

## Altmetrics and Digital Libraries

This issue of *Performance Measurement & Metrics (PMM)*, Volume 18, Issue 1, 2017, is dedicated to selected papers on the topic of the use and relevance of altmetrics in digital (and blended) libraries. It may be interesting to the readers of *PMM* to know how the “altmetric” metrics are connected to the library’s role as active agent both for the collection, measure and valuation of scholar’s research outputs and for the measure, valuation and impact of the collection and of services.

The definition of altmetrics adopted by the *PMM* fascicule is that described by Carpenter and Lagace (NISO) in the same fascicule:

Altmetrics is a broad term that encapsulates the collection of multiple digital indicators related to scholarly work. These indicators are derived from activity and engagement among diverse stakeholders and scholarly outputs in the research ecosystem, including the public sphere.

Why a new metric? The NISO definition clarifies the necessity that comes out of the digital context in which numerous products are considered to be research results (not only books and articles) and in which the research cycle is open and collaborative from the very beginning.

The first function of “altmetrics” is that of guiding the understanding of how research results are used and interpreted, as evidence of the involvement of the community of specialists in a sector and as indicator of engagement. It is not meant to be an indicator of quality like the traditional metrics but rather to provide visibility and offer itself as a filter to predict what may be a future academic impact.

Another function of altmetrics is that of measuring the impact on society. Altmetrics reaches out toward society’s growing need for timely information about research results: time is the advantage given by the new metrics that facilitate the speedy dissemination of research results outside the tight academic community. Politicians and administrators sustain and finance the opening of research results in the context of Open Science for sustainable research. As a contribution to its Open Science Policy Platform, the European Commission has recently established a group of experts to advice on the role of metrics and altmetrics in the development of its agenda for open science and research.

Altmetrics is a collection of very recent metrics and after an initial contrast with traditional metrics the moment has now arrived to affirm that altmetrics is not an alternative to but rather complementary to metrics based on citations. “Altmetric” metrics certainly have some disadvantages and weaknesses, like the risk of manipulation (gaming) and the lack of standards, but they also carry many promises that if fulfilled could bring advantages to the evaluation of scientific research. In particular, the new metrics square nicely with the recent statements of principles to be respected in research valuation such as DORA: San Francisco Declaration on Research Assessment and the Leiden Manifesto, named after the conference at which it crystallized (see <http://sti2014.cwts.nl>).

In this fascicule of *PMM*, we are looking at altmetrics for digital (and blended) libraries. This relationship began with the inception of altmetrics, especially from the initiative of single librarians who have collaborated with some of the altmetric resources and instruments. It is, however, still not a relationship that extends to all digital libraries and altmetrics has not yet entered into institutions’ strategies. On the one hand there is debate over investing in a new and controversial sector, while on the other there is a felt need to use altmetrics to measure the impact of an institution’s research and the impact of the digital library itself.



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Part I of this *PMM* issue covers an overview of the emerging field of altmetrics, focusing on ethics, standards and the evolution from bibliometrics to altmetrics.

Berenika Webster in “Principles to guide reliable and ethical research evaluation using metric-based indicators” comments on the principles of the Leiden Manifesto and the DORA Declaration on Research Assessment. “While I believe that libraries in research institutions are well placed to provide institutional support for metric-based evaluation, I also strongly believe that librarians should become advocates for the responsible and ethical use of these metrics.”

For a change in perspective to the new metrics, a limit that was difficult to surmount was that of the standards and of the sharing of definitions and concepts. The National Information Standards Organization launched a three-year project to identify areas of potential community consensus around these new metrics and then develop recommended practices in those areas. The NISO project financed by the Sloan Foundation has marked an important step forward. Todd Carpenter and Nettie Lagace in “Defining community recommended practice for altmetrics: the NISO alternative metrics project completes its work” describe the findings of the NISO Project to develop Standards and for Altmetrics started in 2013.

Karanatsiou, Misirlis and Vlachopoulou in “Bibliometrics and altmetrics literature review: performance indicators and comparison analysis” outline a history of metrics from bibliometrics to altmetrics through an analysis of the literature.

Part 2 of this *PMM* issue is related to research studies on the use of altmetrics and recommended practices for altmetrics and libraries.

Andy Tattersall in “Supporting the research feedback loop – why and how library and information professionals should engage with altmetrics to support research” describes why and how library and information professionals should engage with altmetrics. The reason is that: “The core elements of the research cycle still remain and will continue to do so for the foreseeable future but newer models are emerging where the dissemination aspect is spreading across the whole cycle, not just at the end of it [...]. This increases the value of the library and librarian and can help bridge any gaps between the academic and the library.” With a proviso: this does not mean extending services and putting pressure on existing services but rather a re-thinking of service priorities in the context of the changes in scientific communication and scholars’ needs.

Jane Cho in “A comparative study of the impact of Korean research articles in four academic fields using altmetrics” analyzes the citations of Korean authors in international journals in medicine, engineering, social science and arts and humanities using Scopus and ImpactStory. In the comparison between the impact measured by altmetrics and citation rate, it appeared that the correlation between the Mendeley saving index and the citation rate is high.

Shrivastava and Mahajan in “An altmetric analysis of ResearchGate profiles of Physics researchers: a study of University of Delhi” are using ResearchGate as a source of altmetrics data. The findings of the study help in understanding the validity of ResearchGate as a source of altmetrics for research evaluation in a developing country such as India.

Can LIS be analyzed as a discipline using altmetrics? Pooladian, Aida and Borrego’s research is centered on Mendeley “Twenty years of readership of library and information science literature under Mendeley’s microscope.” Mendeley covers 61 percent of the LIS literature published in the last 20 years and findings demonstrate that it is a source of data for information behavior studies.

Michael Moore in “Constructing a sentiment analysis model for LibQUAL+ Comments” uses the “sentiment analysis model” which provides a complementary tool to the LibQUAL+ quantitative results, allowing for simple, time-efficient, year-to-year analysis of open-ended comments.

This *PMM* issue's aim was to be of interest to all libraries as they continue to transform, becoming more and more embedded in scholars' workflow and the institutional mission of the universities and we hope that we have succeeded.

Both as a guest editor and a reader, I would like to thank the authors for undertaking this summary of the impact of digital (blended) libraries in altmetrics. Their international perspective is a bonus: they come from Greece, Spain, UK, Korea, India and USA.