

Altmetrics in Institutional Repositories: New Perspectives for Assessing Research Impact

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1 Introduction

The aim of this project is to find out if and how Institutional Repositories (IR) are using alternative metrics or Altmetrics (besides usage statistics and citation counts) as a value-added service to showcase their content impact and give some hints on how this tool can be used to supplement the traditional research performance assessment exercise in an institution.

Altmetrics can provide a measure of impact for all non-journal scholarly works available in Open Access (OA), like usage statistics, but it can go further by contextualizing the readership of an author's research output. The increasing importance of Altmetrics indicators led to its inclusion in the 2014 edition of the Ranking Web of Repositories.

This project promises to be useful for repositories managers in that it gives some examples of good practices of implementation of Altmetrics along with other metrics in IRs which can help to increase the content, foster the adoption of OA by authors, contribute to the visibility of the institution and meet the funding agencies requirements, thus making a strong case for the relevance of IRs in the context of the research assessment process.

2 Methodology

For the purpose of this project, the following data were collected from the 2014 edition of the Ranking Web of Repositories, regarding the top 100 IRs:

evidence of statistics reporting

item/global level statistics

type of statistics generated (usage, citations, altmetrics)

statistics provider

IR software

IR size and country of origin

The fact that Altmetrics sources were included in the "Visibility" indicator of the 14th edition of the Ranking Web of Repositories, suggested that some top IRs could have included Altmetrics to supplement their existing "statistics package". Even though the sample used is only 6% of the total repositories in this Rank, the main purpose of this study was to find out some examples of Altmetrics implementation in IRs that could inspire repository managers to work in the same direction.

3 Results

The most important findings of this project are that the majority of IRs (72%) exhibit usage statistics at global and/or item level (download counts, page views and geographic provenance). But only few provide citation counts (9%) and Altmetrics (9%).

The most used repository software platforms in this study - DSpace, EPrints and Digital Commons – currently deliver usage statistics that can be hidden (only viewed by administrators) or made available to the public. These platforms also supports citation counts (in the case of DSpace and EPrints, a plug-in is available if the institution has a subscription access to the SciVerse Scopus API) and Altmetrics reporting.

Table 1: Statistics reporting by IRs of the top 100 Ranking Web of Repositories

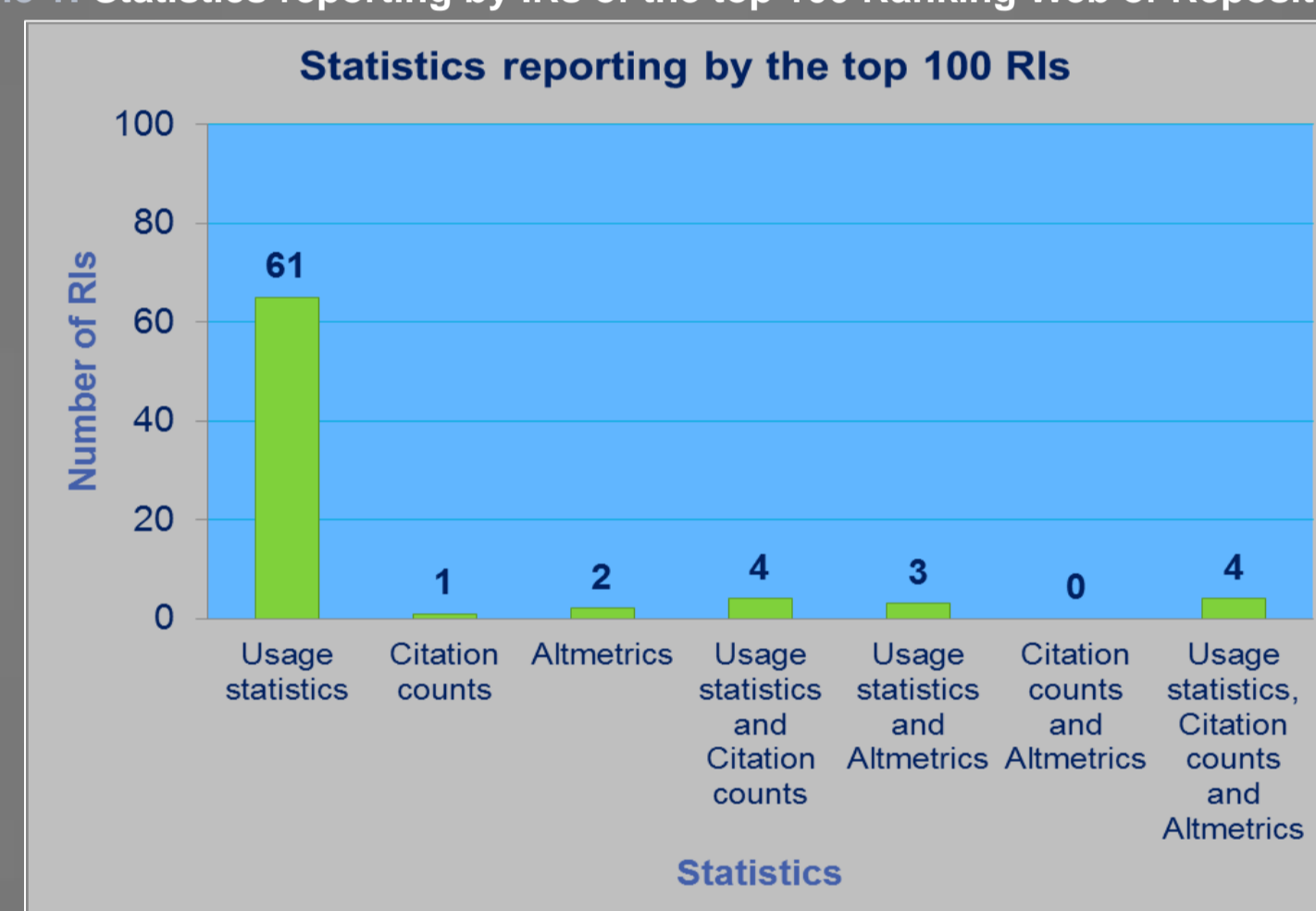
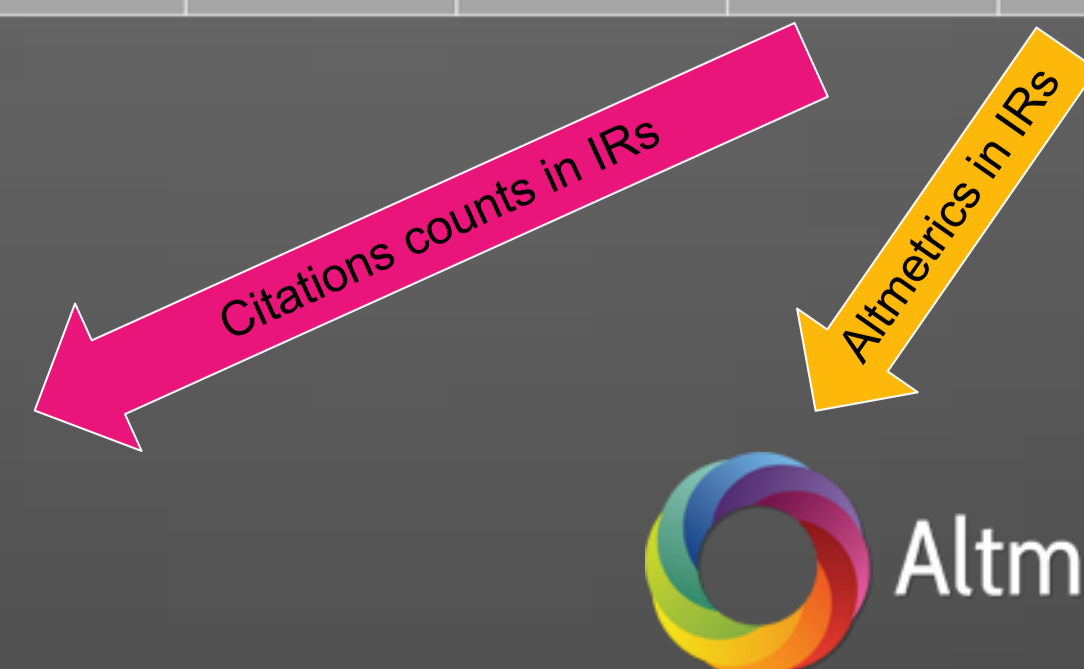
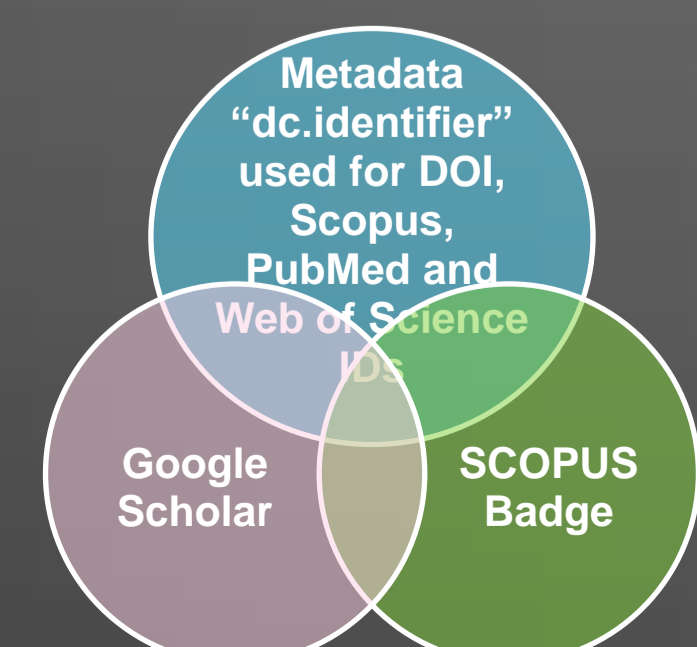


Table 2: List of IRs of the top 100 Ranking Web of Repositories reporting Altmetrics

| Institutional Repository | Country | Software platform | Usage statistics | Citation counts | Altmetrics |
|--|-----------|-------------------|------------------|-----------------|------------|
| Queensland University of Technology Institutional Repository | Australia | EPrints | x | x | x |
| Digital CSIC | Spain | DSpace | x | x | x |
| University of Queensland UQ eSpace | Australia | Fedora | x | x | x |
| LSE Research Online London School of Economics and Political Science | U.K. | EPrints | | | x |
| Purdue University Digital Commons | U.S.A | Digital Commons | | | x |
| University of Wollongong Research Online | Australia | Digital Commons | x | | x |
| Warwick Research Archive Portal | U.K. | EPrints | x | x | x |
| University of Glasgow Published and peer-reviewed papers | U.K. | EPrints | x | | x |
| Indiana University Scholarworks | U.S.A | DSpace | x | | x |



4 Conclusions

Librarians, mainly those involved in learning and research support activities, must be familiarized with the tools available to implement and disseminate Altmetrics.

Many scholars aren't using Altmetrics tools or are aware of its power and Librarians play a crucial role in supporting the adoption of this metrics by researchers in a responsible way.

Only a few IRs report Altmetrics data.

The IRs may be the starting point to raise awareness of researchers and institutional administrators towards Altmetrics, using it as a value-added service. The metrics generated could be used to contextualize the usage. It could also be useful to recruit more content to IRs and supply authors and institutions with data for various stakeholders.

Altmetrics reveals to be very useful in providing data about the impact of non-journal publications. And it could be a good predictor of later citations through usage statistics, as some studies states. Also its immediacy in showing impact could help fill the gap until the first citations appear.

Work has to be done to overcome some limitations of Altmetrics: gaming, discipline-based bias when collecting data from the same platform, differences in the meaning of data extracted from different social media, volatile aspect of social media and absence of a standardized way for reporting Altmetrics data.

Altmetrics increasing use by publishers on their websites and all the research that is being done in this field along with the tools that have been developed that deliver Altmetrics data, are a preview of the growing importance of these metrics in the research arena. So it is essential for IRs managers to be prepared to enter into the "Age of Altmetrics".

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