IUScholarWorks, Statistics, and Altmetrics

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#dlbb
Overview

• IUScholarWorks Repository
• Usage statistics
• Altmetrics basics
• Altmetric.com
• Integrating Altmetric.com and DSpace
• Further work
• Discussion
IUScholarWorks Repository

Founded 2006
DSpace 3.1
10000 items+
7000+ authors
Usage Statistics

• Used to “assess the use, adoption, implementation, economics, and success of [institutional repositories]” (Borgman & Larsen, 2003)

• Usage statistics include:
  – Pageviews
  – Downloads
  – Abstract vs. full-text views (SSRN)
  – Web session length
  – Unique visitors, etc
Applied Usage Statistics in IRs

• Recommender systems (Bollen & Luce, 2002)

• Predict research trends (Bollen, Luce, Sekhara Vemulapalli & Xu, 2003)
  – Predict and meet user needs better than the JIF

• Rank the popularity of content based on web session length (Khoo et al, 2008)
Applied Usage Statistics in IRs

• Meaningful disciplinary metrics for subject repositories (Armbruster, 2008)
  – Abstract display counts
  – Page views
  – Document downloads

• Provide understanding of IR and research impact to authors, university/library administration (Konkiel & Scherer, 2013)
Challenges for IR usage statistics

- **Redundancy** (Hull, Pettifer & Kell, 2008)
- **Metadata inconsistencies** (Hull, Pettifer & Kell, 2008)
- **Author disambiguation** (Warner, 2009)
- **Disengaged faculty** (Janz & Wilson, 2008; Kim 2008; Xia & Sun, 2007; Xia 2007; Xia 2008)
- **Little context or understanding how content is used** (Wacha & Wisner, 2011)
Addressing the challenges

• Redundancy
  – Enhancing metadata with PIDs and citations
• Metadata inconsistencies
  – Librarian enhancement to reconcile disparate versions.
• Author disambiguation
  – ORCID & other author identifiers
  – Re-engineering of Dspace...or move on to another platform
• Disengaged faculty
  – Continue to support engaged faculty, allow control over metrics
• Little context or understanding how content is used
  – Altmetrics
STARTING SMALL: ADDING SIMPLE USAGE STATS FOR IUSCHOLARWORKS
Statistics in IUScholarWorks – the old way

Traditionally, usage statistics for IUSW repository were gathered in 3 ways

- **Apache logs**: comprehensive, but hard to use
- **DSpace logs**: more easily parsed, but not available to public
- **Google Analytics**: Useful and filtered, but not available to the public
Statistics in IUScholarWorks – the new way

DSpace 3.0+ incorporates:

• SOLR-based search data
• Dynamic filtering for robots and crawlers
• Page view and file downloads tracked
Statistics in IUSW Repository – LIVE!

File view and download statistics are available for every item in IUSW Repository.

Statistics now go back all the way to the beginning of the repository in 2007.

Custom conversion script used to convert Apache log files for stats before 2012.
STARTING SMALL: TESTING ALTMETRICS IN IUSCHOLARWORKS
altmetrics

Altmetrics = “Alternative metrics”
Track the usage and sharing of scholarly outputs on the social web

(Image via http://altmetrics.org/manifesto/)
What does Altmetric do?

- Measures the online attention surrounding journal articles and datasets.
- Collect and deliver article-level metrics to publishers, libraries, repositories, researchers, and more.

(Liu & Adie, 2013)
How does Altmetric work?

- Bookmarklet
- Altmetric Explorer
- Embeddable Badges
- API Access

(Liu & Adie, 2013)
Altmetric “badges”

- Displayed on journal and repository websites
- Embedded via javascript
- DOI or other identifier passed in as a parameter

(Via http://bit.ly/13YtCxt)

(Via http://bit.ly/11JbVQ1)
Integration with IUScholarWorks

Issues
• Getting access to Altmetric
• DOI vs. Handle
• Altmetric badge on XMLUI
• IU-branded landing page
• Allowing authors control over displaying metrics for their deposits
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“Altmetrics in libraries and institutional repositories,” Altmetric Blog, http://go.iu.edu/7IM
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Integration with IUScholarWorks

Technical Details

• New metadata element to hold altmetrics display toggle
• New config value to turn on altmetrics overall
• Edited input-forms.xml to show display toggle on item ingest
• Theme changes to add altmetric badge and link it to item handle
• Change in Navigation.java to control placement of badge
Future work

- Release code publicly
- Integration with DSpace stats page
- User testing & deployment
- Ranked lists for IR content
- Author profiles
- Exporting data for “business” analysis
References

Discussion

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Explore the Altmetric API: http://api.altmetric.com/

Source code and documentation:
https://wiki.dlib.indiana.edu/x/rI22Hg

Thanks to Euan Adie & Jean Liu (Altmetric)
Liu J & Adie E. “Altmetric: Getting Started with Article-Level Metrics.”
Presentation available at <http://www.slideshare.net/altmetric/>