Rolling in the Deep: E-Government Innovation and Strategy for Local Government

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Are we doing enough to address the information needs of our communities?

- **Communities**
  - Coordinate
  - Solve problems
  - Establish public accountability
  - Develop sense of connectedness

- **Solutions**
  - Digital hubs
  - Enhancing open government
  - Expanding access in communities
  - Digital literacy campaigns

Knight Foundation, “Informing Communities: Sustaining Democracy in the Digital Age”, 2010
Or, Are You Rolling in the Deep?

- Citizens dissatisfied
- Costs hard to control
- Security risks leave you vulnerable
- Too much drama for your momma with organizational, legal and political issues
Three Strategies to Create Public Value through E-government

- Design E-gov to meet the needs of each citizen
- Develop effective resources and capabilities
- E-gov is a honey pot – secure it, protect it, don’t depend on it
Promise of E-government

- Government as a Platform
  - Communication
  - Collaboration
  - Participation
  - Transformation
  - Education

http://www.techmic.com/img/magazine/1/web3.png
Web 2.0

- Deliver rich user experiences

- Network as platform, spanning all connected devices

- Web 2.0 applications make the most of that platform:
  - Delivering software that gets better the more people use it
  - Consuming and remixing data from multiple sources
  - Creating network effects through an architecture of participation (O'Reilly, 2005)

http://www.techmic.com/img/magazine/1/web3.png
Seductive Nature of Gov 2.0

- She offers
  - Facebook to connect you
  - Speaks eloquently in 140 character Twitter tweets
  - Has your head in the clouds
E-Government Varies with the Complexity of Service

Source: Gartner Group
So You go E-Gov Crazy…

- Key Trends
  - Citizen-Centered E-gov is still in
  - Better governance and management
  - More two-way communication with social media
  - New forms of participation, even application development
Rolling in the Deep…
Left broken hearted over E-gov?

- “There is a fire starting in my heart. Reaching a fever pitch and its bringing me out the dark

- The scars of your love remind me of us. They keep me thinking that we almost had it all…

- We could have had it all, Rolling in the deep, You had my heart inside your hand, And you played it to the beat…”
Lessons Learned

- Top hit
- Give people what they really need
- Open the door to collaboration
- Let others reuse, mashup
San Francisco Parking

- Sensors
- New parking meters
- Real time data Feeds
- Open format for public
FOCUS ON THE CITIZEN AND THE PUBLIC
Strategically – E-Gov Focuses on the Citizen

- How to create public value in a fast-changing global networked environment

- How to leverage internal and external capabilities, know-how, know-who and networks to meet citizen needs

- And thinking through how to use social media to meet engage citizens
Factors Influencing E-government Adoption

- Performance Expectations
- Ease of Use Expectations
- Social Influences
- Availability of Resources to Support Use
- Gender
- Voluntariness Of Use
- Age
- Experience

Source: Venkatesh et al. (2003, p. 447)
Profile of Heavy Users of Digital Products (Ofek, 2010)

- Focus on short term goals
- Demand immediate gratification
- Expect to multitask
- Open to exchanging ideas with people they have never met in person

http://www.nytimes.com/2010/08/22/magazine/22Adulthood-t.html?_r=1&src=me&ref=general
Digital Inclusion Grows as Broadband Expands
Broadband in Urban-Champaign
Mobile Devices Growing in Sales

![Graph showing sales of tablets, netbooks, desktops, and notebooks in millions.](source: Jefferson Graham, "Sales of tablet computers such as iPad outshine netbooks", USA Today, December 30, 2010)
Mashups with Maps, GPS, User Data
Early Mashup - Scipionus.com Serves Maps for Katrina Relief

http://www.jerryslezak.net/scissors/wp-content/scipionus_01.gif

Note: Scipionus is now a dark site

http://www.clayfox.com/images/nolafood.jpg
Application Development

Open Source Initiative

Home

Open source is a development method for software that harnesses the power of distributed peer review and transparency of process. The promise of open source is better quality, higher reliability, more flexibility, lower cost, and an end to predatory vendor lock-in.

The Open Source Initiative (OSI) is a non-profit corporation formed to educate and advocate for the benefits of open source and to build bridges among different constituencies in the open-source community.

One of our most important activities is as a standards body, maintaining the Open Source Definition for the good of the community. The Open Source Initiative (OSI) is a non-profit corporation formed to educate and advocate for the benefits of open source and to build bridges among different constituencies in the open-source community.

Apps for Democracy – An Innovation Contest by StrategyLabs for the DC Government and Beyond

Got a problem or idea for DC that can be addressed with technology? Join us on Social Citizen Sunday, then build Apps for Democracy!

Leave a voicemail or txt here: 202-683-9980
Or even better, click this box to submit ideas and vote. You’ll be helping the city better serve you and your friends!

What: The first edition of Apps for Democracy yielded 47 web, iPhone and Facebook apps in 90 days – a $2,300,000 value to the city at a cost of $50,000 (all apps created are here). Our mission with “Community Edition” is two fold: to engage the populace of Washington, DC to ask for their input into the problems and ideas they have that can be addressed with technology and then to build the best community platform for submitting 311 service requests to the city. Submit your ideas and problems here!

http://www.appsfordemocracy.org
Develop Effective Resources and Capabilities
Technology-Related Challenges of Developing E-Government Services

- Redesign or develop new operation processes congruently with software applications
- Integrate application through one interface
- Unable to use standard off the shelf solutions

Diagram of Web Portal

Source: McGraw-Hill
Sociotechnical Challenges of Developing E-Government Services

- Political Environment
- Laws and Public Policies
- Organization & Strategy
- Pre-existing IT Architecture

E-Government Services
Build a Foundation Based on IT Assets and Capabilities

Human Asset:
- High Performing IT Unit

Relationship Asset:
- Shared Risk and Responsibility

Technology Asset:
- Sharable Platforms and Databases
PROTECT IT, SECURE IT, DON’T DEPEND ON IT...
Understand the Risks and Vulnerabilities

- System security is fragile
- Taking “paper-based” operations and practices and stapling to digital platform
- Many new security vulnerabilities

http://www.youtube.com/watch?v=8_VYWe5my34&feature=related
http://www.youtube.com/watch?v=J4yH2GPiE7o&mode=related&search=
Unintended Vulnerabilities: Leaky Personal Data through Mashups with Maps, GPS, Social Network User Data
Privacy Concerns: iPhone
Location Data
The Cloud

- Deliver music and digital files from online storehouse
- Remote storage locker accessible everywhere
<table>
<thead>
<tr>
<th>SERVICE</th>
<th>DESCRIPTION</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flickr</td>
<td>Yahoo’s service for uploading and sharing photos</td>
<td>Free with upload limits</td>
</tr>
<tr>
<td>Mozy</td>
<td>EMC service to store music, photos and emails</td>
<td>Starts at $5.99 /mo</td>
</tr>
<tr>
<td>Dropbox</td>
<td>Store and sync files</td>
<td>2GB free storage; $9.99 /mo for 50GB</td>
</tr>
<tr>
<td>Google Docs</td>
<td>Create, upload and share documents, spreadsheets</td>
<td>Free up to 1 GB in uploaded files</td>
</tr>
<tr>
<td>MobileMe</td>
<td>Apple’s service to sync email, calendars, contacts</td>
<td>$99 / yr</td>
</tr>
<tr>
<td>Windows Live SkyDrive</td>
<td>Microsoft service to upload and share files</td>
<td>Free up to 25GB of storage</td>
</tr>
<tr>
<td>Unifi</td>
<td>RealNetworks’ service to catalog and stream media to multiple devices</td>
<td>TBD</td>
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</tbody>
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Management Concerns

- Who owns the data?
- Governance with 3rd Party Providers
- Intellectual property issues
- Mashed up management
Conclusions

Leadership Imperatives for E-government
Emerging Model

**IT Critical for Innovation and Performance**

- Social Architecture
  - Individualized Customer Experiences
  - Flexible and Resilient Business Processes
  - Focused Analytics
  - Global Access to resources

- Technical Architecture

Source: Prahalad and Krishnan (2008, p. 6)
Understand Acceptance Across the Organization: Look Beyond the Technology for Drivers/Barriers to Innovation
Build a Foundation Based on IT Assets and Capabilities

Human Asset
- High Performing IT Unit

Relationship Asset
- Shared Risk and Responsibility

Technology Asset
- Sharable Platforms and Databases

Ross and Beath
And Finally,

- Give to get
- Play, Play, Play
- Experiment, mashup, reuse and have fun
- Create networks to learn and share with others
- Have more fun, keep learning and do the next one better…