

URBAN WATER RESOURCES MANAGEMENT

Smart v. Traditional

Did you know?

The installed base of smart meters in the U.S. accounts for approximately two-thirds of the global market and is projected to be over 50% by 2016



Traditional Water Meters

A building or household's total water consumption is manually read → Customers can't pinpoint inefficiencies and leaks are difficult to detect

Smart Water Meters

"Smart meters" allow for continuous, remote monitoring of consumption → More comprehensive usage and price signal data and highly accurate leak alarms

Did you know?

30-60% of water quality incidents are related to events in the water distribution network



Traditional Water Quality Monitoring

Relies on manual, "grab" sampling techniques and field/laboratory analysis → Can be time consuming and costly

Smart Water Quality Monitoring

Online sensors communicate real-time data to a software platform → Manages and avoids quality issues before customers are impacted

Did you know?

According to the World Bank, non-revenue water (NRW) typically averages between 15% and 40% and can reach 60% and 70% in some developing countries



Traditional Leak Detection

Relies on regular sweeps by field teams → Can be time consuming and costly

Smart Leak Detection

Fixed sensors or automated software remotely alert system operators in real-time about various network inefficiencies → Prevents precious water loss and large bursts that interrupt service and cause property damage

Traditional Pressure Management

Pressure valves are manually controlled by reactive programmes or field visits → Can be time consuming and costly

Smart Pressure Management

Network water pressure is automatically and remotely controlled based on real-time operating conditions → Reduces burst frequency and extends infrastructure lifetime

Did you know?

Energy costs can reach as high as 40% of a utility's total operating costs



Traditional Energy Management

Relies on pump station audits or installing pump station controllers → Does not account for water demand or energy tariffs

Smart Energy Management

Pump stations are automatically controlled based on real-time optimization and control applications → Increases energy efficiency and asset performance while cutting down energy costs

Did you know?

It is estimated that implementing smart water network solutions could save global water utilities and their customers up to \$12.5 billion per year



The world is becoming smart. It's time to reinvent our water future.

Learn more at www.swan-forum.com