

Beyond Institutional Repositories

Laurent Romary, INRIA and Humboldt Universität zu Berlin, Germany

Chris Armbruster, Max Planck Society (Max Planck Digital Library), Germany

ABSTRACT

The current system of so-called institutional repositories, even if it was a sensible response at an earlier stage, may not answer the needs of the scholarly community, scientific communication and accompanied stakeholders in a sustainable way. However, having a robust repository infrastructure is essential to academic work. Yet, current institutional solutions, even when networked in a country or across Europe, have largely failed to deliver. Consequently, a new path for a more robust infrastructure and larger repositories is explored to create superior services that support the academy. A future organisation of publication repositories is advocated that is based on macroscopic academic settings providing a critical mass of interest as well as organisational coherence. Such a macro-unit may be geographical (a coherent national scheme), institutional (a large research organisation or a consortium thereof) or thematic (a specific research field organising itself in the domain of publication repositories).

Keywords: Deposit Mandate, Digital Library, Information Access, Institutional Repositories, Open Access, Publication Repository, Research Infrastructure

PUBLICATION REPOSITORIES AT THE CROSSROADS

A series of developments over the past two decades has shaped scientific communication such that parallel to the long-standing tradition of scientific publishing, online environments have been set up to provide fast, wide and free access to content by means of *publication repositories*. This article posits a crossroads for publication repositories, tracing contextual factors that explain why and how it is necessary for us to reconsider the basic parameters

of how publication repositories should evolve further.¹

The current system of so-called institutional repositories, even if it has been a sensible response at an earlier stage, may not answer the needs of the scholarly community, scientific communication and accompanied stakeholders in a sustainable way. However, having a robust repository infrastructure is essential to academic work. Yet, current institutional solutions, even when networked in a country or across Europe, have largely failed to deliver (cf. Basefsky, 2009). Consequently, a new path for a more robust infrastructure and larger repositories is explored to create superior services that support the academy. A future organisation of publica-

DOI: 10.4018/jdls.2010102703

tion repositories is advocated that is based upon macroscopic academic settings providing a critical mass of interest as well as organisational coherence. Such a macro-unit may be geographical (a coherent national scheme), institutional (a large research organisation or a consortium thereof) or thematic (a specific research field organising itself in the domain of publication repositories).

We are concerned with crossroads. Therefore this article will neither trace the history of online scientific communication nor consider the debate on open access, except when it is directly relevant to the argument (for background information consult Armbruster 2007, 2008a, 2008b, 2008d). To substantiate the claim that it would be wise to reconsider the parameters of the publication repository infrastructure, we proceed as follows. Firstly, while institutional open access mandates have brought some content into open access, the important mandates are those of the funders and these are best supported by a single infrastructure and large repositories, which incidentally enhances the value of the collection (while a transfer to institutional repositories would diminish the value). Secondly, we compare and contrast a system based on central research publication repositories with the notion of a network of institutional repositories to illustrate that across central dimensions of any repository solution the institutional model is more cumbersome and less likely to achieve a high level of service. Next, three key functions of publication repositories are reconsidered, namely a) the fast and wide dissemination of results; b) the preservation of the record; and c) digital curation for dissemination and preservation. Fourth, repositories and their ecologies are explored with the overriding aim of enhancing content and enhancing usage. Fifth, a target scheme is sketched, including some examples. In closing, a look at the evolutionary road ahead is offered.

DEPOSIT MANDATES: TOWARDS A SINGLE REPOSITORY, COMMON FORMAT AND INTEGRATED SERVICES?

Deposit mandates are seen as the most important route to enabling more open access to scientific knowledge. Funders' deposit mandates seem particularly important because they target high quality research output, thus setting an example for scientific communities as well as academic institutions. When the National Institute of Health (NIH) implemented its public access policy in 2008, deposit in Pub Med Central (PMC) was mandated, a digital archive developed and supported by the NIH as a single repository with a common format.² Earlier, in 2006, several UK research funders in the life sciences had also opted to create a single repository with a common format, UK PMC (linked to PMC), to implement their deposit mandates.³

While it could be argued that subject-oriented funders would favour subject-based repositories, it is nevertheless remarkable that they would opt for a single, shared repository. Moreover, the European Research Council (ERC) and the European Commission (EC, as research funder), which fund across disciplines and countries, are also opting to create a single repository. Initially, the European Commission had favoured institutional repositories, later advocating deposit in institutional and subject-based repositories alike. However, once deposit mandates were being implemented, it became apparent that a high-quality repository service is required, which is achieved most likely by a single repository with a common format.⁴

Single repositories are providing distinct value to funders, such as helping them to manage their relations with grantees (e.g. reporting), improving internal knowledge management (e.g. portfolio management) and providing the public with a comprehensive overview of

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/article/beyond-institutional-repositories/39036

Related Content

Use of Digital Resources Among Social Scientists: An Evaluative Study

S. Thanuskodi (2020). *Challenges and Opportunities of Open Educational Resources Management* (pp. 1-23).

www.irma-international.org/chapter/use-of-digital-resources-among-social-scientists/258125

Analysis the Typhoon Eyes of Megi from MTSAT Satellite Cloud Images with 3-D Profile Reconstruction

Yueh-Jyun Lee, Ji-Chyun Liu, Shih-Wen Liu, Yuh-Fong Lin and Lung-Chun Chang (2011). *International Journal of Digital Library Systems* (pp. 39-48).

www.irma-international.org/article/analysis-typhoon-eyes-megi-mtsatsat/59887

Information Need and Seeking Behavior of Farmers in Laduba Community of Kwara State, Nigeria

Femi Titus Akande and Akinade Adebawale Adewojo (2016). *Information Seeking Behavior and Challenges in Digital Libraries* (pp. 238-271).

www.irma-international.org/chapter/information-need-and-seeking-behavior-of-farmers-in-laduba-community-of-kwara-state-nigeria/159601

Digital Library Education: India and Abroad

Naresh Kumar (2013). *Design, Development, and Management of Resources for Digital Library Services* (pp. 94-109).

www.irma-international.org/chapter/digital-library-education/72450

First Person Singular: A Digital Library Collection that Helps Second Language Learners Express Themselves

Shaoqun Wu and Ian H. Witten (2010). *International Journal of Digital Library Systems* (pp. 24-43).

www.irma-international.org/article/first-person-singular/39035