TeamViewer Enables SmartCiti Services to Drive 5G Transformation

SmartCiti Services is enabling a global communication transformation as network infrastructure technology moves from 4G to 5G.

SmartCiti Services is a smart city technology company focused on delivering tools to make urban areas smarter. Their key interests include developing smart telecommunications, manufacturing custom smart features for clients, and providing project management services for smart technology implementation in urban areas around the world. With manufacturing in the USA, Mexico, El Salvador, and now India, SmartCiti is well positioned globally to quickly deliver products to every continent at a competitive price point.

Challenges

» Managing, supporting, and providing regular maintenance for new 5G smart poles all around the world

» Securing the data acquired by the devices on each pole

» Meeting individual country security policies to protect the data of citizens

Solution

TeamViewer's unique ability to provide reliable and cost-efficient remote access management, using outbound instead of inbound access, makes it easy for 5G smart pole transformation, while protecting citizens and businesses by securing the data acquired by these poles.

"The move from 4G to 5G is going to require a major change to the footprint and architecture of wireless telecommunications delivery," says Mike Maziarka, managing director of SmartCiti Services.

This is a significant factor in the evolution of driverless cars, as well as other business models. 5G will change the way unattended and IoT device information is processed, collected, and accessed.

Electric cars will also be able to offload a significant portion of their computer processing to smart poles, increasing their energy efficiency and allowing them to go much farther on a charge.

"Traditionally, the macro sites have been used, which are big towers with lots of radios that can deploy signals two to three kilometers. 5G will necessitate the need for small-cell architecture," explains Mike. "What SmartCiti has done is created an agnostic, multi-tenant housing that protects devices from the environment and provides for a more pleasing aesthetic perspective."

Small-cell infrastructure assimilates easier into the existing utility

and multi-use poles, instead of towering 200 feet into the air. Since the small-cell architecture runs on a lower frequency, the towers need to be spaced closer together, without being eyesores or congesting the landscape.

With $300 billion in spend forecasted over the next five to seven years to build 5G infrastructure, starting in the most urban areas, SmartCiti Services' smart poles create an untethered universe with unlimited potential.

And this untethered universe needs more than antiquated resources to manage, maintain, and secure its efficiency. Mike went with TeamViewer to provide the necessary solution to keep this state-of-the-art technology running smoothly.

TeamViewer Empowers Smart Management for Smarter Cities

With the growing prevalence of smart pole deployments, having a remote management solution to maintain and manage all the SmartCiti components, software, bits, and bytes was required. Mike's only choice was TeamViewer.

"When I was tasked with turning our 5G pole into a smart pole, I didn't think twice about what remote management solution I was going to use," says Mike.

Throughout his career, he has relied on TeamViewer to manage and support remote solutions, including troubleshooting digital billboard issues throughout the world. "In a previous job, I used TeamViewer to manage and support our entire line of software solutions for digital displays," he explains. "If I didn't have TeamViewer to troubleshoot issues on billboards throughout the world, I don't know what I would have done."

Michael Bertelsen agrees with the choice to go with TeamViewer. As the Principal Infrastructure Architect at MBBC, Michael is an IT veteran with 20 years of consultant experience.

Primarily responsible for making sure that all SmartCiti's network requirements are met, video is routed properly, and all analytics and center data information is collected correctly, Michael relies on TeamViewer's reliability to drive efficiency.

"We have Windows control units running Windows IoT in each pole," Michael explains. "Using TeamViewer, the team can easily access each unit, make necessary changes or fixes, and monitor the embedded IoT devices that can measure things like air quality, weather, video, and electric vehicle charging stations."

Alternatively, without remote assistance, if a problem was discovered, traffic would have to be stopped so an engineer could be lifted 90 feet off the ground using a cherry picker, open a pole's casing, bringing a keyboard, monitor, and mouse to make changes to each single pole.

"Managing smart poles really requires remote assistance software," Michael adds. "And the advantage of TeamViewer is that it's instrumental as an outbound solution, not an inbound solution, so we can limit inbound access."

Michael continues, "TeamViewer stands out by using outbound connections, unlike other remote management products which use inbound. TeamViewer is my preferred product to go to."

And since SmartCiti is working with third-party ISPs, some without public IPs on the outside of the firewalls for the poles, they needed to ensure they had a remote management solution that could provide outbound access.

"We never know when an internet connection is going to be in a certain way, but we always know that when we require internet connectivity, we typically get outbound HTTPs and

that's enough for TeamViewer to start working so we can get into the system and configure all the things we need to configure," says Michael.

Sensor data is sent continuously so analysts can provide the most accurate information based on that sensor data to enable the next generation of automobiles to safely and effectively function. Because TeamViewer has a vetted reputation as the most reliable remote management solution, it was the only choice for the SmartCiti team.

"If we didn't have TeamViewer, we wouldn't be able to deploy this technology," says SmartCiti's Managing Director. "There is no applicable revenue-producing architecture that would allow us to deploy this if we didn't have something like TeamViewer."

Smarter Secure Access

Accessibility is key, but so is security, especially when some of the information being obtained is from private citizens. For SmartCiti's smart poles, the security discussion follows two use cases: security of the data on the pole and meeting the security policies of the people being served.

Since SmartCiti deploys smart poles all around the world, they needed a remote management solution that would meet the legal requirements of these countries. Say for instance, data from devices deployed in New York City can't be hosted in the

cloud. It needs to be through a private network. And of course, that means having to go through their firewall and ports that allow outbound-only connections.

"TeamViewer plays a critical role in enabling us to work through the firewall, so we can manage the poles and still maintain the integrity of the security," says Mike. "Then there's the ability that TeamViewer gives us to secure the data at the pole, so we don't have to create open ports or access which could be dangerous."

Michael agrees, citing another example in Denmark, where they work with the international DOLL (Danish Outdoor Lighting Lab) project and the local law prohibits filming in public and releasing that footage anonymously on the internet. "The streams that we pick up with the smart poles have to be protected and that data has to be controlled. The ability to not have to open inbound ports for remote management is where TeamViewer adds great value to our security."

From simplifying the remote management of these state-of-the-art smart poles to driving cost efficiency, TeamViewer has enabled SmartCiti to get ahead of the 5G transformation wave.

"Our ability to manage the various devices and address the complications which arise from these IoT sensors makes TeamViewer the only solution out there on the market for us," says Mike.

Michael adds, "The reason I prefer TeamViewer over its competitors is its low complexity and high success rate."

"I would recommend TeamViewer, absolutely," adds Mike. "I would have to do something else other than what I'm doing now if TeamViewer didn't allow me to remotely manage, support, troubleshoot, and view into the solutions that I deploy."
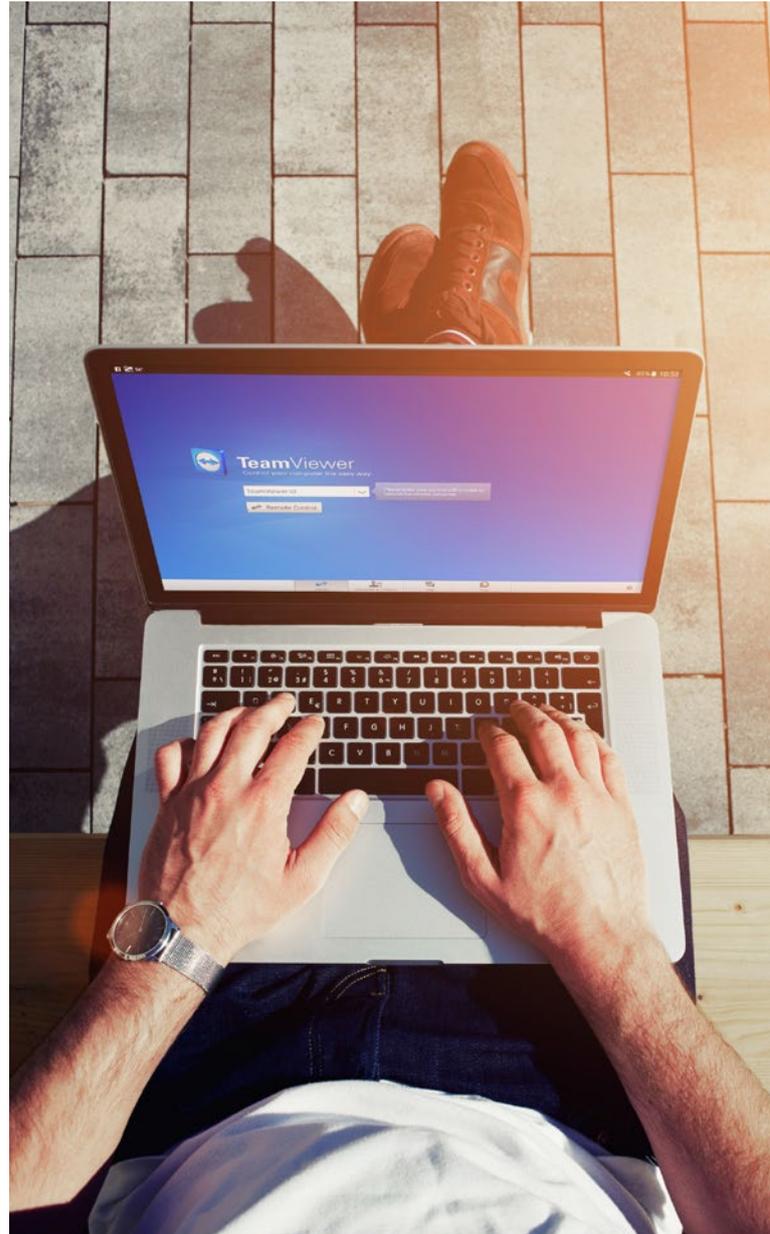
TeamViewer US LLC

TeamViewer is a leading global software provider for remote support, remote access, monitoring, and team collaboration. TeamViewer's flagship product has been activated on more than 1.7 billion devices to support over 8 billion users sessions making it the most trusted remote support solution globally.

For more information about TeamViewer, visit: www.teamviewer.com

TeamViewer US LLC
5741 Rio Vista Dr.
Largo, FL 33760
800-951-4573