

Trendwatch

Amane Advisors Shares Insights in IDA Connections' Trendwatch Section



Digital Transformation in the Water Sector, Part One: Digital Is a Priority By Gigi Karmous-Edwards

The term “digital transformation” seems to be popping up everywhere, across most sectors. Is this a drive-by-trend that we will witness in the water sector, or is it the beginning of a long-lasting, fundamental shift in the way water is delivered to society?

In this installment of a series on the role of the digital world on the water sector, we discuss some of the key barriers to digital technology adoption in water and help define the term “digital.”

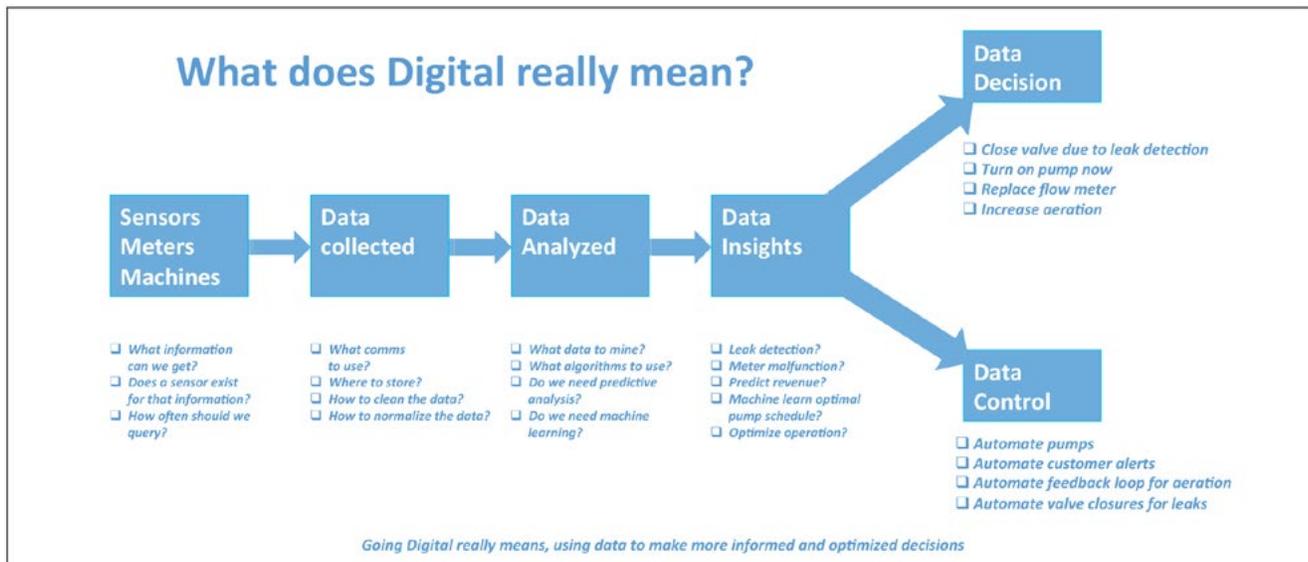
Amane Advisors interviewed 123 utilities, technology providers, and investors as part of a knowledge effort on digital transformation of the water sector. These surveys yielded original insights, trends, and predictions on the digitization of the water sector. One of the interesting findings was that 90 percent of utilities, on a global level, do see digital solutions as a high priority and would like to have an increase in adoption. Although utilities view digital solutions as a high priority, only half of utilities are satisfied with the rate at which they adopt digital.

So, why is the water sector further behind other industry segments in terms of digital transformation? In the past, this has been explained mainly by the risk-adverse nature of the water industry, as water utilities are critical infrastructures, and the market is fragmented.

However, the Amane knowledge effort revealed that there are deeper reasons for some of the barriers to adoption. These include the following factors: a slow and complex procurement cycle, a lack of digital culture within utilities, small budgets for digital solutions, and a lack of staff skills. These barriers can be further broken down into understanding the role and development of technology business cases, or the role or lack of training within a utility, for example. All of these issues are resolvable.

Technology vendors can also do more to simplify and improve the procurement process by creating stronger business cases for their solutions, providing solutions that include mechanisms that makes integration with legacy systems easy, and providing more training and support to utilities that implement digital solutions.

These are just some of the insights gleaned from the interviews. To resolve some of these barriers to digital technology adoption, Amane is bringing together a group of 50 utilities from around the world to help accelerate digital technology adoption by working through these current challenges to help develop real, impactful solutions.



Trendwatch

Digital Defined

At the start of the interviews, water sector leaders asked for clarification about the term “digital”. In the context of the knowledge effort, digital is defined as the use of data to make more informed and optimized decisions.

Data collection and analysis is accomplished using a set of technologies required for most solutions.

The key components of digital solutions include:

- The objects recording the data, such as sensors, meters, machines (pumps, digester, etc.)
- Communications infrastructure
- Data store
- Data analysis to provide insights
- Human control decisions, or machine control decision (automation)

These are among the foundational technology components needed for digital solutions in a utility. Overlying these technologies are people, processes, and leadership’s commitment to innovation and a strong customer focus to take full advantage of digital transformation.

For the next installment, we will discuss the role of a utility’s digital strategy on the rate of digital technology adoption. A key finding: Successful digital transformation of a utility goes beyond process change; it includes the development of a digital culture within the organization.

The rate of digital adoption is dependent on establishing a clear vision of the goals and outcomes, designing and implementing a digital strategic plan and getting the internal culture right.

Gigi Karmous-Edwards is a Director of Digital Business for Amane Advisors, an advisory firm specialized in the water sector.

She can be reached at gigi@amaneadvisors.com