



'THIRD-WAVE' DATA:

New Modes of Environmental Accountability

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**“EDUCATED GUESSES BUT
NOT HARD FACTS”**

Esty (2001)

SHIFT FROM 'COMMAND AND CONTROL'

Tietenberg (1998)

A wooden stamp with a handle and a rectangular base. The base is inscribed with the word "COMPLIANCE" in bold, black, sans-serif capital letters. The stamp is resting on a stack of papers, with the top sheet being a light green document with a grid and some numbers. The background is slightly blurred, showing more papers and a wooden surface.

COMPLIANCE

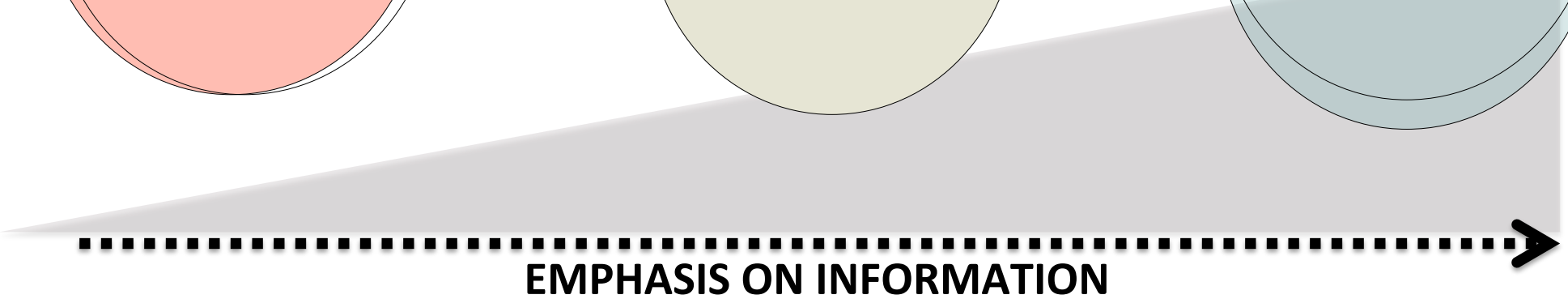
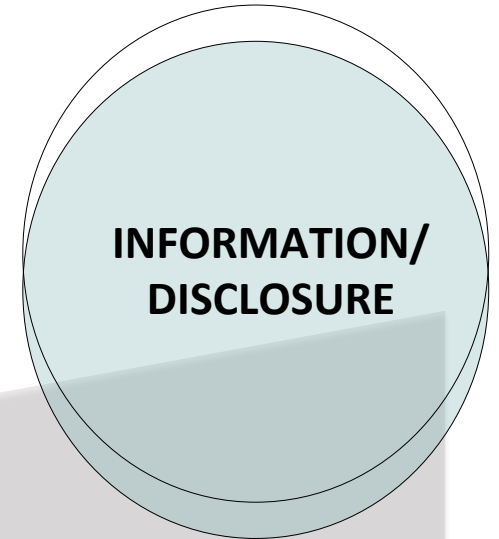
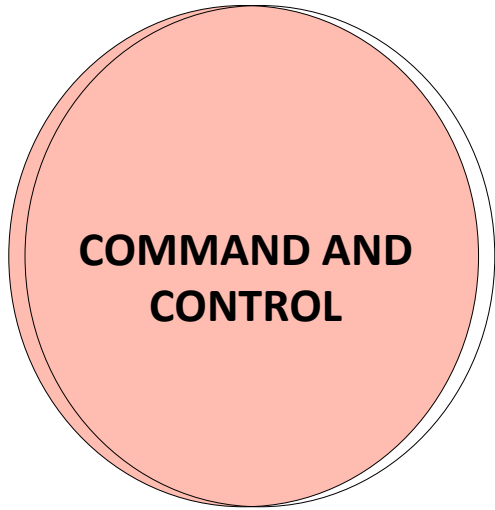
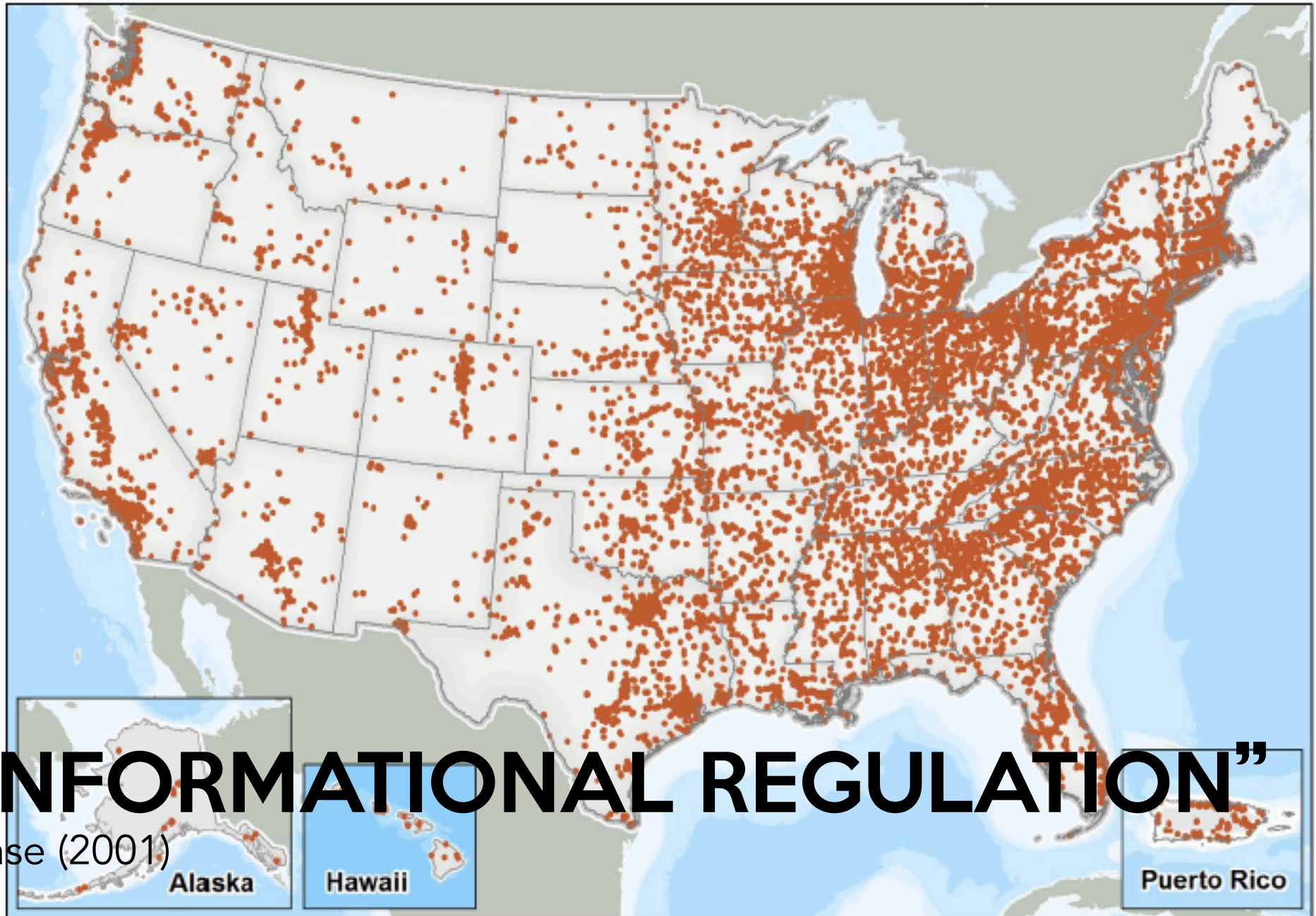


Figure 1. Geographic Distribution of TRI-Reporting Facilities



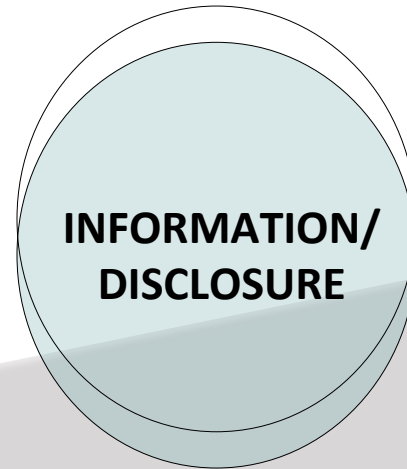
“INFORMATIONAL REGULATION”

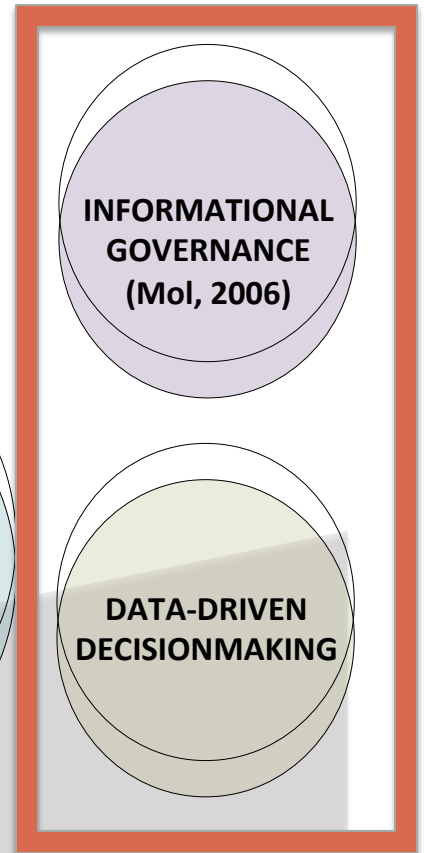
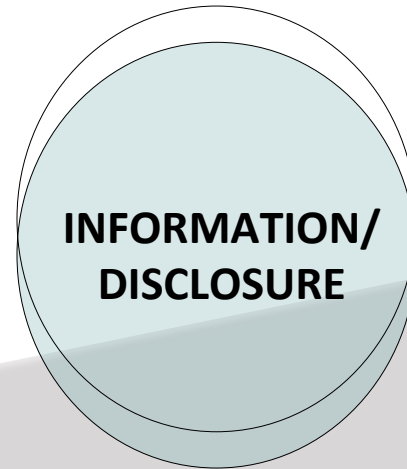
Case (2001)

Alaska

Hawaii

Puerto Rico





'Third-Wave' →

.....→
EMPHASIS ON INFORMATION

Post-2015: Sustainable Development Goals (SDGs)

1 NO POVERTY



2 NO HUNGER



3 GOOD HEALTH



4 QUALITY EDUCATION



5 GENDER EQUALITY



6 CLEAN WATER AND SANITATION



7 CLEAN ENERGY



8 GOOD JOBS AND ECONOMIC GROWTH



9 INNOVATION AND INFRASTRUCTURE



10 REDUCED INEQUALITIES



11 SUSTAINABLE CITIES AND COMMUNITIES



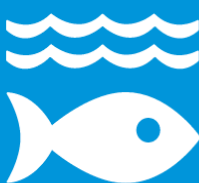
12 RESPONSIBLE CONSUMPTION



13 PROTECT THE PLANET



14 LIFE BELOW WATER



15 LIFE ON LAND



16 PEACE AND JUSTICE



17 PARTNERSHIPS FOR THE GOALS



THE GLOBAL GOALS
For Sustainable Development

Call for a 'Data Revolution'

"By 2020, there will be almost as many 'bits' in the digital universe as stars in the sky."

www.data4sdgs.org


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WE ANALYSE LESS THAN 1% OF BIG DATA

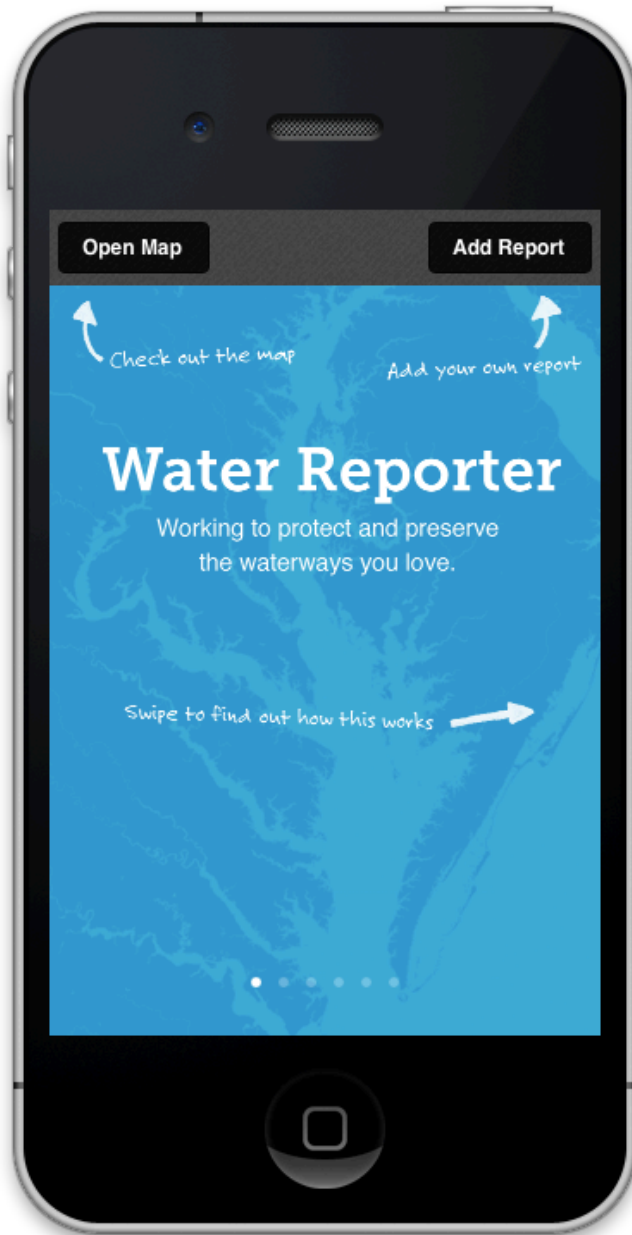
The advent of so-called 'big data' offers huge potential – but so far, it is almost untapped. According to estimates, nearly one-quarter of all data in the digital universe might be useful. However, just 0.5% of these potentially useful data are analysed.



- Integration of new & traditional data sources
- Greater openness, transparency
- Empowering people

A killer whale (orca) is shown from the chest up, with its mouth wide open. It is holding a black smartphone in its mouth. The whale's body is black on top and white on the bottom. The background is blue ocean water with white foam. A white speech bubble with a black border is positioned in the lower-left quadrant of the image.

NO, I ALREADY
TRIED THAT
FIVE TIMES, IT
DOESN'T WORK!



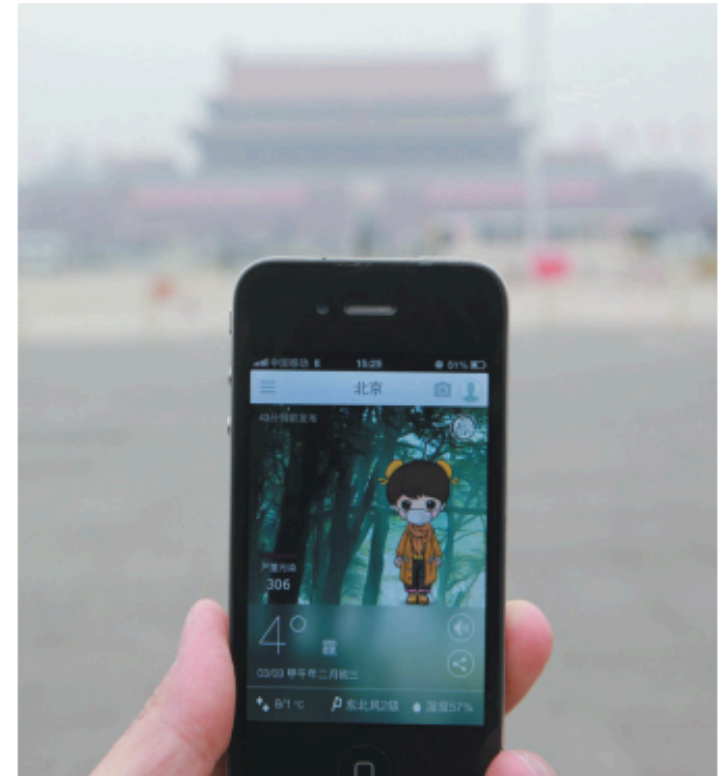
Waterreporter.org



www.cmucreatelab.org/



mylapka.com



Apps to measure air quality proliferated in China following controversies with government statistics.

Mobilize citizens to track sustainability

Businesses and the public can keep watch when governments fail to provide environmental data, say **Angel Hsu** and colleagues.

United Nations negotiators are meeting in New York this week to shape up the Sustainable Development Goals (SDGs) that will replace the Millennium Development Goals (MDGs) after 2015. The scope of the SDGs — from providing universal access to energy and water to ending poverty by 2030 — is being well articulated. But there has been little discussion about how countries will monitor that progress.

The variety of global environmental information that will be needed raises daunting challenges. Official data sets are not up to the task. We have found problems with government-reported sources in nearly every global data set that we have used in 15 years of constructing the Environmental Performance Index (EPI) — a biennial ranking of how well countries are implementing policies ▶

THANK YOU

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