

The background of the slide is a honeycomb pattern. The top and bottom edges feature a close-up photograph of a honeycomb with several bees. The central area is a light gray overlay with a faint, repeating pattern of bees and honeycomb cells.

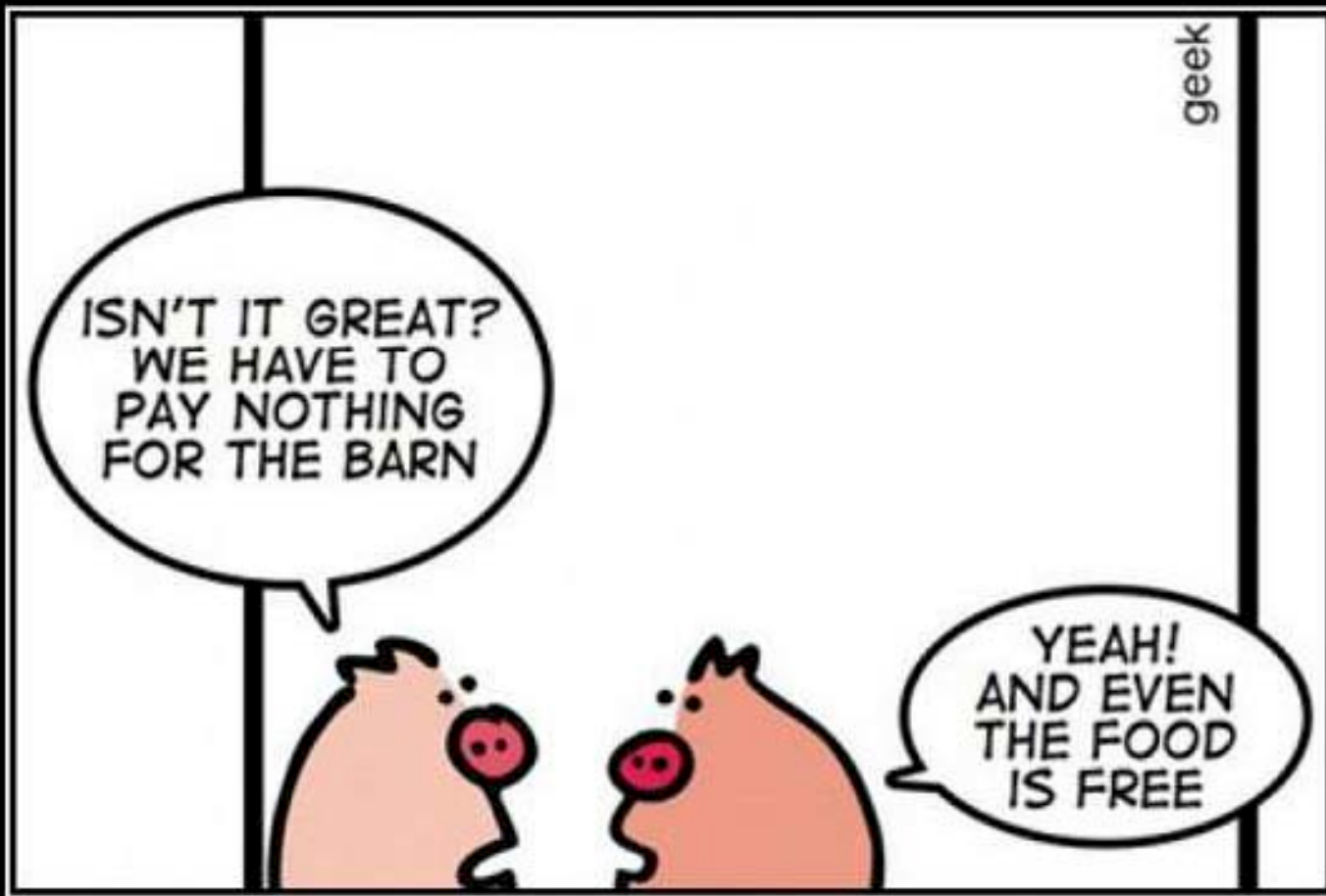
Trust & Transparency

Weshalb Wikipedians gut für unsere Gesellschaft sind

Peter A. Gloor

MIT Center for Collective Intelligence

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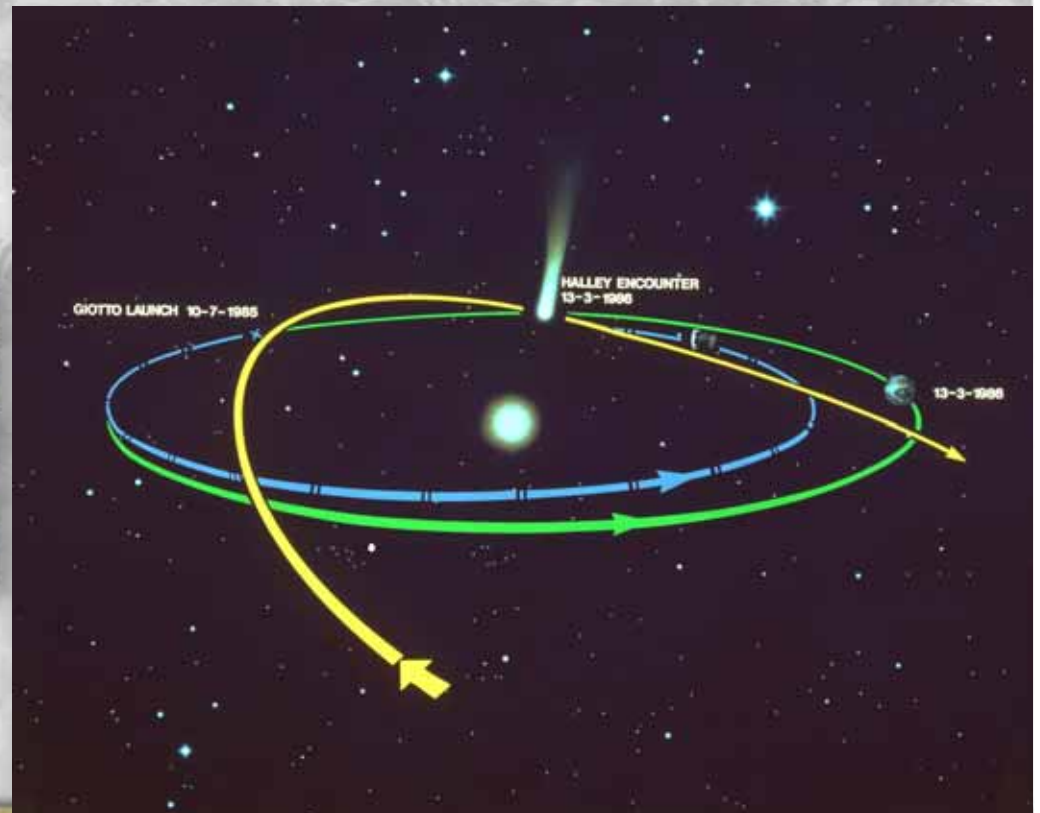


FACEBOOK AND YOU

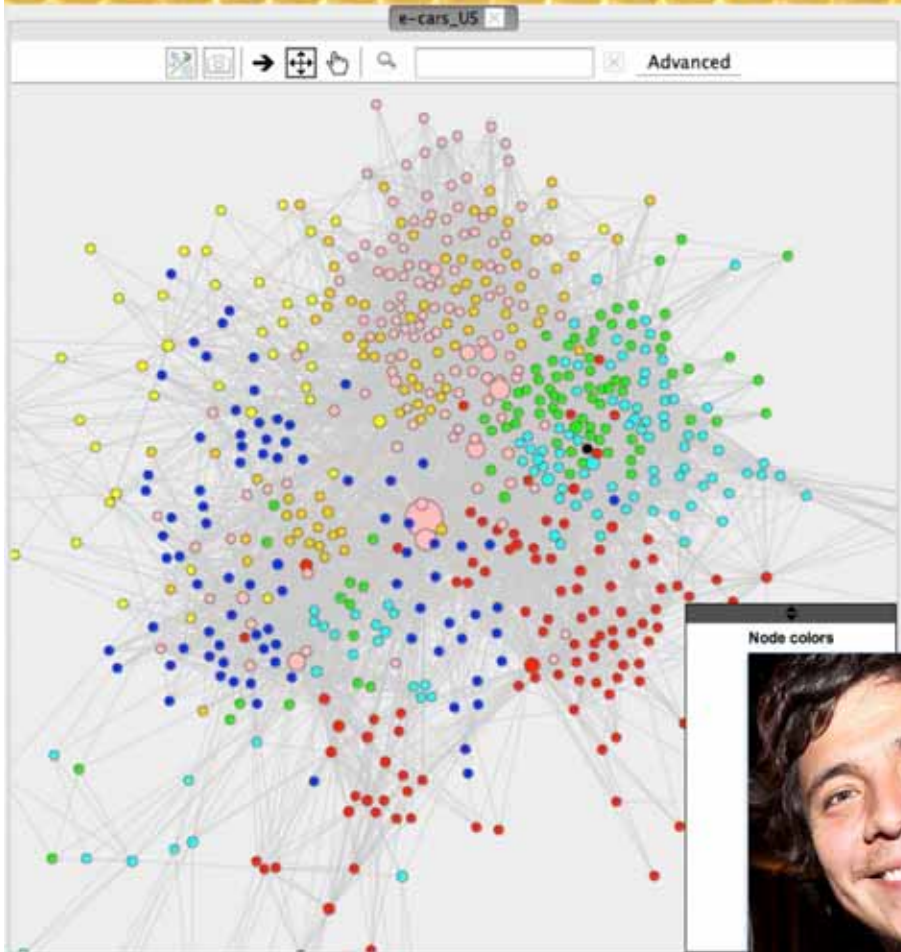
If you're not paying for it, you're not the customer. You're the product being sold.

Predicting the future

Learning from the past to optimize the future



Social Forecasting



**Making the
invisible hand
visible!**





Why crowds are stupid and swarms are smart



What about Al Quaeda?

الفرقان

Trust &
Transparency



Coolhunting (for swarms)



Global

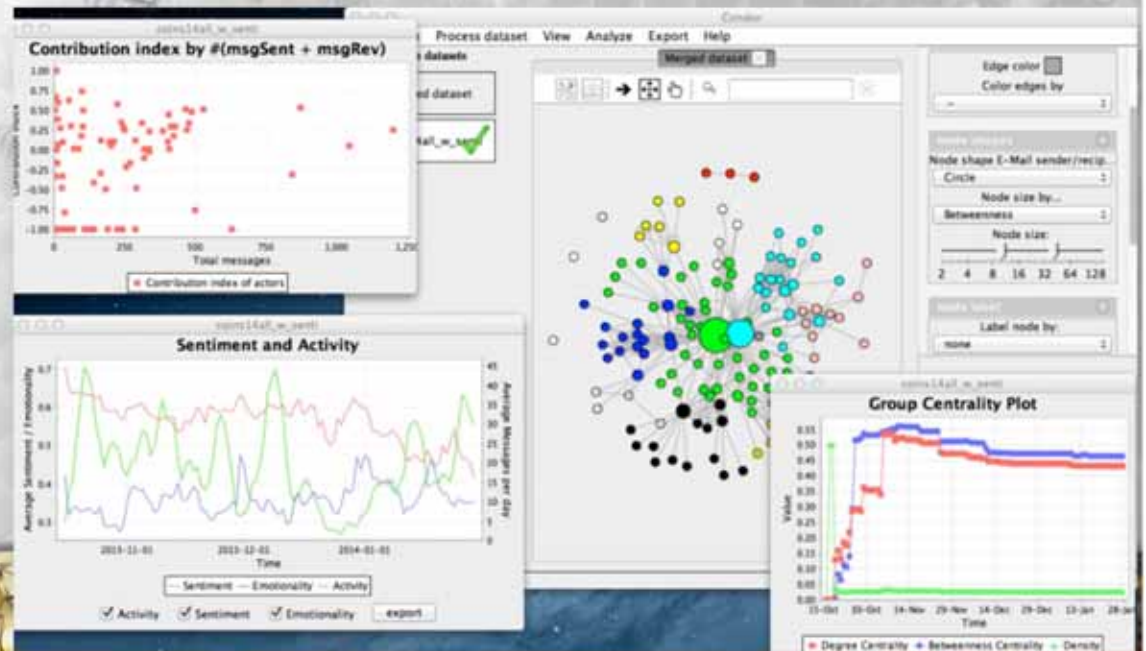
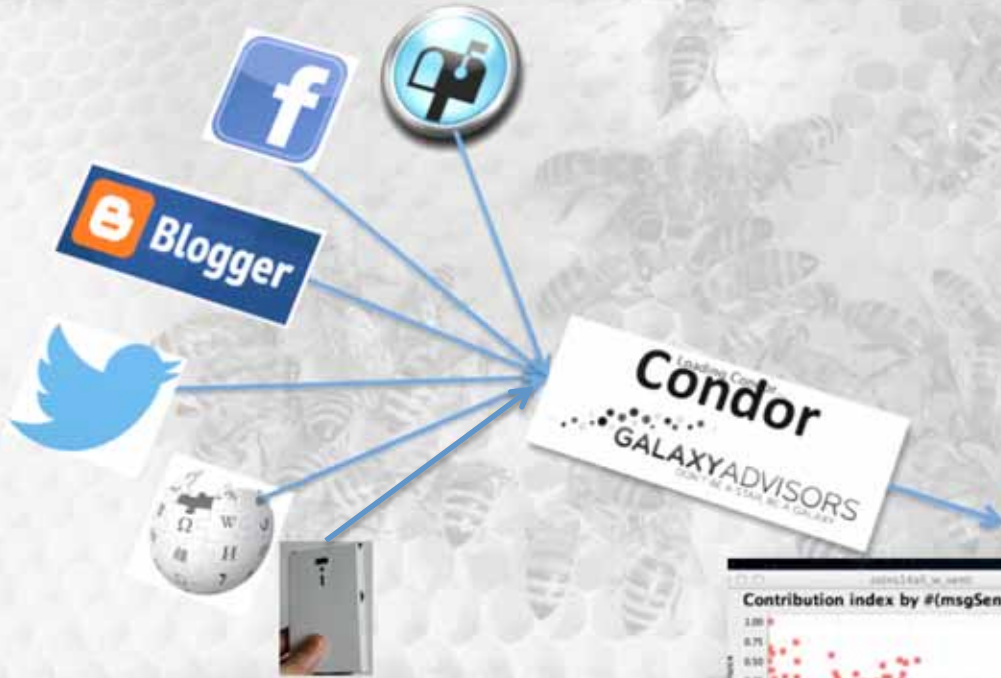


Organizational

Individual



Coolhunting with Condor



Twitterers have nothing to say



Barack Obama ✓
@BarackObama

7,542
TWEETS

671,052
FOLLOWING

21,545,329
FOLLOWERS



Justin Bieber ✓
@justinbieber

19,195
TWEETS

122,602
FOLLOWING

29,627,781
FOLLOWERS



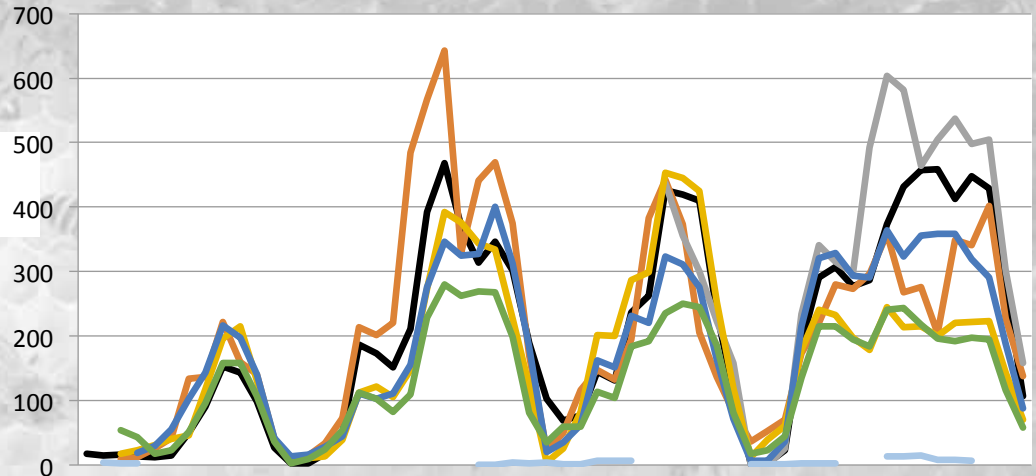
Michael Mosley
@DrMichaelMosley

Science journalist, TV presenter, Self Experiment

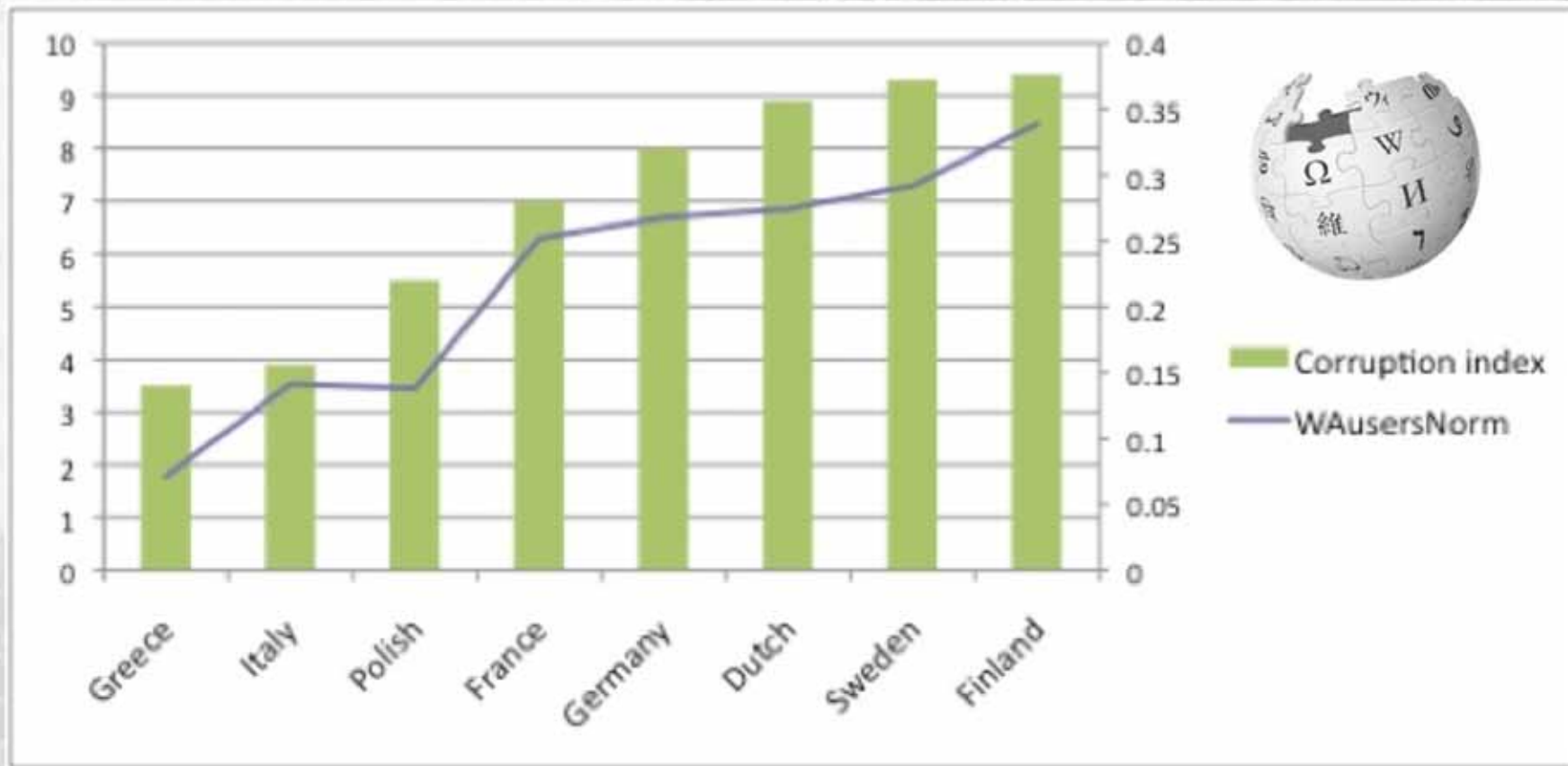
2,463
TWEETS

25
FOLLOWING

23,825
FOLLOWERS



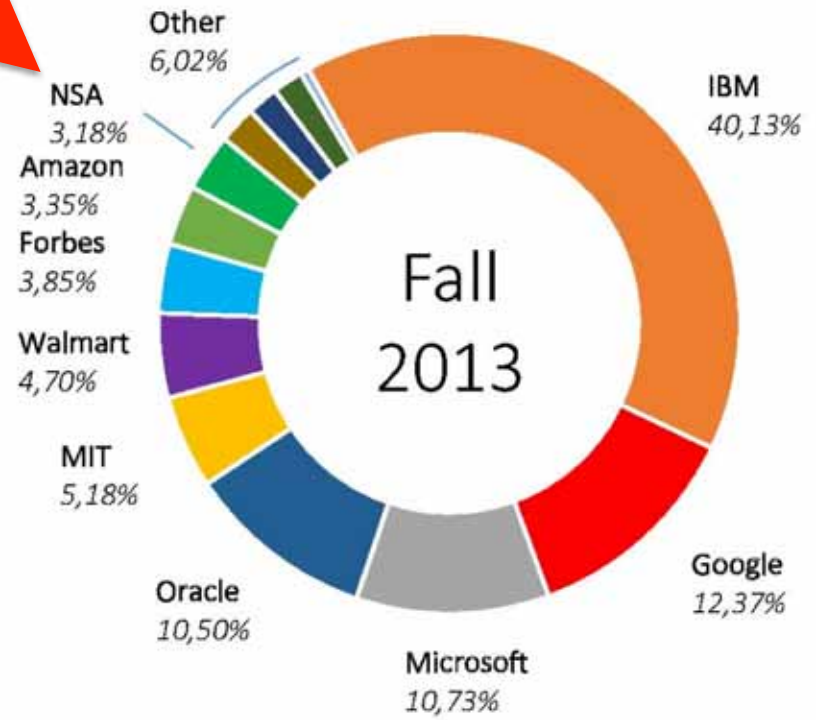
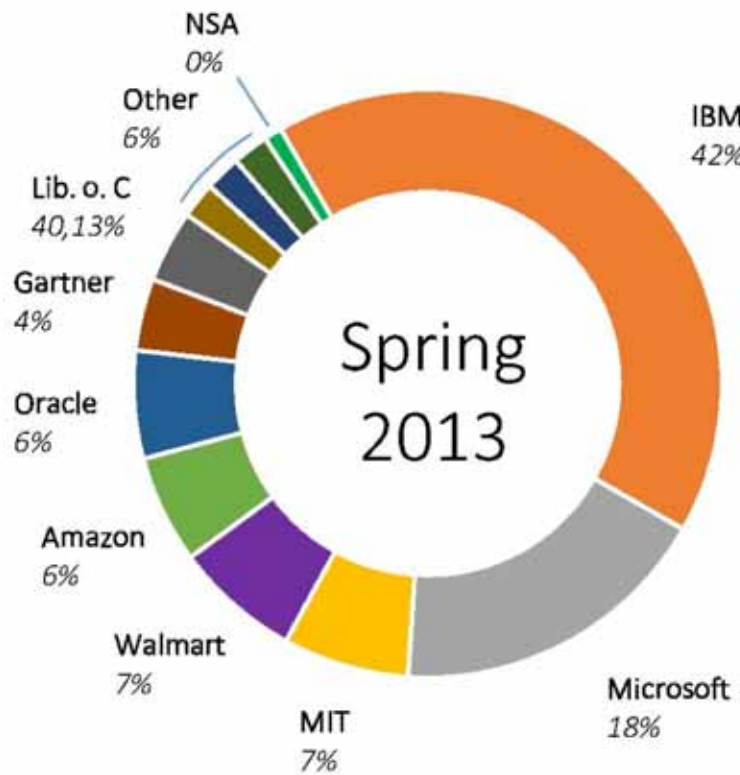
Wikipedians are good for the economy





Julian Braun, Tuomo Eloranta, Patrick Hiesel,
Charlotte Leroy, Michael Menzel, Jim Qian

Big data companies | *Wikipedia*

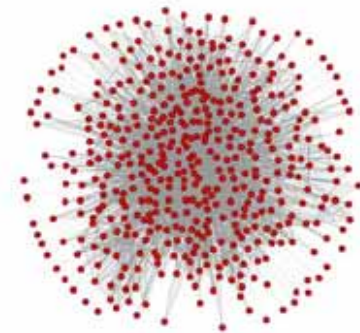
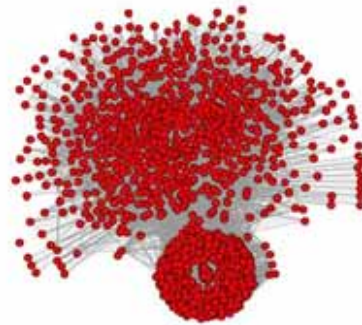


Scandal Discussion | *Wikipedia*

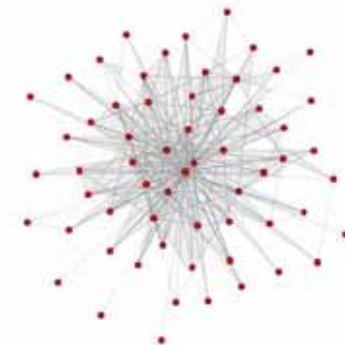
English

German

unidirectional



bidirectional





Six Problems With Big Data

1. Too many correlations
2. No replacement for science
(genetics, protein structure, ...)
3. Gaming big data
(e.g. automatic grading, sentence length, Google bombing)
4. Results might be one-time shots (Google Flu trends)
5. Echo-chamber effect (Web statistics change)
6. Put science on imprecise questions

- http://www.nytimes.com/2014/04/07/opinion/eight-no-nine-problems-with-big-data.html?nl=todaysh headlines&emc=edit_th_20140407





Honest Signals



Analysis Process



1. Filter E-Mail (personal, organizational) SMS, Whatsapp, Facebook, etc.

From: Account1@
To: Account1@
Cc: Account1@

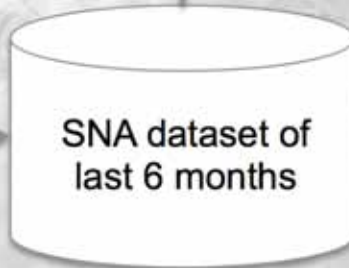
2. Load into Condor Database

Loading Condor...

GALAXYADVISORS
DON'T BE A STAR, BE A GALAXY

Group betweenness centrality
Group degree centrality
Variance in contribution index
Density

3. Calculate SNA metrics



4. Predict Score

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.899 ^a	.808	.664	19.1390482

a. Predictors: (Constant), Resp_DB_Q1, groupMsgSent, group_bc, NPS_H1_11, group_dc, NPS_H2_11, NumActors, group_ci, groupMsgRev

	Peter	John	Mary
Central leader			
Rotating leadership			
Responsiveness			
Initiative			
Sentiment			

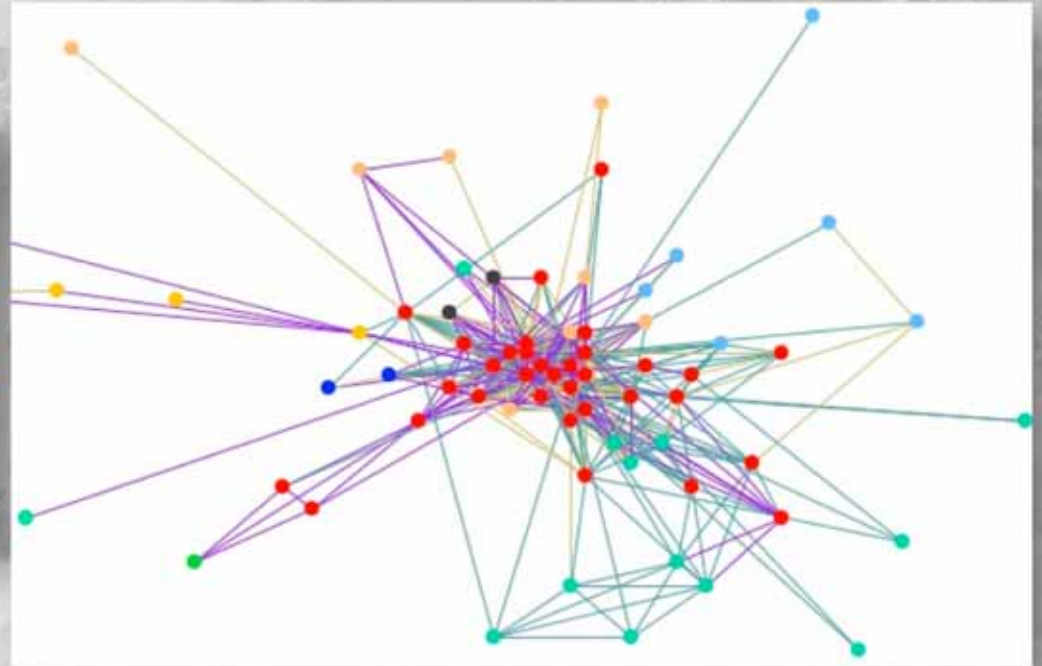
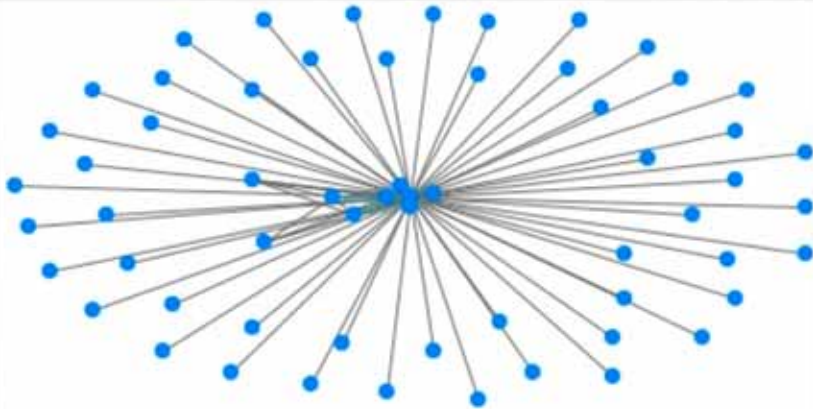
Extracting **Honest Signals** from Social Networks

Constructs	Variables	Operationalization	Implications
Connectivity	Group Density		Dense networks are more resilient; sparser networks have greater potential to access variable sources of information
Group Centrality	Group Betweenness Centrality	Fraction of shortest paths between every possible pair of nodes that pass through at least one node in the group	Identify stages of team development and characterize team leadership structures.
Rotating Leadership	Oscillations in Actor Centrality	Oscillations in Actor Betweenness Centrality, how often an actor connects a pair of actors who would not otherwise be connected	Indicative of changes in leadership structures and deference to expertise
Contribution Symmetry	Variance in Contribution Index	CI = an individual's proportion of sent-to-received email messages	Low variance in CI of team members indicate comparable levels of interactivity in which no one actor dominates
Responsiveness	Average Response Time	Average of team members' average response times for email messages in	Responsiveness within a COIN may predict performance
Group Emotionality	Emotionality Ratio	$\frac{(\% \text{ positive words in email messages})}{(\% \text{ negative words in email messages})}$	The extent to which the words used are emotionally charge; balance between positivity and negativity

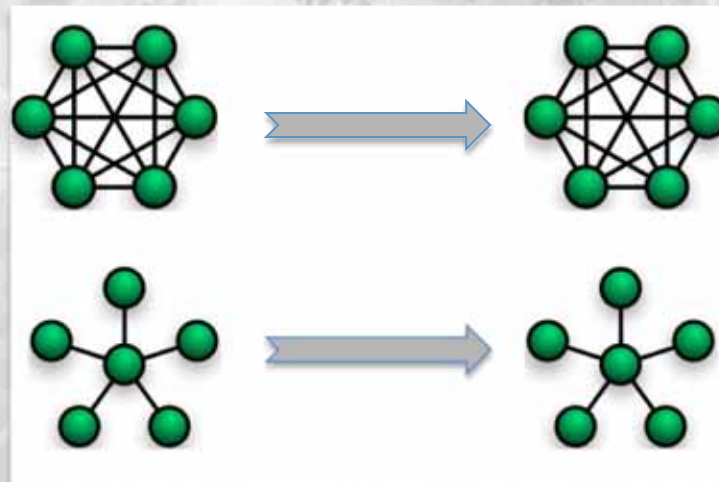
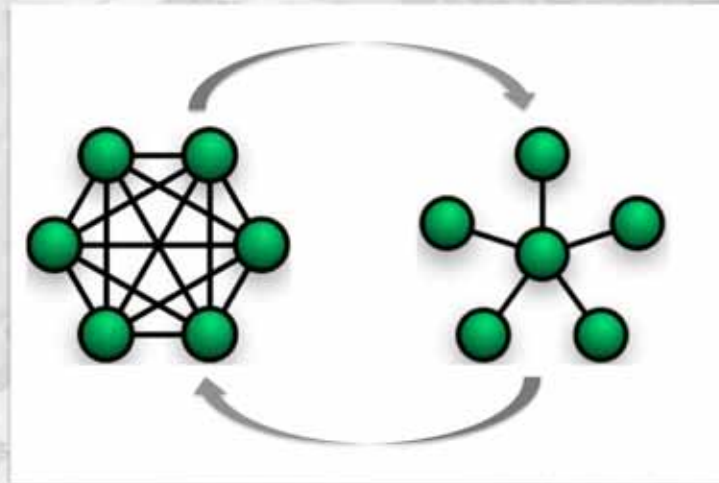
1. Central Leadership

De-centralized leadership

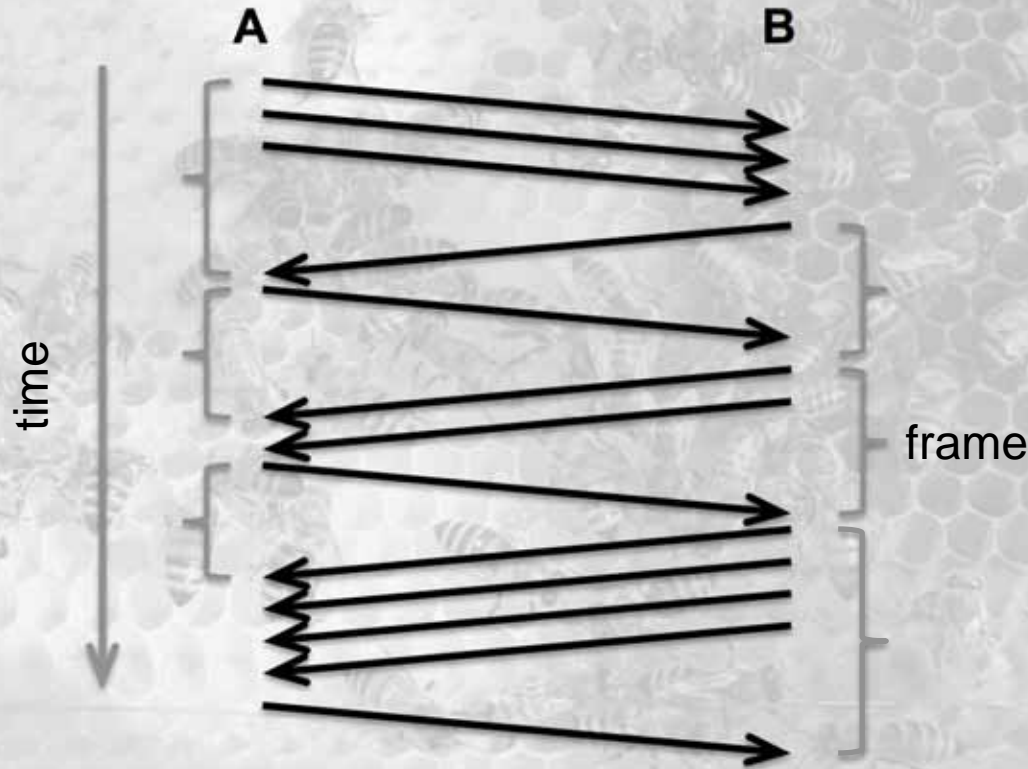
Central leader(s)



2. Rotating leaders



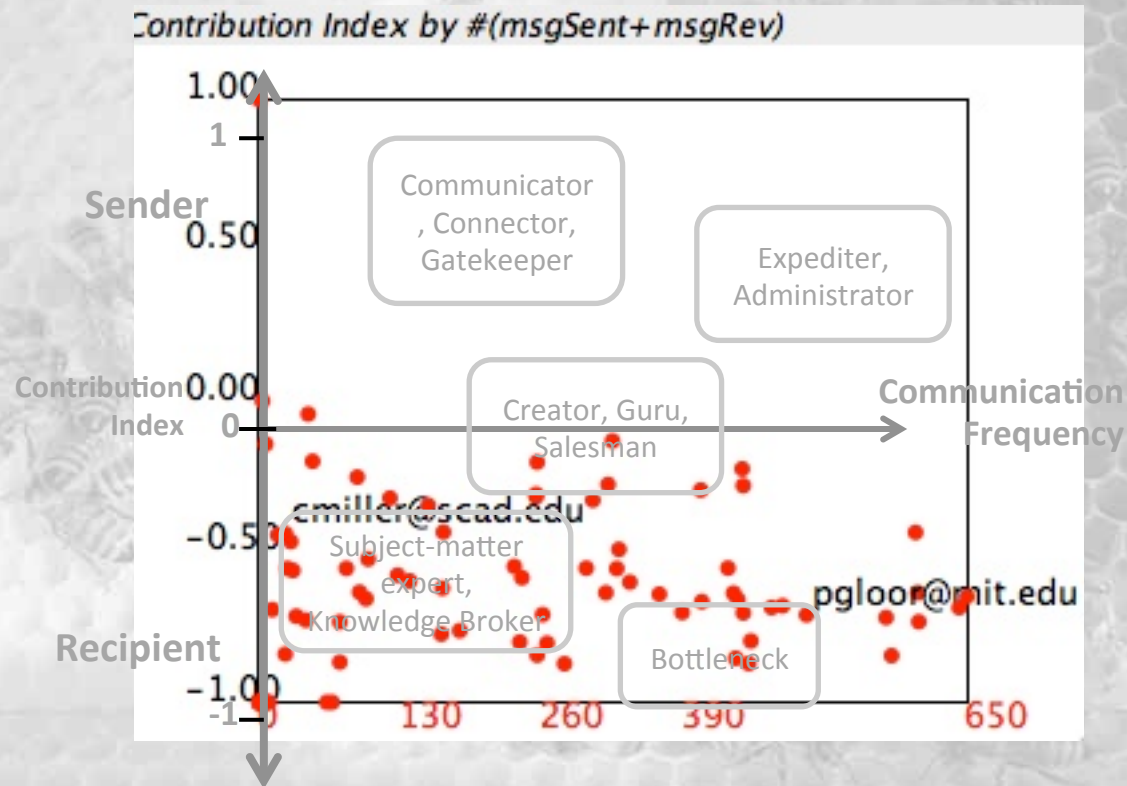
3. "Bursty" Communication



Happy people answer e-mails faster!

Responsiveness in a COIN is predictive of high performance

4. Balanced Contribution



The more oscillations, the more creative

The more positive (to the top), the more extroverted

The larger overall (to the right), the more engaged

5. Transparency - Honest



meritorious
altruistic
easy
heroic
concise
lucky
benevolent
unique
natural
blessed
kissable
attentive
reliable
superb
spoken
deep
brilliant
admirable
practical
lucid
comfortable
fashionable
charming
pragmatic
encouraging
reposed
eloquent
autonomous
neighborly
privileged
systematic
successful
entertaining
ingenious
affirmative
courageous
good
adaptable
delightful
competent
helpful
daring
creative
influential
recognizable
direct
big
complex
active
going
nimble
willing
steady
generous
prudent
dignified
civil
discerning
forbearing
companionable
worthy
polished
beneficent
successful
entertaining
ingenious
affirmative
courageous
good
adaptable
delightful
competent
helpful
daring
creative
influential
recognizable
direct
weary
bored
polish
defiant
jealous
repulsive
tired
selfish
worse
grieving
flipped
condemned
troubled
defeated
anxious
cruel
lazy
scary
crazy
sore
nasty
angry
wicked
uptight
panicky
frantic
disgusted
combative
naughty
dangerous
lonely
homeless
ashamed
even



- Reduce overly positive language
- Give honest matter-of-fact comments
- Build personal commitment (I, me)

Lessons.....

- Sharing
- Altruism
- Humility
- Embrace as equals



Thank You

Tom Allen
Adam Almozlino
Robin Athey
Linda Bäbler
Matias Barahona
Melina Becker
Hans Brechbuhl
Lucas Broennimann
Gloria Busche
John D. Collins
Scott Cooper
Marius Cramer
Patrick DeBoer
Arash Delijani
George Dellal
Marco DeMaggio
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Julia Gluesing
Francesca Grippa
Michael Henninger
George Herman
Takashi Iba
Orr Inbar
Bill Ives
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Xue Zhang
Antonio Zilli
Kang Zhang
Yan Zhao
Kevin Zogg
Matthaeus Zylka



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