

# The Interaction of Open Data and Constituent Services

## How Citizen Service Platforms Help Drive Open Data Programs

written by Spencer Stern



Municipalities are frequently seeking new ways to engage their constituents. For many, deploying a 311 call center or a centralized customer service function is the initial step taken to communicate directly with constituents. At a basic level, these centers allow interaction with constituents as well as provide timely, accurate responses to information and service requests. More advanced centers integrate their Customer Relationship Management (CRM) software, that typically fuels the center, with GIS, work order management, or even licensing and permitting software to supply constituents with a “one stop shop” experience.

Though municipal leaders are very pleased with the performance data they are collecting, the initial excitement tends to wear off when they begin to tackle the issue of how to share and leverage data to enhance performance and create better communication with constituents. As constituents demand more data, and better access to it, municipalities across the board are racing to:

- Enhance transparency about the municipality's own operations
- Actively partner to develop innovative solutions
- Identify and drive improved municipal accountability
- Target solutions to meet specific constituent needs

Prior to initiating the conversation about how data can be leveraged, it is important to baseline the function of a 311 or centralized customer service center (CCSC). For many municipalities this runs along the following continuum:

- A centralized intake point for constituent-generated service and information requests
- A multi-channel intake point for constituents to communicate and interact with the municipality in their preferred manner. I.e. web/portal, text, social media, mobile, phone, etc.
- Focal point that can be utilized to inform a constituent about relevant community issues
- A platform for enhancing awareness of key community issues
- A repository that collects volumes of data on constituent-generated transactions and leverages that data into a performance management program, which, in turn, could improve the municipality's ability to deliver services

There is no “one size fits all approach” for determining what the CCSC should look like. This will be driven by several factors including:

- The vision of community leadership
- Financial capability
- Expertise of internal personnel
- The ability to successfully address cultural change issues
- Willingness to innovate
- Readiness to embrace accountability

Each municipality has constraints they must address when deciding the ultimate function of their CCSC. That being said, municipalities must also continue to innovate. When a CCSC is established, it is critical they continually adapt to constituents’ expectations.

## The Importance of Data Collection

As the ideas of government transparency and citizen engagement trickle into the mainstream, the pressure on municipalities to deliver on these demands increases. Below are the top 10 factors driving municipalities to do a better job of collecting and managing their data.

1. To transform the way residents experience government services
2. To increase accountability for service fulfillment
3. To enhance transparency into municipal operations
4. To provide constituents with access to real-time data
5. To fit both the new and old ways in which constituents communicate and participate
6. To create innovative bidirectional relationships with constituents
7. To foster collaboration between municipal departments and among constituents
8. To empower and engage constituents by allowing them to participate in problem-solving and improved service delivery
9. To facilitate data-driven decision-making by the municipality and its communities and neighborhoods
10. To identify opportunities for improvement of municipal services

In the last few years, governments of all sizes have been doing a good job of collecting data as there are many tools in place to help the process. The issue many struggle with is what to do with the data once it is collected. Because many municipalities do not have sufficient staff to process and analyze the data, it sits, typically stored in some cloud-based database, aching to get out and be useful. Even for those with the necessary staff are still challenged with how to share and array the data on both internal and external fronts.

Municipalities that have developed open data programs and started sharing data with constituents, have noticed the following results:

- Connected constituents with each other to help them solve problems by leveraging new media options to communicate and participate in civic life.
- Improved collaboration between departments and among constituents.
- Enhanced transparency into operations by providing constituents access to real-time data facilitating data-driven decision making for both community and officials.
- Identified opportunities for improvement of services allowing constituents to participate in the problem-solving process

## The Rise of Open Data

Open data programs allow municipal leaders to secure real-time insights from more platforms than ever before. Social media, web/portal, and video cameras are some of the many places these insights are coming from and are being used to make more accurate decisions, achieve greater efficiencies, and respond quicker in both emergency and non-emergency situations. By sharing information across different departments and creating an atmosphere of transparency, constituents will have the opportunity to see how this data impacts them, enabling better insight into policy decisions and how elected officials vote.

Another aspect of providing the data is the potential to increase constituent satisfaction. Even if the data provides the same information they currently have, satisfaction with the services delivered has a better opportunity to grow due to the availability of data in a user-friendly, digestible format. An open data program helps:

1. Foster a connected environment
2. Enhances the value of civic relationships
3. Encourage open and more frequent dialogue
4. Address constituent concerns on a more rapid basis
5. Leverage constituent involvement to develop civic apps and programs leading to potential cost efficiencies for the municipality

In his 2013 publication<sup>1</sup>, Executive Director of the Public Technology Institute (PTI), Dr. Alan Shark identifies the following four pillars of open data as:

1. Volume – The ability to process and analyze monumental amounts of data.
2. Velocity – The speed in which the data can be processed and analyzed.
3. Variety – The ability to pick and choose various data sets at any moment.
4. Veracity – The ability to verify the integrity and trusted sources of data.

Adding a 5<sup>th</sup> V, for visualization, that refers to the ability to display and share the data in a customized, easy to understand format would strengthen Dr. Shark’s foundation of open data. A good visualization program provides a single, unified, consistent, real-time view of all activity across all channels, whether the user is a CCSC agent, departmental employee, supervisor/director or constituent.

## Changing the Nature of the Constituent Relationship

Empowered constituents demand and rely on accurate, timely information to facilitate subsequent interactions with government and each other. Providing them with the ability to track progress on initiatives, request and/or campaigns through sharing data in a visually appealing, easy to use format will be a key driver to enable this behavior. To be successful with open data initiatives, the municipality's vision should extend far beyond responding to information and service requests. It requires participation on a digital level, in the neighborhoods where the constituents reside. Philadelphia's Managing Directors Office's program: [Philly Rising](#) is a great example of this type of approach. Philly Rising targets neighborhoods throughout Philadelphia that are plagued by chronic crime and quality of life concerns, and establishes partnerships with community members to address these issues.

Helping constituents better visualize and utilize their community's data is about more than enhancing the existing CCSC. Initiatives of this nature should focus on how the data can fundamentally alter the manner of the incumbent relationship.

### Tips on Constituent Engagement

#### *Create advisory group of constituents*

To help foster constituent engagement, a municipality can convene a representative group of active neighborhood associations that could provide targeted advice on how to interact with the CCSC and how the data should be presented. By creating an advisory council and developing a strategic plan containing recommendations on how the CCSC can promote and encourage greater engagement, the council would play an active civic role. The council members can also serve as neighborhood liaisons for the CCSC. By securing training on how to use new data tools, they would not only be equipped to train others but would also act as feedback loop to provide the municipality suggestions on new ideas and/or services to implement.

#### *Encourage and support your civic hackers*

The City of Chicago is taking civic engagement to another level by supporting a group that creates apps to improve transparency and understanding of City government called [Open City](#). Open City sponsors a weekly Open Gov Hack Night at a local entrepreneurial hub that attracts those working in the fields of open government, municipalities, and technology. The attendees discuss collaboration, civic hacking, and networking and range from Data Scientists to Municipal Employees to Developers and Designers to Policy experts.

#### *Dedicate employees to manage data*

To help manage the influx of new data, more than 15 municipalities have also created the role of Chief Data Officer (CDO). Typically this position is found in larger municipalities like Chicago, Philadelphia,

and Baltimore who have a significant amount of data to manage. For other municipalities, the CIO or another IT employee leads the open data effort. Since the volume of data collected will be large, for communities of all sizes, it is imperative to have dedicated employee on a full or part time basis to manage data collection.

#### *Use technology to close the feedback loop*

The City of Boston is another example of a municipality leveraging constituent feedback through their [Citizen Connect](#) program. The site includes features designed to build closer ties between constituents and city employees. After an employee completes a repair they can take a photo of the fix and send it to the constituent who submitted the initial request. Accompanying the photo, the constituent receives the names of the city staff responsible for the completing the work, they can then respond with multiple forms of recognition.

### Showcase: City Successes With Open Data

#### [City of Chicago Data Portal](#) Chicago, IL.

In 2012, The Chicago Tech Plan developed Initiative 14, in which Mayor Emanuel issued an executive order ensuring the continual release of new data, and empowering the Chief Data Officer to work with other City departments and agencies to develop new datasets. The City is adhering to an aggressive schedule for releasing new datasets to the public and updating existing sets. The Initiative also works to facilitate ways the City and others can use data to help improve City operations.<sup>2</sup>

The City has secured some rapid results from this initiative, including uploading more than 1,000 data sets on-line. Constituents have then used these datasets to develop apps that better the community, including a [flu shot finder](#) and an approach that rapidly and accurately pinpoints the [City's rat population](#).

#### [Open Data KC](#) City, MO.

One of the leading mid-sized cities to launch an open data program with more than 3,000 sets, Kansas City is making a concerted effort to place more community-based data on-line. They are planning to publish a court scheduling data set for housing court-related issues that would inform citizens of upcoming dates so they could participate and/or testify. In addition, their dangerous buildings data set has helped community leaders better monitor potential crime-related issues in their neighborhoods.

Kansas City is also using the data to help make better decisions. Historically, the city has focused on spending time, resources, and funding on street re-paving, under the assumption that these are the kind of datasets citizens want. They cross-referenced street re-paving data with citizen satisfaction data and realized that removing litter from the streets, painting cross walks, and keeping the roads striped were much more important than re-paving, and led to higher satisfaction scores. This data helped Kansas City re-tool their street maintenance program, saving the city money while simultaneously increasing citizen satisfaction.

## [Data SF](#) San Francisco, CA.

One of the pioneers in the open data space, San Francisco, recently re-launched their citizen portal to make data more easily searchable. The portal is broken into three sections to help those who are not data specialists easily locate data relevant to them:

- Categories (Economy and community, transportation, public safety, etc.)
- Department (311, public works, planning, etc.)
- Data Types (Charts, maps, calendars, etc.)

Recently, the City also has leveraged internal data to develop innovative programs that address longstanding problems such as helping the City's homeless population secure easier access to shelters. Furthermore, additions to the [City of San Francisco 311 Explorer](#) application allows 311 data, dating back to 2008, to be searched by case status, supervisor district, and date range. A newly appointed CDO will continue innovation by following the City's recently released Open Data Strategic Plan.

Though many larger cities appear to have taken the lead with open data visualization initiatives, there are other smaller and mid-sized municipalities that have made great advances in this area including:

- [Hartford Data](#) Hartford, CT
- [City of New Orleans](#) New Orleans, LA
- [Halifax Open Data Catalogue](#) Halifax, Nova Scotia

## What the Future Holds

Moving forward, the amount of available municipal data will increase significantly. Adhering to the "5V" principles outlined earlier will become increasingly important. As open data programs spreads municipalities should:

- Accelerate the speed of pushing out the data to stakeholders
- Remain receptive to innovation; actively engage the vendor community and constituents for recommendations
- Validate importance by demonstrating how data is being used for improve decision-making
- Enhance usability and impact through multi-channel visualization structures

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## About the Author



Spencer Stern specializes in assessing the business and process impact of new technology-based solutions, ranging from enterprise-wide software systems to wireless communications networks. Prior to starting Stern Consulting in 2008, Spencer led the Public Sector Practice of Chicago Office at Baker Tilly/Virchow, Krause. Previously, while working at Motorola, he initiated the company's Public Sector 3-1-1/CRM consulting practice, which focused on delivering Business Process Re-Engineering (BPR), Change Management, and Return on Investment (ROI) studies for clients. Stern was also a founding partner of Market Strategy Group, LLC, a boutique management consulting company based in Chicago, where he led their Public Sector practice. He has been an advisor to senior management for a variety of public and private clients since 1991, including AT&T, Verizon, Microsoft, Accenture, Lucent Technologies, NEC, Hewlett-Packard, City of Chicago, City of Baltimore, City of Chattanooga, City of Carlsbad, CA, and Waukesha County, WI. Stern holds a BS in accounting from the University of Illinois and an MBA in corporate finance and strategic management from The Wharton School of Business, and is also a CPA and a Six Sigma Certified Green Belt.

## About Socrata

Socrata, the open data market leader, is the cloud software company focused exclusively on democratizing access to public sector data for the most innovative organizations around the world, including the cities of New York, Chicago, San Francisco, Los Angeles, Melbourne and Eindhoven; the states of New York, Illinois and Texas; US Health and Human Services; Centers for Medicare & Medicaid Services; the UN and the World Bank. Socrata's solutions – including the recently launched Open Data Network™ which unleashes the full potential of government data to help drive connected communities around the world – assist government leaders in improving transparency, modernizing citizen access to information and bringing data into every decision, all with unprecedented speed and cost savings. Delivered as turnkey services, Socrata's technologies unlock data trapped in enterprise silos, mobilize and transform it into useful information that everyone can easily access, visualize, share and reuse. To learn more about Socrata, visit [www.socrata.com](http://www.socrata.com).

## Sources

1. Article published by International City/County Management Association (ICMA), July 16, 2013, Dr. Alan Shark. "The Big Deal about Big Data"
2. City of Chicago, IL, Technology Plan, Initiative #14, issued in 2012. Plan details are located at <http://techplan.cityofchicago.org/initiatives-by-strategy/effective-government/initiative-14/>