

IoT Technology and Solutions for Smart Cities

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Abstracts

Overview:

Global metropolitan areas are facing unprecedented challenges as the pace of urbanization is increasing at a pace that is testing the ability of city planners to meet the current and anticipated needs of its citizens. Each day, more than 150 thousand people get added in urban areas, either because of migration or births. Between 2011 and 2050, the world's urban population is expected to grow by more than 70%.

Additionally, with climate change and other environmental pressures, cities are increasingly needed to be "Smart" and take significant actions to meet stringent targets inflicted by commitments and legal obligations. Smart City developments are causing solution providers to take a much more integrated approach as the design and implement infrastructure and service capabilities. Feature/functionality must be blended to work efficiently across many different industry verticals as smart city address the needs of disparate market segments with multiple overlapping and sometimes mutually exclusive requirements.

There are many technologies involved in support of Smart Cities. Systems and resources are intertwined as mobility, communications, energy, water, platforms, monitoring/control, performance management, predictability and forecasting all merge together. This convergence is being realized first in a few leading industries such as home entertainment and automobiles. The technologies associated with the Internet of Things (IoT) will benefit Smart Cities greatly, and vice versa, as IoT benefits from the ongoing development of Smart City deployments globally.

This research evaluates IoT technologies that support Smart City deployments, assesses the benefits and challenges for implementation, and provides a view into the future deployments and operation. The report includes forecasts for major technology

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