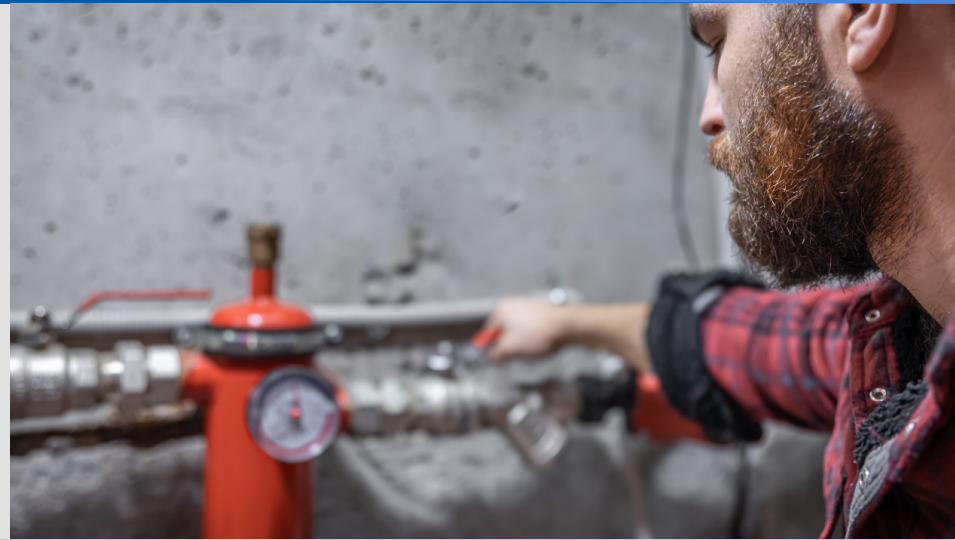


# Enabling the promise of healthy communities for a utilities major



## Client description

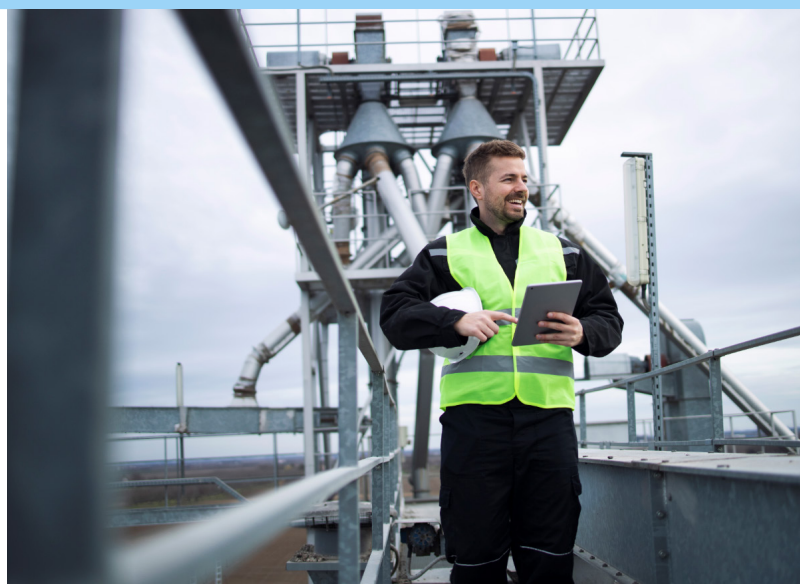
Client is a 24\*7 high-quality water supply and sewerage services provider with a mission to ensure healthy communities. It is on a transformation journey to digitally connect water and sewerage services to improve customer experience, reduce environmental impacts and optimize operating costs.



## HCL's role in the transformation journey

### Intelligent data platform and reporting

- Designed an intelligent data platform on MS Azure with a composable architecture covering data ingestion, data management, reporting and Insights.
- Provided static data analysis of water flow trends(hourly, weekday) and forecasted hourly water flow for next seven days using PowerBI.



### Customer 360° from structured and unstructured data

- Converted phone conversation audio into text file, from which customer details were extracted using NLP.
- Extracted customer details from Cognito forms to identify outage location. Real-time dashboard provides insights into car certification process and enables timely action in case of delays.
- Extracted customer details, longitude and altitude from live chat for identifying outage location.

### AI/ML to detect anomalies in water pressure and outage prediction

- AI/ML based solution to minimize unplanned outages that were resulting in revenue loss and skyrocketing maintenance costs.
- Analyzed water logger data and identified anomalies, low flow incidents and outage flag across channels like call center, social media to confirm an outage and reduce false positives.
- Enhanced customer satisfaction with low response time to incidents and timely communication



### Improved asset management and water loss

- Created an intuitive dashboard for regional managers to provide real-time incident data with key metrics (e.g., Avg. resolution time, area impacted, emergency activities, asset health status)
- Early warnings about illegal pollution of the sewerage network.

## Business benefits



Energy savings of **20%** due to less water being pumped at a lower average pressure



Reduced bursts in water pipes by **40%** and cut leaks by **20%**



Improved customer experience and enhanced sustainability maturity

