CIOReview

The Navigator for Enterprise Solutions

50 Most Promising IoT Solution Providers 2015

'Connectivity' is a pioneering idea that has revolutionized the technological landscape. Right from basic telephonic systems to advanced wireless accessories, everything revolves around an initiative to craft a connected world. Amid this large arena of connectivity, lies the booming landscape of Internet of Things (IoT) that has spread its wings to foster whole new era of intelligence.

Realizing this crucial need of intelligence, today's enterprises are embracing the concept of IoT to significantly improve business performance, profitability and customer-experience. Retailers, warehouse systems, and manufacturers have already employed IoT within their workspace and are experiencing benefits of the connected world.

In spite of its current limited coverage, experts of the IT industry foresee high demand for IoT deployments in the coming future. All along this growth, is the emerging trend for Edge Computing in the field of IoT. Edge computing is an idea where one captures, processes and store the information locally. This allows organizations to filter out the inconsequential messages while also augment the value of existing data. The other advantages include—deployment of smaller and simplified sensors, and application of security at a local level.

Citing these innovative trends and expansion of IoT, the necessity for competent IoT solution providers has increased immensely. Subsequently, a number of companies have achieved distinction in delivering these services. In the last few months, we have come across hundreds of IoT solution providers and shortlisted some of the pioneering companies who have helped manufacturers, retailers and several other enterprises in tackling the IoT's impediments. We present you 50 Most Promising IoT Solution Providers 2015.

Sierra Monitor Corporation

recognized by **CIOReview** *magazine as*

CIO Review 50 MOST PROMISING IoT SOLUTION PROVIDERS 2015

An annual listing of 50 companies that are in the forefront of providing IoT solutions and impacting the marketplace

Pradeep Shankar
Editor-in-Chief
CIOReview

Company:
Sierra Monitor Corporation

Description:
A company that offers solutions enabling CIOs to integrate Information Technology (IT) with Operational Technology (OT)

Key Person:
Varun Nagaraj, President and CEO

Website:
www.sierramonitor.com

Sierra Monitor Corporation
Operational Technology with Distributed Control

Today, many of the giants in the Information Technology (IT) industry are moving to extend their applications to enable Internet of Things (IoT). However, achieving this vision requires integration between the world of IT and the world of Operational Technology (OT). OT includes various instrumentation, automation, and control devices that are often embedded into the operation of a building or a facility. The Industrial IoT refers to the integration of the IT and OT fronts in an industrial or commercial setting where such OT systems are an integral fixture. With over 100 unique protocols, for devices, products, and systems in the OT realm, CIOs are hard-pressed when it comes to finding ways to create and connect between IT and OT.

Providing IoT solutions and enabling the integration of IT and OT is what Sierra Monitor Corporation (SMC) does. "Our offerings are built around the concept of turning traditional industrial or automation

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products into "smart connected products" and involve many technologies that are different from traditional IT infrastructures," says Varun Nagaraj, President and CEO, Sierra Monitor Corporation (SMC). The company's flagship offering, the FieldServer protocol gateway product line, serves as protocol translators to connect OT and IT devices in various configurations. FieldServer protocol gateways have been widely used in industrial and commercial facilities in lighting controllers, heating, physical security systems, smart elevators, and other devices. FieldServer protocol gateways "connect" and map various IoT protocols to enable the implementation of a singular IT/OT management framework.

SMC's "protect" offering, the Sentry IT fire and gas detection system, which consists of sensor modules that can detect the presence of toxic or combustible gases and flames in facilities and integrate with the IT system to take action. The risk of such gas build-up exists in data centers that use battery or diesel generator back-up.

Varun Nagaraj

Additionally, several facilities are inherently high-risk in nature, such as alternative fuel refueling facilities, factories, wastewater treatment plants, and others. "We bring the sensor data into a controller where algorithms make decisions on what actions to take, like fan controls, door locks, alarms, and notifications," says Nagaraj. Imbibed with IoT, the Sentry IT System can be plugged into larger OT/IT infrastructure including cloud based remote access and analytics services. The data collected by the system is designed to be accessible and can be used for analysis and studied.

In one instance, an enterprise wanted to reduce the power consumption of their data center and improve the safety of the professionals who work there. By implementing the FieldServer protocol gateway, the customer was able to connect electric sub-meters and other environmental sensors to the data center facility management system and to the Data Center Information Management (DCIM) system. By doing so, the facility manager was able to monitor and optimize the energy usage that translated to savings and created a greener footprint for the company. Additionally, the company also used the Sentry IT gas detection system to detect the build-up of Hydrogen gas in the battery rooms to notify the facility manager about gas build-up.

When it comes to satisfying clients or developing stellar tools, SMC has been able to maintain the edge with their deep expertise in the field. "IT/OT integration is an area that CIOs should pay attention to because the right distributed control and analytics can increase the company's efficiency and innovation significantly," concludes Nagaraj. CR