The Journey of Digital and Its Ties to Automation

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ABSTRACT

The digital revolution of water is here, but the industry didn't get there overnight. The history of digital began with automation, using simple sensors and other tools that helped operators collect and monitor data at a basic level. Now, more advanced wireless technologies and sensors are enabling advancements in real-time monitoring, predictive and preventative maintenance, system integrations, and asset & operational optimization, among others.

With the growing adoption of these technologies in both the industrial and municipal water sectors comes several early success stories. GE Water & Process Technologies uses advanced sensors to feed up-to-the-minute tank data into Asset Performance Management (APM) software. This enables the business to actively monitor water treatment chemical consumption and inventory levels, and automate inventory reorder/replenishment through integration with critical business systems, including ERP software. Advanced analytics are also enabling the optimization of RO and UF membranes for wastewater treatment. Data collected from membranes can be used to increase their performance and longevity, and deliver operational savings like reduced water usage, optimized maintenance schedules, and decreased chemical and energy costs.

For operators looking to realize these and other benefits, there are three key steps in the digital journey: **get connected; get insights; and get optimized**. Automation is the thread that connects these steps, propelling water and wastewater treatment into the digital future.

ABOUT THE AUTHORS

Steve Davis *is a business development leader at GE Water & Process Technologies. Steve Davis provides strategic direction and program management for the business' digital water initiative, and the innovation and growth for its Software as a Service (SaaS) platform. His main role is to expand Water & Process Technologies' leadership in the digital industrial space.*

Steve joined Water & Process Technologies in 2005 as part of the Commercial Leadership Program and has held numerous roles with increasing responsibility for product management, commercial operations, technical sales and engineering. He has spent the last 5 years defining and growing Water & Process technologies' Industrial Internet strategy.

Steve is as a member of the Water Environment Federation (WEF), the Smart Water Network (SWAN), and the American Water Works Association, and works with other various associations and utilities to propel digital water innovation.

Steve earned a Bachelor of Science degree in business management from Kutztown University in 2005 and has over 10 years of experience in water applications, asset performance management and software as a service business model development. Contact: Steven.Davis1@ge.com