



**Center for  
Technology in Government**

Explore • Empower • Innovate

# **Making Data More Available and Usable: *A Getting Started Guide for Public Officials***

***Theresa A. Pardo, Ph.D.***

***Privacy, Big Data, and the Public Good – Book Launch***

***New York Academy of Sciences***

***June 16, 2014***



**UNIVERSITY at ALBANY**  
State University of New York

# The (new) government data imperative

- In order to bring government data to data scientists and public policy professionals and to benefit from big data in their own programmatic efforts, every type of agency must think differently about how they collect, manage, use and share data.

# My Bio

## *a classic versioning issue...*

- Open NY Policy Adviser to New York State's Governor Andrew Cuomo.
- Expert Advisor to the GovLab Open Data 500 Project, NYU.
- International Advisor to the E-Government Committee for the China Information Association, China.
- President, Digital Government Society, a global multi-disciplinary organization of scholars and practitioners interested in the development and impacts of digital government.
- Member, U.S. Government Accountability Office, Executive Council on Information, Management, and Technology.
- Adviser to the Data Center for Applied Research in Social Sciences at Centro de Investigacion y Docencia Economicas (CIDE), Mexico City.
- Senior Adviser to the Informatization Research Institution, State Information Center, China.



January 31, 1993 Milestones & Honors

## **Governor Mario Cuomo Initiates a Center for Technology in Government**

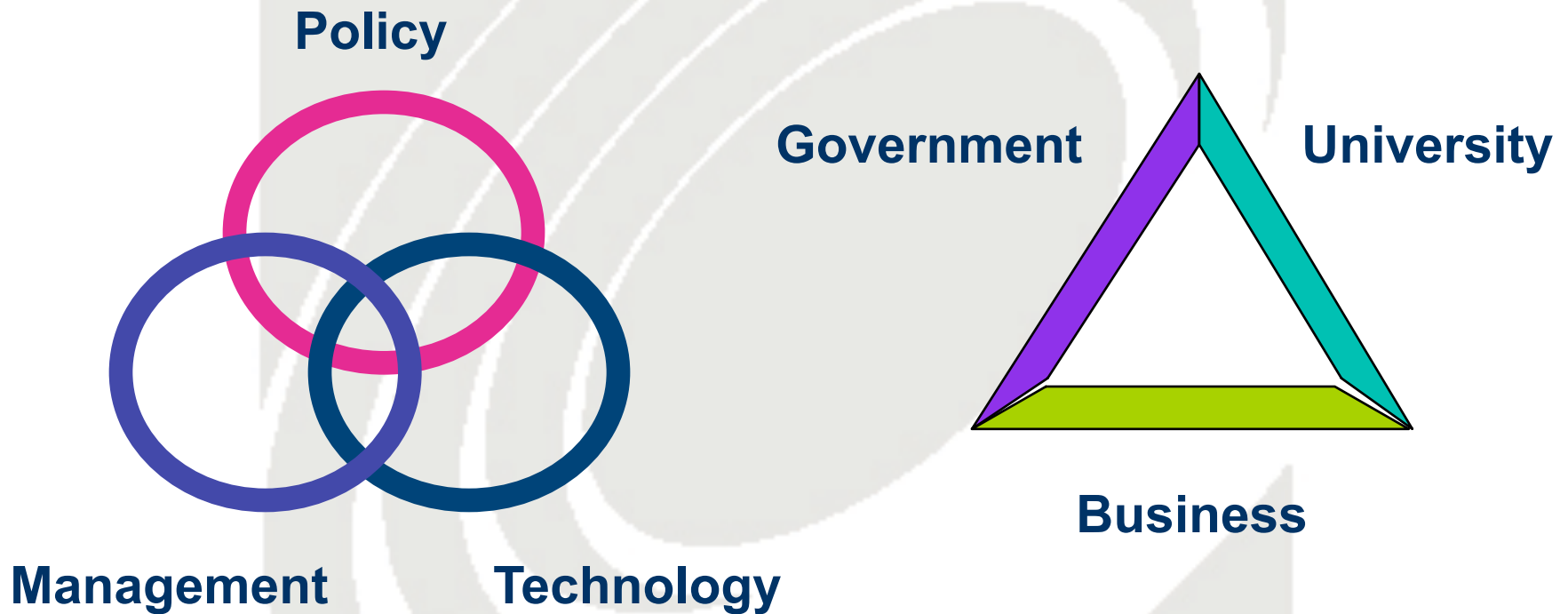
"We will set up a **Center for Technology in Government** to pursue new ways of applying technologies directly to the practical problems of information management and service delivery in the public sector — focusing on increasing productivity, reducing costs, increasing coordination, and enhancing the quality of government operations and public services."

—New York State Governor Mario Cuomo, 1993 State of the State Address

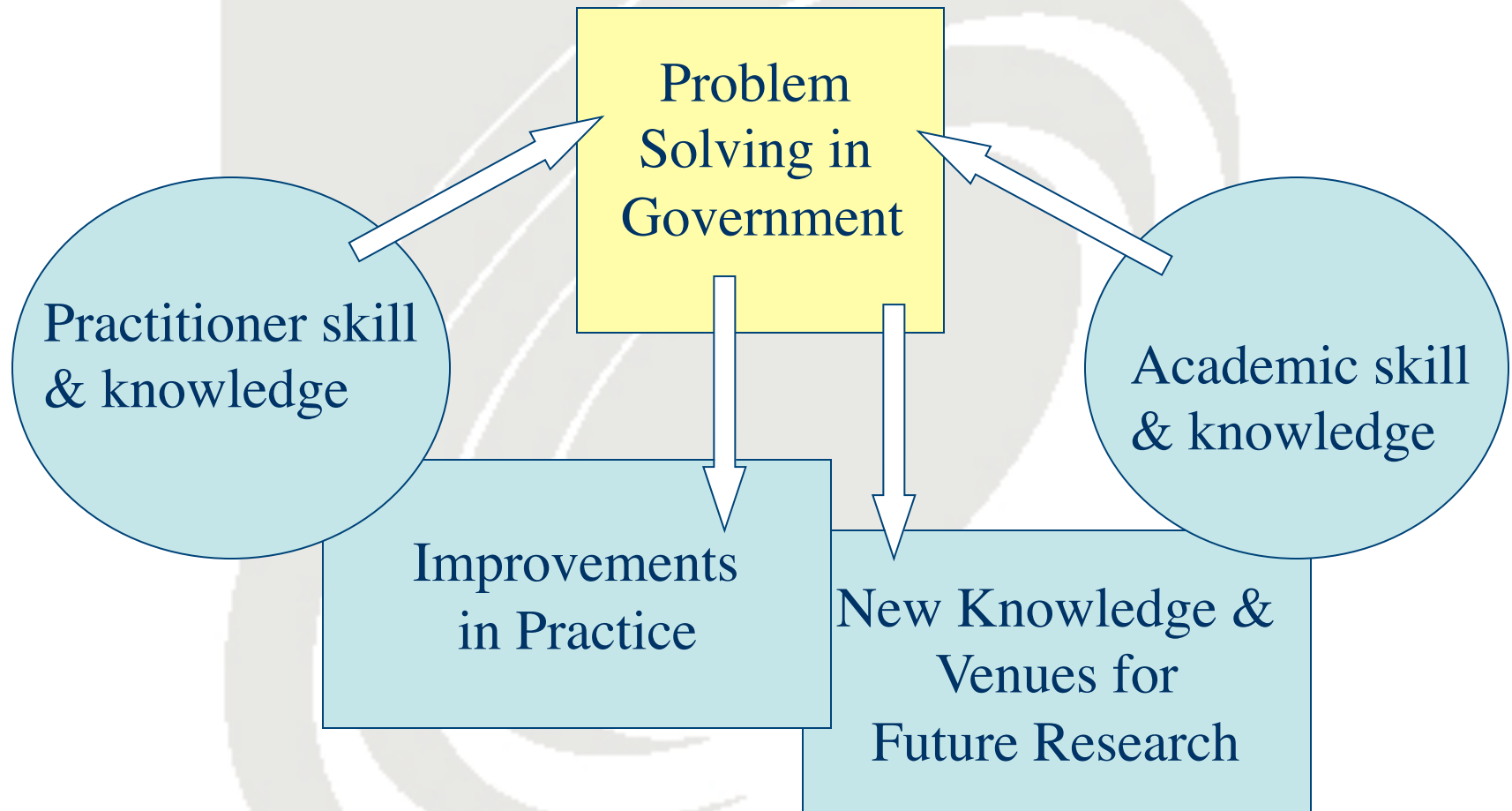




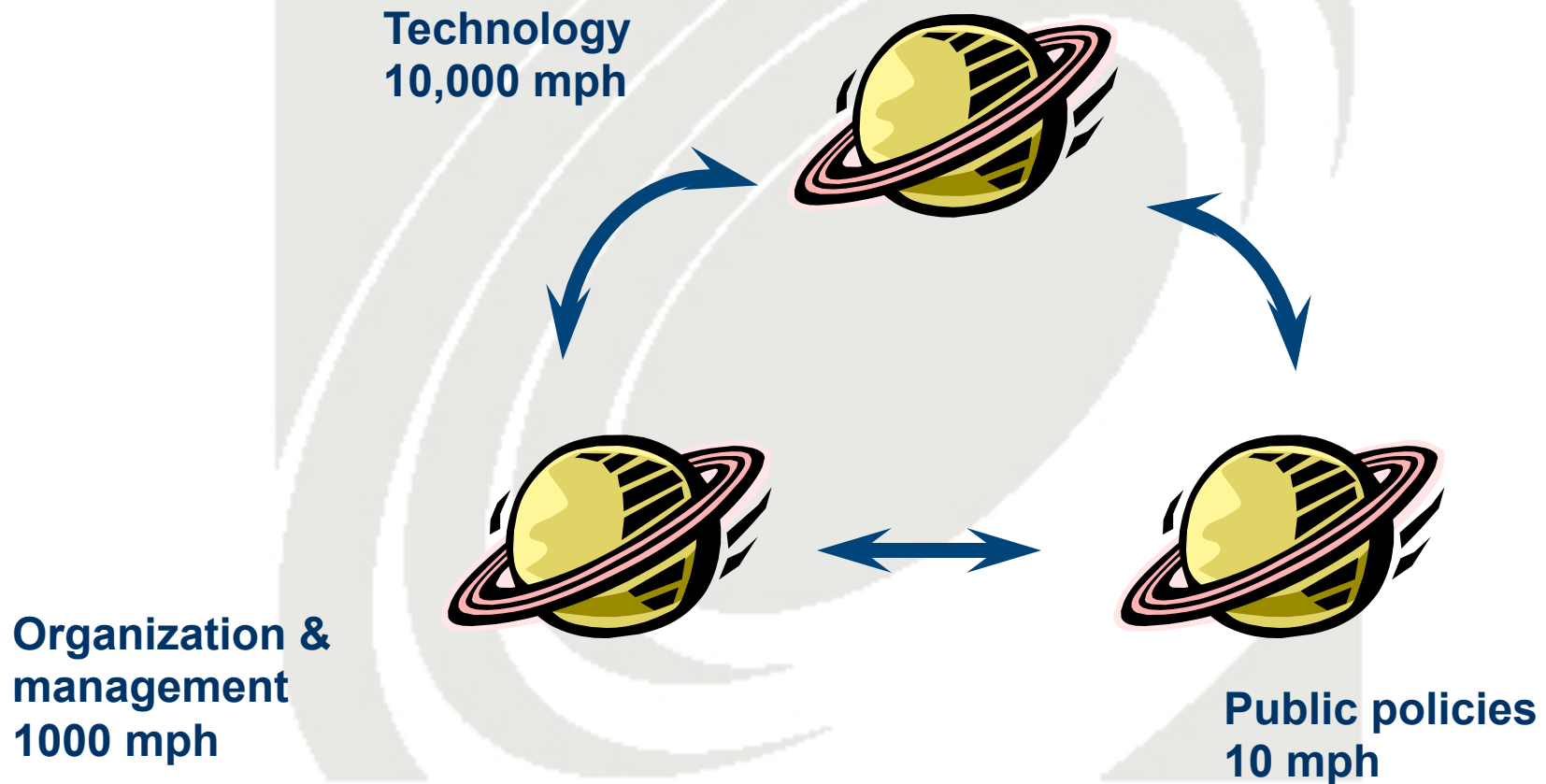
# CTG's Focus and Partners



# Research-Practice Partnerships



# The Government Innovation Context



# How 'big data' is changing lives

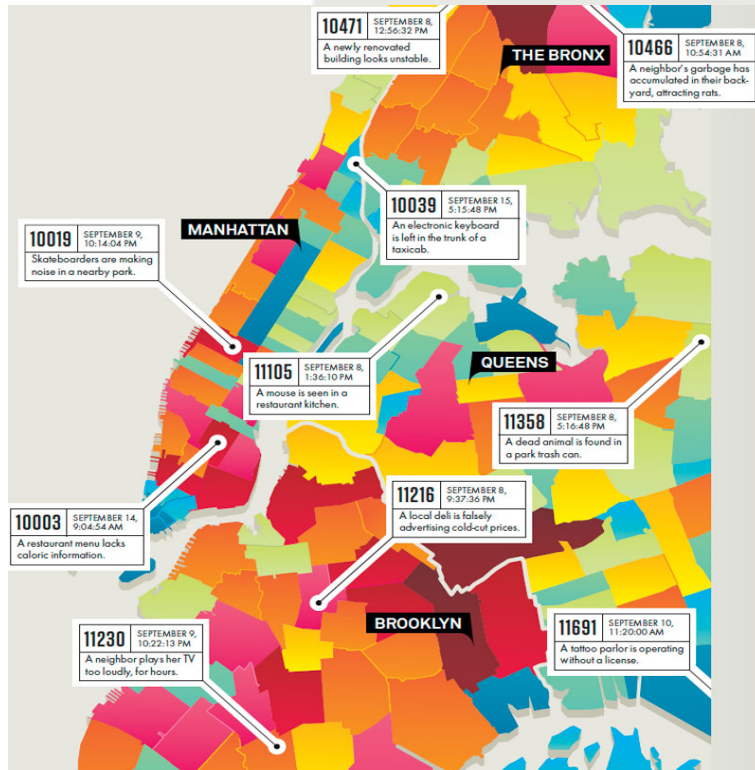
Data is increasingly defining us - from the information we share on the web, to that collected by the numerous companies with whom we interact. Intrigued by the sheer scales involved, photojournalist Rick Smolan wanted to see how data was transforming the world.

Take a look at his global snapshots - compiled in his book *The Human Face of Big Data*.



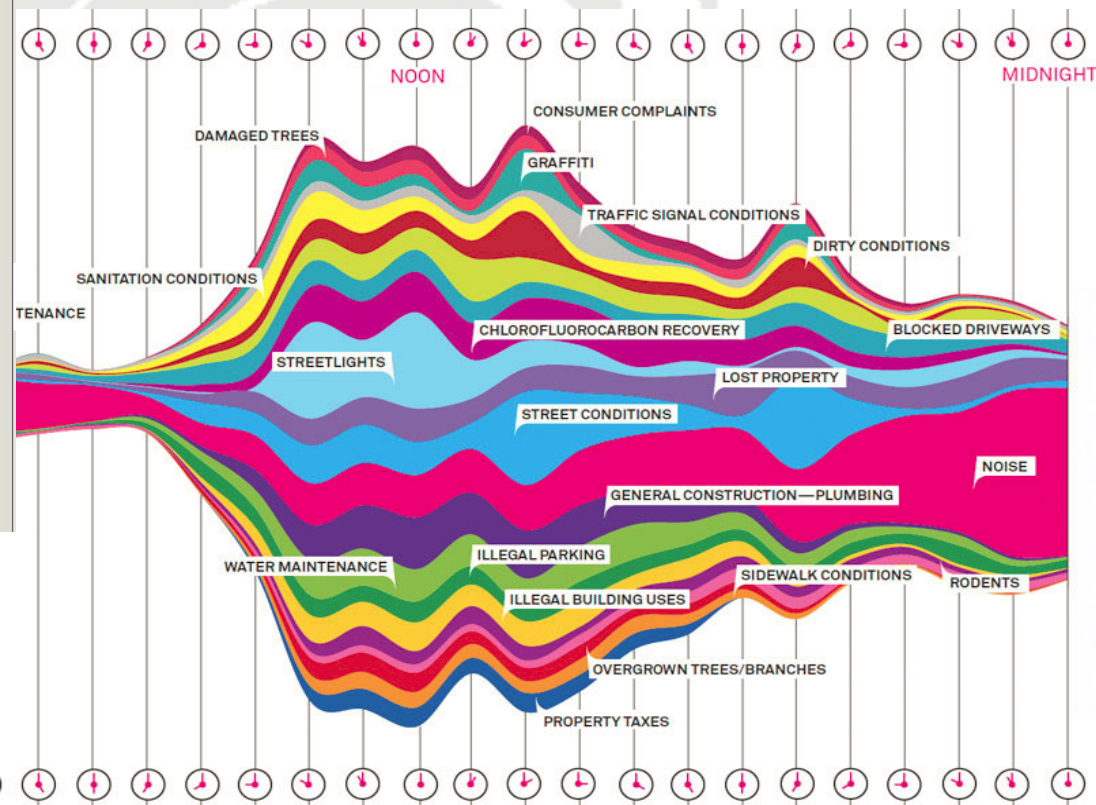


# New understanding about life in a city



Spatial Analysis of Service Requests

## Temporal Analysis of Service Requests

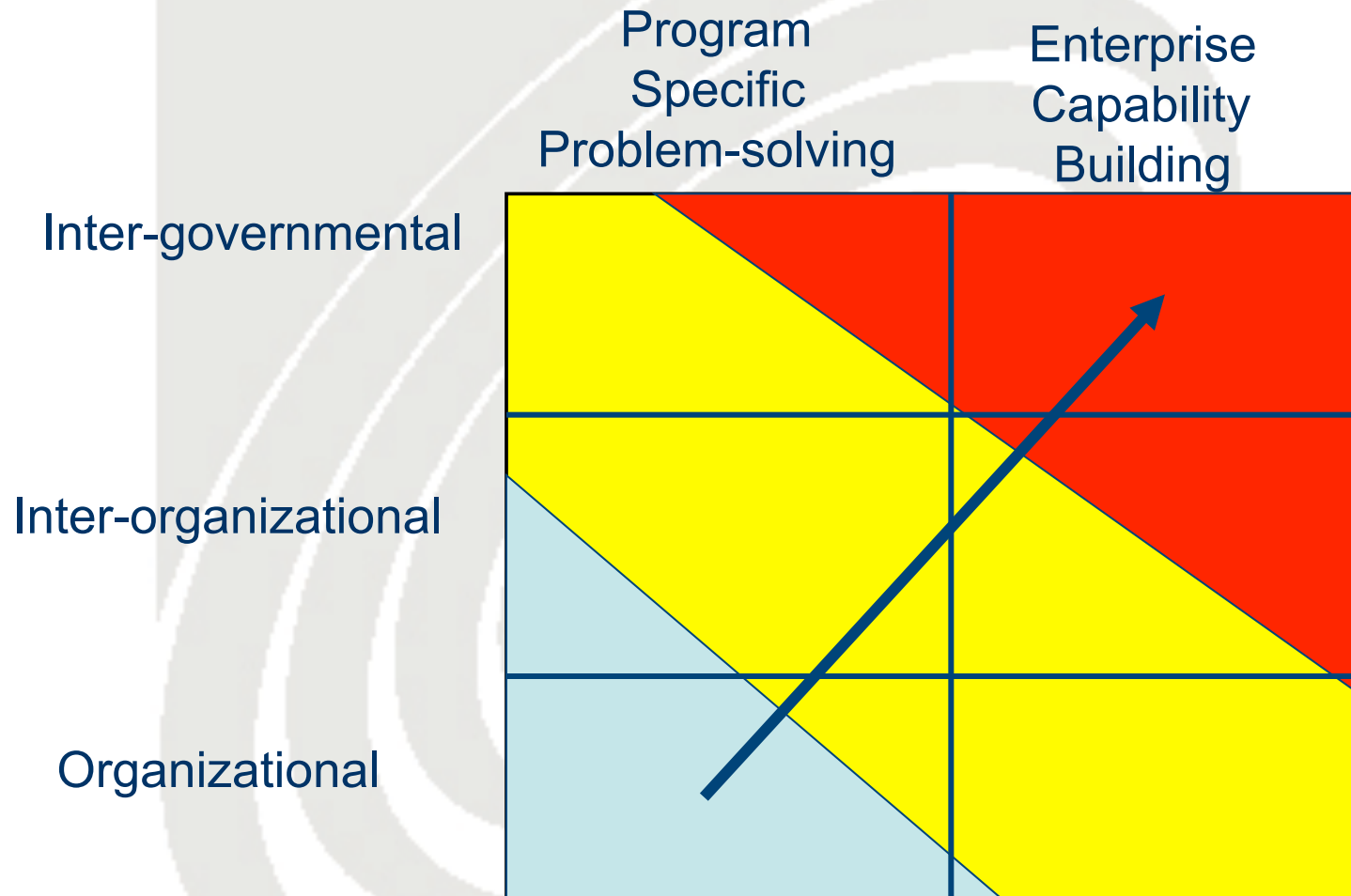




# Making data more accessible and usable

- The advent of big data has caused a growing appreciation for the challenges of creating government data infrastructures that have the policy, management and technology components necessary to be both robust and sustainable.
- For most government agencies – meeting these challenges are unfamiliar and impose responsibilities that compete for resources within their traditional programs.

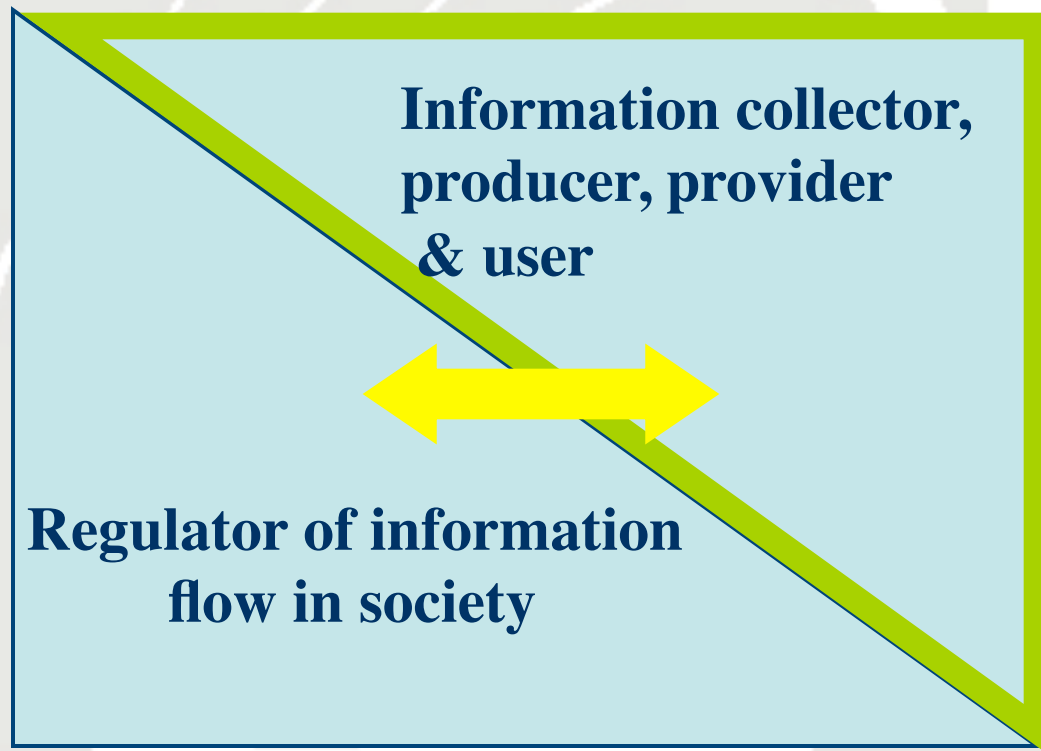
# Information Sharing Complexity Matrix



# Making Data More Available and Usable

- Resources becoming increasingly available
  - Conceptual Frameworks
  - Practical Frameworks
  - Statistical Frameworks
- Need new capability at all levels of government and across disciplines and policy silos to leverage these resources
- Where to start?

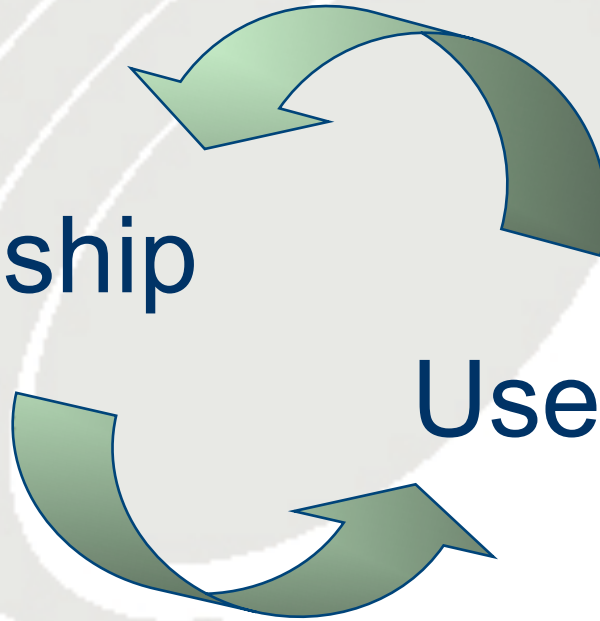
# **Back to Basics: Government's information roles**



# Principles of information use within government

Stewardship

Usefulness



Dawes, 2010



Open New York


nys-its.github.io/open-data-handbook/

rk State open data guidelines

Open New York

Introduction Directives Guidelines Public Use Executive Order Metadata

Comment



# OPEN DATA HANDBOOK

New York State Open Data Initiative

*"Our state government possesses vast treasure troves of valuable information and reports: from health, business and public safety data to information on parks, recreation, labor, and transportation ... The Open New York web portal will allow researchers, citizens, business and the media direct access to high-value data, which will be continually added to and expanded, so these groups can use the data to innovate for the benefit of all New Yorkers." – Governor Cuomo, State of the State Address, January 9, 2013*

## I. INTRODUCTION

Open Data – data.ny.gov

NYS GIS Clearinghouse

https://gis.ny.gov

New York State State Agencies Search all of NY.gov

# NYSGIS Clearinghouse

NYS ITS GIS DATA COORDINATION PROGRAM ORTHOIMAGERY DATA SHARING COOPERATIVE

 Office of Information Technology Services

With the passage of the 2013-14 State budget, the functions, powers, and duties of the Office of Cyber Security (OCS) have been transferred to the Office of Information Technology Services (ITS). The statewide GIS activities formerly associated with OCS are continuing without interruption, but now organizationally assigned to ITS. You will see us identified as the GIS Program Office within ITS. We remain located at the headquarters office of the NYS Division of Homeland Security and Emergency Services and will continue to support their GIS requirements.

### WHAT'S NEW

- [2013 Orthoimagery Now Available For Download](#)
- [Online GIS Parcel Data Resources - Updated](#)
- [NYS Elevation Data](#)
- [NYS Cadastral Business Plan](#)
- [New GIS Help Desk](#)

Click on county for more information



www.its.ny.gov



# **Making Data More Available and Usable:**

## ***A Getting Started Guide***

1. Build awareness of public value potential and comfort with the new reality big data
2. Leverage and invest in collaboration capability
3. Create new or strengthen existing enterprise\* portfolio governance
4. Create new or strengthen existing enterprise\* data governance
5. Create new data management capability

# **Making Data More Available and Usable: A Getting Started Guide**

- 1. Build awareness of public value potential and comfort with the new reality of big data**
- 2. Leverage and invest in collaboration capability**
- 3. Create new or strengthen existing enterprise\* portfolio governance**
- 4. Create new or strengthen existing enterprise\* data governance**
- 5. Create new data management capability**



### **Economic Value**

income, asset values,  
liabilities, entitlements,  
risks to these

### **Social Value**

family or community  
relationships, social mobility,  
status, identity.



### **Political Value**

personal or corporate  
influence on  
government & politics.



## **What is the Public Value of XXXXX?**

### **Quality of Life Value**

security, health,  
recreation,  
personal liberty



### **Strategic Value**

economic or political  
advantage or  
opportunities, goals,  
resources for innovation or  
planning.

### **Stewardship Value**

public's view of  
government officials as  
faithful stewards.



### **Ideological Value**

alignment of beliefs,  
moral or ethical values  
with government  
actions or outcomes.





www.mta.info

ny mta

Accessibility Text-only Customer

Home Schedules Fares & Tolls Maps Planned Service Changes MTA Info Doing Business

### Service Status

as of 10:02:50 AM

Subway Rail Bus

Bridges & Tunnels

The Weekender Future Date

1 2 3 Good Service

4 5 6 Good Service

7 Good Service

A C E Service Change

B D F M Good Service

G Good Service

J Z Good Service

L Good Service


Sandy Routes

### Getting There

Subway Long Island Rail Road

New York City Bus Metro-North Railroad

Staten Island Railway Bridges & Tunnels




http://www.g...911936.d.cWc x Inaugural President's Forum on... x http://www.goo...8911936.d.cWc x Shelter Services | OTDA

otda.ny.gov/programs/shelter/ bureau of sh

New York State State Agencies

## Office of Temporary and Disability Assistance

Andrew M. Cuomo, Governor | Kristin M. Proud, Commissioner

OTDA Home → Programs & Services → Bureau of Shelter Services

## Bureau of Shelter Services

The Bureau of Shelter Services (BSS) is responsible for the oversight of family and single shelter services districts and/or not-for-profit organizations. This includes the development and administration of the State regulations that establish the standards for the operation of facilities.

The Bureau of Shelter Services reviews and approves family shelter operational plans and adult plans. The family shelter operational plan and the single application set forth the facility's plan in the associated regulations. OTDA's oversight of the shelter program in New York includes an annual review of facilities. BSS inspections focus on health and safety issues, including building safety codes, and the provision of programs designed to promote self-sufficiency and enable shelter residents to obtain supportive housing.

In addition, fiscal and budgetary information provided by shelters and local districts is reviewed and approved by the Bureau of Shelter Services. Expenditures made by shelters are also reviewed and approved by the Bureau of Shelter Services.





# Classic Tensions

- Unknowns about users and uses
  - *Who* are the likely users?
  - What will people *do* with it?
  - What will they learn about us before we learn it about ourselves.
- Concerns about data quality and the implications for related decisions
  - Metadata, level of granularity, cleanliness, format, context and more...
- Competing priorities due to high political interest and public visibility of open data programs.

# Making Data More Available and Usable: A Getting Started Guide

1. Build awareness of public value potential and comfort with the new reality of big data
- 2. Leverage and invest in collaboration capability**
3. Create new or strengthen existing enterprise\* portfolio governance
4. Create new or strengthen existing enterprise\* data governance
5. Create new data management capability



# THE NELSON A. ROCKEFELLER INSTITUTE OF GOVERNMENT

The public policy research arm of the State University of New York

Search Our Site:

GO!



ABOUT US

RESEARCH AND DATA

OBSERVATIONS

NEWSROOM

FORUMS AND EVENTS

RESOURCES

Home > Open Health Data Open Opportunities

## About the Open Health Data, Open Opportunities Workshop



How can releasing millions of data points improve the health of New Yorkers? This interactive workshop brought together researchers and practitioners to explore how open health data can be a viable new resource for health research and developing innovative health interventions.

Background, objectives, and list of participants

## Open Data Resources



Half the battle is just finding information. Participants received a white paper on how to use open data in the classroom and links to open health data portals. Classroom handout and open data portals

## Speakers, Panelists, and Keynote



We have provided the Powerpoint and audio of all presentations. The list of speakers included Dr. Nirav Shah; Ms. Courtney Burke; Dr. Guthrie (Gus) Binkhead; Ms. Tania Allard; Dr. James Knickman; Dr. Thomas Gals; Dr. Theresa Pardo; and Dr. Hao Wang.

[Link to presentations and video](#)

## Engaging Health Researchers as Users



During break-out sessions participants discussed research priorities and open data wish lists. NYS DOH practitioners joined the small groups to share their knowledge and ideas. Groups reported out to the larger group. Summary report (forthcoming)

## Join the Conversation



We want to continue the conversation. If you have ideas or comments on open health data, the workshop, or examples of how you have used open data share them with the community! We'll post the feedback.

[Leave a comment](#)



State and Local Finance

Federalism

New York State Statistics

New York State Government

Health Care

Education

Economic Development

Workforce, Welfare, and Social Services

Cities and Neighborhoods

Disaster Recovery

Faith-Based Social Services

## Exploring Ways to Collaborate



The day concluded with a plenary panel on how open data provides opportunities for health researchers and state government to collaborate. See the discussion

## Sponsors



The workshop was supported by the New York State Health Foundation. The Center for Technology in Government co-organized the event.



Recent Books  
by Our  
Researchers

Follow Us



Facebook



Twitter

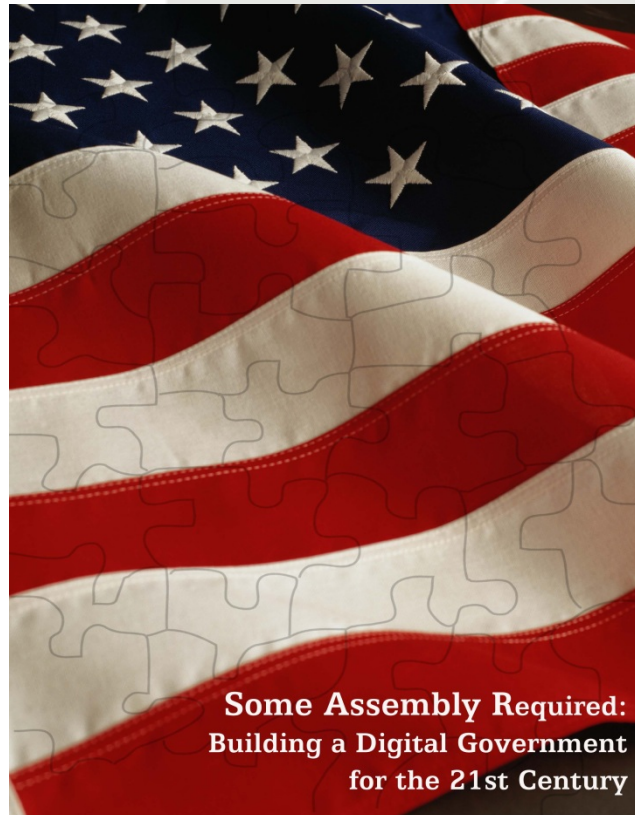


YouTube

# Making Data More Available and Usable: A Getting Started Guide

1. Build awareness of public value potential and comfort with the new reality of big data
2. Leverage and invest in collaboration capability
3. **Create new or strengthen existing enterprise\* portfolio governance**
4. Create new or strengthen existing enterprise\* data governance
5. Create new data management capability

# Recognizing the quintessential underlying problems of eGovernment



**“Advanced IT applications in government must *integrate* policies, processes, information, and technology.”**

**“What is technically possible may not be organizationally feasible or politically or socially desirable.”**

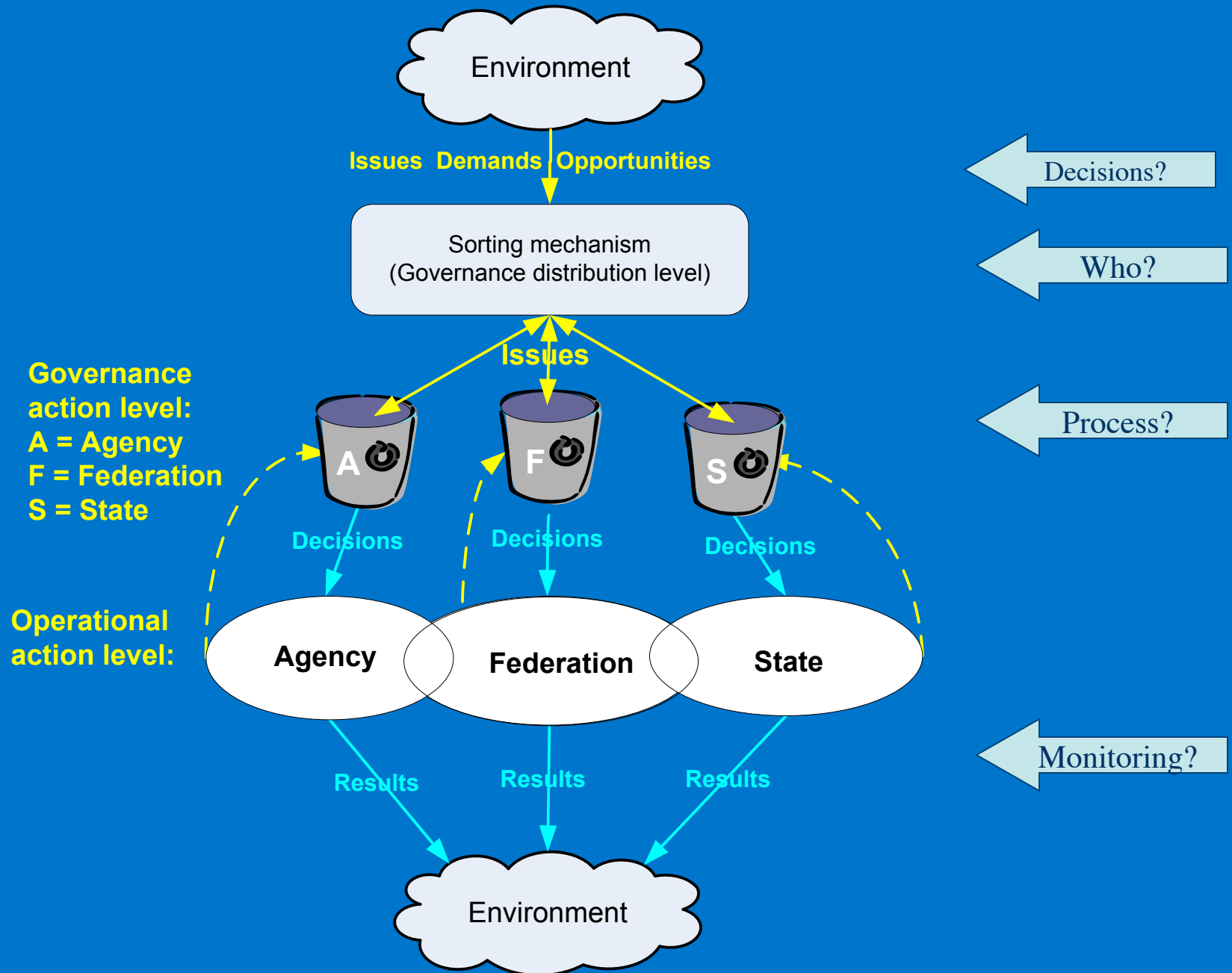


# Governance

Answers the questions:

- What decisions must be made?
- Who should make these decisions?
- How will decisions be made?
- What is the process for monitoring results?

*(Weill & Ross, 1999)*



www.nyc.gov/html/doitt/html/policy/it\_policy.shtml

NYC Resources 311 Office of the Mayor

**NYC** Information Technology & Telecommunications

Home | Newsletter Sign-Up | Printer Friendly | Translate Page | Text Size: A A A

**Policy & Strategy: IT Policy & Governance**

DoITT works to establish a citywide IT strategy through a coordinated and collaborative approach. This includes enactment of necessary policies and governance to ensure that the City's IT agenda is aligned with enterprise business needs and investments, as well as the individual business needs of each agency. As the City's IT leader, DoITT leverages IT policy and strategy to enable significant cost savings, improved efficiency, security and overall service quality for agencies.

**Executive Order 140**

Issued on October 20th 2010, [Executive Order 140](#) (in PDF) authorizes DoITT to centralize the coordination of information technology planning and policy for the City. This new mandate establishes a coordinated approach to citywide IT policies to enable significant cost savings, improved efficiency, security and service through a consolidated IT infrastructure.

Executive Order 140 provides three key directives:

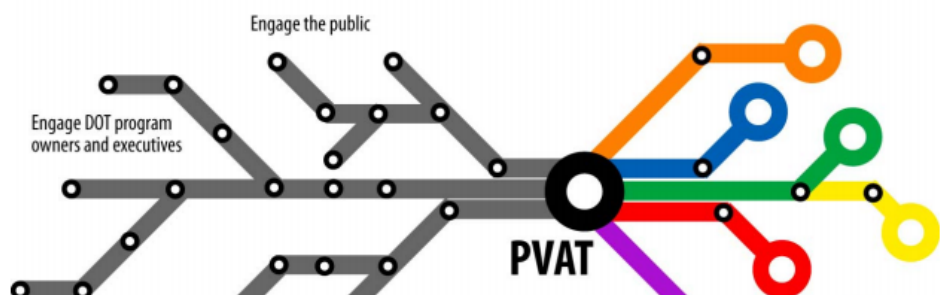
1. Execute the Citywide IT Infrastructure Services Program (CITIServ) and provide for an IT shared services environment
2. Develop citywide IT policies and standards where appropriate

Follow DoITT on:

DOT Open Government Plan 2012-2014

**US DOT Open Government Action Plan**

called the [Public Value Assessment Tool](#) (PVAT), created by the [Center for Technology in Government](#) (CTG) at the University at Albany, SUNY. While the concept of public value is not new and DOT has invoked value analysis as part of its decisionmaking processes, the PVAT represented a new opportunity to systematically assess the public value of DOT's Open Government efforts. DOT sought ideas from multiple sources for activities to include in the Plan that would align with the goals of Open Government. Ultimately, these activities were grouped into similar categories, and prioritized to select our flagship initiative for 2012-2014. The following section will describe in more detail how ideas for activities were sought, how activities were assessed for public value, and how our flagship initiative was selected.



resident's Forum on... x NYS IT Transformation | NY... x +

provide expert advice in all areas related to strategic planning and agency policy development. Mahesh has played significant leadership roles in several key transformation programs, including the consolidation of IT functions under ITS. Mahesh will start on January 23.

**Marking Our First Year**

November 22 marks the One Year Anniversary of the creation of the Office of Information Technology Services (ITS). ITS provides an incredible opportunity for State government to better serve New York by uniting 4,000+ technology professionals into one organization focused on providing best-in-class IT service. The NYS Chief Information Officer Brian Digman thanks ITS staff for their efforts as they work side-by-side to build this new government agency. ITS looks forward to continued successes in the years to come.

**its** Office of Information Technology Services  
11.22.13  
Celebrating Our One Year Anniversary

**Governor Cuomo Announces Agreement with Microsoft for Statewide Implementation of**

## Which States and Cities Have Chief Data Officers?

*Ranks of government CDOs grow as agencies implement analytics.*

BY STEVE TOWNS / JUNE 13, 2014



Click on the pinpoints in the map above to see the various chief data officers in state and local government, and in education. Blue signifies a state-level officer, green signifies a local-level officer, and yellow signifies an officer in education.

### From Our Sister Sites



**How Government's Using Behavioral Economics to Get People to Make Better Decisions**  
Federally funded projects in several states and localities are testing ways to use convenience and peer pressure to get prison inmates and people who owe child support to make better decisions.

#### ADVERTISEMENT

**software**

Get the right information to the right people—faster, with ...

Real-Time Monitoring & Reporting

# Making Data More Available and Usable: A Getting Started Guide

1. Build awareness of public value potential and comfort with the new reality of big data
2. Leverage and invest in collaboration capability
3. Create new or strengthen existing enterprise\* portfolio governance
- 4. Create new or strengthen existing enterprise\* data governance**
5. Create new data management capability





# New York State Division of Criminal Justice Services

ENHANCING PUBLIC SAFETY AND IMPROVING CRIMINAL JUSTICE



Andrew M. Cuomo  
Governor

## Community Resources

- AMBER/Missing Child Alerts
- Current Alerts
- Crime Victims Assistance
- Internet Safety
- Juvenile Justice Reform
- Re-entry Initiatives

## Law Enforcement

- Accreditation
- Crime Reporting
- Forensic Science / DNA
- Fingerprint Services
- Forms
- Operation IMPACT
- Probation / Alternatives
- Sexual Offense Kits
- Technology

[Missing Persons](#)[Sex Offenders](#)[Statistics](#)

## eJusticeNY

eJusticeNY is a browser-based application designed to give users from qualified agencies a single point of access to computerized information within and beyond New York State. eJusticeNY embodies the concept of coordinated and integrated criminal justice information systems for New York State. The system's security and ease of use allow qualified users to obtain current status information for a defendant at any key decision point in the processing of a criminal case. An example of a key decision point when immediate is critical is the initial arraignment of a criminal defendant. A judge must decide if the individual can be released or detained to ensure his or her appearance at subsequent court proceedings. The court's ability to use eJusticeNY to obtain current information regarding the individual's status, both within and beyond New York State, including whether the individual is wanted in another jurisdiction, and to do so by a simple and secure inquiry from an office personal computer, ensures that the decision is sound and the interests of public safety are well served.

## What is the goal of eJusticeNY?

The goal of eJusticeNY is simple: to give qualified users "one-stop shopping" access to the information necessary to fulfill their mission.

## What can users do with eJusticeNY?



Center for  
Technology in Government



UNIVERSITY AT ALBANY  
State University of New York

Search CTG



ABOUT

RESEARCH

PROJECTS

RESULTS

THEMES

ACADEMICS

NEWS & EVENTS

# Information Sharing and Coordination Challenges in Financial Market Regulation

A research agenda setting workshop

November 14, 2013 | Washington, DC  
20F Street Convention Center

20 YEARS



Center for  
Technology in Government

INSTITUTE FOR  
FINANCIAL MARKET REGULATION



Center for  
Technology in Government



UNIVERSITY AT ALBANY  
State University of New York

# Why a Research Agenda?

- The use of information and communication technology in financial markets has accelerated while research on the interactions between technology and organizational and behavioral dynamics of financial market regulation has lagged.
- Information sharing in support of market regulation impacted by system complexity, incentives, trust and standards.



Family offers **FREE** unlimited data and a \$200 reward.

Thanks to where you work, you can switch to the Sprint Family™ Plan and get:

- **FREE** unlimited data for 12 months
- **\$200** VISA® Prepaid Card

For each eligible line you switch from another carrier. Unlimited data while on the Sprint network. Restrictions apply.



**Sprint**  
Happy  
Connecting  
**Switch today**

SOLUTIONS FOR STATE AND LOCAL GOVERNMENT

# GOVERNMENT TECHNOLOGY



MAGAZINE / SUBSCRIBE / NEWSLETTER / NEWS / EVENTS / REPORTS / VIDEO / ADVERTISE / CENTER FOR DIGITAL GOVERNMENT / ABOUT / MORE

## DATA

### Data Governance: The Public Sector's Next Big Frontier

*Managing and organizing data is the next phase of state and local government's hopeful metamorphosis.*

BY COLIN WOOD / APRIL 29, 2014



67



2



1



Collect information and ask questions later has become the mantra of organizations everywhere. The National Security Agency **records** something like 3 billion phone calls every day, along with emails, text messages and who knows what else of the American public. But given how young the big data movement is, it's unlikely the agency has found a way to make use of all its information — and smaller organizations, like cities and states, haven't either. Managing and organizing data is the next phase of the public sector's hopeful metamorphosis.

The National Association of State Chief Information Officers (NASCIO) has been pushing the idea for years, in issue briefs and personal interactions with IT leaders across the country, said Doug Robinson, the association's executive director. But now that data collection tools are

ADVERTISEMENT

**software**

Get the right information  
to the right people—  
faster, with ...

Real-Time Monitoring & Reporting

**LEARN MORE**

GET **GOVTECH NEWS**  
DELIVERED TO YOUR INBOX

Email Address

underwriting provided by:

**nic** the people  
behind  
eGovernment

Innovation in Government



# **Making Data More Available and Usable: A Getting Started Guide**

1. Build awareness of public value potential and comfort with the new reality of big data
2. Leverage and invest in collaboration capability
3. Create new or strengthen existing enterprise\* portfolio governance
4. Create new or strengthen existing enterprise\* data governance
5. **Create new data management capability**





Search

ONEMercury

For

Go

Connect



About

Participate

Resources

Education

Data

Home » Resources » Data Management Planning

## Resources

Investigator Toolkit  
Data Management Planning  
Best Practices  
Software Tools Catalog  
For Librarians  
Publications  
Ask DataONE  
Coffeehouse

## Find it Fast

Data  
Data Management Planning  
Best Practices

## Data Management Planning

*"A goal without a plan is just a wish."* Antoine de Saint-Exupery (1900 -1944)



Build your Data Management Plan

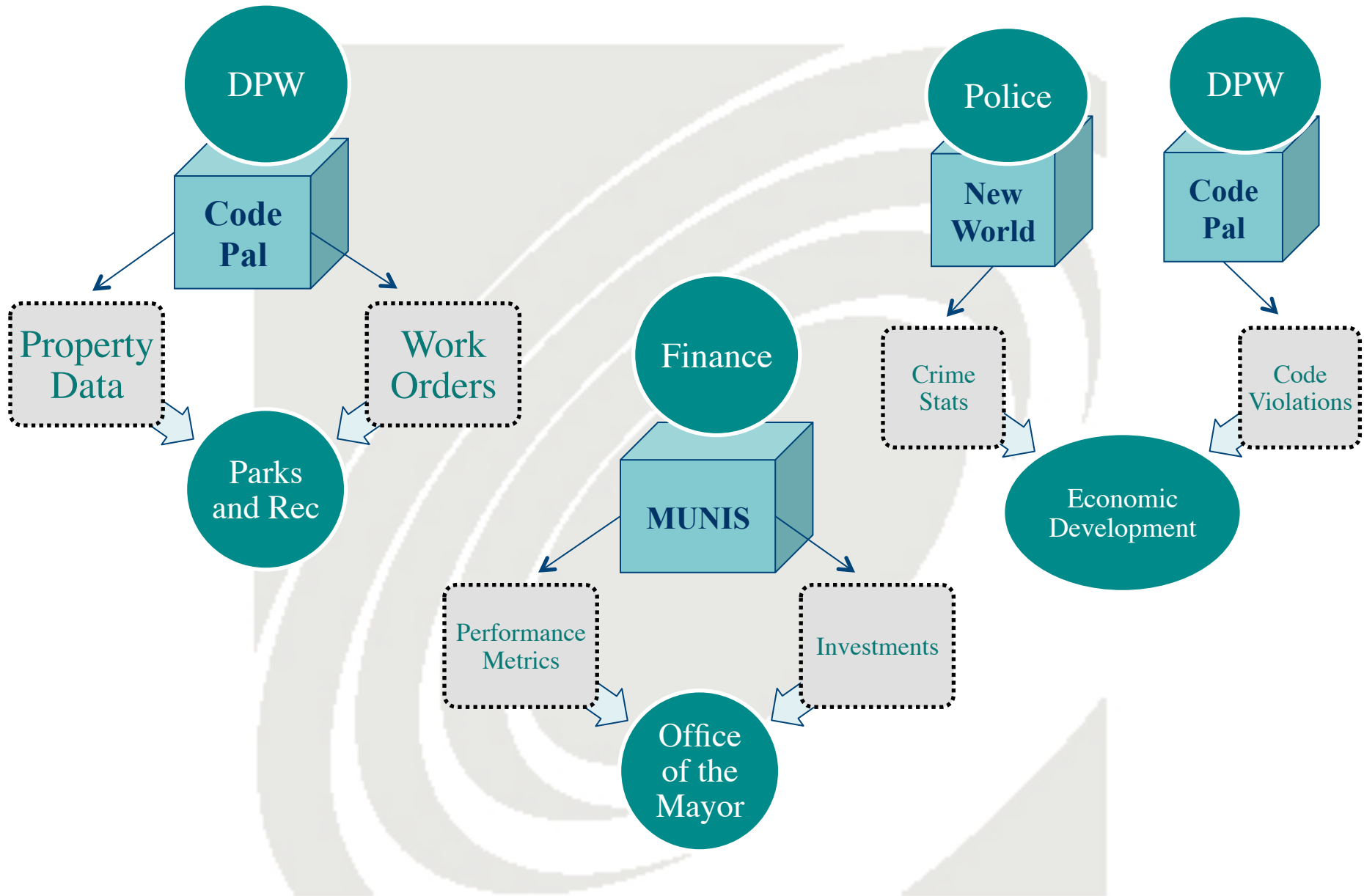
The DMPTool is a collaboration of multiple institutions, including DataONE, and is a service of the UC Curator. The DMPTool will help you:

- Create ready-to-use data management plans for specific funding agencies
- Meet funder requirements for data management plans
- Get step-by-step instructions and guidance for your data management plan as you build it



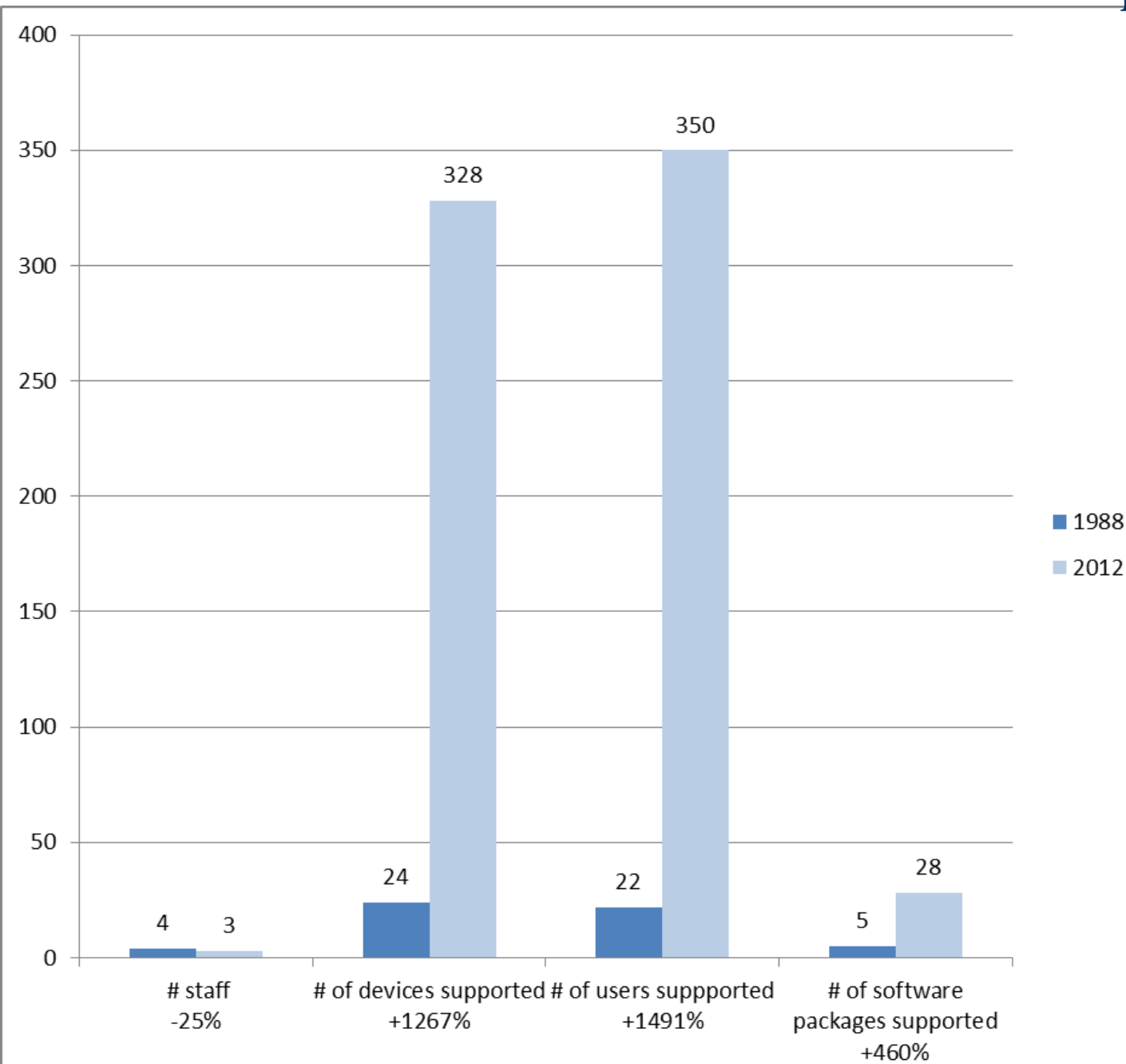
# A Smarter Binghamton





# IT Staff and Growth of Service Responsibilities

1988-2012



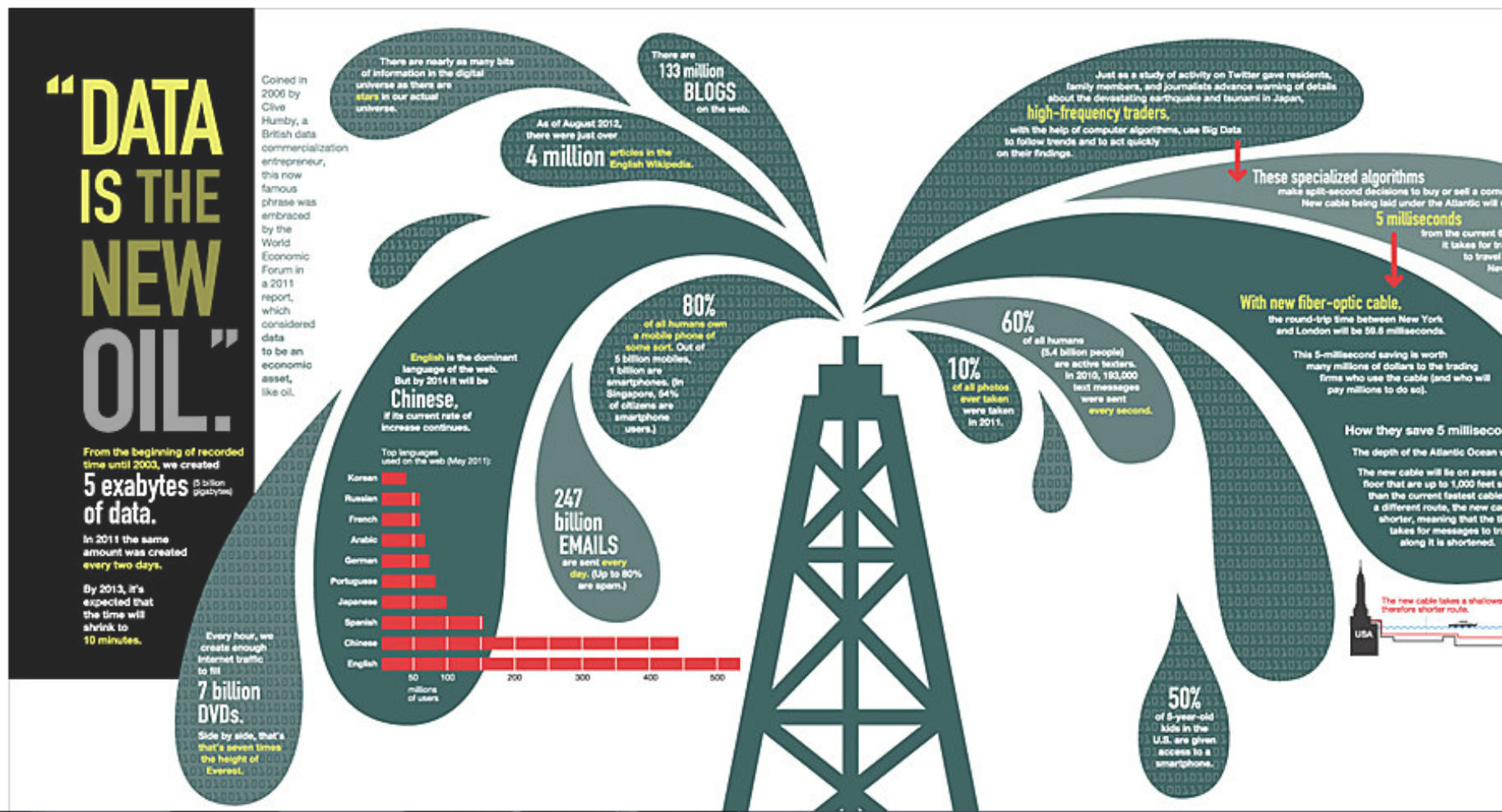




# How 'big data' is changing lives

Data is increasingly defining us - from the information we share on the web, to that collected by the numerous companies with which we interact. Intrigued by the sheer scales involved, photojournalist Rick Smolan wanted to see how data was transforming the world.

Take a look at his global snapshots - compiled in his book *The Human Face of Big Data*.



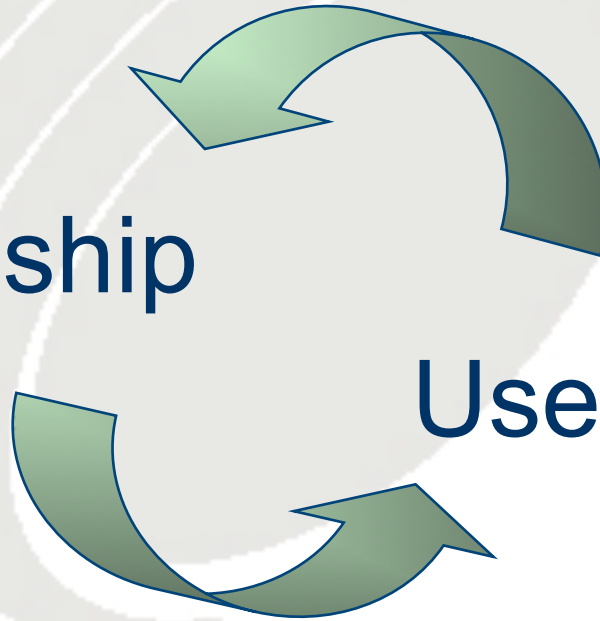
# Making Data More Available and Usable

- Resources becoming increasingly available
  - Conceptual Frameworks
  - Practical Frameworks
  - Statistical Frameworks
- Need new capability at all levels of government and across disciplines and policy silos to leverage these resources
  - Five recommendations for getting started

# Principles of information use within government

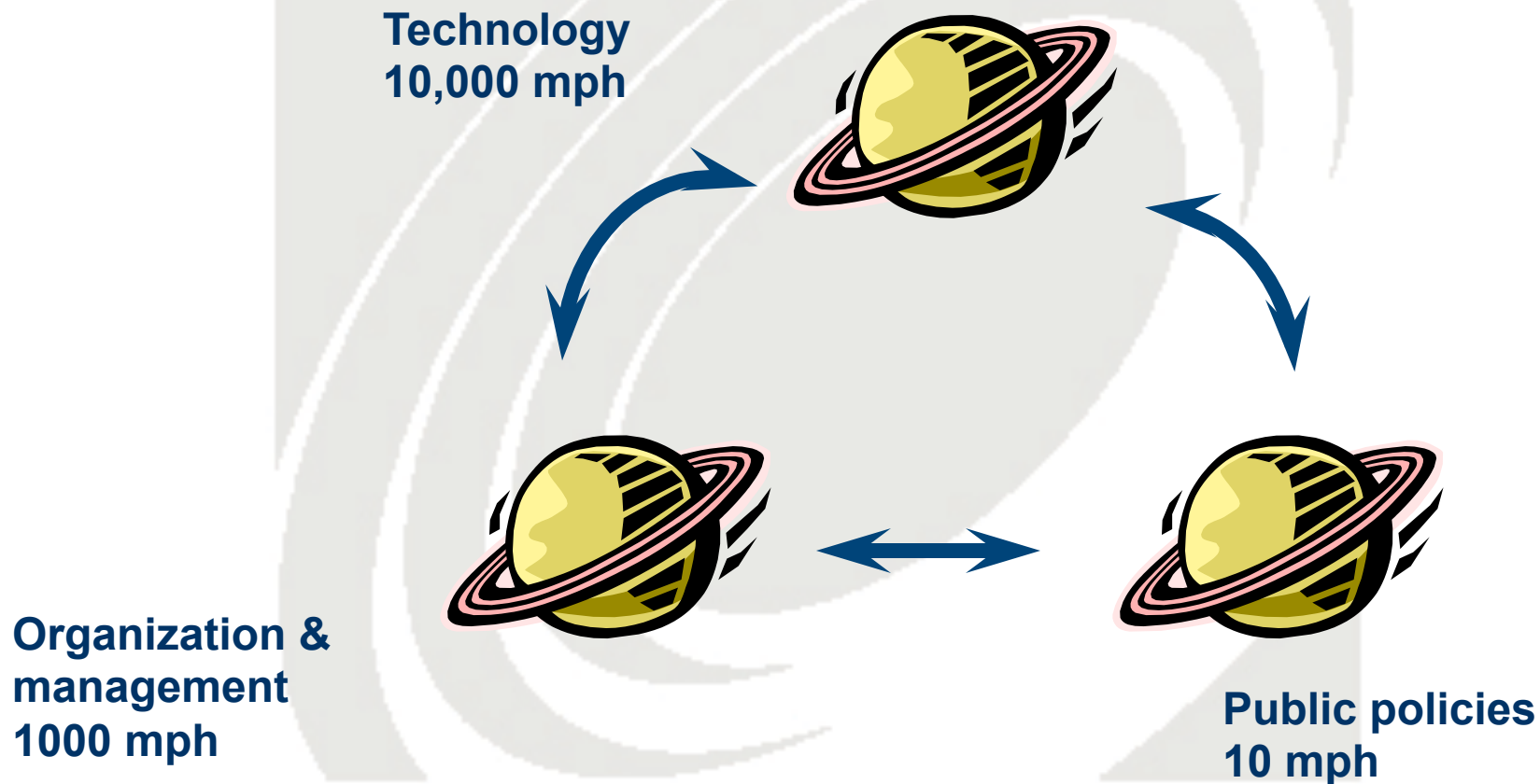
Stewardship

Usefulness



Dawes, 2010

# The Government Innovation Context





Center for  
Technology in Government

Explore • Empower • Innovate

# **Making Data More Available and Usable: *A Getting Started Guide for Public Officials***

***Theresa A. Pardo, Ph.D.***

***Privacy, Big Data, and the Public Good – Book Launch***

***New York Academy of Sciences***

***June 16, 2014***



UNIVERSITY at ALBANY  
State University of New York