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CUSTOMER-DRIVEN GOVERNMENT: HOW TO LISTEN, LEARN, AND LEVERAGE DATA FOR SERVICE DELIVERY IMPROVEMENT

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INTRODUCTION

Public trust in government is low — of the 43 industries tracked in the [American Customer Satisfaction Index](#), only one ranks lower than the federal government in satisfaction levels. Local government ranks a bit higher than the federal government, but for most of the public, that makes little difference. It's time for government to change that perception by listening to its customers and improving service delivery.

PAPER SERIES

This paper is part of a series published by Data-Smart City Solutions, a project of the Ash Center at Harvard Kennedy School. The series explores data-related facets of civic engagement in today's cities.



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What can the cup holder in your car teach government about customer engagement? A cup holder would be hard to live without — it keeps a latte from spilling and has room for keys and a phone. But the cup holder was not always such a multi-tasker. The first ones were shallow indentations in the plastic on the inside of the glove box. Accelerate and the drinks went flying. Did a brilliant automotive engineer decide that was a design flaw and fix it? No. It was only when Chrysler received more complaints about the cup holder than about anything else in their cars that they were forced to innovate. Don Clark, a DaimlerChrysler engineer known as the “Cup Holder King,” designed the first of the modern cup holders, debuting in the company’s 1984 minivans. The engineers *thought* they knew what their customers wanted (more powerful engines, better fuel economy, safety features) but it wasn’t until they listened to customers’ comments that they put in the cup holder. And sales took off.

Today, we’re awash in customer feedback, seemingly everywhere but government. Over the past decade, customer feedback ratings for products and services have shown up everywhere — whether in a review on Yelp, a “like” on Facebook, or a Tweet about the virtues or shortcomings of a product or service. Ratings help draw attention to poor quality and allow companies to address these gaps. Many companies routinely follow up a customer interaction with a satisfaction survey. This data drives improvement efforts aimed at keeping customers happy. Some companies aggressively manage their online reviews, seeking to increase their NPS, or net promoter score. Many people really like to provide feedback — there are 77 million reviews on Yelp to date, [according to the company](#). Imagine the power of that many reviews of government service.

If customer input can influence the automotive industry, and can help consumers make better decisions, what if we turned this energy toward government? After all, the government is run “by the people” and “for the people” — what if citizens gave government real-time guidance on improving services? And could leaders in government ask customers what they want, instead of presuming to know? This paper explores these questions and suggests a way forward.

I. THE PUBLIC HAS DEMONSTRATED AN INTEREST IN PROVIDING FEEDBACK TO GOVERNMENT

Government is beginning to reach out to customers for input. A handful of federal agencies have even appointed Chief Customer Officers (CCOs). But a handful of official customer-focused leaders in [a workforce of 4.2 million](#) is not enough. Several diverse initiatives at the state and local level have shown in recent years that the public will, if asked, provide their input into government decision-making or service delivery improvement. A few examples include:

- New York City has joined the growing movement for participatory budgeting, a process in which residents make choices on how to allocate a specific amount of the municipal budget. Globally, a total of 46,000 people have participated in participatory budgeting projects worth [\\$45 million](#).
- The City of Pittsburgh regularly uses [MindMixer](#) to gather input on neighborhood infrastructure priorities as well as citywide capital budget plans. As a supplement to in-person public meetings, the tool has amplified both the volume and diversity of voices contributing to city decision making.
- Philadelphia used Textizen to create a text-message town hall meeting about where to locate bike share stations. In just three weeks, they received [700 responses](#), which allowed the city to understand where bike share services were most wanted. Getting that many people to participate in a physical town hall meeting, if possible, would have taken a great deal more time and resources.

What these examples have in common is that they solicit advice on a particular, one-time basis to get tactical input to strategic government decisions. What they don't do is provide ongoing feedback about basic government operations.

II. SURVEYS ARE A HELPFUL METHOD TO GATHER CUSTOMER FEEDBACK

The United States government has been conducting surveys since its founding. The first census was conducted in 1790, a year after George Washington was inaugurated. Long before big data, our government collected massive amounts of population data. By the early 20th century, when the advent of the home telephone enabled the modern survey, government had already been collecting census data for a century and half.

Many government agencies effectively gather survey data and use it to improve performance. For example, since beginning its customer satisfaction survey program, San Francisco has seen customer satisfaction [increase over time](#). The survey assesses satisfaction with everything from education to senior services. Many agencies, including the city's 311 call center, have improved their performance based on the feedback from the survey. Other examples include:

- **Federal Websites.** Users of federal government websites get a pop-up survey requesting feedback. Last quarter, 220,000 people answered the survey and provided feedback on over 100 sites. This is a small portion of the [1.4 billion visits](#) to federal websites per quarter, but it's a start. And the U.S. Department of Veterans Affairs has used the data from this survey to make its website more user-friendly, adding navigational paths to address top-priority interests.
- **Denver.** The City of Denver uses customer feedback surveys frequently to get input on specific issues that need attention. Recently, a customer feedback survey helped locate issues in the city's licensing process. Changes based on this survey input, together with process mapping and strategic pushes of information to the city website, have helped reduce wait times for permits considerably.
- **Kansas City.** For a decade and a half, Kansas City, Missouri has conducted a [quarterly resident survey](#) to assess areas of greatest need for city attention. Every year, 9,000 residents are given the opportunity to share their thoughts on everything from street lighting and parks to public safety,

helping the city identify resident priorities. The survey has an impressive 50% response rate. The survey asks for feedback on quality of services, and also asks respondents to prioritize different departments and activities. This allows city leaders to have real input in deciding between funding initiatives – for example, the data might show whether residents place a higher priority on recreational programs or roadway improvements.

Customer feedback surveys are a valuable tool for government that could be more widely and systematically applied.

III. SOCIAL MEDIA ALLOWS GOVERNMENT TO CONNECT WITH ENGAGED CITIZENS

Government uses social media to engage with the public, but not yet in a systematic or standardized way. Many government agencies use social media to push information out to citizens, but far fewer are using it for two-way communication. Some agencies actively monitor social media feeds and a growing number take 311 requests via Facebook or Twitter (68% of agencies in a [recent municipal 311 survey](#) say they take service requests via social media). Boston city employees have the option of taking photos of their completed work (potholes fixed, streetlights repaired) and sharing them with those who use the Citizens Connect mobile app. But very few government agencies fully exploit the potential of social media to provide customer feedback.

Government could make greater use of social media. For example, we might choose which post office to go to based on others' feedback about where the staff are friendly and efficient. Real time feedback from other travelers could help us choose the shortest TSA security line. We could choose which park or library to use based on reviews rating the quality, cleanliness, and courtesy of staff. Transparency of service ratings could inspire staff at post offices, security checkpoints and libraries to compete against one another to get higher customer service ratings. Agencies could award staff bonuses for achieving benchmarks of customer service excellence and re-orient performance management around the customer.

Government Yelp pages are more common for agencies that directly serve the public on a one-to-one basis, such as departments of motor vehicles, post offices, libraries, courthouses, fire and police departments. Less common are Yelp pages for agencies without a public face, such as those that repair potholes, maintain public parks, regulate the timing of streetlights, or repair graffiti in public places. This is likely because these agencies typically don't think of themselves as customer-facing and are less likely to create a venue for online feedback. Wouldn't it be great if government sought out input on the quality of those services, and sought our input on how to improve them?

A few examples of government using social media in compelling ways include the following:

- **Foodborne Chicago.** The City of Chicago, through a project of the Smart Chicago Collaborative, [automatically searches tweets](#) that appear to be about foodborne illness originating from Chicago restaurants. Then staff review tweets and look for indications of illness. This helps city restaurant inspectors find violations of sanitation code that would otherwise have been unaddressed, and prevents further incidents of illness.
- **Washington, D.C.** In Washington, D.C., social media sources are mined and combined with other customer feedback to assess how the public feels about each agency. Each agency receives a grade based on this data; these grades are shared on the city website and updated regularly on a dashboard called "[Grade DC.](#)" The goal is to help customers easily offer actionable feedback and help D.C. government agencies to improve the quality of customer service.
- **Santa Monica.** With its groundbreaking [Wellbeing Index](#), the city of Santa Monica is integrating survey data, administrative data from the city state, local and national sources, and social media data to compile the first-ever local index. Linguistic content analysis of public Twitter data is used to assess the sense of community as well as positive or negative sentiment. This data-driven approach is anchored by a multi-dimensional framework developed by the RAND Corporation and UK-based New Economics Foundation. It is the first of its kind and promises to revolutionize how government understands the needs of citizens. Combining social media insights and self-

assessment data allows for a more granular analysis of wellbeing than ever before, allowing government to precisely target services to improve the health and welfare of its citizens. The Wellbeing Project is a winner of the [2013 Bloomberg Philanthropies' Mayors Challenge](#).

- **Federal “Yelp” Pilot.** The federal government is in the process of creating a “feedback button” and anticipates running a trial of the system with at least one agency this year. The idea is to provide a Yelp-like communication vehicle for the public to rate their interaction with the federal government. The pilot is anticipated to focus on just a few websites or services, so it will be quite a while before there is a platform for grading the entire federal government.

Social media engagement by the public with government is an emerging area, and is not yet routine for either the government agency or for the user. Companies in the consumer market (banks, retail establishments, even small businesses) are relentless in monitoring customer feedback. Why not government?

IV. 311 DATA IS AN IDEAL PLATFORM FOR SYSTEMATIC CUSTOMER FEEDBACK

Anyone who has ever called city hall to ask a question or request service is a customer who can provide feedback on how to make government better. Each caller has chosen to engage with government, so why not ask them to engage a bit more deeply by providing feedback? There is more than sufficient call volume to provide a reasonable amount of survey feedback. New York City alone has fielded over 200 million 311 calls since the launch of its 311 center, and together New York and Chicago field about [25 million calls](#) a year. While the database of past 311 callers isn't representative of everyone who has an idea about how to improve government, it's a good start. There isn't a 311 center in every city, nor does every American call 311. But 311 calls do represent a huge nationwide customer database. And if every local 311 call center

used its customer database to reach out and ask for feedback to make government better, it would be a powerful force for improving government. And it just might improve public confidence in government, too.

Transformational? It just might be better than the cup holder in your car.

Most city 311 systems already allow feedback on the call center customer experience. In the past decade, customer satisfaction levels with 311 service have improved in nearly all cities that track this data. Not yet well-measured is customers' opinion of the services requested through 311. One proxy for this, however, was studied in [Edmonton, Alberta's call center survey](#). Overall satisfaction was high and has been increasing (96% are satisfied with the call center's ease of use, 96% are satisfied with the politeness of call center employees, and 90% are satisfied with the time it took to reach an employee in this year's survey). But only 81% said the issue they called about was resolved in a timely manner. And for those who made a follow up call, the most common reason was because the "concern is still outstanding." In fact, twice as many survey respondents reported that as their reason for calling than the next most common reason. If this is true at other call centers, then the work to be done is not in making customer service representatives more responsive, but in making city services more responsive.

Most 311 satisfaction surveys ask whether the city employee was courteous, and whether the customer received accurate information. Left unasked is whether the original problem was fixed. Today, the ubiquity of customer satisfaction surveys in the private sector makes it surprising that one rarely sees this follow-up step in government.

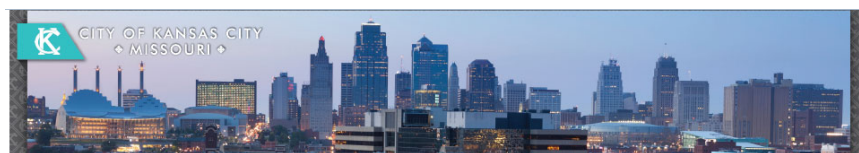
What if we went beyond asking 311 callers just about the call taker but also asked about the quality of service provided in response to their request? Austin has been conducting its customer satisfaction survey quarterly for four years; as a direct result of the feedback received, it has made changes to its garbage pickup process to be more responsive to customer feedback. Montgomery County, MD allows for open-ended suggestions on any aspect of the relevant service at the end of their 311 caller satisfaction survey. Any suggestions for improved government service are forwarded to the agency responsible. Several other

cities allow 311 callers to provide feedback via their websites, but the most systematic and long-standing effort is in Kansas City, which has demonstrated the transformative power of leveraging this data.

V. KANSAS CITY USES CUSTOMER FEEDBACK FROM ITS 311 CALLS TO IMPROVE SERVICE DELIVERY

Kansas City, Missouri is the leader in using customer input to improve government performance. Residents there are happier with their government than almost anywhere else. The overall satisfaction with the quality of city services in Kansas City is 56%, compared to the 50% average for other major cities. Strategic use of data and proactive performance management has resulted in a 20% improvement in resident satisfaction with the city's image between 2010 and 2014.

In addition to the quarterly citizen survey discussed earlier in this paper, [Kansas City surveys its 311 callers](#). Every 311 contact, whether via phone, web, or mobile, may be surveyed to assess the quality of services delivered by the city. As shown in the screenshot below, the survey is quick, with just three questions asking for a rating on a scale of unacceptable to excellent. Two questions relate to the service provided and one to the 311 call experience. Consistently asking just these three questions has been a powerful tool for Kansas City.



311 Satisfaction Survey

Thank you for using the City Manager's Office 311 Call Center. Please rate the services provided by the department as well as the customer service provided by the 311 Call Center.

Your request for service number:

Department:

Quality of service provided by the department:

Excellent Good Acceptable Poor Unacceptable

Timeliness of service provided by the department:

Excellent Good Acceptable Poor Unacceptable

Customer service provided by the 3-1-1 Action Center:

Excellent Good Acceptable Poor Unacceptable

Comments:

0 characters entered. | 2000 characters remaining.

Submit Survey

For five years, the Office of Performance Management team has analyzed this data and worked with city departments to make government more responsive to customer feedback. The results are impressive — in the past four years, customer satisfaction with the service provided to 311 callers went from 77% to 83%. The current satisfaction rate with the 311 center itself is 90%. Kansas City 311 callers represent a broad swath of the population, with 54% of residents last year indicating they had used 311, up from 25% in 2007.

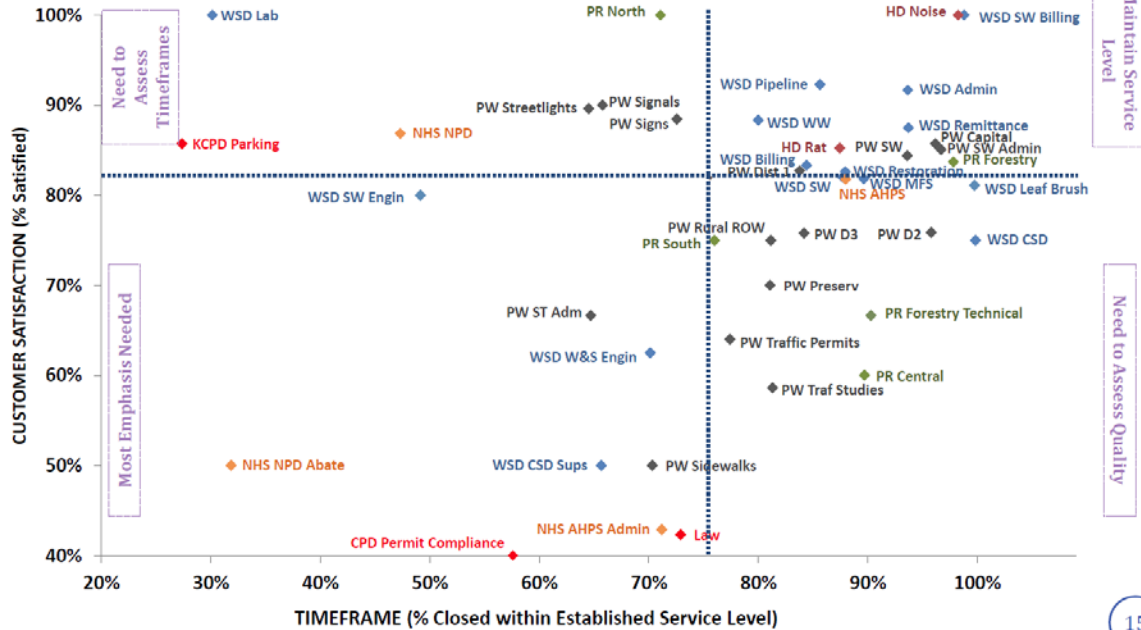
For Kansas City, 311 callers whose call results in a service request (about 20% of calls) are informed of the result of their call after the case is closed, and they are invited to take a feedback survey. All callers with associated contact information receive the survey. The survey reaches those who call as well as those who complete their service requests online or via mobile app. Every attempt is made to gather the caller's email address during the call to allow for a follow-up survey to be sent via email, the most cost-effective method. Callers who do not provide an email address receive a paper survey in the mail. Anonymous web users may fill out the survey online if they choose, but anonymous callers are not sent a survey. The survey allows the user to write down their complaint's case number so that the feedback can be associated with their service request. The response rate of 10% is high for such a survey, and provides enough data to perform statistically significant analysis by service category.

Analysis of results is done by activity type (e.g., graffiti removal) rather than by department. This provides clarity about which services require the most attention. Results are provided to the departments and are used in the city's monthly performance management (KCStat) meetings with the Mayor and City Manager (which are open to the public and livestreamed online). The results are also shared on the city's open data portal.

Kansas City's customer survey results have generally shown higher satisfaction with quality than with timeliness. Many agencies have improved their performance since measurement began. Performance is shown graphically (see below), with all services mapped on a single matrix. The further to the right a

survey result is, the higher the percentage of cases closed in a benchmarked timeframe; the closer to the top of the graph the result is, the greater the percentage of customers satisfied with the result.

311 MATRIX FY2015 YTD



Source: Peoplesoft CRM 311 Service Request Data and 311 Customer Survey

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When the survey was launched, customer satisfaction ratings for the Kansas City Water Services Department's Pipeline Maintenance group were among the lowest in the city. The agency had long done its work in a culture of isolation from the customer. Doing much of their work below ground and out of sight, they didn't think of themselves as a customer-facing agency. They often did the work without closing service requests in the system, making it difficult to track their progress. Further, they felt that customers didn't need to know how long to expect to wait for a water main to be repaired. But for their customers, hearing "as long as it takes" wasn't a satisfying answer. After analyzing the customer feedback data, the Director of the Water Services Department decided to improve external communications — establishing expected timeframes for completing repair work and sharing those expectations with customers. With a small investment in new staff and a large commitment to customer-focused communication efforts, the department increased its customer satisfaction rating for 311 service requests from 77% to 98%.

Another example of successful communications came from a snow removal effort. After seeing low citizen satisfaction ratings on snow removal, the city went on a media blitz. It provided information to help educate residents on what to expect — curb-to-curb plowing on main arteries, one lane of travel on residential roads, and the expected timeframe for plowing. In addition, the City Manager did a “Tweet-along” while driving in a snowplow, providing real-time updates on the city’s progress. Newly-enabled GPS data allowed the public to track snowplows. Survey data showed an improvement in customer satisfaction. Nothing about core operations changed — what changed was the amount of information the public had and their expectations of city performance. Satisfaction went from 50% (three years prior) to 62% based on these efforts.

Several Kansas City agencies have used customer feedback to innovate. Some examples include:

- The Kansas City airport now offers valet parking, and for those driving to the airport, there is a mobile app with real-time updates on available parking.
- The Parks and Recreation Department has created a tool to allow the public to sign up for programs and reserve facilities online. They are also using social media to proactively reach out to the public about various events.
- The Planning Department has enabled online submission of construction plans and electronic access to archived documents.
- The Water Department is expanding online capabilities in areas such as self-service options allowing customers to make payments, and to start and stop water service.

Not every agency has had a transformation because of the customer data. Agencies or services for which customer satisfaction have not improved over time tend to be those with more complex services (vacant buildings) or related to new capital projects, like resurfacing particular streets. Service requests that require multiple agencies to address often take longer and have less visible results. High volume, repetitive tasks are the most prone to be improved through iterative customer feedback.

When asked what advice she would offer to city leaders thinking about improving customer feedback mechanisms, Kate Bender, Deputy Performance Officer for Kansas City, suggests that other cities “just do it” and to “keep it simple.” She recommends that cities carefully consider how they will use the data they collect, as she notes that collecting data without using it can erode public trust in the process. The three questions Kansas City asks of 311 survey respondents haven’t changed in a decade, and she doesn’t see them changing anytime soon. Not only are they straightforward and easy to answer, keeping them the same allows effective analysis of the data over time. This helps with understanding improvements in agencies’ efforts, which can build buy-in. Furthermore, it allows comparison of the 311 customer satisfaction survey data with that of the citywide citizen survey.

VI. THE PATH FORWARD FOR LEVERAGING 311 DATA

Other cities are following Kansas City in using 311 as a platform for customer feedback. Boston, Denver, and Tulsa are planning to ask for customer feedback later this year. Some key considerations in surveying 311 callers include:

- **Which channels to survey.** Deciding which channels to use for the survey (phone, web, mobile) affects cost and the number of responses. Electronic surveys are the most cost-effective method, so they present a good starting point. They save time for city employees by simplifying data entry. In Kansas City, the 311 customer survey is handled in-house with a small budget for mailing costs. The customer satisfaction survey of 311 calls takes very little staff time to administer, perhaps the equivalent of .25 full-time equivalent employees to manage. Of course, it is important that surveys reach the largest volume of customers, so if a city’s main point of contact for 311 is by phone, then eventually developing a phone survey (or a way to reach callers via email or letter) is essential to maximizing outreach.
- **When to survey.** The survey should be done when the service request is complete. But there may be different definitions of “complete.” A department may mark a service request complete in the

request system once it has been assigned and is in the queue for completion. If that's the case, it can be counter-productive to send a follow up satisfaction survey to a customer at that point — they may simply become frustrated when reminded of a complaint that hasn't been addressed. Working closely with staff in the agencies to determine the right time to send the follow up survey for each type of service request will be essential.

There are limitations. Not every city has a 311 equivalent. Some departments will resist having the public rate the speed and quality of their service, let alone suggest improvements. And some constituents may not have an interest in providing feedback to improve government service; Yelp, for example, is built on a community of “engaged locals,” and not everyone will want to be engaged with government. And if Yelp's community is any indication, the audience of “engaged locals” may skew more toward the young and highly educated than the population at large.

Another significant limitation is that the underlying dataset of 311 calls may skew toward the quotidian. The easiest problems to address via 311 calls are routine, high-volume transactions, with garbage pickup and potholes being two examples. Far more complex problems remain that are far outside the scope of the 311 net, such as income inequality, balancing economic growth with preservation, and the quality of preschool programs. But 311 offers a great place to start finding ideas for improvement outside of city hall. Local government can lead the way in listening to citizens and letting them provide solutions.

VII. CONCLUSION

If I were a mayor, how would I begin harnessing customer feedback to improve service delivery? I would build a foundation for improving core city operations (trash pickup, pothole fixing, etc.) by using the same three questions Kansas City uses for follow-up surveys to all who contact 311. Upon that foundation I would layer additional outreach on a tactical, ad hoc basis. I would experiment with the growing body of tools for engaging the public in shaping tactical decisions, such as how to allocate capital projects and where to locate bike share hubs.

To get an even deeper insight into the customer experience, I might copy what Somerville, MA has done with its [Secret Resident program](#). Trained volunteers assess the efficiency, courtesy, and ease of use of selected city departments. The volunteers transact typical city services by phone or in person, and then document their customer experience. They rate the agencies, and the 311 call center, and provide assessments that can help improve customer service.

By listening to and leveraging data on constituent calls for service, government can move from a culture of reaction to a proactive culture of listening and learning from the data provided by the public. Engaging the public, and following through on the suggestions they give, can increase not only the quality of government service, but the faith of the public that government can listen and respond.

Every leader in government should commit to getting feedback from customers — it's the only way to know how to increase their satisfaction with the services. There is no more urgent time to improve the customer experience.

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