But they aren't paid by the community; they are paid by activities that benefit from the code.

“Buy a subscription. Buy training. Buy anything the project's co-developers make out of their work in the project”

Computerworld UK, *28 September 2011*

<http://blogs.computerworlduk.com/simon-says/2011/09/should-you-donate-to-open-source-projects/index.htm>



# Sustainability and digital preservation

Often confused. Preservation will be part of a sustainability strategy.  
Sustainability is a pre-requisite for digital preservation.

# What did we learn from JISC KeepIt repository preservation project?

- Growing content repositories among partners
- Full range of preservation tools
- Which repositories will act on preservation, and what will preservation actions tell you about the repositories?

KeepIt (April 2009-Sept 2010)

<http://blogs.ecs.soton.ac.uk/keepit/>

# Exemplar Kept repositories

**UAL** Customised interfaces for deposit of arts content

**EdShare** 1-click deposit of teaching material

**eCrystals** Formal research data deposit

Each has been growing content successfully.  
Is this a path to sustainability?

# What can repositories do about sustainability?

- Develop a ruthless content strategy
- Align organisational mission and funding
- Review and optimise repository user interfaces
- Explore and support efforts to promote repository interoperability
- Support open source software
- Ensure you have a backup strategy for every decision