

Social Collaboration Data

Fuzzy Intersects In the Open World...

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3rd Billion

Connectivity	Pop.	Pentration
Africa	1 B	11%
Asia	3.8B	22%
Europe	0.8B	59%
Middle East	0.2B	30%
North America	0.3B	78%
Latin America/Caribbean	0.6B	35%
Oceania/Australia	0.04B	61%

^{*1.1}B, 65% 4.8B, 19.7% 0.8B, 6%

Modes of Social Contact

Literacy Numeracy Pictography

Betterment Uses

Economic Entertainment Relationships



Language

3000+ languages in Africa (12 100-language clusters spoken by 75%)
57 official languages – Asia (Central, SouthEast), Middle East
China – 8 language families, 292 living languages
India – 1600 mother tongues, 415 recognized.

Changing Nature of Data...

Structured Data

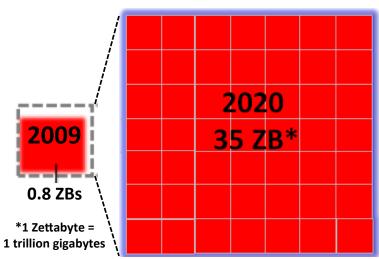
- Meta data
- Sensor data
- Sorted, Organized
- Analyzed using traditional statistical techniques
- Created by formal organizations

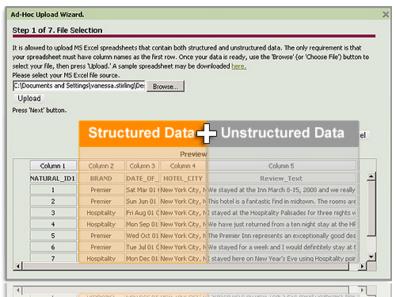
Unstructured Data

- Text
- Audio
- Video
- Analysis requires domain, context, sentiment info
- Created "primarily" by individual actors

"The Digital Universe Decade: Are You Ready?" (IDC – Sponsored by EMC, May 2010).

Data Growth: 2009-2020







Abbottabad

Twitter User: #ReallyVirtual

What's the value of "he knew before the world knew"?

News World Sports Comment Culture Business Environment Science Travel Tec

News > World news > Turkey

Turkey earthquake: Twitter plea for help gets 17,000 responses

Journalist Erhan Celik asks his Twitter followers to offer accommodation to those made homeless by the earthquake



Constanze Letsch in Istanbul and Peter Walker guardian.co.uk, Monday 24 October 2011 06.57 EDT Article history









A larger | smaller

World news

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Technology

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Blogging

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" my home is your home, Van"

October 23, 24 2011



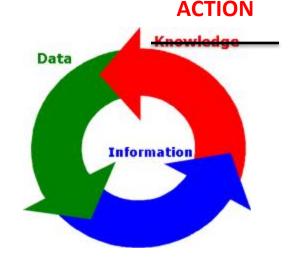
Turkish people sit on a street in Ercis after the 7.2 magnitude earthquake on Sunday, Photograph: Mustafa Ozer/AFP/Getty Images



Data > Information

Traditional

- Statistical Analytics
- Correlations
- Select Population Surveys
- Experiments



New...

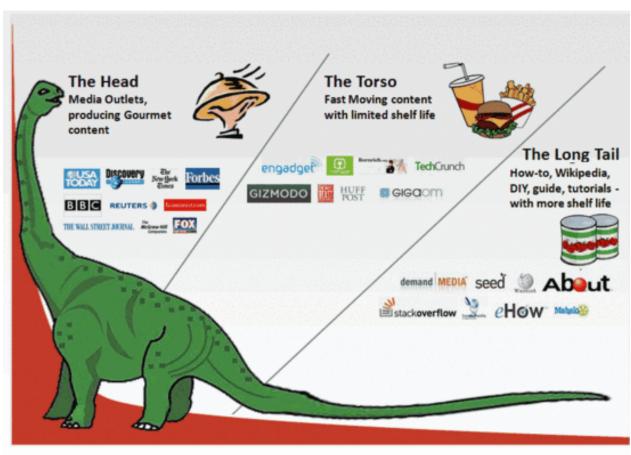
- Blogging
- Walls
- Tagging
- Tweeting
- Crowdsourcing
- Mashups
- Retweets

Data ←→ Information

- Tunisia, Egypt, and other
 - Information to Action predominated
 - Bypassed the "data" stage
 - Data analytics after the event
- Japan Tsunami...
 - Govt. transparency after Information



The Long Tail of Social Media?







Social Web and Peace/Conflict

www.Peace.Facebook.com

Stanford University: Persuasive Technologies Institute (Margarita Quihuis, Mark Nelson)



Social Web and Disaster Response

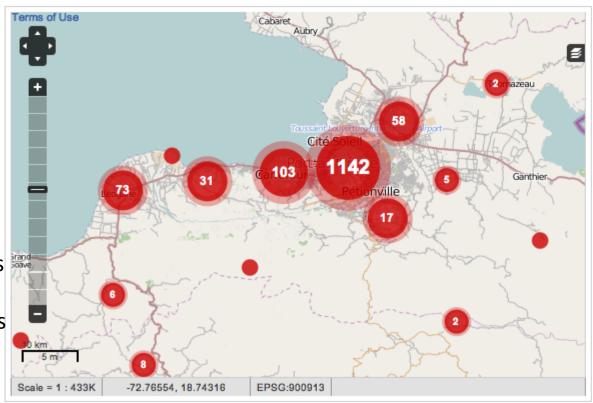
Haiti Earthquake Relief

Project: 4626

Processed 100,000 SMS messages

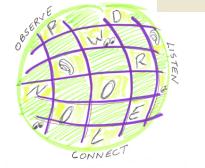
5000 in 1 hr (peak volume)

Average response time: 2 minutes



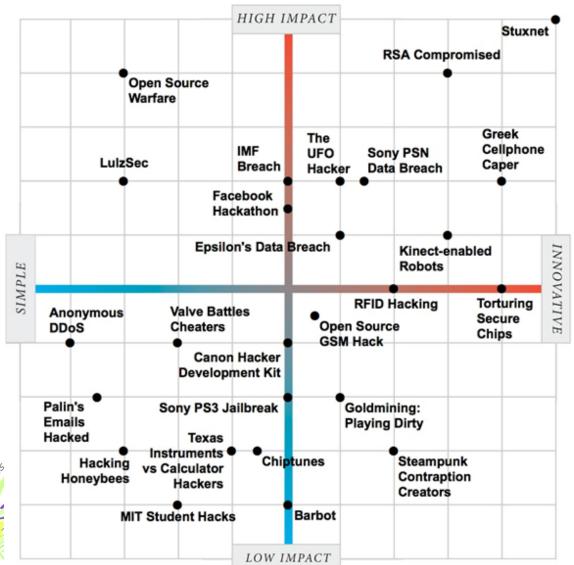






Modes: SMS text, video, photo, online report

Social Web and Security





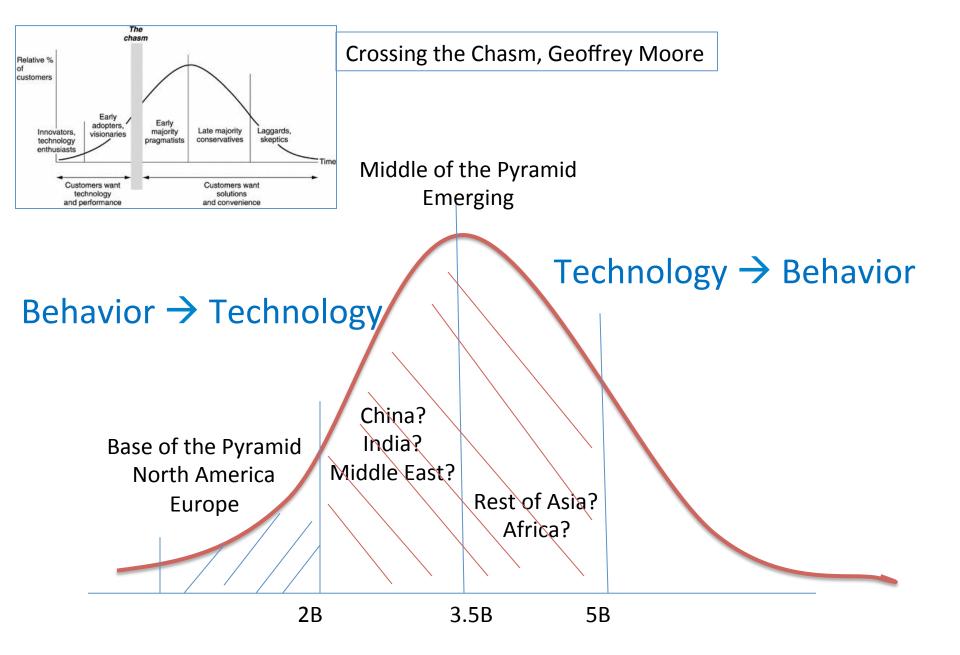
head" represents leaderless organization and anonymity.^[1]

è



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CONNECT



Hyper-AssumptionS

- The 3rd Billion will use the web differently
- The Social Web will be the dominant collaboration and content creation mechanism
- Technology will be shaped by social webinteractions, which will be driven by local cultural mores.



Global IT Revenue: \$ 1.3 Trillion (2009)

U.S. Companies IT Revenue: \$800 Billion (2009)

Silicon Valley Companies IT Revenue: \$500B (2009)

U.S. IT Companies R&D spending: \$30 Billion (2009)

R&D/Global Revenue: 2.3%

Global IT Security Spend: \$2.7 Billion (2010 est.)

Ongoing work...

February 2012 Workshop on Social Media and (Security) or (Knowledge Democracy...)

Defense, HP Labs, Stanford, Security-Innovation.org, NPS...

Fleshing out the 3rd Billion – data effort (Nov-Dec 2011)

Meetup @ Google – Nov 15, 2011

Grassroots engagement – Open World



Possible NPS engagement?

NPS – boundary spanning (Silicon Valley and DC) Students, researchers, co-collaborators Class projects, lectures



Follow-up comments, ideas, questions Sujata Millick, Raj Rajagopalan Sujata.millick@hp.com Raj.rajagopalan@hp.com

THANK YOU!

SO WHAT ??

WHO: 3rd Billion

WHEN: 2+ years

WHAT: Content, collaborations

WHERE: Social web

WHY: Culture, language, different needs

HOW: Devices, Apps



WORLD INTERNET USAGE AND POPULATION STATISTICS Penetration Growth **Users** % **Population Internet Users Internet Users World Regions** (2010 Est.) Dec. 31, 2000 **Latest Data** (% Population) 2000-2010 of Table **Africa** 1,013,779,050 4,514,400 110,931,700 10.9 % 2,357.3 % 5.6 % Asia 621.8 % 42.0 % 114,304,000 21.5 % **Asia** 3,834,792,852 825,094,396 Europe 352.0 % 24.2 % **Europe** 813,319,511 105,096,093 475,069,448 58.4 % 63,240,946 29.8 % 1,825.3 % 3.2 % **Middle East** 212,336,924 3,284,800 N. America **North America** 344,124,450 108,096,800 266,224,500 77.4 % 146.3 % 13.5 % 79.7% **Latin America/Caribbean** 34.5 % 1,032.8 % 10.4 % 592,556,972 18,068,919 204,689,836 Oceania / Australia 34,700,201 61.3 % 179.0 % 1.1 % 7,620,480 21,263,990 1,966,514,816 360,985,492 **WORLD TOTAL** 6,845,609,960 28.7 % 444.8 % 100.0 %

NOTES: (1) Internet Usage and World Population Statistics are for June 30, 2010.