ALTMETRICS

A Case Analysis of PLoS
Article Level Metric (ALM)

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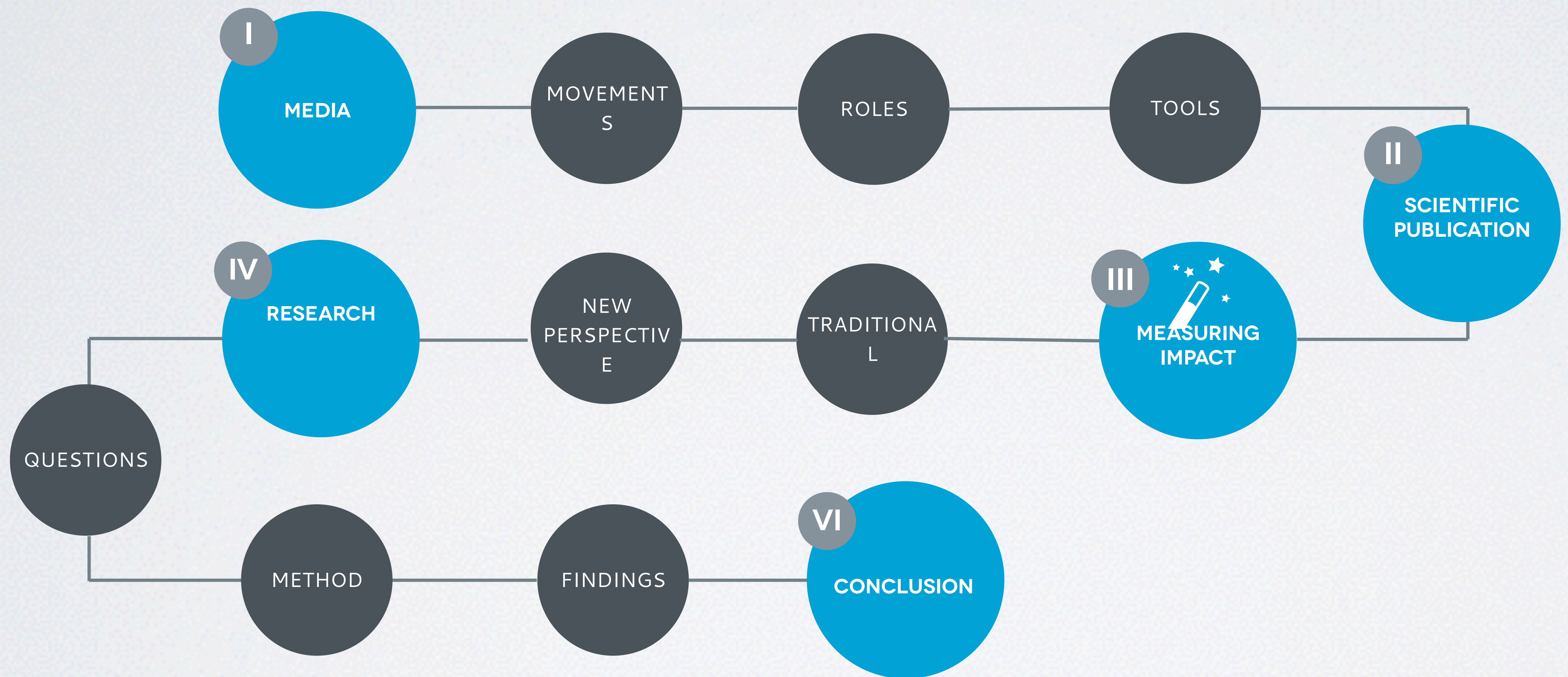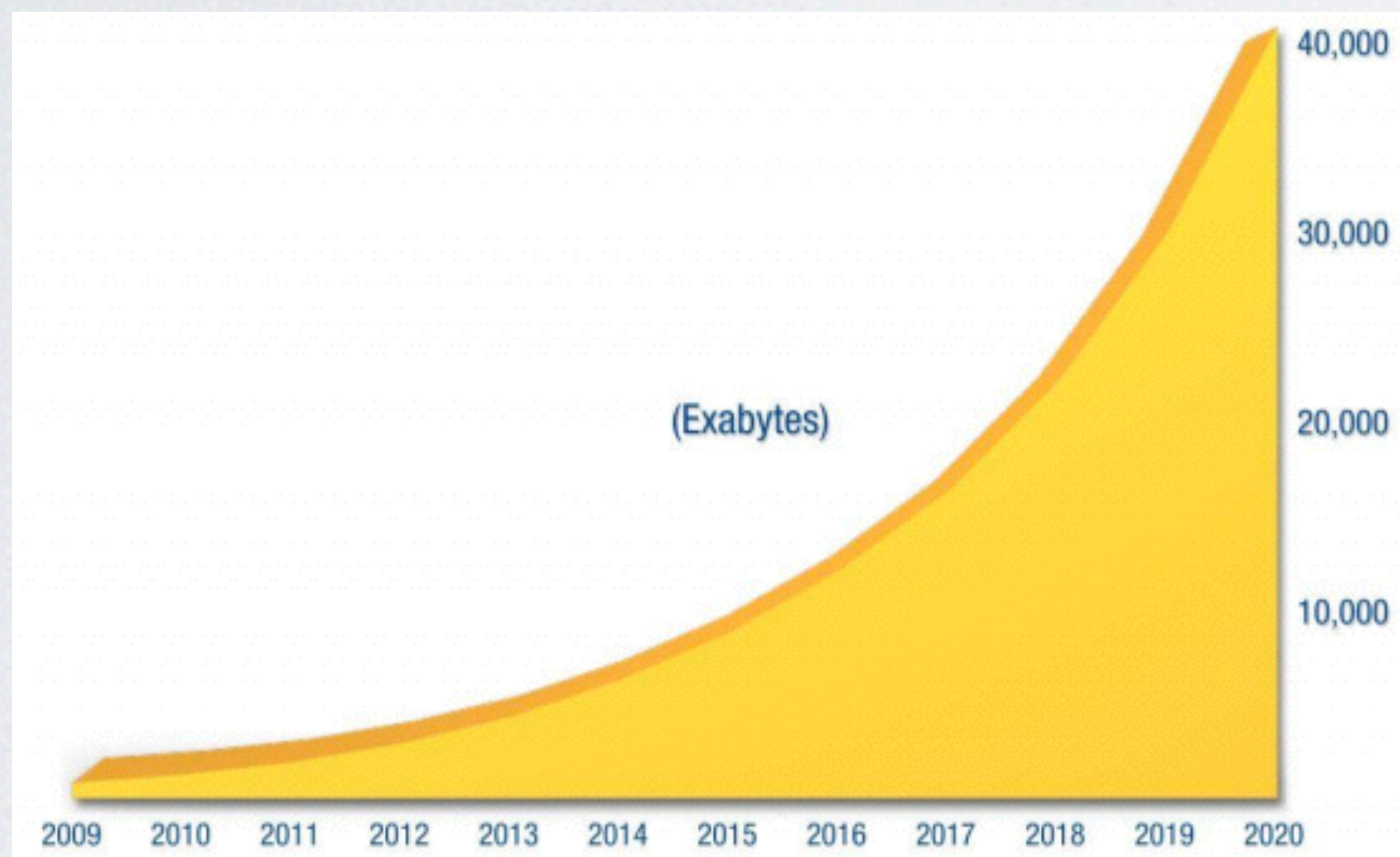06800, Ankara, Turkey
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PRESENTATION PLAN

I MEDIA — MOVEMENTS — ROLES — TOOLS

II SCIENTIFIC PUBLICATION

IV RESEARCH — NEW PERSPECTIVE — TRADITIONAL

III MEASURING IMPACT

QUESTIONS

METHOD — FINDINGS

VI CONCLUSION

MEDIA MOVEMENTS

- Diverse Expressions

- Online Viewership

- Producers v/s Consumers

Source: IDC's Digital Universe Study, sponsored by EMC, December 2012

EMERGING MEDIA ROLES

MANY–TO–MANY PATTERN

For the first time, media is natively good at supporting these kinds of conversations

CARRIAGE

Media is not just a source of information, it is increasingly more a site of coordination

PRODUCERS

Members of the former audience can now also be producers and not just consumers
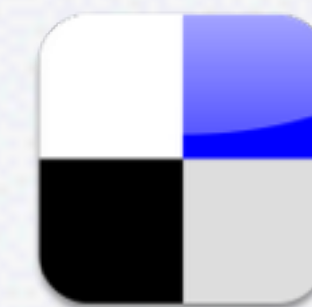
MEDIA TOOLS

REFERENCE MANAGERS

BLOGS

SOCIAL BOOKMARKING

SOCIAL NETWORKS

SCIENTIFIC PUBLICATION

- Raw Science Disclosure

- Semantic Publishing

- Nanopublication

- Widespread Self-publishing

http://altmetrics.org/manifesto/

TRADITIONAL METHODS
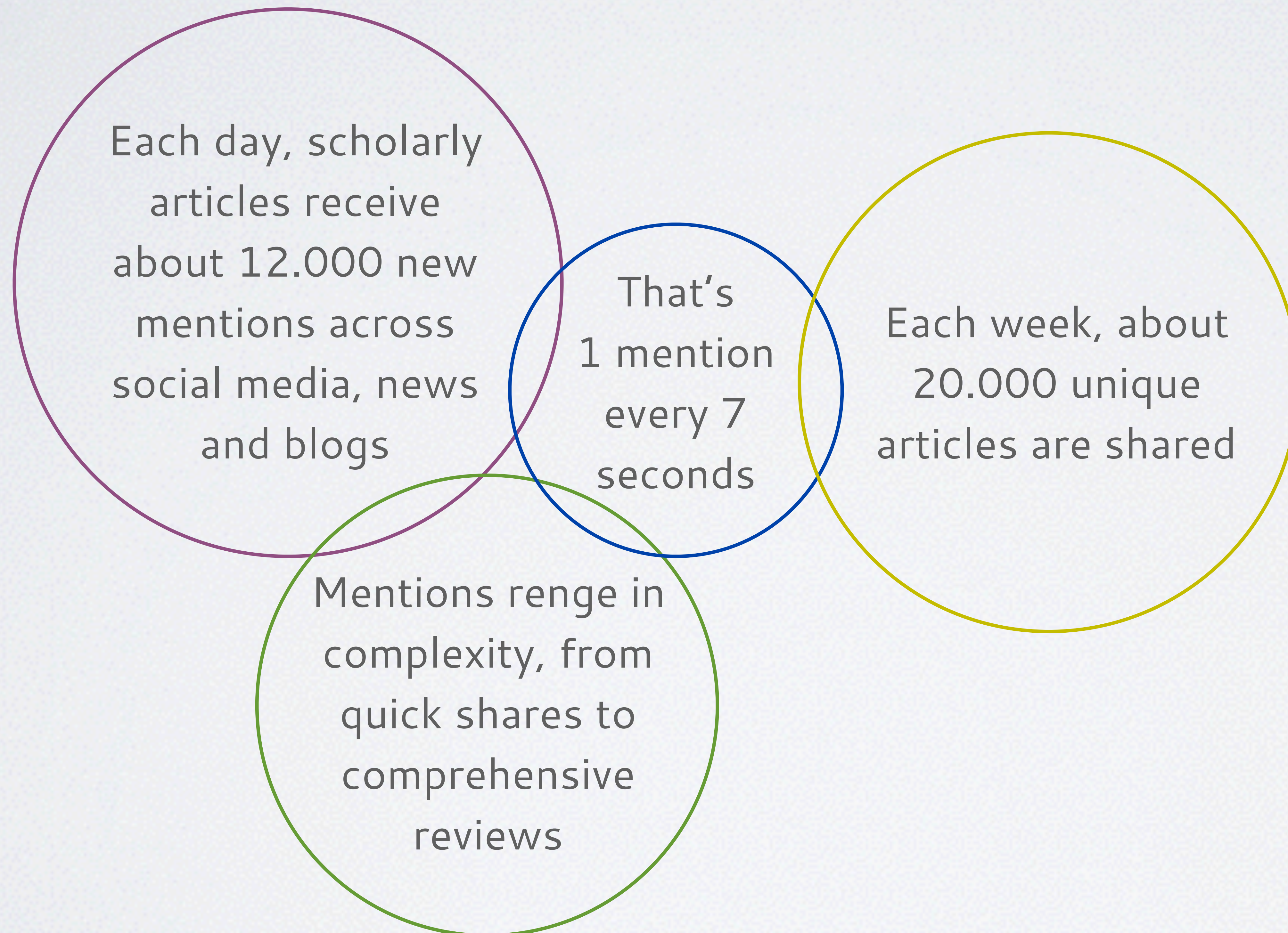
CITATION COUNTING

Slow and uncited

PEER-REVIEW

Slow, encourages conventionality, and fails to hold reviewers accountable.

IMPACT FACTOR

Journal level metric

SCIENTIFIC REACH AND RANGE

Each day, scholarly articles receive about 12.000 new mentions across social media, news and blogs

That's 1 mention every 7 seconds

Each week, about 20.000 unique articles are shared

Mentions renge in complexity, from quick shares to comprehensive reviews

http://www.slideshare.net/altmetric/altmetric-getting-started-with-articlelevel-metrics

MEASURING IMPACT

Article published: 24 July 2013
Screenhsot: 20 August 2013

NEW PERSPECTIVE ON IMPACT

Traditional
Metrics

+

Alternative
Metrics
"Altmetrics"

ACADEMIC IMPACT

Journal Impact Factor
Citation Counts
Peer-Reviews

SOCIAL IMPACT

Download Counts
Page Views
Mentions in news reports
Mentions in social media
Mentions in blogs
Reference manager readers
...

ALTMETRICS

Jason Priem (2009)

Non-Traditional Forms of Impact

Complementary to Traditional Citation-Based Analysis

Not "alternative to citations"

"Bibliometrics mined impact on the first scholarly Web.

Altmetrics mines impact on the next one."

RESEARCH QUESTIONS

Is the impact of an article on the Internet sensitive enough to forecast an increase in citations?

Are "impact factors" and "total citation numbers" of the journals in which there are articles, having high impact (Altmetrics values) values higher?

Do metric statistics show changes over the years?

METHOD

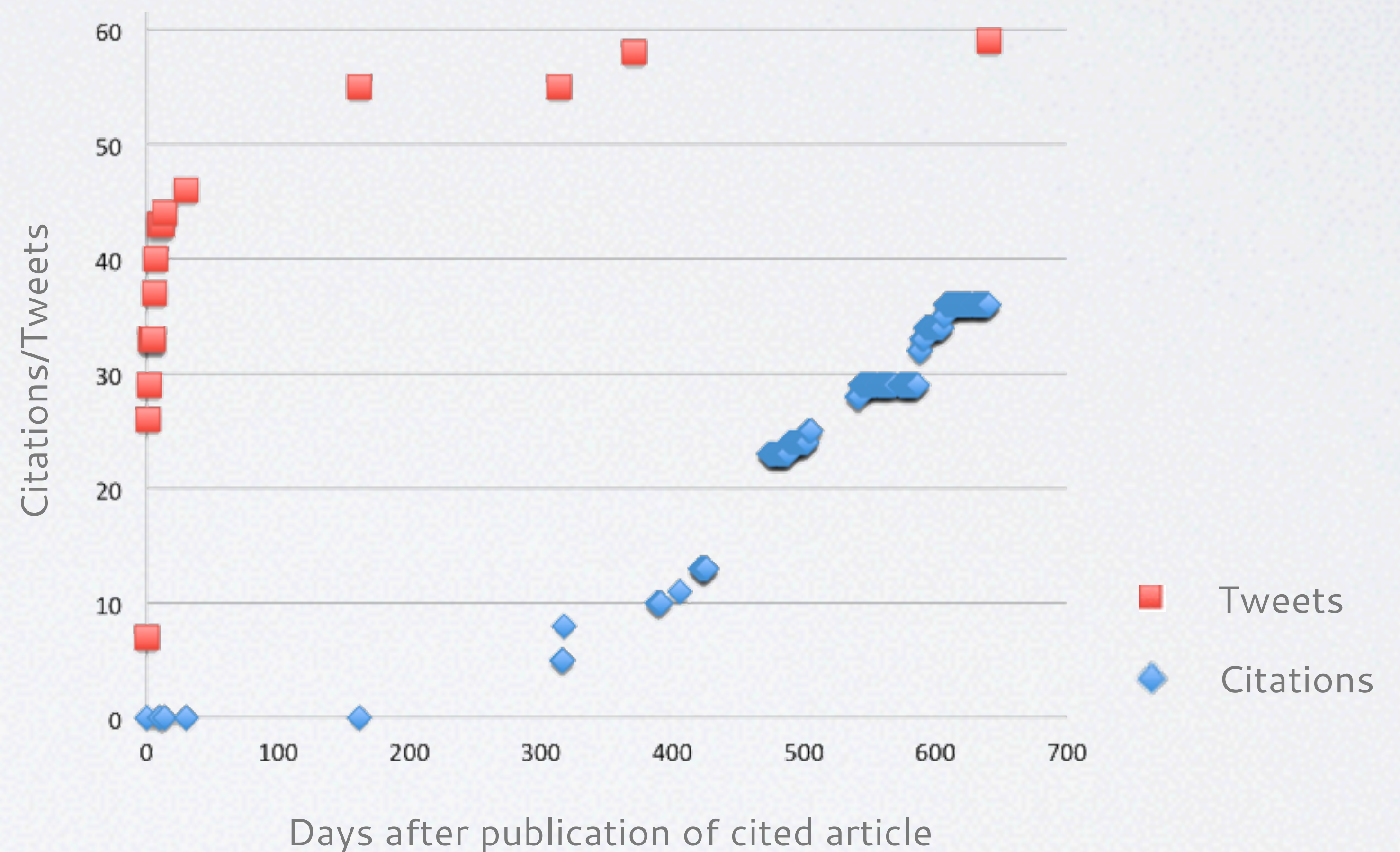PLoS Article-Level Metric (ALM) data set

78386 articles, eight PLoS journals between 2003-2013.

R statistics programming, Numbers, SPSS and Tableau

CAN TWEETS PREDICT CITATIONS?

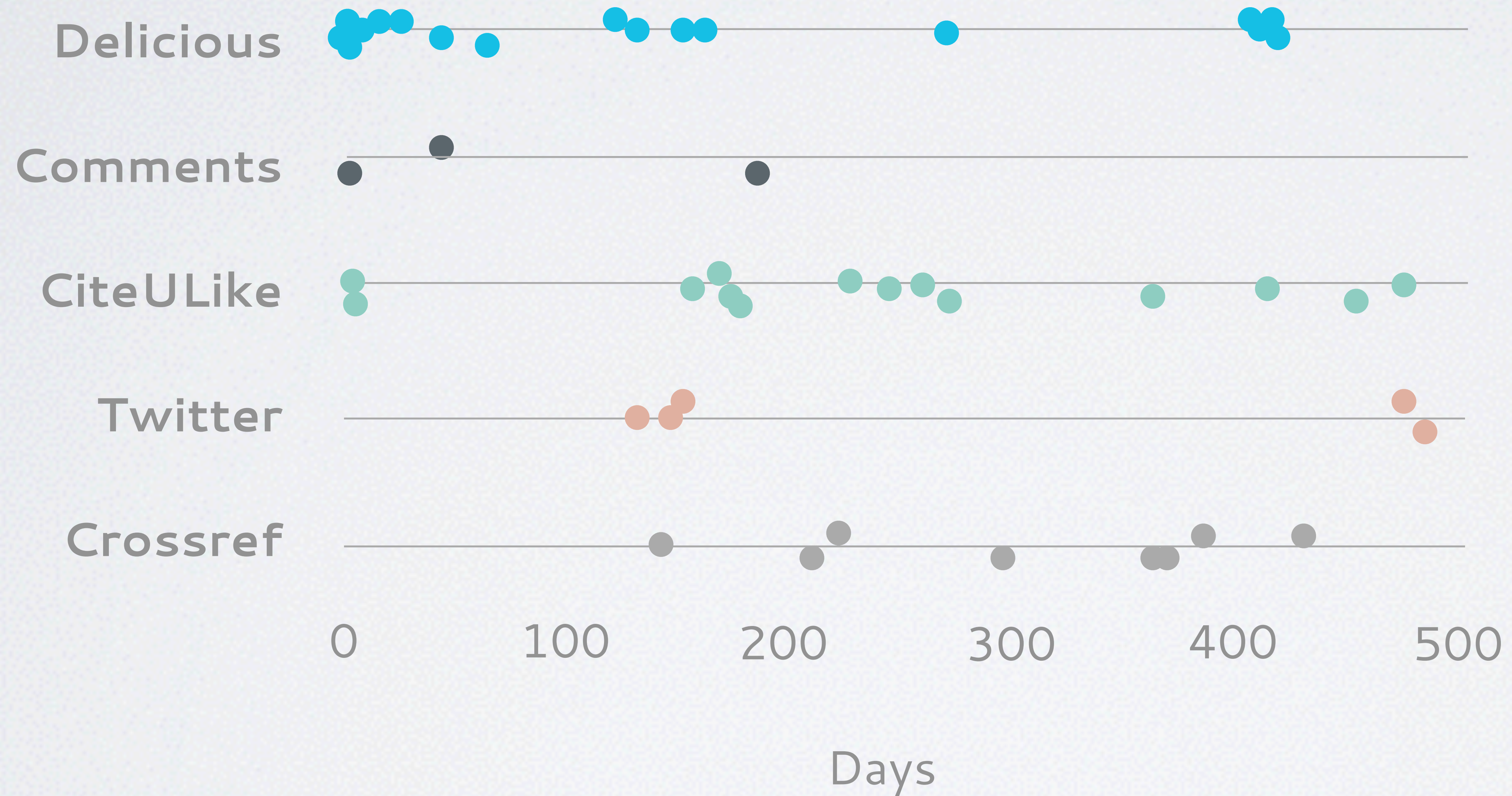Articles in top quartile by tweets after one week are 17 times more likely to be in top quartile of citations later.

CORRELATION AMONG DERIVED FACTORS

TWITTER TIMELINE

Days

CONCLUSION

- Crowdsourced Peer-Review Is Quick and Efficient

- JIF v/s Altmetrics

- Real-time Recommendations and Collaborative Filtering

- Recommendations for Future Research

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