Lessons From Three Cities

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Local governments with effective professional management still want to improve continuously, and using data to reach that goal is an essential prac-

tice. But it's daunting to start a data analytics program, and mistakes can doom it to irrelevance. We visited three cities with programs at different stages of development—Kansas City, Missouri; Cincinnati, Ohio; and San Jose, California—to unlock their secrets for data-based decision making.

While every locality is different, and ideas that work in one place might not apply to another, we came away with leading practices and strategies these cities learned early on that can help others ramp up their data efforts.

Setting Up Shop

Support the data analytics initiative from the top.

Placing the data analytics team in the manager's office conveys support and ownership. Relegating it to a distant department may destroy it. Executives need to stay involved by attending meetings, championing results, and communicating its importance on an ongoing basis so department heads and others understand it is important.

Position the data analytics team as a unit to support operating staff.

The office and team should be viewed as a source of help for departments to address their problems in a cooperative way rather than creating more work for front-line staff. Cincinnati has dedicated space in a city-owned facility that includes analyst workspace, an innovation lab for process improvement events, and a meeting room designed specifically to discuss data analytics and performance measures, modeled after Baltimore's CitiStat.

Make the initiative sustainable.

While executive support is essential to launching a data analytics effort, the next step is to enshrine the use of data within the organization so it can withstand turnover at the top. Train staff, build capacity, develop tools for departments, and integrate data into operations so it is a key component and an institutionalized tool. Capturing and analyzing data to improve operations will become second nature throughout the local government and ensure it endures the eventual departure of its initial champions.

Identify processes in need of innovation and use data analytics to find efficiencies. An emerging trend is to identify citywide business processes that would benefit from innovation or new ways to perform work, and develop a framework for reengineering those processes. This is generally accomplished by mapping the current process and processes and identifying data that helps managers understand their performance.

Departments can use the baseline data to identify issues related to their processes, as **well as any issues with how data are collected, to inform a collaborative effort in modifying the process(es). The success of the modified process can then be gauged using the previously identified metrics.**

Find some early wins.

In San Jose, data professionals who do the work of data analytics for the government collaborated with the planning department to create a dashboard tool. This tool displays performance measurement data in a useful, practical, and visually pleasing way in the beginning stages of the data analytics organization. A happy partner leads to positive word of mouth, which leads to more departments seeking help, as opposed to being skeptical of what an external office might do with a department's data.

As the work of the analytics team gains traction and identifies more projects with which to help, prioritization starts to occur based on the effort needed to complete a project, likelihood of success, impact on constituents, and how it fits with the city's core mission.

Embed a data analyst within departments.

Department staff often don't know data well enough to figure out what to collect and how to interpret it. Data analytics team members often don't know a department's operations well enough to understand the performance issues. A data analyst assigned to a department or a few departments can act as a liaison who can facilitate communication and optimize efforts by understanding sometimes conflicting aims.

Creating Alliances

Tell stories.

Those who love data, love numbers; other people, maybe not so much. Make sure there's a story behind what the data are telling. After all, data are the means to an end and the end comes from the analysis of the data and the inferences, hypotheses, and conclusions that result. Kansas City devotes an entire blog called Chartland to the stories uncovered by its data. One entry digs into dangerous buildings—where they are and what residents want to see happen to them—while others look at wi-fi satisfaction at the airport and a reduction in water main breaks.

Knowing the "why" behind data and how it helps the organization improve makes staff more likely to become involved in capturing, analyzing, and using it. Knowing the intended recipients of the data, whether department staff, managers, policymakers, or the public, is important in determining what data might be useful to collect.

Engage willing departments first.

Working with departments and leaders who want help and will take ownership of the project increases the chances that the work product is used and beneficial to the participating department. Engaging willing departments also allows for a cross section of engaged and relevant staff to participate in working through problem areas and developing the tools to enhance performance.

Department leaders who ask for help are more likely to be pleased with results; their word-of-mouth recommendations will encourage other departments to see a data initiative as a helpful partner in developing useful tools, which will lead to more engagement from willing departments.

Some department heads will, perhaps understandably, be concerned about how data analysis could be used against them or create more busy work for employees. By building relationships and highlighting how a department can benefit from working with the data analytics team, department heads will be more willing to collaborate.

In Kansas City, the data analytics team developed metrics for each department's high-level goals and objectives with help from the executive leaders as some departments began to develop their own strategic plans with goals and objectives. The same team worked with each of the departments to make sure the citizen survey questions were relevant to the defined performance measures.

Create platforms for highlighting achievements.

Work with managers and elected officials, as appropriate, to ensure that at meetings and staff retreats the data analytics team and relevant departments are given an opportunity to talk about their successes and answer questions.

Build interdisciplinary teams.

Doing so requires more effort and takes more time but can result in a better work product. No one person in a local government has all the knowledge needed to solve a problem with data. Indeed, data is just a tool that managers can use to address problems.

In San Jose, we sat in on a meeting of an initiative designed to find talented employees more quickly and effectively. By pulling together the right people, those who know about human resources and unions as well as the data experts, the team was able to create a shared vision and understanding of the project that led to an improved process.

Projects can also benefit from a working group that hammers out the details and a strategy group that provides direction and feedback.

Public Outreach

The data analytics teams found that communicating with the public through a variety of methods, including publishing data sets and soliciting feedback on project prioritization, led to greater engagement with residents. Here are four main strategies that were employed most often among the data analytics teams:

Make data open and push data sets to the public.

Use an open data portal to allow for greater data transparency and collaboration with the public in data analysis. Open data portals can also reduce Freedom of Information Act requests. Increasing engagement by those outside of government to know what their government is doing can help uncover possible solutions. In Cincinnati, a portal called CincyInsights allows residents and employees to see trends in data as disparate as how heroin moves from one neighborhood to the next to where the city's snowplows are during a winter storm.

In starting an open data portal, concentrate first on the datasets that the public is most interested in—budget or crime data, for instance—;and expand from there. Casting too wide a net from the start risks overwhelming staff and resources, which leads to frustration and burnout.

Use public input in prioritizing projects.

Using 311 data can also be helpful in gauging department performance and service delivery. In both of these cases, it is best to respond first to issues characterized by high dissatisfaction and high importance to the residents.

Drill down to find the real problem.

Residents in one city identified road infrastructure as a serious problem. Managers could have assumed that residents meant potholes and crumbling streets, but by conducting focus groups it emerged that sidewalks, curbs, and signage were the more pressing issues.

Develop a vision and communicate it to residents.

Each city developed a document that includes the priorities or vision of the management team. The document serves as both an internal and an external way of communicating what the government intends to pursue. This document can take the form of a strategic plan, a set of priorities, or a smart city vision and can serve as a road map for progress. Data help measure that progress.

Identifying Partners

Forming partnerships with outside organizations has enabled some analytics teams to increase capacity and expertise while also fostering a larger network of peers from which to draw insight. Here are three helpful suggestions on identifying and collaborating with potential partners:

Foundations bring in experts to provide insight and capacity.

National foundations have established organizations to provide insight and assistance to jurisdictions implementing performance measurement, open data, and process improvement functions. *What Works Cities* (https://what-workscities.bloomberg.org), for example, is all about major collaboration.

Two cities that we visited are members of *What Works Cities*, which has provided access to resources, support, and data in jurisdictions through the availability of certain subject matter technical experts, especially in open data governance and predictive data analytics. That in turn has helped advertise the value of these tools.

Universities.

Many universities have courses in data analytics and performance measurement. They are a great source of fellows or interns who can help provide capacity and new ideas for local government efforts.

Networking and peer-to-peer exchanges.

Organizations like *What Works Cities* and the Alliance for Innovation (http://transformgov.org/en/home) promote networking opportunities and peer-to-peer exchanges, as do ICMA (https://icma.org/topics/managing-local-government/performance-management-and-analytics) and Engaging Local Government Leaders (http://elgl.org), to increase the sharing of knowledge and leading practices.

Challenges

The participating data analytics teams agreed on two main challenges to success: lack of access to data and difficulty in using it. Here's how to avoid them:

Own the data.

Local governments that do not own or have easy access to the data they generate can encounter significant difficulties in broadening the scope of analysis. Writing contracts with vendors so the jurisdiction retains ownership over and access to the data provides the greatest control over how data are used.

Make sure data are easy to collect and use.

Not having a central information technology architecture for data collection means that local governments have to spend considerable resources asking for, cleaning, and standardizing data from departments, which hinders the ability to use data as a service. As information technology decisions are being made, it makes sense to involve someone from the data analytics team to advocate for systems that make it easy to collect and use relevant data.

Despite these challenges, local governments can and increasingly must use data to identify and solve problems, address constituent needs, and predict service gaps. The exact details will vary from one jurisdiction to another and will evolve as local government leaders learn from the process.

The leading practices learned in the field are relevant and helpful to nearly any jurisdiction embarking on a data analytics program and will provide a road map for leaders wishing to improve their operations through the careful use of data.

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