<Insert Speaker Name>
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Opening Up Government
How to unleash the power of information for new economic growth

March 2013

Agenda

- **Open Government: What does it mean?**

- Open Government in Practice: Emerging Patterns

- A Way Forward for Open Government and Key Decision Makers

Senior Government officials are telling us that they, too, are faced with changing circumstances

- Big data: Still collecting a great deal of data, but data paradoxes* persist
- Experimenting with Open Data, Open Government initiatives, compounding

$$\left(\text{Data paradoxes} + \text{Information explosion} \right) * \text{Shifting responsibilities} = \text{Complexity}$$

from national to local govts, from one agency to another

- They report three other realities about government information

Governments are not going to stop collecting data	**Touchpoints to that data are expanding far beyond government**	**Rising pressures for data access by citizens and businesses**
(central strategic asset)	*(people, systems, and devices)*	*(uses, users of data skyrocketing)*

So what are governments doing about it?

* The management dilemma of having too much data and too little insight
3   Source: *The power of analytics for public sector: Building analytics competency to accelerate outcomes,* IBM Institute for Business Value, 2011

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Some are embracing *open* – a fundamental shift in the *style* of governing

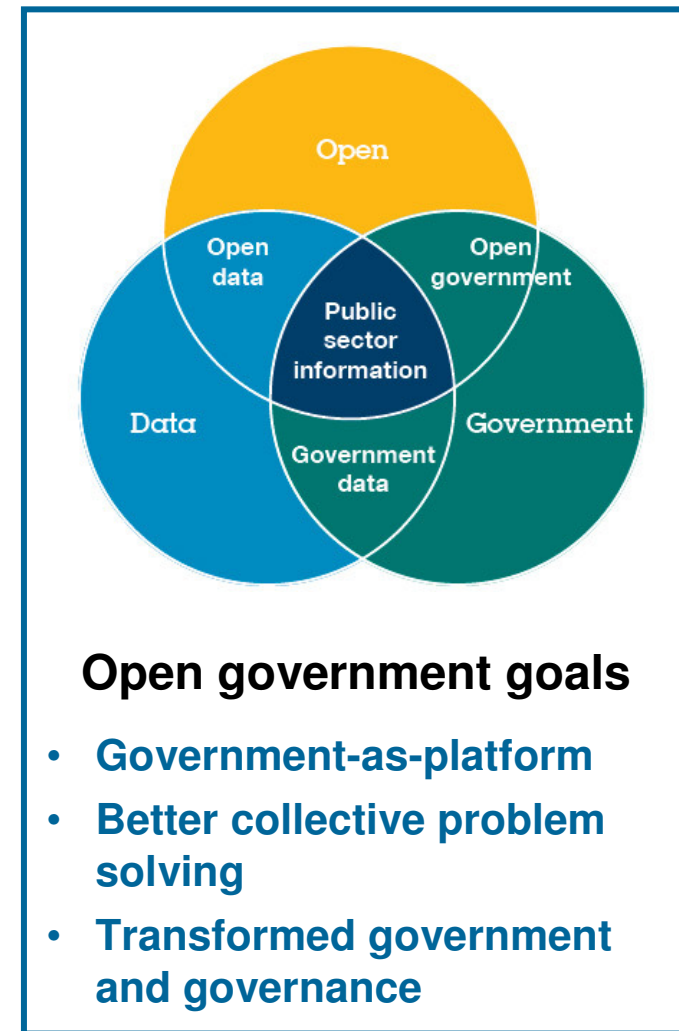- **Adopting an *open* mental model**

  The open government paradigm is expanding

- **Making as much public sector information (non-sensitive) available as possible**

  – *Start / Continue with information that spurs new economic development*

- **Expecting that they *will***

  – *Listen and gain insights into what really matters*

  – *Learn from and exchange ideas with citizens*

  – *Collaborate on all aspects of public administration*

Open government goals

- **Government-as-platform**
- **Better collective problem solving**
- **Transformed government and governance**

Open government and *open data* are intertwined … and their definitions have evolved

Open government requires open data

Open data does NOT mean "all data"

Includes Public Sector Information (PSI)*** made available for reuse in line with open principles

Open data does NOT mean "no management", it means *different management*

Management that enables the structured free flow of data within / across governments and to the public

Open government does NOT mean "no government", it means *different government*

Open government* is the governing doctrine which holds that citizens have the right to access the documents and proceedings of the government (for purposes of this discussion, we call this "public sector information") to allow for effective public oversight and participation

Open data is an approach of managing data so that non-sensitive information flows freely to those who have a need or interest in reusing it, allowing them to access and transform raw data into information and executable insights and create value
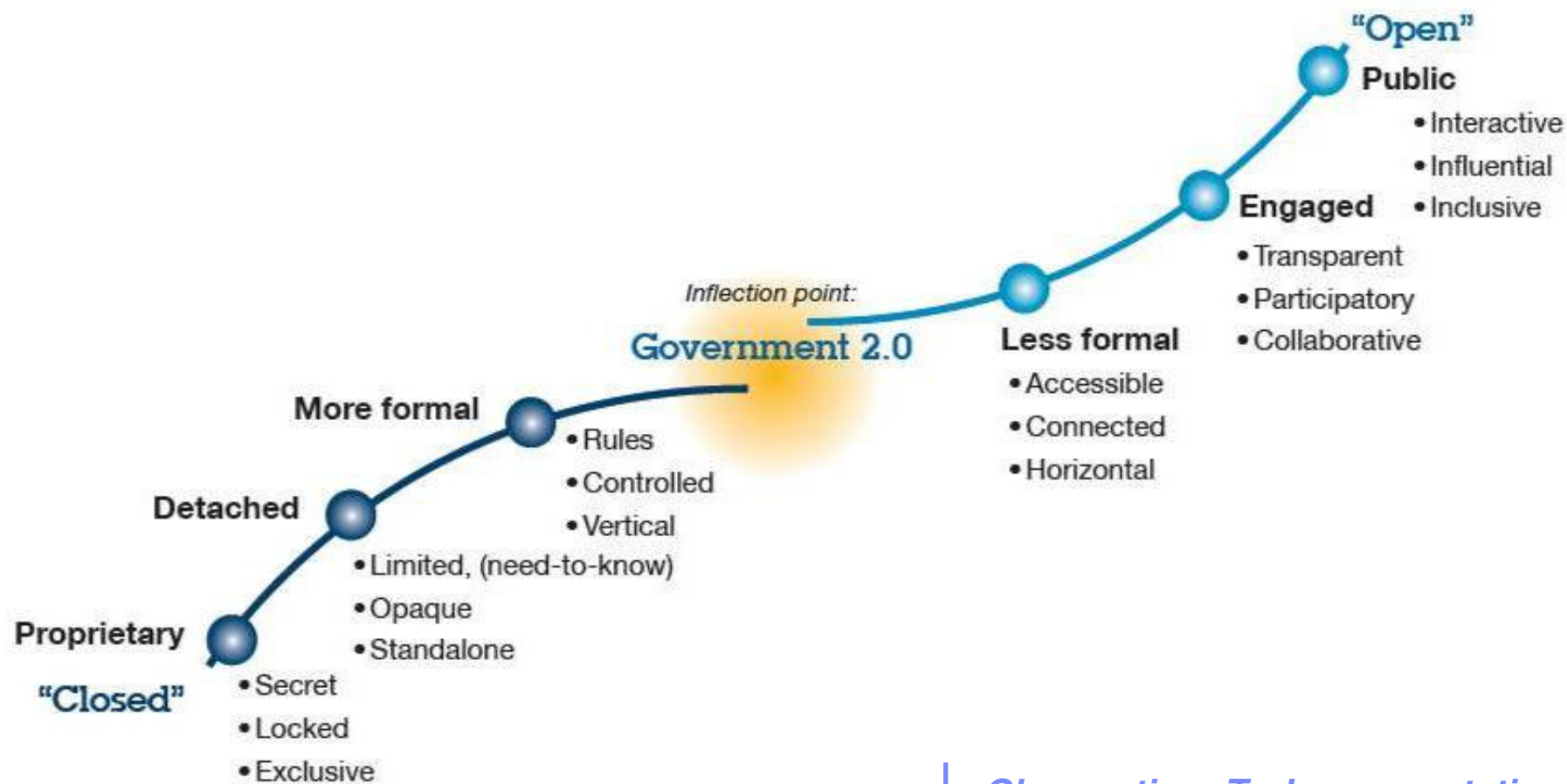
PSI** is non-sensitive / non-personally identifiable information produced and/or collected by a public sector institution as its mandate

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*   [Adapted] Lathrop, Daniel; Ruma, Laurel, eds (February 2010). *Open Government: Transparency, Collaboration and Participation in Practice*. O'Reilly Media. ISBN 978-0-596-80435-0.
**   [Adapted] Source: *Digital Broadband Content: Public Sector Information and Content,* Working Party on the Information Economy, Committee for Information, Computer and Communications Policy, Organisation for Economic Cooperation and Development, OECD report declassified March, 2006
*** An overriding objective is to serve as "raw material" for reuse – for government to carry out its functions, but also for other sectors (i.e., private, civil society) to develop new products and services for commercial and non-commercial use

Open embodies different principles and behavior patterns that extend to the public sector and public sector information (PSI)

"Open"
Public
- Interactive
- Influential
- Inclusive

Engaged
- Transparent
- Participatory
- Collaborative

Inflection point:

Government 2.0

Less formal
- Accessible
- Connected
- Horizontal

More formal
- Rules
- Controlled
- Vertical

Detached
- Limited, (need-to-know)
- Opaque
- Standalone

Proprietary

"Closed"
- Secret
- Locked
- Exclusive

Observation: Today, expectations tend toward "engaged"

Source: IBM Institute for Business Value

An expanding open paradigm presents profound implications

IMPLICATIONS

TODAY

INTENT

Less formal	Engaged	Public
Accessible	**Transparent**	**Interactive**
▪ *Data for all* (not just for officials); information monopolies undermined ▪ Increased demand for meta data, tools	▪ Intensifying demands by citizens, other stakeholders for public sector reform ▪ Increased confidence in entities perceived to be most "open"; "experiencing" accountability becomes essential	▪ Increased diversity of vocabularies ▪ Growing demand for "trust" mechanisms
Connected	**Participatory**	**Influential**
▪ Multiplier effect: higher demand for two-way communications, feedback	▪ New roles challenge traditional governance, organization models at all levels ▪ Private sector "open" models emerge	▪ Intensifying competition for "open" leadership (related practices, skills)
Horizontal	**Collaborative**	**Inclusive**
▪ Nature of power, control and influence changes (e.g., diffused, bottom up)	▪ Social networks, dynamics speed up ideas, perceptions, alternatives ▪ Increased demand for public-private partnerships, "climate" for them to thrive	▪ More, louder "voices" of "communities" ▪ Heightened expecta-tions for empowerment

Source: IBM Institute for Business Value

The potential benefits are compelling ...

Benefits to citizens

- Allows citizens to **use the data** in ways – even create new services – that are **important to them**

- Encourages creation of **new jobs** through **innovative** uses of data

- Enables citizens to **engage meaningfully** with government and **experience** "open"

In the process, Governments can ...

- **Collect new revenues** generated by new economic development propelled by citizens

- **Demonstrate open principles** in practical ways

- **Gain insights** into what really matters

- **Avoid costs** associated with new services

- **Improve** the way government works

Source: IBM Institute for Business Value

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The megatrend is more *open* initiatives at all levels of government and across public sector

The World Bank

Kenya

Australia

United Kingdom

USA

New Zealand

Visualization of 311 data in NYC

Combined with external data, possibilities for citizen participation and self-service and economic development are powerful

A variety of initiatives are already underway around the world that involve sharing data with citizens for economic development

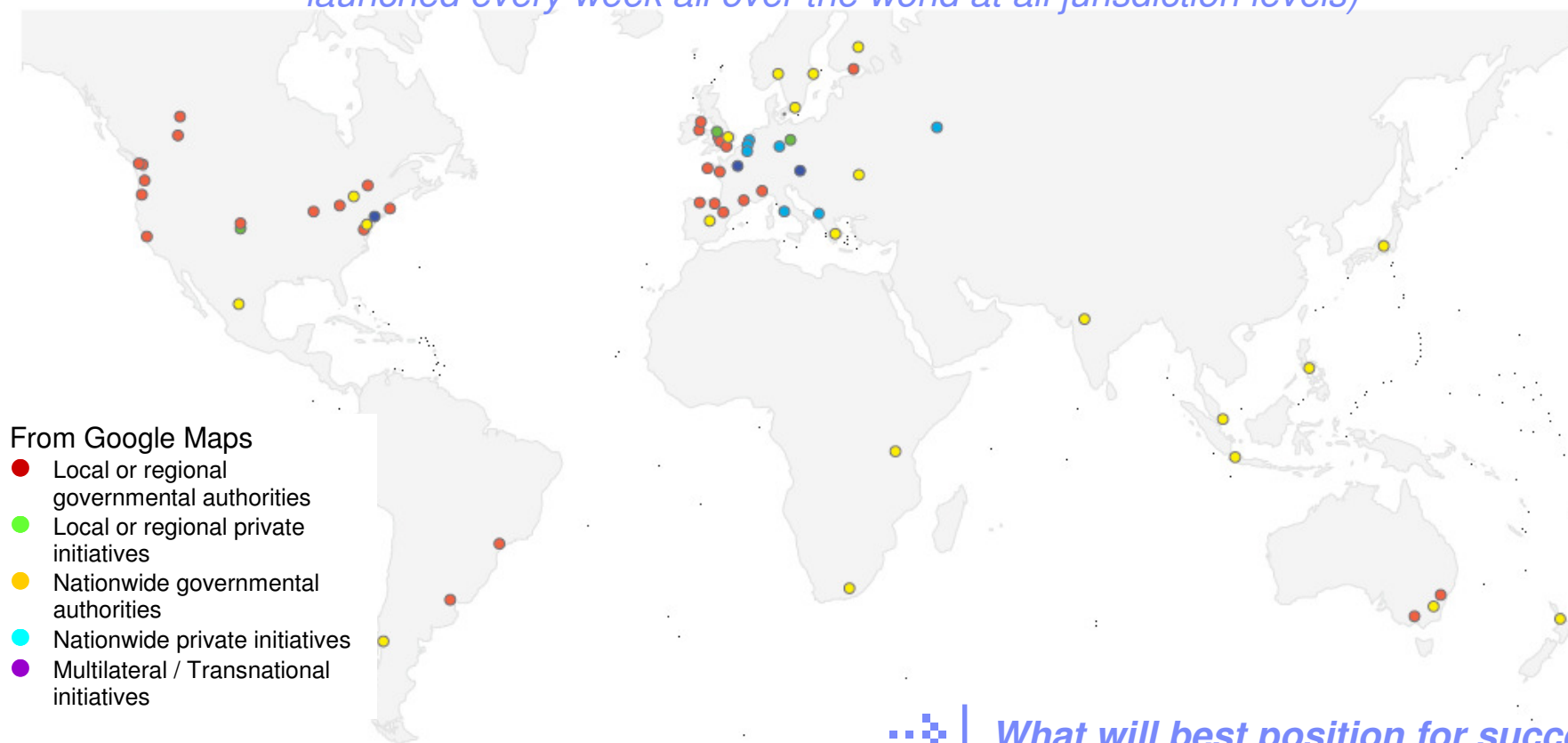| Types of open practices for economic development	
Providing raw data	▪ Providing "raw", raw material (data) ▪ Providing usable raw data (usable formats) ▪ Aggregating sources (originators of "open" datasets) of datasets into data catalogues (to promote data discovery)
"Seeding" innovation	▪ Sponsoring free form contests for innovative uses of data ▪ Awarding prize monies
Enabling collective problem solving	▪ Issue driven; providing issue-based content, selected analyses and support ▪ Galvanizing a "network" around an issue to address
Creating the "bazaar"*	▪ Loose integration of all of the above into a community ▪ Developing an "engaged community" and a strong brand ▪ Monitoring and analyzing usage and applying insights

*   A takeoff from the Eric Raymond's seminal essay, *The Cathedral and the Bazaar,*

Rule of thumb: The most used are the most valuable

Many are already taking strategic steps forward – some are reflected on this map and more initiatives are launched every week

World Map of Open Government Data Initiatives*
(Representative sampling of initiatives; as such, it is not exhaustive – new initiatives are being launched every week all over the world at all jurisdiction levels)

From Google Maps
- 🔴 Local or regional governmental authorities
- 🟢 Local or regional private initiatives
- 🟡 Nationwide governmental authorities
- 🔵 Nationwide private initiatives
- 🟣 Multilateral / Transnational initiatives

What will best position for success?

IBM

Australia's *data.gov.au* makes large data sets of government data available to the public for their use

Applications use Australia's PSI to reflect interests and needs of citizens, from the expected to the seemingly trivial
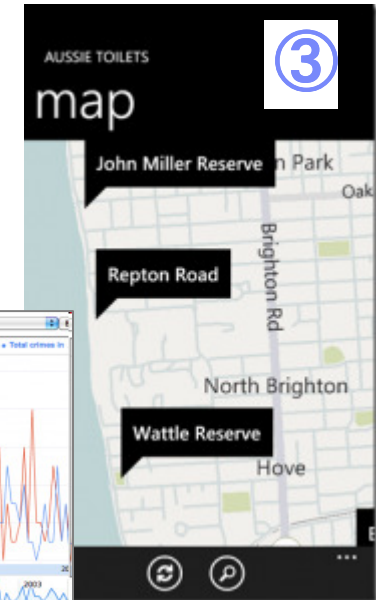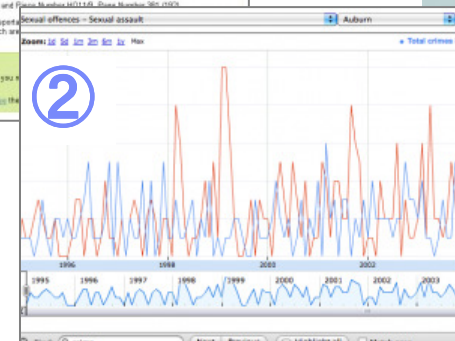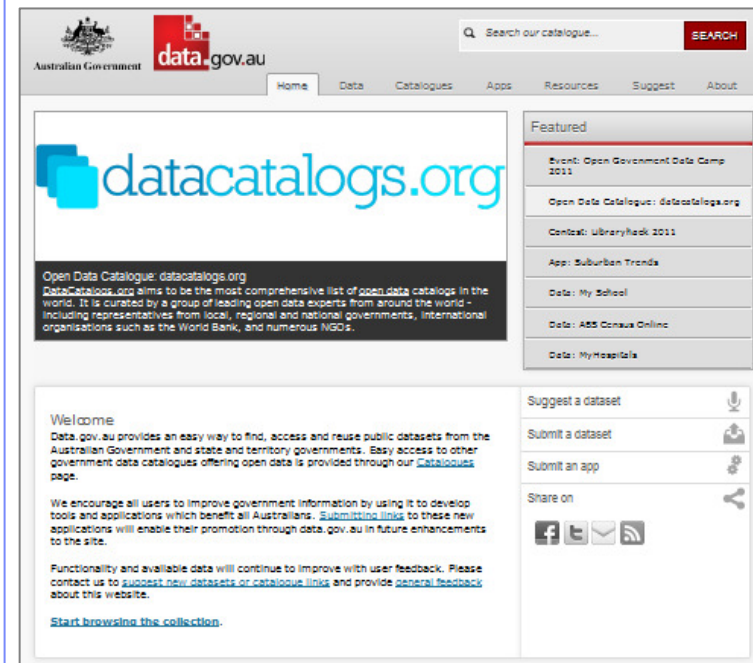
1. **Convict Records**: Allows complete access to and search of the British Convict Transportation Register*

2. **Crime Trends**: Compares trends in a specific crime for two different Local Government Areas in New South Wales

3. **Aussie Toilets**: Helps you find the five nearest public toilets based on your current location

*   Archives of convicts transported to Australia in the 18th and 19th centuries, includes search ability by convict first name, surname, year of departure, ship name

Access to open government data has led to the development of new businesses, such as BrightScope*

- **BrightScope is a San Diego based financial information company**

  - Used open data about 401(k) plans from the U.S. Department of Labor

  - Value-added service: Help customers understand costs associated with fees for retirement plans

  - Very high initial investment as data was not in usable format; obtained through multiple FOIA** requests

  - Was finally able to obtain the data in digital format

- **BrightScope is profitable**

Over 27 contests worldwide reward most the effective or innovative uses of open data for spurring economic development

- **CodePlay** is a competition run by the Australian Bureau of Statistics as a Government 2.0 initiative to help drive collaboration among students, developers and national and international statistical agencies

  - It rewards innovative ways of making statistical data more appealing, relevant and useful

  - Financial prizes are offered; in some cases governments provide office and other administrative support for winners

  - Project may gain the attention of venture capitalists regardless of whether they win

- **CodePlay** aims to reward Australia's brightest students through fun and engaging challenges, while exposing them to real-world applications and datasets

- Contests occurring throughout Asia, Europe and the USA

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Ireland's Dublinked addresses shared urban economic development issues in an open innovation community on an open platform

Dublinked

Mission: Encourage the next generation of jobs and companies in the area of urban solutions, by enabling data-driven innovation and promoting Dublin as a world-leader in developing and trialing new urban solutions.

- Non-profit acts as a structured engagement mechanism with Dublin Authorities

- Members collaborate to solve shared urban challenges, sharing knowledge / experience

- **Focus:** Replicable city solutions, thus creating markets and giving a competitive edge to the companies that create them

- Open government data sources include the councils of Dublin City, Dun Laoghaire Rathdown County, Fingal County, South Dublin County

"The amount of public information produced by us and other public service providers is breathtaking but can be difficult to assimilate. In creating Dublinked we are calling on the expertise within all sectors to help develop solutions to regional challenges and avail of opportunities to test those solutions in our City, towns and neighbourhoods."

John Tierney
Dublin City Manager, speaking on behalf of the four Dublin Local Authorities

New York City's journey is an exemplar of catalyzing innovation, new growth and "community"

- Over 350 datasets serve as the backbone of independently created apps (including mobile)

  Attracted over $6 million in private investment

- Collaboratively developed vision of the city's digital potential integrated with economic growth, job creation and other City priorities

- Engagement includes heavy social media use

- Keen focus on analyzing and measuring digital and PSI usage as part of its sustainability model

  Used to improve services and the way the City works

- Success is both shared with and celebrated by the City *and* its *engaged citizens*

PRIORITIES FOR ACHIEVING NEW YORK CITY'S DIGITAL POTENTIAL

NYC .gov always open

NYC 311

Roadify HOW IT WORKS
BRINGING COMMUNITY TO COMMUTING. JOIN NOW

INDUSTRY A vibrant digital sector

ENGAGEMENT A citizen-centric digital experience

OPEN GOVERNMENT Technology & culture

ACCESS Internet connectivity for all

NYC DataMine

DON'T EAT AT ____
Get a text message when you check into a NYC restaurant that is at risk of being closed for health code violations.
SIGN IN WITH FOURSQUARE
About   @maxstoller

NYC Stat
Mayor's Office of Operations

Proto by Lynn Reyes, 2010

Source: [various] NYC.gov, www.roadify.com, http://donteat.at and *Roadmap for the Digital City: Achieving New York City's Digital Future,* City of New York, Mayor's Office of Media and Entertainment, Spring 2011.

These cases teach us that addressing the data paradox in a world of open government is achievable

- Link / Integrate data across government based on outcomes, related roles
  - Dynamically enhance / create new PSI

- Provide / Leverage tools for interaction while improving data quality
  - Share / Enable analytics-enabled insights, standards
    - Foster / Demonstrate government accountability

- Diffuse "raw" raw material
- Provide usable raw material, curated content

"Open"
Public

Engaged

Inflection point:

Less formal

Government 2.0

More formal

Detached

- Modify rules and controls
- Standardize data sharing formats

Proprietary

"Closed"

- Share data within government on an as-needed basis
- Provide limited data (non-standard formats)

- Provide limited PSI in a few, but static websites
- Prohibit access (provide privileged access) to underlying data

Source: IBM Institute for Business Value

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Practical "Rules of thumb" are becoming apparent, such as those from the U.S. Government's experience

"Rules of thumb"

- Embrace open standards, because they encourage innovation and grow the market

- Build a simple system and let it evolve

- Design for participation by interested groups

- Learn from your users, especially those who do what you don't expect

- Embrace (and lower barriers) to experimentation

- Nurture a culture of measurement and analysis and learn from your data

- Celebrate your developers and users

- Learn from failures, lead by example

www.data.gov

More success stories are appearing – like the ones presented here

Source: Tim O'Reilly, *Government as a Platform,* Presentation, O'Reilly Media, Inc., June 4, 2009 (accessed July 21, 2011)

International bodies are setting conditions for global engagement

- The Asia-Pacific Economic Cooperation's (APEC) privacy principles are available [voluntary]

- Aspen Institute has a multi-stakeholder effort looking at cross-border data issues

- The European Union is revisiting the PSI Directive which will ask all 27 Member States in Europe to open government data.

- Newly launched Open Government Partnership is sharing open government plans; practices (e.g., networking mechanisms, projects, case studies); frameworks / standards (e.g., U.S.' NIST* Cloud Computing Standards Roadmap)

- The Organisation for Economic Co-operation Development is developing Internet policy principles

- In July 2011, the World Bank (WB) opened up 7,000 data sets to the public; it is also the only multilateral institution in the world with a wide-ranging Freedom of Information Policy

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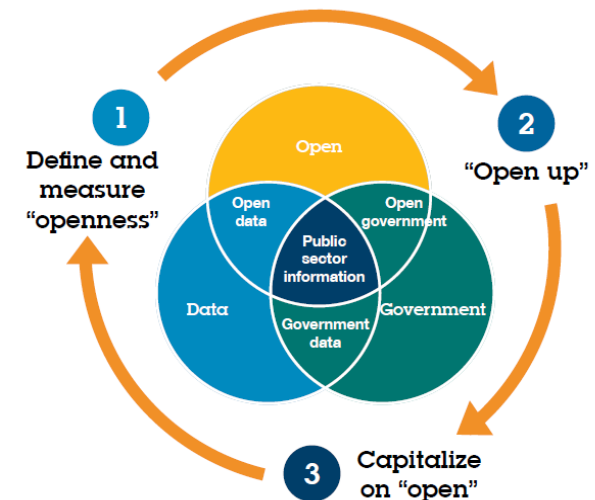- **A Way Forward for Open Government and Key Decision Makers**

Each leader in this new style of public administration plays an essential role

Head of Government	Lawmaker, Policymaker	Mission / Program Exec	Chief Information Officer
▪ Communicate key distinctions of Open paradigm from existing	▪ Establish governing system by which this can be made possible	▪ Provide context <u>and</u> content for programs	▪ Express and advocate new possibilities and spark imagination in new ways
▪ Set principles for Open Govern-ment and Open Data	▪ Understand inter-relationships (and potential conse-quences* of current and proposed policies) and adapt	▪ Communicate meaning and priorities clearly, and propose policies accordingly	▪ Apply technology disciplines but don't wait for perfection
▪ Use results from open data		▪ Collaborate with CIO to develop Information Charter	▪ Collaborate with mission / program counterparts to develop an Information Charter

*   Potential consequences and be both positive and negative

Ask yourselves these questions …

1. To what degree are our citizens getting sufficient benefits / returns on public sector information? How can we measure this?

2. To what degree have we leveraged the collective imagination and knowledge of our citizens? In what ways can we do more?

3. What types of progress are we making toward desired outcomes and how do we communicate that effectively with stakeholders?

4. How relevant are our current information management policies and programs?

Many societies have already made the shift to the *open* paradigm – now they expect public sector to do the same *and more*

To realize the benefits of open government, strategically integrate, execute on *and* measure four areas

Start/continue to define and provide
information relevant to economic
development that makes sense to citizens

Information

Put a flexible and sustainable business
model in place that allows effective
two-way interaction

Engagement model

Build/apply analytics
competency

Competency

Construct/use the
technical infrastructure

Digital platform

**Measurement and
management**

Source: IBM Institute for Business Value