

Better Policies Better Lives

WORKING PAPER 17



# Think Tank Management: Establishing a Knowledge Repository



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Written by:

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## Think Tank Management: Establishing a Knowledge Repository

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# Key Messages

- There is increasing demand for knowledge repositories from think tanks, policy research institutes and government departments. One of the most important aspects of establishing these is that they link to the global Open Access movement, and ensure that publicly funded research (and their data sets) are made openly available, building the collective knowledge base.
- Establishing a knowledge repository will: (i) enable your staff to access shared documents across the organisation, saving them time and making their research easier; (ii) generate efficiencies for the management team, giving them a clear sense of what is being produced across the workplace; (iii) help staff to ensure there is a coherent 'voice' across their outputs, given the shared sense of direction and terminology; and (iv) help a think tank showcase their work in an accessible and searchable way, promoting its products to the broader community.
- The most common problem with the introduction of knowledge repositories into workplaces is that people focus too much on technology. What should really be prioritised in selecting and applying one, is the way that users engage with it. That is the starting point for selection.
- We have identified three key models for knowledge repositories – Institutional Repositories (IR), Research Networking (RN) Tools, and Current Research Information Systems (CRIS) – depending on what your think tank or government department is trying to achieve. Although the borders between these platforms are becoming increasingly blurred, there are enough differences in the respective requirements that it makes sense to keep them separate.
- Once you have determined your model, this paper outlines a road map for establishing your knowledge repository, step by step. The steps are in four broad categories: planning and budget, testing user engagement, partners and relationships and legal considerations (see Diagram 1).
- Key practicalities to consider include:
  - understanding what services would be most relevant to your users
  - eliminating confusion and duplication with other research systems or organisations that already exist; and
  - take into account the availability of resources (for example, in-house expertise and existing infrastructure), as these will all have a huge impact on the most appropriate course of action. ■

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# Abbreviations and Acronyms

CRIS  
IR  
RN

Current Research Information System  
Institutional Repositories  
Research Networking

# 1

## Introduction



**T**he origin of this paper is a diagnostic study on types and characteristics of knowledge repositories produced in 2015 to inform the planning and design of a government think tank. This paper is therefore derived from a study which had a specific objective and scope. What we want to do here is to share the key findings from that activity.

This paper provides an overview of how to develop a roadmap to establish a knowledge repository in a think tank, policy research institute or government department. Government departments in a variety of countries are increasingly asking for help to access synthesised information, wanting the latest analysis at their policy makers' fingertips, allowing them to make real-time decisions (Ribeiro and Minnielli 2016). Many believe this will help overcome perceived blockages in their analytic and knowledge needs. In order to do this, there is demand for systems such as knowledge repositories within government departments. Furthermore, to meet demands from government for analysis, many policy research institutes and think tanks (which provide research to government) are seeking to set up knowledge repositories, to better manage their existing material.

This paper is intended for people working in management positions within think tanks or government departments (overseeing change management for example), who are trying to make decisions about operational issues. It aims to help synthesise the choices involved in determining how best to connect staff to the materials that are most relevant to their work. It assumes that these decision makers are facing realities and trade-offs, with limited time to invest in reading the extensive academic literature or surveying the varied options available. It tries to distil the key benefits and drawbacks of each option and provide clear arguments as to what each option offers. Rather than simply requesting a knowledge repository to overcome information shortfalls across a think tank or government department, requests can now be informed by what is available and select a type of model that is most relevant to their needs. ■



# Why You Would Want a Knowledge Repository



One of the biggest challenges for organisations today (either think tanks servicing government departments or the departments themselves) is knowledge management – connecting people to the right information at the right time and in the appropriate format for decision making

(Tiwana 2000). Knowledge repositories are online databases specifically designed to overcome such issues, through systematically capturing, organising and categorising information being produced by an organisation or research/sectoral community. While information systems and other management systems gather, structure and utilise data/information, knowledge repositories move beyond this remit by also providing access to experts and/or processes-related to facilitate the exchange of tacit knowledge. By providing a central platform for online resources, which both they themselves and outsiders can easily access, knowledge repositories help organisations to connect people with information globally via digital searchable libraries, discussion forums and other elements.

Knowledge repositories have become an integral part of knowledge management programmes, as a means to ensure growth and competitive advantage (Hatala and Lutta 2009). In the context of think tanks and policy research institutes, knowledge sharing and knowledge sharing culture are vital – they require a free flow of information among members that is undistorted and up-to-date in order to strengthen and systematise policy-relevant knowledge and ideas (Kurbalija 2002). These organisations must preserve and provide access to their materials and products, and make them more visible to their primary users, as well as the wider research community. For government departments, the ability to share knowledge quickly and in a searchable format across staff is also vital. Decision makers often require information within very short time frames, as priority issues emerge (sometimes haphazardly) and warrant responses to the public or to the programmes in question. This access to the latest thinking, networks or to the different options available, at short notice in a reliable way, can be a key pillar of successful decision

making for governments.

To achieve this, knowledge repositories deliver efficiencies to people who are producing many outputs, whilst trying to stay across an ever-changing literature landscape. There has been a significant rise of the type and number of repositories available, thanks to the Open Access movement, with notable bursts in both 2003 and 2010 in particular (Ribeiro and Minnielli 2016). Even as recently as April 2016, the International Conference on Economics and Business Information, hosted in Berlin, had specific sessions designated for debating the merits of different knowledge repositories.<sup>1</sup> They are designed to share information

and build networks between researchers, their research and decision makers, bolster evidence-based policymaking, and positively influence the behaviours of individuals and organisations to support sustained and inclusive growth.

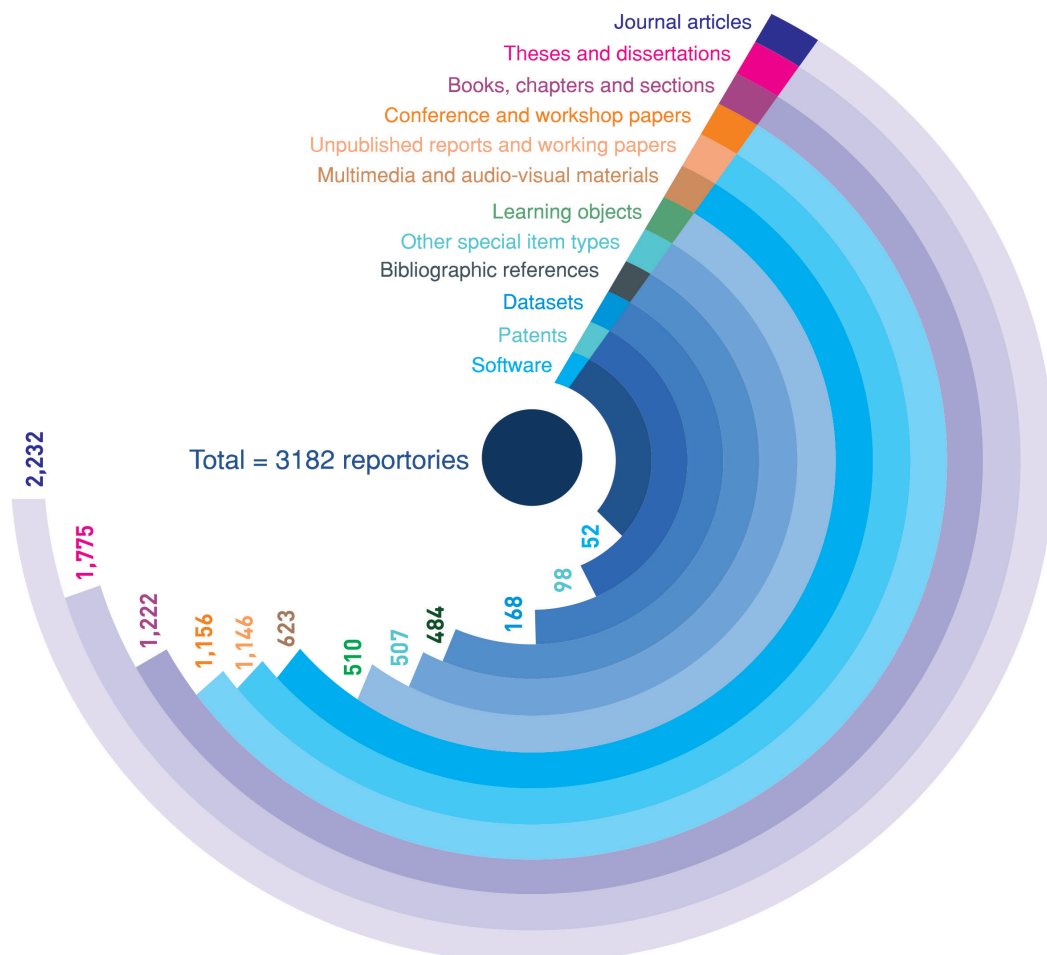
Knowledge repositories deliver several specific benefits, including the ability to:

- Improve users' ability to search, discover and access policy-related research
- Improve users' ability to find and contact researchers and other experts on topics of interest, quickly
- Develop a sustainable framework for the preservation of policy-related research and related information over the long-term that is based on the principles of open access, linked data and interoperability.

The types of documents contained in most registered repositories are shown in Figure 1, with journal articles and theses and dissertations taking the two tops spots. ■

<sup>1</sup> See more on the inaugural 'International Conference of Economics and Business Information' (INCONECSS), hosted on 19 and 20 April 2016 <http://www.eurocris.org/news/inconecss-conference-april-19-20-berlin>.

**Figure 1: Content Types in OpenDOAR Repositories – worldwide (Source: OpenDOAR)**



# What the Main Options Are

There are many different types of systems being used by governments, research institutions, multilateral organisations and private sector companies to preserve and provide access to their work around the world. We have identified three key models of knowledge repositories, shown in Table 1.

**Table 1: Knowledge Repository Models**

Model	In Essence
A. Institutional and Research Repositories (IR)	A curated digital library – externally oriented, open access, providing full text, most often run by the library in a university. These are typically a low-cost option.
B. Research Networking (RN) Tools or Expertise Directories	A research matchmaker and search engine – connecting profiles of researchers, highlighting their expertise. Largely self-archived and low cost.
C. Current Research Information Systems (CRIS)	The full package with plenty of trimming – often used together with Model A. Can be internally or externally oriented, provides metadata, automatic harvesting, more commercially oriented to help administer research grants and projects, monitoring research outputs. These are typically managed by the research office.

**A. Institutional and Research Repositories** are databases with a set of online services that an institution offers to the members of its community for the discovery, management and dissemination of research in digital format. At its core, an institutional repository (IR) platform is an organisational commitment to the stewardship of these digital materials, including long-term preservation where appropriate. They tend to be established to provide open access to the institution's research output, in order to promote scholarly communication (and further research) without restricting access behind a publisher's paywall. Content is usually submitted by the author(s) and reviewed by a team to ensure quality and compliance with reporting requirements.

**B. Expertise Directories** are tools that help people find other individuals or organisations that have the knowledge and experience they need for a particular activity or project. They are similar to a staff directory, but rather than simply listing people's name, job titles, departments and contact details, they include details about their knowledge, skills, experience, publications and interests. More recently, **Research Networking (RN)** tools have been developed to help users rapidly discover and access research about people and resources. One example is ORCID, who are key operators in this space.<sup>2</sup> Moving beyond the scope of Expertise Dictionaries, these tools foster collaboration and improve research effectiveness by harvesting information from organisational websites and databases, institutional repositories and other sources to create networked profiles for individuals and organisations detailing their expertise, research products and contact information.

**C. Current Research Information Systems (CRIS)** are scalable platforms that combine research workflow with researcher profiles, funding information, research tools and repositories, and related data. They provide an overview of a researcher's body of work, which allows the organisation to understand and analyse their research performance. IRs are usually part of a larger CRIS.

According to the European Union's CERIF-CRIS, they can also provide (EuroCRIS 2016):

- Research information for decision support.
- Metadata about scholarly publications, research datasets and software in repositories.
- Ability to access financial, human resource and project management information of an organisation (and to other relevant organisation systems)

- Provision of directory service information for authentication, authorisation, workflow and cooperative working
- Generation of web pages presenting the organisation of intranet, perimeter network and extranet, directly or from other organisational systems
- Interoperability with other CERIF-CRIS (and their associated systems) to give a global view of research information
- Be the primary source of an institution's research information contributing to national and international research information infrastructures.

### 3.1 The Merits of These Models

The IR model has several merits that make it ideal for a think tank environment or government department. Being externally oriented – having evolved to collect and provide free access to research outputs – the IR model can assist the institution to:

- Provide open access to research deposited by staff and facilitate scholarly communication, which maximises the visibility and impact of these outputs as a result.
- Ensure research quality by complying with institutional and national research performance standards.
- Manage and measure contributions toward institutional and national research outcomes.<sup>3</sup>
- Provide a workspace for collaborative or large-scale projects, which enables and encourages interdisciplinary approaches to research.
- Adhere to an internationally agreed set of technical standards, which means that they expose the metadata (the bibliographic details such as author names, institutional affiliation, date, title of the article, abstract and so forth) of each item in their contents on the Internet in the same way. In other words,

<sup>2</sup> See their website: <http://orcid.org/>

<sup>3</sup> According to some authors, for example Oliver and Swain (2006), "from [the relationship of repository content to the research and development investments,] it may be possible to monitor the growth and distribution of innovation geographically around the world"(p. 4).

they are interoperable.

The RN (and expertise directory) model has some merits that mean it is recommended for a government department in particular, or also a think tank. This model could include information about staff from policy research centres, research institutes, and policy makers within government ministries and departments. As a result, these knowledge management systems:

- Demonstrate researchers' activities and accomplishments to the research community, government agencies, industry, media and the public
- Facilitate the development of new collaborations to address research challenges by helping leaders rapidly discover researchers with particular expertise. This allows policy makers to engage with researchers or experts directly to obtain customised research or input into decision-making when needed.
- Offer powerful network analytics by using information to create visualisations of how researchers and research are related, either by subject/topic or geography.

The CRIS model has limited merits that would see it recommended for a think tank environment or government department. It is best suited for universities or large, established research communities managing projects and grants. An important consideration is that the CRIS model is internally oriented, because it is chiefly concerned with collecting a wide range of metadata about all aspects of the research activity carried out at an institution, and places special emphasis on projects and funding.

Once information is submitted, the CRIS model can:

- Support the dissemination of knowledge and exploit research results on a collective level.

- Enable advisors, research policy makers, and research funding bodies to gain the necessary information for evidence-based policy making, the systematic monitoring and evaluation of these policies, and the establishment of priorities and the co-ordination of research efforts on a national and regional level.
- Allow researchers to have a valuable tool not only for recording and presenting their activities but also for finding valid information about the general environment to which they belong. Also, a relatively small input effort is required because most input is automated. ■

# 4

## Sequencing: a Roadmap to Establishing Your Chosen Repository

**T**here are several key steps to consider when establishing any of the knowledge repository options in your think tank. The sequencing of these are outlined here and in the roadmap below (see Diagram 1). These steps include carefully assessing funding and existing internal resources, testing user needs and piloting a model.

The steps proposed in Diagram 1 are adapted from the Confederation of Open Access Repositories (COAR) resources, to be undertaken when establishing the selected repository model. Developing the prototype will depend on resources (human, financial and time) available and trials or an initial proof of concept (which can be reviewed, tested and refined before continuing with full implementation of the repository).

### 4.1. Practicalities to Bear in Mind

First and foremost, the team responsible for developing the knowledge repository should review and make decisions according to current user needs. One way to ensure that the repository and its services will be relevant is to conduct a needs analysis. A typical needs assessment includes both formal input, usually some type of survey, as well as more informal means, such as through discussions with faculty or government officers (Barton and Waters 2005). These consultations should not only be at the more senior levels of staff, but focus on the people who will be using the repository in their day-to-day work. Hiring a repository manager/director would allow

the team to begin planning, with assistance to develop policies and conduct initial design work. Once staff have been hired, planning can begin for a pilot/prototype that will feed into a full repository over the longer term. External expertise and consultants may be needed in the short-term while building the capacity of your staff. During the planning, design and implementation process, efforts should be made to involve key users from both your think tank (or government department) and the wider research community. The availability of in-house expertise and the existing infrastructure of an institution will also have a huge impact on the most appropriate course of action.

In addition to these general remarks, there are specific considerations for each model. Crucially, although the above knowledge management systems share a good deal of functionality, there are also relevant differences in the approach these systems take towards collecting and disseminating research information management (De Castro 2014). For example, the CRIS model is more focused on monitoring rather than maximising impact, and is not always used to prioritise dissemination of the research information that they store. The purpose of the IR and RN models is exactly the opposite: while many institutions may use them as wider research information management platforms – that focus on the preservation of full-text material rather than just bibliographic data – they are usually oriented towards the outside world to showcase, disseminate and grant open access to the institutional



Diagram 1



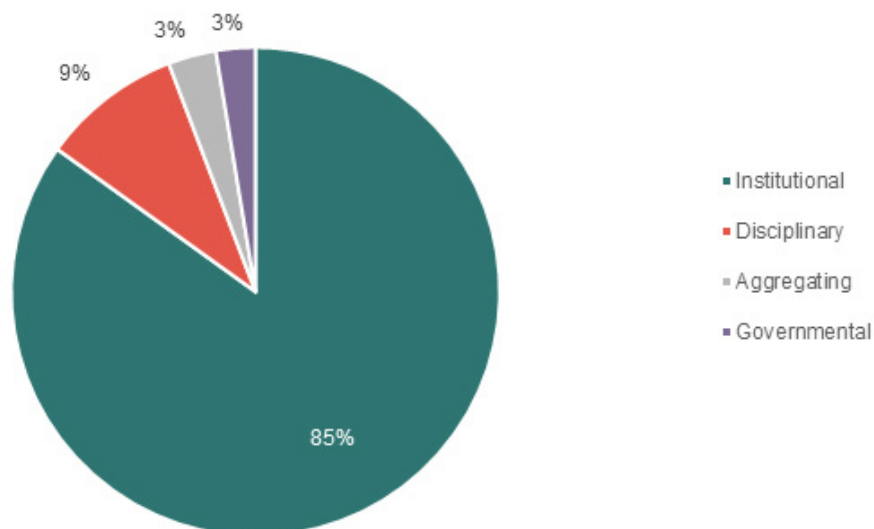
This is an indicative guide only that has been developed based on Model A, but which could be applied to other models outlined in this paper. Graphic: H. Caddick/ODI.

research output. Government departments may like to simply connect to existing IRs or RNs. Knowledge repositories are more typically used by universities and think tanks, rather than government departments. Government repositories make up only 2.6% of repositories registered, or 83 of the 3,182 currently registered (Figure 2).<sup>4</sup>

Similarly, the CRIS model collects a wide range of research information in order to be able to describe the institutional research activity for reporting purposes, either at funder, institutional or governmental level. On the other hand, the main goal of IR and

Nowadays all three models are rapidly evolving towards an increasing level of integration, with the differences between them becoming progressively difficult to point out (Ribeiro and Minnielli 2016). Indeed, the interoperability of these systems is now a fairly widespread feature that will allow all platforms to efficiently exchange information and reinforce each other's features. However, since the CRIS model is built around institutional workflows and existing systems, it is recommended to wait to implement this model until the organisation, its work processes and systems are more

**Figure 2: Open Access Repository Types – Worldwide**



(Source: OpenDOAR, <http://www.andoar.org/onechart>, Accessed 9 August 2016)

RN models is to collect and disseminate institutional research outputs, with a strong emphasis on publications. It is worth remembering that some desired data are private or restricted; IR and RN models require negotiation between research and administrative bodies, and these efforts may threaten established networks of research influence.

established.

One critical aspect to emphasise to anyone establishing a knowledge repository is that it should echo the broader global movement for Open Access. The *Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities* (Max-Planck Society 2003) – the OA Movement – widened the scope of the global Open Access Movement to include scholarly/scientific information (publications and underlying data sets) in science and the humanities (Liau 2013). Any knowledge repository – including for government departments – could deliver

<sup>4</sup> These are defined by OpenDOAR as 'Institutional' (An institutional or departmental repository); 'Disciplinary' (A cross institutional subject repository); 'Aggregating' (An archive aggregating data from several subsidiary repositories); and 'Governmental' (A repository for governmental data).



and receive benefits by ensuring that publicly funded research (and the data sets behind them) are made openly available. The public can then access this research and data, and other researchers can contribute to and build upon the work, fostering collective learning, and helping to build an interconnected, emerging knowledge base.

Of the 3,182 repositories listed with leading site for Open Access Repositories, *OpenDOAR*, the Indonesian language (Bahasa Indonesia) is only used by 42 repositories. However, once established, the majority of repositories remain fully operational, if resourced well. Of those repositories listed with *OpenDOAR*, 3,010 repositories (or 94.6 percent) remain fully operational, with only 86 (or 2.7 percent) listed as having been used for trial purposes, and 20 (0.6 percent) closed. According to *OpenDOAR*, Indonesian language (Bahasa Indonesia) is only used by 42 repositories. However, once established, the majority of repositories remain fully operational, if resourced well. Of those repositories listed with *OpenDOAR*, 3,010 repositories (or 94.6%) remain fully operation, with only 86 listed as having been used for trial purposes (or 2.7%), and 20 closed (0.6%). According to *OpenDOAR*, the most popular software platforms for IR are *DSpace* (which is open source), *EPrints* (also open source) and *Digital Commons* (which is

a hosted platform). To see a comprehensive list of the software available for use, the UNESCO guide is helpful. Knowledge repositories remain an emerging field, with new developments regularly surfacing. Other helpful sites include *Repository66*, which shows where different open access repositories are located worldwide. According to this site, Indonesia has 45 listed repositories, the majority of which are either DSpace and EPrints software. The site *Ranking Web of World Repositories* is also noteworthy, which ranks global repositories based on criteria, including size, visibility and a scholar rating. According to this site, Indonesia has 64 repositories, of which the highest ranked is the repository at Diponegoro University. ■

# 5

## Conclusions

**K**nowledge repositories have evolved from static archives of paper documents to become dynamic online platforms that facilitate the discovery and dissemination of relevant information to key users. They make life easier for the researcher, the policy maker, the institution and the research community by establishing human and technological networks capable of harnessing collective expertise. These principles and tools can deliver real benefits to your organisation by creating useful evidence-based products that meet the needs of decision makers; providing the right information when it is needed and in the appropriate format. They ensure research is searchable and accessible.

The three knowledge repository models described in this paper are ‘most appropriate’ for different institutions (Table 2).

**Table 2: Knowledge Repository Models and Research and Analysis Organisations**

Model Best for	Think tanks, universities	Policy research institutes	Government departments	Large research communities, established think tanks
A. Institutional and Research Repositories (IR)	X	X	X	
B. Research Networking (RN) Tools and Expertise Directories	X	X	X	
C. Current Research Information Systems (CRIS)				X

Retaining and sharing knowledge through repositories has become a critical objective for so many institutions. For example, the World Bank will allow anyone to easily access and build upon its research and knowledge, to help find faster solutions to development problems. Apple justify their knowledge repository helping maintain consistent innovation in a competitive market industry. The United Nations Environment Programme use a repository to help enhance access to environmental information and knowledge for a sustainable future. Institutions that implement a knowledge base not only prevent problems such as lost information, but report seeing increases in productivity and collaboration.

Unfortunately, there is no one simple answer to how much building a knowledge repository will cost. This depends on the scope of your service

requirements and the available resources. Nonetheless, whichever model is selected, there are no shortcuts to building a knowledge repository. You still need to design a service, apply the proper technology platform, create policies, recruit content communities, enlist faculty participation and market the service to your users (Barton and Water 2005). Luckily there is a wealth of information and experts available to help you do this.

It is important to remember that technology is an enabler of knowledge management, not the whole answer. If you do not understand

the users' perspective, the technology will not be as effective. Consideration needs to be given to the barriers human nature poses to information sharing. It is essential that the design of the repository reflects the user's needs within the institution and its key audience of decision makers and researchers, as well as build upon national and international networks. In an effort to preserve research and ensure sustainability, the repository should focus not only meeting the immediate needs of the organisation but should also strive to meet future needs in the years to come. ■

# References

## Roadmap Infographic

The roadmap infographic was developed by Hannah Caddick, Overseas Development Institute, with thanks to the following sources:

1. Confederation of Open Access Repositories (COAR) Resources (2016). <https://www.coar-repositories.org/activities/support-and-training/resources/>, which in turn includes information from these sources:
  - JISC Infonet: <http://www.jiscinfonet.ac.uk/infokits/repositories/>
  - Repositories Support Project: <http://www.rsp.ac.uk/>
  - Practical guidelines for starting an institutional repository, developed by Stellenbosch University SUNScholar repository team: <http://bit.ly/goodir>

## Report References

1. Barton, M. R. and Waters, M. W. 2005. *Creating an Institutional Repository: LEADIRS Workbook*. Cambridge: MIT Libraries. Retrieved 21 July 2016 from: <http://bit.ly/2awh4MD>.
2. Becerra-Fernandez, I. and Sabherwal, R. 2010. *Knowledge Management: Systems and Processes*. Armonk (N.Y.); London, M. E. Sharpe.
3. De Castro, P. 2014. *7 Things You Should Know About... Institutional Repositories, CRIS Systems, and Their Interoperability*. COAR Repository Observatory. Retrieved 20 July 2016 from: <http://bit.ly/2agtXc3>.
4. EuroCRIS. 2016. *Why Does One Need a CRIS? The Research Process and How a CRIS Can Support It*. Retrieved 20 July 2016 from: <http://bit.ly/2agu1s5>.
5. Hatala, J. and Lutta, J. G. 2009. "Managing Information Sharing Within an Organizational Setting: A Social Network Perspective". *Performance Improvement Quarterly*, 21(4), 5–33.
6. Kurbalija, J. 2002. *Knowledge and Diplomacy*. Msida: DiploProjects. Retrieved 20 July 2016 from: <http://bit.ly/2agto1E>.
7. Liauw, T. T. 2013. "Open Access dan Perguruan Tinggi Indonesia" in J. G. Sujana & B. Mustafa (eds.), *Perpustakaan Indonesia Menghadapi Era Open Access: Bunga Rampai* (pp. 52). Bogor, Indonesia: Perpustakaan Institut Pertanian Bogor.
8. Max-Planck Society. 2003. *Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities*. Retrieved 2 August 2016 from: <http://openaccess.mpg.de/Berliner-Erklaerung>
9. Oliver, K. B. and Swain, R. 2006. *Directories of Institutional Repositories: Research Results & Recommendations*. Paper presented at the 72nd IFLA General Conference and Council, Seoul. Retrieved 2 August 2016 from: [http://archive.ifla.org/IV/ifla72/papers/151-Oliver\\_Swain-en.pdf](http://archive.ifla.org/IV/ifla72/papers/151-Oliver_Swain-en.pdf)

10. Ribeiro, L., De Castro, P. and Minnielli, M. 2016. *Final Report: EUNIS – Eurocris Joint Survey on CRIS and IR*. EUNIS Research and Analysis Initiative Publication. Retrieved from <http://www.eunis.org/blog/2016/03/01/crisir-survey-report/>
11. Tiwana, A. 2000. *The Knowledge Management Toolkit*. Upper Saddle River, NJ, USA: Prentice Hall.

## Websites Accessed

1. International Conference of Economics and Business Information: <http://www.inconecss.eu/> (Accessed 10 August 2016)
2. Repository mapping <http://maps.repository66.org/> (Accessed 10 August 2016)
3. OpenDOAR <http://www.opendoar.org/index.html> (Accessed 9 August 2016) including:
  - a. <http://www.opendoar.org/onechart.php?clD=&ctID=&rtID=&clID=&IID=&potID=&rSoftWareName=&search=&groupby=ct.ctDefinition&orderby=Tally%20DESC&charttype=bar&width=600&caption=Content%20Types%20in%20OpenDOAR%20Repositories%20-%20Worldwide> (Accessed 9 August 2016)
  - b. <http://www.opendoar.org/onechart.php?clD=&ctID=&rtID=&clID=&IID=&potID=&rSoftWareName=&search=&groupby=rt.rtHeading&orderby=Tally%20DESC&charttype=pie&width=600&height=300&caption=Open%20Access%20Repository%20Types%20-%20Worldwide> (Accessed 9 August 2016)
  - c. <http://www.opendoar.org/onechart.php?clD=&ctID=&rtID=&clID=&IID=&potID=&rSoftWareName=&search=&groupby=l.lName&orderby=Tally%20DESC&charttype=bar&width=600&caption=Most%20Frequent%20Languages%20in%20OpenDOAR%20-%20Worldwide> (Accessed 9 August 2016)
  - d. <http://www.opendoar.org/onechart.php?clD=&ctID=&rtID=&clID=&IID=&potID=&rSoftWareName=&search=&groupby=os.osHeading&orderby=Tally%20DESC&charttype=pie&width=600&height=300&caption=Open%20Access%20Repository%20Operational%20Statuses%20-%20Worldwide> (Accessed 9 August 2016)
4. ORCID website: <http://orcid.org/> (Accessed 9 August 2016)
5. Repository Webmetrics: <http://repositories.webometrics.info/> (Accessed 10 August 2016) including:
  - a. Indonesia profile: <http://repositories.webometrics.info/en/Asia/Indonesia%20> (Accessed 10 August 2016)
6. The UNESCO guide provides an easy-to-use comparison between some of the most popular software: <http://www.unesco.org/new/en/communication-and-information/resources/publications-and-communication-materials/publications/full-list/institutional-repository-software-comparison/> (Accessed 10 August 2016)

### **Benjamin Horne**

Benjamin Horne is an Assistant Manager in the Public Sector Governance team at Adam Smith International (ASI). His role is focused on project management and business development activities, with the goal of helping to implement economic and governance reform programmes in developing and transitional economies. Prior to joining ASI, he was a Research Intern at the Overseas Development Institute (ODI), providing project support for the Research and Policy in Development (RAPID) programme. He has an MSc in Anthropology and Development Studies at the London School of Economics and Political Science.

### **Tanya Torres**

Tanya Torres is an international librarian and knowledge management professional who has worked with governments, universities, NGOs, and private companies around the world for more than 20 years. She enjoys working with organizations to help them organize their information for the purpose of sharing and collaboration. Ms. Torres has a Masters of Library Science and a Masters of Public Policy. For the past seven years, she has worked with libraries, developed knowledge management strategies and managed digitization efforts with researchers and librarians in Southeast Asia. She has helped research organizations, development projects, government libraries and cultural heritage institutions to improve discovery, knowledge sharing and preservation. Ms. Torres has also conducted research with scholars and librarians from many of the leading Indonesian universities, lectured on information and technology trends, and held workshops and training on digital libraries and research repositories.

### **Jessica Mackenzie**

Jessica Mackenzie is a Research Fellow in the Research and Policy in Development (RAPID) Programme at ODI. Her work focuses on decision-making in policy formulation, research uptake and how to improve the role of knowledge in policy-making particularly within developing countries. Prior to joining ODI, Jessica has worked in a variety of sectors in international development including managing large-scale education, law and justice and electoral support programmes and worked on the Aceh Reconstruction Programme after the Boxing Day tsunami for several years. During this time she was working for the Australian Agency for International Development (AusAID), within the Department of Foreign Affairs and Trade (DFAT) and was posted to the Australian Embassy in Jakarta for four years. She was one of the lead designers of the Knowledge Sector Initiative in Indonesia.



The Knowledge Sector Initiative (KSI) is a joint program between the governments of Indonesia and Australia that seeks to improve the lives of the Indonesian people through better quality public policies that make better use of research, analysis and evidence. KSI is a consortium led by RTI International and in partnership with Australian National University (ANU), Nossal Institute for Global Health, and Overseas Development Institute (ODI).

