G-CLOUD WEBINAR : THE OPEN DATA PLATFORM of the FUTURE | NIK GARKUSHA | Microsoft Canada

Slide 1

Hi I'm Nik Garkusha

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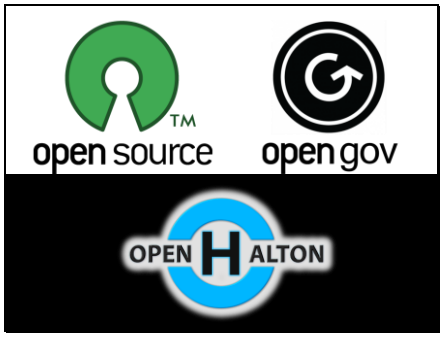

- By Day – I run a team responsible for Open Source strategy & Open Gov initiatives at Microsoft Canada
- By Night – I run a community organization OpenHalton, helping to bring Open Data to the Halton Region

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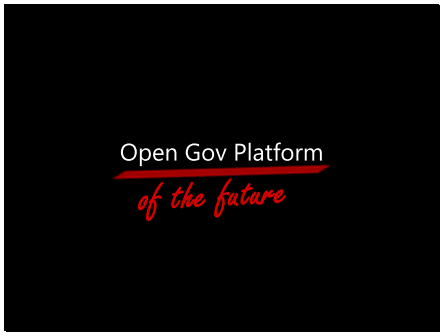

I'll be sharing some thoughts on what an **Open Government Platform of the Future** would look like,
Platform – in the broadest sense, the foundational components of an evolved / transformed government
what are some of the challenges on the road to this future
And how IT / technology can help bring this future closer to reality

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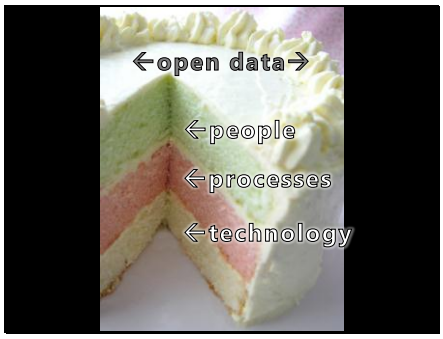

The future is sweet – like cake.
Like a multi-layer cake, any org – gov't included – has many layers: People – interacting internally and externally , Organized through Processes, that relies on **Technology** Infrastructure & Applications.
For me, the best cake is the one where the Sweetness of Open Data seeps through every layer of the organization.

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The key take-away from today's talk is that Gov't Organizations need to evolve the following aspects of their engagement across the 3 "layers" – to build an effective Open Data platform -- corresponding to the following "3 C's of an effective Open Data Platform"

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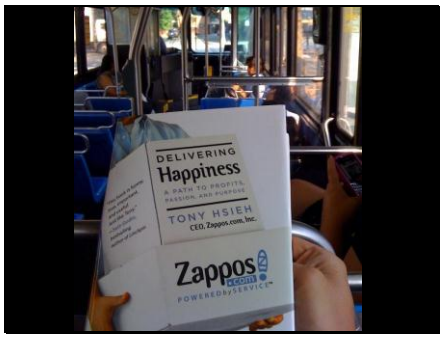

Inspiration: Tony Hsieh's org & take on role of Customer interactions
Role of open Data & Open Communication in an org
Alignment of IT platforms, processes & people.
Government organization can learn a lot from the private sector in the areas of focus on customer engagement, data strategies & opportunities to create --

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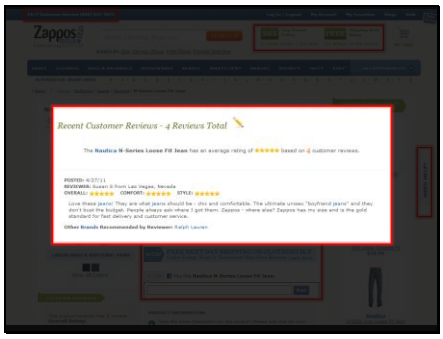

At a first glance, zappos doesn't have a dramatically different type of an online experience:
You get your jeans, for a price, $35 and a choice of sizes & colors
But then we start paying attention to details, like the
- 24/7 service
- Return & free shipping policy
- Help & support options that are ever present

...and then it gets interesting
Options to SHARE - can be a double-edge sword
- Everything is in the open, the good & the bad
- You get an option to like & share w/ FB
- Explore what others have thought

LOVE THESE JEANS

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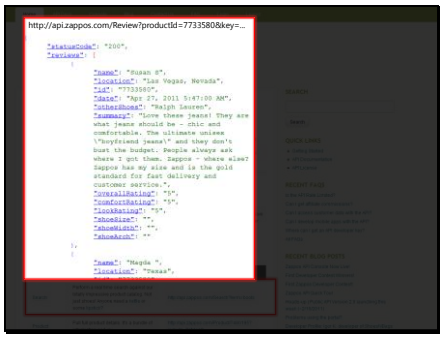

But here's where it gets REALLY interesting
- This data: catalogue, search, ratings, reviews, etc. are available
- As Data that you can build upon -- as APIs
- And if you're a developer -- you can have programmatic access to the data –

- LOVE THESE JEANS – have a whole diff meaning now
- Now I have access to zappos entire database
- And BUILD APPS, mash-ups, etc. on top of the Zappos Data --- Zappos is now a PLATFORM

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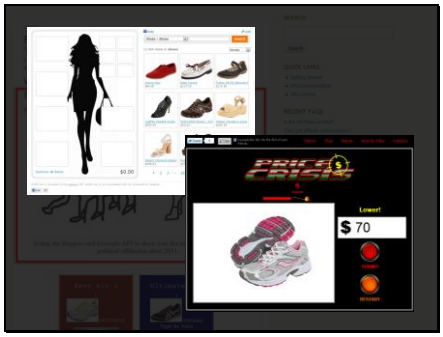

Platform for innovation. Zappos fostering apps dev
Interesting mash-ups – what shoes you wear based on your political affiliation
Interactive shopping apps
And even games –

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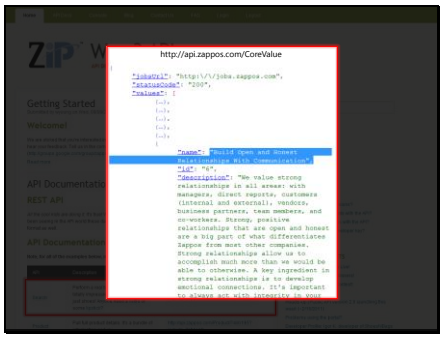

Where things don't quite compare is the next level that Zappos takes NOT only their site, platform or IT systems…. Or APIs

..it's the culture -- of course you can access that via API too.

While it's the systems that enable the APIs, it's the processes & people that enable this to happen {SYSTEMS}

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Twitter / FB interaction

- CREATING MORE TOUCH POINTS with CUSTOMERS
  - More frequent & meaningful engagement
  - translated into positive experience & loyalty
  - People want to be heard
  - 1M+ million of opportunities to interact per day

Connected EXPERIENCE
{PROCESSES}

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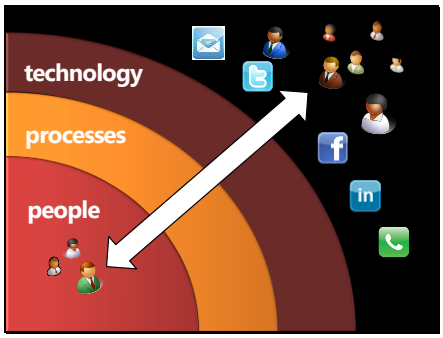

The layers within Zappos as an org are aligned –
Across technology, processes, people
To support Open Communication & Open Data exchanges

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Creating a Connected Experience for their Customers

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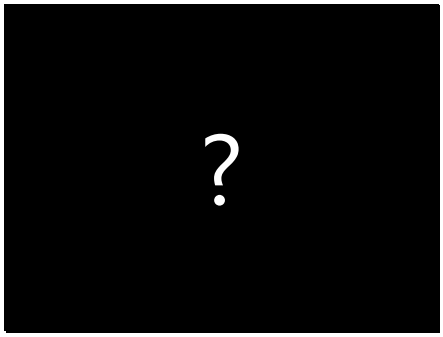

So…
Using the Lens of ZAPPOS in our minds,
- Let's think no about Today's Open Gov initiatives --
- How does the gov't experience compare & contrast that of Zappos?
- Why kind of CITIZEN EXPERIENCE is it?

Key Question: How does Gov't take advantage of the opportunities that open data / open gov present?

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So many Open initiatives today seem to use a "point in time" approach:
- say - let's have a social media "strategy" - create a twitter/Facebook
- Getting online : you're ON Facebook -- not IN Facebook -- part of that community
- I call that the "Edge" approach --
- There's no tie back in to the core of gov't processes

Same with O/data - ok, let's publish to a catalogue
- "open mandate" - we're done; our data is now public --
- There's no tie back in to the core Systems where this data originates

That's why we have budget issues with DATA.GOV in the US – and similar "edge" initiatives that are at risk of being cut b/c they aren't perceived to be core to the gov't business

..

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Our Challenge of today: Gov't approach Open Gov and Open Data initiatives in silos

These initiatives are at the edge -- first to go (Data.gov)

Gov't has to change - at its core

Open data needs to be at its core

Platforms & technology that support gov't today -- need to have open data at their CORE

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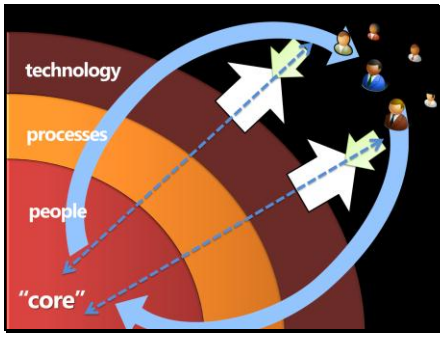

The opportunity for true government transformation is where

Government-led open data initiatives are aligned with citizen- and community-driven initiatives

With "connection points"

across Technology, Process & people layers ----

Straight to the CORE of government business ….

… with "open data" being an Integral Part of the gov'ts every

With processes to support open data that span through each layer of the gov't organizations

Enabling an ecosystem of data exchange –

- Gov data pushed out
- community data / metadata:

corrections, feedback, insights, etc. absorbed back in

This is crowdsourcing.

Knowing how to COLLABORATE with citizen community

Gov't being TRULY CONNECTED into the citizen Network -

In Turn -- The government services, both in-person & on-line, as well as apps will REFLECT this

Providing a CONNECTED CITIZEN EXPERIENCE

The good news --- elements of this already exist…

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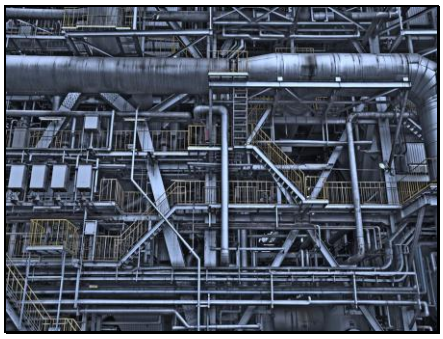

Helping get rid of the silos, and helping build the Open Government Platform of the future.

Transforming – creating connections, from silos

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Open Data is a key enabler of this platform as a pillar of government business, at the core of government's operations…

And we're seeing this evolving role of Open Data from enabler of ….

Slide 20

I see evolving role of Open Data from enabler of ….

Transparency – via initiatives like:

OpenCongress
OpenParliament
How'd the Vote.CA

….to that of a DRIVER of participation/**Engagement**….

Townhall-type sites: America Speaking Out initiative
CitizenFactory / Apathy Is Boring –
MySociety .ORG in the UK

…To increasingly an enabler of what I call **"Collaboration" initiatives**

where citizens have a much more active role as drivers (vs participants) of the open gov / open data initiatives.

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A great example of where this evolution is happening is in the 311 / municipal services space.
In the UK – fix my street
In AU – It's Buggered, Mate.

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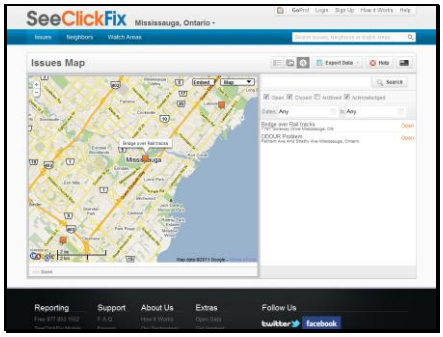

Solutions like See-click-fix that are looking to solve that – bridging citizen- and gov't-led services

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And governments themselves like SF, Miami with their 311 services as example
Allow you to submit service requests, check the status of requests & visualize 311 activities via web & mobile
HeyGov platform by ISC

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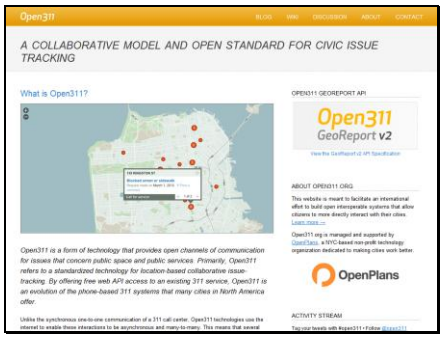

And what enabling that successful experience between the gov't and citizens are:

Community of Citizens – who are driving "content" & **C**rowdsourcing that info
Collaboration – made possible by processes and workflows to **C**apture Knowledge that was Crowdsourced --
Connected Experience – technology & systems powered by open standards & APIs (like Open 311) that brought all of the parties, content, bits & pieces in this exchange together

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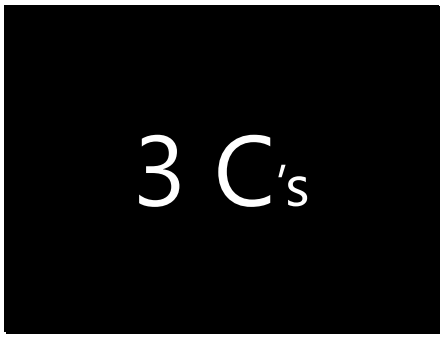

Of course, these are the 3 C's that I mentioned earlier, which are
Helping create those "connection points" between the citizen --- and GOV't Service

Let's look at each **C** in more detail.

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C #1:

Community --- the changing the relationship between the gov't and the citizens
Janice LaCouvee (Vancouver Island) concept of the Evolution of gov't - to address citizens need to BELONG

Maslow's hierarchy of needs applied to Gov't

Before:
Institutions met basic needs of citizens.

- education, police, fire, military, public transport, social services, town planning, water services, waste mgmt
-- roman aqueducts

Now:

- Called upon to help meet “the need to belong”

The requires that Gov't is not only talking TO citizen communities, or Online communities or Open Gov communities, or Open Data hacker communities ---

It needs to evolve to become PART of these communities & foster these communities

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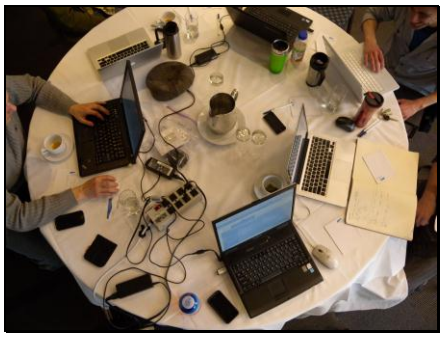

Organic engagement / participation as part of the communities

City of Nanaimo, OpenDataBC, Nanaimo IT workers - part of the Nanaimo Open Data Hackathon (photo)

Relying on citizen communities requires knowing how to:

- Empowering the culture of these communities (foster communities)
  - Hosting Hackathons, providing F&B and venue --
- Socially – specific things
- Sense – making

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Organic crowdsourcing

Extends to gov20
City of Niagara falls, ON
City of Nanaimo – parks N rec (@NinjaMeg) example of crowdsourcing image / voting for an activity guide
Voting done online on Facebook by citizens

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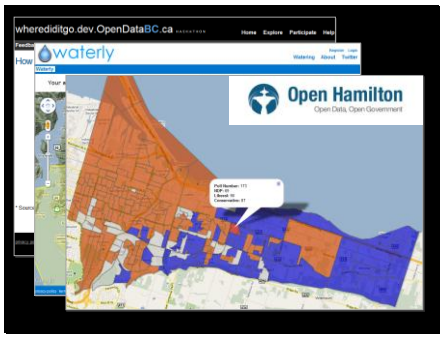

Working with Communities to “help them help you”:
Like the:

- WhereDidItGo project by OpenDataBC that helps to visualize how BC’s taxes are being spent, or
- Waterly – knows about watering restrictions & weather / rainfall information – helps make informed decisions about watering your lawn
- OpenHamilton project to visualize the Map of 2011 Federal Election results in Hamilton East Stoney Creek. (Color-coded by victor of polls)

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and our own OpenHalton-led project WardRep.ca - in partnership with OpenHamilton, OpenGuelph, OpenDataLondon
It mashes up Council & City Ward information and shows you this for an address in Guelph, London, Hamilton & some parts of Halton
This can be an “application asset” for any city that has wards or just wants to provide an easier way to identify / share info on councilors

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Fostering use & applications on top of the platforms
Tapping into App Ecosystem
Fostering citizen Ready apps

Fostering Connected experience for citizens

Be the foundation --
App store / marketplace
Other services that can use Gov't data:
standards, APIs allow this to be seamless

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C #2:

Collaboration - particularly effective one -- is enabled & driven by
Effective Mechanisms to **C**APTURE KNOWLEDGE

powered by Communities / Social component
There is a wealth of knowledge - need to know how to harness it

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Like in the crowdsourcing of Flood data during the Manitoba Floods –
Seen here (Morris River, Manitoba):

www.flickr.com/photos/paperandglue/3437753623/

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Using the Ushahidi platform –
Capture citizen reports
Effectively used to gather the information and help the province capture the flood information
Manage deployment of services / resources based on citizen information

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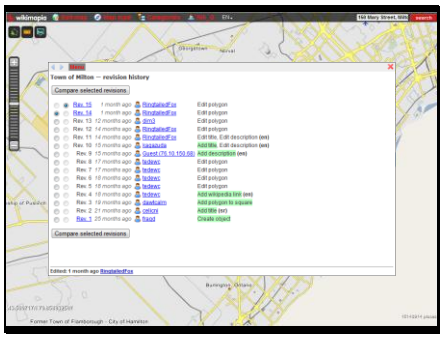

The movement toward a more Social media - citizen-driven GIS data (also excellent resource for rich linked data)
OpenStreetMap -
Platform for crowdsourcing and – if the gov't is smart – a great platform to augment & enrich Gov't GIS systems

Example: Location-based Collaboration (citizen)
GeoWikis --- represented by WIKI MAPIA

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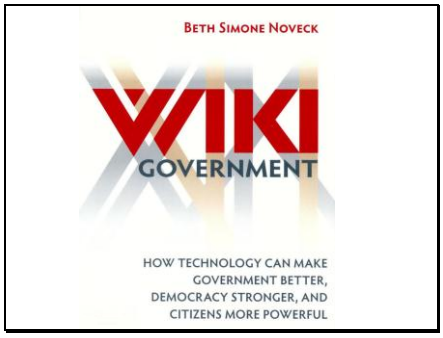

Moving toward a more WIKI-style government (with citizens as active contributors / participants)
WIKI - government: role of technology in enabling better, more agile & responsive gov't (Beth Noveck)
Enablers of collaborative democracy
participatory nature of Web 2.0 technologies to build a new kind of participatory democracy and a smart, lean government.

Food for thought – the need for robust data- and meta-data merge frameworks

(from Wiki Gov't):
Patent examiners have traditionally worked in secret, cut off from essential information and racing against the clock to rule on lengthy, technical claims. Peer-to-Patent broke this mold by creating online networks of self-selecting citizen experts and channeling their knowledge and enthusiasm into forms that patent examiners can easily use.

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C #3:

Connected experience -- Transforming data publishing & application experience for citizens
Creating citizen-ready applications

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Evolution from DATA

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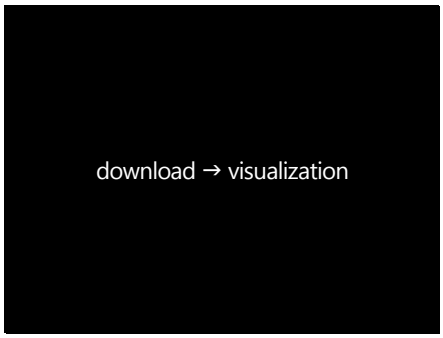

To Data + Maps / visualization

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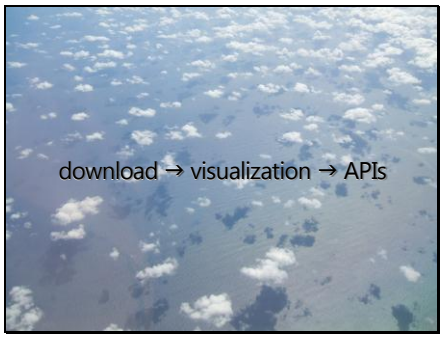

To APIs – in the
Cloud – lower barriers to deploy open Gov / open data solutions, efficiency, scale.
The Cloud lends itself as a great hosting platform for open data, open standards, and development of open APIs (and therefore shared applications).

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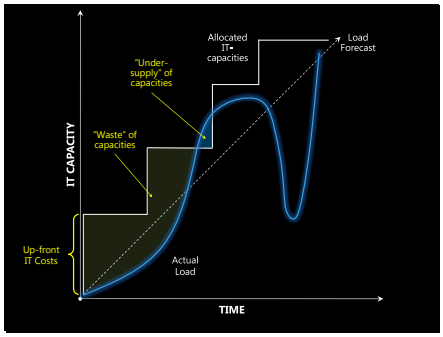

KEY MESSAGE:
Explaining about capacity/demand for IT services and the negative impact of over building for capacity scaling.

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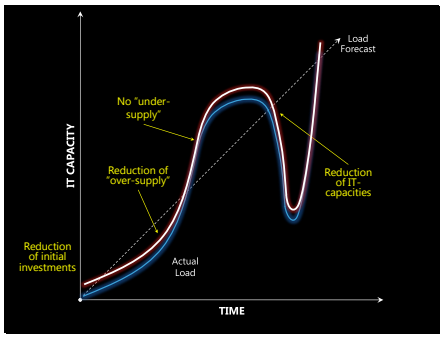

KEY MESSAGE:
Explaining about cloud – lowering initial investment required to do Open Gov /Open data – more agile, responsive etc.

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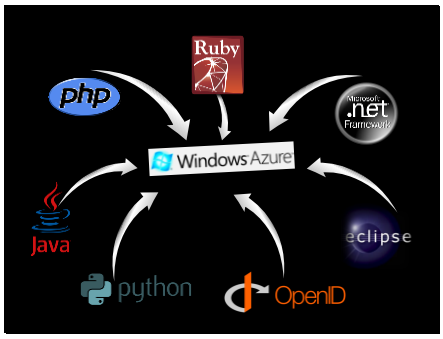

Platform as a Service scenarios supporting heterogeneous application environments

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Leverage APIs to the data & back to providers:

- PDX API started by Max Ogden , using GeoCouch (spatial index enabled flavor of CouchDB)
- more generalized version CivicAPI Socrata, ESRI
- OGDI / oData APIs
- also mixed: e.g. OpenDataPhilly: ESRI , PHL API, etc.

And exposing RELATIOSHIPS & LINKS between the data–

Semantic Web -- throughout the org & also outside the org

It will help to break through the Barrier between data inside & outside the org

oData
Linked Data / RDF
GdAta, HTML MicroData

Open Standards – enable a better ecosystem for navigating networks of data

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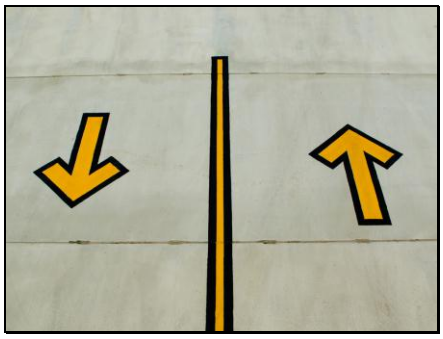

Together, APIs and Open Standards have the potential to enable the 2-way data exchange

with processes to both
- expose the open data feeds, and
- Workflows to capture the feedback/meta-data/changes back from citizens

Creating RICH ecosystem of citizen-ready applications which can be both COMMUNITY- BUILT & GOVERNMENT-BUILT (or a MIX)

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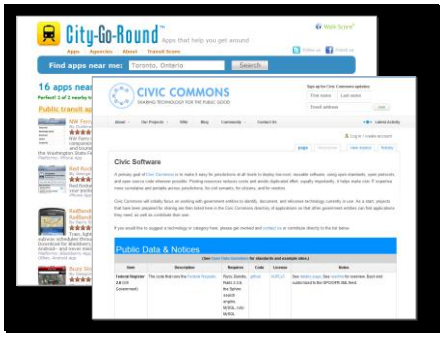

-- resulting vision of an “Open Government Application Marketplace” or
“Open Gov App Store” concept.

That can leverage application assets (Open Source and/or Shared Source) built by Communities or Other Gov’t orgs
--- through initiatives like the Civic Commons ---

To provide a consistent & very RICH connected experience for citizens with their government

Again, this assumes Open Standards & APIs, with processes to both
- expose the open data feeds, and
- Workflows to capture the feedback/meta-data/changes back from citizens

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Community
Collaboration
Connected Experience

Community of Citizens – who are driving "content" & **C**rowdsourcing that info
Collaboration – between Gov't & Community, made possible by processes and workflows to **C**apture Knowledge that was Crowdsourced --
Connected Experience – technology & systems powered by open standards & APIs (like Open 311) that brought all of the parties, content, bits & pieces in this exchange together

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Open G2C

Together, these pillars are an evolution into a new model of

citizen-centric
government-to-citizen engagement,

A path to a new era -- from the traditional –> to highly collaborative citizen/government paradigm:

B2B, B2C, G2C ---
OG2C = Open Gov to Citizen

..helping put together Open and Government…

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…the good news:
– we **already have** all the building blocks to build this Open Gov Platform of the future
- We just need to **put them together!**

Slide 50

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OpenHalton.ca

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Image Attributions:

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