

# Getting to Know Altmetrics

Julie Carmen, Librarian and Assistant Professor  
James E. Brooks Library

The Symposium Of University Research and Creative  
Expression (SOURCE) Presentation  
Student Union and Recreation Center (SURC)  
Central Washington University  
May 18, 2016



# Julie Carmen

## Altmetrics

What are Altmetrics?

Alternative Metrics

- Term first coined on Tweet, April 2013, by Jason Priem

Other Related Names:

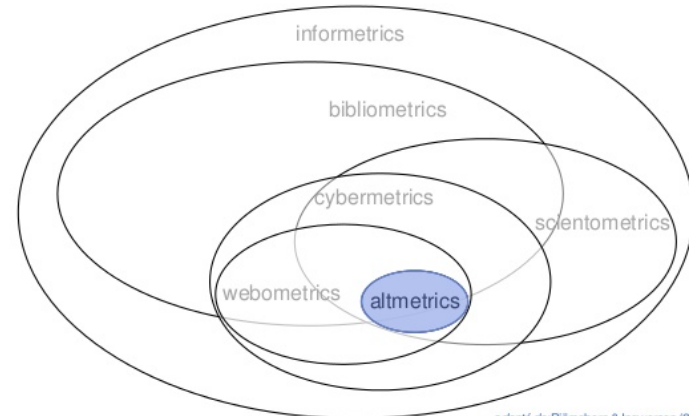
- Bibliometrics
- Cybermetrics
- Informetrics
- Scientometrics
- Tagometrics
- Webometrics
- Wikimetrics

How are they used?

Who is using them?

Why are they useful?

Altmetrics



adapté de: Björneborn & Ingwersen (2004, p. 1217)  
Björneborn, L. & Ingwersen, P. (2004). Toward a basic framework for webometrics. *Journal of the American Society for Information Science and Technology*, 55(14), 1216-1227.

[\(Mounce, 2013\)](#)

[Piwowar, 2013](#)

[www.slideshare.net](http://www.slideshare.net)



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## Altmetric Functions:

### Alternative Metrics

- Usage
  - Downloads
  - Views
  - Book Holdings
  - Inter Library Loan
  - Document Delivery
- Captures
  - Favorites
  - Bookmarks
  - Saves
  - Readers
  - Groups
  - Watchers



[\(Buschman, 2013\)](#)

[www.flickr.com](http://www.flickr.com)

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## Altmetric Functions:

- Citations
  - Citation Count
- Mentions
  - Blog Posts
  - News Stories
  - Wikipedia Articles
  - Comments
  - Reviews
- Social Media
  - Tweets
  - +1s
  - Likes
  - Shares
  - Ratings

([Buschman, 2013](#))

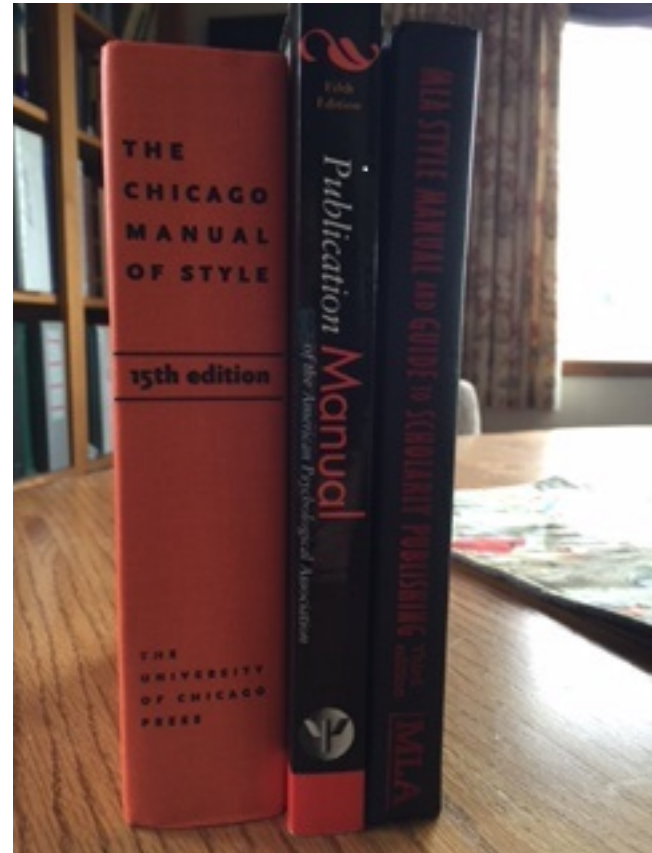


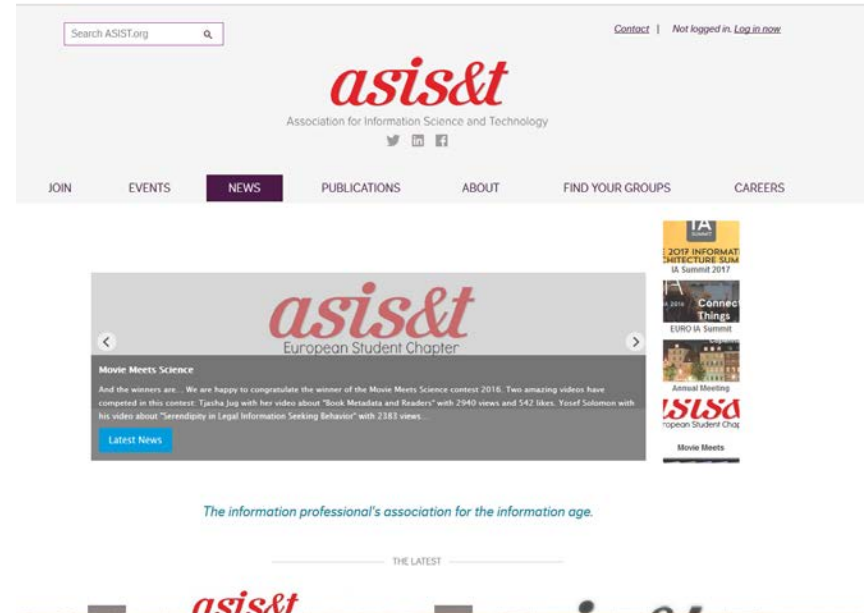
Photo by Julie Carmen



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## Association for Information Science and Technology (ASIST).

- Journal of Association for Information Science and Technology (JASIST)
- Bulletin of Association for Information Science and Technology
- ASIST proceedings
- ASIST special issues
- If member, log in to get full text
- Search title through Library's Onesearch



<https://www.asist.org/>



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## How are they used/created?

- Citation analysis or statistics
- Reader Statistics
- Enhance a scholar's CV
- Captures social media metrics
- Most common method: journal impact method.
  - How often an average journal article has been cited within a year.
- Number of times an article is cited by other articles.
- Transform scholarly communication:
  - Open Access
  - Digital Repositories
  - Research across emerging countries
  - Downloads and views
  - Blogged about
  - Bookmarked
  - Tweeted about, cited in Wikipedia, etc...



(Piwowar, 2013)

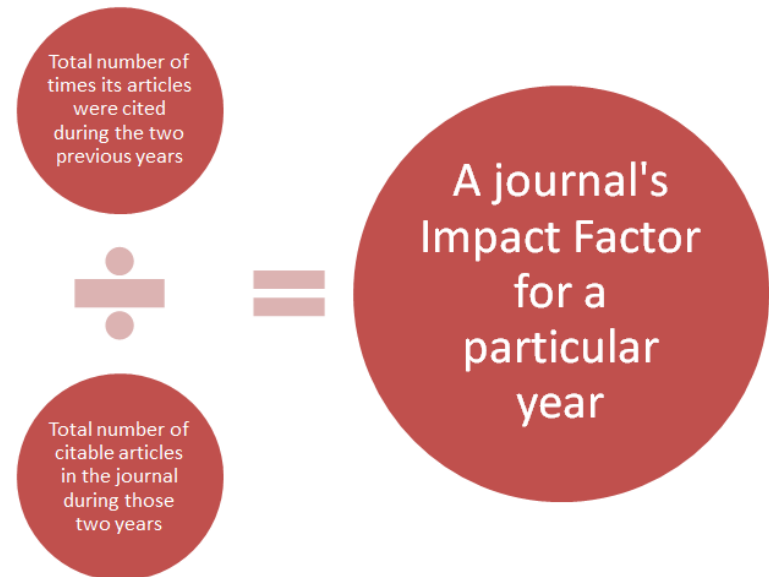
[writtent.com](http://writtent.com)



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## Bibliometrics

- Metrics about biblios
- A set of measurements about a book, or text, or articles, or other publications.
  - Bibliographic databases
  - Citation indexes
  - Statistical programs
  - H-Index
    - Number of articles published by author and the number of citations of that author



[\(Wilson, 2012\)](#)

[\(Lariviere, 2012\)](#)

University of Denver, University Libraries

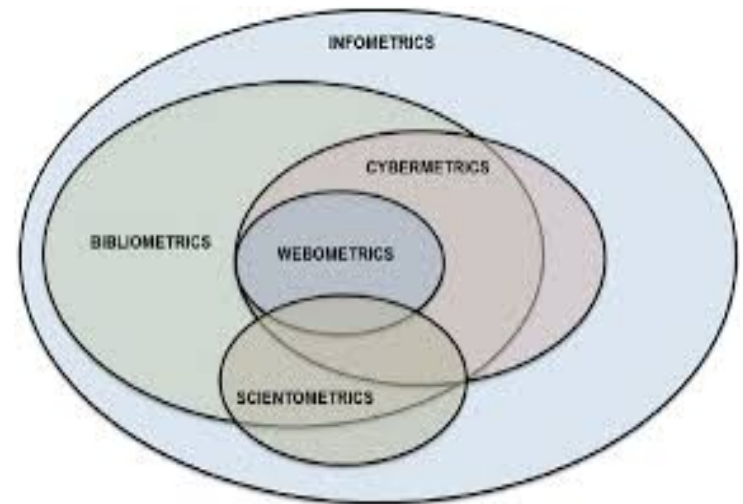
<http://libguides.du.edu/c.php?g=204307&p=1348066>



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## Cybermetrics

- Similar to Webometrics
- Measures the World Wide Web to get knowledge about the number and types of hyperlinks
- Attempts to create data from the World Wide Web and its usage patterns



(Martin, 2016)

[www.researchgate.net](http://www.researchgate.net)



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## Informetrics

- Sources for Informetric Analyses
  - Web of Science
  - Scopus
  - Google Scholar
- Application of Informetrics
  - Misuse and problems of accessing data
  - Need for local databases to construct meaningful metrics
  - Use of informetric principles in information retrieval and library settings, such as collection enhancement
- Data Aggregation and Cleaning



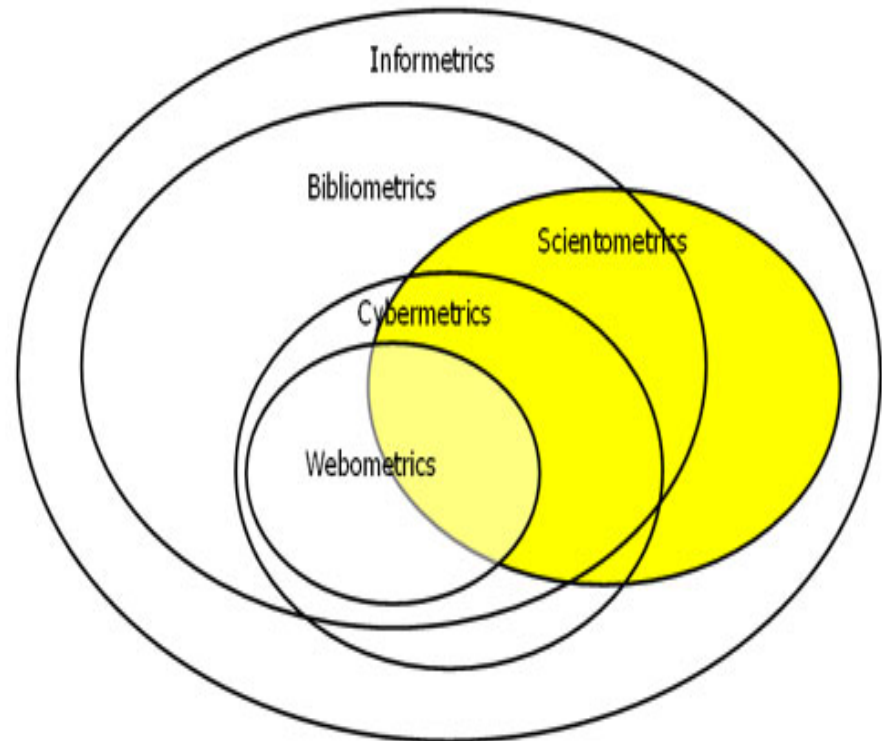
[\(Peters, 2014\)](#)

[twitter.com](https://twitter.com)

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## Scientometrics

- The study of measuring and analyzing science, technology and innovation
- Studies of Expenditures, Education, and Institutions
  - Focus on Institutional Repositories use and growth
- Metrics of quantitative studies of the science system
  - Evaluation of science and technology
  - Library collection development
  - Theories and methods pertaining to information retrieval



[bid.ub.edu](http://bid.ub.edu)

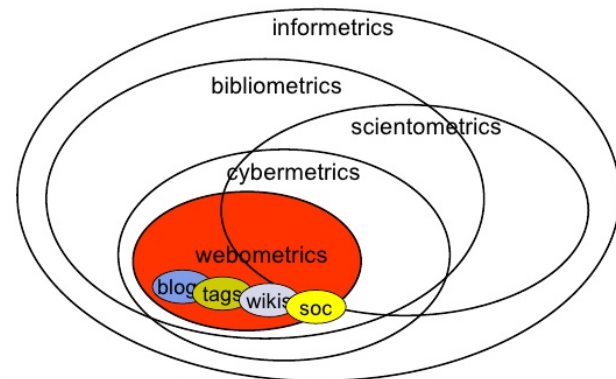
(Mayr, 2014)

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## Webometrics

- Term first coined in 1997 by Thomas Almind & Peter Ingwersen
- Web citation analysis
  - Counting online citations of published academic journal articles
- Social web analysis
- Co-inlink data
- Web Impact Factor
  - Metric for measuring & analyzing website hyperlinks
  - Web crawlers used to gather data
- Benefits
  - Allows students more time for data analysis and research design rather than data collection

(Thelwall, 2012)



## webometrics 2.0

- blogometrics
- wikimetrics
- tagometrics
- ... and sociometrics revisited

© Björneborn

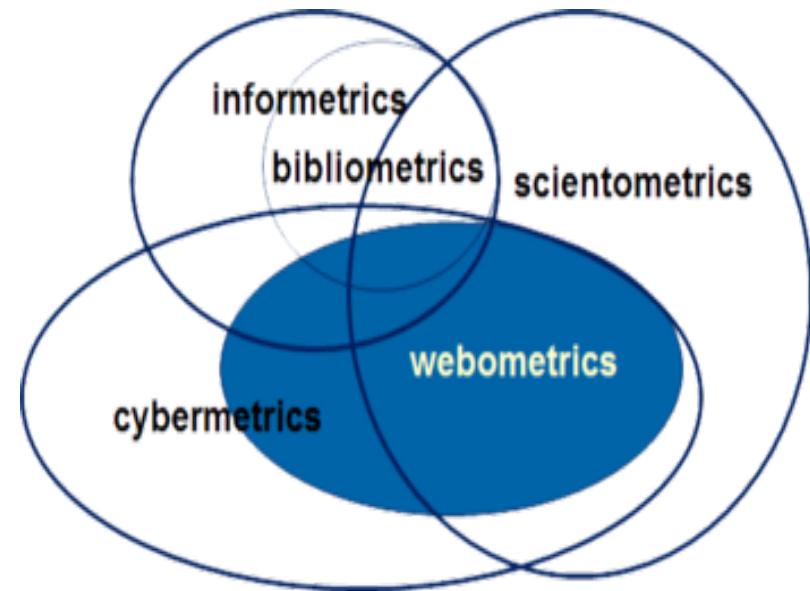
[www.slideshare.net](http://www.slideshare.net)



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## Webometrics

- Most like Altmetrics
- Developed in the tradition of the modern Library and Information Science
- Discipline increasingly dedicated to computer science
- Focuses on how information is transmitted
- Increasing even more with the growth of Social Media



[\(Martin, 2016\)](#)

[blogs.ubc.ca](http://blogs.ubc.ca)

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## Who is using/creating them?

- Digital Commons
- Elsevier – Scopus
- FactShare
- Google Scholar
- Google Analytics
- Mendeley
- ResearchGate
- Web of Knowledge
- Web of Science
- ...and many more



[\(Maflahi, 2016\)](#)

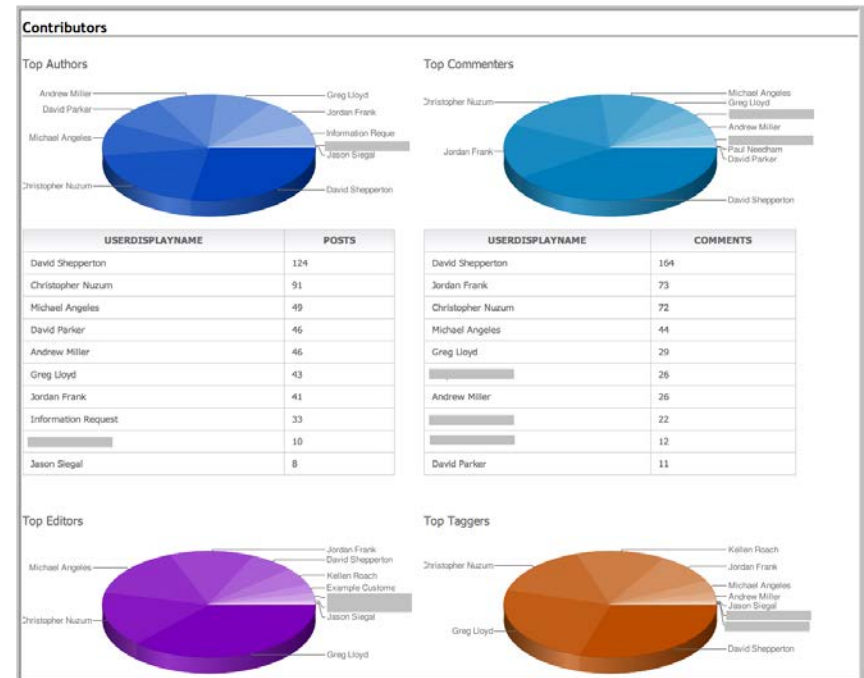
[www.hypehartford.com](http://www.hypehartford.com)



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## Why are they useful?

- Help with promotion
  - Enhance a scholar's CV, use metrics in an accurate, auditable, and meaningful way
- Locating specialists in our field of study
- Assists in determining journal cancellations or subscriptions for libraries
- Shows positive use of Open Access
- Scholarly Competition more competitive
  - gives us an edge
- Research budgets are tightened
  - Grant allocation decisions



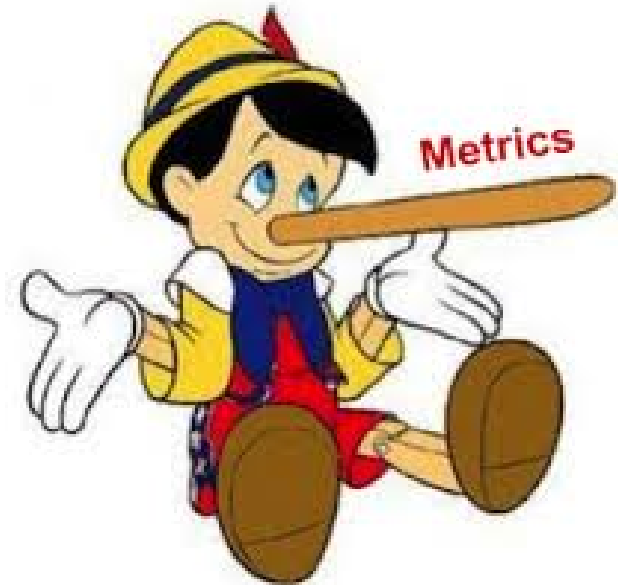
(Piwowar, 2013)

[tractionsoftware.com](http://tractionsoftware.com)

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## Are they really that useful?

- Numbers may not be accurate
  - Negative vs Positive views, not delineated
- Can be confusing
- A variety of metrics
- Not timely
- Traditional counts
- Negative citations
- The Matthew Effect
- Other Issues
  - Book reviews cited as books
  - Profiles not set up correctly
  - Different books and or articles on the same record



[www.truesocialmetrics.com](http://www.truesocialmetrics.com)

[\(Buschman, 2013\)](#)

[\(Martin, 2016\)](#)

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## Digital Impact

- Growing numbers of scholarship shared on the Internet.
- Creates diverse digital footsteps
- Social media continues to support research
- Researchers encouraged to create Web presence on social media websites including Google+ and Twitter.
  - To create higher visibility
  - Create a profile on the sites (BePress)
  - Survey of one conference attendees show:
    - 77% monitor their online images
    - 88% guard the reputation of their work online
    - 70% are on LinkedIn
    - 23% have public Google Scholar profiles
    - 16% are on Twitter



([Samoilenko, 2014](#))

[sproutsocial.com](http://sproutsocial.com)





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## ScholarWorks

- Digital Commons is a hosted vendor-based solution from Berkeley Electronic Press (bepress).
- Gives metrics on Downloads and Views or your scholarship.
- Contact Scholarly Communications Librarian at Brooks Library to find out how to have your scholarship uploaded onto ScholarWorks.

The screenshot shows the ScholarWorks website for Central Washington University. The header includes the CWU logo, the text 'Central Washington University', and 'James E. Brooks Library ScholarWorks'. Navigation links for 'Home', 'About', 'FAQ', and 'My Account' are visible. The main content area features a search bar with a dropdown menu set to 'in this repository', a search button, and a 'Notify me via email or RSS' link. Below the search bar are sections for 'Author Corner' (with links for Author FAQ, Guidelines, and Submit Research), 'Links' (with links for Terms of Use and Brooks Library), and a 'Browse Research and Scholarship' section with a 'Follow' button. This section lists several categories: All Collections, Faculty Scholarship and Creative Works, Student Scholarship and Creative Works, Community Projects, University Archives and Special Collections, Journals, and Conferences and Events. A featured collection, 'Suncadia Legacy Collection', is highlighted with a logo and a description: 'Check out photographs and interviews with residents of Kittitas County, WA, who talk about coal mining and cultural life in the mid-20th century. Support for this collection, and ScholarWorks, generously provided by the Suncadia Fund for Community Enhancement.' Below this is a 'Top 10 Downloads All time' section with a colorful bar chart.

(Konkiel, 2013)

<http://digitalcommons.cwu.edu/>



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