

Scholarly communication and OAI – what are the issues for journal publishers?

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When assessing scholarly communication, all stakeholders – from readers and researchers to librarians and publishers – share the common goals of quality, reliability, value for money, cost reduction and innovation. We all care about the scholarly communication process. This paper provides a publisher's view of the Open Archives Initiative (OAI), the drivers for change and the implications for journal publishers.



KATHRYN TOLEDANO

Director of Business Development, Emerald

During times of change, open communication, where goals and aspirations are shared at a strategic level, presents an opportunity to collaborate and facilitate developments that aim to benefit all involved. This is particularly important as change does not happen in isolation and often has unforeseen consequences. There are strengths and weaknesses in the current method of scholarly communication, and technology offers all stakeholders opportunities to improve or re-engineer processes. However, it is essential that we are led by stakeholders' requirements and not by technology alone.

For Emerald as a long-established independent scholarly publisher, change is an intrinsic part of our life. The company was formed in 1967 by a group of senior academics who developed a publishing house that focused on niche management disciplines including strategy, change management and international marketing. We are a UK-based publisher with the largest portfolio of scholarly journals in the management and LIS fields, with over 140 international peer-reviewed journals and full text databases.

Our strategic priorities are market-driven. Those listed here will probably not change in the next five years although the way in which we tackle them certainly will:

- building closer relationships with stakeholders
- researching and creating new products and services that meet stakeholder needs
- maintaining and improving quality of content
- increasing value for money through new business models
- increasing access to and dissemination of authors' work
- exploring new initiatives with partners and intermediaries that expand our role in scholarly communication.

At times it has been quite tough to understand the potential implications of OAI for Emerald, as a journal publisher, and for other stakeholders in the scholarly communication chain. OAI is one of several technology-driven initiatives, and most publishers, whether for-profit or not-for-profit, have been prepared to work with authors and their institutions in response to their changing needs.

The current scenario

Many authors operate their own web site and post copies of their research work: conference papers, e-prints, data sets, and, increasingly, PDFs of their work published in scholarly journals (supplied by the publisher).

Papers submitted by authors for publication in a scholarly journal go through a comprehensive process of selection, peer review, revision and correction, editing into good English, advice on titles and keywords, typesetting, style and presentation, proofing, SGML tagging, print and online distribution. Dissemination is significantly increased through sales and marketing effort, value-for-money business models, alerting programmes, usage improvement campaigns, linking agreements, author workshops, content being indexed by Google, and agreements with e-journal gateways, subject portals and membership associations. Copyright is managed and cases of plagiarism acted upon. The published article is the official record and the document which will be deposited and preserved. And so on. It adds up to a considerable amount of value added to the original paper.

The subscribing library enables online access to the journal to be made available alongside other electronic resources.

This is represented in Figure 1. The author’s published article appears on his/her web site either in e-print form and/or as a PDF of the final published version. That same published article is available direct from the publisher or from library holdings.

The potential user of that article is searching online. There are no barriers to access the author’s web site and the user is dependent upon the site being found via Google. The user usually has a financial barrier to access the article at the

publisher’s web site. Access to the article via the library resources will require authentication and subsequently be free-at-point-of-use.

The developing scenario for scholarly communication

The current scenario is shifting. As Pinfield explains: “A movement is beginning to develop amongst some stakeholders in the scholarly communication process where e-prints are being deposited in open-access online repositories so that the literature is freely available to users.”¹

Institutions are beginning to encourage academics to post their work (e-prints and published articles) within their repositories. This creates an accumulation of easily identifiable, freely accessible versions of published documents within an organised environment – see Figure 2.

Pinfield goes on to say: “The enormous potential of these repositories has been enhanced by the development of the Open Archives Initiative (OAI) Protocol for Metadata Harvesting, which facilitates interoperability between repository servers.”

The development of the Resource Discovery Network (RDN) Subject Portals Project will further facilitate the user finding the author’s work. Searchers will discover the article as a published (official) record available via repositories, the publisher’s site and the library resources. Also, the search will most probably find the e-print version of the article at the repository.

Will this potentially lead to the erosion of

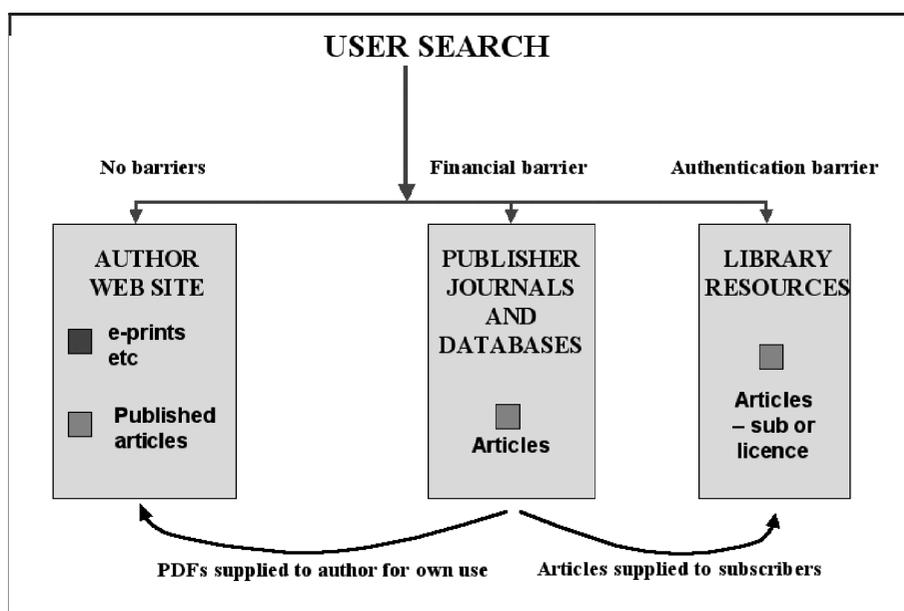
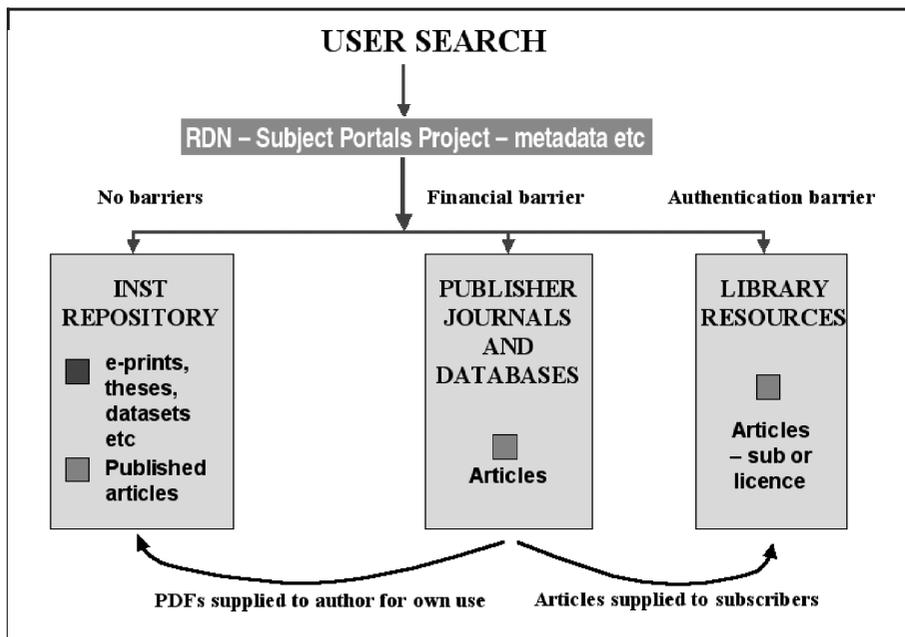


Figure 1

Figure 2



journal revenues and ultimately journal brands? The threat is shared by society and commercial publishers and will be facilitated by the OAI and the development of archives and repositories.

Scholarly journals need to survive financially if authors continue to need their work published within peer-reviewed journals, and institutions need to demonstrate the publication results of their research output. If that same research output is freely available in an organised environment, revenues are under threat. Journal brands may not survive and the value added quality improvement that they bring to the author’s work will be lost. It is replicable, but at a cost. Who will resource it, organise it, invest in it and sustain it? Publishers, by the way, are quite good at this!

Many publishers, both for-profit and not-for-profit, have been prepared to work with authors and their institutions in response to how they wish to utilise the web.

Understanding OAI technology, what it can do, what it means to us as a publisher and its potential impact on the publishing process as a whole is not always clear. There are very vocal advocates who promote the use of OAI technology and open access to create extreme change within the system. Others help make sense of the practical ways in which publishers and other stakeholders can collaborate to evolve an improved system. We should all be concerned. It is possible that other models will shift the status quo unfavourably for all stakeholders.

Publishers’ response

There is no better way to begin to understand the implications than to get involved. These are some of the practical things publishers could do:

Standardize metadata for cross-searching

The OAI promotes the use of standardized metadata to enable interoperability and cross-searching of archives. The standards – based on Dublin Core – were established after most publishers had devised their metadata structure and hence may not be sufficiently flexible to cope with the rights metadata that reflect publishers’ current business models with regard to access and reproduction rights. In practice, however, most platforms that allow the user to cross-search across different resources appear to be able to cope with non-standard metadata.

Provision of metadata – harvesting, licence, sub-licence

There are various ways in which journal article metadata can be deposited in an open archive:

Publishers can enable the journal article metadata to be harvested using the OAI protocol for metadata harvesting – some publishers require the harvester to request permission first.

Publishers can provide a metadata feed under licence. In practice, archives use a filter to convert metadata to whatever standard they use.

The Subject Portals Project funded by JISC (Joint Information Systems Committee), as part of the Resource Discovery Network, is an open archive and e-content gateway currently under development and primarily for users in further and higher education. Various publishers, including Emerald, have been asked to provide metadata for the project during the test phase.

PSIgate is the physical sciences hub of the Resource Discovery Network and provides free access to high quality internet resources for students, researchers and practitioners in the physical sciences². Through collaboration with the Institute of Physics Publishing (IoPP), users of PSIgate can search the titles of every IoP article published since 1960 and read an abstract. The full text is available where institutions subscribe to the relevant journal.

Use of OpenURLs

OpenURLs are the links from the metadata to the document, such as the full text journal article. They enable librarians to specify the most appropriate resource to access that document – such as the subscribed-to journal or database. Version 1 of the OpenURL standard was recently announced and trials started on 1 May 2003. We expect this standard to continue to evolve and publishers will assess the demand for adoption.

Authors – making their life easier

Authors want to use their work freely and without seeking permission. Many publishers, including Emerald, have developed more liberal copyright policies, including the provision of a PDF of their article. Some authors post this on their personal web site. As institutional and subject repositories are created, authors are also seeking to include this PDF in open-access repositories. Publishers will, unsurprisingly, review developments and take a view on the terms of their copyright policies. Project RoMEO has compiled a useful database of existing journal publisher copyright transfer agreements³.

Rights – the Zwolle Principles and Project RoMEO

Part of the OAI debate has shifted into the area of 'rights' and the implications for various stakeholders. That debate becomes more focused within steering groups and Emerald has been pleased to participate in two such groups.

The Zwolle Principles on Copyright address the management of copyright in higher and further education. This debate has been intensified as a result of the OAI and development of institutional repositories. In fact, Emerald was the first publisher to sign up to these principles.

Project RoMEO (Rights METadata for Open archiving) is a JISC-funded project assessing the protocol for rights metadata within an open archive where the content is open access. RoMEO has developed guidance showing how authors may both self-archive and get their paper published without breaking publishers' copyright transfer agreements.

There are practical ways in which publishers can collaborate with other stakeholders and, through participation, gain a better understanding of the issues. Change is inevitable and the shake-up from OAIs could be far-reaching, affecting:

- the role of publishers and librarians
- the quality of the official record of scholarly communication
- the erosion of journal brands and investment in access to and dissemination of authors' work
- the way in which excellence is measured
- the demise of the peer-review process
- the restriction of authors' rights.

The Open Archives Initiative is a response to the issues facing stakeholders, and it is useful to remind ourselves of these agents of change:

- barriers to maximum dissemination
- scholars' perception of opportunities via digital technologies
- the rising cost of journals, and restrictive licences
- copyright restrictions on authors limit their rights to use their own work
- faculty creating, editing and reviewing content – are 'publishers' required?

There are many initiatives that publishers have developed in response to these critical issues – for example:

- new business models which give better value for money and flexible access
- new distribution models which have resulted in tremendous increases in access and significantly to institutions that did not previously have access. (For example, the International Network for the Availability of

Scientific Publications (INASP) is providing over 7,000 peer-reviewed titles to all institutions in less developed countries at a cost of 97-100% discount off list price. This is a very efficient way to make good quality content widely available.)

more liberal copyright policies that meet authors' and institutions' demands

the 'value-added' that publishers provide.

It is initiatives such as the OAI that continue to ensure publishers are not complacent but continue to listen to their customers and authors and seek to anticipate their needs. Question marks remain over issues such as costs and future investment required to fund open archives, the potential for plagiarism, and quality control.

References

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Kathryn Toledano

Director of Business Development

Emerald

60/62 Toller Lane, Bradford BD8 9BY

E-mail: ktoledano@emeraldinsight.com

www.emeraldinsight.com

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