



## Data Collection with Elevate Structure Tech Trees

by NC Fitz | June 18, 2018 |

Cities of the future bring to mind a lot of cool sci-fi images. Smart cities are cities of the future. The term is often viewed as something that will happen someday with a lot of planning. But you may not realize that it's already happening, in little ways, all around you.

When the lights in your office at work turn off after you leave the room, those are smart lights, probably installed in a smart building. The thermostat in your home that you can set by speaking to it through your cell phone is a smart thermostat. More and more, as things run on data rather than manually, we get closer to smart cities.



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**Margaret Rouse,**  
Tech Target IoT Agenda

And it's not just about convenience, but also greater efficiency. According to [Margaret Rouse of TechTarget IoT Agenda](#), "*...the overarching mission of a smart city is to optimize city functions and drive economic growth while improving the quality of life for its citizens using smart technology and data analysis.*"

Data gathering and analysis are the fuel needed to plan a smart city. The information obtained from various sources today makes it possible for different systems to interact and provide the knowledge needed to design and construct better facilities tomorrow.

Whether you realize it or not, data is continuously being collected to study and make improvements. Depending on the way the information is gathered, the analysis can happen even in real time.

## City Parks

Let's look at city parks for example. Park administrators are continually monitoring everything that goes on to improve the existing layouts and design enhanced parks for the future. They are following the age and gender of people that visit, if physical activities are taking place, lighting, seating, tree mapping, amenities, and even how the weather affects attendance and use.

And that's just a few things. The information will ultimately be used to enhance the services being offered to the community, to improve overall park operations, and to understand how different areas are being used, or avoided, by park attendees.

In [\*Beyond Recreation, A Broader View of Urban Parks\*](#), by the Wallace Foundation, it is noted that the collection of data for park improvements was a hands-on affair. Park personnel observed visitors while they moved through the park or counted them at specific times. Sometimes, the administrators interviewed park-goers directly or provided surveys or arranged focus groups.

But now a park administrator can find out anything needed without ever approaching the visitors – if they have the right technology.

## Tech Trees

A Tech Tree, created by [ELEVATE](#) Structure, is a data gathering platform that provides real-time or historical data for space optimization. Picture a tree-shaped structure made of wood, metal, and potted plants equipped with data sensors and cameras. The tech elements of the tree are hidden within the construction. It looks like a tree, but it's so much more.

Now picture a Tech Tree at a park. People come and go as usual, or they gather around the tree and sit on its base. All while the sensors and cameras are doing their work.

Park administrators will get a view of attendance, crowd flow, and security issues, all in real time. Later on, they can review the historical data and decide what needs to be done differently for upcoming special events, holidays, or weekends.



*1-Tech Trees at the Zappos Brands Summit 2018*

If they have enough Tech Trees set up, they would be able to determine if more lighting is needed in specific areas, if the exercise stations need repair, or if more trees should be planted to provide shade for the people who just want to chill. This information could be used immediately to improve the park, no wait time needed. How smart is that?

## Trade Shows and Corporate Events

Parks aren't the only place where Tech Trees work. Trade shows and corporate events also benefit significantly from the data they provide. No matter the location, event venues are a lot like small parks. The sponsors of conferences and conventions also need to know about vendor placement, crowd flow, and bottleneck issues to optimize layouts for future occasions.

Instead of relying solely on details that profile each person as a possible lead for business, a Tech Tree is not intrusive and provides real-time feedback on how well the function is going. What people are focused on, where they are congregating, what spatial elements are working, and how it can all be improved the next time can be easily tracked or saved for historical reference later on.

The Tech Trees are inspired by nature and are a unique point of interest for people to congregate around. Just like real trees.



*2-Tech Tree with Promotional Screens*

In addition to the basic construction and data sensors, the Tech Trees can be customized with advertisements, lights, viewing screens or whatever is needed for promotion purposes while capturing the data required by the event sponsors. They are temporary and quick to set up.

Perfect for tracking real-time space optimization for busy holidays at parks or particular functions in any size space, a Tech Tree is a truly smart multi-purpose data gathering device.

ELEVATE Structure's Tech Trees are currently in use at [Feast It Forward](#) in Napa Valley, at various promotional events, and there are three Tech Trees at the Zappos Headquarters in Las Vegas.

*\*Photos used with permission from Elevate Structure's website.*