Altmetrics: An App Review

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Overview

• Current University Research Environment
• Altmetrics: Definition and Services Primer
  – Altmetric
  – ImpactStory
  – Plum Analytics
• How Can Libraries Use Altmetrics?
• Limitations
• Q&A
The Current University Research Environment

• Traditional incentives for researchers reign
  – Publish or perish...and that’s it!
    • Values journal articles and monographs over emerging forms of scholarship
    • “Real world” worth not always taken into account (e.g. translational research (Deschamps, 2012; Hobin et al, 2012; Kain, 2008), popular relevance)
  – Metrics are used to evaluate impact
    • Grants received
    • Awards won
    • Journal Impact Factor (JIF) of published work
The Current University Research Environment
The Current University Research Environment...is Changing

• “Peer review” is broader
  • Not just for journal articles anymore
  • Pre- and Post-publication peer review
• New findings reported more quickly, in a variety of forums
• Measures of impact are plentiful and instant
• Impact can be tracked both inside and outside of the academy
• Feedback loop is shortened, accelerating research (Konkiel & Noel, 2012)
The Current University Research Environment...is Changing
The Current University Research Environment...is Changing

Previously measured

• Journal Impact Factor
• Grant monies received
• Awards

Potentially measured

[Diagram showing various popular and scholarly communication tools and platforms]
Altmetrics

How many times an output

– article, website, blog, dataset, grey literature, software, etc has been:

– Viewed (Publisher websites, Dryad)
– Downloaded (Slideshare, publisher websites, Dryad)
– Cited (PubMed, CrossRef, Scopus, Wikipedia, DOI, Web of Science)
– Reused/Adapted (Github)
– Shared (Facebook, Twitter)
– Bookmarked (Mendeley, CiteULike, Delicious)
– Commented upon (Twitter, Mendeley, blogs, publisher websites, Wikipedia, Faculty of 1000)
Altmetrics

- Generally gather stats using COUNTER standards and open APIs
- Provide item-specific, up-to-the-minute glimpses of the impact of many types of scholarship (Neylon & Wu, 2009; Priem et al., 2010)
- Can help researchers filter information to find relevant research more quickly and easily (Neylon & Wu, 2009).
- More transparent than the closely guarded impact factor formula (Priem et al., 2010)
Altmetrics Services: a Primer

- Measure attention received by various types of research outputs
- Reports
- Visualizations
Caveats

• Altmetrics should not be used by non-peer policy makers to evaluate a researcher’s performance (Russell & Rosseau, 2002)
• Use in context and to supplement other evaluative techniques (Priem et al., 2010; Steele, Butler, & Kingsley, 2006)
• Freemium service
  – Free bookmarklet, limited use API; paid full-service API, reports
• Aimed at commercial publishers
• Tracks usage of traditional outputs:
  – DOIs
  – PubMedIDs
  – arXiv IDs
• **Strengths**

  – Context-based metrics
  – Free (limited use) API available
  – Boolean querying and filtering
  – Reports and visualizations available, can export

• **Weaknesses**

  – Aimed at commercial publishers, not libraries
  – Does not track non-traditional outputs
The Power of Kawaii: Viewing Cute Images Promotes a Careful Behavior and Narrows Attentional Focus

PLOS ONE

The internet has won. Scientists say that looking at pictures of cute animals can raise your productivity!

Great research shows viewing cute pictures of cats and kittens—like these—can help you work better. The web is full of fun images that are easy to digest and enjoyable to look at. This makes you feel more relaxed, happy, and creative, allowing you to focus better and be more productive.

For example, new studies have shown that looking at pictures of cute cats and kittens increases attentional focus and reduces distractions. This can be especially helpful when working on tasks that require concentration and attention to detail.

So next time you're feeling stressed or overwhelmed, take a break and enjoy some cute images. You might just find that they help you stay focused and productive!
LSD helps to treat alcoholism

Arran Frood

Geographical breakdown

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</table>
• Free service
• Aimed at individual researchers
• Tracks usage of:
  – DOIs
  – PubMedIDs
  – URLs
  – Slideshare
  – Github
  – Dryad

Sources
• **Strengths**
  – Flexible
  – Easy to implement
  – Fully Open API
  – Context-based metrics

• **Weaknesses**
  – Scalability (resource intensive to create reports)
  – Less technical support than competitors
create collection

**Articles from Google Scholar Profiles**
(Click here for help)

**Article IDs**
Paste DOIs or PubMed IDs (limit 100)

- 10.1038/171737a0
- 13054692

**Webpage URLs**
(No articles; they go above)

- http://www.example.com
- http://www.zombo.com

**Slidshare username**

**GitHub username**

**Dryad author name**
article


Twitter Mood as a Stock Market Predictor. (2011) Bollen, Mao Computer

slides

Cs11 - Keynote Johan Bollen

Slideshare
Twitter Mood as a Stock Market Predictor
(2011) Bollen, Mao Computer

saved by scholars

15 readers

98 98

cited by scholars

4 citations

75 94

slides

Csn11 - Keynote Johan Bollen

viewed by public

78 downloads

3067 views

discussed by public

4 comments

1 likes

4 shares

8 influential tweets
article

Co-authorship networks in the digital library research community

A principal component analysis of 39 scientific impact measures.

Twitter Mood as a Stock Market Predictor
(2011) Bollen, Mao Computer

slides

Csn11 - Keynote Johan Bollen
Slideshare
- Paid service
- Aimed at libraries and institutions
- Measures “artifacts”:
  - articles
  - book chapters
  - books
  - clinical trials
  - datasets
  - figures
  - grants
  - patents
  - presentations
  - source code
  - videos
• Usage - Downloads, views, book holdings, ILL, document delivery, software forks
• Captures - Favorites, bookmarks, saves, readers, groups, watchers
• Mentions - blog posts, news stories, Wikipedia articles, comments, reviews
• Social media - Tweets, +1's, likes, shares, ratings
• Citations - Web of Science, Scopus, Google Scholar, Microsoft Academic Search (Plum Analytics, 2012)
• **Strengths**
  – Largest and most diverse research outputs, sources of metrics
  – Could potentially incorporate other library metrics (e.g. IR pageview and download statistics)

• **Weaknesses**
  – No API available (for now)
• View demo here: http://www.youtube.com/watch?v=pRnU8aJQQ0U
How can librarians use altmetrics?

• Value added service
  – IRs, assessment reporting

• Determining value
  – Collection development, resource allocation

• Prove value to stakeholders
  – “Look at how much use our IR gets!” “Look at how many faculty we serve, and the attention their work receives!”

• Teach information literacy skills to patrons (identifying experts in certain subject areas)

• Conduct/filter our own research
Limitations

• Lack of author identifiers (disambiguation)
• Low (or zero) metrics available for some items (Piwowar & Priem, 2012)
• Gaming (Abbott et al., 2010)
• Little adoption among traditional publishers, libraries, and university administrators.


Q&A

• Download this presentation at:
  > http://hdl.handle.net/2022/586 <

• Get in touch!

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