REIMAGINING
GOVERNANCE
IN PRACTICE

BENCHMARKING BRITISH COLUMBIA'S CITIZEN ENGAGEMENT EFFORTS

May, 2013

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Re-imagining Governance in Practice

Benchmarking British Columbia's Citizen Engagement Efforts

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EXECUTIVE SUMMARY

Purpose and Focus

Over the last few years, the Government of British Columbia (Canada) has initiated a variety of practices and policies aimed at providing more legitimate and effective governance. Leveraging advances in technology, the Government of British Columbia (BC) has focused on changing the way it engages with its citizens with the goal of changing the way it seeks input and develops and implements policy. The efforts are part of a broader trend among a wide variety of democratic governments to re-imagine public service and governance.

The goal of this report is to:

▶ Outline and benchmark the current state of the BC Government's efforts in improving transparency, citizen engagement and streamlined service delivery;

▶ Inspire BC officials how to build upon the existing foundation by pointing to worthwhile practices and policies drawn from case studies and reflections of current practitioners and thinkers in the field.

For this report, GovLab Research has identified two central themes to position BC's efforts. For each theme, the report provides an account of what BC is currently doing - benchmarking it with other jurisdictions. The methodology also included conducting interviews with select BC officials and GovLab Network experts.

The two themes include:

1. THE PRACTICE OF RE-IMAGINING GOVERNANCE

What kinds of initiatives is BC pursuing to provide for more legitimate and effective governance? What are important comparable efforts that exist elsewhere? What are key case studies suggested by practitioners in the field that can inform future work by BC in each of these areas?

Practice areas:

▶ Disclosure, transparency, and open data

▶ Engaging citizens to provide meaningful input into policy decisions

▶ Citizen-driven policy innovation (including challenges and prizes)

▶ Citizen monitoring and enforcement

2. TOWARD A CULTURE OF RE-IMAGINING GOVERNANCE

How is BC creating a culture of innovation within government? What institutional and policy foundations are being developed to foster innovative practices by government officials? What lessons might BC learn from the experience of other governments in attempting to create a sustainable culture of government innovation among officials themselves?

Foundational areas:

▶ Government-wide strategies;

▶ Shared technological frameworks and guidelines;

▶ Training and sharing best practices;

▶ Research and evaluation mechanisms.

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Key Comparative Findings

British Columbia's current practices to create a more open government and leverage citizen engagement to inform policy decisions, create new innovations and provide improved public monitoring, though in many cases relatively new, **are consistently among the strongest examples at either the provincial or national level**.

Although there are certainly opportunities for further development, and much to learn from other governments and private sector or non-governmental organizations, BC's current practices render it **a leader in the field of re-imagining governance.**

1. THE PRACTICE OF RE-IMAGINING GOVERNANCE

▸ Disclosure, transparency, and open data

- DataBC favorably compares to other currently available open data portals, especially considering that it is a provincial offering rather than a national one. While additional on-site collaborative capabilities would be valuable, the portal is notably sophisticated, particularly in regard to its efforts and tools directed at those who lack advanced technological capabilities.

- Beyond opening data, BC should further increase the transparency of government by encouraging officials to be transparent throughout the course of initiatives (e.g., sharing documents in draft stages and seeking citizen input), rather than only providing open access at the end of a process.

- Opening data is considered an essential step toward improving the transparency of government and creating new value for citizens, but developing uniform standards and improving interoperability can help to amplify the positive effects of released data.

- Similarly, the targeted release of valuable, but sensitive data in a "smart manner" (smart disclosure) and the creation of comprehensible visual representations of public data can help steer behavior and enable more people—of all levels of technological ability—to unlock more value from public data.

▸ Engaging citizens to provide meaningful input into policy decisions

- GovTogetherBC is not only uniquely successful at the provincial level, but also in comparison to initiatives at the national level.

- Expanding on-site community tools and lowering technological barriers to entry could be valuable next steps toward broadening participation. In addition, BC may consider profile and reward systems that can help to incentivize engagement, and elicit user input on a wider variety of topics.

- BC should work toward building relationship networks with constituents, both offline and online, particularly through more closely monitoring, responding to and categorizing citizen comments and feedback. The creation of "feedback loops" can help drive participation by demonstrating that government is acting on citizen input.

- Verification systems can help ensure public input is, at minimum, geographically relevant.

▸ Citizen-driven policy innovation (challenges and prizes)

- British Columbia's BC Ideas Solutions for Strong Communities competition demonstrated the potential of government driving private-sector innovation with prizes far less expensive than traditional research and development.

- In its next iteration, expanding the scope and variety of contests while developing BC Ideas into a central contest hub with clear, substantial incentives for participation could further amplify its impact.

- Backing particularly audacious goals with significant prizes can yield high levels of unsubsidized research and development and lead to results previously thought impossible. Team-building tools, referral programs and a wide variety of contest and challenge offerings can help draw in a larger portion of the population.

▸ Citizen monitoring and enforcement

- British Columbia's Drive BC site is a meaningful first step toward utilizing citizen reporting to inform government services, with a notably strong system for receiving input and directly engaging citizens using Twitter.

- Potential next steps include on-site reporting, expanding the service's purview, using open APIs to engage developers, creating an issue up-voting system and offering more visualizations and maps.

- As BC collects more information from, and on, individuals, government should look for opportunities to improve the personalization of citizens' experiences with government.

- Citizen reporting and monitoring initiatives can reach new levels of success when they give citizens a variety of options for providing input, develop a Web 2.0-type interface allowing for discussion and up-voting of important issues and focus on results and accountability by providing a system of issue updates and information on the government body responsible for a given problem.

2. TOWARD A CULTURE OF RE-IMAGINING GOVERNANCE

While the study of currently available practices is the most immediate method for determining a province or nation's proficiency and sophistication in its efforts to re-imagine governance, the infrastructure put in place by a government to develop such efforts is perhaps more essential for enabling a culture of re-imagined governance. To date, BC has been notably successful relative to other provinces and nations in its efforts to create an infrastructure that provides political leadership and direction; develops and disseminates shared frameworks and guidelines to ministries and employees; trains employees and shares best practices; and allows for meaningful research and evaluation.

Foundational areas:

▸ Political leadership and direction;

- The mere existence of British Columbia's Ministry of Citizen's Services and Open Government demonstrates a unique commitment to re-imagining governance.

- A goal for BC's political leadership going forward should be the encouragement of more risk-taking and experimentation in ministries and agencies, while accepting and allowing that failure can be part of the process.

▸ Shared technological frameworks and guidelines;

- BC's formal efforts to standardize its transparency and citizen engagement projects are at the fore of such frameworks and policies.

- To ensure that BC maintains its leadership position, it should focus on clarifying the benefits of open data and developing a common alignment around the purpose of open data tools within ministries and across external alliances.

- Consolidating the information and strategies housed in its "Citizens @ the Centre" document, "Open Information and Open Data Policy," User Experience Toolkit and Citizen Engagement Corner could further aid government employees' efforts to implement optimized open government projects with the desired level of uniformity.

▶ Training and shared best practices;

- British Columbia's Citizen Engagement Corner provides government employees with a wealth of tips and best practices in both citizen engagement and social media strategies.

- Webinars, Q&A sessions and the Dragon's Den Course provide more interactive learning opportunities for employees.

- An expansion of online, course-based training opportunities, like those available through the United States' Digital-Gov University, could be a logical next step.

▶ Research and evaluation mechanisms.

- There is a current lack of meaningful metrics and indicators of the success of open government initiatives across the globe.

- BC has taken steps toward developing relevant metrics for both DataBC and citizen engagement projects in general.

- Important questions for developing open government evaluation mechanisms include:

  » How can BC provide answers to the following questions: to achieve certain participatory objectives, what works, with whom, and under what conditions?

  » How can BC start determining what the impact is on people's lives?—the ultimate benchmark of success.

  » How can BC best engage with citizens to determine what success should look like and what to measure?

  » How can BC improve the evaluation of governance innovation through increased experimentation in methods and practice, including the use of big data?

Key Findings from Interviews

BC OFFICIALS

▶ **Strong political leadership and capacity building are needed to bring about the culture shift**;

▶ **Lessons learned need to be translated into best practices**;

▶ **Linkages across ministries will be important to achieve government wide transformation.**

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▶ **Political leadership is critical for change** - Re-imagining governance requires significant shifts within government, and presents challenges to political leaders as they attempt to facilitate those shifts.

▶ **Decisions must be evidence-driven** - Rather than succumbing to inertia, the ability to collect and analyze information, including data, can help government become more strategic and effective.

▶ **Designs must be user-centric** - While open-by-default is a noble goal, sometimes government systems should be designed with an eventual goal or citizen use in mind to make that openness or engagement meaningful and actionable.

▶ **Experimentation should be embraced but balanced** - The ability to test new governance methods and learn from both successes and failures can help optimize both new and old systems. However, it is important to remember that citizens may not be comfortable if made to feel as though they are the guinea pigs in a government experiment.

▶ **Interoperability is key to scaling initiatives** - Common standards and systematic processes can lower barriers to entry and increase efficiency.

▶ **Trust goes both ways between government and citizens** - Trust is essential for meaningful citizen engagement projects, both in the form of citizens trusting their government to act on their input, and in the form of government trusting their citizens enough to value and act on their input.

▶ **Culture must shift, with a focus on community-building** - Closely related to the need for political leadership, it is important to recognize that moving toward opening government requires significant cultural shifts and the development of new collaborative communities—i.e., simply releasing a trove of public data is not enough.

Conclusions

While British Columbia's practices to re-imagine governance and its internal infrastructure for creating a more open and participatory government culture are relatively new, the province can count itself among the leaders in the field.

Just as every province and nation has numerous and significant opportunities for further developing their practices in this field, and changing the culture among public officials, BC should not allow complacency following its early success to endanger its position as an open government leader.

Leadership from above, along with the elimination of possible imperatives that may limit further experimentation, will remain important.

As with all initiatives to re-imagine governance worldwide, much more evaluation of what works, and why, will be needed to keep strengthening the value proposition behind the new practices and polices and provide proof-of-concept.

Below we recommend 10 Areas for Improvement within BC's current citizen engagement and transparency efforts. Beyond these proposed policy goals and adjustments for existing initiatives, we recommend that BC increase its footprint in the following areas:

▸ **Behavioral Science** – like the UK's Behavioral Insights Team, which leverages academic research in behavioral economics and psychology to inform public policy and services
▸ **Expert Networks** – such as the Open Development Technology Alliance, which calls on technologists to help guide World Bank development projects

Finally, by studying and incorporating best practices and distinguishing characteristics from other localities, provinces, nations, companies and organizations in a systematic manner, BC can ensure that its government remains uniquely transparent and proficient at engaging its citizens. The development of a research-based observatory for tracking the evolution and best practices of citizen engagement projects, complete with a common communications platform for information-sharing between open government practitioners, hosted either within the BC government or through a third party, would not only help to ensure BC's continued role as a leader in the space, but could also provide an invaluable resource to governments from all over the world. As the Rensselaer Polytechnic Institute's (RPI) Jim Hendler argues:

> *"If this emerging field is going to become a community, we really have to start having ways to share that knowledge. It's not, 'Wait 'til it gets published in some paper somewhere.' It's what worked in a community, what worked in another place, not even the academic stuff."*

10 Areas for Improvement

In order to sustain and enhance BC's open government initiatives, the following actions are recommended for immediate, cost-effective improvements to BC internal capacity building and to BC citizen engagement efforts:

IMPROVEMENTS IN INTERNAL CAPACITY-BUILDING

▸ Encourage officials to be transparent throughout the course of initiatives (e.g. sharing documents in draft stages and seeking citizen input), not only open access at the end of a process.

▸ Clarify the benefits of open data and develop a common alignment around the purpose of open data tools, within ministries and across external alliances.

▸ Greater support for the internal culture shift toward open government, offering ministries more trainings, knowledge sharing tools and implementation resources (e.g., internal web platforms and shared best practices.)

▸ Political leadership should encourage more risk-taking and experimentation. Accept and allow that failure is part of the process, while opening the process to citizens.

▸ Require fluency in technology and social media for new hires, particularly in entry-level positions, to ensure ministries have the capacity and attitudes conducive to open government initiatives.

▸ Adopt success metrics and incorporate more analytics and measurement to benchmark progress (e.g. levels of engagement, number of datasets.)

IMPROVEMENTS IN CITIZEN ENGAGEMENT EFFORTS

▸ Clarify and/or increase incentives for public participation in government initiatives, particularly through challenges

▸ Create a more systematic process to allocate resources and expertise towards building relationship networks with constituents, both offline and online. This includes more closely monitoring, responding to, and categorizing citizen comments and feedback.

▸ Place greater emphasis on engaging with citizens to incorporate input into government action, allowing citizens to see results. Create a concrete "feedback loop."

▸ Increase opportunities for citizens to personalize experiences with government through more diverse tools, challenges, and datasets.

▸ To improve service design, hire more user-experience specialists, and consider building a larger dedicated user-experience team and/or department.

1. The Practice of Re-imagining Governance

1.1. DISCLOSURE, TRANSPARENCY, AND OPEN DATA

In July 2011, the government of British Columbia launched an open data initiative with the intention of strengthening the economy, increasing citizen engagement and achieving the goal of "government as a platform," where citizens, companies and organizations can use public information to create new value. While British Columbia was a notably early entrant into the open data space, particularly among Canadian provinces, the creation of DataBC is part of a wider effort among governments across the globe[1] to improve their transparency, engage their citizens and spur the continued development of the "data economy," where individuals and companies transform raw information into profits. Although the transition to an open-by-default culture has not been without challenges—including, notably, significant up-front costs to develop the necessary technical infrastructure and privacy concerns regarding personally identifiable data. The Open Data Institute's Nigel Shadbolt highlights the challenge of providing open data that will actually be put to use:

> *"There's been a lot of supply side open data discussions here. In the U.K. what we're really thinking about now is how you stimulate the demand side. How do you build businesses and an ecosystem which consumes this stuff? The best way to maintain a great supply of open data is to have a strong demand side."*

Despite any initial or persistent difficulty in providing meaningful disclosure and open data, many agree that these and other challenges pale in comparison to the potential and already-realized benefits for the public, private and civil sectors.

RELEVANCE FOR BC

DataBC, the first Canadian provincial open data portal, is notably sophisticated, especially considering its relative newness. Strong efforts to engage the less technologically savvy, in particular, set DataBC apart from many similar portals. Logical next steps include providing more on-site communication capabilities for citizens, increasing the use of visualizations and moving toward data and platform interoperability. Beyond opening data, BC should further increase the transparency of government by encouraging officials to be transparent throughout the course of initiatives (e.g., sharing documents in draft stages and seeking citizen input), rather than only providing open access at the end of a process.

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[1]   DataCatalogs.org—*an exhaustive list of currently available open data portals—and the World Wide Web Foundation's* Project: Open Government Data *are valuable resources for tracking the development of open data portals worldwide and understanding such projects' goals, challenges and best practices*

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1.1.1. BRITISH COLUMBIA: DATABC - DATA.GOV.BC.CA
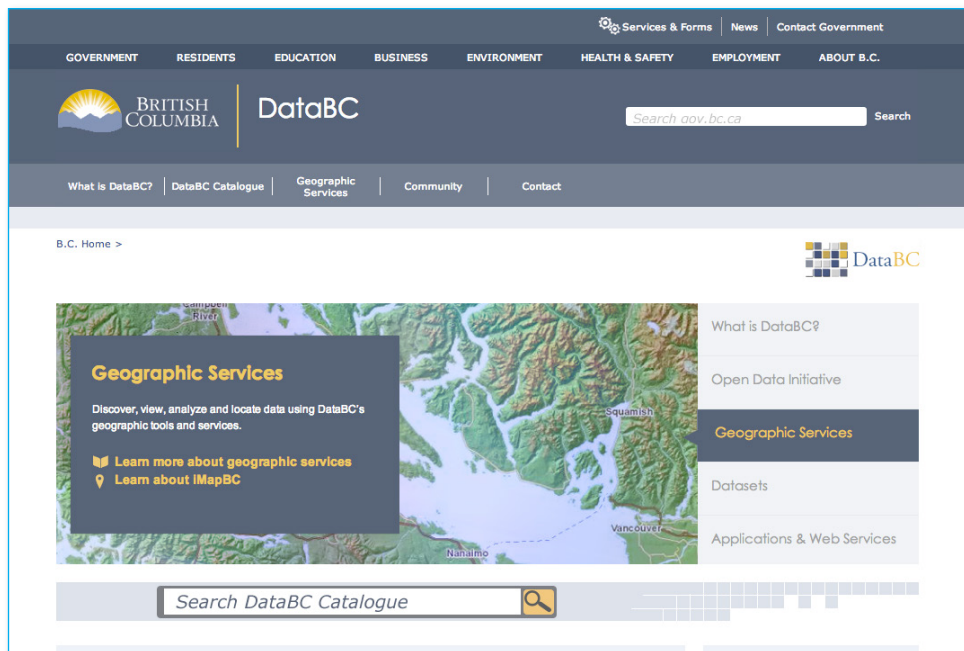
Summary

DataBC is the original provincial open data portal in Canada. Its variety of available data, granular search and browsing function-alities, and tools for non-developers to gain insight from data make DataBC the standard-bearer for Canadian open data portals.

About

DataBC currently houses over 3,000 datasets, with new types of data being added daily, on subjects including carbon emissions, school exams, public accounts, casino and gaming revenue, birth rates, park trails and many others. Since its launch in 2011, the site has been visited over 100,000 times, served 100,000 datasets and seen a 20% growth in the number of datasets publicly available.

Objectives

The impetus behind DataBC is the belief that, "Access to reliable, authoritative data gives citizens and businesses the raw material to make informed decisions and create opportunities." The project's Concept of Operations document goes further, listing three central goals for sharing data. With projects like DataBC, governments hope to:

▸ Encourage public dialogue and participation by giving citizens better access to data about their communities and the operations of their government;

▸ Rethink the role of government as a provider of a platform for sharing information that can be leveraged by public servants, non-profits, businesses and citizens to find efficiencies, enhance services or research evidence-based policies; and;

▸ Strengthen the economy by promoting a data-based economy that enables local companies to find efficiencies, create new services and spur innovation.

Background

Launched on July 19, 2011, DataBC was the first Canadian provincial open data portal. Premier Christy Clark headed up the DataBC effort as a part of a wider commitment to open government in British Columbia.

Functionality

DataBC's Data Catalogue provides granular search and browse functionality, letting citizens filter their queries by the type of license the dataset is subject to,[2] the type of resource,[3] type of data product or file format,[4] type of web service,[5] sector[6] and originating organization.[7] Since, unlike many other data portals, applications and other resources are provided in the central data catalogue, citizens can easily discover any and all available resources—data or otherwise—on a given topic or originating from a given agency.

DataBC's Geographic Services tab contains links to relevant geospatial datasets included in the broader catalogue, as well as tools to analyze, download, connect and map geospatial data. Tools like iMapBC and Geomark Web Service give users, no matter their technological capabilities, the ability to gain insight and value from the collected data. Far from a simple data clearing house, DataBC demonstrates a clear attempt to engage all citizens, not just those with data analysis skills.

The Community section of DataBC further exemplifies a desire to engage even those who are not technically proficient. In addition to an open data blog, the Community section offers step-by-step guidance to users as they "Start a Project" using BC's open data. The portal also gives users the opportunity to request data and contact the administrators with any questions or feedback.

Distinguishing Characteristics

In addition to being the oldest and most sophisticated provincial open data portal in Canada, DataBC has been lauded for its commitment to providing tools and guidance for citizens without advanced technical knowledge to gain value from open data. Providing a central catalogue containing information and links to all of the available resources from a given organization or on a given topic—data or otherwise—instead of separating content into different areas of the site also likely benefits the casual user, since topic- or organization-based browsing can yield unexpected discoveries.

Challenges

While the Contact section allows for citizen feedback, and the community section provides guidance for potential data users and a blog with commenting capabilities, DataBC does not directly provide citizens with any community-building platform allowing them to collaborate on open data projects.

Current Impact

Perhaps DataBC's biggest impact is the role it has played in catalyzing the creation of more open data portals across Canada, while codifying a number of best practices. BC was, for instance, the first province to release its budget data as open data. So while the 52 applications currently listed in the Data Catalogue are undoubtedly beneficial for citizens, the type of access leadership demonstrated by the budget data release may have the greatest ultimate impact.

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2   *Access Only, BC Open Government License, GeoGratis, Request Permission or Statistics Canada*

3   *Applications, Geospatial Datasets, Non-Geospatial Datasets and Web Services*

4   *Delimited Text, KML, SHP, XML, CDED, FGDB, KMZ and Spreadsheet*

5   *ATOM, GEO RSS, RSS and WMS*

6   *Economy, Education, Finance, Health, Justice, Natural Resources, Service, Social Services and Transportation*

7   *Elections BC; Ministry of Aboriginal Relations and Reconciliation; Ministry of Advanced Education, Innovation and Technology; Ministry of Agriculture; Ministry of Children and Family Development; Ministry of Citizens Services and Open Government; Ministry of Community, Sport and Cultural Development; Ministry of Education, Ministry of Energy, Mines, and Natural Gas; Ministry of Finance; Ministry of Environment; Ministry of Forests, Lands and Natural Resource Operations; Ministry of Health; Ministry of Jobs, Tourism and Skills Training; Ministry of Justice; Ministry of Social Development; Ministry of Transportation and Infrastructure; and Public Sector Employers Council Secretariat*

1.1.2. CANADA

www.data.gc.ca

Canada's open data ecosystem is rife with stakeholders, initiatives and portals at each level of government, in addition to international partnerships featuring Canadian participation. Data.gc.ca, the national data portal, which remains in a pilot stage until its re-launch sometime in 2013, features nearly 300,000 datasets. In addition to BC, the provinces of Ontario and Québec also have open data portals. OpenDataSK.ca, the portal for the province of Saskatchewan, is notable because it is not an official provincial project; rather it is operated by "a community of citizens just like you," including programmers, designers and data scientists outside of the federal or local government. Provincial open data portals are not yet the norm, however. Manitoba, for instance, has a Freedom of Information and Protection of Privacy Act (FIPPA) website that disseminates public information but does not provide downloadable datasets. At the municipal and city level, Calgary, Edmonton, Niagara Falls, Prince George and many others have their own portals. Canada earned the #8 position in the World Wide Web Foundation's Open Data Index for 2012.

Next to British Columbia, Québec has the most full-featured Canadian provincial data portal. Unlike Ontario's open data offering, which was just launched in November 2012, Québec's data portal, though not nearly as extensive as DataBC, has reached a stage of development that comparing the two can yield insights for British Columbia.

1.1.2.1. Québec - données.gouv.qc.ca

Summary

The province of Québec's open data portal features a variety of easily searchable datasets in downloadable formats. Dashboards provide citizens with a simple means to monitor certain areas of government with a variety of digestible information in a central location.

About

The provincial open data portal, not to be confused with the City of Québec's offering, features over 300 datasets originating from 15 different agencies[8] separated into 10 different categories.[9]

Objectives

As part of Québec's Gouvernement Ouvert, the data portal falls under the mission slogan, "Transparency. Participation. Collaboration." The province's open government declaration features a commitment to proactively make government data open to the public "in a user-friendly format so that citizens, businesses, researchers, associations and government agencies can take ownership, use them to make informed decisions, [and] enrich and develop new applications that can be shared [with the] community with a view to continuous improvement of public services."[10] The declaration also posits that using information technologies to open government "will allow the citizen to approach the government and have a direct impact on the quality of services they enjoy daily."

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8   AMT (Metropolitan Transport Agency); BAnQ (Library and Archives); CPTAQ (Commission for the Protection of Environmental Land); Trustee (Public Curator of Quebec); ISQ (Institut de la statistique du Québec); MAPAQ (Agriculture, Fisheries and Food); CMC (Communications and Culture); MNR (Natural Resources); MSP (Public Safety); MSSS (Health and Social Services); MTQ (Transport Canada); Services Québec; SAAQ (Society assurance automobile du Québec); SQ (Surete du Quebec); and Tourism.

9   Agriculture; Reference map land cover; Transport infrastructure, Location, Earth sciences, geosciences; Biology, wildlife, forestry and nature; Economy; Political and administrative boundaries; Health; Society and Culture

10   Translated from French

Background

The province's open data portal was first announced in May 2012 by Deputy Prime Minister, Minister Responsible for Government Administration and Chair of the Treasury Board, Michelle Courchesne and the Deputy House Leader and Member of National Assembly (MNA) for Verdun, Henri François Gautrin. The portal officially launched the following month.

Functionality

The portal allows citizens to browse and filter search results according to file format, data category and originating department. It also provides links to the most popular datasets, as well as the latest uploads. Citizens can keep up to date with new data releases by subscribing to the portal's RSS feed.

The Dashboards tab provides centralized locations for citizens to easily monitor certain types of public data. Transportation, particularly bridges and roads, and health information are the currently available dashboards, but more offerings are being developed. The site also has an Applications tab with links and information to offerings created using open data. Currently there are only three applications posted on the site: two geospatial applications and an open data search browser extension.

The portal provides a number of means for contacting the administrators and an extensive FAQ featuring information ranging from a basic definition of open government to granular information on different file formats and metadata. A link to "Request Data" can also be found at the top of each page of the portal.

Distinguishing Characteristics

While Québec's open data portal remains in its infancy, its simple navigation and centralized information dashboards are good models for providing citizens with data in a way that is not too overwhelming or intimidating for those with less technology-savvy.

Challenges

As noted in the initial project announcement, the portal currently lacks any means of citizen collaboration or community building around the available open data. While the lack of applications is certainly understandable due to the newness of the site, some illustrative examples from other open data sites could be beneficial.

Current Impact

While it is perhaps too early to determine the impact of the portal, early reactions have largely been positive, particularly concerning the use of the developer-preferred KML file format for geospatial data.

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1.1.3. UNITED STATES – DATA.GOV

Summary

Data.gov is the central open data hub for the U.S. Federal Government. Data.gov provides downloadable datasets to encourage public participation in government by building applications, conducting analyses, and performing research. It is one of the first, pioneering examples in increasing government transparency, and supported by President Obama. (*At the time of writing this report President Obama released an executive order on open data which is widely seen as the current standard-bearer in the field, not only because of its content, but because its guidelines and deadlines carry the force of law – See Section 2 for a more detailed discussion*)

About

Data.gov was developed by the Federal CIO Council as an interagency Federal initiative and is hosted by the General Services Administration. Currently there are 373,029 raw and geospatial datasets, 1,209 data tools, 350 apps, 137 mobile apps available under 172 agencies and sub-agencies. The top dataset downloads by category include Geography and Environment, Information and Communications, Transportation, and Energy and Utilities.

Objectives

The purpose of Data.gov is to increase public access to high value, machine-readable datasets generated by the Executive Branch of the Federal Government and to expand creative use of those data beyond the walls of government by encouraging innovative ideas (e.g., web applications).

Background

Data.gov was launched in May 2009 in response to President Obama's Memorandum on Transparency and Open Government. The Memorandum declared that "Transparency promotes accountability and provides information for citizens about what their Government is doing. Information maintained by the Federal Government is a national asset. My Administration will take appropriate action, consistent with law and policy, to disclose information rapidly in forms that the public can

readily find and use. Executive departments and agencies should harness new technologies to put information about their operations and decisions online and readily available to the public. Executive departments and agencies should also solicit public feedback to identify information of greatest use to the public.

Functionality

A "Raw" Data Catalog provides the ability to instantly view and download platform-independent, machine-readable data (e.g., XML, CSV, KMZ/KML, or shape file formats), as well as a link to a metadata page specific to the respective dataset. The geodata catalog includes trusted, authoritative, federal geospatial data. This catalog includes links to download the datasets and a metadata page with details on the datasets.

A Tool Catalog provides the public with simple, application-driven access to federal data with hyperlinks. This catalog features widgets—interactive virtual tools that provide single-purpose services such as showing the user the latest news, the current weather—data mining and extraction tools, applications and other services.

A collection of Data Mining and Extraction Tools allows users to either produce maps, tables, or charts of the subset of data that are specific to the user's interests, or build their own dataset extracted from a data source.

Finally, users can subscribe to updates from specific agencies using RSS feeds.

Distinguishing Characteristics

In May 2012, Data.Gov produced an open source version (based on Drupal) called the Open Government Platform (OGPL), which can be downloaded and evaluated by any national government or state or local entity as a path toward making their data open and transparent. The core software includes a data management system, web site, and social networking community support.

The "DIALOGUE" link guides visitors to a collaborative site to enable two-way conversation with the public throughout the evolution of Data.gov, (e.g., posting of draft documents for the public's review, obtaining feedback to specific posted questions, and obtaining suggestions in general. Documents will be posted for review, for comment, and ranking of comments through an up or down arrow icon.)

The "Developers Corner" is a place where an agency, organization, or individual can share their mashups created using datasets from the catalog with the Data.gov community.

The Community Boards organize resources such as existing/in-development applications according to topic (Agriculture, BusinessUSA, Cities, Consumer, Counties, Developers, Education, Energy, Ethics, Health, Law, Manufacturing, Ocean, Research, Restore the Gulf, Safety, States, Sustainable Supply Chain) and encourages members to collaborate on ideas.

Challenges

Compared to other topics, Data.gov lacks financial and budgetary datasets. User experience could be improved through increased reach-out and tutorials to less tech-savvy citizens, incorporating more open mapping and data visualization tools, and more embeddable/sharable data summaries and visualizations. Broadly, the site needs better integration with other Open Government Initiatives (e.g., Challenge.gov) and better promotion of the value of open data to citizens.

Current Impact

Data.gov was the first centralized, open data portal created for a federal government and is still considered a leading portal in government open data and transparency. Compared to similar sites, it features a robust gallery of **datasets and tools.**

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1.1.4. UNITED KINGDOM – DATA.GOV.UK
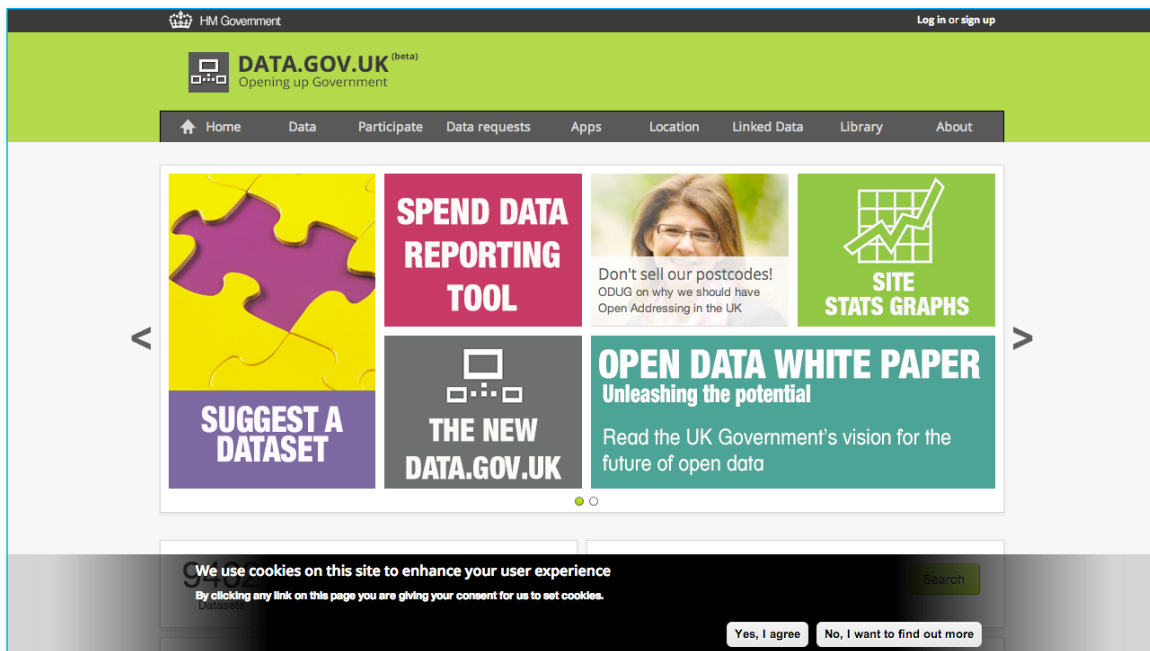
Summary

Data.gov.uk is the central open data hub for the U.K. Federal Government and key part of the government's work on transparency. Data.gov.uk provides downloadable, searchable datasets to encourage public participation in and monitoring of government.

About

Data.gov.uk currently contains over 9,400 UK government datasets from all central government departments and a number of other public sector bodies and local authorities, including 1,000 location datasets, detailed descriptions of public roles and salaries, and UK Departmental spend reporting.

Objectives

The objective of Data.gov.uk is to release public data to increase transparency and to help citizens understand how government works and how policies are made. Data.gov.uk brings information together in one searchable website, making it easier for people to make decisions and suggestions about government policies based on detailed information.

Background

Data.gov.uk was launched in closed beta in September 2009 and publicly launched in January 2010. Data.gov.uk led by the Transparency and Open Data team in the Cabinet Office, and is supported by Sir Tim-Berners Lee & Professor Nigel Shadbolt.

Functionality

The Data section includes a data catalog searchable by keyword, department or organization, geography (interactive "Map Search"), public roles and salaries, and government spending. The Participate section includes public forums, blogs, case studies, and consultation (requests feedback on datasets and activities.) In Data Requests, users submit requests for datasets, and the Apps page serves as a centralized, searchable hub for applications created by citizens using Data.gov.uk datasets. Finally, the Location page allows users to access, download, analyze, and create apps with location-based data.

Distinguishing Characteristics

An emphasis on Linked Data allows people to provide data to Data.gov.uk in a way that allows for flexible and easy reuse, while the Comprehensive Knowledge Archive Network (CKAN) stores the catalogue behind Data.gov.uk. An interactive tool, the Time Slider, allows users to "travel back in time" to previous organograms—organizational charts of institutional structures—for a given agency or department and a function to download different aspects of an organogram in several open formats. The Public Roles and Salaries pages includes an interactive, searchable tool to browse public officials, roles, and salaries. Finally, the Spend Browser allows users to browse and search through items of major government expenditure, while a Spend Reports page lists Core Government departments spending reports.

Challenges

To improve user experience and sharability, the site should increase reach-out and tutorials to less tech-savvy citizens, offer more pre-loaded data visualizations, and offer more embeddable/sharable data summaries and visualizations.

Current Impact

Data.gov.uk is considered a leader in government open data web portals and was shortlisted for the following awards: Nominet Internet Awards 2010, Empowering Young People & Citizens ISPA Awards 2010, and Internet Hero. It also features open data applications and an Open Data White Paper, highlighting progress.

1.1.5. NEW ZEALAND - DATA.GOVT.NZ

Summary

Data.govt.nz is a directory of publicly available, non-personal New Zealand government held datasets. The site does not host data; instead it links to datasets held on other government websites.

About

Data.govt.nz links to 2,297 datasets from central government departments.

Objectives

Data.govt.nz aims to make non-personal government-held data and information more widely available and discoverable, easily usable and compliant with open government data, and to facilitate agencies' release of the non-personal government-held data and information that people, communities, and businesses want to use and re-use.

Background

Launched in November 2009 under the New Zealand Open Government Data and Information Reuse Programme, and the Declaration on Open and Transparent Government, overseen by the Office of the Chief Information Officer and administered by the Department of Internal Affairs.

Functionality

The Catalogue page serves as a central search page to find datasets by category, agency, license, and format. Under Add Dataset, citizens suggest a dataset already published by government agencies to be released in a re-usable machine-readable format. Government agencies submit links to datasets. Through the Data Requests page, citizens request access to datasets not currently available, while Forums serves as a hub for users to share ideas about open data. Categories include: Open Government, Geospatial Mashup and InfoConnect Developers Discussion.

Challenges

Data.govt.nz should be made the comprehensive government data catalogue with full, downloadable government datasets (beyond link aggregation), which would entail creating a more robust platform that includes more targeted news, information, tools, and case studies regarding open data initiatives and dataset availability and a dashboard for users to access tools for analyzing and manipulating data. Additionally, the communication platform should be expanded to allow direct contact with the department via the website, and to better engage with other users across more topics and datasets by add mapping tools, geo-spatial datasets, open source tools, and APIs. User-experience would be improved by adding pre-made data visualizations and the tools to create new visualizations, a section highlighting user-created applications and how data has been re-used. Finally, the site should include more information about the New Zealand Open Government Data and Information Reuse Programme.

Current Impact

New Zealand Open Data Case Studies:

- 2006 Census
- ANZ Truckometer
- ASB Property Guide
- CamperMate
- Charities Register
- Economic Indicators
- InfoConnect
- InfoShare
- Land Information New Zealand (LINZ) Data Service
- Marlborough Floodwatch
- NZ Schools App
- NZ Tides Prediction Data
- Parliamentary Counsel Office
- Tongariro Pocket Ranger

	British Columbia DataBC (3,000 datasets)	Québec Données.gouv. qc.ca (300+ datasets)	United States Data.gov (370,000+ datasets)	United Kingdom Data.gov.uk (10,000+ datasets)	New Zealand Data.govt.nz (2,000+ datasets)
Functionality	Central repository of data, services and applications with granular search; Separate geospatial data section with mapping and visualization capabilities	Granular data catalogue search; Dashboards and Applications sections; Extensive FAQ for non-tech savvy	Granular data catalogue search; Catalogue of widgets, applications and data-mining and extraction tools	Granular data catalogue search; Interactive map search; Applications hub	Granular data catalogue search; Ability to add a dataset
Distinguishing Characteristics	Mapping services, visualization tools and step-by-step project guidance lower the barrier to engagement for non-tech-savvy	Centralized dashboards provide easy access to information on given topics	Open Source Open Government Platform; "Dialogue" tool allows for on-site collaboration; Developers Corner for sharing data mashups	Emphasis on Linked Data; Historic information through "Time Slider"; Extensive information on public roles, salaries and spending	Theme-based forums allowing for discussion and collaboration between developers
Challenges	Lack of on-site tools for collaboration and community-building	Lack of on-site tools for collaboration and community-building; Lack of examples of useful applications of open data	Lowering barrier to engagement for the non-tech-savvy; Emphasizing sharing and visualization; Providing more financial and budgetary data	Lowering barrier to engagement for the non-tech-savvy; Emphasizing sharing and visualization	Many aggregated links rather than downloadable datasets; Lack of mapping and visualization tools; No list of example applications
Current Impact	First provincial Canadian open data portal; Enabled the creation of a variety of applications	Limited as yet; Use of developer-preferred KML geospatial data format considered a best practice	First centralized federal open data portal; Enabled the creation of numerous applications, including DataMasher	Leader in the open data space; Enabled the creation of numerous applications, including *WhereDidMyMoneyGo.org*	Helping to create a culture of openness and transparency in New Zealand

Assessment:
DataBC favorably compares to other currently available open data portals, especially considering that it is a provincial offering rather than a national one. Beyond opening data, BC should further increase the transparency of government by encouraging officials to be transparent throughout the course of initiatives (e.g., sharing documents in draft stages and seeking citizen input), rather than only providing open access at the end of a process.

GOVLAB RESEARCH

1.1.6. GET INSPIRED- PLATFORMS AND INTEROPERABILITY

While the use of open data portals is expanding across the globe, and across Canada in particular, the piecemeal nature of currently available open data offerings could limit interoperability and the ultimate impact of individual portals. The following open source open data platforms could represent the next step for government data portals.

1.1.6.1. Open Knowledge Foundation's CKAN - ckan.org
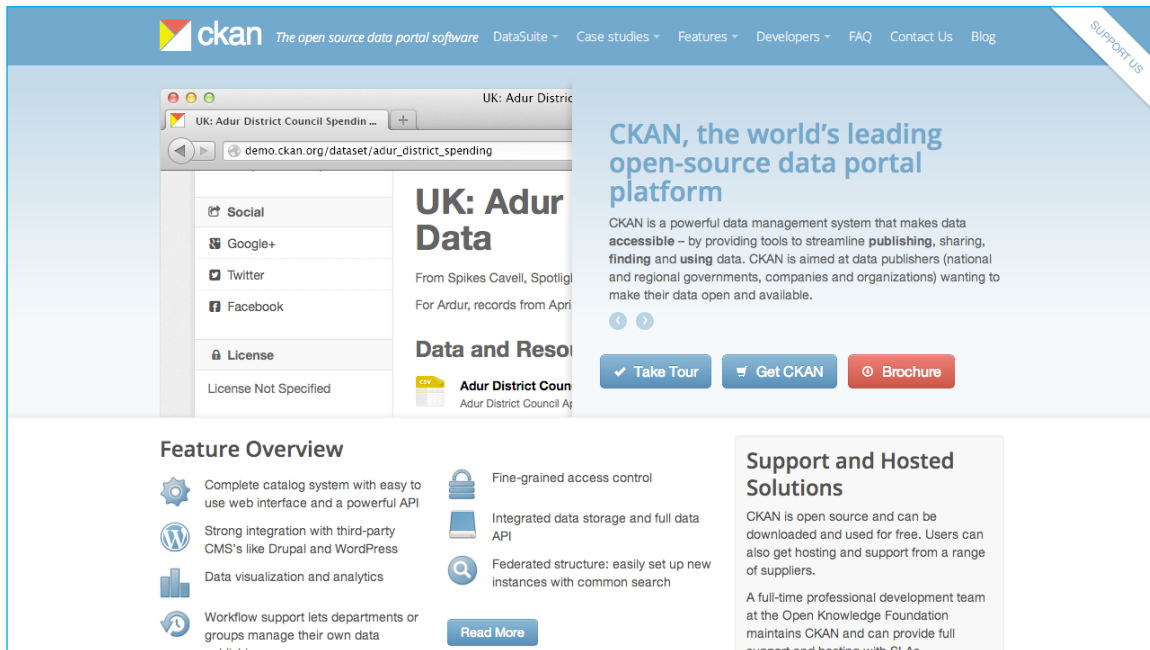
Summary

The Open Knowledge Foundation is a global network dedicated to promoting open data and open content in all forms. Its open source CKAN software provides free data management capabilities to a wide variety of government open data initiatives.

About

Because CKAN is open source, it is difficult to confidently state how many government entities are utilizing it for their open data portals. The Open Knowledge Foundation, however, knows of "nearly 50 data hubs running CKAN," including numerous examples of official national sites,[11] official regional and city sites,[12] other official public-sector sites[13] and community-run sites.[14] The platform's inherent flexibility makes its scope practically unlimited, and the amount of information released through CKAN far surpasses even the most extensive official data portal.

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11   Including Austria, Brazil, Germany, Netherlands, Norway, United Kingdom, Uruguay and the United States.

12   Including Buenos Aires, Argentina; Linz and Graz, Austria; Queensland, Australia; Helsinki, Finland; Berlin, Germany; Hamburg, Germany; Rheinland-Pfalz, Germany; Rostock, Germany; Province of Rome, Italy; Tuscany, Italy; Aragon, Spain; Greater Manchester, UK; Denver, Colorado, USA; Santa Cruz, California, USA; and Lexington, Kentucky, USA.

13   Including the Brazilian International Aid Transparency Initiative, Datacatalogs.org and Publicdata.eu

14   Including German citizens' OffeneDaten, OpenDataHub Italia, CKAN Serbia, the Greek open data hub, France's nosdonnees.fr, DataGov.ru in Russia, Spain's opengov.es, CKAN Italia, CKAN Brazil, Finland's Data Hub Suomi, Datos Publicos in Argentina, CKAN Czech Republic and CKAN Norway.

GOVLAB RESEARCH

Objectives

The Open Knowledge Foundation's vision is that, "a vibrant open knowledge commons will empower citizens and enable fair and sustainable societies."

CKAN provides open source tools for publishing, sharing, finding and using data "aimed at data publishers (national and regional governments, companies and organizations) wanting to make their data open and available."

Background

The Open Knowledge Foundation—with co-directors Rufus Pollock and Laura James, and Director of Policy and Ideas Jonathan Gray—was founded in 2004. Its notable accomplishments include the OpenSpending project and the 2011 Open Data Challenge, "which was Europe's biggest open data competition to date, attracting 430 entries from 24 Member States." The foundation also offers a free Open Data Handbook to guide government access initiatives.

CKAN is in its sixth year of development, with a beta version of CKAN 2.0 currently available to developers.

Functionality

Because of its open source nature and the fact that it is a platform, not a static site, variation exists between the functionalities of different portals using CKAN. However, by default, the software offers a number of central features. Site administrators are given the ability to publish datasets, search by keyword and filter by tags, view metadata and change history, store raw and metadata,[15] visualize structured data, map geospatial data, build community and commenting systems and develop APIs to further extend the data portal's reach.

Distinguishing Characteristics

CKAN's status as a constantly evolving, open source platform that is striving toward international data interoperability not only provides agencies at all levels of government with the ability to quickly and easily open their data, it also embodies the values of collaboration and access that the open data movement is meant to represent.

Challenges

It is difficult to pinpoint specific areas for improvement with CKAN because of its flexibility and the variety of data portals that it underpins. Specific issues with the base software, however, can be discovered and potentially solved by a wide variety of members of its user base due to its open source status.

Current Impact

The Open Knowledge Foundation and CKAN have had, and are continuing to have significant global impacts on the opening of data, due to both the individual data portals they enable and the software's continued push toward open data standards and interoperability.

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15   While the CKAN software is free, clients must pay for storage.

1.1.6.2. Socrata - socrata.com

Summary

Socrata is a cloud software company offering a variety of tools for governments and governmental organizations that want to provide open access to their data. It offers software for publishing, storing, visualizing and sharing open data to a wide variety of national, local and global governments and organizations, as well as businesses and individuals.

About

Socrata was originally founded in 2007 by CEO Kevin Merritt. The company is based in Seattle but has clients from across the globe, including New York City, Chicago, the World Bank, Medicare, United Nations Development Programme and the Province of Alberta, among many others. Socrata currently streams 14 terabytes of data each month.

Objectives

Socrata is "focused exclusively on democratizing access to government data. We help public sector organizations improve transparency, citizen service, and fact-based decision-making by efficiently delivering data to citizens, employees and developers in a user-friendly experience on web, mobile, and machine-to-machine interfaces."

Functionality

▸ Socrata's variety of offerings have varied functionality, but share the common goal of increasing access to government information. Socrata's available software includes:

▸ The Turnkey Open Data Cloud for Government software is a full-service data portal platform that allows administrators to "access, share, and reuse public data without boundaries."

▸ The Socrata API Foundry is a tool that quickly transforms raw data, including basic Excel spreadsheets, into "an open, standards-based, developer-ready API in minutes."

▸ Mondara provides a simple means to map geospatial data.

GOVLAB RESEARCH

The Open Data Player allows users to "sort, filter, analyze and visualize data in place, wherever it is embedded online." In addition to allowing citizens to gain greater understanding of raw data, the player makes it simple for datasets and visualizations to be embedded on different sites, increasing their reach and visibility.

Distinguishing Characteristics

In addition to providing a full-featured platform for government data publishing, Socrata's visualization and mapping tools can make raw data more intelligible, interesting and shareable for citizens. The API Foundry also helps governments extend the reach of their data, no matter the technological sophistication of the host government or agency.

Challenges

While tools like the Open Data Player can be used by citizens at no cost, Socrata, unlike CKAN, provides proprietary software solutions, meaning that the products themselves are not democratically produced and there is a greater financial barrier to wide adoption.

Current Impact

Socrata's wide rate of adoption and variety of available tools make its impact, like that of CKAN, difficult to quantify. *Atlantic Cities'* article on "The Best Open Data Releases of 2012," however, points to the influence and sophistication of the platform—nine of the ten releases mentioned in the article were provided by Socrata customers.

1.1.7. GET INSPIRED – BEYOND OPEN DATA

1.1.7.1. Smart Disclosure

Data transparency need not be managed by a simple On/Off switch: It's often desirable to make specific data available to the public or individuals in targeted ways. A prime example is the use of government data in Smart Disclosure, which provides consumers with data they need to make difficult marketplace choices in health care, financial services, education, and other important areas. Governments collect two kinds of data that can be used for Smart Disclosure.

First, governments collect information on services of high interest to consumers, and are increasingly releasing this kind of data to the public. In the United States, for example, the Department of Health and Human Services collects and releases online data on health insurance options, while the Department of Education helps consumers understand the true cost (after financial aid) of different colleges. In these cases, government agencies themselves provide online tools that consumers can use directly. In other cases, such as information on some financial products and services, government data is used by third-party providers who create online "choice engines" that serve as tools for consumer decision-making.

Second, state, local, or national governments hold information on consumers themselves that can be useful to them. In the U.S., the Blue Button program was launched to help veterans easily access their own medical records. In another project, called Green Button, the federal government encouraged electric utilities to give consumers data about their power usage to help them use electricity more efficiently. The UK government has led a similar "MiData" initiative with energy companies and major retailers there. In these cases, data held by a government or company is released back to individuals in secure ways that ensure it will not be seen by the general public.

An increased focus on developing behavioral insights within government—to the end of identifying other opportunities for individuals to leverage their data—can help further guide the strategic disclosure of information to citizens.

1.1.7.2. Visualization

Data is increasingly seen as the raw material for creating value and insights across sectors. Of course, making that raw material accessible is the first step in the process of converting it into value, but it is becoming consistently more evident that, as long as the majority of the public does not boast sophisticated data analysis skills, finding ways to make data accessible—in an objective manner—for a larger segment of the public is an essential next step. Visualizations are one method of engaging the less data-savvy public with the raw information provided by open data portals and other sources. Making data more understandable for more people not only better serves the transparency function of open data, it also can yield more value creation by allowing a wider variety of people to monitor and analyze public information. New York University's Aaron Schumacher notes that visualizing information takes the guess work out of communicating, because "It's not just a concept of why [a project] would be good; it's an image of what it looks like for a user." Open Data Tools provides links to a number of examples of illustrative, comprehensible visual interpretations of raw data that only a limited portion of the population could engage with and understand on its own terms.

GET INSPIRED

OPEN DATA FOUNDATION'S CKAN	SOCRATA	SMART DISCLOSURE	VISUALIZATIONS
Moving beyond a piecemeal system for open data portals and releases can lead to improved interoperability and further lower the barrier to engagement for developers and less tech-savvy citizens alike.	Standards and interoperability can extend beyond data itself to applications and analysis resources—like mapping programs—to improve user experience and mitigate the intimidating nature of data analysis for less tech-savvy citizens.	Transparency does not always have to be an On/Off switch. While privacy and security concerns can be valid for certain datasets, those concerns should not act as an excuse for abandoning openness. Strategic, targeted disclosure can help citizens gain the value of open data without over-sharing sensitive information.	Visual representations of raw data can provide value on their own terms and also bring more people into the conversation about public data. Visualized data can allow more citizens to engage with public information, rather than forcing the non-tech-savvy to wait for developers to create value and/or insights and pass those along to the general public.

Key Take-aways

Opening data is considered an essential step in improving the transparency of government and creating new value for citizens, but developing uniform standards and improving interoperability can help to amplify the positive effects of released data. Similarly, the targeted release of valuable, but sensitive data and the creation of comprehensible visual representations of public data can help more people—of all levels of technological ability—unlock more value from public data.

GOVLAB RESEARCH

1.2. ENGAGING CITIZENS TO PROVIDE MEANINGFUL INPUT AND EXPERTISE INTO POLICY DECISIONS

Across the globe, public and private organizations are learning that citizens, when engaged, can provide meaningful input to inform decisions and shape policy. While wider citizen consultation can provide government with a greater understanding of the priorities and opinions of untapped expertise and the citizens who are likely to be most affected by policy decisions, interviews with BC officials pointed to the challenge of developing meaningful consultation processes, rather than simple, traditional public relations exercises or narrow information gathering efforts. As RPI's Jim Hendler notes:

> *"Right now government sees [citizen engagement] as, 'Aren't we being nice in our paternalistic way to give things away and get these tweets back?' We want to say, 'How do we turn that into an effective conversation between the government and the people mediated by the technology?'"*

Moreover, Brad Burnham argues that one of the greatest challenges for citizen consultation is creating engagement opportunities that are not "dumbed down," but still "manage to organize the questions in a way that [are] accessible to a larger audience."

BC has developed a growing portfolio of citizen engagement initiatives through GovTogetherBC, (including, for instance, Skills for BC, and the BC Education Plan). In the below we compare these initiatives with what other countries have done.

Current experimentation worldwide has also generated a variety of inspirational examples, such as Australia's 2020 Summit, a 2008 initiative where 1000 Australians were invited to come to Parliament House in Canberra to discuss the long-term agenda for the nation and the United States Environmental Protection Agency's open nomination process for its Board of Scientific Counselors.

RELEVANCE FOR BC

British Columbia's notable utilization of citizen consultation in its Skills for BC and BC Education Plan initiatives demonstrate a strong effort to leverage citizen input in policy development. The centralized citizen consultation opportunity hub GovTogetherBC compares favorably with not only similar provincial and departmental efforts, but also even national consultation hubs. Potential next steps for GovTogetherBC include increasing on-site citizen communication and community-building opportunities and lowering technological barriers to participation. More broadly, BC's citizen engagement efforts should work toward building relationship networks with constituents, both offline and online, particularly through more closely monitoring, responding to and categorizing citizen comments and feedback. The creation of "feedback loops" can help drive participation by demonstrating that government is acting on citizen input.

1.2.1 BRITISH COLUMBIA – GOVTOGETHERBC - GOV.BC.CA/GOVTOGETHERBC

Summary

GovTogetherBC provides citizens with a central location to find government consultation and community volunteering opportunities and get directly involved. Beyond simplicity and ease of use, the site promotes greater government transparency by publishing the full results of completed public consultation projects.

About

GovTogetherBC is a central engagement and volunteerism portal for British Columbians. It provides information, including links for getting involved, on over 80 government consultation and dialogue projects. There are currently 7 active opportunities on the site, with 75 entries on past projects and full results for 43 of those completed consultations. The site also includes 36 opportunities for citizens to help build their communities.

Objectives

GovTogetherBC was created "to let you know what's being talked about in the province and plug you into ways you can get involved. Whether the government is consulting citizens about taxes, employment standards or healthcare; our job is to make sure that you're connected."

Background

Premier Christy Clark launched GovTogetherBC at the Premier›s Awards on June 11, 2012. The site was in some ways part of the second step in the province's wider open government efforts, with its launch arriving 11 months after the redesign of the central B.C. homepage and launch of DataBC and Open Information.

Functionality

The Consultations and Dialogues section of the site allows citizens to filter their browsing or search to include all citizen engagement projects, those that are active, those that are closed and closed projects that include published results. A sidebar also lets citizens browse opportunities by how they are tagged in four different categories: What We've Learned,[16] Opportunities by Location,[17] Opportunities by Category[18] and Type of Opportunity.[19] The site also places opportunities on a Google Map, allowing users to browse by location. Citizens can further narrow results by filtering their map search by project category.

In the Build Your Community Section, the 36 opportunities[20] can be filtered according to their six color-coded categories.[21] Since the section is an aggregation of opportunities across the British Columbian government, each entry is hyperlinked to the relevant governmental website with more information on how to get involved.

A Subscribe tab allows citizens to filter content by topic and region and receive automatic updates by email, or subscribe to RSS, including a full site feed and individual feeds separated by Type of Opportunity (i.e., Online, In-Person, etc.) or Category (i.e., Government, Families & Residents, etc.)

GovTogetherBC's front page includes a "Listen In…" section providing links to different blog posts from across the province's online presence.

The site features numerous links to project Twitter feeds and contact opportunities. An instructive YouTube video also shows citizens how to make the most of the resources provided on the site.

Distinguishing Characteristics

A central site offering citizens information on all available public consultation projects and volunteer opportunities is unique, both at the provincial and national level.

Challenges

Since consultation opportunities link to off-site information and sign-up pages on agency or department websites, there is little standardization of available projects. Moreover, since the site acts as an aggregated list, rather than a platform for consultation, there is little opportunity for citizen collaboration or community building.

Current Impact

Due to the site's newness, discerning its direct impact on British Columbia is difficult. It is, however, already acting as an inspiration for other provinces and nations, as its centralized listing of consultation and volunteer opportunities is unique.

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16   *Another way to filter out all projects without published results.*

17   *Province-wide, Mainland/Southwest, Northeast, Thompson/Okanagan, Nechako, Kootenay, North Coast, Vancouver Island, Cariboo*

18   *Environment, Families & Residents, Government, Health & Safety, Business & Investing, Education & Training, Immigration & Tourism*

19   *Online, Email, Mail, In-Person*

20   *Apply to Serve on a Board, Apply to Serve on a Property Assessment Review Panel, Become a Foster Parent, Become a Search & Rescue Volunteer, Become a Sports Coach, Become an Ecological Reserve Warden, Build a Neighbourhood Learning Centre, Become a Volunteer Park Host, Century Farm Award, Child Care Excellence Awards, Crime Prevention Award, Develop a Community Crime Prevention Action Plan, Excellence in Water Stewardship Award, Fight Invasive Plant Species, Good Samaritan Award, Guide Someone Through Trades Programs and Resources, Help Bring Restorative Justice Through Community Accountability Programs, Help Prevent Forest Fires, Help the Non-Profit Sector by Volunteering with the Government Non Profit Initiative, Help Your Community Become Age-Friendly, Improve BC's Air Quality, Join Team Power Smart, Learn to Recognize the Trees of B.C., LiveSmart BC Climate Action Projects, Make Your Community Bear Smart, Mentor a Youth, Most Small Business Friendly Community Award, Order of British Columbia, Prepare for an Emergency, Provincial Nesika Award, Queens Counsel, Representative for Child and Youth Award of Excellence, Sponsor or Hire an Apprentice, Support BC Parks, Support Rural Community Economic Development and Vital Link Award*

21   *Community Development, Environment, Mentor, Recognition/Awards, Safety, Volunteer.*

GOVLAB RESEARCH

1.2.2. BRITISH COLUMBIA - SKILLS FOR BC / IDEAS 2 ACTIONS – BC JOBS PLAN
BCJOBSPLAN.CA/IDEAS-TO-ACTIONS/

Summary

To help generate new ideas for building a skilled workforce in British Columbia, Premier Christy Clark held a seven-week online consultation period to obtain ideas from the public.

About

The #Skills4BC public consultation occurred over a seven-week period, in which each week's discussion revolved around a different question.[22] The Ideas2Action website now lists citizen ideas and government actions in topics like: Increase Trades Awareness, Improve Apprenticeship System, Increase Numbers in Trades, Worker Support, Coordination and Liquefied Natural Gas (LNG).

Objectives

As part of a larger effort to engage the public in the crafting of the BC Jobs Plan, Skills for BC's aim was to engage the public on the development of British Columbia economic development plan, since it "is everyone's plan and there is an opportunity to collaborate to build the future of our province together."

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22   Week 1 – How can British Columbia's young people build a successful trades or technical career and be first in line for BC jobs? Week 2 – What can we, as parents and schools, do to change people's notions of trades and technical careers? Week 3 – What advice would you give on exploring alternatives to traditional routes to a trades career? Week 4 – How can BC communities and businesses get ready to seize the opportunities coming with liquefied natural gas (LNG)? Week 5 – How can employers deal with the upcoming skills shortage?

Background

The Skills for BC consultation was held from November to December 2012 and led by Premier Christy Clark. Citizen input was then reviewed and acted upon by the BC Jobs Plan Team, relevant government officials and partners like the Industry Training Authority.

Functionality

The Skills for BC consultation used an online discussion forum to solicit input from the public in a seven-week period, a new question was posted every week and open for two weeks. The discussion forum allowed users to comment on other's input and vote for or against a given entry, resulting in each piece of citizen input displaying a positive or negative number representing the community's opinion.

Now that the consultation has ended, summaries for each week's discussion remain available on the site. Citizens can still vote for or against an entry, but new submissions are closed. The Ideas2Action site includes information on the original consultation, as well as a list of highlighted ideas and government responses. Ideas and Actions are separated by topic and by subtopic, though there is no search or filtering functionality. When users place their cursor over a thumbnail of a person's head with a series of gears in place of a brain under the Ideas heading, short descriptions of user-generated ideas appear. Similarly, under the Actions heading, short descriptions of government responses appear when placing the cursor over an image of a single gear—a visually interesting but less than user-friendly interface.

Distinguishing Characteristics

During the consultation, the use of a comment and voting system helped ensure that those reviewing citizen input could clearly ascertain which ideas best reflected the opinion of the community.

Following the consultation, by presenting the ideas generated by the public and the resulting government actions together on the same central site, Skills for BC makes it evident that the consultation period was undertaken to produce meaningful results, not to simply appease the public.

By keeping the discussion forums available for review after the end of the project and including the names of the people whose ideas were acted upon, the initiative further highlights the importance of individual participation and input.

Challenges

Using the title Skills for BC for the discussion portion of the project and Ideas2Action for post-consultation government response, all under the wider umbrella of the BC Jobs Plan, could create confusion. Using the same title for each stage of the initiative would make it easier for citizens to understand the nature of the consultation and to continue their interest and involvement as government continues to act on public suggestions.

While the consultation period is over, and contact information is available on the site, the continued presence of an ideas-based discussion forum could be valuable, even if relevant government agencies are unable to review or act on any new suggestions for the foreseeable future. Providing an outlet for citizen discussion in this area could prove worthwhile on its own terms.

Current Impact

The consultation generated 500 contributions, just over 400 comments in the official discussion forum and approximately 100 ideas sent via private email, Twitter and Facebook. The Ideas2Action website provides information on the "125 actions and counting" that were inspired by the citizen consultation period. Some actions include, the creation of a Job Trend Tracker for exploring statistics on more than 500 careers, increased outreach to schools and counselors regarding BC Job Fairs and the development of a Cost of Living Calculator for many BC towns.

GOVLAB RESEARCH

1.2.3. CANADA

A number of Canadian provinces and agencies have developed citizen engagement and consultation projects, including, for example, Alberta's Social Policy Framework, Ottawa's "Have a Say" initiative, Québec's public consultation portal and the Environmental Registry's public notice and comment system. Notably, Canada is one of the only countries with a centralized federal consultation aggregation website.

1.2.3.1. Consulting with Canadians - consultingcanadians.gc.ca

Summary

Consulting with Canadians aggregates consultation opportunities from across Canada in a single centralized location. Citizens can easily find consultation initiatives based on date, department or agency, subject or project title.

About

Consulting with Canadians is an aggregation of current and past citizen consultation opportunities. The site features over 70 current opportunities—with projects ranging from Action Plan to Improve Northern Regulatory Regimes to Draft Guidance on GMP and APIs Guidelines—and nearly 400 past consultations.

Objectives

According to its "About" page, Consulting with Canadians is meant to provide citizens with "a structured, single-point of access to on- and off-line consultations." The Frequently Asked Questions section provides a more detailed three-prong objective for the project:

▸ To enhance public awareness of government consultation activities;

▸ To provide opportunities for Canadians to participate in government consultations, both online and offline;

▸ To develop the government's capacity for engaging Canadians online and improve management of government consultations across departments.

Background

Consulting with Canadians is a federal program that is not the sole responsibility of any Canadian agency. Its most recent iteration was deployed on October 12, 2011. An April 2012 Canadian commitment to the Open Government Partnership regarding the development of a Web 2.0 citizen engagement platform may result in an eventual site overhaul or abandonment.

Functionality

Visitors can browse both active and past public consultation opportunities by calendar, department or agency,[23] subject[24] and title. The search functionality, however, only allows citizens to filter their queries by current or past consultations.

Consultation opportunities on the site contain basic information, like the dates available, but to learn more information, including how to get involved, citizens are taken off the Consulting with Canadians site and redirected to the projects' originating department or agency website.

A frequently asked questions section provides guidance on the use of the Consulting with Canadians site, as well as general information on government consultation projects. A Contact Us page also provides physical and electronic mailing addresses and a questions and feedback form.

Distinguishing Characteristics

While Consulting with Canadians offers neither the same level of granularity in its consultation listings as GovTogetherBC, nor a separate section on volunteering opportunities, the availability of a centralized national consultation calendar, regardless of its sophistication, places Canada at the fore of online citizen consultation.

Challenges

Consulting with Canadians not only provides neither location-based browsing and search filters nor a map of available consultation opportunities, it does not provide any information on the location of different projects. While many projects likely call for online submissions, perhaps minimizing the importance of location, listings also do not provide information about whether engagement is meant to be online or in-person.

Current Impact

Consulting with Canadians is a relatively unique federal initiative to consolidate consultation listings. Due to the growing prevalence of public consultation opportunities, many are calling for the Consulting with Canadians model to be adopted elsewhere.

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23   *Aboriginal Affairs and Northern Development Canada, Agriculture and Agri-Food Canada, Canadian Environmental Assessment Agency, Canadian Food Inspection Agency, Canadian Nuclear Safety Commission, Canadian Transportation Agency, Environment Canada, Health, Canada, Human Resources and Skills Development Canada, Natural Resources Canada, Parks Canada Agency, Public Health Agency of Canada, Transport Canada and Veterans Affairs Canada.*

24   *Aboriginal Peoples, Agriculture, Amendments, Children, Communication, Economic development, Economy, Employment, Environment, Exporting/Importing, Finance, Financial Assistance and Entitlements, Food and Drug, Health, Heritage, Industry, Natural Resources, Persons with Disabilities, Policy, Private Sector, Public Safety, Regulations, Science and Technology, Seniors, Service, Transportation and Youth.*

1.2.4. UNITED STATES - REGULATIONS.GOV

Summary

Regulations.gov is a U.S. Federal Government website that provides information on the development of federal regulations and other related documents issued by the U.S. government while inviting citizen participation in the process. Citizens can find, read, and comment on regulatory issues, and make public comments in response to notices of proposed rulemaking, which become part of the public record.

About

The eRulemaking Program Management Office, with the assistance of partner Federal agencies, manages Regulations.gov. The eRulemaking Program was created in 2002 as an E-Government project and is managed by the U.S. Environmental Protection Agency.

In 2003, the eRulemaking program launched the Regulations.gov Web site to enable citizens to search, view and comment on regulations issued by the U.S. government.

Objectives

The primary objectives of Regulations.gov are to increase access and citizen participation in developing regulations and other related documents that can impact the public; and to promote more efficient and effective rulemaking through public involvement.

Background

Rulemaking is the policy-making process for Executive and Independent agencies of the Federal Government. Agencies use this process to develop and issue Rules, also known as "regulations." By law, federal agencies must consult the public in rulemaking. Based in section 553 of the Administrative Procedure Act.

Regulations.gov was launched according to the basic principles of democracy, in that by improving public access to Rules, the government increases citizen participation, Rule legitimacy, public interest, public acceptance, agency learning and reduces cost.

Functionality

Regulations.gov allows users to search for a regulation such as a proposed rule, final rule or Federal Register (FR) notice; submit a comment on a regulation or on another comment; submit an application, petition or adjudication document; sign up for e-mail alerts about a specific regulation; quickly access regulations that are popular, newly posted or closing soon-directly from the home page; and subscribe to RSS feeds by agency of newly posted FR notices.

Distinguishing Characteristics

Comments submitted on Regulations.gov are automatically sent to the appropriate agency, increasing efficiency and enhancing user-experience. Specifically, after a user submits a comment, a Comment Tracking Number is displayed. This number can be used to quickly search for and locate the comment once it has been posted to Regulations.gov.

Challenges

While Regulations.gov provides citizens with a voice, without more official feedback from the government, citizens may doubt how much of an effect their input actually has.

Current Impact

On average, Federal agencies and departments issue nearly 8,000 regulations per year. In the past, if members of the public were interested in commenting on a regulation, they would have to know the sponsoring agency, when it would be published, review it in a reading room, then struggle through a comment process specific to each agency. Today using Regulations.gov, the public can shape rules and regulations that impact their lives conveniently, from anywhere.

The following are the top five actions based on comments posted to Regulations.gov:

▶ Coverage of Certain Preventive Services under Affordable Care Act (408,854 comments)

▶ Endangered and Threatened Wildlife and Plants: Threatened Status for the Distinct Population Segment of the North American Wolverine, etc. (118,116 comments)

▶ Request for Information Regarding an Initiative to Promote Student Loan Affordability (8,492 comments)

▶ National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of 2010 (247,802 comments)

▶ Meetings: National Organic Standards Board (3,014 comments)

1.2.5. UNITED KINGDOM – FOIA ONLINE

Summary

The UK Government launched an extensive open consultation (allowing line-by-line annotations) on the guidance that public authorities will use to enhance the right to data in the Freedom of Information (FOI) Act. These provisions, covering the re-use of data and the form in which it is made available, are key drivers of the transparency agenda. Using public crowd-sourcing to amend these provisions increases public participation further.

About

Hosted on data.gov.uk, and managed by the Cabinet Office in coordination with the Ministry of Justice, the National Archives and the Information Commissioner's Office, the open consultation lasted from November 2012 through January 2013.

Objectives

The code and consultation sought to make public authorities aware of their new responsibilities under the new FOIA 'datasets' sections. The datasets sections require all public authorities to make their datasets available to applicants in an electronic form that is capable of re-use. The consultation provided the opportunity for people affected by the new sections to let us know whether the draft code provided the right level of guidance and make recommendations to ensure the code is comprehensive and useful as possible.

Background

In May 2010, the UK Government set to formally establish an enhanced right to data. By amending the Freedom of Information Act by means of section 102 in the Protection of Freedoms Act 2012, a new statutory duty was set out which means that public authorities must publish datasets for re-use and where reasonably practicable, do so in a re-usable format.

Functionality

For the online FOI consultation, Data.gov.uk provided a tool that allowed citizens to read and comment upon the proposed FOI provisions. Citizens could also engage with each other about the provisions, and view other users' comments in real-time.

Distinguishing Characteristics

The use of real-time crowdsourcing and community-building around an evolving piece of legislation not only resulted in improved transparency and access as a result of the new policy being adopted, it demonstrated the value of citizen engagement during the legislative process.

Challenges

The FOI consultation should be used as a model for the creation of a broader platform for the government to consult the public and crowdsource more provisions, with improved feedback loops to citizens. This future platform should also incorporate better design and user-experience elements.

Current Impact

By adopting this open, real-time crowdsourcing, the case for any changes to provisions could evolve through dialogue, rather than views being submitted in isolation to an email address, and people having no knowledge of other responses until a summary is published after the consultation.

A white paper discussing the crowdsourcing process and the results was published in April 2013. The white paper presented clear actions to strengthen people's access to data, improve its usability and ensure that its full potential for economic and social growth is unleashed.

1.2.6. WORLD BANK MOBILE FACILITATION OF PARTICIPATORY BUDGETING IN THE DEMOCRATIC REPUBLIC OF CONGO
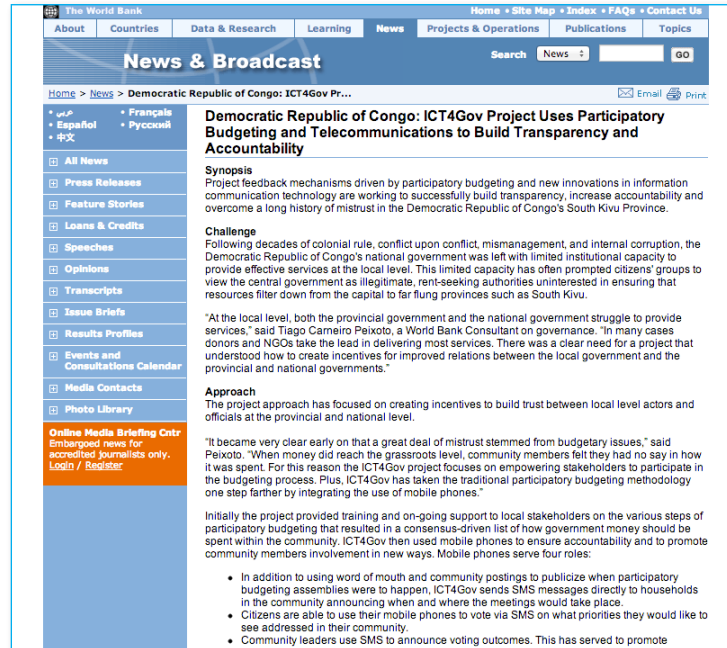
Summary

The World Bank's ICT4Gov initiative launched a participatory budgeting project in the Democratic Republic of Congo, allowing citizens to vote on local government budgetary spending through simple SMS technology. Beyond creating a more inclusive environment, citizen participation translates into demonstrated and measurable results on mobilizing more public funds for services for the poor. This makes a strong case for the return of investment of open government approaches.

About

The project was developed and led by the World Bank's ICT4Gov initiative, which partnered with the Democratic Republic of Congo. In 2011, the DRC Ministry of the Budget began the process of institutionalization of Participatory Budgeting in the South Kivu Province, with the goal to expand to more provinces over time.

Objectives

The goal of the project is to empower citizens to demand and work towards improved governance.

Background

Mobile technology has an estimated 47% penetration in a country that has long dealt with conflict and still struggles to provide basic public services to citizens. By leveraging simple SMS systems, citizens can now express and vote on the priorities that are most pressing for their communities.

Functionality

To enhance these efforts, ICT4Gov is using mobile phones for four purposes. The first is to invite citizens to the participatory budgeting assemblies through geo-targeted SMS messages. These messages, reaching all the phones receiving signal from a particular tower, announce the date, time and location of the assemblies.

Mobile phones are also being used for voting, allowing citizens to text a number associates with a particular project to identify which of the priorities they would like to see addressed in their community. When they have reached an agreement the local government devotes a percentage of the local investment budget to the project selected by the citizens.

Additionally, mobile phones are being used to announce the voted decision, making the process more transparent and inclusive than ever before. Finally, mobile phones are being used to ask citizens about the projects that had been chosen. Through text messages, citizens are able to offer feedback and monitor the projects.

Distinguishing Characteristics

By instituting a participatory budgeting initiative that uses simple SMS, rather than more advanced computing technologies, the World Bank and the Republic of Congo have been able to engage a larger portion of the population—women in particular.

Challenges

Increasing mobile technology penetration in developing countries remains the greatest challenge to increasing participation levels, particularly regarding scalability to other countries. The program should also strive to open more data and publish more budgetary information on a regular basis, and to expand citizen feedback opportunities to more steps in the budgetary process and to more government processes/policy areas.

Current Impact

As of 2012, over 250,000 text messages have been sent throughout the different stages of this project.

Since the beginning of the program, the provincial Kivu government reports an increasing capacity of the local government to better allocate resources, and communities involved have already seen an increase in the transfer of funds from the provincial to the local level.

The preliminary results of an external evaluation suggest a reduction of tax evasion at the local level, with citizens more willing to pay taxes as they link government spending to improvement in the delivery of services. For the first time, communities such as Ibanda have gone from not having any investment budget to having 40% of their budget devoted to investments.

The increase in the transfer of funds from the provincial to the local level has benefited communities, which now have more resources to deliver public services to the poor. For instance, the process has enabled the repair of 54 classrooms and a bridge in Luhindja, the founding of a health center and repair of a sewage system in Bagira, and the construction of a water fountain, as well as toilets in the local markets of Ibanda.

	British Columbia GovTogetherBC	Canada Consulting with Canadians	United States Recovery.gov	United Kingdom FOIA Online	World Bank Congo Participatory Budgeting
Functionality	Granular browsing and search capabilities for aggregated list of provincial public consultation and volunteer opportunities	Granular browsing and search capabilities for aggregated list of public consultation opportunities across Canada	Granular search for regulations; Commenting on regulations and other citizen comments; Application, petition and adjudication document submission	Commenting system allowed citizens to provide feedback and engage with other citizens in real-time	Citizens can use mobile SMS technology to receive consultation opportunity alerts, vote on budget priorities and learn about voting outcomes
Distinguishing Characteristics	Filtering by location and mapping of consultation opportunities; Volunteer listings on same platform as consultation	Aggregated consultation opportunities across entire nation	Providing a means for citizens to not only provide input on policy regulations, but also to communicate and collaborate with each other	Open, collaborative and participatory technology used to develop government transparency policy	The use of relatively simple and prevalent SMS technology lowers barrier to engagement
Challenges	Little standardization since project information and sign-up exist off-site; Lack of on-site tools for collaboration and community-building	Lack of location-based filtering and project mapping	Improved feedback mechanism regarding citizen submissions	Expanding single initiative into a broader consulting platform; Improved feedback; Improved user-interface	More data released in timely manner; Increased mobile penetration; Expansion to other provinces and other steps in budgetary process
Current Impact	Uniqueness of centralized listing of all consultation and volunteer opportunities has potential to inspire more such initiatives elsewhere	Commitment to develop a Web 2.0 consultation platform; Potentially driving adoption of consultation calendars in other nations	Providing feedback on the nearly 8,000 regulations issued per year simple; Shaped coverage of certain preventive services under Affordable Care Act	Demonstrated value of real-time policy crowdsourcing; Improved access to information and data for UK citizens	Over 250,000 messages sent during the project; Improved allocation of funds; Reduction in tax evasion

Assessment:
GovTogetherBC is not only uniquely successful at the provincial level, but also compared to other initiatives at the national level. Expanding on-site community and lowering technological barriers to entry could be valuable next steps toward broadening participation. More broadly, BC should work toward building relationship networks with constituents, both offline and online, particularly through more closely monitoring, responding to and categorizing citizen comments and feedback. The creation of "feedback loops" can help drive participation by demonstrating that government is acting on citizen input.

GOVLAB RESEARCH

1.2.7. GET INSPIRED

For the most part, there is little uniformity across nations and provinces in the effort to better consult the public on policy initiatives. In fact, public consultation initiatives not only vary widely depending on sovereign borders, they often vary widely depending on the individual initiative or government agency seeking to solicit public input. The following platforms provide greater consistency across different consultation projects, while still allowing for a considerable amount of customization based on the intricacies of a given issue.

1.2.7.1. YouGov - today.yougov.com

Summary

YouGov is a research and consulting organization that uses opt-in surveys to provide companies, governments and institutions with insights into the opinions of the public on given issues. The site uses a system of points that can be redeemed for real-life rewards to incentivize participation.

About

YouGov offers public engagement surveys and results in four subject areas: Life, Consumer, Politics and "Have Your Say," which is "about unlocking the 'wisdom of crowds' and finding out exactly how you feel about the hot topics of the day."

Objectives

YouGov's objective is "to collect higher quality, in-depth data for companies, governments, and institutions so that they can better serve the people that sustain them."

Background

YouGov was originally founded in the United Kingdom in May 2000 by Stephan Shakespeare and Nadhim Zawahi. It remains headquartered in the UK, but now has offices in North America, Germany, Central and Eastern Europe, Scandinavia and Northern Europe and the Middle East and North Africa

Functionality

YouGov requires the creation of a free membership profile including demographic information and optional personal interest information. After the creation of a profile, users are notified of available surveys directed at their demographic as they become available. Users can also provide unsolicited opinions on a wide variety of topics and individuals by using the "Add an Opinion" search functionality, which leads to individual profile pages that allow for user submissions. The public figure ratings page presents users with different the names and pictures of politicians and other public figures and prompts them to drag individuals into one of five boxes: Really like, Like, OK, Don't like and Really don't like. The home page also includes a collection of recent news items with links for users to provide their opinions.

Participation with the YouGov platform is incentivized by a points system. When users complete surveys, they are awarded points that can be redeemed for prizes like Amazon gift cards, tote bags and cash.

Survey results are presented on the site's main page, as well as the Latest Findings section, which features not only statistical representations of the results, but further analysis and context in the form of blog posts.

Distinguishing Characteristics

YouGov's use of personal profiles and points-based incentives can help keep its user base engaged, not only out of a desire to earn cash and prizes through a somewhat gamified system, but also because actions taken on the site are quantified and saved, resulting in a users developing a deep, evolving on-site identity.

Challenges

Because of its opt-in nature, it is questionable how representative the results of YouGov surveys really are, particularly in a public policy context. A survey on gun control, for example, found less than 50% of respondents agreed with President Obama's attempts to widen background checks, a significantly smaller percentage than popularly referenced polling numbers.

Current Impact

While it is questionable to what extent YouGov survey results are examined in a public policy context, with the company's continued expansion, it would appear that the platform is successful in its consumer research function. Whether or not user submissions are helping to shape policy, the site gives citizens an opportunity to have their voices heard in a more meaningful, quantified way than, for example, simply commenting on news articles. A recent partnership with the Huffington Post is likely to further increase its visibility and member base.

1.2.7.2. PlaceSpeak - placespeak.com
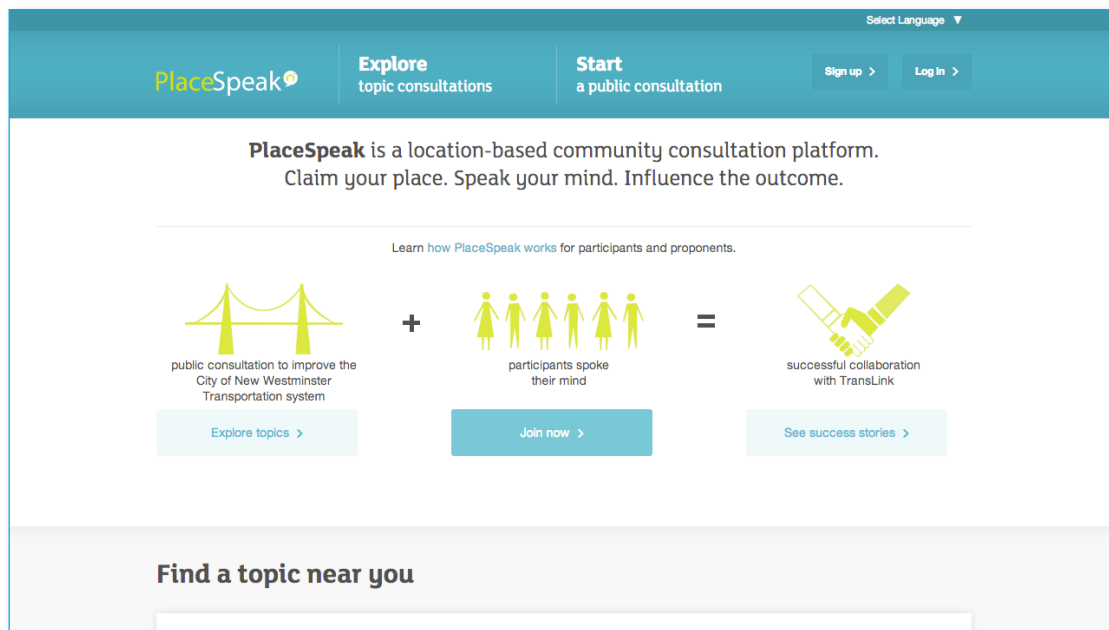
Summary

PlaceSpeak is a public consultation platform, mainly for city governments, that features a user verification system that ensures everyone taking part in a consultation project has a connection with the relevant geographic area.

About

PlaceSpeak features consultation opportunities split into four central topic categories: government, private sector, community and agency. So while the platform is likely best known for its use by city governments, any member can create a public consultation entry for their organization.

Objectives

PlaceSpeak "advances public consultation to a whole new level by enabling evidence-based decision-making by allowing citizens to influence the process in an open, safe, secure and transparent manner."

Background

Founder and CEO Colleen Nystedt developed PlaceSpeak in 2010. The platform was the first location-based community consultation platform in existence.

Functionality

PlaceSpeak requires users to create profiles with verified geographic information to ensure that they only partake in consultation opportunities relevant to them. When signing up, users have the option to receive a notification every time a new opportunity is created in their area.

On the Explore Topics tab, a Google Map shows currently available consultation projects, which can be filtered by their color-coded by their topic area. The page also has featured topics, popular topics near the users location, recently added topics and a sidebar allowing users to browse by suggested topics, categories, organizations and popular tags.

GOVLAB RESEARCH

Topic pages feature customizable tabs, which can include an overview; a discussion board; resources, like instructive PDFs or links; notification board; and upcoming events. A "Connect with this topic" button appears at the top of each page. A sidebar shows the number of times the topic profile has been viewed, the number of connected participants and the organization's contact information. Since PlaceSpeak is a customizable platform, topic overviews are not uniform. Some options include links to off-site surveys or sign-up forms, media coverage of the topic or on-site polls. Each page, however, features a module at the top with a Google Map showing where the consultation is based and a bulleted list of "How you can help."

A "How it works" video and Contact Us page are there to support individuals in the use of the site.

Distinguishing Characteristics

As a customizable platform, PlaceSpeak can, in many ways, become whatever is needed for a particular consultation project. The geographic verification system ensures that people engaging with a consultation are in fact from the relevant area.

Challenges

As of May 2013, each of PlaceSpeak's limited consultation opportunities are based in Canada. While the site can be used for single initiatives, as a platform, a growing network of participating organizations and governments is likely necessary for the site to be valuable.

Current Impact

Lists of case studies and testimonials describe PlaceSpeak's successful implementation in projects like the development of the City of New Westminster's Transportation Plan, the City of Vancouver's Mayor's Housing Affordability Task Force and the District of Tofino's Tsunami Siren Test.

GET INSPIRED

YOUGOV	PLACESPEAK
Wide-ranging market and policy research platform provides a central location to share opinions on all manner of subjects. Evolving user profiles and a point-based reward system maintains user engagement and interest.	Public consultation platform serves to improve uniformity of offerings while maintaining customizability. User verification system ensures that those engaging with consultation projects are indeed affected by the given issue.

Key take-aways

Profile and reward systems can help to incentivize engagement, and elicit user input on a wider variety of topics. Verification systems can help ensure public input is, at minimum, geographically relevant.

1.3. CITIZEN-DRIVEN POLICY INNOVATION

To help solve really big problems, two ideas are increasingly considered by governments: prize-induced contests and grand challenges. As budgets tighten and information and communication technologies continue to advance, leveraging the public's expertise through contests and challenges is becoming more attractive to government agencies. Both contests and grand challenges offer many advantages for government—including paying only for results, establishing an ambitious goal without having to predict which team or approach is most likely to succeed, stimulating private sector investment that is much greater than the prize value—but U.S. Chief Technology Officer Todd Park and others believe that the greatest advantage comes from widening the pool of potential problem solvers beyond the "usual suspects." InnoCentive's Jon Frederickson agrees, arguing that to create a more innovative government, "You have to start with the premise that maybe the most highly educated and those who have the most experience, may not have the answer. But you've got to start thinking about where are the people in the margins who could look at something radically different, and be disruptive in terms of thinking."

To gain a greater understanding of prize-induced contests and grand challenges, it is important to recognize that, though they each shift the locus of innovation from inside a government agency to the public and channel motivations in untraditional ways, there are central differences between the two methods. Prize-induced contests, as the name suggests, are largely defined by the monetary incentive that drives the public's engagement with the contest. Grand challenges, on the other hand, rely on a less-concrete system of incentives, one based on different stakeholders working together to tackle the big, audacious public challenges of our time. However, in both cases, Frederickson notes that perhaps the greatest difficulty to government lies in properly framing the question:

> *"The framing of the question is everything. If you get the correct answer to the wrong question, instead of going forward, you are probably going sideways or backwards. That's really the fundamental asset that you have to create, is what's the question? What are the boundaries? What are the incentives or rewards?"*

RELEVANCE FOR BC

Contests and challenges can spur publicly beneficial innovation at lower cost than traditional research and development. Developing a central contest and challenge hub, rather than deploying individual projects, featuring opportunities of varied scope, financial backing and requisite skill could amplify impact and create clear incentives for engagement across the populace.

1.3.1. BRITISH COLUMBIA – BC IDEAS - CHANGEMAKERS.COM/BCIDEAS

Summary

BC Ideas is an innovation community and problem-solving marketplace that grew out of the prize-based contest Solutions for Strong Communities. The original contest accepted a wide range of submissions in a number of topic areas and provided a total of $270,000 in grants.

About

In addition to an active community problem-solving marketplace, BC Ideas sponsored a 2012 prize-based contest called Solutions for Strong Communities. The competition featured fifteen different contest areas,[25] with 12 different sponsors, and resulted in over $270,000 in funding for 33 winners. Like BC's Apps 4 Climate Change contest, Solutions for Strong Communities catalyzed innovation to the public's benefit at limited cost to the government.

Objectives

The BC Ideas Solutions for Stronger Communities competition sought "innovative solutions to health, social and environmental challenges facing BC communities today, and in the future." After the competition ended BC Ideas continued "as a hub for social innovators and enthusiasts to convene, collaborate, and access partnership and investment opportunities."

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25   *BCIdeas Early Entry Investments – two $500 prizes; BCIdeas Mini-Growth Investments – two $500 prizes; BCIdeas People's Choice Investments – three $15,000 prizes; Lift Philanthropy Partners Health and Productivity Investments – two $10,000 prizes; BC Sport Agency Sport and Technology Investment – two $7,500 prizes; Columbia Basin Trust Columbia Basin Investment – five $10,000 prizes; Urban Systems Aboriginal Communities Investment – one $10,000 prize; United Way Lower Mainland Preventing the Threat of Homelessness Investment – one $15,000 prize; The J.W. McConnell Family Foundation National Investment – one $15,000 prize; The Venture Inclusion Investment – one $15,000 prize; British Columbia Supporting People with Developmental Disabilities Investment – two $15,000 prizes; Vancouver Foundation Community Connections and Engagement Investment – one $5,000 prize; Vancity Community Impact Investment – three $5,000 prizes; Vancity University Solutions Investment – three $4,667 prizes; Decoda Literacy Investment – four $5,000 prizes.*

Background

The competition was launched on the Ashoka Changemakers platform on May 16, 2012 by a partnership including: ArtsBC, Ashoka Canada, Ashoka Changemakers, British Columbia Association of Aboriginal Friendship Centres, BC Social Innovation Council, BC Sport Agency, Capilano University, Columbia Basin Trust, Community Council, Community Living BC, Community Living Innovation Venture, Decoda Literacy Solutions, Enterprising Non-Profits, Federation of Community Social Services of BC, ISIS at the Sauder School of Business, The J.W. McConnell Foundation, LIFT Philanthropy Partners, Planned Lifetime Advocacy Network, Province of British Columbia, Selkirk College, The Land Conservancy of BC, United Way of the Lower Mainland, Urban Systems, Vancity and Vancouver Foundation.

The judges panel included: Andy Broderick, Vancity; Dan George, Four Directions Management Services Ltd.; Nicole Rycroft, Canopy; Stephen Huddart, J.W. McConnell Family Foundation and Yuri Fulmer, FDC Capital.

Functionality

Innovators used the BC Ideas community system to create a profile, with which they could simply click the "Enter an Idea" link on the Solutions for Strong Communities competition section. Entries could "be at any stage of development, from idea or concept, to proven programs." The only eligibility requirements were the inclusion of a mechanism for measuring a solutions social impact through both quantitative and qualitative data, and a demonstrable impact on BC.

Ideas were assessed using three central criteria:

▶ **Innovation**: "Innovation is the most important criterion – if the idea or work is not innovative, the judges will not give it high rankings. The entry must describe how it strengthens BC communities in new and different ways. The solution does not have to be entirely new; instead it can have new approaches or strategies within it. It needs to show that it is tackling an issue in a way that is different than other initiatives in the field. The best entries will also describe the potential for large-scale replication."

▶ **Social Impact**: "It is important that the idea or program results in measurable social impact in BC communities. Some entries will have proven success at a small level, while others may have engaged thousands of people in communities across the province. Some solutions will achieve their impact quickly, while some will slowly seed social change for the long term. For ideas that are entered, they must show how they intend to create and track social impact."

▶ **Sustainability**: "For an idea or program to be truly effective, it must have a plan to exist and grow well into the future, a plan to sustain itself. Innovations will be judged on their long-term vision for increasing impact and creating lasting change. Entries should describe how they are currently financing their work, and how they plan to finance their work in the future. The most successful entrants go beyond discussing whether or not they will charge for services and describe a business plan. They should also demonstrate that they have strong partnerships and support networks to address ongoing needs, and to aid in scalability and maintenance of a clear financial strategy."

Since BC Ideas is operated on the Ashoka Changemakers platform, competition participants received on-site input and questions regarding their entries from the BC Ideas community.

The competition's voting mechanism involved a panel of expert judges—whose information is included in a sidebar on all competition pages—selecting finalists, followed by a community vote by Changemakers users to determine the winners. The entire process, from launch to conclusion, occurred over the course of around six months. Winners were announced just three weeks after the deadline for submissions.

In addition to the continuing BC Ideas community, the Solutions for Stronger Communities site retains information on the contest mechanics, as well as information on nominees, official entries, finalists and winners.

GOVLAB RESEARCH

Distinguishing Characteristics

BC Ideas' strong community integration, both during and after the competition, serves to aid problem-solvers in finding both the funding and partners needed to address public problems, while also engaging a broader portion of the population than other competitions that require significant expertise for participation.

Transparency regarding every aspect of the competition, including information on all nominees and finalists, as well as the panel tasked with determining finalists for each award, not only helped ensure accountability, but also could help guide other problem-solvers hoping to build off a stalled contest entry.

Challenges

While the BC Ideas community continues to thrive—115 innovations are currently posted in the "Marketplace," seeking to gain collaborators and funding—the actual contests have concluded, and there is no mention of a second iteration being in the works.

By accepting submissions at every stage, including the idea stage, the Solutions for Stronger Communities competition lowered the barrier for engagement for those with potential solutions who lacked the capital or expertise to put their solutions into action. However, this low barrier to entry could also delay the impact of contest winners, since entries could take a significant amount of time and capital to operationalize.

Current Impact

In addition to launching the BC Ideas innovation community, the Solutions for Stronger Communities competition provided $270,000 in funding for a wide variety of initiatives, including: Local Peer-to-Peer Micro Lending, Keeping Vulnerable Families Together and New Page Mental Health Literacy.

1.3.2. CANADA – GRAND CHALLENGES CANADA - GRANDCHALLENGES.CA

Summary

Grand Challenges Canada is a publicly funded philanthropy that uses grand challenges to address global health problems. It is notable for its use of grand challenges for development, and the fact that its efforts benefit people in both Canada and low- and middle-income nations.

About

Grand Challenges Canada has six central programs: Stars in Global Health, Saving Lives at Birth, Saving Brains, Global Mental Health, Hypertension in Low- and Middle-Income Countries and Point-of-Care Diagnostics. At this time, the sixth round of Stars in Global Health, the most open, least structured challenge, is the only active program accepting submissions.

Objectives

The initiative's slogan—"Bold Ideas for Humanity"—succinctly describes the type of projects it funds to work toward its overall mission: "Saving and improving lives in low- and middle-income countries through integrated innovation."

Background

Grand Challenges Canada was launched on May 3, 2010 by Canadian Minister of Finance James Flaherty. The initiative was the result of the Canadian Development Innovation Fund in the 2008 budget. The initiative is hosted by the Sandra Rotman Centre and partners with Canada's International Development Research Centre and the Canadian Institutes of Health Research. So while Grand Challenges Canada is an independent organization, it remains funded by the Government of Canada and is the direct result of a national focus on driving innovation through the use of grand challenges.

Functionality

The site provides extended descriptions of each of its six grand challenges, including information on proposal deadlines for the different phases of the process. A Resources tab provides prospective applicants with guidance on proposal development, integrated innovation, grant management and budgeting, as well as ethics and access policies and a collection of relevant white papers.

Interested parties and prospective applicants can also search and browse past grantees, with the ability to filter by program, institution, institution country, implementation country and implementation region. The grantee information serves to improve the initiative's transparency while also providing guidance and relevant examples for those applying for funding.

Blog and News sections provide information on specific Canadian grand challenges, as well as open innovation and global health concerns more broadly.

Distinguishing Characteristics

Combining a wide topic area—improving global health—with targeted proposals can likely lead to more immediately actionable outcomes than other less-tractable grand challenge initiatives. The project's global scope is also notable, considering the fact that the Canadian government funds it, but positive outcomes are not exclusively felt in Canada.

Challenges

While topic areas are broad and project goals are large and audacious, as expected from grand challenge initiatives, the tight structure and schedule of Grand Challenges Canada's calls for proposals may constrain potential innovators. Similarly, while health and development are major public issues, the project's scope and impact could be extended by widening its purview and soliciting proposals on all types of public issues, particularly those that relate to civic life.

Current Impact

Grand Challenges Canada has already provided grants to 175 healthcare innovators from Canada and low- and middle-income countries. Also, a growing number of countries are following Canada's lead and using a grand challenges approach to foreign aid.

1.3.3. UNITED STATES

The U.S. government is using grand challenges and prize-induced contests to address a variety of problems across departments and agencies. Beyond the central contest portal, Challenge.gov, case study below, which features prize-induced projects from many agencies, including the Department of Health and Human Services' "Mobilizing Data for Pressure Ulcer Prevention Challenge," the Department of Veterans Affairs' "VA Medical Appointment Scheduling Contest," and the Department of Energy's "Apps for Energy" contest, the U.S. government has issued a request for information regarding grand challenges, and agencies like USAID and NASA have introduced their own grand challenges.

On a more local scale, New York City recently introduced the BigApps 3.0 challenge, which "offers $50,000 in cash and other prizes to software developers for the best new apps that utilize NYC Open Data to help city residents, visitors and businesses." Washington, D.C., meanwhile, launched "Apps for Democracy" in 2008, a contest that first seeks to engage the populace of DC to ask for their input into what they would like to see in a DC Community Platform, and then award citizen technologists who build the application.

1.3.3.1. Challenge.gov

Summary

Challenge.gov is an online challenge platform administered by the U.S. federal government, which enables the government to collaborate with citizens by posting specific challenges on the site, to which the public can post submissions to these challenges, with winning selections typically receiving a prize. It is one of the first challenge platforms launched and managed by a federal government.

Objectives

Challenge.gov aims to find innovative solutions to tackle some of the nation's most pressing challenges by engaging citizens through a challenge platform. Federal agencies can use challenges and prizes to find creative but cost–effective submissions or improvements to ideas, products and processes. Challenges and prizes can tap into innovations from unexpected people and places.

Background

In his September 2009 Strategy for American Innovation, President Obama called on agencies to increase their ability to promote innovation by using tools such as prizes and challenges to solve tough problems. On March 2010, the Office of Management and Budget (OMB) issued a memorandum on the use of challenges/contests and prizes to improve government and encourage innovation, including a promise to make a web-based platform for prizes and challenges within 120 days.

The OMB memo also promised that the administration would: "…make available a web-based platform for prizes and challenges within 120 days". OMB tasked General Services Administration with overseeing the launch and continued program.

Functionality

Once agencies have done the hard work of designing a prize competition or challenge, Challenge.gov makes it simple and free for the agency to post the rules and resources for the challenge, accept entries, and manage the selection process through judging or public voting through a "Challenge Wizard."

In many cases, agencies turn to different market solutions to meet their distinct needs, leverage existing niche communities in other innovation marketplaces, such as Ashoka Changemakers, TopCoder, or InnoCentive. Even in such cases, Challenge.gov showcases and drives participation, regardless of the technology platform on which they are administered.

Through this platform, the public will be able to find all challenges/contests taking place across the Federal government and participate in those challenges that are of interest to them by proposing solutions, showing support, and sharing with their friends. Users can search by date, topic, prize, and popularity.

Distinguishing Characteristics

The platform is cost-effective because the government solicits a multitude of ideas, but only pays for performance if a winning submission is submitted. Additionally, Challenge.gov is one of the first and only federally run challenge platforms and boasts easy navigation and a streamlined user-experience.

Challenges

In the broader field of crowdsourcing, questions remain as to whether prizes create incentive for individual effort rather than teamwork within or across institutions. Regarding Challenge.gov, it is also unclear how/if participants are vetted for qualifications and whether metrics exist as to whether different prize offerings are more effective than others.

Current Impact

As of 2013, the site has hosted challenges posted by 45 departments and agencies, and more than 16,000 citizen "solvers" have participated in these competitions directly on Challenge.gov, with additional entrants joining the competitions through other sources.

GOVLAB RESEARCH

1.3.4. AUSTRALIA – MASHUPAUSTRALIA

The Australian government has not launched a central government challenge hub. Instead, through advisement of its Government 2.0 Taskforce, it has held more limited challenges, most notably MashupAustralia.

Summary

The Australian Government 2.0 Taskforce created Mashup Australia to offer a practical demonstration of the benefits that open access to Australian public sector information (PSI) can provide. By working to establish this contest, the government also provided a practical demonstration of what open access is and does, while identifying some of the barriers that exist within government to a broader adoption of open access to PSI.

About

In 2009, from October – November, the Australian government released 59 government datasets from 23 local and national agencies for a "hackathon."

Objectives

The primary objective of MashupAustralia was to showcase how something as simple as, for example, the locations of government services or census data, can deliver benefits to the research, commercial and community sectors—and to citizens at large.

The government also hoped to address some of the challenges raised by open access to PSI, and awarded bonuses to entrants that sought to transform, enrich and enhance data sets into more useful and open formats in the process of building their entries.

Finally, the government also aimed to drive community engagement, an ongoing goal of the Government 2.0 Taskforce.

Background

The Government 2.0 Taskforce was established by the Australian Government in 2009 as a joint initiative between the Hon. Lindsay Tanner MP, Minister for Finance and Deregulation and Senator the Hon. Joe Ludwig, Cabinet Secretary and Special Minister of State.

The purpose of the Taskforce is to investigate how the Australian Government can increase the openness of government and encourage greater online engagement.

Functionality

Participants had from 10am October 7 to 4pm November 13 2009 to mashup government data and create a data platform, which was judged according to:

- Originality
- Consistency with contest purposes including social value
- Quality and design (including standards compliance)
- Usability (including documentation and ease of use)

Bonus prizes for the "Transformation Challenge" were awarded for entries that significantly enhanced and/or made datasets available for re-use programmatically.

Distinguishing Characteristics

An open innovation contest built around creating value from open government data serves to not only benefit the public good by leveraging the skills of citizens outside of government, it also demonstrates the potential value of opening more data.

Challenges

The greatest impediment to the program is that Australia lacks a central hub for all challenges, but instead has one-off sites and programs. This compounds other problems, most notably those regarding resource allocation; for example, individual agencies are not empowered to launch their own challenges, and most challenges tend to be short-lived.

Current Impact

Of the 82 mashups entered, two won the grand $10,000 prize:

Suburban Trends: "A mashup of different types of crime and census data that allows you to compare and contrast suburbs by a range of economic, education, safety and socio-economic indicators. The judges thought the ability to compare suburbs visually combined with the selective choice of statistics was excellent especially in a field dominated by many entries using similar datasets."

Know Where You Live: "This entry bills itself as a prototype of a mashup of a range of open access government data based on postcodes so that you can truly know where you live. The judges loved the very citizen-centric "common questions" user experience of this app and the groovy, and again, selective repackaging of what could otherwise be considered (we'll be honest here) slightly boring data."

1.3.5. UNESCO – EDUCATION FOR ALL CROWDSOURCING CHALLENGE
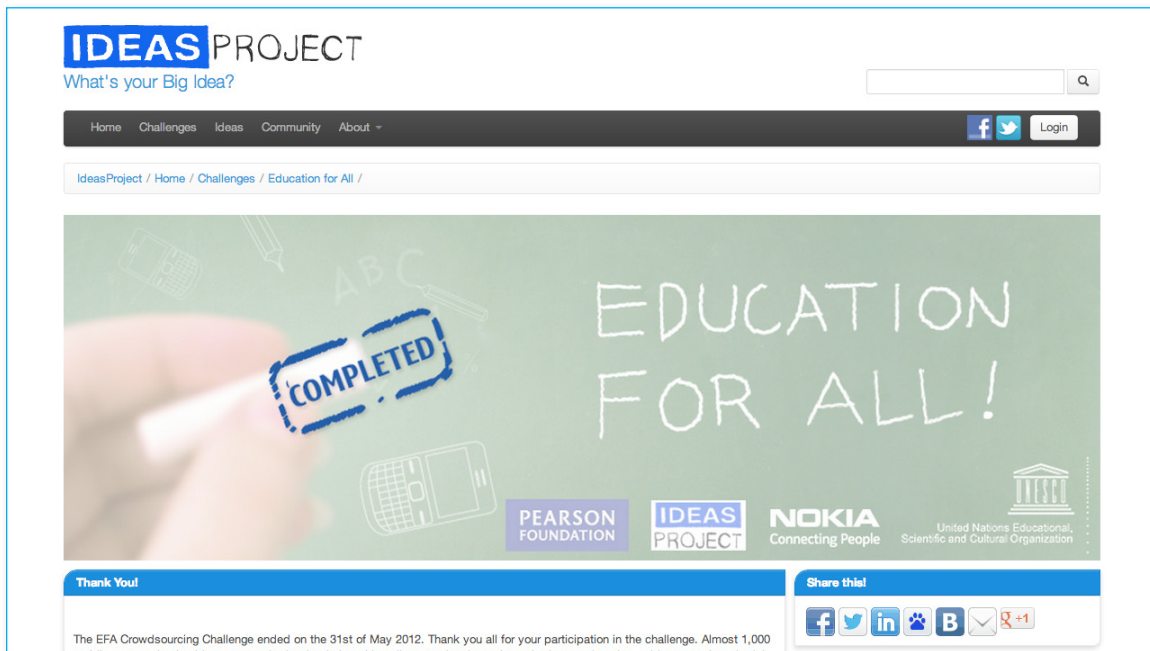
Summary

Nokia, UNESCO and the Pearson Foundation teamed up to enable people with similar interests to share ideas, connect and collaborate on ways to achieve Education for All (EFA). The EFA Crowdsourcing Challenge was an online initiative to develop various suggestions on how mobile communication can help achieve EFA goals.

About

Each month, from October 2011 to May 2012, education experts, teachers, parents, students, software developers and anyone else wanting to respond to the challenge posted ideas on the platform hosted by Nokia. Promising projects were then developed and implemented either by Nokia or by participants at the end of the Challenge. The winner was announced before 30th of every month starting from November 2011 and ending June 2012.

Objectives

The objective of the EFA Crowdsourcing Challenge is to develop various suggestions by a dynamic interaction between education experts, teachers, students and software developers on how mobile communication can help achieve EFA goals. These dynamic exchanges will lead to concrete projects that will then be developed and implemented either by Nokia or by participants in the challenge.

Background

The Education for All (EFA) movement is a global commitment to provide quality basic education for all children, youth and adults. At the World Education Forum (Dakar, 2000), 164 governments pledged to achieve EFA and identified six goals to be met by 2015. UNESCO is mandated to coordinate the collective efforts of governments, development agencies, civil society and the private sector to reach the EFA goals.

Functionality

The EFA Crowdsourcing Challenge allows participants to: create ideas, evolve current ideas to ensure they meet their potential, learn from experts and one another, find people with similar interests and areas of expertise, and link people with needs, ideas and the skills to act on them.

Distinguishing Characteristics

Each month featured a new goal in a distinct topic area: Early Childhood Care and Education, Gender Parity and Equality in Education, Quality Education, Youth and Adult Learning Needs, Primary Education and Literacy.

Challenges

Since the campaign and each challenge are short-lived, the opportunity for further growth or innovation is diminished. Additionally, community features feel incomplete and the platform lacks clarification as to how winning projects will be actualized and/or integrated within existing government programs.

Current Impact

Almost 1,000 mobile communication ideas were submitted to help achieve literacy, develop universal primary education, address youth and adult learning needs, improve the quality of education, achieve gender parity and equality in education, and improve early childhood care and education.

The best ideas are due to be published and promoted on UNESCO's website to explain their proposal in further detail and to encourage the development of the ideas into concrete projects.

	British Columbia BC Ideas	**Canada** Grand Challenges Canada	**United States** Challenge.gov	**Australia** Mashup Australia	**UNESCO** Education For All
Functionality	Submissions—from ideas to completed projects—judged according to innovation, social impact and sustainability; Judging panel and community determine winners	Grand challenges in six areas with specific guidelines and well-defined phases; Resources for developing proposals; Information on past winners	Challenge Wizard makes posting prize opportunities simple; Central contest and challenge platform allows citizens to browse offerings from across government	Open data challenge judged based on originality, social value, quality and design, and usability; Added bonus for enabling programmatic re-use of data	Platform for generating ideas, evolving them, learning from others and connecting with peers
Distinguishing Characteristics	Strong focus on community-building both during and after competition; Transparency regarding every aspect of contest, including judging panel	Limited scope and strong structure could lead to immediately actionable outcomes; Government-funded project with benefits not exclusively realized in Canada	One of the first centralized challenge and contest platforms that allows government to only pay for success; Strong design and user experience	Open innovation challenge built around open government data, creating valuable mashups while demonstrating potential of open data	Monthly challenges focusing on a different topic area
Challenges	Competition aspect has concluded; Ideas accepted as valid submissions, possibly delaying impact	Tight structure and submission schedule could constrain innovators; Scope limited to only health-based problems	Unclear if incentives equally effective for individuals and teams; Unclear vetting process; Lack of metrics regarding prize effectiveness	Lack of central contest hub; Individual agencies not empowered to launch own contests; Short-lived contests	Short-lived campaign and challenges; Incomplete community features; Lack of information on next steps
Current Impact	Launched innovation community and "marketplace"; Original competition provided $270,000 in funding to a variety of initiatives	Already provided grants to 175 healthcare innovators in Canada and other countries; Potential to inspire other countries to use grand challenges to approach foreign aid	Inspired 45 departments and agencies to host contests and challenges and engaged over 16,000 citizen solvers	Demonstrated potential of open data; Creation of data mashups for visualizing suburban trends and displaying extensive government data related to a geographic location	Generated almost 1,000 mobile communication ideas to help increase access and quality of education, achieve gender parity and improve childhood care

Assessment:

British Columbia's BC Ideas Solutions for Strong Communities competition demonstrated the potential of government driving private-sector innovation with prizes far less expensive than traditional research and development. In its next iteration, expanding the scope and variety of contests while developing BC Ideas into a central contest hub with clear, substantial incentives for participation could further amplify its impact. An increased use of grand challenges is a similar opportunity for growth.

GOVLAB RESEARCH

1.3.6. GET INSPIRED

As governments continue to experiment with the use of contests and challenges to address societal problems and incentivize citizen problem-solvers, looking to the use of such tools in the private sector and civil society could prove beneficial. Two organizations—InnoCentive and the XPRIZE Foundation—have particularly well-developed best practices in the field.

1.3.6.1. InnoCentive - innocentive.com

Summary

InnoCentive is a company and platform that enables prize-based competitions for public and private sector agencies and organizations to engage a global network of problem-solvers to address specific challenges.

About

InnoCentive offers three separate programs for solution-seekers: Premium Challenges,[26] InnoCentive@Work[27] and Custom Challenge Programs.[28] To date, InnoCentive has almost 300,000 solvers from nearly 200 countries; over 1,600 external challenges and thousands of internal challenges have been posted, and over 37,000 solutions have been submitted. InnoCentive's awards range from $5,000 to over $1 million, depending on a challenge's complexity.

Objectives

InnoCentive believes "that innovation and problem solving need to evolve in order to meet the challenges of the 21st century," and that, "By unleashing human creativity, passion and diversity, we can solve problems that matter to business and society. Once you untether the search for solutions from an individual, department or company, amazing things happen. Problems are solved better, faster, and at a lower cost than ever before."

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26   "Online platform for crowdsourcing innovation problems to talented minds from all over the world who compete to provide novel ideas and solutions to important Challenges."

27   "Cloud-based enterprise innovation management platform for building collaborative internal innovation communities to harness the collective intelligence of your employees and partners."

28   "High-profile Challenge programs and innovation competitions, uniquely tailored to your needs, for solving big problems and encouraging breakthrough innovations."

Background

InnoCentive was launched in 2001 by Jill Panetta, Jeff Hensley, Darren Carroll and Alpheus Bingham with funding from Eli Lilly & Company. The company has partnered with organizations like the AARP Foundation, Air Force Research Labs, Booz Allen Hamilton, Cleveland Clinic, Eli Lilly & Company, EMC Corporation, NASA, Nature Publishing Group, Procter & Gamble, *Scientific American*, Syngenta, *The Economist*, Thomson Reuters, as well as a number of U.S. and European government agencies.

Functionality

The Challenge Center features a search and browse functionality that lets potential problem solvers filter their search by the type of challenge,[29] challenge discipline,[30] pavilion,[31] award amount[32] and submission type.[33]

Each challenge profile includes a basic overview, and, depending on the challenge type, can include such tabs as Test Solution, My Solution, Leaderboard, Messages and Form a Team.

A My IC tab gives members—registration is free—a centralized look at their interactions with the site and different challenges.

The site also features a wide variety of resources, including relevant webinars, articles, reports, case studies, collaboration tools and best practices for solvers. An extensive frequently asked questions section and a multi-faceted contact form can help users address any questions regarding challenges or the site in general. Beyond challenge-specific message boards, the site offers a general community tab featuring resources to enable team-building and solver forums.

Distinguishing Characteristics

In addition to its role as a customizable contest and challenge platform, InnoCentive's team building functionality is especially useful for large-scale problems unlikely to be solved by individuals. Leaderboards and solution testers, when applicable, can also provide meaningful feedback for solvers.

A Challenge Referral program helps to incentivize participation for even those without the skills necessary to solve a given challenge. Individuals can win up to $1,5000 for referring a solver who goes on to win a challenge.

Challenges

While InnoCentive has strong browsing and search functionality, the sheer scope of the site and the incredible variety of contests housed on it could prove overwhelming for some citizens, despite the referral and team-building resources that, in theory, should mitigate those concerns.

Current Impact

To date, InnoCentive awarded over $39 million to over 1,400 challenge winners. Notable challenge solutions include: Prize4Life's Biomarker prize for ALS research, the Oil Spill Recovery Institute's challenge for mitigating oil spill damage, SunNight Solar's challenge for developing solar-powered lamps and flashlights for African villages and the TB Alliance's challenge for developing fast-acting and affordable tuberculosis drugs.

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29   *Premium, Brainstorm, Grand Challenge*

30   *Business & Entrepreneurship, Chemistry, Computer/Info. Technology, Engineering/Design, Food/Agriculture, Life Sciences, Math/Statistics, Physical Sciences and Requests for Partners*

31   *AARP Foundation, Cleveland Clinic, EDF, Life Grand Challenges, Lumina, NASA, Nature, Scientific American, Tec^Edge (Air Force), The Economist, UnitedHealth Group, Clean Tech, Developing Countries, Emergency Response, Environment, Global Health, Novel Molecules and Public Good.*

32   *>$25,000; >$50,000; and >$100,000*

33   *Individual Solver and Team*

1.3.6.2. XPRIZE - xprize.org

Summary

XPRIZEs are massive financial awards provided by the XPRIZE Foundation and a variety of private sector sponsors for solutions to audacious problems. The Ansari XPRIZE for space exploration is one of the most famous examples of prize-induced contests.

About

XPRIZEs are awarded in five different groups: Education, Energy and Environment, Exploration, Global Development and Life Sciences. Currently active XPRIZEs include the Google Lunar XPRIZE, Archon Genomics XPRIZE presented by Express Scripts, Qualcomm Tricorder XPRIZE and the Nokia Sensing XPRIZE. Already awarded XPRIZEs include the Ansari XPRIZE, Progressive Insurance Automotive XPRIZE, Wendy Schmidt Oil Cleanup XCHALLENGE and the Northrop Grumman Lunar Lander XCHALLENGE.

Objectives

In its Who We Are section, XPRIZE is defined as "an innovation engine. A facilitator of exponential change. A catalyst for the benefit of humanity." The initiative's stated mission and vision also include:

▸ We believe that you get what you incentivize. And that without a target, you will miss the mark every time. Rather than throw money at a problem, we incentivize the solution and challenge the world to solve it.

▸ We believe that challenges must be audacious, but achievable, tied to measurable goals. And understandable by all

We believe that solutions can come from anyone, anywhere and that some of the greatest minds of our time remain untapped, ready to be engaged and unleashed on a world that is in desperate need of help. Solutions. Change.

Background

Chairman and CEO Peter Diamandis first announced the Ansari XPRIZE in 1996. The $10 million prize for building and launching a spacecraft capable of carrying three people to 100 kilometers above the earth's surface, twice within two weeks, was awarded to Scaled Composites on October 4, 2004. Following the success of the project, the XPRIZE Foundation grew and began offering prizes in a wider variety of areas.

Functionality

The XPRIZE website is essentially an information portal regarding active and past prizes. Since each XPRIZE is sponsored and implemented by an outside organization, such as the Google Lunar XPRIZE, each individual prize site differs. Each outside site tends to contain general overviews and guidelines, participating team information, education sources, media information and blogs, and, depending on the site, forums and other community-building features.

Distinguishing Characteristics

XPRIZE's use of a relatively small number of extremely well financed competitions serves to incentivize targeted, large-scale engagement from companies and teams of individuals. Instead of using small prizes or posing poorly defined grand challenges, XPRIZEs give participants clear goals and offer substantial rewards, justifying more significant monetary commitments, both in terms of research and development, and the activation of human capital.

Challenges

The scope and difficulty of XPRIZE challenges traditionally lead to teams or organizations winning the prize, as was the case with the original Ansari XPRIZE. However, considering the level of complexity involved in each challenge, unaffiliated individuals could possibly provide useful input if given the opportunity to collaborate, but the website provides no on-site means of collaboration or team building.

Current Impact

XPRIZEs likely remain the most popularly known form of open innovation contests or challenges. The incredible success of the original Ansari XPRIZE—which spawned over $100 million in development efforts by contestants—likely played a significant role in catalyzing the wider use of price-induced contests and challenges. XPRIZEs have "facilitated an oil recovery cleanup at quadruple the standard rate. Enabled the creation of a 135 MPGe energy-efficient car. And helped launch a $1.5 billion private space industry."

GOVLAB RESEARCH

GET INSPIRED

INNOCENTIVE	XPRIZE
Providing not only a wide array of challenges and contests, but also a referral program and strong team-building tools can help inspire participation from citizens with a wide variety of backgrounds and skillsets	Extremely well-financed challenges with particularly audacious goals can inspire significant non-governmental expenditures in research and development and, in time, lead to previously unexpected results

Key take- aways:

Backing particularly audacious goals with significant prizes can yield high levels of unsubsidized research and development and lead to results previously thought impossible. Team-building tools, referral programs and a variety of contest and challenge offerings can help draw in a larger portion of the population.

1.4. CITIZEN MONITORING AND ENFORCEMENT

As mobile technology becomes ever more omnipresent in society, governments and companies are increasingly drawing on citizen's connectedness to learn more about public problems. Whether to create crowdsourced maps or report the presence of potholes, such services are providing an outlet for citizens to provide feedback, as well as a means for government to learn about the problems of its locality from the people most affected by them. As mobile penetration continues to grow, and the prevalence of passive sensor technologies is also likely to make exponential gains, government's leveraging of citizen reporting should become even more common—in many cases, learning from citizens without any manual input.

While it is easy to see the benefit of providing a simple means of citizen monitoring and a centralized platform for reporting public issues, the World Bank's Tiago Peixoto highlights the difficulty of crafting platforms that meaningfully leverage the input of citizens:

> *"Normally governments can come to you and say, 'Okay, now make me a platform for people to come, a crowd source,' and then they put it up and nobody comes. Then they shut down. They're frustrated. At the same time, these governments they're receiving a million phone calls from concerned citizens to complain about things and so on."*

So although there is little doubt that such projects can provide significant value to the public, creating a useful system of citizen monitoring and reporting likely requires more than simply building a platform and expecting citizens to make the most of it.

Relevance for BC

Government, private sector and civil society citizen reporting systems are providing outlets for a wide variety of citizen input. At this point, many such efforts revolve around location-based issues, and, as such, the deployment of mobile optimized sites and apps are increasing initiatives' success. The use of open APIs to draw in developers can be especially effective in expanding efforts' scope and obtaining more meaningful citizen feedback. As BC collects more information from, and on, individuals, government should look for opportunities to improve the personalization of citizens' experiences with government.

1.4.1. BRITISH COLUMBIA – DRIVEBC - DRIVEBC.CA

Summary

DriveBC is the central hub of vehicle related information, services and citizen reporting for the province. The service provides citizens with contact information to report highway issues, with optimized site versions for desktop and mobile, and a strong Twitter presence.

About

Drive BC contains a wide variety of transportation information for citizens. Citizens can use the site to report issues with provincial highways, municipal or city highways or roads, as well as wildfires, chemical spills and downed power lines.

Background

DriveBC was overhauled in March 2012 by its operating department, the Ministry of Transportation and Infrastructure. None of the most recent updates, however, have affected the citizen reporting aspect of the site.

Functionality

Citizens who witness a non-emergency road issue, wildfire, chemical spill or downed power line can go to Drive BC and click on Report a Highway Problem to find ways to provide information to authorities. The desktop site provides links to contact information for electrical problems, wildfires and downed power lines at the top of the page, and a hyperlinked map of the province that directs citizens to the relevant contact information for the area in which they witnessed the road or highway issue. On mobile, citizens choose whether they are reporting a problem with a provincial highway, municipal or city highway or road, a wildfire, chemical spill or downed power line. Clicking on the links for wildfires, chemical spills or downed power lines takes the citizen directly to the relevant contact information. The municipal or city highway or road link takes citizens to the Civic Info BC site, with contact information for 190 different local governments. Finally, the provincial highway option gives users the option of selecting highway and bridge problems or electrical problems. When citizens make the their selection, they are presented with another hyperlinked map that will lead them to the relevant contact information. The mobile site also features a Voice Reports option, with a link to a toll-free contact number.

A help page and feedback form provides means of support and contacting the site. Citizen feedback also informs the continued development of the site.

Distinguishing Characteristics

An optimized mobile site makes site navigation very simple. The use of maps on both mobile and desktop further increase the simplicity and usability of the site.

While Drivebc.ca is a notable provincial citizen reporting effort in itself, DriveBC's Twitter account is likely the strongest, most user-friendly aspect of British Columbia's efforts. The account not only provides updates on weather conditions, lane closures and the like, it also acts as another channel for citizen input—people can tweet at the account to provide information on non-emergency transportation issues. The account also directly responds to questions from citizens, creating a strong feedback loop.

Challenges

Drive BC's citizen reporting functionality does not feature any on-site means of citizen input. For all issues, citizens are directed to contact information, notably telephone numbers, with no option for simply typing in a description of the issue and the address directly from the Web or mobile. While this capability exists using the DriveBC Twitter account, it is questionable whether citizens would ascertain this fact from visiting the desktop or mobile Drivebc.ca site.

Drive BC's ability to guide citizen input regarding issues on different types of provincial roads and highways, as well as wildfires, chemical spills and downed power lines could go unnoticed by citizens because the link to report such issues is subtly presented on the site. Moreover, the link citizens need to click, on mobile or desktop, is confusingly labeled "Report a Highway Problem." Based on this subtlety and misleading label, citizens attempting to report a wildfire or a pothole on a municipal road could easily assume that Drive BC is not the correct place to make such a report.

Current Impact

Drive BC offers nothing in the way of metrics regarding the use and impact of the site. However, the citizen reporting option's placement on a central Ministry of Transportation and Infrastructure web page makes it likely that citizen input will continue to increase and inform government operations. The Twitter account's 17,600 followers demonstrate its reach and scope.

1.4.2. CANADA

Across Canada, a number of provinces, cities, departments and agencies are drawing upon citizen input to improve service delivery. Examples like the City of Windsor's online 311 system and Prince George's Air Improvement Citizen Toolkit illustrate the increasing desire to leverage citizen input to both improve service delivery and learn more about an area from the people who live there and know it best. While there are a number of Canadian citizen reporting options, the City of Toronto's 311 system is the most sophisticated and most worthy of emulation.

1.4.2.1. 311 Toronto - toronto.ca/311
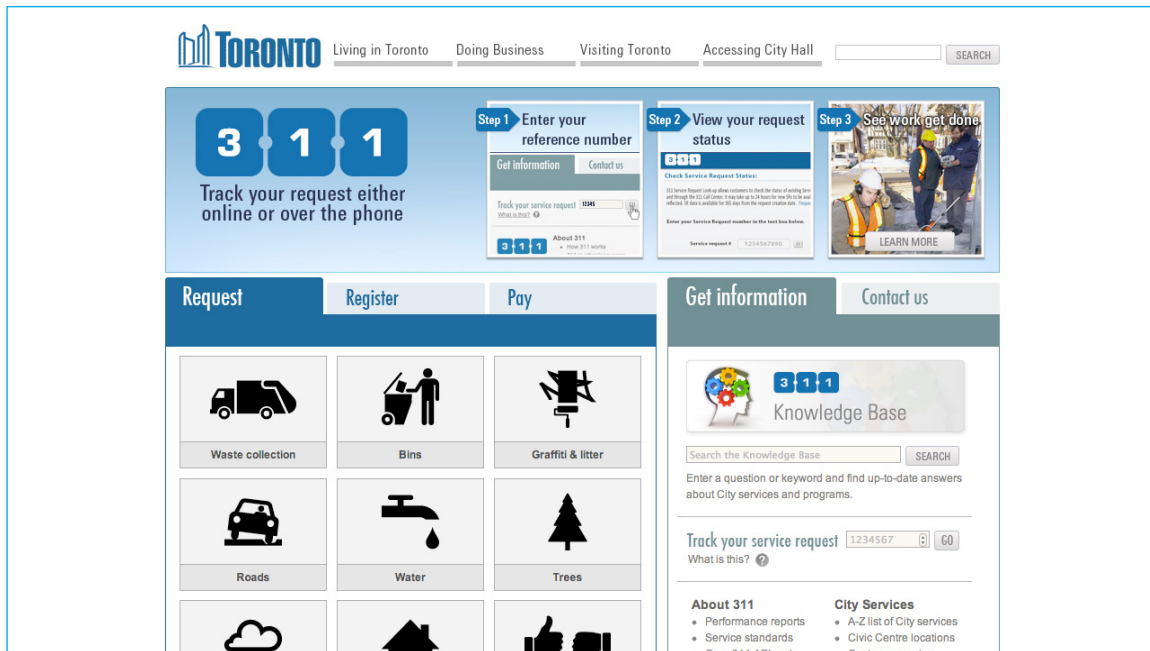
Summary

Toronto's 311 service website provides a centralized location for citizens to access government services and report issues like potholes and graffiti. Mobile apps and an open API make the service even more accessible, and a service request tracking number system allows citizens to follow the progress of their requests online.

About

In addition to providing public information, allowing citizens to register for services and pay fees and fines, 311 Toronto provides a centralized online, email, fax, mobile and telephone service where citizens can report and request assistance in 9 broad categories: Waste Collection, Bins, Graffiti & Litter, Roads, Water, Trees, Winter Issues, Property Issues and Complaints & Comments.

Objectives

311 Toronto "improves accessibility to non-emergency City services and information and increases the City's effectiveness in responding to public inquiries."

GOVLAB RESEARCH

Background

Operated by the City of Toronto, 311 Toronto was launched in its current iteration in 2012, giving citizens access to new and previously available information, reporting and public service options in one location.

Functionality

311 Toronto reporting services, in addition to appearing on the home page, are listed under a Self-Service Requests tab, with links to an online form to report issues in the areas of Waste Collection,[34] Bins,[35] Graffiti & Litter,[36] Roads,[37] Water,[38] Trees,[39] Winter Issues,[40] Property Issues[41] and Complaints & Comments.[42]

Upon submission of a request, citizens are given a service request number, which can be entered on the 311 Toronto home page to track progress.

The service's commitment to accessibility and openness is demonstrated in its use of the Open311 standard, with the 311 Toronto functionality available to developers. The site also provides links and information on mobile apps supported by 311 Toronto, including Rebuild Your Community, SeeClickFix and TDOT 311.

Numerous support and contact options are present on the site, including "Tips on how to be a good '311 Mobile Reporter.'"

Distinguishing Characteristics

311 Toronto's embrace of an open API demonstrates a commitment to solving public problems, by whatever means necessary, including relaxing control of its services and allowing outside developers to give citizens a variety of options to report issues and draw upon city services.

The use of service request numbers that permit citizens to track the progress of reported issues shows people that their requests are actually being acted upon, and not thoughtlessly entered into a static database, never to be acted upon by the government bureaucracy.

Voice over Internet Protocol (VoIP) services, like Skype, are another means for citizens to contact 311 Toronto, providing more options and further lowering the barrier to engagement.

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34   *Household hazardous waste, Bulky items – not picked up, Garbage – not picked up, Recycling – not picked up, Green Bin – not picked up, Yard waste – not picked up, Overflowing litter bin.*

35   *New bins – resale home or new development, Green Bin – new occupant, Garbage Bin – additional, Garbage Bin – exchange size, Recycling Bin – additional, Recycling Bin – exchange size, Garbage/Recycling Bin – damaged, Green Bin – damaged.*

36   *Graffiti on private property; Graffiti on a City road, sidewalk or bridge; Graffiti on a street litter bin maintained by the City; Overflowing litter bin; Loose litter.*

37   *Pothole, Road damage, Sidewalk damage, Traffic or street name sign – missing or damaged, Pavement markings – missing or faded, Pedestrian signal – timing issues, Road – surface cleaning, Catch basin – surface cleaning.*

38   *Water service – turn off, Water service – turn on, Water service valve – damaged, Fire hydrant – damaged, Fire hydrant – leaking, Low water pressure, No water, Discoloured tap water, Basement drain blocked or backed up, Leaking water line – on private property.*

39   *Tree pruning, Tree removal, Tree planting.*

40   *Sidewalk – slippery or needs snow ploughing, Bus stop – slippery or needs snow ploughing, Walkway – slippery or needs snow ploughing, Bridge sidewalk – slippery, Driveway – blocked by ploughed snow, Snow piled too high, Snow plough damage, Property standards investigation – snow/ice.*

41   *Property misuses – business operating from a residence, Property misuse – frequent garage sales, Construction noise in residential area, Waste dumping on private property, Long grass or weeds on private property, Fence problem on private property, Poster or temporary sign problem, Graffiti on private property, Property standards investigation – garbage storage, Property standards investigation – insects/pests, Property standards investigation – lack of maintenance, Property standards investigation – snow/ice.*

42   *Complaint: 311 Toronto, Compliment: 311 Toronto, Comment/suggestion: 311 Toronto, Complaint/comment: Roads – operations or staff, Complaint/comment: Water – operations or staff, Complaint: Accessibility of a City program or service.*

GOVLAB RESEARCH

Challenges

While unofficial options exist due to the use of an open API, the 311 Toronto mobile site is no different from the desktop version. So while the site functionality is fully accessible on mobile, the use of extensive forms to report issues could be too time-intensive for people on the go, particularly when travelling.

Current Impact

Since 311 Toronto is the largest end-to-end service integration system in North America, it is likely that more cities, provinces and, perhaps, nations will attempt to follow its lead. When fully operational, the 311 Contact Centre is expecting to receive 48,000 inquiries per week. Prior to the launch of 311 Toronto, citizens were forced to ascertain which of 251 available inquiry telephone lines was correct for a given issue.

1.4.3. UNITED STATES - CONSUMER FINANCIAL PROTECTION BUREAU CREDIT CARD COMPLAINT DATABASE - CONSUMERFINANCE.GOV/COMPLAINTDATABASE/
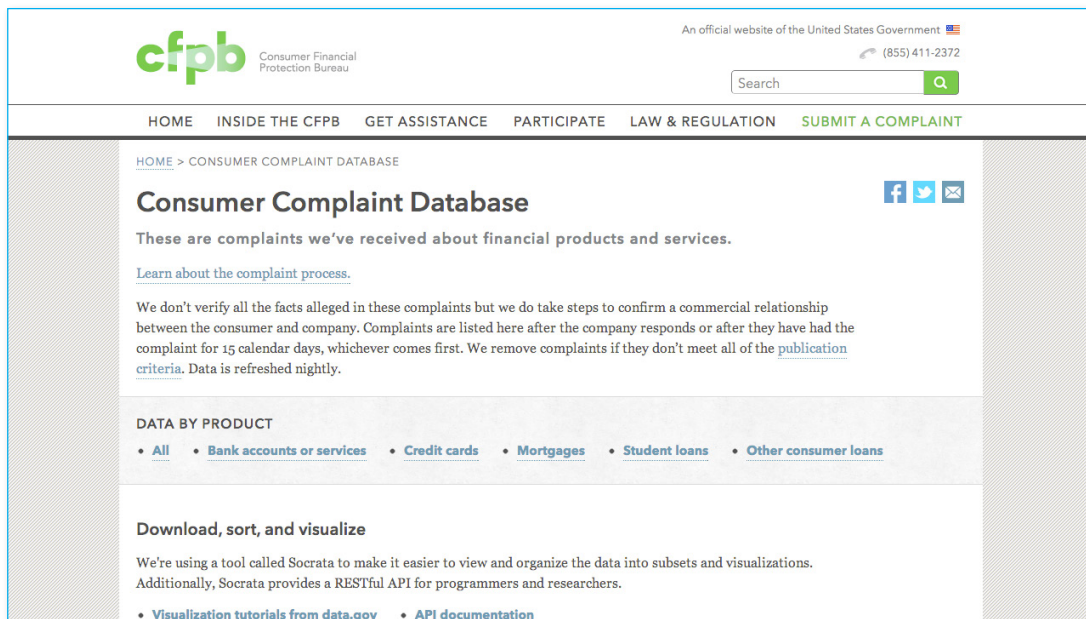
Summary

A key mission of the Consumer Financial Protection Bureau (CFPB) is to make the financial products and services available to citizens more transparent. The Consumer Complaint Database site allows consumers (and anonymous whistleblowers) to directly submit, view, download and visualize complaints. The CFPB is America's first 21st-century consumer agency and accordingly, adheres to open government and government 3.0 standards.

About

The Consumer Complaint Database launched on June 2013, following the formation of the CFPB in July 2011, which continues to oversee site management.

Objectives

The objective of the Consumer Complaint Database is to make consumer complaints about financial products and services free, open and easily accessible to the public.

Background

The CFPB was founded as a result of the Dodd–Frank Wall Street Reform and Consumer Protection Act, which passed in response to the Late-2000s recession and financial crisis. The bureau began operation on July 21, 2011. Congress established the CFPB to protect consumers by carrying out federal consumer financial laws. The CFPB seeks to ensure that consumers get the information they need to make the financial decisions they believe are best for themselves and their families, that prices are clear up front, that risks are visible and that nothing is buried in fine print. The agency has the power to write rules, supervise companies, and enforce federal consumer financial protection laws; restrict unfair, deceptive, or abusive acts or practices; take consumer complaints; promote financial education; research consumer behavior; monitor financial markets for new risks to consumers; and enforce laws that outlaw discrimination and other unfair treatment in consumer finance.

Creating the Consumer Complaint Database invites citizens to actively participate in these processes.

Functionality

Through the website, citizens can: submit complaints about financial services companies; search complaints data by product (e.g. bank accounts or services, credit cards, mortgages, student loans other loans), by company, and by channel; access, search, and download financial companies' responses to complaints; download, sort, and visualize data sets; access tutorials on data visualization; and directly access the database API.

Distinguishing Characteristics

The CFPB uses the Socrata platform, which specifically targets non-technical Internet users trying to access government data, to make it easier to view and organize the data into subsets and visualizations. Socrata provides a RESTful API for programmers and researchers.

Challenges

The CFPB should include more sample data visualizations and pre-made reports to guide and inform citizens.

Current Impact

Initially populated with credit card complaints received by the CFPB, the database was expanded in October 2012 to include consumer credit card complaints dating back to December 1, 2011.

In the summer of 2012, the CFPB asked for public comment on adding complaints about other consumer financial products and services under its authority to the Consumer Complaint Database and received a wide range of comments from interested stakeholders.

1.4.4. INDIA – I PAID A BRIBE - IPAIDABRIBE.COM

Summary

I Paid A Bribe uses citizen reporting to identify corrupt government services and work with local government to effect process change. Citizens can report bribes, which the organization will use to push for improving governance systems and procedures, with the goal of tightening law enforcement and regulation, and thereby reducing the scope of corruption in government services.

About

The site is managed by Janaagraha, a non-profit organization based in India. On average, the site receives about 25 to 50 reports a day. In addition, there are about 20-50 reports and comments a day logged in on the various forums and the administrator's blog.

Objectives

By providing a place for citizens to report, as well as by analyzing the information, I Paid a Bribe aims to: heighten citizen awareness about the nature and spread of bribe-related exchanges and promote a purposive public debate that pressurizes public officials to reduce and eventually eliminate corruption; to help citizens to recognize, avoid and tackle bribe paying situations; and to identify and analyze the workflows within corruption prone public services, to make suggestions on systemic reform directed at entrenching simpler and more transparent processes, more consistent standards of law enforcement and better vigilance and regulation.

Background

I Paid a Bribe was launched by the co-founders and board members of Janaagraha, a non-profit that works for improving the quality of citizenship and infrastructure and services in India's cities. The site was officially launched in 2010, on August 15, India's Independence Day.

Functionality

The site allows for anonymous reporting on the nature, number, pattern, types, location, frequency and values of all corrupt acts in India (beyond bribes). Users can sort and view all reports, as well as report "honest officials."

Distinguishing Characteristics

The use of crowd reporting services has, to date, traditionally been utilized in areas of public works, like reporting potholes. I Paid A Bribe is notable for taking this type of functionality out of the utilitarian realm and applying it to combat corruption.

Challenges

The greatest challenge to the efficacy of I Paid a Bribe is that the initiative is not integrated with government in any official capacity. The platform would also benefit from an improved user-interface, including search functions and access to raw data.

Current Impact

I Paid a Bribe has launched, or is coming soon, to 16 other countries, and may serve as inspiration for other corruption-based crowd reporting initiatives.

1.4.5. UNITED KINGDOM – PATIENT OPINION - PATIENTOPINION.ORG.UK
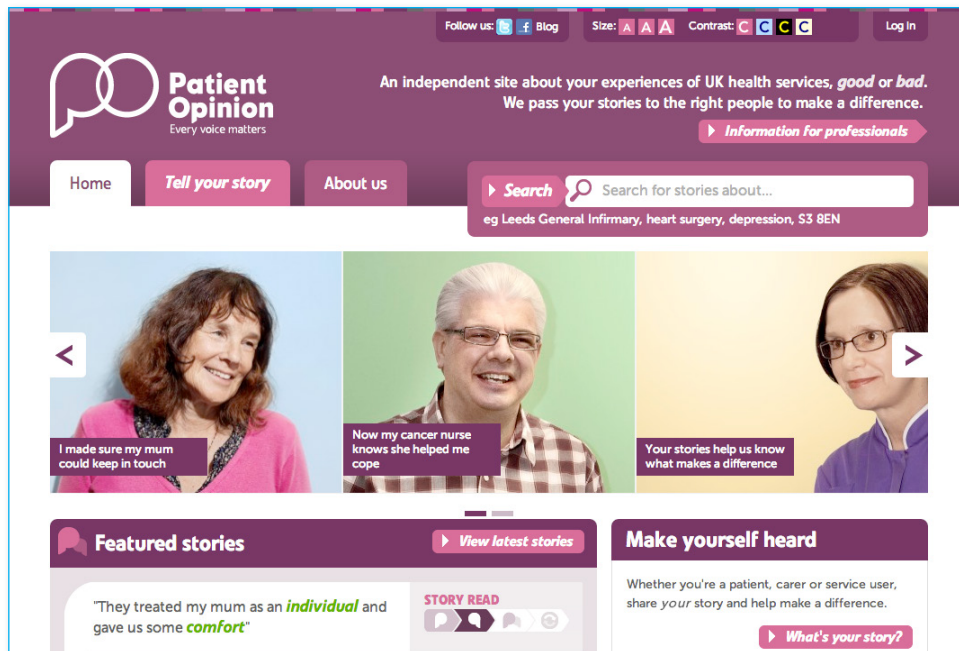
Summary

Patient Opinion is a national feedback website for the UK National Health Service. Users can rate their health service experience, view other ratings, and engage directly with other patients and health providers.

About

Patient Opinion is the UK's leading independent non-profit feedback platform for health services. Over 450 organizations subscribe or are registered with Patient Opinion.

In the past month (May 2013): 50% of stories received a response and 10% of responses to concerns led directly to change.

Objectives

Patient Opinion seeks to create honest and meaningful conversations between patients and health services in order to make health services better. Health services use Patient Opinion in three main ways: to plan how to develop and improve services; to understand the choices that patients are making in their health care; and to give doctors, nurses and managers a feel for what patients are saying about the service they provide. The Care Quality Commission receives all published stories and uses them to improve services.

Background

Patient Opinion was founded in 2005 by Paul Hodgkin, a GP in Sheffield, who wanted to make the wisdom of patients available to the NHS. The initial phase of PatientOpinion was funded by the Department of Health and South Yorkshire Strategic Health Authority. Since 2006, Patient Opinion has been funded through subscriptions and sales to trusts, commissioners and others.

Functionality

Users sign in to share and rate their health service experience, which is then sent directly to staff so that they can learn from it. Staff also provides a response to the user. Additional news, featured patient stories, and social tools are also included on the site.

Distinguishing Characteristics

Patient Opinion is one of the only patient healthcare feedback services for a national healthcare service.

Challenges

Patient Opinion is not integrated with government in any official capacity, diminishing its efficacy. The platform itself should look to improve its user-interface, including adding search functions and access to raw data.

Current Impact

Over 50,000 ratings or stories have been submitted to Patient Opinion, with over 2,000 healthcare staff actively reviewing these submissions. About 45-50% of stories are entirely positive, with no changes needed.

	British Columbia Drive BC	Canada 311 Toronto	United States CFPB Credit Complaint Database	India I Paid A Bribe	United Kingdom Patient Opinion
Functionality	Citizens can find relevant contact information regarding a variety of problems related to transportation using simple web interface	Citizens can use an on-site form to report issues in a wide variety of public concerns; Service request numbers distributed to allow for continued monitoring	Citizens can submit and view complaints about financial services companies; Granular search of complaints, including companies' responses	Users can anonymously report instances of corruption; Granular sorting functions; Ability to view and report instances of honest officials	Users share and rate healthcare service experience and receive responses from the relevant staff
Distinguishing Characteristics	Optimized mobile site; Use of maps increases simplicity and usability; Strong Twitter presence with feedback loops	Tracking numbers allow citizens to follow up on requests; Open API for developers and researchers; VoIP support	Socrata platform provides tools for organizing and visualizing data; Open API for developers and researchers	Use of crowd reporting for combatting corruption, rather than more utilitarian means like fixing potholes	Unique service for citizens to supply feedback regarding their healthcare; Feedback loops
Challenges	Lack of on-site input – site only provides contact information for relevant agencies; Confusing name for citizen reporting system	Lack of official mobile app or mobile optimized version of website makes on-the-go reporting more difficult	Need for more sample visualizations and pre-made reports	Lack of direct government integration; Lack of search functions and other user-friendly features; No public access to raw data	Lack of direct government integration; Lack of search functions and other user-friendly features; No public access to raw data
Current Impact	Growing visibility; Over 17,600 followers on Twitter	Provides central location for accessing city services, simplifying system that previously used 251 separate telephone lines; Expected to receive 48,000 inquiries per week	Wide variety of input regarding public financial products and services; Inspired increase in available complaints	Soon to be available in 16 other countries; Leader in the expanding use of crowd reporting to combat corruption	Collected over 50,000 ratings or stories to date; Engages over 2,000 healthcare workers

Assessment:

British Columbia's Drive BC site is a meaningful first step toward utilizing citizen reporting to inform government services, with a notably strong system for receiving input and directly engaging citizens using Twitter. Potential next steps include on-site reporting, expanding the service's purview, using open APIs to engage developers, and offering more visualizations and maps. Moreover, as BC collects more information from, and on, individuals, government should look for opportunities to improve the personalization of citizens' experiences with government.

GOVLAB RESEARCH

1.4.6. GET INSPIRED

As citizen reporting and monitoring options are becoming more prevalent, three important services are leading the way, and, in some cases, providing the technical infrastructure for official government projects. In each case, a focus on community-building and government accountability helps to drive engagement, and instill the hope in citizens that their input is having an effect.

1.4.6.1. Ushahidi - ushahidi.com

Summary

Ushahidi is a free, open source interactive mapping platform that can draw in a wide variety of data streams to visually present location-based information. It has been used for a wide variety of humanitarian and civic ends, including its original use in mapping post-election violence in Kenya.

About

Ushahidi is a widely used interactive mapping platform that has been used to monitor elections, map crisis information and aid activists in humanitarian efforts. The platform is supported by a global community of volunteers and is partnered with the Omidyar Network, Knight Foundation, Humanity United, MacArthur Foundation, Open Society Institute, Cisco Foundation, Hivos and Net[2].

Objectives

The Ushahidi platform is "built on the premise that gathering crisis information from the general public provides new insights into events happening in near real-time. It is also expected to help organizations marshal efforts to assist areas that are not well covered in the mainstream media." The Ushahidi team "builds tools for democratizing information, increasing transparency and lowering the barriers for individuals to share their stories."

Background

Ushahidi, which means "testimony" in Swahili, was originally developed by an ad hoc group of volunteers in 2008 to help map reports of violence following the Kenyan election.

Functionality

The Ushahidi platform is freely available for download, and can be used for information collection, visualization and interactive mapping. The platform is also available in the form of IOS and Android apps. For developers, Ushahidi allows for significant customization, including on GitHub. For the less tech savvy, Crowdmap, an offshoot of the classic Ushahidi platform, allows for election monitoring, crisis mapping and other Ushahidi functionality, without requiring significant coding capabilities or a dedicated web server.

Ushahidi's most essential functionality is its ability to draw in multiple data streams, including text messages, email, Twitter posts and information from web-forms to create interactive, dynamic maps.

Developer wikis, user forums, a blog and numerous contact options provide guidance for both advanced users and those with less technological skill.

Distinguishing Characteristics

Ushahidi's ability to convert multiple data streams, including SMS messages, into interactive maps not only makes deployment simple for developers, it makes providing input to a given citizen reporting effort simple, even for those with little technological knowhow and/or access to smartphones or wireless Internet.

The extensive customizability, particularly between the basic Crowdmap service and Ushahidi classic further lowers the barrier to engagement for all types of citizens.

Challenges

The Ushahidi website provides a wealth of information for developers, but little guidance for people seeking to contribute to a particular deployment. While the Community section features a map and list of deployments, a more central means of discovery for users could prove beneficial.

Current Impact

During its original launch following the 2008 Kenyan election, Ushahidi had 45,000 users. The platform has since been used for a wide variety of humanitarian causes, including, notably, crisis mapping in Haiti and New Zealand following earthquakes in 2010 and 2011, respectively. The Community section of the website features a map with information on deployments of the platform from around the world.

1.4.6.2. SeeClickFix - seeclickfix.com

Summary

SeeClickFix is a multifaceted citizen reporting engine featuring user-generated information in a wide variety of areas. The site's Web 2.0-like interface provides a wealth of information on a given issue, and allows for users to interact with existing problems on the site, potentially amplifying their importance for governments.

About

SeeClickFix is a growing platform that allows citizens to publicly report a wide variety of civic issues and then monitor their development. The most active cities on the platform are Chicago, Illinois; Washington, DC; Malden, Massachusetts; Macon, Georgia and Winston-Salem, North Carolina.

Objectives

SeeClickFix is informed by three basic principles:

- ▶ "**Empowerment**. SeeClickFix allows anyone to report and track non-emergency issues anywhere in the world via the internet. This empowers citizens, community groups, media organizations and governments to take care of and improve their neighborhoods."

- ▶ "**Efficiency**. Two heads are better than one and 300 heads are better than two. In computer terminology, distributed sensing is particularly powerful at recognizing patterns, such as those that gradually take shape on a street. Besides, the government can't be in all places at all times. We make it easy and fun for everyone to see, click and fix."

- ▶ "**Engagement**. Citizens who take the time to report even minor issues and see them fixed are likely to get more engaged in their local communities. It's called a self-reinforcing loop. This also makes people happy and everyone benefits from that."

Background

SeeClickFix was founded in September 2008 by CEO Ben Berkowitz and COO Miles Lasater in New Haven Connecticut.

Functionality

The SeeClickFix website prompts users to enter their neighborhood into a form, which leads them to a site featuring a searchable collection of user-generated issues that allow for citizen comments, featuring an issue "up-voting" system. The collection of issues can be viewed in list form, on a map or as a gallery of uploaded images. Each individual issue entry can feature user-supplied images, the ability to view the issue on a map, information on when it was reported and by whom, a list of notified stakeholders, the ability for users to follow the issue and links to other nearby problems reported on the site. Each neighborhood also features an "Answers" user forum, a list of "Neighbors" using the site and a collection of mapped "Watch Areas" for user monitoring.

SeeClickFix also offers mobile apps for IOS, Android, Windows Phone and Blackberry that allow citizens to report issues, browse open problems, view a list of active neighbors and send and receive messages. The company also provides links on its website for governments to request custom mobile apps for their area.

Distinguishing Characteristics

SeeClickFix's sophisticated and well-designed web and mobile interface make it very easy for citizens to report and monitor problems. The ability to up-vote issues gives users an avenue for reiterating the need to address a problem, and helps demonstrate to government which issues are currently the most important to constituents.

Challenges

A lack of advanced browsing and search filters for a given neighborhood could make it difficult for users to find information on a given issue, particularly if they are not aware of the exact geographic location of the issue. While the option exists for users to simply create a second entry on the issue, spreading the comments and up-votes on the issue across two or more entries could dilute influence.

Current Impact

SeeClickFix was integrated with Chicago's 311 system to become the official means of citizen reporting in the city. In 2010, at a point when the site was available in 25,000 towns and 8,000 neighborhoods, it was reported that over 45% of issues submitted on the site were resolved.

1.4.6.3. FixMyStreet - fixmystreet.com

Summary

FixMyStreet is a U.K.-based service allowing citizens to report problems in their area, view them on a map, discuss them with fellow citizens, monitor their development and provide or read citizen updates. The service automatically sends the citizen reports to the relevant government council upon receipt.

About

FixMyStreet is a citizen reporting service for the U.K. that has received and acted upon thousands of user-generated issues in a variety of topic areas.

Objectives

FixMyStreet is a service constructed for citizens to report, view and discuss local problems.

Background

FixMyStreet was launched by mySociety in February 2007, with funding from the Department for Constitutional Affairs.

Functionality

Users are prompted to enter their location on the site, which then takes them to a map with a list of issues in that area. To report a problem, users click on the relevant area of the map and enter the subject and details of the problem, choose a category[43] and are given the option to upload a photo. Users, including but not limited to the originally reporting individual, can enter information into a form to provide updates on the issue and subscribe to any future updates.

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43   Abandoned Vehicles, Bus Stops, Car Parking, Dog Fouling, Flyposting, Flytipping, Graffiti, Parks/Landscape, Pavements/Footpaths, Potholes, Public Toilets, Roads/Highways, Road Traffic Signs, Rubbish (Refuse and Recycling), Street Cleaning, Street Lighting, Street Nameplates, Traffic Lights, Trees and Other.

Users can also view a collection of their past reports, as well as a collection of all reports generated through the site, separated by the receiving government council. The collection of reports also provides information on the number of new problems, older problems, old/unknown problems, recently fixed problems and older fixed problems for each council.

The mobile optimized version of the site provides all of the same functionality, including the ability to use GPS to locate the citizen, rather than forcing them to manually enter their location.

Finally, users can subscribe to RSS or email alerts based on their locality.

Distinguishing Characteristics

FixMyStreet's mapping interface is both user-friendly and visually appealing. Its focus on results—in the form of user-generated updates on each issue and information on different councils' response to submitted issues—shows citizens that their complaints can, should and will be acted upon.

Challenges

FixMyStreet features little in the way of community functions, outside of the ability to provide updates on other's reported issues. The site also lacks any ability to browse or search for issues based on any criteria other than location and relevant government council.

Current Impact

In the first week of May 2013, the site received over 1,600 reports, over 5,000 issues had been fixed in the past month and over 300,000 updates on reports had been provided in total.

The success of FixMyStreet inspired the creation of many similar services, including FixMyStreet Canada

GET INSPIRED

USHAHIDI	SEECLICKFIX	FIXMYSTREET
Open source interactive mapping provides simple and advanced iterations to engage a variety of potential users. The ability to seamlessly draw in a wide variety of data streams increases usability and improves relevance.	Web 2.0 functionality, like the ability to up-vote certain issues, helps to highlight the importance of different problems, while inspiring greater citizen engagement.	Focusing on results by providing a central system for providing updates, as well as granular information on the reaction of relevant government councils to submitted issues, demonstrates to users that their submissions are not going unheard.

Key take-aways

Citizen reporting and monitoring initiatives can reach new levels of success when they give citizens a variety of options for providing input, develop a Web 2.0-type interface allowing for discussion and up-voting of important issues and focus on results and accountability by providing a system of issue updates and information on the government body responsible for a given problem.

GOVLAB RESEARCH

2. Toward a Culture of Re-Imagining Governance

"I find [culture] is real important, because usually the exports of culture precede the exports of product. People are very concerned about the economy but in some sense, you have to change the sense of fashion of people before you can sell them blue jeans."

Cesar Hidalgo, MIT

2.1. POLITICAL LEADERSHIP AND DIRECTION

To create a more open and effective system of government, though it is important for individual ministries, departments and agencies to re-imagine their strategies and practices, government-wide political leadership, in the form of overarching strategies and/or commitments is essential. The development, launch and upkeep of new technology-aided governance systems that maximize government transparency and citizen engagement can be expensive, time-consuming and require expertise not currently housed in some sectors of government. Moreover, as budgets fluctuate, it is all too easy for government decision makers to cut such systems if they have already been developed, especially considering the potential backlash that could come from cutting other more entrenched government services. A central political leadership and direction, such as a codified commitment to open government, can help bypass such concerns and increase the adoption of re-imagined governance projects, from the national to the local level. Interviews with BC officials, in particular, highlighted the need for political leadership from above to ensure lasting, meaningful culture shifts within government.

2.1.1. BRITISH COLUMBIA

BC's commitment to re-imagining and opening government is evident simply based on the existence of the Ministry of Citizen's Services and Open Government. The norm for most governments regarding open government strategies and commitments involves executive mandates and/or recommendations, which individual departments and agencies are expected to implement. British Columbia, however, makes it clear that improving and valuing citizen engagement and open government, while certainly the responsibility of practically every government department and agency, is central enough to the mission of government that a dedicated ministry is essential.

Beyond its mere existence, the Ministry of Citizen's Services and Open Government provides guidance to the rest of the province through service plans, reports and publications, as well as involvement in the BC Jobs Plan, BC Auction, BC Bid, BC Stats, Information Access Operations and Service BC.

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2.1.2. CANADA

The evolution of Canada's open government initiatives, housed on the official Open Government website, began on March 18, 2011 when Stockwell Day, President of the Treasury Board and Minister for the Asia-Pacific Gateway, announced the Expansion of Open Government. The expanded effort and goals of the national open government initiative are provided in Canada's Action Plan on Open Government. The plan, which itself was crafted by drawing upon citizen consultation, includes commitments to opening information, data and dialogue, and becoming an active participant in the Open Government Partnership. The goal of the Action Plan is summarized in the introduction:

> *"Canada's commitment to open government is part of the federal government's efforts to foster greater openness and accountability, to provide Canadians with more opportunities to learn about and participate in government, to drive innovation and economic opportunities for all Canadians and, at the same time, create a more cost effective, efficient and responsive government."*

Reception to the Action Plan has been moderately positive, with Canadian **open government activist David Eaves** in particular describing it as a solid foundation, but far from a breakthrough document.

2.1.3. UNITED STATES

On December 8, 2009, President Obama released the Open Government Directive, espousing the "three principles of transparency, participation, and collaboration [that] form the cornerstone of an open government." While the directive includes, since updated, guidelines and deadlines for action, discussed more below, its most immediate impact was the creation of an Open Government Initiative website housed on the WhiteHouse.gov domain, featuring extensive information, a collection of available initiatives, a blog, a dashboard and an innovator's toolkit, highlighting the central importance of open government to the Obama Administration. The demonstrated, meaningful commitment to transparency, participation and collaboration that the Open Government Directive and Open Government Initiative represent, along with similar commitments in the United Kingdom, have likely done more to influence the continued global evolution of open government than any other governmental or non-governmental actions.

The White House later released "The Obama Administration's Commitment to Open Government: A Status Report," providing information on the development and evolution of Freedom of Information, the overarching Open Government Initiative, Data.gov and Tech-Driven Innovation, Transparency for Taxpayers: Federal Spending Disclosure, Classified Information and Other Government Records and White House Transparency, as well as a section on critiques and recommendations for the continued evolution of U.S. open government initiatives. The report, beyond reiterating President Obama's own commitment to opening government, asserts that "Creating a more open government…requires, as the President has instructed, sustained commitment—by public officials and employees at all levels of government."

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2.1.4. UNITED KINGDOM

On May 31, 2010, Prime Minister David Cameron penned a "Letter to Government departments on opening up data." The letter provides a number of recommendations and commitments, discussed more below, but perhaps its most important function was demonstrating the national government's commitment to relaxing government's control over public-sector information. The letter begins:

> "Greater transparency across Government is at the heart of our shared commitment to enable the public to hold politicians and public bodies to account; to reduce the deficit and deliver better value for money in public spending; and to realise significant economic benefits by enabling businesses and non-profit organisations to build innovative applications and websites using public data."

Despite the fact that this commitment came months after the public launch of Data.gov.uk, its importance in highlighting the need for consistent and meaningful data release is significant.

The U.K.'s national commitment to open government was further highlighted in its 2012 "Open Data White Paper: Unleashing the Potential." While, like Cameron's letter, the white paper includes recommendations and guidelines, its focus on "Building a transparent society" serves an important role in organizing the efforts of government agencies. Minister for the Cabinet Office and Paymaster General Francis Maude's foreword includes a passage that reiterates the value proposition of a more open government, while recognizing that such fundamental shifts in the culture of government may not be easy for public sector employees:

> "There is nothing easy about transparency. The formative years of open government will be tricky, difficult and uncomfortable at times. But the prize is effective, personalised, 21st-century democracy. It's a more prosperous United Kingdom where the public services on which we all rely are strengthened and improved. We are determined to ensure that all of us can reap the benefits of transparency and data sharing in the future. The future will be Open."

2.1.5. OPEN GOVERNMENT PARTNERSHIP

The Open Government Partnership is a global network of countries committed to improving how government operates and citizens are engaged. A major function of the partnership is a system of country-based commitments, where nations set specific goals for re-imagining government, and are held accountable for their success or failure in satisfying those commitments. Ranging from implementing freedom of information laws to creating sophisticated open data portals and e-government platforms, 48 countries have already delivered on commitments to the partnership to improve their efforts in opening government and engaging citizens,[44] and another 10 are currently developing such commitments.[45]

British Columbia	Canada	United States	United Kingdom	Open Government Partnership
The unique Ministry of Citizen's Services and Open Government demonstrates a provincial commitment to re-imagining government. The ministry provides guidance on projects across the BC government.	An open government action plan provides nationwide goals for re-imagining governance, including commitments to opening information, data and dialogue with citizens, as well as a commitment to active participation in the Open Government Partnership.	The Obama Administration's Open Government Directive espouses principles of transparency, participation and collaboration. The Open Government Directive and Initiative have likely done more to further the global open government movement than any other governmental or non-governmental actions.	An open data white paper and a letter from Prime Minister David Cameron describe the central importance of re-imagining governance, particularly regarding the potential of opening government data and information.	Formal open government commitments from 48 nations not only demonstrate the importance of re-imagining governance, but also ensure that government efforts themselves are transparent and accountable.

Assessment:

The mere existence of BC's Ministry of Citizen's Services and Open Government demonstrates a unique commitment to re-imagining governance. Going forward, BC should look to make more formal, transparent and accountable commitments to take specific open government actions, and provide citizens with the means to meaningfully track efforts to satisfy those commitments.

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44   *Albania, Armenia, Azerbaijan, Brazil, Bulgaria, Canada, Chile, Colombia, Croatia, Czech Republic, Denmark, Dominican Republic, El Salvador, Estonia, Finland, Georgia, Greece, Guatemala, Honduras, Indonesia, Israel, Italy, Jordan, Kenya, Latvia, Lithuania, Macedonia, Malta, Mexico, Moldova, Montenegro, Netherlands, Norway, Paraguay, Peru, Philippines, Romania, Slovak Republic, South Africa, South Korea, Spain, Sweden, Tanzania, Turkey, Ukraine, United Kingdom, United States and Uruguay.*

45   *Argentina, Costa Rica, Ghana, Hungary, Liberia, Mongolia, Panama, Russia, Serbia and Trinidad and Tobago.*

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2.2. SHARED TECHNOLOGICAL FRAMEWORKS AND GUIDELINES

Beyond political leadership in the form of government-wide strategies and commitments, shared frameworks and guidelines can help increase the prevalence of transparent and participatory governance systems, improve citizen experience with such systems by ensuring a uniform, standardized experience and optimize government-wide efforts. As evidenced by the wide praise for the United States' executive order on opening departmental data, converting recommendations and loose guidelines into meaningful and enforceable policies and deadlines represents the important next step for many governments. Premier Christy Clark's formal directive regarding open data and information places BC, like the United States, at the fore of such efforts. However, as interviews with BC officials made clear, the development of guidelines and imperatives must walk the fine line between standardizing government-wide efforts and snuffing out experimentation within ministries.

2.2.1. BRITISH COLUMBIA

BC's shared open government frameworks and guidelines largely exist in the document "Citizens @ the Centre: B.C. Government 2.0 – A Transformation and Technology Strategy for the BC Public Service," the "Open Information and Open Data Policy" document, a User Experience Toolbox and the Citizen Engagement Corner, respectively.

"Citizens @ the Centre" provides an overarching strategy for shifting the public service's operating philosophy to maximize citizen participation, service innovation and business innovation. The document provides specific strategies and guidelines in each of those areas, as well as an extended list of "strategic enablers" that includes new or enhanced methods in the areas of Integrated Planning, Privacy, Identity Management, Culture Change in the BC Public Service, Procurement and Contract Management; Network and Wireless Connectivity; Web 2.0 and Unified Communications; Corporate Standards and Corporate Policies and Guidelines.

The Open Information and Open Data Policy provides guidance to all ministries on widening transparency following Premier Christy Clark's formal directive for all ministries to expand the availability of data and information. With the goal of "offering increased access to government information" and "enabling use, adaptation and distribution of Data by the public," the policy provides direction and assigns responsibility for:

▸ The Proactive Disclosure of responses to access to information request (FOI Requests) and information designated for Routine Release; and,

▸ The assessment, approval and posting of Open Data for public use, adaptation and distribution.

The document contains a list of policy objectives,[46] legal considerations, open information policy requirements,[47] open data policy requirements,[48] explanations of employee roles and responsibilities, proactive disclosure exemption criteria and an open data assessment form for agencies.

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46   *Make government information and Data more accessible to the public in a way that is responsive to citizens' needs and expectations; engender a participatory environment in which citizens are engaged with their government, communities and public policy issues; provide an equitable approach for citizen access to government information and Data that is timely, simple and straightforward; enhance trust between citizens and Government; increase efficiencies and cost savings for government; create new opportunities to inform citizens about government and enable participation in government decision making; enhance the social and economic benefit of government Data; empower citizens to create value from Open Data; where possible, adopt publicly developed services and products, benefiting citizens and extending the value of Open Data.*

47   *Proactive Disclosure of Responses to General FOI Requests; Routine Release – General Requirements and Routine Release of Designated Information.*

48   *General Requirements, Open Data Criteria and Assessment Requirements and Open Government License Requirements.*

The B.C. User Experience (UX) Toolbox "is intended to give [government employees] a full picture of government's new approach to web as described in *Citizens @ the Centre* and how to apply it to create better web in government." The toolbox is separated into three categories featuring a number of informational modules:

▸ **Plan**: Introduction to Online Service Delivery, Design Research, Web Strategy, Citizen Engagement and Social Media
▸ **Build**: Information Architecture, Content, Metadata, Design, Technology and Tools
▸ **Run**: Governance, Web Standards and Guidelines

The extensive information available on each module ensures that even government employees and agencies with little technological expertise can craft their web services to not only reflect the broader strategy of the B.C. government, but provide the best possible experience for citizens.

Finally, the Citizen Engagement Corner includes recommendations and guidelines for government employees in designing citizen engagement processes, moving ideas forward, planning and launching such initiatives, as well as recommendations on engaging citizens face-to-face and through social media. While much of the information available comes in the form of best practices, discussed more below, a section on social media guidelines includes a basic introduction; context setting; key considerations, including approvals and available support; principles, including being professional, being personable and being relevant; guidelines on the personal use of social media; and appendices regarding privacy, records management, intellectual property and information security. Guidelines are provided for each step of the "Social Media Lifecycle": Discovery, Planning, Launch and Maintenance & Wrap Up. Beyond social media strategy, a Standards of Conduct guide provides a framework for the personal use of social media, with concerns like loyalty, confidentiality, public comments and political activity.

2.2.2. CANADA

Canada's Action Plan on Open Government, released in 2012, includes a commitment in the first year to develop an Open Government Directive, which "will provide guidance to 106 federal departments and agencies on what they must do to maximize the availability of online information and data, identify the nature of information to be published, as well as the timing, formats, and standards that departments will be required to adopt." In years two and three, the Directive will be progressively implemented "in order to establish consistency and standard practices with regard to open publishing across government departments and agencies. The clear goal of this Directive is to make Open Government and open information the 'default' approach." Since the Directive itself has not yet been released, its impact cannot yet be known.

The non-governmental Canadian Policy Research Network also released the "Handbook on Citizen Engagement: Beyond Consultation," including guidelines and best practices for preparing a citizen engagement initiative, designing the process and implementing it, as well as case studies and other information.

2.2.3. UNITED STATES

The "Executive Order – Making Open and Machine Readable the New Default for Government Information," released by the White House on May 9, 2013, is being widely praised as perhaps the most meaningful government-wide open government standard introduced in the world to date. The collection of guidelines and implementation deadlines are ordered based on the goal of openness by default:

To promote continued job growth, Government efficiency, and the social good that can be gained from opening Government data to the public, the default state of new and modernized Government information resources shall be open and machine readable. Government information shall be managed as an asset throughout its life cycle to promote interoperability and openness, and, wherever possible and legally permissible, to ensure that data are released to the public in ways that make

the data easy to find, accessible, and usable. In making this the new default state, executive departments and agencies…shall ensure that they safeguard individual privacy, confidentiality, and national security.

Unlike similar open data guidelines introduced in Canada, featuring "policies and best practices," and the United Kingdom, featuring "requests to adhere to timetables," the U.S. executive order, though never having passed through Congress, carries the force of law and includes meaningful deadlines.

Aside from the fact that it is law rather than a recommendation, the requirement that each department and agency creates a public listing of its data based on internal audits of information holdings is the most consistently praised aspect of the order.

2.2.4. UNITED KINGDOM

The U.K., though an unquestioned leader in the realm of open government, lacks a codified set of government-wide, legally binding standards. Instead, 14 different open data strategies can found on Data.gov.uk for the following departments and ministries: Department of Health, HM Treasury, Ministry of Justice, Ministry of Defence, HM Revenue and Customs, Foreign & Commonwealth Office, Department of Energy and Climate Change, Home Office, Department for International Development, Department for Education, Department for Work and Pensions, Department for Communities and Local Government, Cabinet Office and Department of Business, Innovation and Skills, as well as a Cabinet Office Departmental Open Data Strategies Blog post.

Aside from those agency-specific standards, the national government has released a collection of recommendations in its above-mentioned "Open Data White Paper: Unleashing the Potential," which includes guidelines on, among other topics, harnessing user and engagement and strengthening data usability.

Prime Minister David Cameron's "Letter to Government departments on opening up data" features commitments to central government spending transparency, local government spending transparency and the release of other key datasets, in including information on crime and senior civil servants, but the letter's actual standards-setting impact is questionable considering the important line, "Given the importance of this agenda, the Deputy Prime Minister and I would be grateful if departments take immediate action to meet this timetable for data transparency."

2.2.5. EUROPEAN UNION

The EU adopted the Directive on the Re-Use of Public Sector Information in November of 2003, with all member states implementing the directive by May 2008. A proposal to revise the original directive was presented in December 2011.

The directive specifically deals with requests for the re-use of public sector information—not an open-by-default requirement—and features standards regarding availability, including a provision that, "where possible, the material shall be made available by electronic means"; charging, with cost ceiling provisions; transparency; non-discrimination; cross-subsidies; exclusive arrangements and licensing.

Despite all member states reporting full implementation of the directive, the Sunlight Foundation "found no evidence of a comprehensive policy or national portal (not even among the mushrooming central data portals and data catalogs) that would provide a scope of all information holdings belonging to a government (including listing (and linking, when possible) to information that has been made public, as well as that which is not public).

British Columbia	Canada	United States	United Kingdom	European Union
British Columbia's "Citizens @ the Centre" strategy, "Open Information and Open Data Policy" document, User Experience Toolbox and Citizen Engagement Corner provide standards and guidelines with a wealth of information to ministries and employees regarding the deployment of new transparency and citizen engagement initiatives. A formal directive from Premier Clark renders guidelines and standards notably meaningful.	A currently developing Open Government Directive will provide open-by-default guidance to over 100 federal departments and agencies. Since the directive has not been completed, its impact is unknown, and whether guidelines will be legally binding remains questionable.	President Obama's executive order on open data is seen as the current standard-bearer in the field, not only because of its content, but because its guidelines and deadlines carry the force of law.	Separate open data strategies exist across 14 different departments and agencies. National recommendations abound, but guidelines and deadlines do not carry the force of law.	The "Directive on the Re-Use of Public Sector Information" was adopted and implemented by every EU member state. However, the directive does not attempt to establish an open-by-default system, and meaningful implementation from member states remains questionable.

Assessment:

British Columbia's formal efforts to standardize its transparency and citizen engagement projects are at the fore of such frameworks and policies. To ensure that BC maintains its leadership position, it should focus on clarifying the benefits of open data and developing a common alignment around the purpose of open data tools within ministries and across external alliances. Consolidating the information and strategies housed in its "Citizens @ the Centre" document, "Open Information and Open Data Policy," User Experience Toolkit and Citizen Engagement Corner could further aid government employees' efforts to implement optimized open government projects with the desired level of uniformity. A goal for BC's political leadership going forward should be the encouragement of more risk-taking and experimentation in ministries and agencies, while still fostering some level of standardization across government and accepting that failure can be part of the process.

2.3. TRAINING AND SHARED BEST PRACTICES

As efforts to reimagine governance spread across the globe and continue to deepen in complexity, culture shifts in the public sector become increasingly essential. These culture shifts can only become reality if government employees are provided with guidance on how to implement and manage innovative governance strategies. Whether through direct course-based training or the sharing of best practices, a wide-scale knowledge transfer is necessary for reimagined governance to take hold.

As SUNY Albany's Theresa Pardo notes, in such a new and fast-moving area, training needs to reach a wider audience than just new entrants:

> *"We need to think about sitting professionals, folks who are already in their leadership positions or about to enter into leadership positions. How we do expose those folks to these new ways of thinking about what they do and how they can use technology?"*

Two notable efforts at developing a resource for sharing knowledge in the space exist outside of government. The Open Government Guidebook, part of the Civic Commons, is a wiki that "describes step-by-step process for opening government," and encourages contributions, particularly in the form of case studies. The guidebook is organized into six sections: Build Alignment, Develop Strategy, Develop Policy, Manage, Derive Value and Sustain. The OpenGov Playbook is a similar wiki mainly focused on providing guidance and sharing best practices regarding American open government initiatives.

2.3.1. BRITISH COLUMBIA

The BC Citizen Engagement Corner provides extended information on building engaging content, including tips language, tone and voice. Similarly, tips and best practices are presented for each step in the above-mentioned "Social Media Lifecycle."

Under the heading of Ways to Engage, the site features a table with recommended tools—like discussion forums, Facebook or QR Codes—for five different forms of citizen engagement: Inform, Outreach, Recommendation/Advice, Agreements and Action. A Tools section also provides a brief, bulleted description and list of best uses for blogs, Twitter, Facebook, wikis, YouTube and Flickr. Also included are dedicated "modules" for each tool, featuring extended information on the tool, including BC's current and historic use of it, as well as extended guidelines on each of the stages of the Social Media Lifecycle.

In addition to the informal training put forth in the Social Media section, the Citizen Engagement Corner provides information on training opportunities like Q&A sessions, open office hours and webinars, as well as the "Dragons' Den Course" a one-week project that guides participants through the process of planning a citizen engagement initiative, and presenting it to a simulated "dragons' den"—a panel of executive decision makers—in front of a live audience to gain experience making such a pitch. The case studies participants work with are real business issues facing government organizations. Topics covered in the course include:

▶ Social Media Tools Training and Wikis 101

▶ Face-to-Face Engagement

▶ Taking the Citizen's Journey

▶ Mapping the Current Process

▶ Defining the Business Problem/Objective

▶ Role of Government Communications

▶ Technology Panel

▶ Risks & Benefits

▶ Advice on Preparing the Briefing

Finally, a "Reading Corner" provides brief descriptions and links to guidelines and case studies regarding the use of different citizen engagement and social media tools in the public sector.

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2.3.2. CANADA

Aside from two courses in the Canadian School of Public Service, Canada does not appear to offer any meaningful training opportunities for government employees seeking greater understanding of new governance initiatives, though it is possible that, like BC, the national government houses information on such opportunities on an intranet that is not publicly accessible. The two courses available in the School of Public Service are: Overview of Open Information Initiatives, a workshop held in March 2013 that cost $125 to attend in person and $100 for the webcast; and Understanding Canada's Open Government Strategy and Initiatives, an in-person only course that also took place in March 2013 and cost $350.

2.3.3. UNITED STATES

The site HowTo.gov—with its slogan "Helping agencies deliver a great customer experience"—includes dedicated sections on Web Content, Social Media, Mobile, Challenges & Contests and Contact Centers featuring guidance and best practices, particularly regarding customer experience.

The site's "Open Government Directive: Guidance for Agencies" section provides a collection of "living documents" that are meant to act as a resource repository for government departments and agencies attempting to keep pace with federal open government guidelines. Available documents and links include: Open Government Tool/Share Ideas for Other Agencies; a recording of a conference call, "Implementing OGD at Your Agency"; and a link to the above-mentioned OpenGov Playbook.

The site also includes the DigitalGov University, "the federal government's training program for digital media and citizen engagement. DGU provides high quality, cost-effective training to thousands of federal employees each year." Through in-person courses held in Washington, DC, online courses, webinars, new media talks and workshops targeted at a federal audience, DigitalGov University works toward the following goals:

▸ Building agencies' capacity to deliver an outstanding and innovative customer experience across government

▸ Adding to the broad range of skills agencies need to manage their digital media and citizen engagement efforts

▸ Improving agencies' knowledge of digital government best practices

The curriculum leverages peer-to-peer learning "that facilitates cross-agency collaboration and sharing of best practices" in the following subject areas:

▸ Customer service principles and techniques

▸ Web management

▸ Content strategy and plain language communications

▸ User experience, design, and accessibility

▸ Search engines

▸ Social media and citizen engagement

▸ Challenges, prizes and innovations

▸ IT and emerging technology

▸ Contact center management

The Open Government Initiative website also features shared best practices in the field. The site also includes "Fact Sheet: Open Government Flagship Initiatives," a collection of summaries and links to "selected open government flagship initiatives that Federal departments and agencies are undertaking to make the government more transparent, participatory, and collaborative. These are the hallmarks of each agency's open government plan, and will result in lasting change in the way that the Federal government works for and—equally important—with the American people."

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2.3.4. INDIA

India's National e-Governance Plan (NeGP) is a nationwide effort mean to "Make all Government services accessible to the common man in his locality, through common service delivery outlets, and ensure efficiency, transparency, and reliability of such services at affordable costs to realise the basic needs of the common man." In addition to utilitarian implementation resources, the plan's website features a Knowledge Portal, containing a Repository with an extensive, though unstructured, collection of standards, frameworks, status reports and other potentially useful information for government workers seeking guidance and best practices in their efforts to satisfy the plan's requirements.

The Knowledge Portal also links to the MyNeGP online community of practice, which gives "Governance Practitioners" the ability "to join the collaboration portal and deepen [their] knowledge and understanding on e-Governance by interacting with other practitioners on an ongoing basis."

2.3.5. OPEN GOVERNMENT PARTNERSHIP

The Open Government Partnership Webinar Series, hosted by the World Bank Institute, is an initiative meant "to encourage peer learning and knowledge sharing on critical open government issues among civil society, government, and private sector participants."

Webinars are consistently being scheduled, with the most recent occurring in April 2013. The Adobe Connect system used for the webinars allows screen-sharing for presenters and features voice and text chat for all participants.

Past webinars currently available on the site include: Citizen Engagement on Law Making, E-Petitions: Giving Voice to Citizens, Proactive Transparency, Codes of Practice on Consultations, Grievance Redress Mechanisms, Measuring Implementation of Access to Information Legislation, Open Budgets, Citizen Engagement Using ICTS, Citizen Budgets and Public Participation.

British Columbia	Canada	United States	India	Open Government Partnership
The Citizen Engagement Corner provides government employees with tips, best practices, links to relevant guidelines and case studies to aid the development and implementation of citizen engagement and social media strategies. The site also features Q&A sessions, open office hours and webinars. A one-week, intensive "Dragon's Den Course" guides participants through the process of planning a citizen engagement initiative and presenting it to superiors.	Canada appears to lack any meaningful, publicly accessible training or shared best practices resources. To date, two courses in the Canadian School of Public Service appear to be the only training opportunities for public employees. The existence of training or shared best practice resources could be available on a government intranet, and/or they could be deployed following the official implementation of the Action Plan on Open Government.	HowTo.gov provides government employees with a wealth of information on new governance best practices and guidelines. In areas ranging from mobile strategies to the development of contests and challenges, government employees can access informative resources in a number of forms. The online and offline DigitalGov University provides direct, course-based guidance in a variety of relevant subject areas.	A "Knowledge Repository" provides government employees with a wide variety of information on implementing new governance strategies. Though extensive, its lack of structure lessens its usability, and likely its impact.	A webinar series allows for the sharing of best practices in a variety of subject areas. The platform used not only allows for sophisticated presentations, but also gives participants the opportunity to communicate and collaborate. Previously held webinars are available for viewing on the site.

Assessment:
British Columbia's Citizen Engagement Corner provides government employees with a wealth of tips and best practices in both citizen engagement and social media strategies. Webinars, Q&A sessions and the Dragon's Den Course provide more interactive learning opportunities for employees. An expansion of online course-based training opportunities, like those available through the United States' DigitalGov University, could be a logical next step.

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2.4. RESEARCH AND EVALUATION MECHANISMS

While the need for more transparent and participatory government has become something of a truism, as open government initiatives mature, it is essential that we move from faith-based to evidence-based assessments of their impact and effectiveness. For instance, U.S. federal CIO Steven VonRoekel notes that the economic effects of open data remain largely anecdotal. The World Wide Web Foundation's Jose Alonso agrees, noting:

> *"We have examples, especially here in the U.S. and the western world in general, at the local level, state level, federal or national level, but we don't have yet systematic evidence to say, 'Look, this is the best way you can do to achieve X.' One straightforward example is the open data portals, the data of the top websites. Do we know as of today that that is the best way to file this open data from a common point of view? We don't."*

Before we try to change how we solve problems and plan new initiatives we need to know what has worked already and what has not. Calls for meaningful measurements to guide the allocation of resources and understand what projects to continue, scale up or cancel abound. Beyond demand for more precise and nuanced understanding of whether programs are successful, desire inside and outside government also exists as to how projects are successful and what factors lead to that success.

While the need for improved research and evaluation mechanisms is obvious, creating such systems presents a complex and challenging task that requires judgment to choose how, what and when to measure along with the criteria for an intervention to be deemed successful.

2.4.1. BRITISH COLUMBIA

BC's Concept of Operations document for DataBC provides a list of people who can benefit from the data portal, and example metrics demonstrating the portal›s success or failure for those different people:

▸ **The Policy Analyst** – Sector or ministry DataBC participation rates (Internally shared datasets / Total datasets); Total internal downloads

▸ **The Program Manager** – DataBC usability score; Accuracy of plans (forecast vs. actual)

▸ **The Deputy Minister** – DataBC usability score; Timeliness of information

▸ **The Citizen** – Sector or ministry DataBC transparency rates (Externally shared datasets / Total datasets); Total external downloads

▸ **Business Users** – Number of businesses built on or supplemented by government data; Number of datasets used to support businesses

▸ **Non-Government Organization (NGO)** – Number of NGOs built on or supplemented by government data; Number of datasets used to support NGOs

▸ **The Data Supplier** – Sector or ministry DataBC participation rates; Percentage of participating sectors & ministries; Average dataset ratings; Number of "favourites" assigned to dataset; Cultural shift from a scarcity economy to a gift economy (measured by survey)

▸ **The Data Custodian** – Data quality measures (completeness, accuracy, currency); Compliance score (DataBC standards); Staff performance ratings for data management

The document also features an appendix on success metrics. The section notes that, "A useful success metric will allow DataBC to measure and monitor the value of its data and the quality of the service it provides. This will require clear definition of what value means to DataBC. While this list is not exhaustive, it nonetheless provides a basis to provoke further discussion, and can be refined to meet the needs of DataBC." The appendix proposes metrics separated into the following

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broad categories: Sector or Ministry Participation Metrics,[49] Usage Metrics[50] and Usability Metrics.[51]

BC's efforts in developing meaningful metrics to demonstrate the success or failure of DataBC are notable not only because of the variety of indicators mentioned, but especially due to the recognition that different metrics demonstrate value to different stakeholders, discussed more below.

The province also distributed the guidance document, "Analytical Framework - Getting started at measuring citizen engagement projects," to project leads and posted it on the Citizen Engagement Corner.

The framework includes metrics listed for three different goals of citizen engagement initiatives:

▸ **Usefulness of Recommendations**: Reach, Return and Representativeness; Education and Awareness; Quality and Insight of Dialogue

▸ **Enhanced Transparency**: Perceived Fairness and Public Satisfaction; Network Effects and Building Collaborative Trust

▸ **Organizational Learning**: Cost, Process, Planning, Access to Data, Skill Development, Impact on Other Channels

The document also puts forward the "Three Rs" of citizen engagement: reach, return and representativeness, with a collection of metrics and possible tools to use. Examples include web hits measured by Google Analytics for reach, social voting or social bookmarking using Bit.ly for return, and the demographic and geographic representativeness of the target audience using IP address data. Beyond the 3 Rs, potential metrics are listed for Education and Awareness (e.g., increase in fans or followers); # of Actionable Ideas (e.g., are ideas coming from influencers or followers); Conversions (e.g., conversion trends over time); Perceived Fairness and Public Satisfaction (e.g., sentiment analysis); Quality and Insight of Dialogue (e.g., parameters for feasibility and creativity); and Network Effects and Building Collaborative Trust (e.g., retweets and Facebook likes).

Finally, categories of internal capacity building are listed with possible metrics: Citizen Engagement and Skill Development (e.g., determining skills to develop internally); Network/Relationship Improvements (e.g., improved collaboration among ministries); Planning (e.g., downtimes and post/response times); Cost Analysis (e.g., cost per capita); Process (e.g., average number of hands on each issue/each response); Access to Data and Organizational Capacity (e.g., how much can project-based information be shared or repurposed in other organizations).

2.4.2. DEVELOPING A CONCEPTUAL FRAMEWORK

As noted in a recent paper by Francis Fukuyama, the current challenge of assessing governance is, at least in part, due to the lack of a conceptual framework for evaluation. Fukuyama argues: "[W]e cannot measure what we cannot adequately conceptualize, we have to start with the concept first."

Related to the need for a conceptual framework, is the need for recognizing the diversity of stakeholders and the accordant diversity of goals underlying government citizen engagement and transparency initiatives. The DataBC Concept of Operations document's presentation of a variety of possible metrics dependent on the stakeholder in question demonstrates a strong recognition of such a need.

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49   *Total datasets within sector or ministry, Total datasets planned to be made public by sector or ministry, Total datasets planned to be kept private by sector or ministry, Sector or ministry transparency rate, Total datasets published by sector or ministry, Total datasets published via DataBC by agency, Sector or ministry DataBC participation rate, Total datasets published by sector or ministry, Total API enabled datasets published by sector or ministry, Total visual datasets published by sector or ministry, Sector or ministry growth rate, Total geographically enabled datasets.*

50   *Page views, Dataset views, Downloads, Downloads XML, Downloads CSV, Downloads XLS, Downloads JSON, Downloads PDF, Downloads Shapefile, Downloads KML, Downloads other, Records accessed, Records accessed online, Records accessed bulk, Records accessed API, Records accessed widget, Records accessed email, Records accessed print, Comments, Ratings, Average rating, Favourites, Embeds, Secondary Embeds, Propagation factor, Tweets, Engagement index.*

51   *Completeness of Description (metadata), Accuracy and Appropriateness of Data, Searchability of Data.*

This user-based evaluation system is, however, only one possible framework. Caron Chess identified three different approaches that are routinely taken to assess public participation:

▶ **User-based evaluation** – developing evaluation methods with the assumption that different participants have different goals, as BC did in the DataBC Concept of Operations document

▶ **Theory-based evaluation** – a system driven by theories and models that applies normative criteria universally to public participation efforts

▶ **Goal-free evaluation** – a system free of any constraining goals or theories

2.4.3. METRICS

Although the creation of an exhaustive, bias-free system of metrics for assessing citizen engagement initiatives may be an impossibility, the development of thematic buckets of metrics within each subset of open government projects could be a valuable—and feasible—method for evaluating initiatives.

So while there is a lack of all-encompassing examples of local, provincial or national government metrics to compare with BC's measurement and evaluation methods, a variety of potentially instructive examples with a more limited focus exist from across the world and across sectors, both in the form of proposed systems and relevant case studies. Some examples include:

▶ The World Wide Web Foundation partnered with IDRC to establish a research network to measure the impacts of open data in developing countries. Harvard's Berkman Center for Internet and Society, the Open Development Technology Alliance and Practical Participation are also involved in the network. An early draft of the forthcoming paper "Understanding Open Government Data and addressing its Impact," which includes an "OGD Outcome Measurement Framework," is available on the foundation's website.

▶ The SUNY Albany Center for Technology in Government has published a number of relevant reports in the area of evaluating open government, including "The Dynamics of Opening Government Data." The paper, "Developing Public Value Metrics for Returns to Government ICT Investments" argues that the return on investment for government interventions should be judged only on whether they are "valid and useful in the relevant context of measurement." SUNY Albany's Taewoo Nam also reviewed a number of evaluation studies in the area of citizen sourcing using Web 2.0 technologies in his paper, "Suggesting Frameworks of Citizen-Sourcing Via Government 2.0," which includes framework suggestions for evaluating the impacts of such initiatives.

▶ Openthegovernment.org developed agency evaluations on a scale of 1 to 3 based on adherence to the Obama Administration's Open Government Initiative. However, the effort only measures the extent to which agencies made their data public, with no evaluation of the actual goal of the directive: engaging the public in governance. The report on this study, which notes that, "directional policy without benchmarks or specific increments of improvement is akin to diagnosing fever without a thermometer," also points to the need for continued development of more substantive metrics.

▶ The Institute of Development Studies, which has examined a number of evaluation methods in the open government space, produced a "Review of Impact and Effectiveness of Transparency and Accountability Initiatives: Synthesis Report," assessing transparency and accountability projects in the following fields: Service Delivery, Budget Processes, Freedom of Information, Natural Resource Governance and Aid Transparency.

▶ Exploring the Emerging Impacts of Open Data in Developing Countries (ODDC) is a research project aimed at furthering developing countries' use of open data to improve governance, support citizens' rights and promote more inclusive development. In the interest of sharing evaluative information and best practices, their website features a number of case studies regarding the impacts of open data, such as "Understanding the impacts of Code4Kenya open data applications and services."

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▶ The World Bank's Striking Poverty program is working toward the development of an evaluation system that measures the actual impacts of interventions on people's lives, rather than strictly their ability to improve government transparency and accountability. The project's current state is a public debate hosted by the World Bank's Tiago Peixoto, OECD's Joanne Caddy, El Centro Brasileiro de Análise e Planejamento's Vera Schattan Coelho and Involve's Edward Andersson.

▶ The Nesta initiative "Making Evidence Useful: The case for new institutions" is a report documenting the need for, and eventual creation of, a network of "What Works" evidence centres in the U.K. that will develop and evaluate assessment methods.

▶ The Project on Government Oversight produced the "Highlighted Best Practices for Open and Accountable Government," which includes "key criteria for successful practices" in the following areas: proactive release of agency operations, proactive release of consumer information, engaging the public in policymaking, shining a light on how tax dollars are spent, bringing FOIA into the 21st Century, moving towards a culture of openness, prioritizing openness and accountability and promoting responsibility in the classification of national security information.

2.4.4. KEY EVALUATIVE QUESTIONS

Going forward, as proposed in the GovLab research document "Toward Metrics for Re(imagining) Governance: The Promise and Challenge of Evaluating Innovations in How We Govern," BC should focus on developing research and evaluation methods that address four key questions:

▶ How do we provide answers to the questions we really should seek to answer: to achieve certain participatory objectives, what works, with whom, and under what conditions?

▶ How do we start determining what the impact is on people's lives?—the ultimate benchmark of success.

▶ How can we best engage with citizens to determine what success should look like and what to measure?

▶ How can we improve evaluation of governance innovation through increased experimentation in methods and practice, including the use of big data?

APPENDIX I: List of Interviewees

BC INTERVIEWS:

David Hume, *Executive Director, Citizen Engagement, Government of British Columbia*

Greg Leake, Director, *Client Communications and Engagement at BC Environmental Assessment Office*

Russel Lolacher, *Web and Social Media Director at BC Ministry of Transportation*

Paige MacFarlane, *Assistant Deputy Minister, Education, BC Public Service*

Blair Neufeld, *Director, Information Architecture at Province of British Columbia*

Dominic Seiterle, *Manager, Performance and Analysis at BC Public Service*

Tanya Twynstra, *Director, Citizen Engagement, Government of British Columbia*

David Wrate, *Director, Citizen Engagement, Government of British Columbia*

GOVLAB NETWORK INTERVIEWS *(took place at GovLab's Experiment on April 18-19, 2013):*

Jose Alonso, *Program Manager, World Wide Web Foundation*

Irving Berger, *MIT's Sloan School of Management and Engineering Systems Division*

Rudi Borrmann, *Open Government Director, City of Buenos Aires, Argentina*

Brad Burnham, *Union Square Ventures*

Jon Frederickson, *Vice President of Government, InnoCentive*

Rod Glover, *former Deputy Secretary, Innovation and Projects, Department of Premier and Cabinet, Australia*

Jim Hendler, *Rensselaer Polytechnic Institute*

Cesar Hidalgo, *MIT Media Lab*

Nigel Jacob, *co-chair, Mayor's Office of New Urban Mechanics, City of Boston*

Tim Kelsey, *National Director for Patients and Information, National Health Service, UK*

Kris Kobach, *Secretary of State of Kansas*

Peter Levin, *former Chief Technology Officer, U.S. Department of Veterans Affairs*

Theresa Pardo, *Director of the Center for Technology and Government, University at Albany*

Tiago Peixoto, *Open Government Specialist, The World Bank*

Sandy Pentland, *Director of the MIT Human Dynamics Laboratory, MIT Media Lab*

Aaron Schumacher, *Senior Data Services Specialist at New York University*

Nigel Shadbolt, Professor, *University of Southampton, chairman, Open Data Institute*

Jonathan Taplin, *Director, Annenberg Innovation Lab, University of Southern California*

APPENDIX II: Key Findings from Off the Record Interviews with BC Officials

COMMON THEMES

Strong leadership and capacity building are needed to bring about the culture shift

▶ Internal culture needs to shift more towards open government principles such as collaboration, transparency and experimentation, which may be challenging.

▶ Strong political leadership is required to bring about this culture shift, igniting the broader movement. However, leadership must be careful to balance strong leadership with inviting collaboration.

▶ Leaders should remove strict political imperatives to give ministries room to experiment, while ministries should strive to think outside the box.

▶ Proof-by-concept is important; officials may first need to see the purpose of new tools for engagement and openness and their added value, beyond engagement for engagement's sake, before adopting them.

▶ Considering the shift in culture and operations in government, it may be necessary to re-examine the skills and personality types that fit different government roles.

▶ There is a need to bolster the culture shift within BC to consolidate practices of consultation and use of new technology tools, such as social media, by consistently hiring government staff with those skill sets.

Lessons learned need to be translated into best practices

▶ While there are currently no universal success metrics, it is clear that so far, investing in offline relationship-building with constituencies has increased the reach and the effectiveness of open government tools. The value of online platforms and engagement depends on depth of offline networks and relationship building with constituents, which similarly requires dedicated resources, manpower and expertise. Until now this aspect has been done ad hoc, if at all.

▶ Specific design components that have facilitated the most engagement include: emphasizing topics that directly affect citizens, including high profile leadership on the issue, and building an offline community prior to growing online engagement.

▶ Initiatives should address the tension between the open government view of citizen engagement as a process of meaningful participation, compared to the more traditional view that citizen engagement is a simple one-way input or information-gathering tool for regulators. That is something that ongoing efforts will have to navigate through specific design features (e.g., topics that affect people directly, high profile leadership on the issue, building offline community prior to online engagement).

▶ The initiatives also need to recognize and engage with citizens as actual participants, and not engage them in a mere public relations capacity, focused on educating them about what the government is doing.

Linkages across ministries will be important to achieve government wide transformation

▶ The Office of Citizen Engagement already acts as a bridge between ministries, but a more structured inter-ministry arrangement might have to be considered.

▶ Word-of-mouth and informal ties across ministries remain important in sharing knowledge.

▶ More of a consulting relationship should exist between central teams like Citizens' Services and User Experience and the 'line' ministries like education and transportation.

APPENDIX III: Key Findings from Interviews with GovLab Expert Network

COMMON THEMES

▶ **Political leadership is critical for change** – Re-imagining governance requires significant shifts within government, and presents challenges to political leaders as they attempt to facilitate those shifts.

▶ **Decisions must be evidence-driven** – Rather than succumbing to inertia, the ability to collect and analyze information—data and otherwise—can help government become more strategic and effective.

▶ **Designs must be user-centric** – While open-by-default is a noble aim, sometimes government systems should be designed with an eventual goal or citizen use in mind to make that openness or engagement meaningful and actionable.

▶ **Experimentation should be embraced but balanced** – The ability to test new governance methods and learn from both success and failures can help optimize both new and old systems. However, it is important to remember that citizens may not be comfortable if they feel as though they are the guinea pigs in a government experiment.

▶ **Interoperability is key to scaling initiatives** – Common standards and systematic processes can lower barriers to entry and increase efficiency.

▶ **Trust goes both ways between government and citizens** – Trust is essential for meaningful citizen engagement projects, both in the form of citizens trusting their government to act on their input, and in the form of government trusting their citizens enough to value and act on their input.

▶ **Culture must shift, with a focus on community-building** – Closely related to the need for political leadership, it is important to recognize that moving toward opening government requires significant cultural shifts and the development of new collaborative communities—i.e., simply releasing a trove of public data is not enough.

Quotes

POLITICAL LEADERSHIP

"How do the conditions within that governmental context influence innovation opportunity, innovation energy, innovation commitment? One of the big answers is leadership support. Seeing this environment now, we have 20, maybe 30, years of research into IT innovation in the governmental context, but what we also have now converging together with that research and a lot of deep pockets of experience and practice is tremendous leadership support for the kinds of changes that new technologies, that new insight and understanding about government and the use of information make possible."

Teresa Pardo, *Director of the Center for Technology and Government - University at Albany*

[A] "problem of public participation in decision-making, really, in political decision-making...[is] trying to think through ways to create that engagement that didn't become dumbed down and yet manage to organize the questions in a way that were accessible to a larger audience."

*- **Brad Burnham**, Union Square Ventures*

"Well, the government at some level there is a lot of built in [inertia] and some of it comes from government officials that don't want to change. Some of it comes from citizens that don't like the government to change. Obviously, let's say the citizens not liking the government to change, there's offering a lot of different points of view. Some people who would like better services from government would like the change. Other people who are happy with the services they get now would prefer not to have it change even if maybe the services that they're getting now are not affordable.

Unlike business government have a lot more constituencies to satisfy and let's say in business the measurements of how well you're doing are a little bit easier, revenue, profit, and things like that. Many of the measurement, but if you're a business and you're not making you're not making profit, you're in trouble. In government the measurements are more quality of life. Those are very important, but they are much harder sets of measurements and often the things government has to do to be productive and, let's say, they have to take cut back, they can't afford doing what they have been doing, could decrease quality of life. There are a lot more issues in government."

*- **Dr. Irving Berger**, IBM, MIT's Sloan School of Management and Engineering Systems Division*

"Government's leadership role in job creation: "If you ask people, are you sure we'll get new jobs in the future, whatever? Nobody is very sure. We could be in such a big economic shift that that would take time. What could government do? How could government reach out to the private sector to collaborate in helping to create jobs? Are regulations in the way, do we need more open regulatory assistance?"

*- **Dr. Irving Berger**, IBM, MIT's Sloan School of Management and Engineering Systems Division*

EVIDENCE-DRIVEN DECISIONS

"I'd look at under which conditions do citizen participation promotes better decisions than what we know as the status quo. Under which condition are citizens smarter than the city council? We advocate for transparency, for citizen involvement, but there are some cases that citizens can perform just as bad or even worse than representatives. So what I would be trying to look at, really, is under which conditions and what are the mechanisms that we leverage the knowledge that is disbursed because actually this is the ultimate goal, is to leverage the knowledge that is in everybody's head towards coming into more optimal decisions."

*-**Tiago Peixoto**, Open Government Specialist, The World Bank*

"How do we build something not that humans just do what they do, but humans really get involved in this? How do we really solve problems out of this wisdom of the crowd stuff rather than just get 2,000 tweets and say, 'Okay, that was nice.' Right now government sees it as, 'Aren't we being nice in our paternalistic way to give things away and get these tweets back?' We want to say, 'How do we turn that into an effective conversation between the government and the people mediated by the technology?'"

*-**Professor Jim Hendler**, Rensselaer Polytechnic Institute*

"How do we understand when the crowd is wise and how do we understand the impact of access to data on the wisdom of the crowd? We expect citizens will engage. We expect that they will add value to the political process, to the decision making process. We expect that they will use information that's newly available from governments to support their process. We really don't have, in place, ways to understand that process or to evaluate the impact of any particular data set, of any particular engagement strategy, of any particular overall effort, to understand the dynamics of that process. What we really need is a more general understanding of how we can use these various assets to increase the capability, the opportunity that citizens have to participate, and ultimately create more informed policy and more satisfied citizens."

*-**Teresa Pardo**, Director of the Center for Technology and Government - University at Albany*

"I think that working to make public sector decisions much more based on real information properly analyzed and then figuring out how to best communicate...these stories that the information is telling us. I think that would be very, very important. Now that doesn't mean that just because you got to people and you say with the huge analyst, with the huge models we have the biggest super-computers in the national lab and this is what they're telling us. If people don't want to believe what you're telling them they will say no. It takes time, but for example the Surgeon General report on smoking and cancer came out in the 60s and, I think, the reactions on reducing smoking didn't really start happening until the 80s or the 90s because of the cigarette companies didn't want it to happen, but what finally won the day is more and more evidence kept coming, more and more data, more scientific studies until eventually you hit a change and people have to change."

- Dr. Irving Berger, *IBM, MIT's Sloan School of Management and Engineering Systems Division*

"So, the problem, traditionally, has been how to give people better information so that they can make better decisions. Simply giving people better information does not change their decision-making, by and large, their decision-making capacities. What you need to do is appeal to the broader range of how we make decisions when we were emotional creatures. We have range of different biases just because of our brain neurology. So, we need to be thinking in those terms; so empathy, a sense of connection between people, these are important elements of the decision-making process. Government needs to bring itself to that realization and say that we need to be using those as mechanisms by which they connect with people."

- Nigel Jacob, *co-chair, Mayor's Office of New Urban Mechanics, Boston*

USER-CENTRICITY

"If you want the wisdom of the crowds, the wisdom of the ordinary citizen to weigh in, you have to somehow take that complexity and reduce it to something that's a set of principles."

- Brad Burnham, *Union Square Ventures*

"I think that a difficulty for policymakers is to understand that the community is not actually in the policy space. Communities and citizens want to hear their politicians and their policy leaders talk about values in a way that appeals to their emotions, in a way that appeals to their ethics, not just provides a technical, engineering solution."

- Rod Glover, *former Deputy Secretary, Innovation and Projects, Department of Premier and Cabinet, Australia*

"In the data space, we've been working for over a decade now on pursuing the idea that people ought to be able to define their own way of interacting with data. Historically, it's all been about developers creating applications that manage a certain kind of data and manage that data a certain way. We always ran into problems with people who want to do something different with that data or combine that data with a different kind of data or look at that data in a different way than the developer thought they would want to look at it.

Those rigid applications really interfere with people managing information instead of supporting them in managing information. They constrain what they can do...

Data.gov is this really ambitious project to push data out of government. One of the things that always worries me is that it doesn't help to push it out if there's nobody there who can then receive it and do something with it.

So, you're getting all of these datasets, which don't have applications. The mortality rates in hospitals, there's not an application for that. How is somebody going to take that data and look at it and do a task with it or make some decisions from it? There has to be a way to design or create the tool that will let them have the appropriate interactions."

- David Carter, *MIT Computer Science and Artificial Intelligence Laboratory*

"When we talk about data, we mean quite a lot of things. That data is, on the one hand big data. It's like the medical record. It's big, structured data. It's also unstructured people's comments. There are lots of kinds of data. What we want is to feed all these data into a space which will help people make sense of themselves, to make sense for individuals."

- Tim Kelsey, *National Director for Patients and Information, National Health Service, UK*

EXPERIMENTATION

"Probably the best idea that I took, it was this idea of experimenting government and that the government can also try new things. I think the subject around open government and open government and innovation, it have been a lot...there's been a lot of discussion around it. On this specific summit, I think it was clear that the government has to find new ways to do things and that the government can make mistakes, can experiment and a lot of things that we did in the past that didn't work and now have the opportunity to change that."

- Rudi Borrmann, *Open Government Director, City of Buenos Aires, Argentina*

"I would rather move forward than get on the same page because I think what's better is to experiment with lots of different ways, but run a lot of small experiments, none of which could be catastrophic on its own. But learn from those experiments, rather than trying to define a perfect solution, which would take a long, protracted, political process."

- Brad Burnham, *Union Square Ventures*

"[F]or government people, you can't experiment on your citizens. This is obviously a different kind of space and I think it is important for people to embrace that, but it is okay to try something quickly. It doesn't mean that you are going to implement it in your home country, right? We're exploring the space of ideas; we are not making choices that will affect huge populations today.

It's a difference of culture, right? Hackers want to fail fast. Hackers want to come up with a minimal viable product. If you're running a healthcare organization, MVP is not sufficient, right? I think getting a broader group to experiment with the ideas of quick iteration—just experimenting with ideas—is a cultural exchange."

- Aaron Schumacher, *Senior Data Services Specialist at New York University*

"You could have an apps challenge that says, 'We don't actually know why we're having an apps challenge. We just want people to get together this weekend and work on things that they care about.' The more we try to layer on a specific and anticipated or expected outcome, the more limited the participation is going to be, except for the people who are really, really interested in that."

- Peter Levin, *former Chief Technology Officer, U.S. Department of Veterans Affairs*

INTEROPERABILITY

"It's like trying to define a standard in the tech world. It's just really hard, but if something emerges organically, or lots of different things emerge organically, what generally happens is one of those things grows to a point where it becomes a de facto standard. I think that's a better approach."

- Brad Burnham, *Union Square Ventures*

"I think it's a cultural challenge that we need to change and it's really hard to do it, but I think it will be great. If the government creates new ways to adapt to innovation of foster way and embrace this kind of collaboration, open collaboration, inside the agencies."

- Rudi Borrmann, *Open Government Director, City of Buenos Aires, Argentina*

GOVLAB RESEARCH

"One of the things that really made it clear to me is that if this emerging field is going to become a community, we really have to start having ways to share that knowledge. It's not, 'Wait 'til it gets published in some paper somewhere.' It's what worked in a community, what worked in another place, not even the academic stuff."

- Professor Jim Hendler, *Rensselaer Polytechnic Institute*

GOVERNMENT-CITIZEN TRUST

"[Open Data] is just beginning, but one of the first things it does is you can get reactions of people to this new idea—do they feel good about privacy, do they feel safe, do they see value in it—and it's those facts on the ground where you really do it that are going to make the thing either go or not go. It's all good ideas and good intentions now. You really have to actually try it out and be able to point to successes to make the thing move forward."

- Sandy Pentland, *Director of the MIT Human Dynamics Laboratory, MIT Media Lab*

"There is a bit of reality that I am excited to talk about, which is how do you get your citizenry to trust that, if I do help you innovate and help you change, and look at government differently—how would I trust that something actually will happen? That's, I think. something that you can't academically study. It is though something that you can look at experientially and no one believe that. There are people who don't trust government at all but could, if there were that means for them to engage and engage in something that they have an insight into."

- Jon Frederickson, *Vice President of Government, InnoCentive*

"In this country, and certainly in the Northeast in New England, there's a strong tradition of town hall meetings. Those work because people have trust in each other, in the community. They had shared goals and so on. Obviously, that model really hasn't changed much in 400 years and has not been adapted to suit the modern world."

- Nigel Jacob, *co-chair, Mayor's Office of New Urban Mechanics, Boston*

CULTURE SHIFT / COMMUNITY-BUILDING

"It's true the cultural barriers can be the real show stoppers. We've got the technology in some sense. It's the willingness to as you say take that view that the state doesn't know everything, that actually other people can do smarter things than they can do with their own data, that the innovation should be supported openly."

- Professor Nigel Shadbolt, *University of Southampton, chairman and co-founder of the Open Data Institute*

GOVLAB RESEARCH

"Put very simply, the complexity and the uncertainty that surrounds change in large-scale systems, whether it's economic systems or health systems or education systems or sustainability questions, the complexity involved in those questions is beyond the capacity of governments in their traditional form to deal with. The traditional, industrial, hierarchical model of government is generally a closed process. It is hierarchical and it's a system where the job, more often than not, is to develop a plan and then deliver on a plan. That runs fundamentally contrary to the nature of the types of wicked problems that we're facing in government today whereby the solutions to problems, and even the definition of problems themselves, is a function of the actions or the commitments or the attitudes or beliefs of not merely policymakers in a centralized government but actually of distributed players reflecting devolved actions across stakeholders, businesses, communities, citizens. It's a point that governments can no longer solve these questions themselves, and yet the traditional models of government are fundamentally still structured as if they can."

- Rod Glover, *former Deputy Secretary, Innovation and Projects, Department of Premier and Cabinet, Australia*

"I would appeal to the hacker community's credo of social impact. I would be very, very clear. You're doing this in your community for somebody who needs a helping hand because you know something? Day after tomorrow, you're going to be the one in your small community who needs a helping hand. The idea that we're creating in these kinds of communities and that we're using web and web-enabled technologies to facilitate and catalyze those communities, that is the best possible use of Internet technologies."

- Peter Levin, *former Chief Technology Officer, U.S. Department of Veterans Affairs*

Creating a collaborative culture between tech world and government: "They [government] have the nails. We [tech world] have the hammers. But, they need to tell us about the nail so that we can create the proper hammer."

- David Carter, *MIT Computer Science and Artificial Intelligence Laboratory*

"Creating that interdisciplinary connection from computer sciences to government people from theoreticians or academics to practitioners, I think, that's really essential for defining the right problems to solve."

- David Carter, *MIT Computer Science and Artificial Intelligence Laboratory*

GOVLAB RESEARCH

APPENDIX IV: Further Reading – Comparative Benchmarking Studies

1. **"Highlighted Best Practices for Open and Accountable Government."** Project on Government Oversight. March 2013.

Summary: The Project on Government Oversight, with contributions from other organizations, provided and reviewed examples of U.S. Federal Government transparency and accountability practices to be shared with other agencies.

Key Findings:

▶ Proactively release government agency data in a timely, accurate, searchable, and user-friendly manner.

▶ Make public participation as simple as possible (i.e., focus on user-experience in design process) and make the initiative as inclusive as possible.

▶ Invest in an "infrastructure for openness" to ensure scalability across agencies, as well as to enhance intra-agency operations.

2. **"Becoming a Digital Nation: An Evaluation of Provincial and Territotial eGovernment Initiatives."** Version 1.1. The Stratford Institute for Digital Media and Brainmaven Research. April 2012.

Summary: The report takes an in-depth look at how Canadian citizens interact with government, specifically at the provincial and territorial levels, and ranks them according to three components: how well average citizens are able to complete basic government services online; access government information online; and engage and interact with their government online.

Key Findings:

▶ Top performers in each category are: Québec for its provision of citizen-centric online services; Ontario for its provision of integrated online information; and Alberta for its effective use of social media to engage with citizens online.

▶ Considering overall performance, British Columbia is highly rated, with the most consistently citizen-centric and integrated eGovernment initiatives in online services (rank: 4), online information (rank: 2), and online engagement (rank: 2).

▶ The majority of provincial and territorial governments are incorporating technology to create more citizen-centric online environments, and integrating deep-linked content that spans ministerial, departmental, and at times even governmental boundaries.

3. **"The Call for Innovative and Open Government: An Overview of Country Initiatives."** OECD. March 2011.

Summary: This report presents an overview of country initiatives concerning efficient, effective public services and open and innovative government.

Key Findings

▶ The increasing technological shift and reliance on IT provide an opportunity to create a new paradigm for the future of the public sector and the state.

▶ Collaboration with citizens and civil society will become a cornerstone for future public sector reforms.

▶ Trust remains an overaching goal, which includes paying attention to openness, integrity, and transparency leadership, efficiency through innovation, and preparedness for future challenges.

▶ Countries are developing three streatgies to facilitate reform implementation: mobilize citizens/customers, involve the private sector and civil society, and include all public stakeholders at different levels, especially local government.

4. **"Digitizing Public Services in Europe: Putting Ambition into Action."** Capgemini and Sogeti, IDC, Rand Europe and DTi for the European Commission's Directorate General for Information Society and Media. February 2011.

Summary: This report captures the findings of the 2010 eGovernment benchmark survey, conducted over the period May to December 2010. The benchmark is a collaborative exercise, designed by and involving both the European Commission and country representatives. The benchmark uses a comprehensive ranking system to identify those European countries that have implemented the most mature eGovernment services.

Key Findings:

▸ Most administrations now see eGovernment [open government] as an enabler to transform the public sector, significantly changing their relations with citizens and businesses and harvesting the gains in efficiency and effectiveness of the services in the process.

▸ Most regional and local governments lag behind national governments in launching and fulfilling open government intiaitives, which poses the question of the efficacy of governance within and across administrative layers.

▸ No matter the governance structure of a country, diligent coordination of activities and collaboration across agencies/ministries remain key success factors to achieve more consistent progress.

5. **"Developing Public Value Metrics for Returns to Government ICT Investments."** Anthony M. Cresswell and Djoko Sigit Sayogo. Center for Technology in Government, University at Albany. June 2012.

Summary: This report presents a new approach to assessing public value returns as part of an overall return on investment analysis for government information and communication technologies (ICT). The approach addresses one basic question about public value assessment: What constitutes good evidence of public value impacts?

Key Findings:

▸ Public value impacts of government ICT investments are interconnected and multidisciplinary, imbedded in a context of social and economic activity.

▸ To identify the expected public value impacts of that investment it is necessary to look at how it links to the interests of stakeholders, individuals or organizations (both formal and informal.)

▸ In spite of the differences in language and details, the similarities between the national level approaches (U.S., Australia, Canada) are many and significant. All the approaches employ a substantial mix of quantitative and qualitative indicators, and have an emphasis on outcome assessment.

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About The Governance Lab – thegovlab.org

The GovLab builds, studies and implements experimental, technology-enabled solutions that advance a collaborative, networked approach to re-invent existing institutions and processes of governance to improve people's lives. Our work is predicated on the following hypotheses:

▸ Institutions that govern themselves more collaboratively solve problems faster and with greater success.

▸ Greater engagement leads to more legitimate democratic governance and also to better solutions for citizens.

The GovLab is housed at New York University and funded by grants from the John D. and Catherine T. MacArthur Foundation and the John S. and James L. Knight Foundation.

GovLab Research convenes an interdisciplinary network of thought leaders across academia, government, and industry to analyze novel forms of collaborative problem-solving in public and private institutions. Despite advances in collaborative governance, there has been little systematic study of what approaches work best under varied conditions. We produce scholarly research and map real-world developments to create a robust understanding of how scientific and technological advances can be harnessed to improve 21st century governance.