

# DATA-DRIVEN SUSTAINABLE WATER MANAGEMENT

## Delivering key insights for controlling water quality & providing clean water to citizens

A state-of-the-art solution that helps water departments monitor and control water quality parameters, leveraging new-age tech such as AI and predictive analytics. The solution unifies data from siloed systems, provides real-time & proactive insights, anticipates issues, initiates proactive corrective measures, helps fix issues faster, and reduces the number of customer complaints so that agencies can provide clean & safe drinking water to citizens.



### Benefits

**95%** reduction in data discovery time for water scientists

Data quality issues reduced by **70%**

**1500-person days/year** saving due to ticket volume reduction

### Features

- AI-based Predictive Maintenance using anomaly detection & forecasting techniques
- Data pipelines that can ingest from legacy ERP & Scada systems & IOT Sensors
- Realtime Dashboard & report templates
- Reusable Common Data Model for capturing data coming from ERP /Scada/ IOT sensors
- Data Governance with Data Cataloguing, Data Lineage for entire IT Landscape.
- Scalable to 100 Petabytes of data.

### Why Acuvate



#### Ready to use solution

can be deployed without any modifications to the existing (Legacy) IT landscape



#### Faster time to market

3 to 4 months using reusable solution



#### Proven experience & expertise

Successful rollouts done for large Public sector organizations



#### Award winning Public sector



## CLEARING THE PIPELINES

**How Acuvate enabled a Metropolis' Water Supply Department become a data-centric as well as customer and employee friendly organization**

### About the client:

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Our customer is a large government organization that manages the city's water supply and works to reduce air, noise, and hazardous materials pollution.

It provides more than 1.1 billion US gallons (4,200,000 m<sup>3</sup>) of water each day to more than 9 million residents through a complex network of nineteen reservoirs, three controlled lakes and 6,000 miles (9,700 km) of water mains, tunnels and aqueducts. Our customer is also responsible for managing the city's combined sewer system, which carries both storm water runoff and sanitary waste, and fourteen wastewater treatment plants located throughout the city.

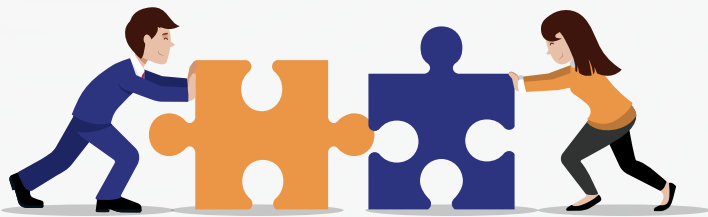
### Highlights:

- Implemented a self-service Data Modernization system with Data Governance and best practices for the water department

- Enabled the water department to identify and correct water quality issues in real time, and develop proactive models to avoid future

## CHALLENGE

- Disparate data sources with 90 databases often redundant data.
- Inability to combine streaming and history data.
- No data governance mechanism and master data challenges.
- Difficulty to find and access data when business needs to make decisions.
- Siloed applications which do not talk to each other.



## SOLUTION

The solution was to stream data from various IOT sensors, historians and other data sources into cloud for real time insight generation.

**Solution has the below components and benefits:**

- Streaming data ingested
- Migrating historical data
- Transformation and curating data
- Real time monitoring of data using operational dashboard
- Building self-service reporting
- Generating alerts based on business rules
- Querying data using Natural language through chatbot

## ROI

Enterprise data warehouse built enabling single version of truth.

Streaming data and batch data combined to get better insights.

Reduced manual effort of building reports with centralized self-service analytics.

Data governance and security mechanism for subscriber access.

## THE ACUVATE ADVANTAGE

Acuvate is a global player in next-generation digital solutions & services that modernize, automate, and transform processes. With over 16 years of experience, we have been enabling our clients globally to steer their digital transformation strategy using Cloud, Data & AI. We build & develop smart & sustainable solutions to help our customers transform their conventional processes to match the next-generation technological trend. We have a strong presence in Europe, North America, and Middle East, where we serve multiple ultra-large customers as well as SMBs from various sectors such as Public Sector, CPG, Retail, Oil & Gas, Energy, Manufacturing, BFSI, Healthcare, etc. With our multi-skilled experts and packaged AI accelerators, we deliver unparalleled efficiencies and accelerate time-to-value for our customers.

