DATA-POP ALLIANCE

HARVARD HUMANITARIAN INITIATIVE

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Reflections on Data Literacy

National Workshop on Data Roadmaps for Sustainable Development

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October 13, 2016

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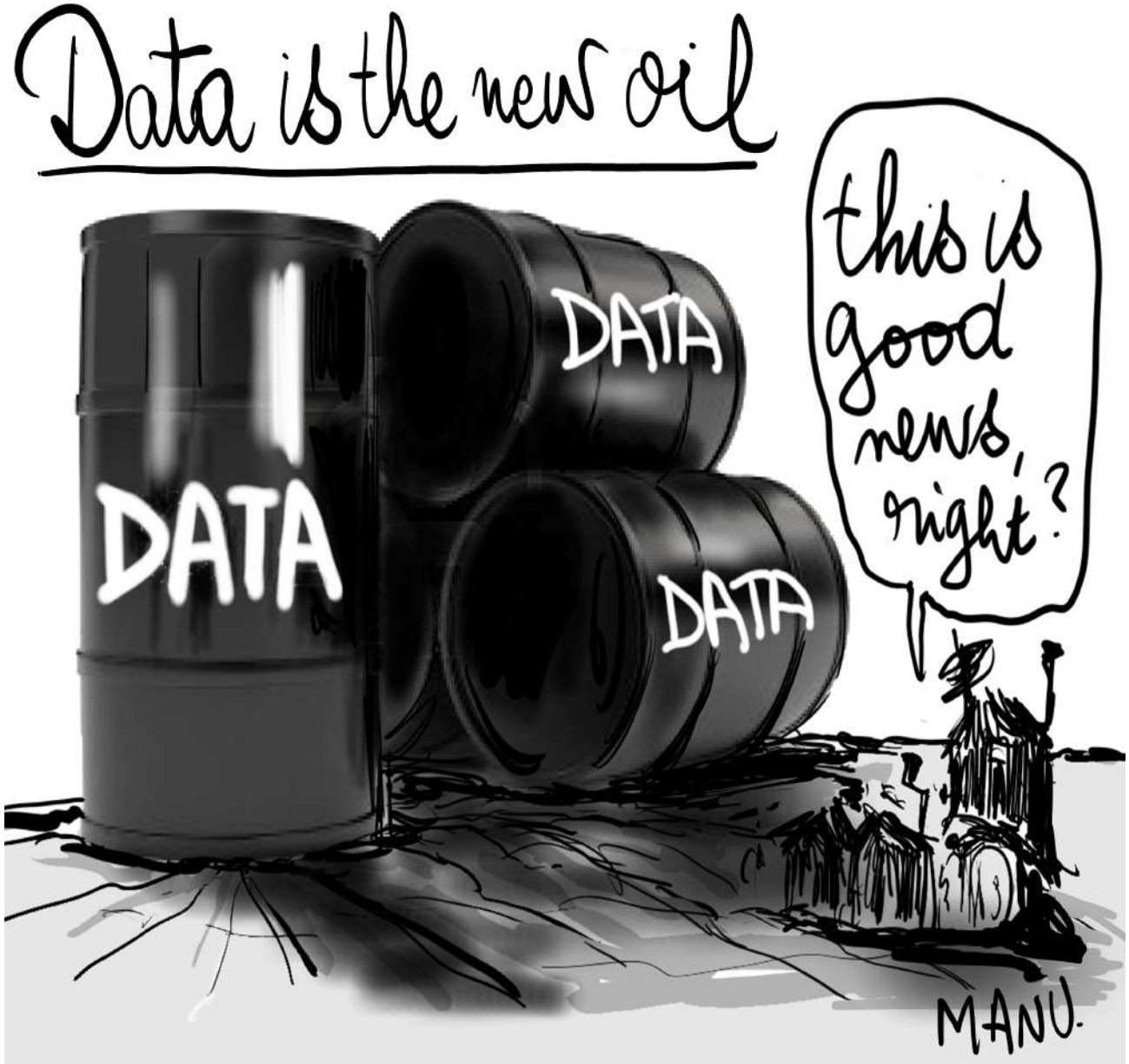
Dakar

Natalie Shoup
Program Manager | Data-Pop Alliance

Data, development and democracy



The bottom half of the world's population owns the same amount of wealth as the richest 62 people in the world

—*Oxfam, 2015*

SENSE NETWORKS INC.
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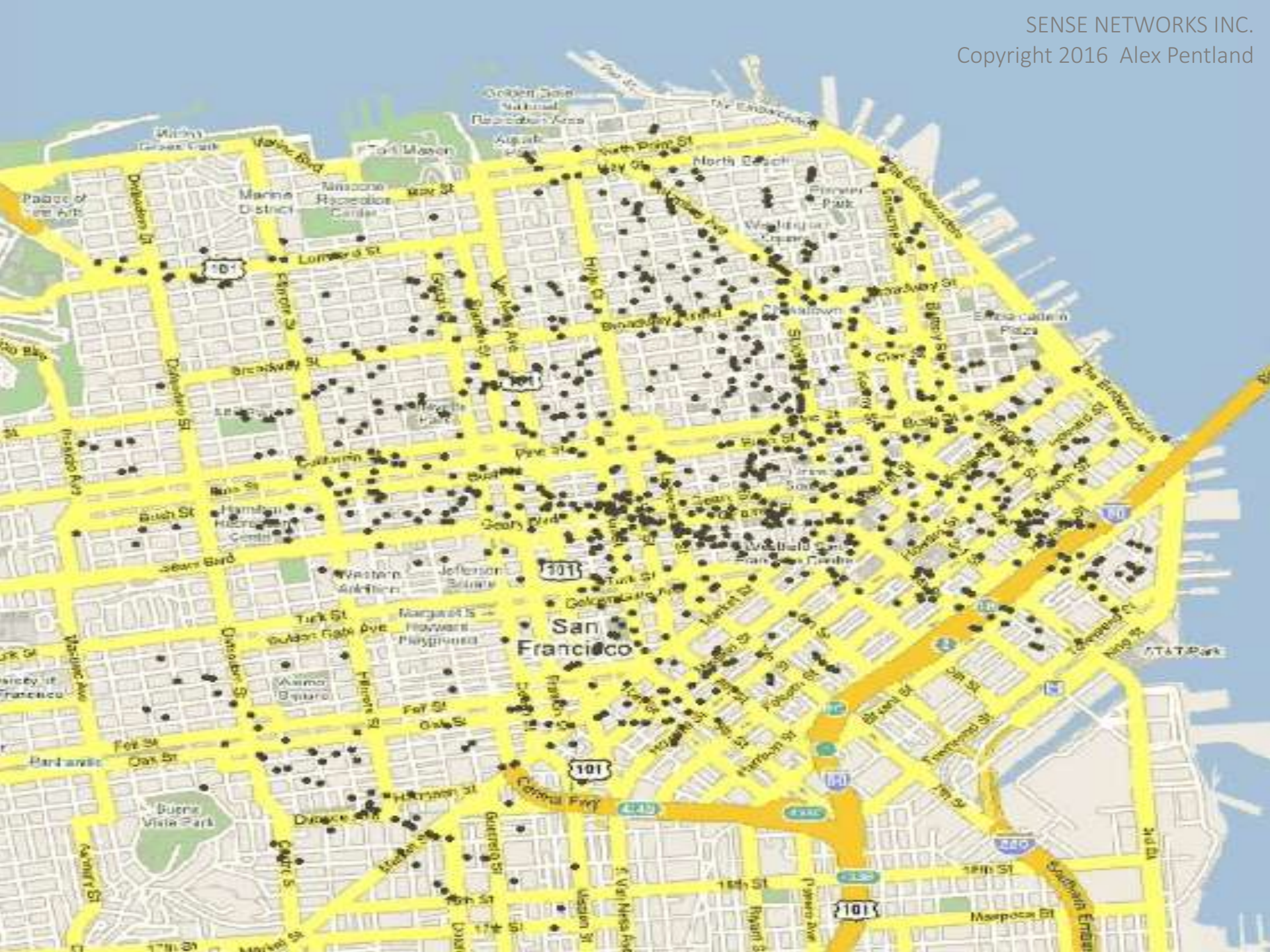


2008-2010: Entering the age of data

Computational Social Science

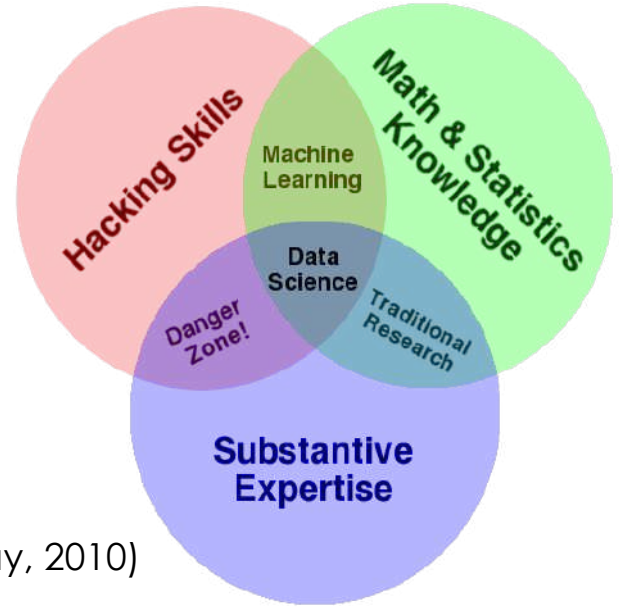
David Lazer,[1] Alex Pentland,[2] Lada Adamic,[3] Sinan Aral,[2,4] Albert-László Barabási,[5] Devon Brewer,[6] Nicholas Christakis,[1] Noshir Contractor,[7] James Fowler,[8] Myron Gutmann,[3] Tony Jebara,[9] Gary King,[1] Michael Macy,[10] Deb Roy,[2] Marshall Van Alstyne[2,11]

A field is emerging that leverages the capacity to collect and analyze data at a scale that may reveal patterns of individual and group behaviors.

(Science, 2009)

*"We are at the beginning of what I call **the Industrial Revolution of Data.**"*

—Joe Hellerstein , November 19, 2008



(Drew Conway, 2010)

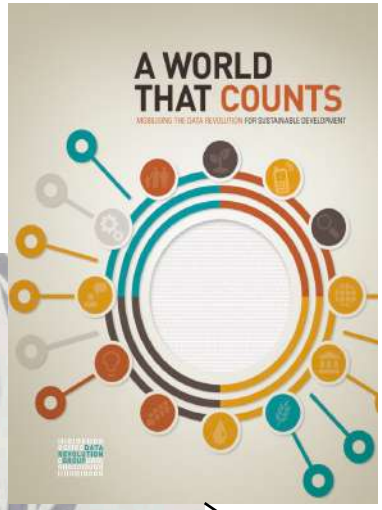
(2010)

2013: Call for a "data revolution"

Call for a ***"data revolution*** for sustainable development (…) to ***improve the quality of statistics and information available to people and governments*****".**

BUT only 3 mentions of "*literacy*" that referred to 'standard' or "*basic*" literacy, explicitly distinguished from "*numeracy*"

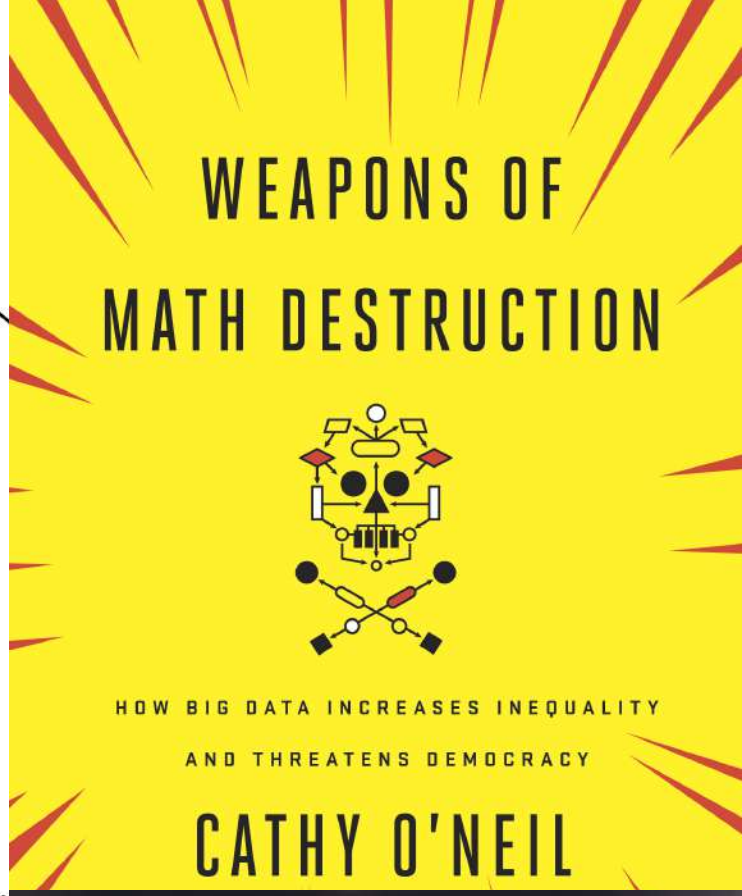
2014: ‘Data Literacy’ emerges as a policy concept and priority



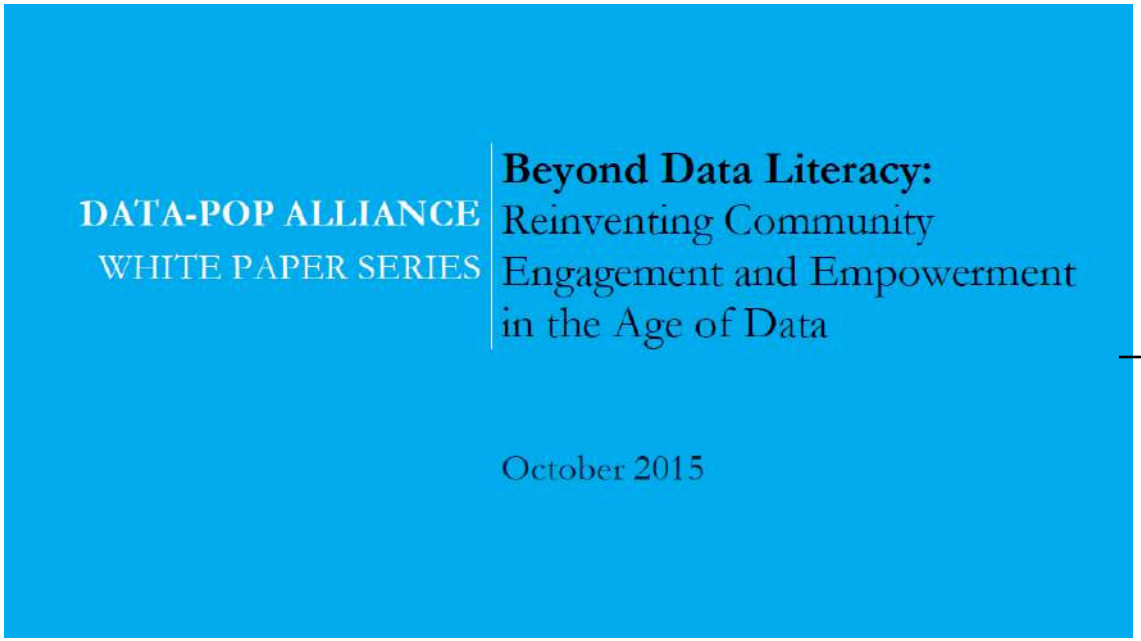
Call for the funding of an ***“education program aimed at improving people’s, infomediaries’ and public servants’ capacity and data literacy*** *to break down barriers between people and data”* (p. 3)

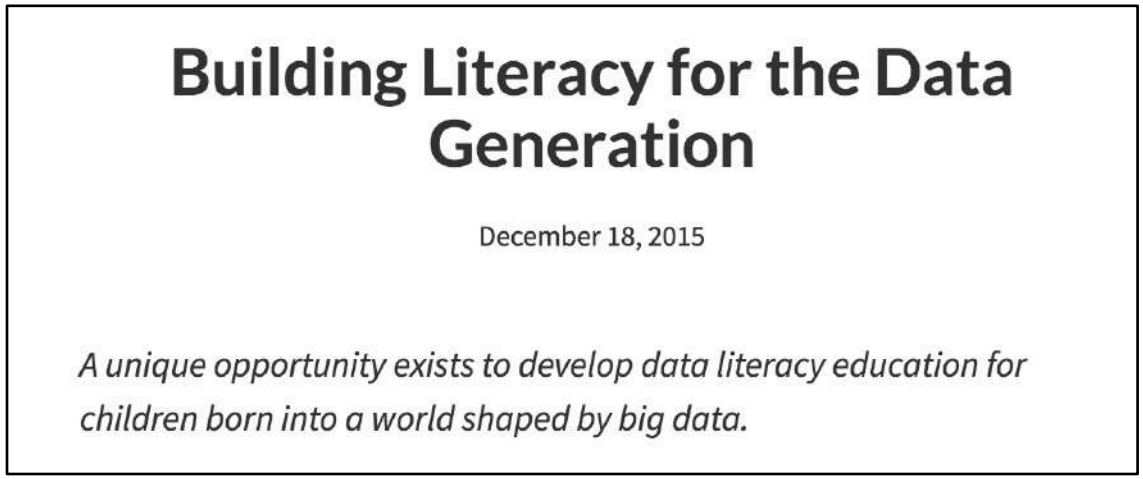
Science without conscience is the soul's perdition.

(François Rabelais)



We need to promote a thicker conceptualization of 'data literacy'



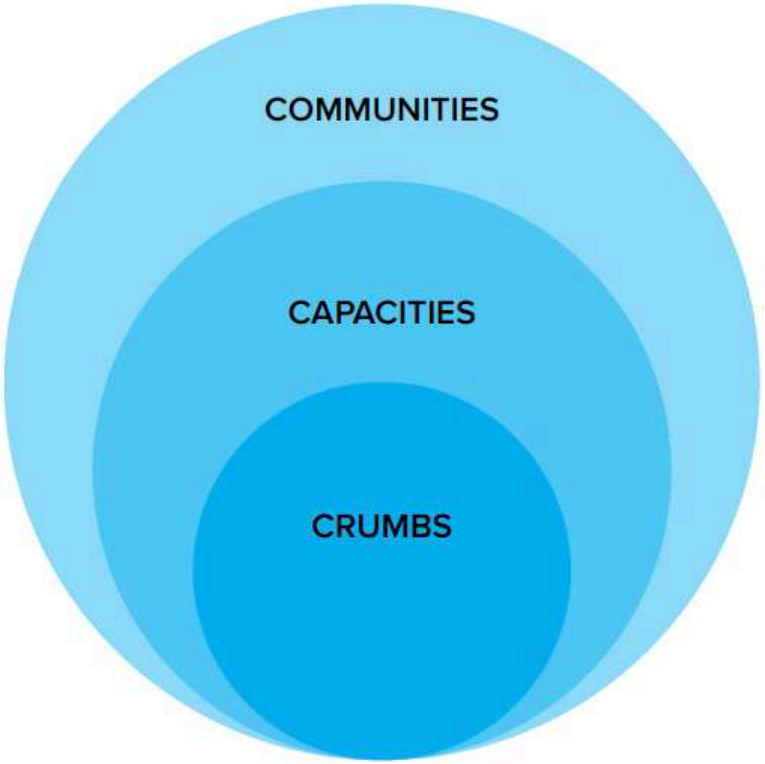


*We **conceptualize data literacy as literacy in the age of data, defined as "the desire and ability to constructively engage in society through or about data"**.*

MasterCard | MasterCard Center for Inclusive Growth

Identify and strenghten building blocks of literacy in the age of data

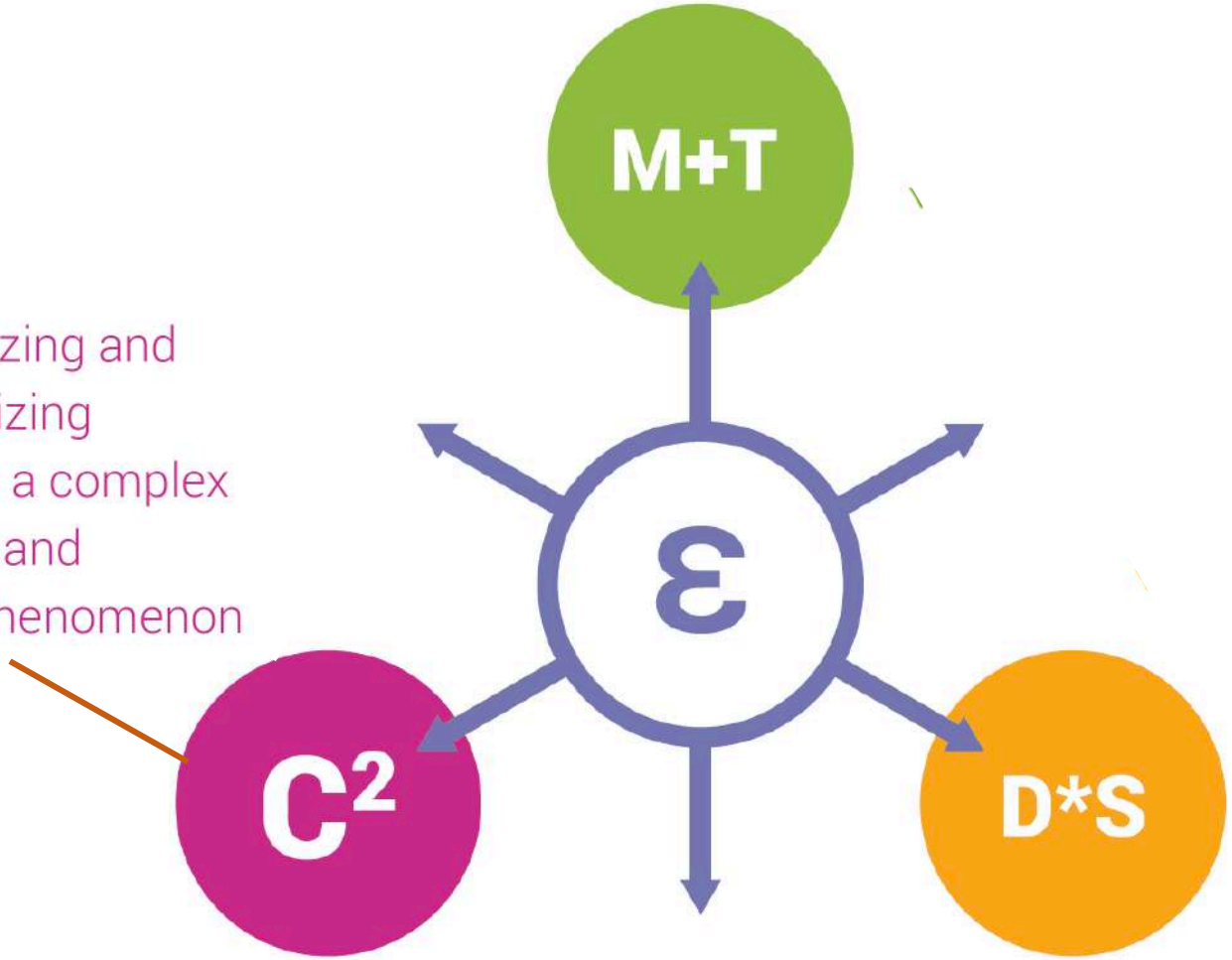
THE 3 C's OF BIG DATA



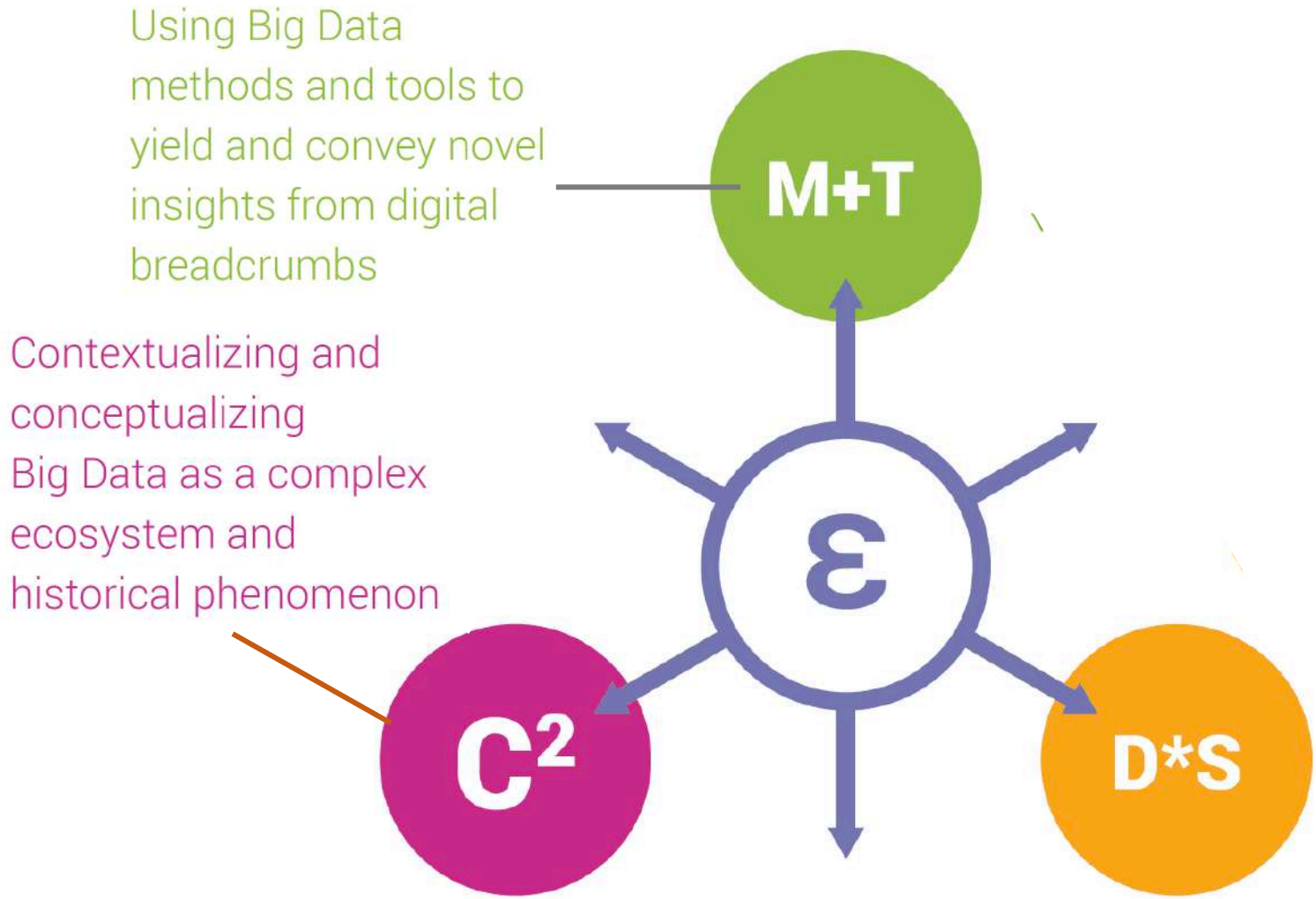
Originally framed as the "3 V's" (volume, velocity and variety) in the early 2000s, Big Data has emerged as an ecosystem of "3 C's": digital "crumbs" (digital translations of human actions and interactions captured by digital devices); powerful capacities to collect, aggregate and analyze data; and communities involved in generating, governing and using data, including data generators, end users, policy-makers, experts, privacy advocates and civic hacker communities.

Identify and strenghten building blocks of literacy in the age of data

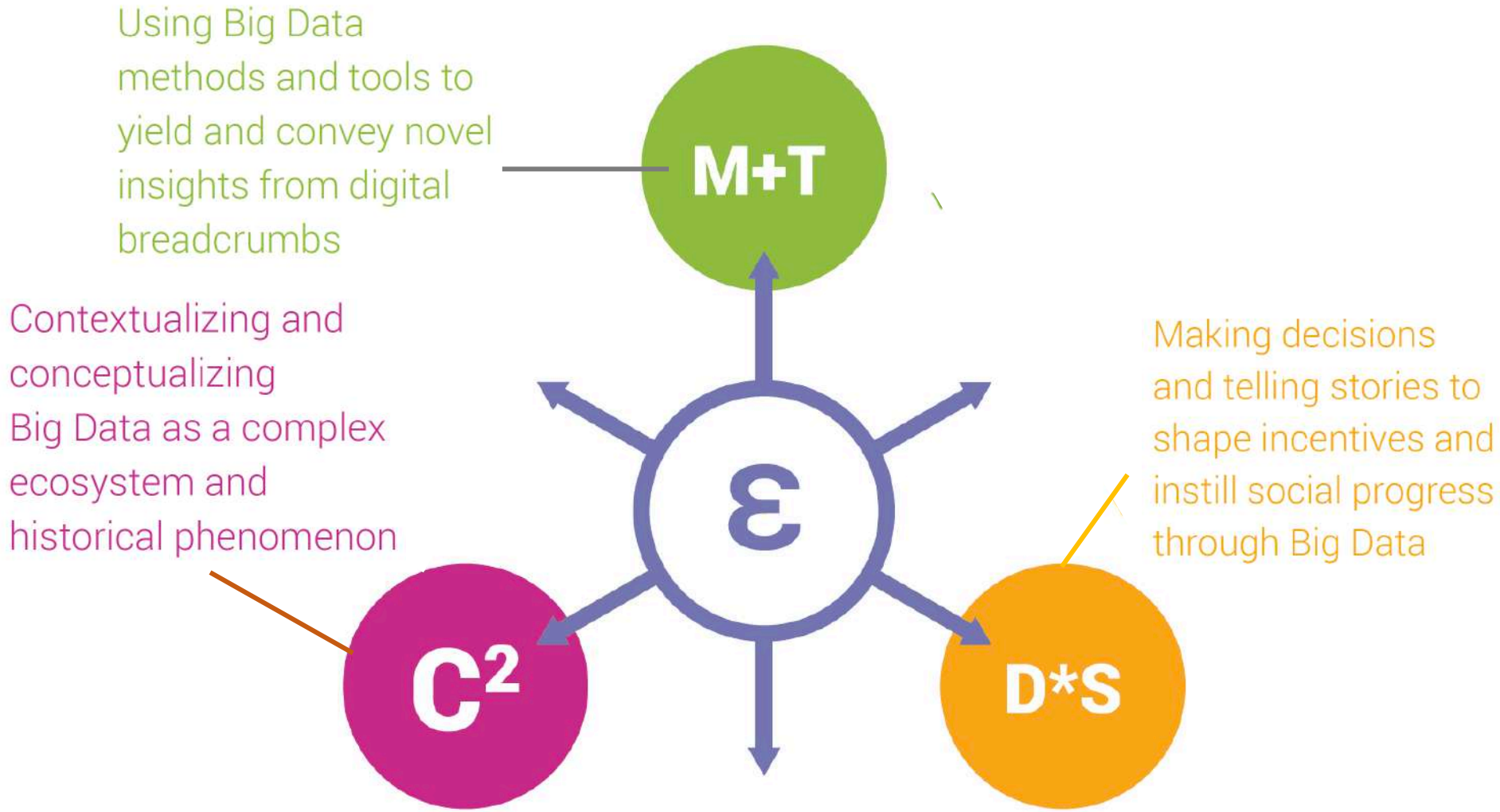
Contextualizing and conceptualizing Big Data as a complex ecosystem and historical phenomenon



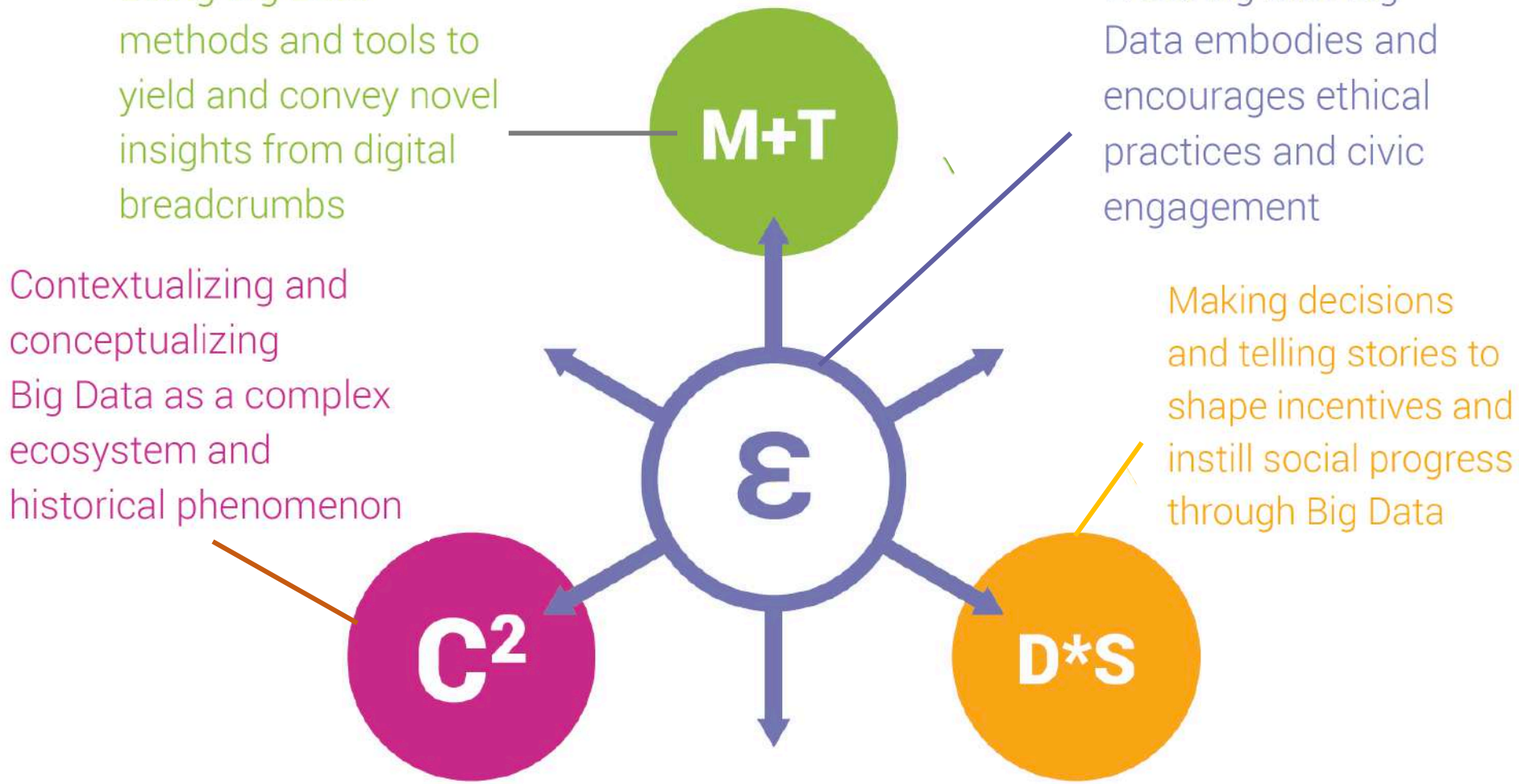
Identify and strenghten building blocks of literacy in the age of data



Identify and strenghten building blocks of literacy in the age of data



Identify and strenghten building blocks of literacy in the age of data



In the age of data, literate people will care about and have control over the use of their data

Who should we trust to manage our data?

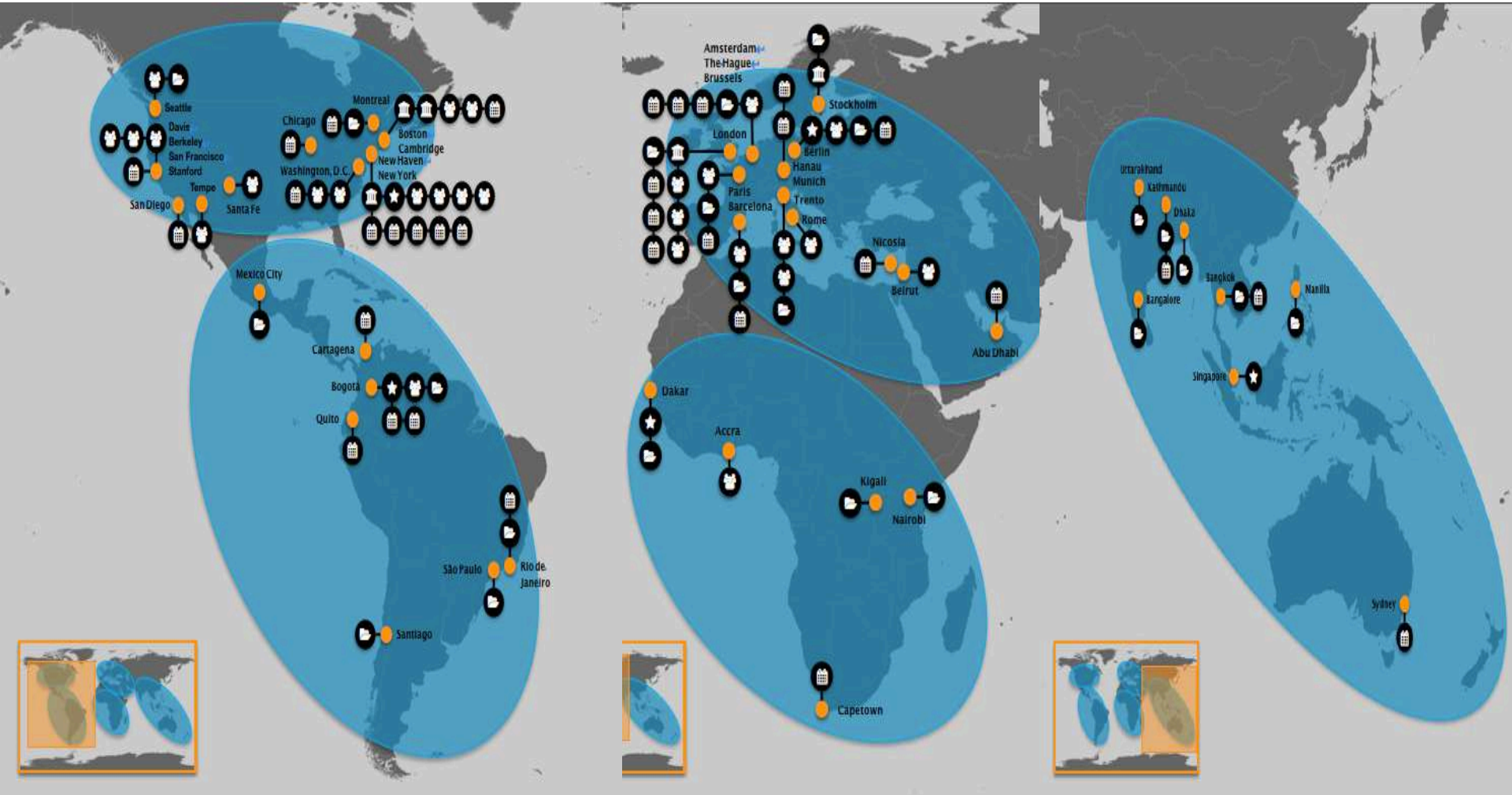
By Alex Pentland
Oct 23 2015

f 392 202 in 19

WORLD ECONOMIC FORUM

It is time for legislators and judiciary to stop relying on traditional bureaucracies to enforce data rules and rights, and use this new technology to ensure that data stewardship meets the high standard of *always* following the rules and rights specified by our laws. The essential factor that led toward democratisation was broad ownership of the resource, which made it difficult to exert autocratic control. The same seems true for data: to avoid autocratic control, citizens must have effective, direct control of data about themselves.

Towards a Global Education Program to promote mass literacy in the age of data



Components of the program

'DATA LITERACY'

Enhance people's willingness and ability to constructively engage in society in the age of data

1. Professional training program

- Up to ten 4-day workshops in Colombia, Senegal, Kenya, Rwanda, NYC, MIT over June 2016-June 2017 (Hewlett program)
- Partnership with UNSSC to expand to 5 locations for UN Staff and others into 2018

2. Other training workshops

- Data Expeditions on the Colombian peace process
- Additional trainings with WB Staff, BuildPeace, and others

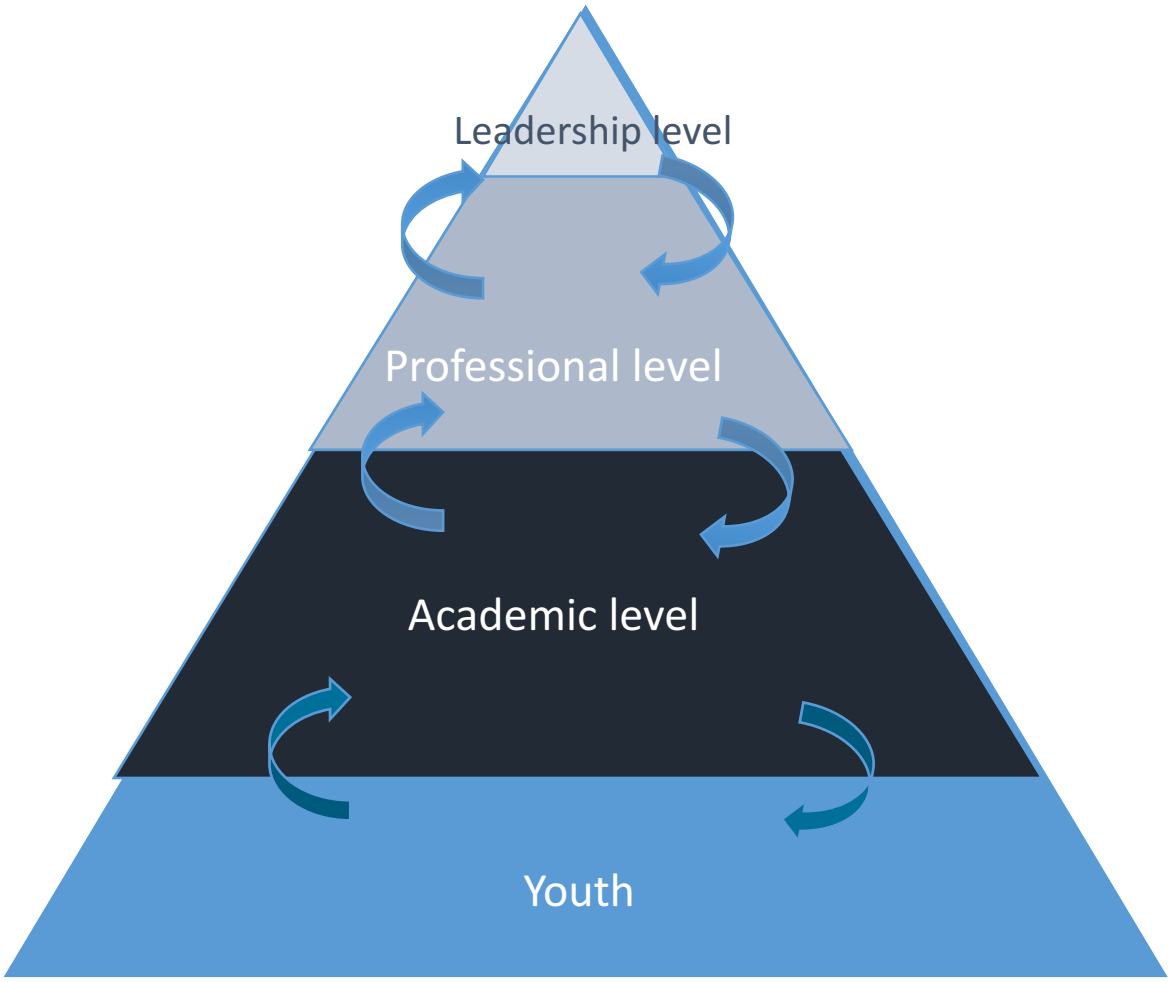
3. Community training + dialogues

- Partnership with Africa Gathering, Libraries without Borders…
- Media and statistics training in Africa in partnership with PARIS21

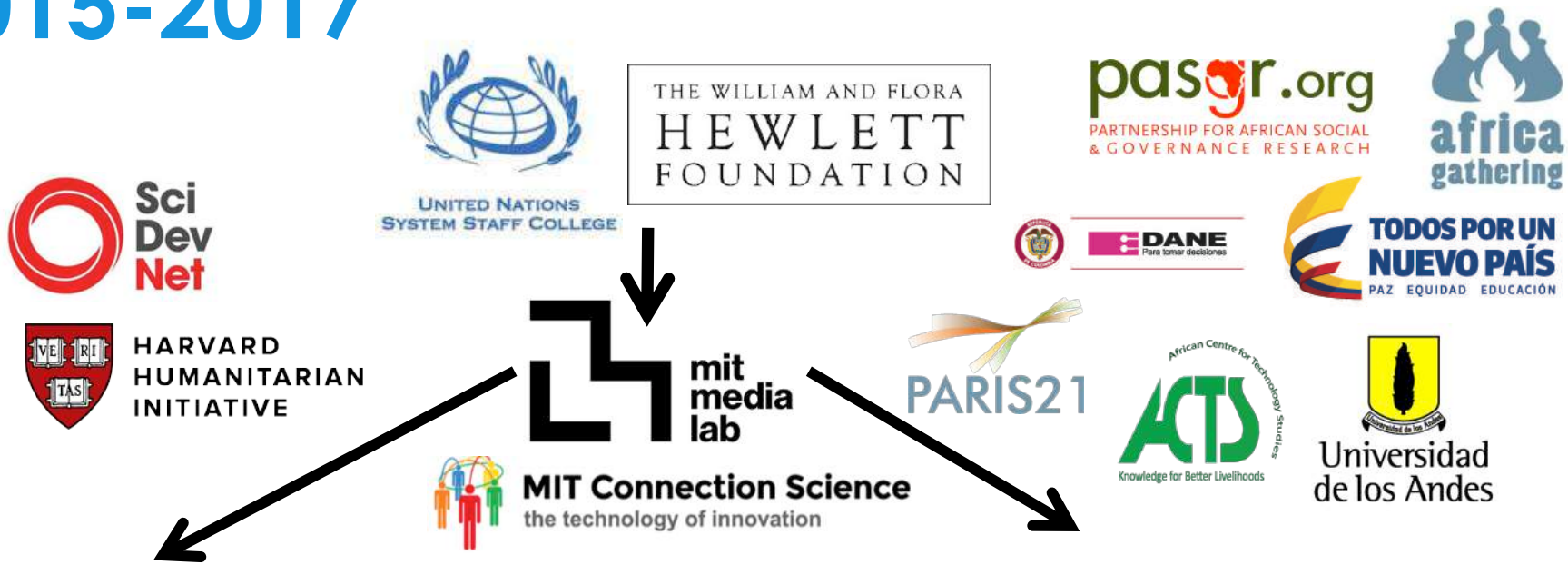
4. Academic level

- Developing a global academic network with leading global North and Global South universities
- Starting with a fellowship program for early-to-mid career academics from Global South

A holistic and connected approach, locally anchored.



Professional training program in Big Data and development 2015-2017



Knowledge platform with literature reviews, articles, toolkits, pilots, codes…

Training workshops and regional seasonal 'Big Data and development' schools in various countries (Bogotá, Dakar, Kigali, MIT Media Lab, Singapore,..) covering technical, institutional, legal aspects…

DATA POP ALLIANCE

Take-aways

1. Data may be the most valuable resource of the 21st Century

2. It can be used to entrench or challenge traditional power structures depending on how 'data literacy' is promoted

3. A 'true' data revolution will be a radical socio-political evolution through data

4. This will require promoting data literacy as literacy in the age of data

5. This is unlikely to happen organically; forceful investments and partnerships are needed

National Workshop on Data Roadmaps for Sustainable Development

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Dakar

Merci

For more information

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