

Leading water utilities who've successfully navigated the digital journey to true smart water

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SUBMISSION TYPE

30 minute presentation

6-12 page paper plus 30-minute presentation

3 foot wide x 4 foot high large format poster

KEYWORDS

Big data, automation, real-time, smart water, leakage

ABSTRACT

Put 200-300 word abstract here.

Today, water utilities are being asked to do more with less as they face challenges around ageing infrastructure, budget constraints, water scarcity, and the need to operate and maintain efficiently. However, technology is disrupting the industry with the prevalence of cheaper smart sensors / devices, Internet of Things, wireless connectivity, and software that can integrate and make sense of all these data sources and silos. Water utilities are embarking on this digital transformation journey, but what does this all mean for utilities and how do they take advantage of these technologies and massive amounts of data?

This presentation will focus on leading water and wastewater utilities who have embraced and leveraged these digital technologies by creating a data strategy and using real-time data to:

- drive smarter decisions to reduce opex and capex
- increase asset life
- meet environmental compliance
- reduce risks.

Operational intelligence success stories will be discussed, including:

- White House Utility District has reduced leaks by \$900,000 and deferred \$20 million in capex,
- San Francisco PUC has used condition based maintenance to save \$400,000 / year,
- Vitens in the Netherlands can detect a leak in 2 minutes,
- Veolia Water has reduced their energy by 6%,

- United Utilities uses machine learning to predict their water demand 24 hours ahead and forecast combined sewer overflows 6 hours into the future with 98% and 97% accuracy respectively

ABOUT THE AUTHORS

Gary Wong leads OSIssoft's (a leader in real-time operational intelligence) global water practice and has extensive international experience providing sustainable, strategic and cost-effective business solutions, particularly in the water industry. He holds a Bachelor's Degree in Chemical Engineering, is registered as a Professional Engineer in Computer Engineering, holds an M.B.A. from the Queen's School of Business and is also a Chartered Professional Accountant.

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