

DIGITAL TRANSFORMATION JOURNEY FOR WATER UTILITIES

As we look across industries, the state of the Water Utility Industry is the strongest it has been in the past 15 years. The industry has demonstrated the ability and desire to address challenges while safeguarding public health, serving and supporting communities, and protecting the environment. Many Utilities have started their digital transformation journey using an array of methods such as data governance, advanced operations management, and enhanced customer engagement.

While the road to transformation is not easily navigated, Water Utilities across North America are facing challenges that come with growing population demands, managing supply and infrastructure, an aging workforce, and the need to provide affordable drinking water and services to their customers. Today, Utilities need to have a clear enterprise-level digital transformation strategy to transform their existing operating and business models. The Digital Utility is now viewed as the standard and is no longer an option.

The technology available to assist with these challenges has established SAP as the leader in the Utilities industry.



Jennifer Baldwin, Industry Executive Advisor for Utilities – SAP

Jennifer has over 19 years' experience in the utility industry, and is a PMP certified Project Manager, specializing in large scale, rapid business transformations in the utility environment. Jennifer joined SAP in December 2019 as an Industry Executive Advisor to build meaningful relationships and help deliver utility specific customer experiences.

Jennifer began her career at Hydro One in Canada and worked in a number of customer-facing roles in the Customer Care division. She then spent several years as a System Implementer and most recently worked as a utility consultant helping electric, water and gas utilities in North America with their strategic planning, evaluation, selection, and implementation of mission critical applications.





“ DIGITAL TRANSFORMATION IS ENABLING UTILITY COMPANIES TO CHANGE THEIR BUSINESS MODELS AND ADAPT TO A NEW MARKET REALITY. ”

AGING INFRASTRUCTURE & INCREASING MAINTENANCE COSTS

One of the most pressing issues facing the water industry is their aging infrastructure and infrastructure funding. According to the United States Environmental Protection Agency (“EPA”), \$472.6 billion is needed to maintain and improve the nation’s water infrastructure over the next 20 years. We are now seeing Utilities investing in new ways to be more operationally efficient and to gain more insight into their assets. Water leakages (which the EPA estimates at 1 trillion gallons of water nationwide each year) and unmetered water are driving increased investment into digital technologies.

To combat these issues Utilities are supporting the adoption of new technologies such as SAP S4/HANA, smart devices, and the Internet of Things (IoT), which can proactively and predictively manage infrastructure including proper water metering, leak detection, and degrading system identification while otherwise improving asset utilization and predictive maintenance.

AGING WORKFORCE

All Utilities in North America are facing similar resource constraints due to an aging workforce that are eligible for retirement and a lack of a new talent pool. To make much-needed upgrades to a Water Utility’s aging infrastructure landscape will require a digitally savvy, skilled workforce to build, operate, maintain, and manage these new technologies and assets.

Utilities are looking at new ways to attract younger, high performing talent and creating an employee-centric culture. They are also leveraging modern technologies such as Qualtrics, SuccessFactors, etc. to unify the workforce under the digital transformation banner, improve employee

satisfaction, develop faster ramp-up times and productivity, and begin early engagement for new hires.

We are also seeing Utilities partner with nearby colleges as a way of sourcing a fresh talent pool with new ideas, providing students with internships, and sponsoring industry-specific courses and research.

INCREASED CUSTOMER EXPECTATIONS

Customer engagement is changing, and Utilities are looking to provide an enhanced customer experience with seamless interaction. The water industry is leveraging newer digital multi-channel solutions such as SEW to improve the customers’ experience, create positive customer interactions, and streamline operations.

CALL TO ACTION

Digital transformation is enabling Utility companies to change their business models and adapt to a new market reality. The need to invest in the right technology is paramount, but it’s dependent on four pillars.

1. Build a digital roadmap with a strategy on outcome-based themes
2. Create a culture of innovation with stakeholders across the Utility
3. Leverage partners and peers to explore new technology that create value
4. Develop a data strategy for use across the enterprise

While it will take time for Utilities to adapt in order to take full advantage of digital technologies and methods, the water industry has never had such a wide array of solutions to improve how they service their customers and manage their critical water infrastructure as they do today.