THE RESPONSIVE CITY

ENGAGING COMMUNITIES THROUGH DATA-SMART GOVERNANCE

Bay Area Digital Government Summit
Professor Stephen Goldsmith
Harvard Kennedy School
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Opportunity to Massively Change

The Responsive City

- Ubiquity of mobile devices
- Cloud computing reduces startup costs
- More data/less paper
- Data mining techniques overcome legacy barriers
- Budgetary pressures force change
- Private sector and app developer successes push public systems

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Transparency + Co-Creation + Empowerment + Measurement

- Open Data
- Data Analytics Center
- CitiStat
- Citizen Ideation
- Performance Measurement
- Employee Empowerment

Public Value
The structure of government is the problem. Progressive government produces regressive ends in cities. It eliminated corruption and abuse of discretion with accountability and rule-based measures to make sure people weren’t abusing power. A century later - public employees are pinned in boxes. Against that we have the complexity of current society and insufficient resources in cities.
NYC – Targeted Fire Inspections

The new predictive model synthesizes 60 factors that are correlated with deadly fires, including the age of a building, electrical issues, and the number of sprinklers, and builds an algorithm that assigns each building with a risk score.
Santa Cruz – Predictive Policing

By examining historical data about the time and location of crimes and applying an algorithm to predict future incidents, Santa Cruz PD reduced burglaries by 27%.
Philadelphia – Parole Violations

A new risk-forecasting tool helps save the city time and money, while also reducing the likelihood of violent recidivism, by identifying high-risk probationers before release.
A New Sense of Engaged Citizenship and Trust

BREAKTHROUGH #2:

Usable Open Data
Connecting to Communities
Residents Forcing Responsiveness
Coproducing Solutions
Make Data Useful: Visualization

- Utilities
- Public Works
- Non-Departmental
- Police
- Fire
- Community Services
- Administrative Services
- Planning and Community
- More (10 grouped)
311: Useful Shared Data

Service Request Count by Location

- 1 Request
- 2 to 137 Requests
- 138 to 272 Requests
- 273 to 407 Requests

You are now viewing Service Requests that are open and recently closed. Recently closed is within five days of today.
Engage Citizens in Creating and Using Data
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How can we make it easier and safer to walk or bike to parks?

- **Lower Speed Limits & Enforce no Stopping in Bike Lanes**
  - Updated: Dec 31, 2012
  - Matthew M4
  - 29 votes

- **Better Signposting along the Panhandle Bike Path**
  - Updated: Jan 11, 2013
  - JJ S
  - 149 votes

- **Educational plant and flower information**
  - Updated: Dec 6, 2012
  - Hunter Franks (Community Manager)
  - 21 votes

- **Close off certain roads to cars completely.**
  - Feb 15, 2013
  - Jessica A1
  - 32 votes
Virtual Activism Requires Intermediaries
Residents Forcing Responsiveness

Department of Motor Vehicles

Help Grade DMV!
Your input determines the agency grade. Fill out the survey on DMV. Tell us what you think--good or bad--and help us to improve our service to you.

DMV's Monthly Grade

November Customer Grade

B

October Customer Grade

B

September Customer Grade

B-

The grade is based on an algorithm that scores public sentiment that was shared by web, text or social media. The November grade is based on 168 customer reviews.

Positive and Negative Customer Reviews

Positive Themes:
- Staff - Helpful
- Facility - Clean
- Service - Excellent

Negative Themes:
- Staff - Rude and slow
- Facility - Not clean
- Website - Confusing and misleading
Renewed Sense of Citizenship

Digital technology will enable citizens to work with local government on shared solutions to the grand challenges that confront all Americans.
Moving from complaint center to citizen as partner in fashioning or identifying a solution.
BREAKTHROUGH #3: The Empowered Employee

Breaking Hierarchical Ceilings
Increasing Discretion without Losing Accountability
Integrating Data Across Agencies
Department of Transportation – IdeaHub

This program is changing the way that management and employees interact, shifting the old paradigm of top-down bureaucracy to one where everyone can collaborate and share expertise.
Alternative Accountability: Boston City Worker

More accountable to citizens
Supervisors more effective
Increasing Discretion

**Before CRM system**
- Avg. time to deliver new recycling bins: 30 days
- Avg. time to fix burned-out street lights: 17.5 days
- Avg. time to fulfill to park maintenance: 10 days

**After CRM system**
- Avg. time to deliver new recycling bins: 7 days
- Avg. time to fix burned-out street lights: 7 days
- Avg. time to fulfill to park maintenance: 6 days

**IMPROVEMENTS IN RESPONSE TIMES**
BOSTON’S NEW CUSTOMER RELATIONSHIP MANAGEMENT (CRM) SYSTEM

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Indiana has launched the country’s leading effort to eliminate paper in child welfare services, to promote cross-agency data sharing, and to ensure full integration of case information.
Decision Support Tools

**Data Mining**
- Automated Voice Response
- Internet/Web
- Mobile phone/data/picture
- Bar Code/GPS
- Point of Service Device

**Alerts/Dashboards/Decision Support for Outcomes**
- Caseworker
- Court/law enforcement
- Supervisor
- Caregiver

**Device Agnostic**

- Billing/E-payment/EBT

- Decision Support
- Caseworker
- Previous Cases
- School
- Police
- Medical
- Counselor

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GOALS

• Reduce transactional friction
• Reallocation of attention to bad actors
• Simplify process for obtaining and renewing licenses
• Decrease costs associated with compliance
BREAKTHROUGH #4:

From Activities to Public Value

Before:
Serving the Homeless

After:
Preventing and Reducing Homelessness

Number of Homeless People Each Night in the NYC Shelter System, 1983-2013

Source: NYC Department of Homeless Services and the Homeless Outreach and Navigation Team (HOMELESS)
Data-Driven Public Value

Move traffic better, not just widen roads
Less street construction activity, more results.
Internet of Things Captures Instant Useable Info
Managing the Network
Internal Structural Change
Performance Management

The Innovative Leader
Internal Structural Change

Disruptive Innovation Models (Executive-Driven)

- Offices of Innovation
- Mayor’s Office of New Urban Mechanics
- Enterprise Development Office

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Elected Official

Government Efficiency/Innovation Office
Focus on continuous improvements in service, operations and cost reductions

Representative from Each Agency
Program Reviews

Procurement Reform, Cost Savings and Operational Excellence Opportunities

Use Data Analytics to Improve Performance, Define Outcomes and Unlock Value

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Stat programs are an important performance-management technique to enhance public accountability and drive organizational improvement.
Greg Fisher, LouieStat

LouieStat brings individual Metro departments before the Mayor every 6-8 weeks to identify, through consistent metrics tracking and data analysis, what agencies can do to improve service delivery.
Through a combination of performance management tools and a robust analytics platform, Indiana’s Management and Performance Hub promises to save the state money and improve services.
Key Challenges

Obstacles
- Perceived legal walls
- Legacy CIOs
- Talent
- Tone Deaf Professionalism
- Imagination

Privacy
- Protect citizen anonymity
- Ensure secure storage
- Respect confidentiality
- Increase transparency
Bridge to New Governance

- Responsive driven trust and civic pride
- New sense of public employment
- Repurposed $
- Evidence based, what-works government

Evidence Based Value

Committed Mayor

Trust through responsiveness

Coproduction

Empowered Employees

Personalized

Open, Shared Data with Officials who listen

Enhanced Voice

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