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M2M TECHNOLOGY SPECIAL

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20 Most Promising M2M Solution Providers 2015

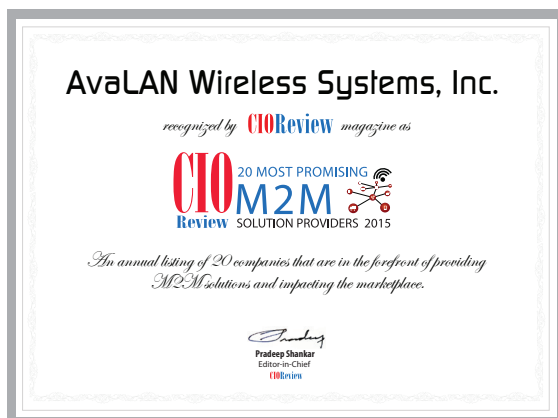
Machine-to-Machine has become a keyword that has the potential to transform operations in nearly every industry. With the primary aim of connecting, monitoring and actuating devices that are used chiefly in the telecom industry, the technology is now shifting towards cellular connectivity and data services that monitor the hardware equipments utilized in different industrial sectors. Greater demand for M2M solutions has primarily triggered the widespread adoption and creation of affordable wireless communication.

As the adoption of M2M increases, managing the sheer amount of connected devices is resulting in reduced workflow performance and giving rise to new types of security threats. Further, the convergence of trends like the cloud, mobile, and big data is fuelling a huge inflow of data in M2M space. To overcome these issues, the M2M vendors and service providers are offering new strategies in the submarkets such

as M2M security, Connected Device Platforms (CDP) and Application Platforms.

While there are thousands of M2M solution providers in the market, the variety in solutions and their use cases have made spotting the right solution, a difficult task to accomplish. To simplify and help CIOs identify the right M2M solution providers, a distinguished panel comprising of CEOs, CIOs, VCs, analysts, and CIOReview editorial board have selected the top M2M solution providers. The companies featured here demonstrate an ability to develop innovative technologies and methodologies, while offering outstanding customer service.

In our selection process, we looked at the vendor's capability to fulfill the need for cost-effective and flexible solutions that add value to the M2M landscape. We present to you CIOReview's 20 Most Promising M2M Solutions Providers 2015.



Company:

AvaLAN Wireless

Description:

AvaLAN is an industrial supplier of secure wireless products, providing robust and reliable solutions for the video surveillance, smart-grid, retail IoT, digital signage, access control and industrial automation markets.

Key Person:

Matt Nelson
President & CEO

Website:

avalanwireless.com

AvaLAN Wireless

Providing Wireless Radio Capable of Industrial M2M

The lack of reliability and robustness has made wireless technology unpopular amongst CIOs. Decision makers have been reluctant to use wireless technology for M2M communication, considering business critical machines cannot afford to have a drop in connection, like consumer cellular phones. Providing secure and reliable wireless communications has been a challenge in industrial environments, and extreme climates. “Since, our inception we have been delivering wireless M2M solutions to clients in trying conditions,” says Matt Nelson, President and CEO, AvaLAN.

The company started as a spinout of a semiconductor company producing radio frequency chips, some of which are embedded in its current products. “We were implementing Ethernet connections from the days when RS 232 was widely used, so we consider ourselves pioneers on the subject when it comes to industrial Ethernet traffic,” adds Nelson. Originally founded in Silicon Valley but now headquartered in Huntsville, AL, AvaLAN, provides a host of wireless communication applications, which includes IP video surveillance, smart-grid, digital signage, remote access control, and industrial automation. AvaLAN primarily works as an OEM for most of its clients along with providing full turnkey packaged solutions to some of its customers.

The company fine-tunes its solution as per client’s requirements in terms of throughput and distance. On the high-end, AvaLAN provides 5.8 GHz bandwidth connections for its IP video surveillance solutions while, on the lower end, it deploys 900 MHz bandwidth for remote sensors. The expertise possessed by AvaLAN has helped the company think at the design level while developing unique solutions to address the customer’s shortcomings.



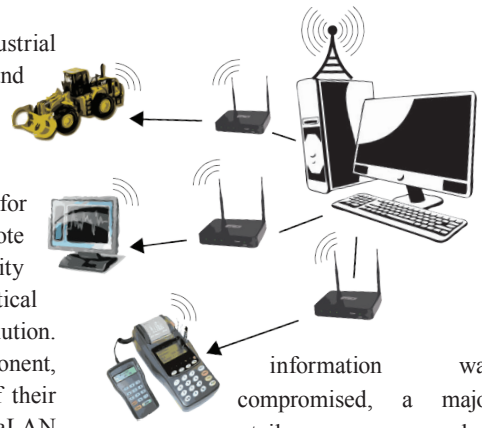
Matt Nelson

AvaLAN works with industrial customers that need secure and reliable cellular M2M solutions. Throughout the past five years, AvaLAN’s customers have been deploying cellular technology for kiosks, remote monitoring, remote automation and remote security applications. Cellular service is a critical component to every cellular M2M solution. In an effort to ease the service component, AvaLAN offers pre-provisioning of their solutions for their customers. AvaLAN sees the M2M market continuing to grow and an accelerated rate and more and more devices can be managed through the internet.

Nelson delineates, “We control our own platform all the way down to the chip level by using our own baseband hardware, firmware, protocols, and software.” Self-controlled protocols combined with government certified encryption makes AvaLAN’s technology more reliable than standard Ethernet. Through Ethernet packet manipulation, the company ensures a certain level of packet delivery every instance, based on customer requirements. Nelson asserts, “As a company, we are ahead of the prevalent technology as we use a multi-layered security system.”

This level of expertise and specificity in terms of design keeps AvaLAN ahead of its competition and keeps clients satisfied.

When retail giants made the news after their customers’



information was compromised, a major retailer approached AvaLAN to evaluate their existing security. “Our client voiced concerns about protecting critical customer information stored in their mobile POS systems,”

“**We control our own platform all the way down to the chip level by using our own baseband hardware, firmware, protocols, and software**”

says Nelson. To meet that need, AvaLAN designed the initial layout and tweaked the validation and device certification to improve integrity. “By adding some of our encryption technologies, along with VLAN (Virtual Local Area Network) integration, we made it compliant with PCI 3.0 standard making it secure,” explains Nelson.

Today, companies are looking for newer and better ways to secure their network, be it protocol, cryptography, or interfacing in their M2M communication systems. “We continue to innovate to meet our client needs and continue to push the existing boundaries of M2M technology,” concludes Nelson. **CR**