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UTILITIES TECHNOLOGY SPECIAL

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50 Most Promising Utilities Technology Solution Providers

From smart meters to rooftop solar and energy storage, innovative technologies have the capacity to disrupt the utilities industry. After remaining reasonably unbothered for the last 100 years, the lattice is in front of embracing new technologies that are sprouting new business models, altering consumer prospects and causing regulatory models to acclimatize.

The emerging technology solutions are reinventing the industry—automating and enhancing distribution grids, improving security and compliance efforts, and helping to harness meaningful information to keep costs down. With these advances, the industry can better serve their customers and grow the business.

Amidst this technology advances, the aging infrastructures, complex ecosystems, stricter regulations, and higher expectations set a challenging backdrop for energy and utilities.

But connected technologies offer powerful opportunities to modernize operations while cutting costs and generating insights. Technology is enabling utilities to embrace new challenges and pursue new opportunities.

In the last few months we have looked at hundreds of solution providers who primarily serve the utilities sector, and shortlisted the ones that are at the forefront of tackling challenges faced by the industry.

In our selection we have looked at vendor's capability to fulfill the needs of utilities sector—both from a provider and consumer perspective—through variety of services that support core business processes, including innovation areas related to cloud, SaaS, Big Data and analytics.

We present you to CIOReview's 50 Most Promising Utilities Technology Solutions Providers 2014.

Company:
DigitaLogic

Description:
Providing an Enterprise to Field System (EFS) for utilities to Monitor, Control and Automate distribution, transmission and other Smart Grid devices on their system

Key Person:
Ali Khorramshahi
President

Website:
www.digitalogic.com

DigitaLogic Enterprise to Field System (EFS) for Monitoring, Control and Automation of Things (MCAoT) – Smart Grid Solution

Utilities of the 21st century are in a transformative stage as they are faced with the challenge of producing and effectively delivering their products in an era of emerging smart grids and smart devices. These challenges include changes in regulatory requirements, increased renewable and distributed generation, optimizing operations, maintenance, and resource management. As a result, utilities are including the concept of Monitor, Control, and Automation of Things (MCAoT) into their business strategies as an effective tool to overcome these challenges.

Headquartered in Baltimore, Maryland, DigitaLogic has developed a new category of automation architecture: the Intelligent Grid Network - Enterprise to Field System (IGIN-EFS) helps clients build a single infrastructure that can securely monitor, control, and automate the entire array of field assets. "Our IGIN-EFS is a practical, secure, and cost-effective class of technology to implement and deploy MCAoTs," says Ali Khorramshahi, President, DigitaLogic.

DigitaLogic's IGIN-EFS delivers the infrastructure for MCAoT by securely connecting the enterprise-level systems to the field-level devices that are typically geographically dispersed. The process is done by leveraging any land/wireless telecom assets and applying IGIN-EFS to deploy new telecom assets, when needed, to extend the telecom coverage.

"Companies realize significant savings on two fronts when they implement IGIN-EFS for their MCAoT applications. First, as a business investment strategy, having a single system infrastructure for the MCAoT applications achieves savings for total ownership cost in terms of building, operating, and maintaining the system. Second, IGIN-EFS makes MCAoT affordable, therefore cost savings are realized when MCAoT is applied for the automation of utility companies' core business function and applications," explains Khorramshahi.

Early iterations of the Enterprise to Field System were implemented almost two decades ago and incrementally improved so that today it offers a powerful suite of tools enabling DigitaLogic's clients to deploy complex MCAoT applications. This includes


connecting the enterprise level systems to the field devices, supporting the communication protocols at the enterprise and field levels, and building SCADA telecommunication infrastructure. Examples of DigitaLogic's solutions include utilities that monitor,

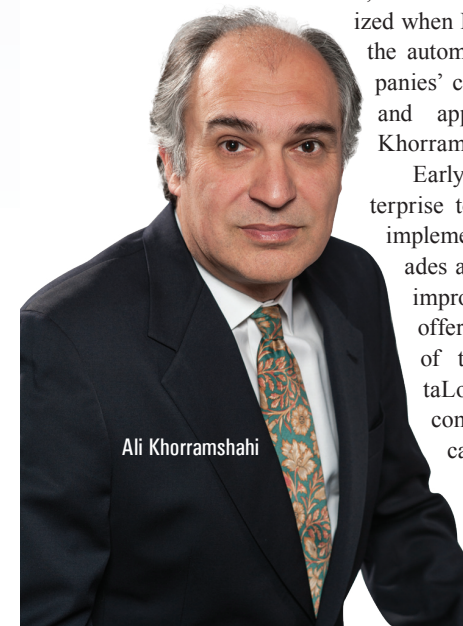
“Our IGIN-EFS is a practical, secure, and cost-effective class of technology to implement and deploy MCAoTs”

control, and automate the operations of hundreds of electric distribution circuits by wirelessly connecting thousands of distribution assets such as reclosers and switches. In addition, IGIN-EFS has made it possible for utilities to implement advanced smart grid applications such as processing radar activation signal to wirelessly perform group switching of air traffic beacon lights.

"Our clients are keenly aware that 'the only thing that is constant is change.' They know that technology is rapidly evolving and that they must be agile when incorporating new technologies into their existing infrastructure. Plus, they need it to be highly functional, cost-effective, field proven, and risk free. Additionally, many of our clients have limited resources and we become their partners and a cost-effective extension of their Engineering Team," adds Khorramshahi.

The IGIN-EFS uses open hardware and delivers a flexible infrastructure for MCAoT to ensure that legacy systems and new components work in concert. One can incorporate new radios or network solutions for telecommunications for expansion of the system while continuing to use older parts of the infrastructure. That includes telecommunications networks, radios, controllers, relays, sensors, and applications. For many of DigitaLogic's clients, licensed radio frequencies are scarce and IGIN-EFS has helped them efficiently use communications channel bandwidth. This has enabled the utilities to implement over 200 devices per master on a single narrowband channel.

Over the last two decades, DigitaLogic has deployed many large systems, patented key parts of their technology, incrementally refined and improved their solutions so that today their technology is far ahead of competitors within their niche in the market. "We have a unique product that is field proven, a solution that can empower a wide range of companies. Over the years, we have been somewhat silent about our products, engineering services and achievements. It is time to be vocal," concludes Khorramshahi. 



Ali Khorramshahi

