## Leverage Your VIVO Profiles with Modern Metrics to Tell the Stories of Your Research

Andrea Michalek, Bruce Herbert and Marianne Parkhill

Plum Analytics
Texas A&M University Libraries





### The Need





#### **Defining Goals**

### **TAMU Strategic Planning**

TAMU's embarking on the final phase of Vision 2020: Creating a Culture of Excellence.

To achieve this vision, TAMU will:

- Provide an outstanding educational experience for all students
- Produce impactful new knowledge, innovations, and creative works
- Place the needs of the public good at the forefront of our mission



#### **Strategic Planning 2015-2020**

We are embarking on the final phase of Vision 2020: Creating a Culture of Excellence, which articulates Texas A&M University's bold recognition of necessary institutional evolution required to achieve its mission as a land, sea, and space grant institution of global preeminence. Adopted in 1999, with an explicit vision for acceptance as a consensus leader among peer public institutions, more than 250 stakeholders worked to identify benchmarks, which if achieved, would enhance the value of Texas A&M University System, the State of Texas, and the nation.

The next five years will be critically important for Texas A&M University. The University as a whole – including all colleges and divisions – is currently formulating strategic plans for the period leading up to 2020. It is vital that all our planning efforts be as coordinated and inclusive as possible. To that end, the Office of the Provost, the Faculty Senate and the Council of Principal Investigators are jointly convening four planning forums, open to all faculty and staff and also broadcast by TTVN to our campuses outside College Station. The forums will be brown bag, with drinks provided.

#### Strategic Planning Process

Download PDF of Strategic Planning Process

#### Strategic Planning Open Forums

The forums will be organized as follows:

Forum 1 Tuesday, Feb. 10, 11:30 a.m. - 1 p.m., Rudder 601

[Download PDF of Highlights of Forum 1.]

Overview with discussion of university academic goals and measures of success

[Download PDF of Dr. Watson's PowerPoint slides.]

[Click here to watch video recording of the forum.]

Forum 2 Thursday, Feb. 26, 11:30 a.m. -1 p.m., Rudder 601
Dialogue on Texas A&M's strengths and inhibitors, both internal and external

[Download PDF of Highlights of Forum 2.]

[Click here to watch video recording of the forum.]

Note: There is a delay between the beginning of the audio recording and the start of the video recording.

Forum 3 Friday, March 13, 11:30 a.m. - 1 p.m., Rudder 601 Dialogue on strategies for excellence at Texas A&M

[Download PDF of PowerPoint Slides.]

[Click here to watch video recording of the forum ]

TAMU Strategic Planning, 2015-2020 http://provost.tamu.edu/initiatives/ strategic-planning-2015-2020





### Moving Forward

### The Manziel Effect

The University has a real commitment to improve.

Resources

**Legislative Support** 

Alumni Engagement







## **AAU Membership Policies**

The members of Association of American Universities should be comprehensive universities distinguished by the disciplinary breadth and quality of their programs of graduate education and research.

#### **Phase 1 Indicators**

- Competitively funded federal research support
- Membership in the National Academies (NAS, NAE, IOM)
- Faculty awards, fellowships, and memberships
- Citations: Thomson Reuters InCites<sup>TM</sup> citations (Web of Science) database

#### **Phase 2 Indicators**

- USDA, state, and industrial research funding
- Doctoral education
- Number of postdoctoral appointees
- Undergraduate education





#### **Scholarly Impact**

## (Re)Claiming The Narrative

Faculty want control of their narrative

http://www.aaup.org/reports-andpublications/academe







## **Empowering the Faculty**

Students learn what is assessed......

......Faculty act on what is measured.





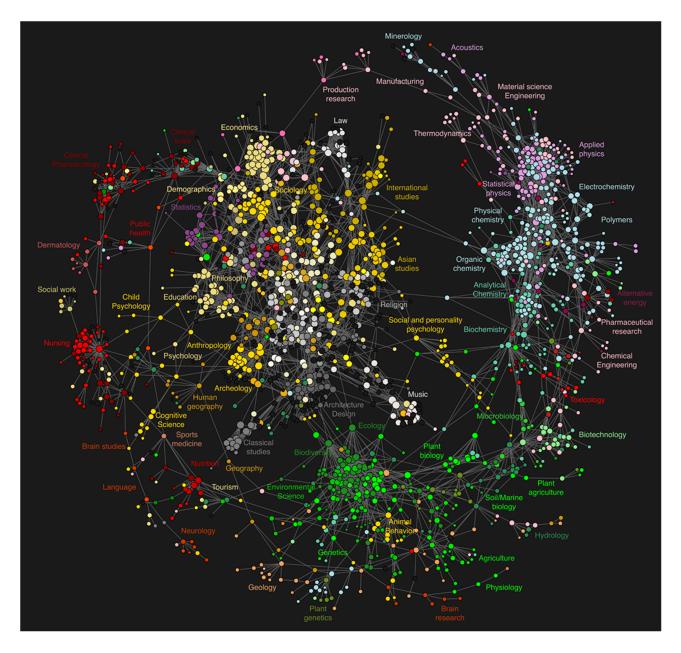
# Defining Goals Diversity in Disciplinary Communities

Books & Monographs

Articles

**Creative Works** 

Digital Projects/ Collections

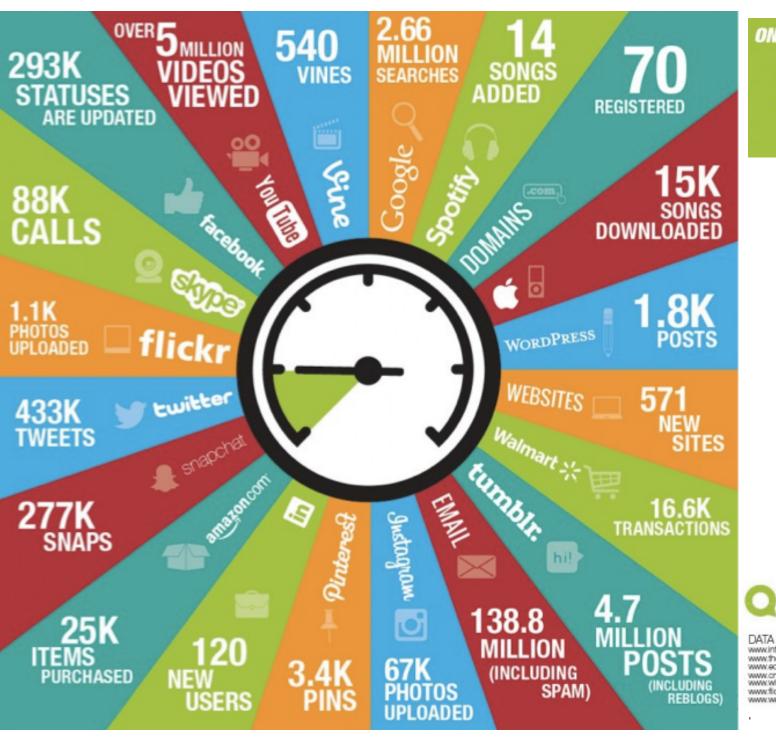


Bollen, J., H. Van de Sompel, A. Hagberg, L. Bettencourt, R. Chute, et al. (2009). Clickstream Data Yields High-Resolution Maps of Science. PLoS ONE 4 (3): e4803. doi: 10.1371/journal.pone.0004803.

## Tell the Story









omee.com

www.internetlivestats.com www.thesocialskinny.com www.econsultancy.com www.crn.com www.wkibon.org www.flickr.com www.weidert.com

www.linkedin.com www.tumblr.com moo.aroup.www www.amazon.com www.iacpsocialmedia.org www.flckr.com www.mashable.com

Measuring data exhaust to tell the story...

## TECHNOLOGY HAS FINALLY CAUGHT UP





## What is Research Output?

- Articles
- Blog posts
- Book chapters
- Books
- Cases
- Clinical Trials
- Conference Papers
- Data Sets
- Figures
- Grants
- Interviews

- Letters
- Media
- Patents
- Posters
- Presentations
- Reports
- Source Code
- Theses / Dissertations
- Videos
- Web Pages













**(...)** 











## Samples of PlumX Metrics Sources

- Amazon
- Bit.ly
- CrossRef
- Delicious
- Oryad
- dSpace
- EBSCO
- ePrints
- Facebook
- figshare

- Github
- 9 Goodreads
- **Section** Google+
- Medwave
- Mendeley
- PLOS
- PubMed Central
- Reddit
- Research
  Blogging

- Scopus
- SlideShare
- SourceForge
- Stack Overflow
- Twitter
- USPTO
- Vimeo
- w Wikipedia
- Worldcat (OCLC)
- YouTube





## PLUMX Metrics Categories



USAGE (clicks, downloads, views, library holdings, video plays)



CAPTURES (bookmarks, code forks, favorites, readers, watchers)



MENTIONS
(blog posts, comments, reviews, Wikipedia links)



SOCIAL MEDIA (+1s, likes, shares, tweets)



CITATIONS
(PubMed Central, Scopus, patents)







# clicks, downloads, views, library holdings, video plays

- Is anyone reading our work?
- Did anyone watch our videos?
- Usage is the #1 stat researchers want to know after Citation counts
- PlumX is the only product that includes Usage







## bookmarks, favorites, readers, watchers

- Captures indicate that someone wants to come back to the work
- Early indicator of future citations







## blog posts, comments, reviews, Wikipedia links

- This category measures people truly engaging with your research
- Automatically uncover the conversations about your research
- Discover feedback, opinions, etc.







## +1s, likes, shares, tweets

- Social media measures how well a researcher is promoting their work
- This is especially important for early career researchers to measure and understand
- Track the buzz and attention around your research output







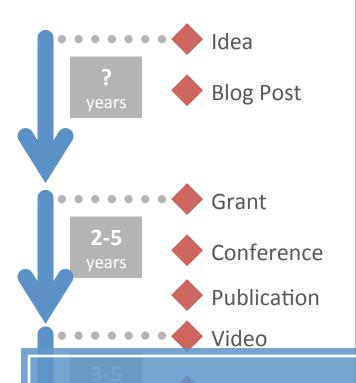
## PubMed Central, Scopus, patents

- Citations still a standard of long-term impact
- Including citations enables side-by-side analysis with other metrics categories

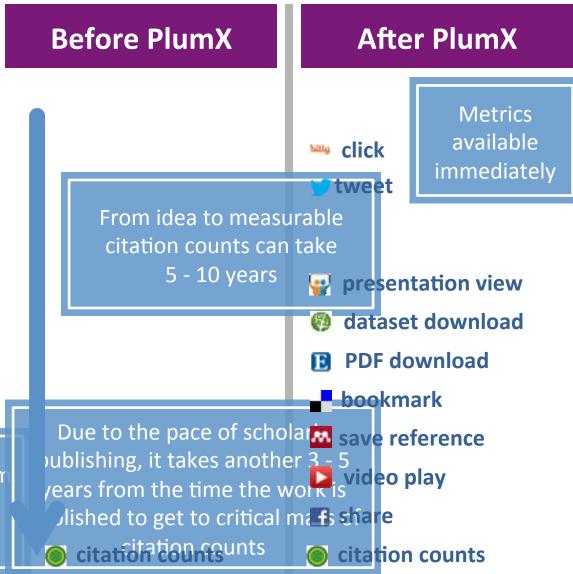




## Metrics timeline: From Idea to Impact



It can take at least 2 - 5 years from idea to a published peer-reviewed journal article







#### 5 Categories in Action – Example Article



Why Do People Transmit Word-of-Mouth? The Effects of Recipient and Relationship Characteristics on Transmission Behaviors

#### Usage

Bitly - Clicks: 11 Bitly - Clicks: 1

RePEc - Abstract Views: 430
RePEc - Downloads: 181
SSRN - Abstract Views: 15860
SSRN - Downloads: 4390

#### Captures

Delicious - Bookmarks: 1 Mendeley - Readers: 19

#### Mentions

Facebook - Comments: 5

#### Social Media

Facebook - Likes: 160 Facebook - Shares: 72 Google+ - +1s: 91

#### Citations

RePEc - Cited by: 1

Ratings

SSRN - Rating: 918

Article level metrics are the building blocks for PlumX





## Designing the Program





## Organizational Change Designing Systemic Programs

# Scholarly communication initiatives are focused on supporting behavioral changes





## Organizational Change Designing Systemic Programs



Numbers of People Changing Practice

#### Curdmudgeons

Motivated to maintain status quo. Change supported by mandates and policy

#### **Pragmatists**

Motivated by cost benefit analysis.

Change supported by
awareness program that highlight benefit,
service programs that address costs,
and design of IT systems that maximize benefits
and minimize costs

#### Idealists

Motivated by purpose & identity (calls to action). Change supported by awareness programs

#### Time





Organizational Change

Designing Systemic Programs

Student, Faculty & Societal Needs **Educate** Inform & Advise **Develop Awareness** Persuade & Inspire or Organizational Systems Infrastructure, Information that Empower Change & Overcome Barriers that Nudge Behavior Support **SCHOLARLY** Design COMMUNICATIONS **INITIATIVES** Policy, Mandates, and Workflows that **Guide Behavior** Guide

Institutional Goals



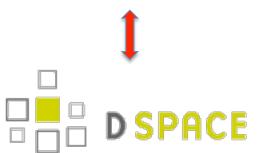


#### Design

## Scholarly Identity & Impact Information Ecosystem













Log in

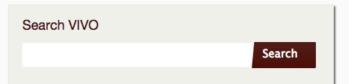
<u>Home</u>

Organizations

People

Research

About



#### Research

32,312

Academic Articles

View all ...

#### Faculty



Dronen, Norman O.



Lee, Kyung Hee



Crouse, Stephen F.



Mankin, Joseph M.

View all ...

#### Departments

- > Industrial and Systems Engineering
- > Teaching Learning and Culture
- > Petroleum Engineering
- Oceanography
- > Economics
- Marketing

View all ...



#### Statistics





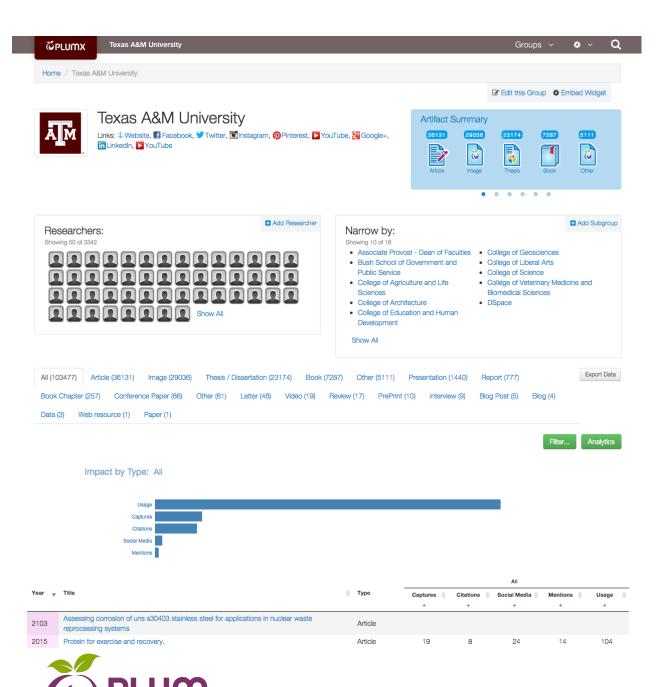










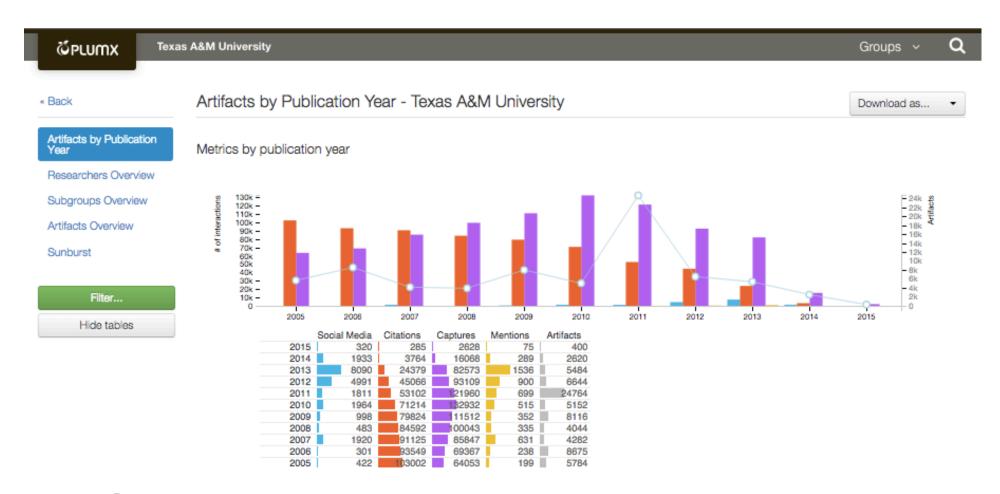


# Scholarly Identity & Impact PlumX Dashboard

https://plu.mx/tamu/g/

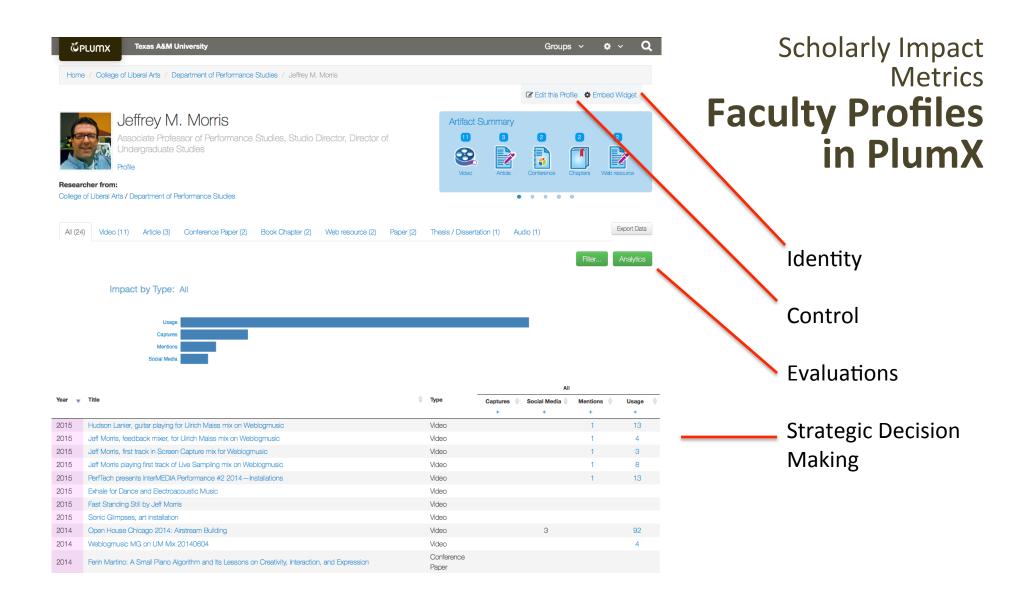


#### Analytics across all research output in VIVO









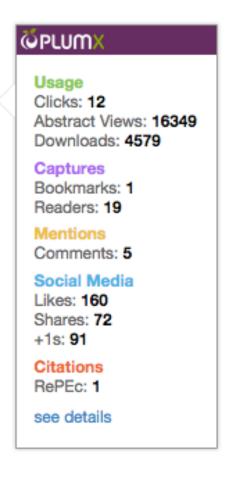




## Visualizing Impact: Plum Print

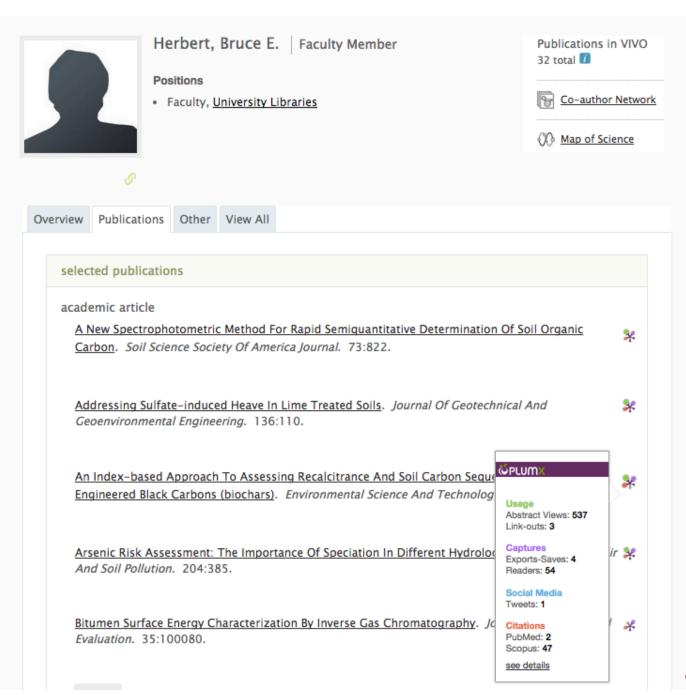
- Includes the 5 categories of metrics
- Circles dynamically change size based on metrics in each category







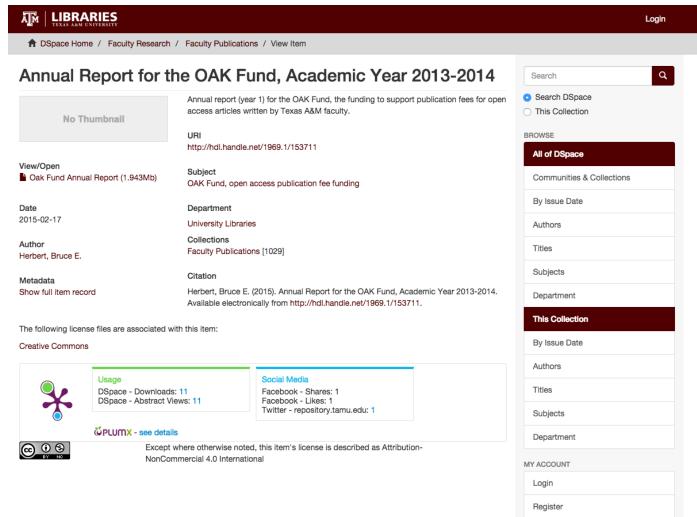




## PlumX Metrics in VIVO



## OAKTrust: Integrated PlumX Metrics







### **Expected Outcomes**

- Faculty empowerment through data
- Improved scholarly identity
- Productivity gains through enhanced business practices
- Open access





#### **Future Metrics**

- Scholarly conversation
- Societal impact
- Identify funding opportunities

Storify the tweets from a keynote



