

Citizen Data Festival #SCE2015
bologna, 14 ottobre 2015

La città trasparente: Open Data Government

Lorenzo Benussi

about me

PhD in Economics of Innovation

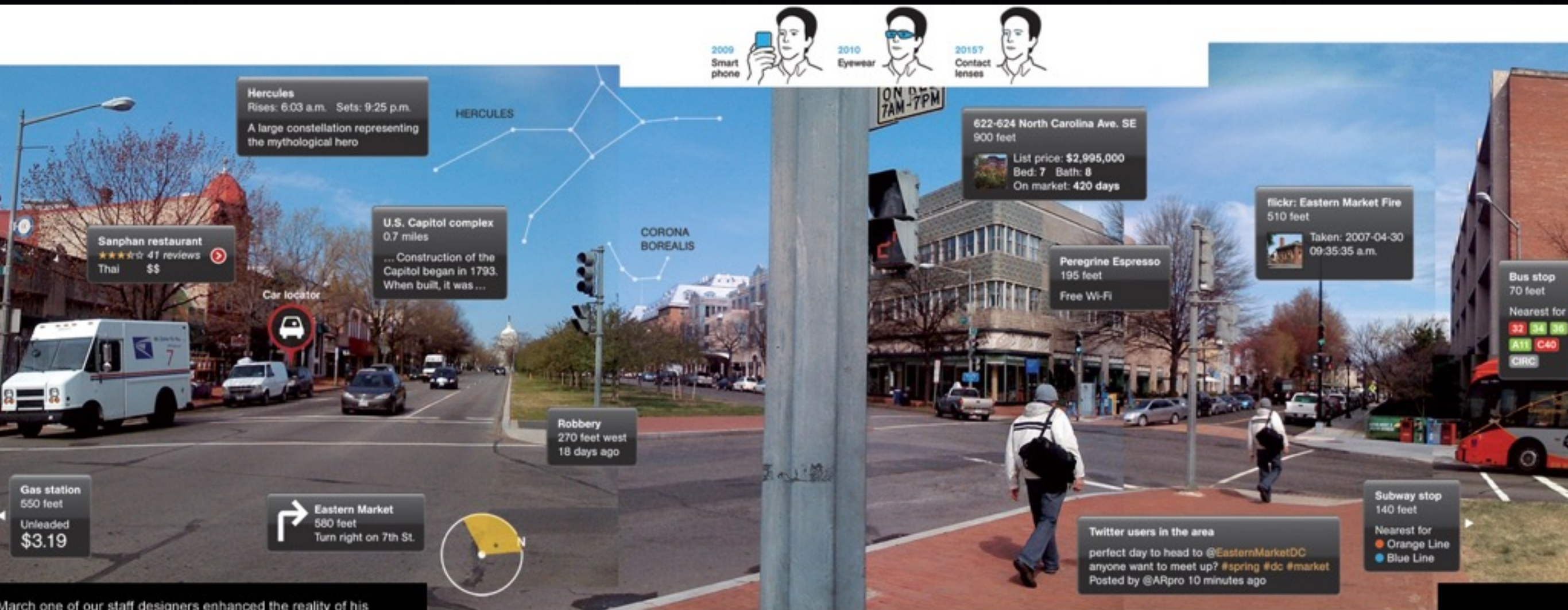
- **Strategic Advisor (Public and Private sector) @ TOP-IX Consortium**
- **Fellow, Economics of Innovation @ NEXA Center, Polytechnic of Turin**
- **Task Force for Innovation and Digital Agenda @ Presidenza del Consiglio**
- **Strategic Advisor, Innovation Board, Iren Group**

Digital (Open) Data Evangelist



why (digital) data?

we live in a world of data



March one of our staff designers enhanced the reality of his Washington, D.C., neighborhood. Smart phone applications (apps) added layers of information to what he saw—called out this composite of five photos, each taken with his phone.

UP AND AWAY Point your phone at the sky and find stars hidden by daylight. Aim at a tourist spot and see its history plus info for visitors. For an augmented-reality check, tap into crime stats.

REAL DEALS Various apps can steer you to the cheapest gas around, mass-transit options, good food, and Wi-Fi spots. You can also learn the price of that town house that's up for sale.

STREET PALS The Tweepers Around app tells if tweeters are near. Flickr displays area photos by members (Eastern Market, above). In the works: an app to match faces to social-network profiles.

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Socio-technical hyper connected complex system



Arab spring

**You are data
(the “you world”)**



**They use data
(mapping the
digital world)**



...data is value



- Data
- Information
- Knowledge

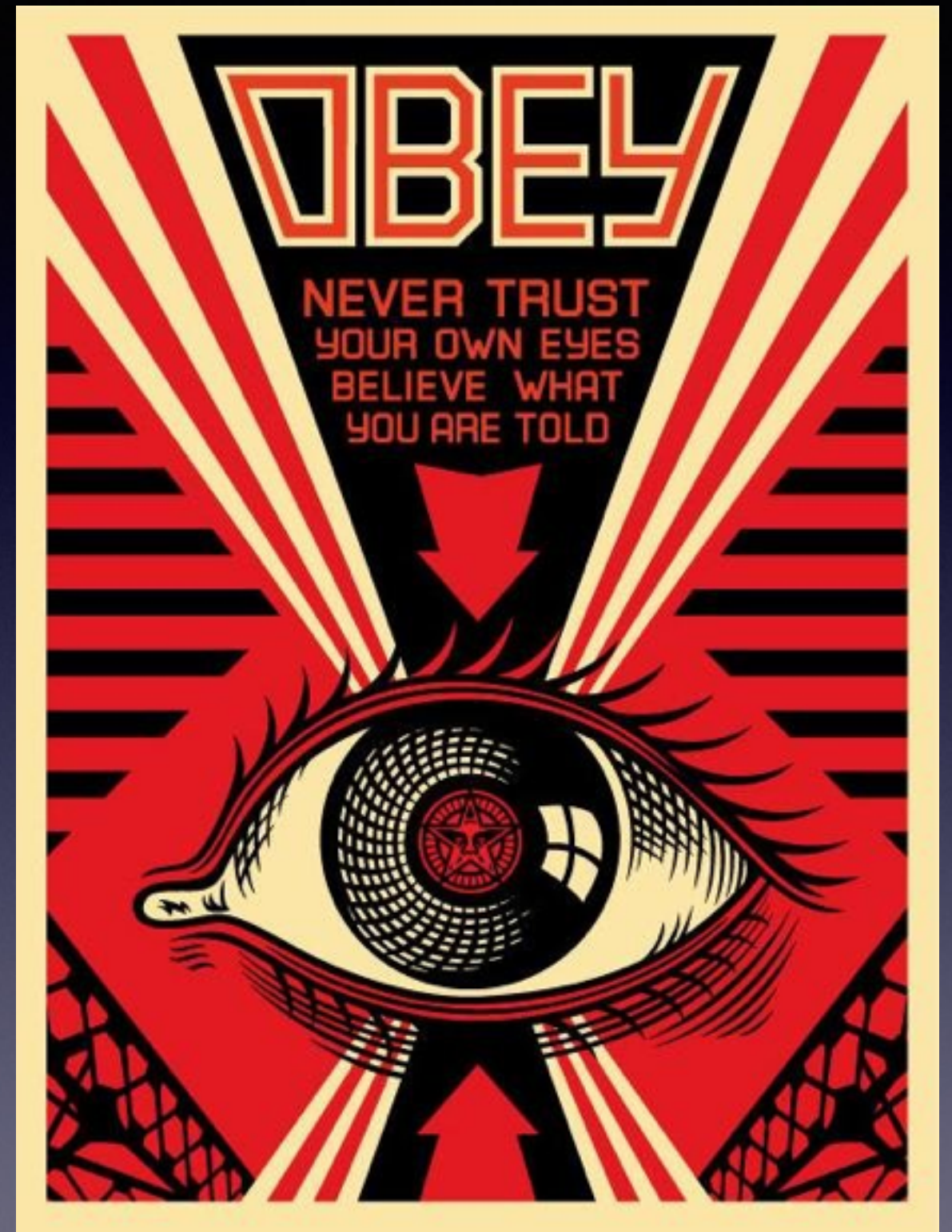
alibaba.com the largest global IPO ever: \$25 billion



data power...

#smalldata: against the
centralisation of data-power
in the hands of the few.

[Open Knowledge Foundation mailing list, 07/05/2013]



How much is data worth?

The big data and analytics market will reach **\$ 125 billion worldwide in 2015**, according to IDC.

New technologies will account for 100% of growth - Worldwide IT and telecommunications spending will grow 3.8% in 2015 to more than **\$3.8 trillion**. Nearly all of this [...] will be focused [...] on mobile, cloud, big data analytics and the Internet of Things. - **NEW ICT**

Wireless data, the largest segment of the telecommunications sector, will also be the fastest growing - Wireless data will be the largest (**\$536 billion**) and fastest growing (13%) segment of telecom spending. - **MOBILE**

Phablets will be the mobile growth engine - Sales of smartphones and tablets will slow down from the pace of recent years, reaching **\$484 billion** and accounting for 40% of all IT spending growth. **THE PC IS DEAD**

In 2015, **digital marketing** budgets will increase by 8% [...] with more than **\$500 million in annual revenue**.

Source: Forbes (2015) 6 Predictions For The \$125 Billion Big Data Analytics Market in 2015



Prof. Angus Deaton (2010): “Open Data is **Game Changer”
speaking about World Bank Open Data Initiative (<http://data.worldbank.org>)**

(open) data 4 business?

Property shark: open data 4 your property (made in US)



[Home](#) [Foreclosures](#) [For Sale/Lease](#) [Comparables](#) [Maps](#) [Mailing/Data Lists](#)

Property Search

Search by	Address or Street	City, State or Zip or NYC Borough	Search
Address ▼	<input type="text" value="e.g. 324 3 Ave"/>	<input type="text" value="San Francisco County, CA"/>	
	Street name index		

Find out Everything Real Estate COMMERCIAL & RESIDENTIAL

Plans & Pricing

PropertyShark is easily my favorite ... a must-use if you want to find every last bit of information about a property. [Cnet News]

1,000,000 members
and counting

Atoka: open data business intelligence (made in italy)



Lead Generation B2B su 6 milioni di aziende italiane

Trova nuovi clienti in pochi click

Provalo subito gratuitamente!

Hai già un account? [Accedi](#)

 **Parla con Atoka**

explore your data and co-design (made in italy)

[INDYCO EXPLORER](#)[INDYCO BUILDER](#)[LEARN](#) [USE CASES](#)[BLOG](#)[TEAM](#)[CONTACT](#)

We are a **Gartner Cool Vendor 2015** in **Big Data**.

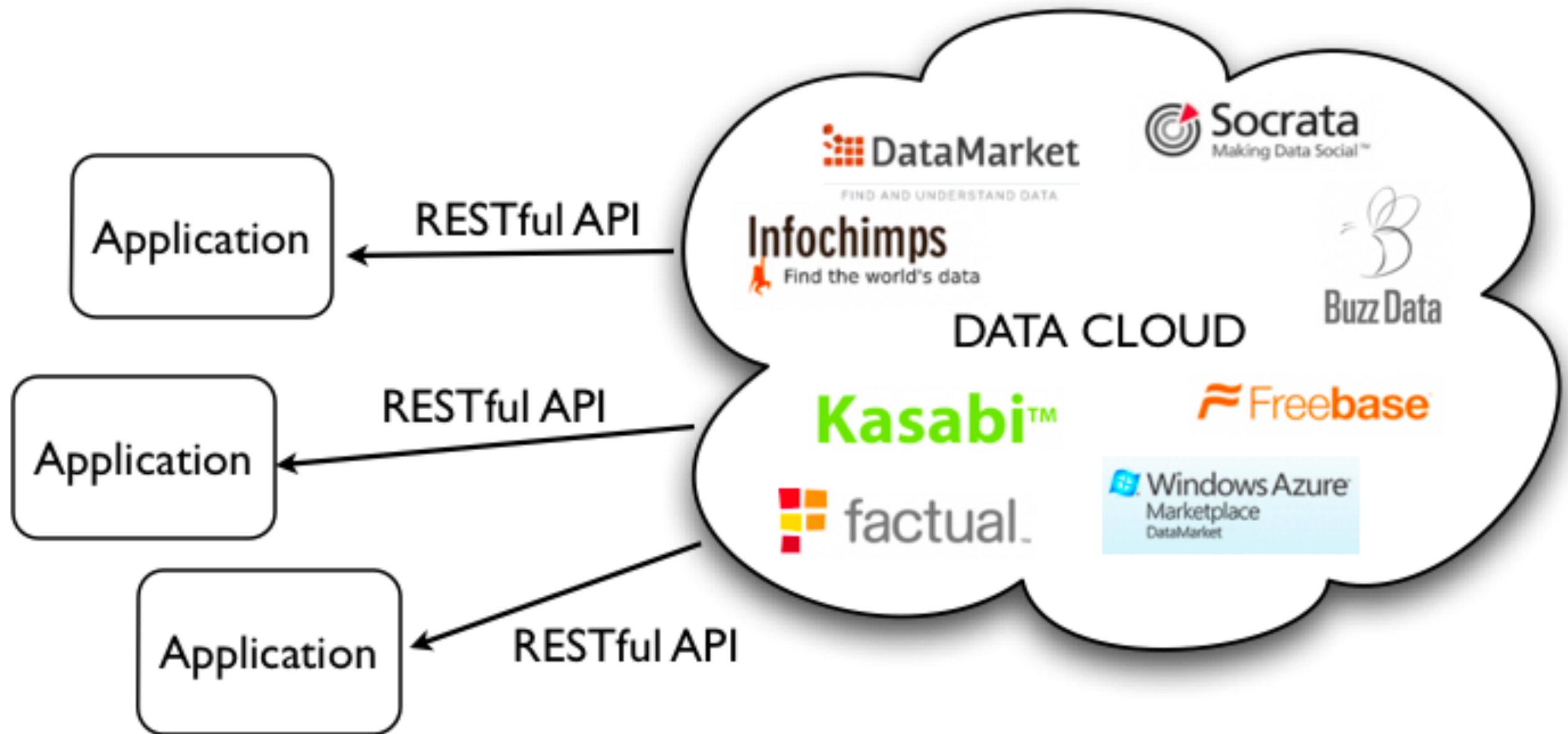
[≡ READ THE PRESS RELEASE](#)[📄 START YOUR FREE TRIAL](#)

Why data are so important?

digital data change the market

Data As A Service





The Market of Data

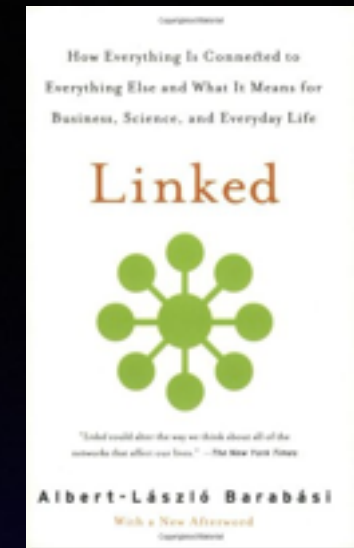
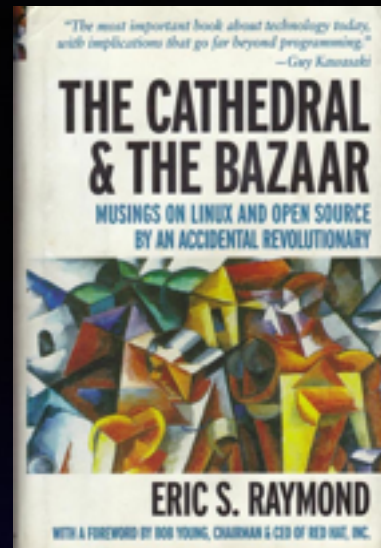
... Data are not closed inside applications but they are consumed on-demand as a service

RESTful API make possible to access data as a web resource (through URI - uniform resource identifier)

digital data change innovation models



When I say that innovation is being democratized, I mean that users of products and services—both firms and individual consumers—are increasingly able to **innovate for themselves.**
(DEMOCRATIZING INNOVATION,
Eric Von Hippel, MIT)



The Cathedral

The Bazaar





digital data shape cities

Smart City: data & platforms

Data helps to **monitor the status and the development of a system/city**

1) Economic Development -

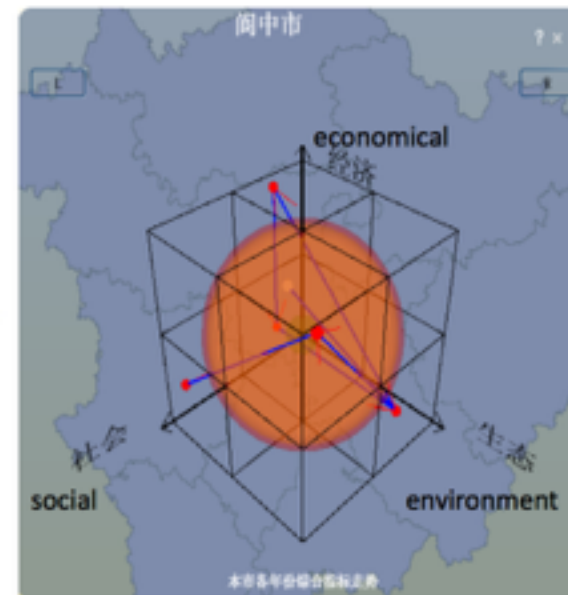
monitoring efficiency and effectiveness of the overall economic system;

2) Social Development -

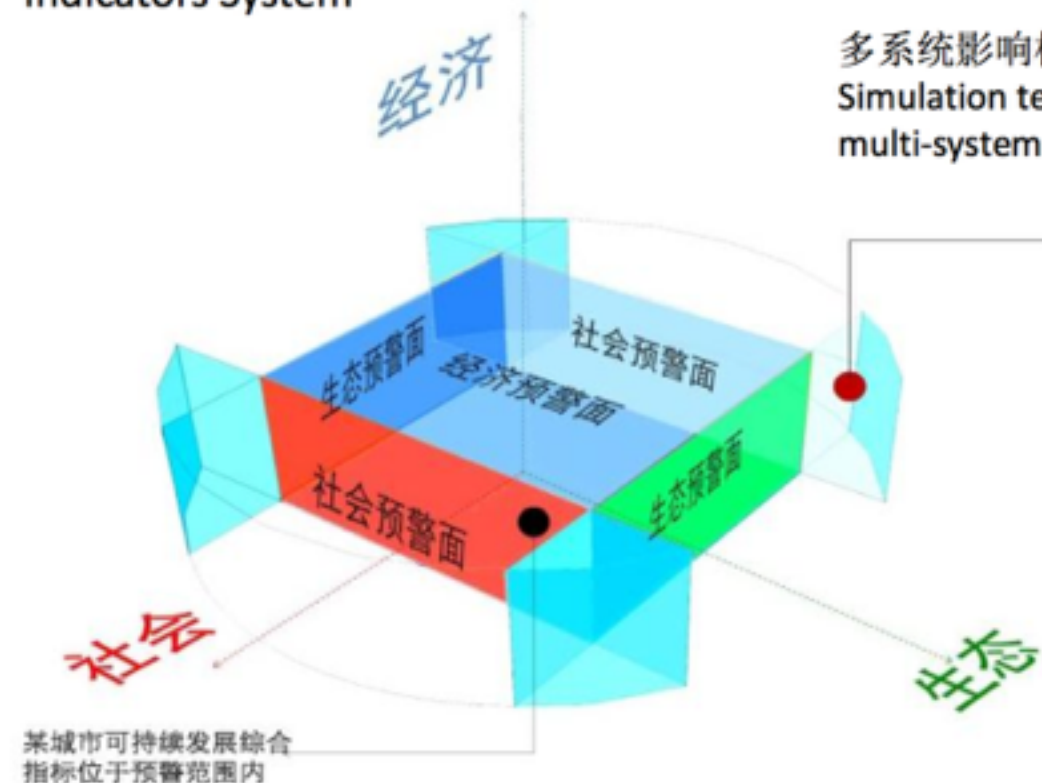
assessing social impact of policies and programs;

3) Environmental Development

- evaluating environmental sustainability of policies in medium and long term.



Indicators System



异构数据整合技术
Heterogeneous data
integration technology

关键警情识别技术
Major Emergency Recognition
Technology

数据智能优化技术
Intelligent Data Optimization
Technology

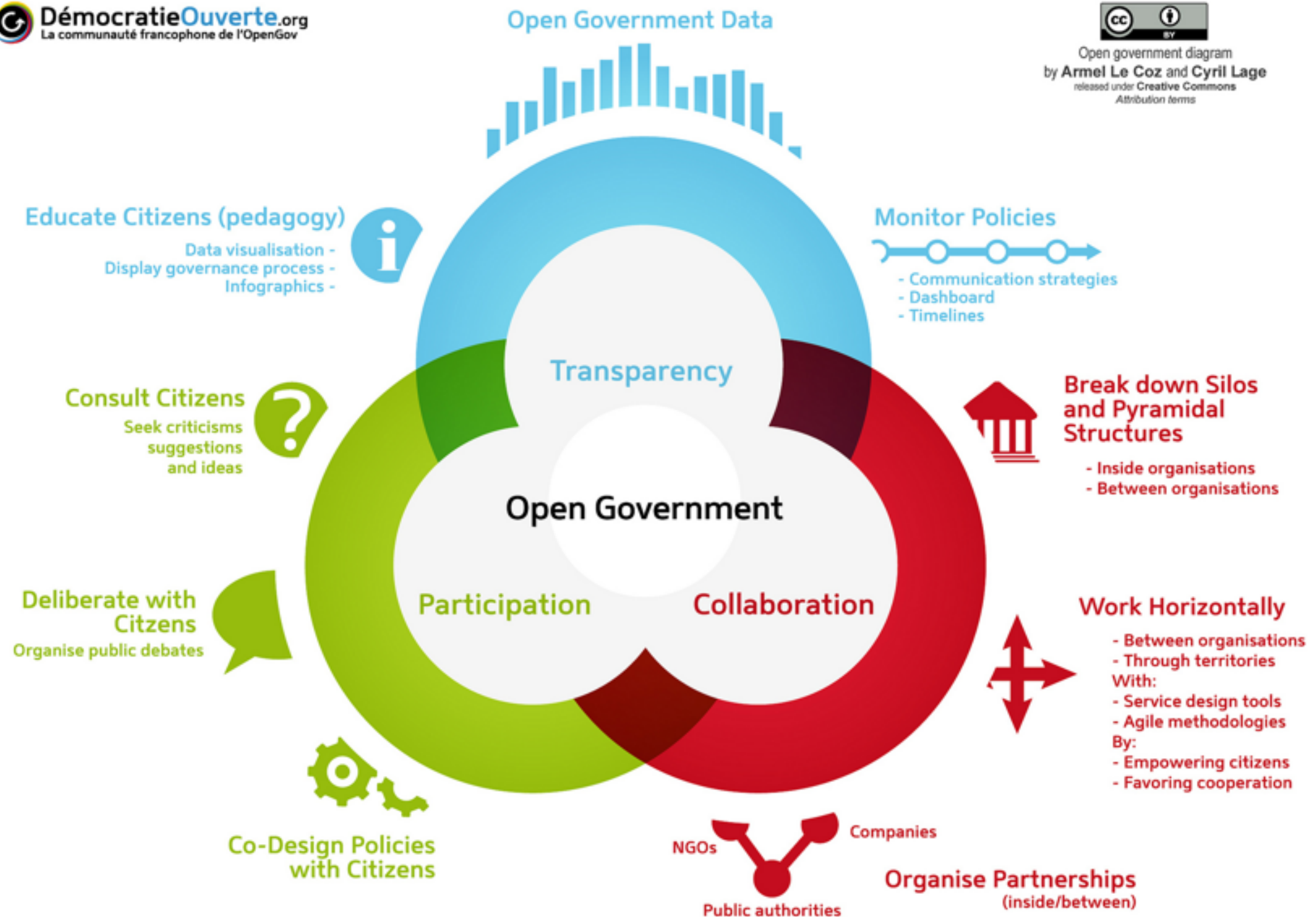
海量数据存储技术
Mass data storage technology

多系统影响模拟分析技术
Simulation techniques for
multi-system effects

digital data change politics



Digital Data open (the) government



EU data policy?

Towards a thriving data-driven economy

big data policy

the european digital agenda 2

Capacity and community building

1. A European **Public-Private Partnership** on Data

2. Digital **entrepreneurship** and open data incubator

3. Developing a **skills** base

4. **Data market** monitoring tool

5. Identification of sectoral **priorities** for R&I

Framework Conditions

1. **Availability** of data and **interoperability** (Fostering Open Data policies, Data handling tools and methods, Supporting new open standards)

2. Enabling **infrastructure** for a data-driven economy (Cloud computing, E-infrastructures and High Performance Computing, Networks/Broadband/5G, Internet of Things (IoT), Public Data Infrastructures)

3. **Regulatory issues** (Personal data protection and consumer protection, Data-mining, Security)



Personal Data Space

Data is at the centre of the future knowledge economy and society

Ref: EU COM(2014) 442 Towards a thriving data-driven economy

THE ENTREPRENEURIAL STATE



Debunking
Public vs. Private
Sector Myths



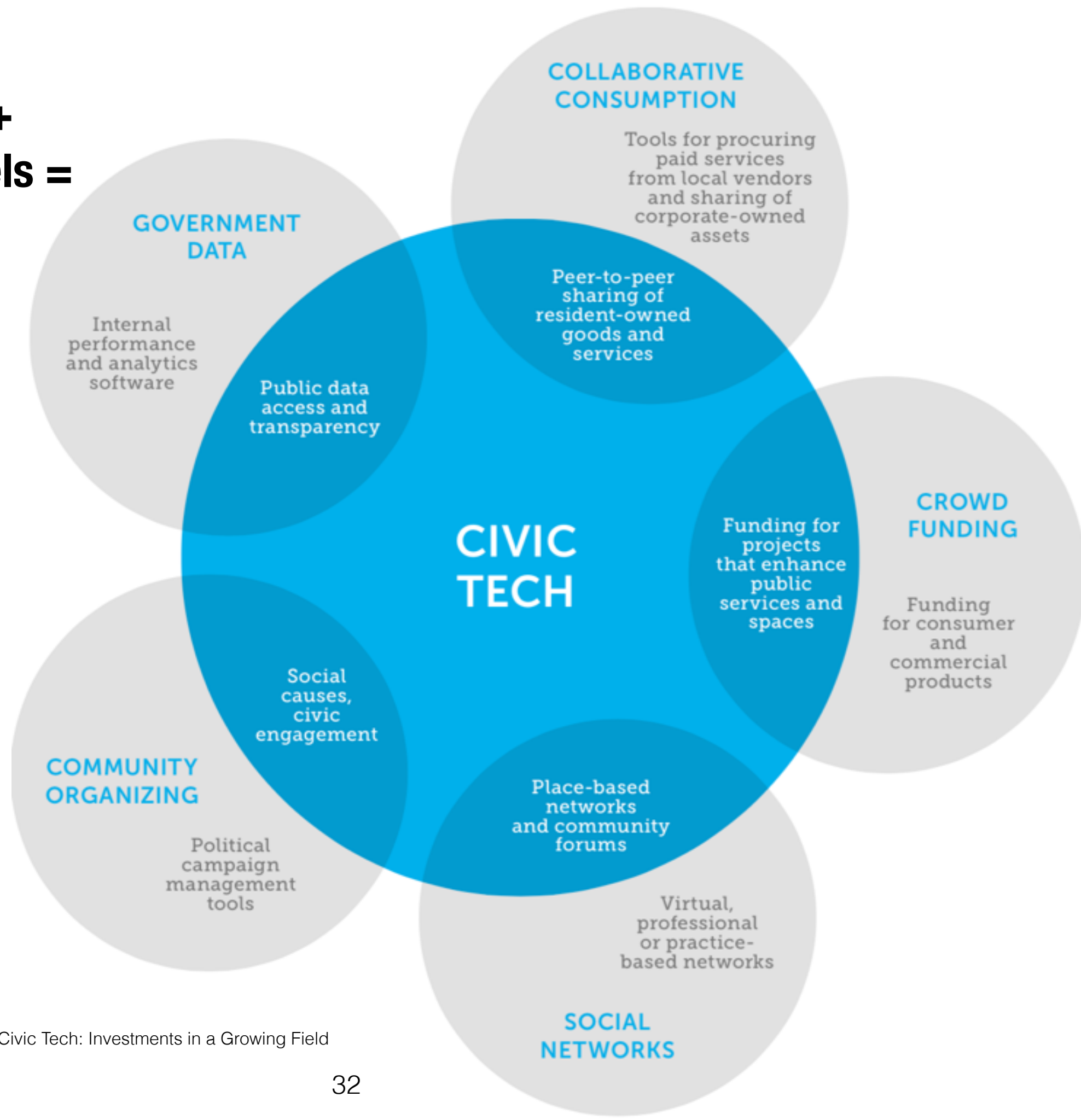
MARIANA MAZZUCATO



**the state has not just
fixed markets but
actively created
them...**

**and how can I use (open) data
for (social) innovation?**

**Civic needs +
digital data & tech +
new business models =
Civic Tech**



(disruptive) social platform (powered by google)

New York

Driver-contributed reports between 7-11 am, Monday morning

Commuter Insights



1 traffic report
every 23 seconds

1 accident report
every 4 minutes

Major
Accident



Minor
Accident



Stand Still
Traffic Jam



Heavy
Traffic Jam



(24) to (78) exchange:
30 stand still jams
60 heavy traffic jams
3 accidents

Garden State Pkwy:
51 stand still jams
117 heavy traffic jams
13 accidents

waze

OUTSMARTING
TRAFFIC, TOGETHER!



empower you community with digital data (& tech.)

**social problems and
social dynamics**

data based services

disintermediation



**... and how can I improve
governance and decision making
with data?**



conoscere per deliberare

(L. Einaudi)

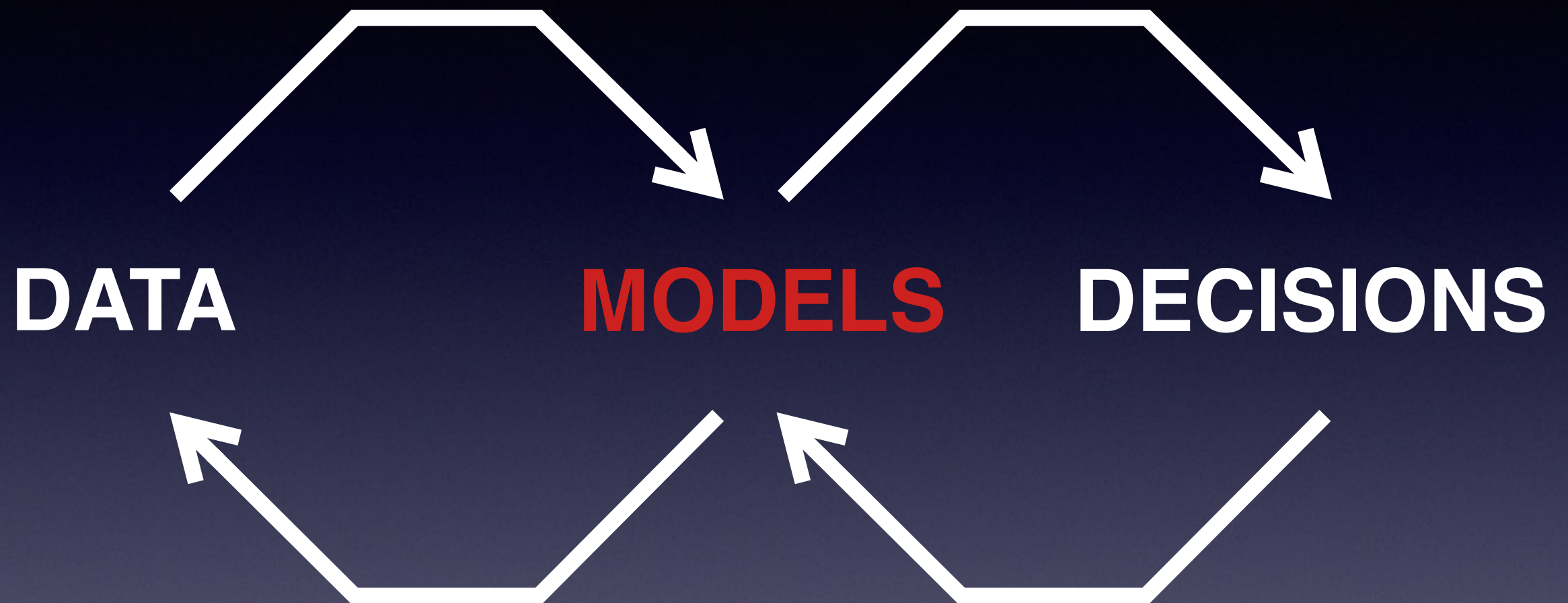
BIG DATA?

IS WHEN YOU HAVE
TOO MUCH DATA TO
HANDLE ON YOUR
OWN COMPUTER
OR WITH NORMAL
PROGRAMMING
SKILLS & NORMAL
METHODS...

... BUT AT THE
SAME TIME YOU
COMPLAIN THAT
YOU DON'T HAVE
ENOUGH DATA.
SO THIS IS ALL
ABOUT HIDDEN
PATTERNS.

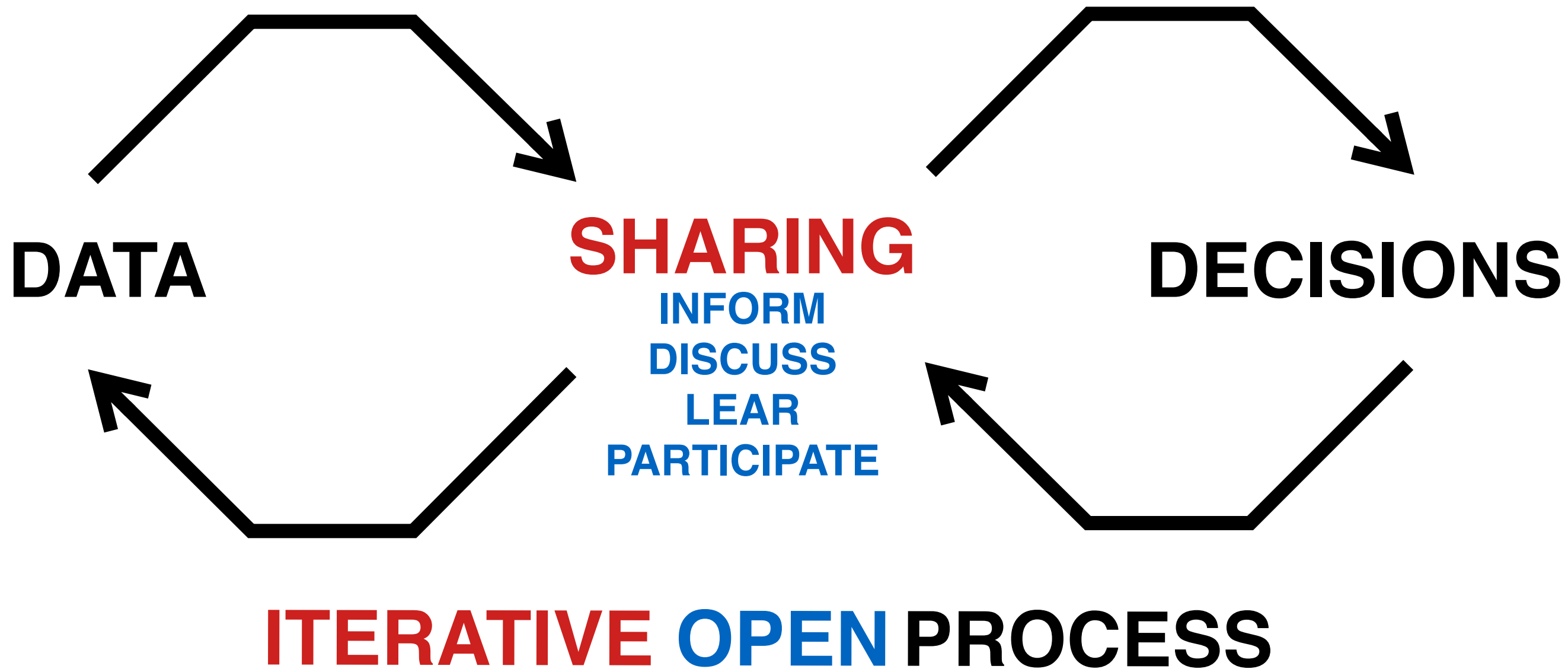


(BIG) DATA LIFECYCLE

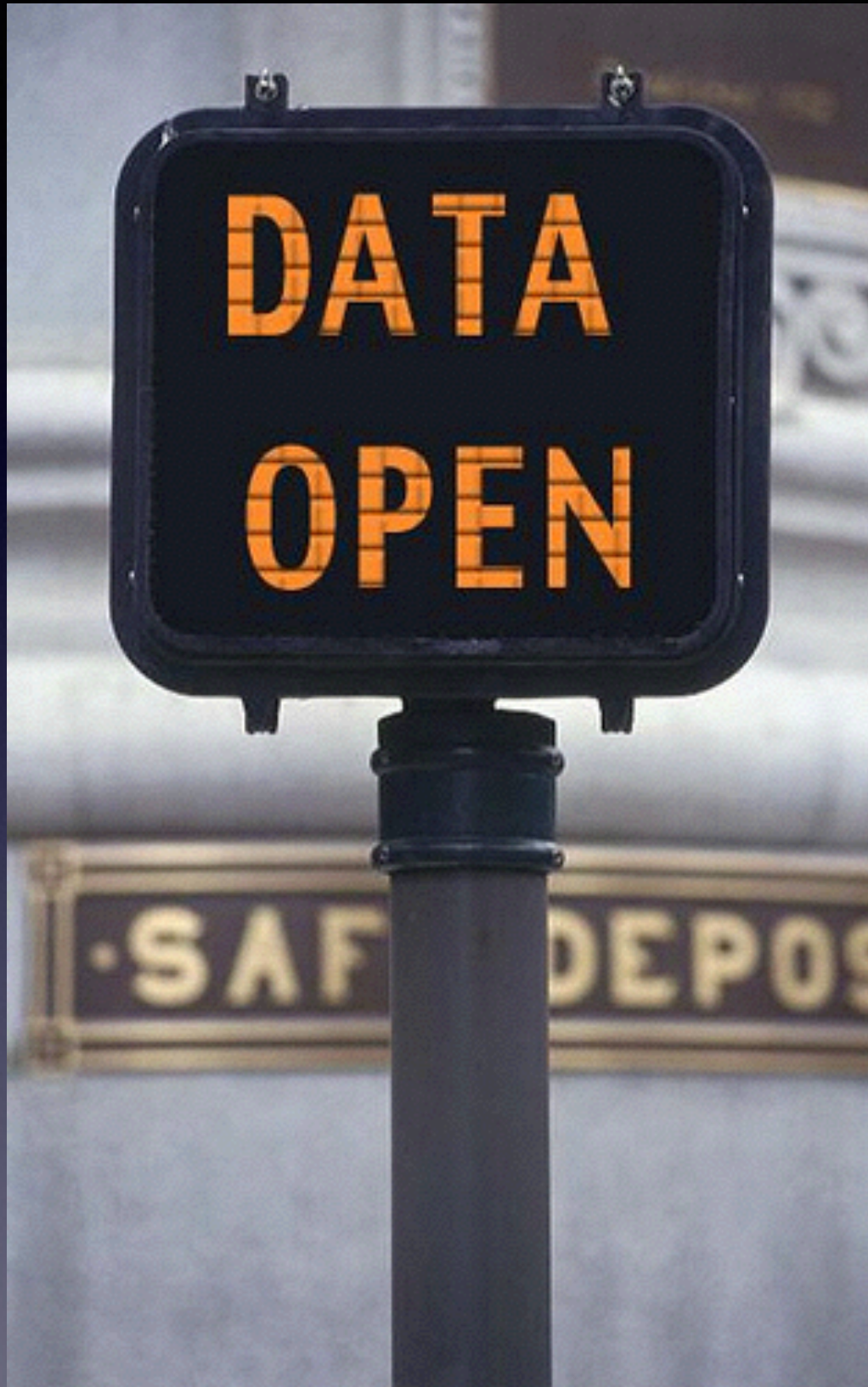


ITERATIVE LEARNING

(OPEN) DATA DECISION MAKING



and so...?



the impact of digital (open, big, ecc.) data

1. data **technologies** = dealing with complexity (HD and SW)
2. data **market** = hyper-competition & hyper-cooperation + disintermediation
3. data **policy** = data driven and demand driven approach to policy making (entrepreneurial state)



Open Data? non ce la faranno mai...

**only two choices for (open) data
development:**

- 1) entrepreneurial open data policies**
- 2) raw data now**

Thank you

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