PERSPECTIVES ON SMART CITIES FROM A CITY CDO

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City of Boston
Mayor Martin J. Walsh

Innovation & Technology

BEFORE WE BEGIN...

MY BACKGROUND

Chief Data Officer for the City of Boston, leading Citywide Analytics Team

Past:
PhD in poli-sci from NYU (2011)
Post-doc at Vanderbilt (2011-12)
Analytics consultant (2012-14)
Director of Data Science at the Democratic National Committee (2014-16)

THE CITY OF BOSTON

17,000+ employees

60+ departments, offices, and agencies

17 cabinet chiefs

1 aesthetically-questionable City Hall (*see next slide*)

WHAT THE CITY DOES

Measured as a portion of a $3.1B operating budget:*

45% education
26% police & fire
11% administration & finance
6% streets
5% health & human services
2% parks & environment
2% arts & culture
1% technology

*FY18 recommended budget, see
https://budget.boston.gov

OUR TAKE ON SMART CITIES

How we try to tell the difference between reality and hype

The City of Boston has generally been wary of the "Smart Cities" hype...

B

From our Mayor's Office of New Urban Mechanics:

BOSTON SMART CITY PLAYBOOK

The age of the "Smart City" is upon us!

It's just that, we don't really know what that means. Or, at least, not yet.

So far, many "Smart City" pilot projects that we've undertaken here in Boston have ended with a glossy presentation, and a collective shrug. Nobody's really known what to do next, or how the technology and data might lead to new or improved services.

(see monum.github.io/playbook)

B

From our Mayor's Office of New Urban Mechanics:

Smart City Plays

1. Stop sending sales people

2. Solve real problems for real people

3. Don't worship efficiency

4. Better decisions, not (just) better data

5. Platforms make us go ¯_(ツ)_/¯

6. Towards a "public" privacy policy

In detail

(see monum.github.io/playbook)

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So basically, this is your warning that what follows may seem a little snarky, cynical, or jaded.

(Continue listening at your own risk.)

B

WHAT'S ANALYTICS GOT TO DO WITH IT?

Why you should play nice with city CDOs

MOTIVATING QUESTIONS FOR A CITY'S ANALYTICS TEAM

CITY SERVICES

How can we route 311 requests to the right people?

How do we make sure we're serving *all* of our residents?

EDUCATION

How do we find students at risk of dropping out?

How can we help students affected by fires or crime?

HOMELESSNESS

Can we identify those at risk of becoming homeless?

What is the most efficient way to allocate shelter beds?

URBAN MOBILITY

What areas are underserved by existing public transit?

How do we make the city safer for cyclists and pedestrians?

HEALTH & SAFETY

Which buildings are most likely to have a fire?

Which restaurants are most likely to cause illnesses?

DATA-DRIVEN JUSTICE

How can we improve mental health or addiction treatment?

How do we keep at-risk youth away from gang violence?

WHERE "SMART CITY" TECH CAN HELP US

TRAFFIC & MOBILITY

Volume, speed, variability, alerts, behaviors, modes, conditions

ENERGY EFFICIENCY

Electricity, heating, occupancy, waste, cogeneration, billing, improvements

MAINTENANCE

Potholes, lighting, utility infrastructure, vehicles, trash, facilities

PUBLIC SPACES

Pedestrian travel, visitor patterns, cleanliness, animals, disturbances

HOW TO MAKE A GOOD IMPRESSION

Tips for potential partners

WHAT NOT TO DO

DON'T BE CREEPY

Your facial recognition tool might give us lots of cool data, but it gives normal people a Big Brother vibe.

DON'T BE SHADY

If you're making us an offer we can't refuse, we're going to assume there's a catch, so just say it.

DON'T BE ENTITLED

Just because something belongs to the public doesn't mean it belongs to you specifically.

DON'T MAKE A DASHBOARD

There is nothing more useless to a data person than a fancy custom dashboard. So just don't. Seriously!

WHAT TO DO INSTEAD

TAKE CITIES SERIOUSLY

It's our job to look out for the public's interest, which may or may not align with yours.

EXPLAIN THE BUSINESS MODEL

We know you're a business and you're looking to make money. If you want our trust, explain how.

HAVE A LONG-TERM PLAN

Your startup will probably fail. But maybe you'll succeed and get bought out. What happens then?

WORK WITH US AS PARTNERS

We can make your life a lot easier if you let us, and we mostly just want cool data. It's a good deal. Take it!

For more information about the City of Boston's Analytics Team, go to boston.gov/analytics.

And if you want to talk more:
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THANK YOU!

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