What Does It Mean to Be a True Smart City?

By Kelsey Owens

WITH THE RISE OF BIG DATA, the internet of things (IoT), mobility, and the rapid pace of technology innovations overall, becoming a smart city is a frequently discussed topic throughout the parking and transportation industries. Going "smart" is an aspiration of many cities around the world, but the process for getting there is not clearly defined.

The broad definition of a smart city is a connected city that allows people to use mobility and technology to get around. Easy enough, but the concept of a smart city extends into a much broader realm of innovations. Think about a day in the life of a city traverser: In a truly smart world, a citizen should be able to park his or her car and pay for the parking directly by phone, find out when the next bus is coming, and seamlessly plan a day's travels. The successful smart city will collect data continuously, using the data to make beneficial business decisions, such as adjusting street parking prices based on the frequency of parking in a particular location. The possibilities are endless.

The Real Steps to Smart

Going smart is not an overnight process. It's not even a two- or three-month process. It's an ongoing, multifaceted initiative that takes time to implement, with adjustments and new initiatives cropping up all the time. Overall, it can be broken down into three phases: data collection, data analytics, and using data to take action.

Phase 1: Data Collection

The first phase of the transition to smart status is the collection of data using different technologies comprising measurable services and infrastructure

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To learn more about data and the development of new data standards for the industry, visit parking.org/ipi-dataex.

components throughout your municipality. This can include everything from parking and transit to traffic lights.

Phase 2: Data Analytics

The second phase is analyzing the data collected and coming up with an action plan, depending on what can be determined based on the analytics performed. For example, where parking is concerned, if data show that most people are parking at the center of the city because the rates are the same, using dynamic pricing would be a data-informed action you could take in phase 3 to direct people to park further out and also reduce emissions.

Phase 3: Using Data to Take Action

Phase three is focused on taking the analysis performed in phase two and using it to operationalize a complete plan for increasing connectivity and mobility throughout the city, ultimately empowering citizens to use technology to get around. With a plan in place, smart cities should be able to use data to predict activity throughout the municipality on an ongoing basis.

Remember, decisions without data are often guesses at best. The most critical part of the process is information gathering. It's not possible to make impactful decisions for a smart city without data.

Success Story: Columbus, Ohio

In June 2016, Columbus, Ohio, won the U.S. Department of Transportation's (DOT's) Smart City Challenge, a contest "asking mid-sized cities across America to share their ideas for how to create an integrated, first-of-its-kind smart transportation system that would use data, applications, and technology to help people and goods move faster, cheaper, and more efficiently," the DOT reported.

Because the concept of smart cities is relatively new, there aren't many cities that have fully transitioned successfully yet. According to the DOT, Columbus conceived of a comprehensive plan about how technology could maximally help residents move about the city with ease and enjoy greater access to opportunities. The city's vision covered residential, commercial, freight, and downtown area challenges and included everything from connected infrastructure to integrated data and autonomous vehicles as part of the implementation plan.

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Getting Started on Smart City Implementation

While becoming a truly smart city is within reach with the right resources and expertise, it takes planning and support. Consider the points above. Do you have everything you need to carry out data collection, analytics, and an action plan? If you're not sure where to begin, reach out to the technology vendors who are forward thinking and can offer food for thought.

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