

The Industrial Internet – Enabling the New Water Operator

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FORMAT

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ABSTRACT

Intelligent machines are creating new ways of connecting the world's myriad of facilities, fleets and networks with advanced sensors, controls and software applications. Advanced analytics are using the power of physics-based, predictive algorithms, automation and deep domain expertise in material science, electrical engineering and other key disciplines to understand how machines and larger systems operate. New technologies and digital processes are enabling workers to be more effective and productive. Capturing knowledge in digital forms also helps retain expertise as an aging workforce retires. We call the combination of these advances the Industrial Internet, and it's creating the next generation operator and greatly enhancing the capability and power this role can deliver.

The promise of the Industrial Internet for the water/wastewater operator is significant. It will help protect treatment system's critical fixed assets with the alarm management and analytical tools needed for swift response and corrective action. The Industrial Internet will also help the operator achieve consistent compliance with drinking water standards and effluent discharge requirements with robust data record keeping and electronic operating procedures. It will prevent treatment upsets and other operational risks through increased process automation and treatment system visibility. Finally, it will improve operational efficiency through visualization of every aspect of treatment processes and operations as well as detailed training and corrective action instructions. For the operator, imagine detecting defects or being alerting to a fault in a plant on an Apple iPad® or creating large, new efficiencies by making sense of the big data from all of the equipment and processes in the plant. This is possible today, and is the exciting new reality of the operator.

In this talk, we'll look at how the Industrial Internet can bring meaningful benefits to water operators across every aspect of their operations, through technology, process, and people.

About the Authors:



Jill Burdette is the CCS Water Vertical Sales Leader at GE Intelligent Platforms. Jill has over 15 years diverse project experience with many vertical industries, as well as a Master's Degree in Mechanical Engineering from West Virginia University. In her current role at GE, Jill spends her

time with water customers exploring what their biggest challenges are and how GEIP can solve them.



Lee Jellum brings 20 years of experience to his role as Software Solution Consultant at GE Intelligent Platforms. His experience deploying automation solutions in manufacturing enables his creativity when developing prototype software solutions that address customer challenges. Prior to GE, Lee led automation projects that improved asset performance and lowered operating costs. Lee has a Bachelor of Science degree in Electrical Engineering from the University of Minnesota, Institute of Technology.