Usage Factor
- current status and future plans

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Usage Factor: the context

- There is a growing body of journal usage data
- The Usage Factor will complement altmetrics and citation-based measures
  - Impact Factors, based on citation data, are generally accepted as a valid measure of the impact and status of scholarly journals
    - Do not cover all fields of scholarship
    - Do not reflect the true impact of more practitioner-oriented journals
  - Altmetrics, take into account novel forms of scholarly communication
    - Repositories, archives, blogs, social media
    - More immediate measure of impact than citations
    - Scholar and item based rather than journal-based
Who will benefit from the Usage Factor?

Four major groups will benefit from the introduction of Usage Factors:

• Authors
• Publishers
• Librarians
• Research Funding Agencies
The goals of the project

The **overall aim** of this project was to explore how online journal usage statistics might form the basis of a new measure of journal impact and quality, the Usage Factor for journals.

**Specific objectives** were to answer the following questions:

• Will Usage Factor be a statistically meaningful measure?
• Will Usage Factor be accepted by researchers, publishers, librarians and research institutions?
• Will Usage Factor be statistically credible and robust?
• Is there an organizational and economic model for its implementation that would cost-effective and be acceptable to the major stakeholder groups.
Recommendations: the metric

- Usage Factors should be calculated using the **median** rather than the arithmetic mean.
- A **range of Usage Factors** should ideally be published for each journal.
- Usage Factors should be published with appropriate **confidence levels** around the average to guide their interpretation.
- The Usage Factor should be calculated initially on the basis of a maximum **usage time window of 24 months**.
- The Usage Factor **is not directly comparable across subject groups** and should therefore be published and interpreted only within appropriate subject groupings.
The calculation of a UF

• The Journal Usage Factor 2009/2010: all items
  • The median number of successful requests during 2009 and 2010 for countable items published in the journal during 2009/2010
  • Different items types have different impacts in different fields

• The Journal Usage Factor 2009/2010: full-text articles
  • The median number of successful requests during 2009/2010 for full-text articles published in the journal during 2009/2010
Recommendations: infrastructure

- Automation of the extraction and collation of data needed for UF calculation is essential if calculation of this metric is to become routine.

- Development of an agreed standard for content item types, to which journal specific item types would be mapped, is desirable.

- Adoption of a simple subject taxonomy to which journal titles would be assigned by their publishers.

- Publishers should adopt standard “article version” definitions based on ALPSP/NISO recommendations.
Stage 3 – road testing the ideas

• Publication of a draft Code of Practice for the Usage Factor
• Investigation of an appropriate, resilient subject classification
• Exploration of the options for the UF infrastructure
• Development of an independent audit process
• Investigate the feasibility of applying the Usage Factor concept to other categories of publication in addition to journals
The draft Code of Practice

• The Code of Practice will be consistent with COUNTER and will provide:
  • A list of Definitions and other terms that are relevant to Usage Factor
  • A methodology for the calculation of Usage Factor as a median value
  • Specifications for the reporting of the Usage Factor
  • Data processing rules to ensure that Usage Factors are credible, consistent and compatible
  • Specifications for the independent auditing
  • A description of the role of the Central Registry for Usage Factors in the consolidation of usage data and in the publication of Usage Factors
Scope of the test

• Issues tested
  • 12-month and 24-month Usage Factor periods
  • Stability of UF for low usage journals
  • Stability of UFs over time
  • Additional gaming scenarios
  • Process for data collection and consolidation

• Scope
  • 27 subject fields/~200 journals
Initial results from Stage 3

Methodology and process
• 12 month and 24 month UFs both show a good spread within subject fields, allowing good differentiation on the basis of UF.
• A fixed UF counting period based on calendar years may be subject to gaming by publishers; a rolling year UF is likely to be more robust

Subject classification scheme
• Ringgold scheme works well for the 27 subject fields covered.

Infrastructure
• Problems with publishers providing data in the required format
• Aggregation of usage data is time consuming
• CIBER developed a tool for the automatic aggregation of usage data
Challenges

- Auditing publisher submitted data
- Collation of data by article for the appropriate time periods
- Consolidation of usage data from different sources
- Consistent item type definitions
- Subject classification system
- Economic/Organizational model to support the Central Registry
Planning for full implementation

- Publication of the definitive Release 1 of the Code of Practice for Usage Factor
- Setting up the governance structure for Usage Factor
- Setting up the Central Registry and other aspects of the required Usage Factor infrastructure
  - Technical model
  - Business model
- Invitation to publishers to participate in the recording and reporting of Usage Factors for their journals
Usage Factor : Stage 3 organization

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Usage Factor project

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For further information

The full report on Stages 1 and 2 of the Usage Factor project, as well as the draft Code of Practice and information on the progress of Stage 3 is on the COUNTER website at:

http://www.projectcounter.org/usage_factor.html