Crack the Smart City Code

How solution provider Consiliant moved out of its comfort zone and into a smart city opportunity.

After years of working with Hitachi IT solutions, a vendor and its solution provider rely on Hitachi Vantara's advanced analytics and IoT capabilities to play a big part in the City of Las Vegas' smart city initiative.

Hitachi Vantara has a key role in Las Vegas' smart city initiative with the help of Irvine, Calif.-based Consiliant.

Working with the City of Las Vegas, Consiliant highlights not only how the combined solutions of Hitachi Vantara can turn a city into a showcase of digital transformation, but also how partners can move out of their traditional data-center comfort zones into new advanced solutions.

"Bringing analytics and IoT opportunities to partners has been a key focus of Hitachi Vantara in the year-plus since it was formed," said Kimberly King, Hitachi Vantara's Vice President of Global Partner Strategy and Programs.

"Hitachi in that time has completely revamped its partner program and competencies training to transition partners to take advantage of the company's combined portfolio," King said.

"2019 is when we'll see the volume start to come through with all the new products, because partners have just gone through the competencies," she said. "They're just starting to create a pipeline. We're in the early stages right now."

Realize the Smart City Promise

For Consiliant, the Las Vegas' smart city initiative was an opportunity to bring those solutions together.

"In 2016, Las Vegas created an Innovation District to look at new ways to adopt leading-edge technologies and create new efficiencies and new development opportunities," said Michael Sherwood, director of technology and innovation for the city. The Innovation District also was aimed at providing new amenities to the city, including better policing, safer streets, solving homeless challenges, and providing services while being able to understand who received those services.

Despite the attention the Innovation District's new downtown autonomous shuttle has received, Las Vegas' smart city initiative is seeing a flurry of new activity in

areas such as analytics and video surveillance.

Consiliant, working with Hitachi Vantara, has the solid underpinnings of multiple vendor contacts and alliances that make Sherwood's job easier. Together, Consiliant and Hitachi Vantara launched a pilot project to explore the use of video cameras in innovative ways, including monitoring parking lots to see if a car was in a space or not, counting vehicles and pedestrians, and public safety and security.

"It really demonstrated Hitachi Vantara's networking capabilities by actually linking all this equipment up on a wireless backbone since we didn't have fiber in the area," said Sherwood.

The smart city initiative goes well beyond any single project.

"It's about the environment as a whole," said Sherwood. "A lot of the technologies from our partnership with Consiliant and Hitachi Vantara don't focus on any one specific area. It's how we use technology as a game changer in the entire scope of our operation."

Improving Quality of Life

Hitachi, a core partner of Consiliant's since their inception, offers solutions ideal for a project that will eventually include monitoring and managing transportation, air quality and video cameras. These solutions even provide the ability to count people and discern them from cars and bicycles, according to Jon Garcia, director of Consiliant's public safety and smart spaces.

The core of the Las Vegas Innovation District is Hitachi Smart Spaces and Video Intelligence, a business intelligence platform for IoT environments. Smart Spaces and Video Intelligence is doing analytics on Las Vegas' video infrastructure and a part of the city's public safety system.

Consiliant, working with Hitachi Vantara, also spearheaded the installation of a video surveillance system to protect visitors at a new tourist-oriented video display in the downtown area.

"We're doing this at the edge," Garcia said. "We're delivering the camera, compute, storage and the application layer at the edge itself, doing the processing there, and then offering that intelligence through the cloud via a cellular connection."

Data from those devices, and from a variety of

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other sensors including LiDAR, is sent to a lightweight, centralized database. The database can be accessed, monitored and managed by the City of Las Vegas and a variety of vendors that provided sensors to the smart city project. That data provides information such as traffic and pedestrian density, air quality and accidents.

The city plans to perform advanced analytics on the data exclusively for the city and its citizens by using Hitachi Vantara's Pentaho solutions. "We're getting ready to start a Pentaho analytics project very soon with Consiliant to start bringing this data back and being able to tell stories with the data," said Sherwood.

Sherwood couldn't estimate the number of actual data points the city captures on a daily basis via sensors from multiple vendors. And, he said, those vendors may be collecting data related to the health of their sensors that he is not aware of.

"One challenge we have going forward is, what do we do now that we have all this data," said Sherwood. "How do you categorize it and make the data points available so people understand what each data point represents. From an air quality sensor, I might have three or four data points that look like they say the same thing, but are actually different."

The biggest factor in bringing a smart city solution to the City of Las Vegas was the confidence that stems from long-standing relationships with Hitachi Vantara, noted Garcia. Also important was Consiliant's experience with the wide range of Hitachi technologies it has worked with over several years.

Going forward, Las Vegas plans to increase the number of cameras installed downtown for such purposes like public safety. It also plans to work closely with Consiliant on public safety and related analytics.

"We hope to partner with Consiliant on how to work with the community to get our skills ready for this next-generation of technology," said Sherwood. ■