

## SIX DEGREES OF ACQUISITION: HOW TO IMPROVE PUBLIC PROCUREMENT

By Chris Foreman

**Six degrees of separation** is the idea that all things in the world are six or fewer steps away from each other, making a “friend of a friend” chain to connect any two people in a maximum of six steps.

The world of government technology procurement relies heavily on these “six degrees” referrals and recommendations to propel initiatives from idea to deployment. Government innovators, be it a Mayor, CTO, CIO, or an agency leader, are already burdened with the day to day activities of operational responsibilities, leaving little time to dedicate to a thorough evaluation of the market and different solution types when adopting new technology. Coupled with the public sectors’ low risk tolerance, absence of these connections and information can slow down or kill projects.

As consumers, we have come to trust up to the minute online reviews, ratings, and recommendations from complete strangers to determine what doctor to see, where to have dinner, and where to stay on vacation. Yet in the world of government technology, we are still using outdated methods of sharing information. Given that the Smart Cities market will soon be a **trillion dollar a year business globally**, there are remarkably few easy to use platforms for government employees to connect and share valuable references, and to build on the experiences of others. This information increases the likelihood that next implementation is a success, reducing wasted time and mistakes, meaning more smart city projects are completed.

Today, the most common method of sharing case studies and results with peers is during a physical event. This process is costly in terms of time and money spent planning and travelling to the event, but also inefficient in reaching the target audience over a long-time period. Participants are forced to choose a schedule of sessions to attend, with varying panels and speakers, in hopes of capturing usable content they

can apply to their current projects. Meanwhile, they juggle the needs of their day job and often find themselves in the hallways of conferences putting out fires.

Additionally, vendors' case studies showcase their capabilities and results, but are beefed up with marketing jargon, which remove much the true customer experience. Published case studies also age very quickly, with products evolving and the project's main contacts moving on to other roles. Over time, vendors will continue to use the same case studies, but the evaluators can do very little with the information provided to them.

It is time to start compiling our information, experiences, and results in easy to share formats for our peers in cities, towns, and counties around the world to see and learn — in consumable volumes, at convenient times. Using the power of digital platforms and the availability of public data sets, governments can connect with others who are tackling the same issues. We must harness the fact that we are less than six degrees away from a successful acquisition.

Leaders have already taken notice of this. The World Economic Forum recently published their [Internet of Things Guidelines for Sustainability](#). In this report, driven by leading companies, governments and NGOs, they call for government to “Support standardization of IoT proof of concept and pilot projects”. The report states:

*“Proof of concepts (PoC) and pilot programmes are being developed worldwide while the short-term business model for the IoT market remains challenging. This leads to a situation where vendors need to provide costly PoC multiple times to various customers. There is a need to do fewer but better PoCs and pilots, which once successful, are accepted for deployment elsewhere. A rigorous process is required to manage this, akin to the clinical research process in the pharma industry where research outcomes, once achieved, are accepted worldwide.”*

This report calls on governments to continue to innovate and test but ensure there are two key steps in the process. At the front end, build

off the network of projects and pilots that have already been done. Don't run the same pilot for the 10th time just get the same results. Finally, at the end of tests and trials, share the results with the community. These steps allow everyone to benefit. The next city can achieve results faster and with lower risk and companies are not repeating the same pilot in hopes of a sale but building on past successes to deliver value faster.

Some cities are taking matters into their own hands. New York City was experiencing the problem of being overburdened by product sales pitches that promised results but not having enough insight as to what other cities or departments were doing when it came to certain innovative projects. As a result, the city piloted Marketplace.nyc to serve as a directory of solutions that any member of the city could tap into to conduct research. The pilot was a success and it has been converted into a **global directory open for any city to join**, at no cost, to find and validate what other cities are doing.

So what information needs to be shared? When searching for ideas, solutions and vendors, government officials are generally looking for the same information:

## What problem does the product or service solve?

It is possible to codify all the problems that governments are trying to solve for in a single list. For example, all cities are faced with virtually the same set of challenges: traffic, stormwater management, or public safety. Several factors will determine the type and cost of a solution for a particular city, but the types of solutions that deliver against that outcome are shared. By creating a taxonomy in the same way we do for corporate SIC or NAICS codes, we can begin to categorize solutions into a database that can be filtered based on the demographics of the government organization.

## Will it fit my technical needs?

The technical requirements for a solution vary widely, which is why these solutions often have multiple partners and systems integrators. Too often CTO/CIOs hear “Tell me your problem and I will make you a solution that fits.” The vast array of existing systems, many of which are outdated, make it challenging to deploy new technology without paying large sums to connect with existing applications and data stores. Common API’s, standards for data sharing, and big data storage and analysis tools are paving the way for new applications to be deployed at a lower cost, with fewer services required for integration.

That being said, government IT departments and decision makers need to understand the technology and how they connect to their current install base. Of course, one can sit down and write up an exhaustive list of requirements, but an off-the-shelf product that meets 90% of your needs and comes with support and maintenance at 50% of the cost of a custom solution that meets 100% of your requirements is a better choice and a better investment of taxpayer dollars. Using standard solutions allows governments to be nimbler and change as their needs adjust.

## Where has it been done before? Bonus points if that city looks like my city.

After price, this is by far the most commonly asked question during the evaluation phase, and it is by far the easiest to answer based on available data; the problem is a lack of coordination. By law, government contracts are public documents as are most of the solicitations used to get them. Companies love to tout their successful deployments to prospects. Yet there is no central location to store reference data for companies serving the public sector let alone for individuals or an individual project. You would have to search multiple databases and websites (and probably be skilled at searching) to find

the information that is publicly available, or people that will willingly share.

The power of a reference from a trusted source is paramount to the decision-making process. In such a risk averse industry, where taxpayer dollars are being spent and potentially lost on technology initiatives, having the ability to defend a decision based on having a stable of peers who have already come before you are critical. Having validated the solutions not only satisfies potential detractors, but it cuts down on the costs for deployment and could facilitate obtaining the best possible price for the products in question. Some municipalities allow you to buy off other contracts, even out of state –if you have all the information and documentation. Furthermore, this data helps make the case to launch the program to mayors, councils, participating agencies and your citizens.

How does this work in practice? Autonomous vehicle pilots are a great example. It seems like **every city is rushing to test AV's on their streets**. Many of these pilots are likely solving and proving the exact same points...sometimes with the same technology. Pilots must build on each other. Cars, streets, bikes, curbs and pedestrians share a lot of similarities from one city to the next. You stand to gain only a marginal benefit by running the same costly pilot in Ann Arbor, Columbus and Madison. And cities should not be fooled, even free pilots have costs – both in resources and bandwidth. As these pilots complete, the cities and companies should broadcast the results so the next city can build upon them and get to value faster.

As an example, Rhode Island is planning an **autonomous shuttle bus program** this year. Rather than designing the program in a vacuum, they are looking to the pilots in Las Vegas, Atlanta, Paris etc., to better design their scope to learn something net new. Rather than another pilot that concludes autonomous vehicles can avoid other cars and people (they do), they can create a program that tests the efficacy of an autonomous fleet with new business models.

Another example of how a network of information can assist cities is

with **Vancouver and Surrey's bid** for the \$50 Million **Canadian Smart City Challenge** competition. Rather than constructing a bid from just known vendors and implementation, the Vancouver/Surrey team directed partners to tell them what was possible and show their past results. This will allow Vancouver/Surrey to build on not only what is happening locally, but also what has happened globally, to best deploy projects resulting from the program.

There are many people within only a few degrees of us, seeking answers to the same questions, and some who many have already found those answers. Connecting with those people will not only speed up the acquisition cycle, it will ensure greater success, better decision making, and a better quality of life for our citizens.