

The efficacy of institutional repositories: Reflections on the development of a personalised collection on UPSpace

ELSABÉ OLIVIER



ELSABÉ OLIVIER has worked as an Information Specialist since 1989 and rendered an information service to the Dean and other departments at the University of Pretoria's Faculty of Education until recently. In 2007 she was appointed as Open Access Manager of the Academic Information Service (library) at the University of Pretoria, South Africa. One of her main responsibilities will include the coordination of open UP – a collection which digitally preserves the research articles of UP staff and students in UPSpace, their institutional repository.

Abstract

There is much speculation that the development of institutional repositories will impact on or even change the traditional scholarly communication process. The purpose of this conversation is to introduce the reader to the use of and response to institutional repositories which were initiated by the Open Access Initiative. The concept of institutional repositories will be described, as well as their advantages and uses in institutions, specifically a personalised academic collection (the Jonathan Jansen Collection) which was developed on UPSpace, the institutional repository of the University of Pretoria, South Africa.

Introduction

Although the concept of institutional repositories is still new and uncertain in South Africa, more and more repositories are being planned and developed in universities throughout the world and the University of Pretoria has followed suit (Cervone, 2004; Drake, 2004; Prosser, 2003, 170; Schulenburger, 2005; Shearer, 2002/2003; Young, 2002). The Research Councils United Kingdom (RCUK) has proposed that researchers publish copies of their published journal articles on their institutional repositories or enter them in a subject-based website (Barnett & Hindstrom, 2005, 4). The motivation for doing this is "making research readily available" (Barnett & Hindstrom, 2005, 4).

Institutional repositories

UPSpace is the digital repository system of the University of Pretoria which was officially launched in February 2006. The Academic Information Service (library) and the Department of Education Innovation initiated this project at an e-information workgroup in 2004. UPSpace is part of the Academic Information Service's e-information strategy in support of learning and research with the emphasis on the preservation of information at the University of Pretoria.

A digital institutional repository can be defined as "a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members" (Lynch, 2003).

Institutional repositories are characterised by the following:

- They are institutionally defined and preserve the intellectual output generated by an institution's members (Crow, 2002).
- A wide range of materials can be included (Prosser, 2003, 168).
- The main focus is on scholarly material (Crow, 2002).
- The contents are cumulative and continuously maintained (Crow, 2002).
- Open access and interoperability imply that everybody – even users not affiliated with the university – is able to find and retrieve information (Crow, 2002).
- The collection houses material in a digital format (Costanza, 2005).
- Self-archiving possibilities – authors can deposit their own content directly.

Libraries and their staff play a significant role in the development of institutional repositories. "Linking people to resources" (O'Brien, 2005, 68) has been the task of information specialists for many years.

Numerous studies suggest that institutional repositories will impact on the scholarly communication process and may even reform it totally (Crow, 2002; Drake, 2004; Hixson, 2005).

The scholarly communication process

In the past scholarly publishers and institutional libraries had complementary roles in facilitating scholarly communication and preserving the intellectual output of the institution (Crow, 2002). Traditionally the scholarly communication process operated in the following way: research was created and peer-reviewed by scholars, produced by the publishers, distributed by publishers as well as librarians and utilised by scholars. Support was provided by institutions such as universities, governments and granting institutions (Yiotis, 2005).

Numerous factors are now impacting on this traditional scholarly communication model and are forcing it to change:

- Technological changes such as the Internet and search engines have a definite impact on the research process. There is an increasing demand for broader access to research in digital format (Crow, 2002). The research process is changing – it's more multidisciplinary, collaborative and global (O'Brien, 2005, 76)
- Since the 1960s the volume of scholarly research has increased and information users are increasingly becoming dissatisfied with the traditional model (Crow, 2002; Yiotis, 2005). Many researchers believe that institutional repositories offer them a better way to deal with the increasing volume and even give them greater control of the process (Prosser, 2003, 168).

Libraries can significantly contribute to the change in the scholarly communication process by establishing institutional repositories with open access to scholarly research. O'Brien warns that libraries need to address these changes or "risk fading from existence" (O'Brien, 2005, 70).

Open access

Institutional repositories support the open access initiative which promotes the removal of permission barriers – copyright and licensing restrictions – so that scholarly research is freely available via the Internet. Whereas traditional models (journal platforms) require payment of fees to access publications, institutional repositories provide open, free and immediate online access for scholars who need access to literature for their research.

Prosser (Prosser, 2003, 168) defines open access as follows: "Open access refers to the free and unrestricted access on the public Internet to the literature that scholars provide to the world without expectation of direct payment."

The advantages of open access are:

- It accelerates research and enriches education (Bluh, 2006; Paquette, 2005).
- It brings learning to the rich and the poor (Bluh, 2006; Paquette, 2005).
- Anyone, anywhere, can read, download, copy or print the full text of scholarly research (Paquette, 2005).
- It increases the visibility of authors, institutions and countries (Paquette, 2005).
- It increases the usefulness of journal articles (Paquette, 2005).
- It is convenient (Paquette, 2005).

According to Yiotis (Yiotis, 2005) there is a worldwide tendency to distribute knowledge freely among nations as this is a prerequisite for scholarship. Institutional repositories are a direct result of the open access initiative.

A case study: The Jonathan Jansen Collection

I have been the information specialist for the Dean of Education, Prof. Jonathan Jansen, since 2005. It was during my first meeting with the Dean that he expressed the need for a personalised webpage.

Prof. Jonathan Jansen is an eminent scholar. During the period January 2005 to July 2006 he published 35 media columns and 8 research articles which are high in demand – from scholars, governmental departments and private individuals. The Dean constantly receives requests for these items which are usually referred to me. After the advent of UPSpace, I decided to use it as a platform to develop the Jonathan Jansen Collection and immediately set about adding to the content. In the words of Foster (Foster, 2005) "without content an IR (institutional repository) is just a set of empty shelves."

The main purpose of this collection is to bring together and preserve Prof. Jansen's intellectual output in digital format. It serves as a central archive for his publications and research since 1990 up until now and even grants access to his CV. In cooperation with the Dean, the Collection was organised in the following subdivisions:

- Knowledge and Research Collection
- Media columns
- Photo album
- Radio and Television interviews
- Research papers
- Speeches

All the items are tagged with metadata (title, keywords, abstracts, etc.) which are harvested by search engines like Google to navigate searches. At the moment there are a total of 173 items in the collection which even include audio and video files of speeches and interviews. The Collection Policy was formulated in cooperation with Prof. Jansen.

UPSpace can display information on the number of times an item has been viewed. The latest statistics received indicate that the items viewed the most are those in the Jonathan Jansen Collection, which proves that the collection is utilised extensively.

Advantages of the Collection

The development of the Jonathan Jansen Collection offers multiple benefits to a range of stakeholders within and outside the University of Pretoria.

For the Dean

- It serves as a showcase of all his work and research over the years.
- It builds his reputation and increases his visibility.
- It increases the dissemination of materials that previously remained hidden or would otherwise have been lost.
- Open access makes the material more widely available, and broadens its usage and impact, which can lead to more citing by peers. Research has shown that articles which are accessible via open access get cited more often (Young, 2002).
- It increases communication among scholars and serves as a source for ideas and information.
- Lecturers, researchers and students increasingly prefer material in a digital format which they can access from their homes or offices (Schulenburg, 2005) and this collection meets this need.
- A wide range of materials can be accessed, e.g. articles, media columns, speeches, interviews, audio-visual materials etc.
- It serves as a long-term safe preservation of his research output in a digital format.

Benefits for scholars and their administrative officers

- Scholars everywhere can now gain free, unrestricted and easy access to all the material in this collection.

Institutional benefits

The benefits to the University of Pretoria are:

- UPSpace serves as an archive which preserves the intellectual wealth and knowledge of the University of Pretoria.
- It can serve as an indicator of the University of Pretoria's quality, visibility, prestige and public value (Crow, 2002; Prosser, 2003, 168)
- As such it can act as an advertisement for funding sources and industrial sponsors (Drake, 2004; Prosser, 2003, 168).

To summarise, Prosser (Prosser, 2003, 170) encapsulates "By working together we have the power and ability to change this process (scientific publishing) to the advantage of our authors and researchers, and society as a whole."

Obstacles to sustaining personalised collections

Submitting items to an institutional repository is a very easy, user-friendly process due to the DSpace software. But there are also a number of problems that I have personally identified:

- The most important problem at this stage is that of the copyright barriers. Since authors do not retain copyright of their intellectual property and have not negotiated in advance with publishers to archive their publications on their institutional repository, library staff have to negotiate this process with the publishers on behalf of the authors. Project SHERPA <http://www.sherpa.ac.uk/romeo.php>, which was developed in the UK, is a wonderful help in obtaining the international publishers' copyright and self-archiving policies on institutional repositories, but many of the publishers have strict regulations or guidelines regarding this process.
- Inadequate library staff to submit items to a repository. Costanza (Costanza, 2005, 34) states that most librarians are already overwhelmed by all their responsibilities and I agree with her.

- Submitting items also entails the standardisation of file names, subjects and referencing techniques. From time to time I have noticed mistakes that I have made in the Jonathan Jansen Collection and it is very important to keep track of and carefully monitor these standards.

Future deployment on campus

What is the road ahead for UPSpace at the University of Pretoria?

The following matters need to be addressed:

- Other staff members need to become interested and involved.
- The relationship between library staff and the rest of the staff on the campus needs to be fostered.
- Library staff also have an important role to play in increasing lecturers' awareness of copyright and educating them in retaining at least the right to submit their articles to UPSpace without restrictions.

As Shearer (Shearer, 2002/2003,106) however recognised: "Ultimately, the success of institutional repositories will be determined by their uptake and use by researchers."

Conclusion

Worldwide, institutional repositories are in a developmental phase and their future and impact are still unknown. Time will tell whether institutional repositories like UPSpace will only affect the existing scholarly communication process or change it completely. The numerous requests and positive feedback that I receive from the Jonathan Jansen Collection indicate to me however, that UPSpace presents researchers, scholars and other academic staff with endless opportunities to enhance their visibility, to showcase their intellectual outputs and to capture material that would otherwise have been lost and, most importantly, make it available to a wider audience through open access. The key to success however lies in the collaboration between library staff and authors in firstly adding content to UPSpace, and secondly in utilising that content. I agree with Stevan Harnad, Professor of Cognitive Science at Southampton University, who said: "Research that is not used might as well not have been done" (Barnett & Hindstrom, 2005).

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