Overview

Repositories are both part of an institution's local information provision and of the developing global open access information environment. This briefing paper discusses these contexts, helping the repository to serve the institution's business needs effectively

Global or local?

The global context is used here to mean systems outside of the institution, for example the World Wide Web. The local context is the systems within the institution. The boundaries between local and global, internal and external are of course artificial and these systems are not discrete. For example a researcher operates in both contexts.

Use or effective use?

Effective use of a repository requires a thorough understanding of its purpose and potential for supporting the ongoing activities of the institution. For example, how does it contribute towards the institution's mission statement? What are its business drivers? What are its strategic plans? And how will the repository contribute to the institution's needs? The various uses of a repository can range from research management, research assessment, marketing, profile raising, and knowledge, information & data sharing, to facilitating research, promoting the careers of new researchers, industrial liaison, attracting students and asset management & preservation. All potential uses should be considered when determining how best to make use of the repository and maximise the investments made in establishing and maintaining it.

Repositories in the local context

Institutions often host other systems that the repository can integrate with and perhaps draw content from to facilitate automatic metadata population, such as academic personnel registries. The repository may in turn offer services back to local systems. Examples of other local systems that repositories might utilise include:

- **Publications / bibliographic databases**: Many institutions maintain publication information without full-text. This information can be used to pre-populate a repository and repositories can replace these systems.
- **Management Information Systems**: Institutions maintain an administrative directory of personnel data and departmental information. This data can provide the community structure for the repository and be used to authenticate users. When such systems operate under the constraints of the Data Protection Act, re-use of such data must first be authorised.
- **Personal web pages and automated publication lists**: Some institutions generate publications web pages for their members on the basis of content in the publications database. Repositories can support this function. Consider whether full-texts and metadata are available from staff home pages and if they should link back to the repository in the first instance.
- **Virtual Learning Environment**: the repository could be used to store and manage learning resources referenced by the VLE. Courses may be archived from the VLE and shared via the repository.
- **Marketing Systems**: directed advertising on the repository pages can attract new PhD applicants and even new staff.

Repositories in the global context

Increasingly methods of scholarly discovery are moving beyond traditional library systems and into the global context of the web. Most accesses are likely to be requests for full-text direct from third party services such as web search engines (for example,

Google), specialist repository search services (for example, Institutional Repository Search[1], OAIster[2]), 'federated' search systems (for example, Metalib[3]) and OpenULR resolvers (for example SFX[4]). Machine-to-machine interfaces are vital for enabling global use.

To make effective use in the global context, consider the following in the first instance:

•   Search Engine Optimization / Sitemap protocol[5]: To ensure your content is indexed by and accessible to search engines.

•   Registries of repositories: Registering with OpenArchives[6] / OpenDOAR[7] / ROAR[8] ensures services are made aware of your repository, interfaces and content.

•   OAI-PMH[9]: To ensure your content is available to data aggregators who may build services on the basis of harvested data.

•   RSS[10]/Atom Syndication Format[11]: To ensure your repository can operate as part of Web 2.0.

No-one really knows what services might be built on top of an open access global corpus of scholarly research. It is therefore important that repositories remain flexible, that the data is accessible and, if necessary, can be migrated to new systems.

Related or emerging standards in this area include OAI-ORE[12], SWORD[13] and SRU/SRW[14]

Conclusion

Understanding the business drivers and purpose behind an institutional repository is a clear pre-requisite to effective use. Repository managers or administrators should clearly and comprehensively identify these as early as possible in the life of the repository. Having established the purpose of the repository, consider how the repository will make use of and support institutional systems, providing a flexible, sustainable repository system to meet the needs of the future. Furthermore, consider how it will interact with new and developing services in the web-based global information environment. These considerations and the actions that arise from them will be fundamental to gaining widespread institutional and academic support, maximising institutional investments in establishing and maintaining the repository, and contributing to development of both local and global networks of sustainable repositories.

References & Further information

1 Institutional Repository Search http://irs.mimas.ac.uk/demonstrator/
2 OAISter http://www.oclc.org/oaister/

3 MetaLib http://www.exlibris-usa.com/category/MetaLibOverview
4 SFX http://www.exlibris-usa.com/category/SFXOverview
5 Sitemaps Protocol http://sitemaps.org/

6 Open Archives http://www.openarchives.org/Register/BrowseSites
7 OpenDOAR http://www.opendoar.org/

8 ROAR http://roar.eprints.org/

9 OAI-PMH http://www.openarchives.org/pmh/
10 RSS http://www.rssboard.org/

11 Atom Syndication Format http://tools.ietf.org/html/rfc4287
12 OAI-ORE http://www.openarchives.org/ore/
13 SWORD http://www.ukoln.ac.uk/repositories/digirep/index/SWORD
14 SRU/SRW http://www.loc.gov/standards/sru/simple.html

RSP Briefing Paper on OAI-PMH http://www.rsp.ac.uk/documents/briefing-papers/technical-%20OAI_PMH.pdf