

There are plenty of resources available for institutions planning to build a repository. Two of the most comprehensive is the [LEADIRS Workbook](#) published by MIT libraries in 2004 and the [Building Repositories](#) section of the Support Repositories Project in the UK. Much of the information provided below has been adapted from these two resources. Readers are encouraged to read the full documents for more information. Links to other resources can be found at the bottom of the page.

Each institution will have its own unique approach for establishing a repository that reflects their specific context and community. However, there are a number of common elements that will have to be addressed by all:

1. Making the business case

The case for a repository must be made to the institution or community that will own and sustain it. In justifying a repository it is critical to work out a case that best aligns with the priorities of the institution. For research-based institutions this means focusing on the benefits to the institution in having a tool that can increase the usage and impact of its research effort, maximise the visibility of its outputs and provide a management information system for monitoring and assessing the research carried out in the institution. In countries that have a formal national research assessment scheme, institutional repositories will be a boon to collecting data and compiling returns and a case can be made based on this issue. [A carefully prepared case](#) to senior management will highlight the appropriate advantages of the repository to the institution, will detail expected expenditure over a number of years, and will emphasise that the payoff is not measured in financial terms.

2. Defining the purpose of the repository

Repositories can have a [wide variety of uses](#). To date, most repositories have focussed on providing open access to research outputs. However, some are concentrating on supporting digital publishing initiatives on campus; while still others aim for the preservation of content. Repository services should be developed with a clear idea of the purpose of the repository in mind.

One way of ensuring that the repository and its services will be relevant to users is to undertake a needs analysis. The most successful repository collections are the ones that support the needs of the community. A typical needs assessment includes both informal input, such as through discussions with faculty, as well as more formal means, usually through some type of survey. The LEADIRS Workbook provides a sample needs assessment survey that can be adapted for use by institutions.

3. Defining repository services

Once the major purpose of the repository has been determined, implementers can then begin to define the repository services. There are many [different services](#) that can be provided by a repository. The LEADIRS Workbook provides a set of questions for implementers to help determine which services should be incorporated into the repository:

- What is the service's mission?
- What kinds of content will you accept?
- Who are the key users?
- Who are the key stakeholders?
- What responsibilities will the library bear versus the content community?
- What are your top service priorities?
- What are the short-term priorities and long-term priorities?

4. Choosing repository software

Based on the needs and services of the repository, institutions will then want to assess the available software platforms. There are three types of options available:

- **Open Source Software:** The software is free to download, but usually requires some level of expertise to implement and maintain. A central governing body manages the source code, but it is open for changes and enhancements from the development community (for

example, CDSware, DSpace, EPrints, Fedora, Greenstone).

- **Commercial Software:** You typically pay for the software and, optionally, any additional subscription or consulting fees. You own the use of the software and, with a subscription, get software upgrades. With a programming interface, or API, you can customise the software, but the software vendor owns, creates, and maintains the source code.

- **Software Service Model:** A software vendor owns and distributes a software platform, or also hosts and manages your data for you. In this model, the software vendor provides additional services for a fee, and also controls and updates the software source code (examples are EPrints Services, Open Repository or bepress).

Implementers will want to choose the software that best matches their needs and available resources (budget and staffing). For example, institutions without significant technical expertise may want to look at some of the commercial services available. In terms of open source software platforms, each has its own unique strengths.

5. Developing repository policies

Three policy areas need to be addressed in relation to repositories: collection, management, and access. The LEADIRS Workbook recommends forming a Policy Advisory Group to assist in making policy decisions. Some of the major policy decisions that will have to be made are as follows:

Collection

- What types of materials will be accepted into the repository?
- Whose work can be included in the repository?
- Criteria for determining what constitutes a collection in the repository. Who determines, sets, and authorises membership?
 - How will the repository be structured – around individual faculty or authors, or by department, research division, etc. Are collections of content built around an academic department or an individual?
 - Who will deposit content? (library staff or authors)

Management

- General rights and responsibilities of libraries and those who create collections of digital content.
- What types of metadata will be used.
- What preservation activities will be undertaken.

Access

- Privacy policy for registered users of the system.
- Will the repository restrict access to content if requested by author?
- Will the repository enable embargo periods for content?

6. Staffing

Staff requirements for running a repository vary greatly between institutions. However, there are two main types of jobs involved:

- Repository Manager- manages the 'human' side of the repository including content policies, advocacy, user training and a liaison with a wide range of institutional departments and external contacts.
- Repository Administrator- manages the technical implementation, customisation and management of repository software, manages metadata fields and quality, creates usage reports and tracks the preservation issues.

These are described in a SHERPA Briefing document, [*Institutional Repositories: Staff and Skills Requirements*](#)

7. Setting up communities

Most repositories are organised according to collections, often called communities. These are groups that contribute content to an institutional repository – academic or administrative departments, colleges, centers, units, labs, etc. Many institutions begin with a pilot programme for their repository services, showcasing a few early adopter communities. This enables repository staff to focus on seeding the repository with content, testing the software, and ironing out procedures and policies. Early adopter communities are also very important for demonstrating the repository to other potential communities.

8. Marketing the repository

Populating the repository is one of the greatest challenges for repository managers. The ongoing [promotion of the repository](#) is key to ensuring its visibility and success. A variety of methods can be used to market the repository on campus. Heleen Gierveld proposes a four-pronged strategy in her article, [Considering a Marketing and Communications Approach for an Institutional Repository](#)
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- **Profiling Strategy:** The purpose of this strategy is to raise the profile and develop a positive brand for the repository. The strategy involves for example the use of brochures, newsletters and web sites that discuss the general benefits of IRs.

- **Pull Strategy:** The purpose of this strategy is to reward and encourage authors to deposit their work in the repository. The strategy offers specific incentives for researchers who deposit. One obvious incentive (if applicable) is that authors will have complied with an institutional or funding agency policy.

- **Push Strategy:** This strategy demonstrated the positive effects of the repository once the material has been deposited. One of the best examples of this is to highlight usage statistics for authors, since downloads of content in repositories tend to be very high. Other aspects of a push strategy can include removing existing barriers by, for example, assisting authors with their deposits and providing rights checking services.

- **Consultation Strategy:** This strategy involves direct communication and consultation with faculty to improve messaging and better engage faculty in developing the repository to meet their needs. This can be done through surveys, meetings, informal conversations, etc. Faculty advocates are probably the most effective marketing tool of all because they can provide first hand testimonials to their peers about the value of the repository.

More information can also be found on the [promoting the repository](#) page.

Further information

Bailey, C et al (2006) Institutional repositories. ARL SPEC Kit 292. Association of Research Libraries, Washington DC. ISBN: 1-59407-708-8. Summary available at: <http://www.arl.org/bm~doc/spec292web.pdf>

Barton, Mary R and Margaret M Waters. Creating an Institutional Repository: LEADIRS Workbook. Boston: MIT Libraries, 2004. Step-by-step guide on how to build an institutional repository. It contains worksheets, examples, planning guides, cost modeling, and references to other sites. <http://dspace.org/implement/leadirs.pdf>

Budapest Open Access Initiative. Guide to Institutional Repository Software 3.0. Open Society Institute. (2004) Guide to help organizations select a software system. Covers 9 open-source systems for open-access, OAI-compliant repositories. Includes a feature and functionality table. Most common are DSpace, EPrints, and Fedora. <http://www.soros.org/openaccess/software>

Crow, Raym. SPARC Institutional Repository Checklist & Resource Guide. (2002) Raym Crow's practical guide offers an overview of the major issues which institutions and consortia need to address in implementing an institutional repository. Contains a more comprehensive bibliography. http://www.arl.org/sparc/IR/IR_Guide.html

DRIVER. Information about Building Open Access Repositories. Part of the DRIVER web site that provides information on the issues to be considered in developing a repository and information on how to make your repository DRIVER compliant. <http://www.driver-support.eu/tech/index.html>

Gibbons, Susan. Establishing an Institutional Repository. Library Technology Reports 40:4 (Jul/Aug 2004). This is a soup to nuts resource for anyone seeking more information on institutional repositories. She outlines the steps for establishing an institutional repository, its features, uses, available systems, costs, and much more.

Greig, Morag and William J. Nixon. Setting up a repository: practical advice. University of Glasgow. June 2005. This QA presentation is based on their experiences over the last three years of the DAEDALUS Project. <https://dspace.gla.ac.uk/handle/1905/699>

Nkosi, Dudu Sizakele Establishing an Institutional Repository: A UNISA Case Study. Conference on Electronic Publishing and Dissemination. "Putting African Journals On Line: Opportunities, Implications and Limits". Dakar, Senegal, 6-7 October, 2008. www.codesria.org/Links/conferences/el_publ08_eng/nkosi.pdf

Pfister, Joachim and Hans-Dieter Zimmermann. Towards the Introduction of an Institutional Repository: Basic Principles and Concepts. 2008. <http://edoc.hu-berlin.de/conferences/bobcats/ss2008/>

Case Studies

Learn how the staff of the MIT Libraries launched their DSpace implementation. Meet some of the DSpace staff and see how they met the organizational, technical, and management challenges of building a digital repository. See the [MIT Case Study](#) (pdf). Also see the DSpace Federation Project's [year-end report](#) (pdf) for the Mellon Foundation, which includes short case studies on each participating university.

