

G7: CIOs From Seven Big-Cities Work Together to Develop Open-Source IT Solutions

| October 18, 2010

Local governments could one day find a wealth of low-cost IT solutions at their fingertips, thanks to the efforts of an informal group of big-city CIOs.

These IT leaders have dubbed themselves the Gang of Seven or Group of Seven, depending on who you ask. (Either way, it's G7 for short.) They adopted the name when they started getting together last year to share ideas and collaborate on IT projects.

The G7 includes: Hardik Bhatt, CIO of Chicago; Randi Levin, CTO of Los Angeles; Bill Oates, CIO of Boston; Carole Post, commissioner of the Department of Information Technology and Telecommunications in New York; Bill Schrier, CTO of Seattle; Bryan Sivak, CTO of the District of Columbia; and Chris Vein, CIO of San Francisco.

"It's a consortium of like-minded leaders who are very open to seeking input and relying on the experiences of others to help guide us," said Post, who became the newest member after taking New York City's top IT spot in January.

It's also a group of leaders who believe that since all local governments wrestle with similar problems, it's time to stop developing technology solutions alone.

"We're sick and tired of reinventing the wheel," said Schrier. Whether the goal is a utility billing system, an e-government portal or a public safety radio network, every city and county goes through the same process from scratch to obtain what it needs, he said. "In most cases, if we had better information sharing, we wouldn't have to do that."

The G7 emerged from a network of relationships among its members, most of whom already talked often, and some of whom already had worked together on projects. The group gelled at about the same time San Francisco and the District of Columbia started to collaborate on an open application programming interface (API) for their 311 systems.

The goal of the two cities was to tie their nonemergency service request systems to popular social networking sites. With such a link in place, a resident could use Facebook or Twitter, for example, to report a broken sidewalk, rather than make a phone call or visit the city's 311 website.

San Francisco had already connected its Lagan 311 system to Twitter. Washington, D.C., had created an API to help independent application developers link to its Motorola 311 system. Vein and Sivak started discussing how to create a more generic piece of middleware. "You need to figure out a way to sit on top of each one of those systems that's agnostic to those systems, but is also agnostic to the social networking platforms that you're using as an entry point," Vein said.

Working on opposite coasts, communicating mainly by e-mail, the cities' IT innovation groups collaborated on an API that allows social networking sites to "talk" to both the Lagan and Motorola 311 systems.

Around the time Vein and Sivak started laying plans for that project, they and Bhatt, Levin, Oates and Schrier began discussing other potential ventures. They wanted to develop open source applications that their cities could use, and that they could share free of charge with other local governments. As those talks progressed, members started calling themselves the G6 and then when Post joined, G7.

When the members converge in the same location to attend a conference, the G7 meets in person. But most of the work gets done in a series of conference calls, held every other week and chaired by Vein.

Common Concerns

Although application sharing is a major focus of the G7, members also like having a forum where they can discuss common concerns and get advice. For Levin, one big benefit is the chance to hear how other cities are coping in the current economy. "It's really nice to be able to share and see what they're doing," she said.

Post has e-mailed the group several times for advice on specific issues, such as how other cities choose locations for disaster recovery sites. The answers tend to be informal and off-the-cuff, she said, "But the speed of the response and the level of insight is such as you wouldn't be able to obtain through typical research processes."

Besides exchanging ideas and experiences, G7 members are planning to create new products. The first order of business is to get more cities using the open 311 API. Bhatt, Oates and Levin said they plan to adopt the system, although severe budget constraints may slow the project in Los Angeles. Schrier said the Seattle government hopes to use the API when it upgrades its constituent relationship management (CRM) system. Post said that in principle, New York City would like to adopt the API, but the extreme complexity of its 311 system might make it difficult.

G7 members also are drawing up a list of open source applications that they would like to develop and share in the future. Two or more members could develop these products together, or members could share applications that they've created on their own.

Bhatt has one product ready to go: a mobile application that turns a BlackBerry smartphone into a data capture and communications device for Chicago's Department of Streets and Sanitation. Field workers use the app to file inspection reports, including photos and GPS coordinates. "I offered it to the group, so we can work on making it generic and configurable and then post it on a common code site where all the municipalities can utilize it," he said.

Sivak would like the group to expand on the open 311 API concept, creating an API that connects to a city's entire IT infrastructure. It would give developers access to data on procurement, transit, crime, personnel and a great deal more, even if the city hasn't published all that data in a public catalog.

"Anything a city does that has systems and data behind it really should be accessible via this type of interface," Sivak said. With an API of this sort, a developer could write a program that, for instance, alerts a vendor of janitorial supplies whenever the city releases an RFP that mentions cleaning products.

Standards for Data Catalogs

Schrier would like the group to work on uniform standards for the data catalogs that some cities publish for use by third-party application developers. Right now, if a developer wants to create an application that tracks crime incidents in a neighborhood, for instance, the developer will need to write a different application for each city.

"I would like to be able to standardize the way that's done, or at least have a catalog that cross-walks it, so that an application that's written in Seattle to display crime data would work in San Francisco, Chicago, New York and Boston," Schrier said.

Post hasn't identified specific applications for the list. But like many cities, New York is looking for ways to harness social media and mobile devices to interact more effectively with constituents. She would like to take advantage of common tools and platforms to support such solutions. "That would be an agenda item I very much want to pursue," Post said.

One item on Oates' wish list is a set of social networking tools to encourage citizen engagement with city government. Boston has a project under way that would use social networking technology to provide incentives for city youth to get involved in positive activities, he said.

Boston was chosen to participate in Code for America, a fellowship program that lends talent to city governments to help them create innovative applications. The city could use that program to further develop the civic engagement and youth incentive ideas, and Oates expects to share the fruits of that labor.

"I think that's a great opportunity, for us to be looking at how to leverage our Code for America resources to work on projects that will absolutely be sharable among the other folks in the [G7] organization and beyond," Oates said.

Several group members are promoting a project idea that extends beyond application development, and beyond the G7 itself. It's based on an initiative under way in the District of Columbia, which is another of the five locations chosen for the first round of Code for America projects.

D.C.'s Code for America project is really a "meta-project," in Sivak's words. The district hopes to spearhead an organization that will create and maintain a central repository for open source code and other artifacts, such as policies, legal frameworks and best practices. Any government could contribute items to this IT library or take items from it.

The Civic Stack

"The end goal is to create what we're calling the 'civic stack' of software," Sivak said. "At the end of the day, we should have everything in this organization, so a city could literally come in and say, 'We'll take the whole thing,' and become a technology-enabled city."

One way to get municipalities to collaborate on that large of scale would be to forge ties between the G7 and the Metropolitan Information Exchange (MIX), said Schrier. MIX is an organization of about 60 CIOs from large and medium-sized cities and counties. Schrier currently serves as its president.

"I'd like to be able to leverage the work that's being done in these larger cities," Schrier said, "connect it with work that's being done in the medium-sized cities, and set up a framework where we could rapidly disseminate new open source applications that are invested by the various players."

Schrier said he would like to see the G7 become part of MIX. But the desire to join a larger, more formal group isn't unanimous. And members don't seem ready to enlarge the G7 or give it more structure.

Several other city CIOs have expressed interest in joining the G7, and they certainly would add value, Vein said. But members decided early on that rapid expansion would make the group unwieldy. "We decided to keep our membership for the time being at seven, until we make sure that the model works and we refine how we work," he said.

Oates agrees that it's too early to expand. "Before we get too diffuse, and before the organization and requirements get too wide, I would love to see us actually go from a great-conversation, great-idea phase to 'Look what we're able to deliver,' and 'Look what we're able to share with others.'"

Ultimately the group will get larger, Bhatt said. "That's why I think one of the initial discussions we have as a Group of Seven is what kind of a structure do we want this to take?" The group should have enough structure to endure beyond the tenure of any of its members, he said.

At the same time, Bhatt said he's leery of creating an organization formal enough to require bylaws and place heavy demands on members' time. "We are more interested in, 'Hey, you've got a solution — let's work on that.'"

While G7 members have yet to agree on the details of their future course, the CIOs agree that their

collaboration creates solid value in the present.

As budget cuts force IT departments to scale back on innovation, a group like G7 can pool resources to create a better mousetrap, Vein said. "You can do it cheaper, you can do it faster, and hopefully you can do it better."

They Can Build, But Can They Buy?

The G7 is making plans to create and share municipal IT solutions, but what about procurement? Can IT departments in multiple cities, in different states, join forces to buy software from vendors?

It's possible, but it won't be easy, say some members of the consortium of seven big-city CIOs. "A logical next step is to become almost one governmental entity in some respects, and that entity then enters into contracts, or negotiations, or discussions with vendors as a group," said Chris Vein, CIO of San Francisco.

Members have discussed this concept, said Chicago CIO Hardik Bhatt. To make it work, though, someone would have to review each city's unique procurement regulations and then create a template that passes muster with all the cities' procurement and legal departments.

"It needs a lot of attention, time and energy," Bhatt said. "I think with all the budget pressures that we have right now, we won't be able to find that time."

Los Angeles CTO Randi Levin agrees that the G7 cities would need to overcome many practical hurdles to collaborate on procurement. "But at a minimum, we could share pricing and vendor experiences. That alone is very valuable. And if there are contracts that we could all piggyback on, fine," she said. "If we can cut down on the amount of time it takes to do procurement, that would be a great benefit."

Web 2.0 Help

Code for America is a nonprofit organization created earlier this year to help local governments launch innovative Web 2.0 solutions. The organization, which is backed by technology guru Tim O'Reilly, matches top Web developers to cities seeking Web 2.0 solutions for improving transparency, efficiency and citizen participation.

Code for America — which describes itself as a collection of "Web geeks, city experts and technology industry leaders" — is funded by donations from the Knight Foundation, Omidyar Network, Sunlight Foundation, Case Foundation and others. Developers and participating cities are chosen through a competitive application process. Cities selected for the program are matched with a five-person development team, and the developers receive a stipend from the cities.

Five Code for America cities were chosen in 2010:

- Boston
- Seattle
- Philadelphia
- Boulder, Colo.
- Washington, D.C.

This article was printed from: <http://www.govtech.com/e-government/G7-Big-City-CIOs-Work-to-Develop-Open-Source-IT-Solutions.html>

