

# CIOReview

The Navigator for Enterprise Solutions

SMART CITY SPECIAL

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## 20 Most Promising Smart City Solution Providers - 2017

From the earliest instances of inhabitation millennia ago to the industrial revolution of the 19th century to today's digital generation, technology has been a decisive force behind the dynamism of urban settlements. Responding to this age of rapid innovations, engineers worldwide are turning to new technologies—such as cyber-physical systems, data analytics, and artificial intelligence—to develop participative, accountable, and effective city governance programs and support rapid urban transformation.

Cities have begun, and would continue, to integrate technological breakthroughs in revamping traditional infrastructure: from the remodeling of road networks to infrastructure planning and more. Intelligent transportation management solutions, embodying smarter traffic control and incident management systems are helping communities realize the benefits of optimizing transportation networks. Simultaneously, local governments are harnessing the potential of big data to wield greater opportunities for small-scale businesses.

Meanwhile, smart city strategists and urban planners are also intent on leveraging IoT technologies and utilizing data collected

from various kinds of connected devices to holistically optimize city operations. In fact, by harnessing the power of IoT, connected streetlights can create a city-wide WAN, which would not only solve streetlamp connectivity issues, but also lay its foundation for future smart city projects.

Smart cities around the world are currently focused on enhancing the experience of their community members through new inventive techniques with a robust feedback mechanism. It is only a matter of time until fully connected smart cities flourish with strengthened opportunities to imbue equity among all urban populace.

In this edition of CIOReview, we are featuring the best-in-breed technology solutions that have uplifted the way urban residents live, work, and communicate in a milieu. Over the last few months, a distinguished panel comprising CEOs, CIOs, VCs, analysts, and CIOReview's editorial board reviewed the top companies that provide inventive tools and services to make cities 'smarter' and have selected the ones that are at the forefront of delivering modernization.

We present to you 20 Most Promising Smart City Solution Providers 2017.



**Company:**  
InterDigital

**Description:**

Aggregates disparate IoT systems and data in smart city setups providing a single platform for management of data assets for cities

**Key Person:**

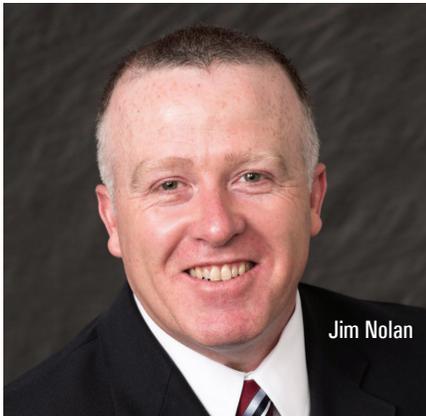
Jim Nolan,  
EVP, IoT Solutions  
Vanja Subotic,  
Director of Product  
Management, IoT Solutions

**Website:**

[interdigital.com](http://interdigital.com)

## InterDigital Creating the Living Network

**S**ilverstone Racetrack hosts the UK leg of the Formula One Grand Prix, which saw a footfall of over 400,000 over a period of three days in July 2016. This typically jam-packed venue poses grave challenges to the local transport authorities: spectators arrive at the venue through multiple routes greatly straining traffic management systems. In an amazing feat, four UK local authorities, in conjunction with the UK's highways agency and a number of other partners, are tackling these type of 'roadblocks' using the oneTRANSPORT initiative.



Jim Nolan

The overall premise is an intelligent transport data exchange that aggregates multiple data streams in an effort to better understand and optimize both traffic and user experience around it. Various sources of data include the volume of traffic, the speed of cars, parking lot occupancy, and signals from the entry/exit gates. The consolidated approach gives authorities the power to more efficiently manage and route the traffic, with real-time insights into the matrix. The backbone platform powering the oneTRANSPORT initiative is provided by InterDigital. "This is where our value proposition comes in—our ability to integrate, aggregate, and federate data from disparate sources, and make that data available to different application

types that perform different functions," says Jim Nolan, Executive Vice President, IoT Solutions at InterDigital.

InterDigital's unique positioning as an expert in consolidating sporadic data points into a single environment has been an anchor point to the oneTRANSPORT

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**The universal standards we work with overcome major drawbacks of proprietary technology: vendor lock-ins and lack of interoperability**

initiative for almost two years now. InterDigital's platform brought together close to 300 data sources containing at least 20 unique traffic data types and integrated them into a single platform accessible via a unified web interface. "Although individual IoT implementations may render some immediate benefits, cities simply accumulate complexities from multiple systems and lose the value in terms of data and insights—essentially the 'bigger picture'—which can drive decisions in management, control, and usage of the assets," says Nolan. "When we talk to new cities, they also find comfort in our ability to arrange discussions with local authorities who have gone through similar growing pains," adds Vanja Subotic, Director of Product Management, IoT Solutions at InterDigital, "it is that experience, systems knowledge, and advisory aspects of deployments that make us stand out."

While working toward the creation of smart cities, integration of new IoT systems with traditional legacy systems is another major agenda for government authorities. The future-proof architecture of InterDigital's offering implies that the users can evolve their

solutions. As Nolan explains, "Our scalable architecture allows integration of various systems and applications. Our standards-based approach works to overcome major drawbacks of proprietary technologies: vendor lock-ins and lack of interoperability."

InterDigital couples this level of scalability with end-to-end solutions developed in collaboration with partners. For example, Nolan believes that security is a pervasive requirement. InterDigital's solutions are designed with this in mind, but also coupled with strong security offerings from best-in-breed partners.

Apart from providing asset management efficiency for cities and enhanced quality of living for its residents, InterDigital's proficiency drives another natural evolution for their clients: the concept of a data marketplace. InterDigital is currently working to enable counties to monetize their data by allowing multiple parties to both contribute and consume data. "The county, through a marketplace concept, can not only have their data protected and managed, but also sell that data to innovative application developers and other benefactors and get a revenue share," summarizes Nolan.

With a strong mix of highly-educated research and development staff who constantly ideate, along with a team of world-class developers who roll up their sleeves to implement these ideas, InterDigital is, in fact, taking their vision of the "Living Network" to reality. 