



Counting **O**nline **U**sage of **N**eTworked **E**lectronic **R**esources

PIRUS2: Developing a standard for individual article usage statistics

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Research Quality Assessment: role of individual article usage statistics

- Journal level metrics are not statistically representative of individual journal articles
- Journal level metrics do not give insights into the impact of the work of individual authors
- Citation data does not cover all fields and does not adequately measure the impact of research in some fields
- The H-index is biased towards older researchers with long careers in highly cited fields
- An over-reliance on one metric alone gives an incomplete picture and distorts author behaviour
- Any statistics-based metric should be used in conjunction with expert knowledge, and interpreted and used with care

- **Sponsored by JISC**
 - UK Joint Information Systems Committee
- **PIRUS 1** completed in January 2009
 - Lead by COUNTER
 - Report available at:
http://www.jisc.ac.uk/media/documents/programmes/pals3/pirus_finalreport.pdf
- **PIRUS 2**, October 2009-December 2010
 - Lead by Mimas and Cranfield University
 - Primary project team members: Mimas, Cranfield, COUNTER, CrossRef, Oxford University Press

PIRUS: why now?

Increasing interest in article-level usage

- More journal articles hosted by Institutional and other Repositories
- Authors and funding agencies are increasingly interested in a reliable, global overview of usage of individual articles
- Online usage becoming an alternative, increasingly accepted measure of article and journal value
 - PLoS has been reporting individual article usage since 2009 and is providing information on usage by topic within journals, which will provide useful benchmarks
 - Knowledge Exchange report recommends developing standards for usage reporting at the individual article level



PIRUS: why now?

Article-level usage metrics now more practical

- Implementation by COUNTER of XML-based usage reports makes more granular reporting of usage a practical proposition
- Implementation by COUNTER of the SUSHI protocol facilitates the automated consolidation of usage data from different sources.

The challenge

- An article may be available from:-
 - The main journal web site
 - Ovid
 - ProQuest
 - PubMed Central
 - Authors' local Institutional Repositories

- If we want to assess article impact by counting usage, how can we maximise the actual usage that we capture?



PIRUS Project aims

- Develop COUNTER-compliant usage reports at the individual article level
- Create guidelines which, if implemented, would enable any entity that hosts online journal articles to produce these reports
- Propose ways in which these reports might be consolidated at a global level in a standard way.



PIRUS1: outputs

- A proof of concept COUNTER-compliant XML prototype for an individual article usage report
- A tracker code, to be implemented by repositories that sends usage data as OPEN URL context objects to an external party or to the local repository server
- A specification of the criteria for a central facility that will create the usage statistics where required or collect and consolidate the usage statistics

PIRUS 2: scope

Further research and development in the following areas:

- Technical: further tests, with a wider range of repositories and a larger volume of data
- Organizational: the nature and mission of the central clearing house(s) to be developed and candidate organizations identified and tested
- Economic: assess the costs for repositories and publishers of generating the required usage reports, the costs of any central clearing house(s), and investigate how these costs can be allocated among stakeholders
- Political: engage the major stakeholder groups (repositories, publishers, authors) and encourage their support



PIRUS 2: objectives

- Develop a suite of free, open access programmes to support the generation and sharing of COUNTER-compliant usage data and statistics, initially for journal articles, but that can be extended to cover a wider range of individual items
- Develop a prototype article-level publisher/repository usage statistics service
- Define a core set of standard statistical reports at the individual article level

And finally...a word of warning.....

“There are cultures in which people believe that some objects have magical powers; anthropologists call these objects fetishes. In our society, statistics are a sort of fetish. We tend to regard statistics as though they are magical, as though they are more than mere numbers.....because we treat statistics as true and incontrovertible, they achieve a kind of fetishlike, magical control over how we view social problems. We think of statistics as facts we discover, not numbers we create.”

Joel Best, University of Delaware
Chronicle of Higher Education, 2001

Use statistics wisely!!



PIRUS 2: Project Team

- Simon Bevan (Cranfield University) – Senior Project Manager
- Richard Gedye (Oxford University Press)
- Ross MacIntyre (Mimas, Manchester University)
- Paul Needham (Cranfield University) – Project Manager
- Ed Pentz (CrossRef)
- Peter Shepherd (COUNTER)

PIRUS2 Website:

<http://www.cranfieldlibrary.cranfield.ac.uk/pirus2>