New Challenges and Opportunities in Democratizing Data

2012 Regional Data Summit

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Matthew Barry
“Over the next decade, cities will continue to grow larger at a rapid pace. At the same time, new technologies will unlock massive streams of data about cities and their residents. As these forces collide, they will turn every city into a unique civic laboratory—a place where technology is adapted in novel ways to meet local needs.”

- Institute for the Future, *The Future of Cities: Information and Inclusion*
The Information Landscape Has Fundamentally Changed

<table>
<thead>
<tr>
<th>Was</th>
<th>Is</th>
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<tbody>
<tr>
<td>Broadband</td>
<td>Mobile</td>
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<tr>
<td>Fixed</td>
<td></td>
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<tr>
<td>Smart Devices</td>
<td>Voice</td>
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<tr>
<td>Voice</td>
<td>Multimedia</td>
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<tr>
<td>Interfaces</td>
<td>Terminal</td>
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<tr>
<td>Terminal</td>
<td>Natural Interaction</td>
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<tr>
<td>Computing</td>
<td>Personal</td>
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<td>Personal</td>
<td>Cloud</td>
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Data Creation + Access is Mainstream

True, but....
Democratization of Data (An Expanded Definition)

A Prerequisite.
Complete
Primary
Timely
Accessible
Machine processable
Non-Discriminatory
Non-Proprietary
License-free

Which is (really) more democratic?

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Source: Opengovdata.org

Source: U.S. Census Bureau
No one can do it alone.

“The ability of 5 billion people to instrument the world and share their experiences in a low-cost manner has forever shifted power away from the hands of the few to the network.” - Vivek Kundra, Digital Fuel of the 21st Century: Innovation through Open Data and the Network Effect

Luckily, we don’t have to.
“Network strategies” for using data to democratize innovation:

1. Leverage networks and collaborations to liberate data

[Image of OpenStates and Sunlight Foundation]

[Image of ScraperWiki]

[Image of Data Developer and Data Requester]
“Network strategies” for using data to democratize innovation:

2. Involve (unexpected) networks and collaborations in applying data

http://www.guardian.co.uk/uk/series/reading-the-riots

3. Complete the loop
Piton’s Data Initiative (A Short History)

1. Data Access

2. Data Interpretation and (limited) Community Information Systems

3. Leveraging Data to Drive Innovation

The Colorado Data Commons and The Citizen Atlas
The Colorado Data Commons Project

Truly democratic data should be easy to find, easy to use, and easy to share.

THE DATA COMMONS will open key socioeconomic datasets currently locked within public agency databases or hard-to-use formats, providing one-stop access for journalists, policy-makers and citizens.

Colorado Data Commons Front End

A public, user-friendly website featuring:
- searches across data sets
- lightweight data visualization
- data downloads/exports in accessible, easy to work with formats
Data-rich stories can be powerful drivers of change. **STORYBASE** will provide user-friendly tools for community members to tell multimedia stories with data. **THE CITIZEN ATLAS** will be a freely-available, public-facing website where users can publish, view, browse and comment on stories.

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**Citizen Atlas**

A web publication showcasing:

- data- and multimedia-driven stories
- about important social issues
- from around the metro Denver area
- authored by community members and professionals.

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**StoryBase**

- raw materials
  - text
  - pictures
  - video
  - data
  - audio
  - music

- templates
  - slide show
  - article
  - annotated chart
  - timeline
  - poster

- multimedia story

- website
- PDF
- Facebook
- Twitter
- etc.
COLLABORATIVE

OPEN SOURCE

Knight Foundation

The Denver Foundation

L-News

Address problems in real time.

“Something” Up & Running by Year’s End

launching

analyzing and adjusting

COMMUNICATIONS NEEDS

INFO. GATHERING

TECHNOLOGY

CAPACITY

USABLE

ITERATIVE + AGILE
Challenges We Face

Data Control: safeguards v. public good

Participatory Public Services: cooperation v. offloading

More Data, More Models: visible v. actionable

Proliferating Digital Divides: access v. agency

Tyranny of Networks: freedom v. anarchy

“The biggest threat to the open data movement is the desire for governments to operate in a closed, secretive and opaque manner and to create a mirage of openness by releasing low value datasets.” - Vivek Kundra
Discussion Questions

Can democratizing data go too far?

What role should public agencies play in democratizing data?

How could we build an effective network to democratize data?

How can you prove the ROI is worth the energy it takes to democratize your data?