

### Central Event Management for Optimized Network Operations

Reduce water loss and improve operational efficiency and customer service — with a single software solution that leverages all your different data sources and delivers actionable insights across your organization.

TaKaDu Central Event Management (CEM) empowers water utilities to manage their networks proactively and efficiently, resulting in dramatically lower NRW, improved service continuity and lower costs. With TaKaDu, utilities are well-positioned for digital transformation and they can better comply with regulations, improve retention of organizational knowledge, and proactively plan maintenance of their assets.

A cloud-based SAAS platform in use at dozens of utilities worldwide, TaKaDu offers proven value — by enabling billions of liters of water savings annually, reducing time to repair, and driving data-driven decision-making for more efficient operations.

#### The TaKaDu advantage

- Centralized dashboard of all operational solutions
- Uses advanced data analytics and machine learning for 24X7 detection of:
  - Slow-developing leaks, even smaller than the nightline resolution
  - > A wide variety of asset failures
- Ongoing KPI-driven prioritization of events and their entire lifecycle management
- Quickly deployed and easily scaled
- A proven, intuitive, cloud-based software solution with built-in best practices and a friendly user interface
- Global presence, 10+ years of experience, and patented technology

\*\*Over the past two years, using the TaKaDu system we avoided 1000ML in non-revenue water loss and over \$1.3M in rebates for non-supply. We also avoided or minimized over 200,000 property impacts.\*\*

Darren Cash, Customer Hub Manager, Sydney Water

# Actionable insight everywhere it's needed

With TaKaDu, you can quickly and easily detect, analyze and manage network events and incidents such as hidden leaks, apparent water loss, burst pipes, faulty assets, telemetry, pressure, and water quality.

## Detect. Analyze. Manage.

TaKaDu's Central Event Management (CEM) transforms the utility's multiple data sources into a single dashboard about events that is accessible across your organization. Using advanced data analytics and machine learning, TaKaDu converts the tsunami of raw data generated by your various sensors and systems into critical knowledge and actionable insights.

TaKaDu is fully integrated with other enterprise IT systems, including GIS, asset management, work order management, call centers/CRM, ERP, AMI/AMR and with other detection solutions, such as acoustic leak and pressure transient detection.

For each event, TaKaDu provides all the information needed to efficiently manage the entire event life cycle, prioritize actions, communicate with others in the organization, track progress of the operational activity in the field and verify the repair. Details provided include time, magnitude, priority, location, assigned 'owner', estimated cost and more.

#### Smart, automated leak detection process

1 Integrate real-time data



- SCADA data
- Meters, sensors
- 2 Learn the supply behavior

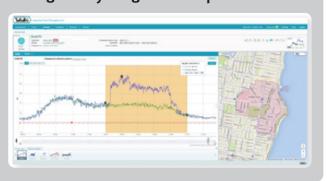


- Cleanse data
- Create predictions
- Intelligently fill-in data gaps
- 3 Detect anomalies



- Compare real-time data with historic and network predictions
- Identify trends (slow-developing leaks)

#### 4 Manage everything with one platform



TaKaDu monitors the network 24/7 and provides event life-cycle management. Leak detection is based on deviation from historic pattern and network predictions. When an anomaly is significant, the system declares it an 'event' soon after it starts (e.g. within one hour).

#### A Strategic Decision-Making Tool

The system bridges organizational silos, improving communication and coordination across relevant departments for increased operational efficiency and the highest levels of customer service. TaKaDu helps to align People, Processes, and Technology (PPT) by prioritizing assignments, repairs and investments, while providing insights into network performance.

The system provides managerial dashboards, actionable insights and detailed reports to leadership teams, driving improved asset management and regulatory compliance.



TaKaDu's event management paradigm has transformed the flood of incomprehensible data into meaningful information that the KUB organization can effectively use.

Ted Tyree, Water Systems Engineering, Knoxville Utilities Board (KUB), USA

# Proven high value across your operations

#### **Minimize NRW**

- Detect hidden and slow-developing leaks that otherwise could run for months before surfacing
- Detect asset failures such as pressure, PRV, breach, faulty meters, transmission failure, water quality, water level, and industrial and commercial meter degradation
- Calculate water balance and immediately see lost water volume and value, allowing you to prioritize repair activities

#### Achieve more with less

Monitor and manage your network faster and more accurately, using fewer applications, with a less-skilled workforce, lower subcontracting costs, and less leak-associated damage

- See all relevant information from multiple systems, via a single dashboard
- Plan and prioritize repairs and work orders based on timely, precise, and detailed information (fewer fires to fight)
- Reduce leak detection time and costs, with detection surveys aligned with district metered area (DMA)) boundaries
- Empower data-driven decision-making, with ongoing automatic analytics and operational reports
- Improve coordination across departments, with a central hub for all incident-related information
- Efficiently manage events along their lifecycle

### Delight customers and improve regulatory compliance

Improve customer service with higher service uptime, high-quality water and consistent water pressure

- Minimize disruptions with early detection of leaks, water quality, and water pressure events
- Reduce customer complaints with shorter repair lifecycles and proactive detection and repair
- Meet and exceed regulatory targets for water availability, pressure, and quality

#### Scale with ease

- Flexibly integrate data from multiple sensor types and IT solutions as you evolve into a smart, digitalized utility
- · Easy and fast deployment in eight weeks or less

### Reduce dependence on skilled or aging employees

Simplify event management with automated and standardized processes and a user-friendly interface

- Train new staff to monitor and manage events, in as little as 1-2 days
- Access an always-available historical log of events and activities

#### Plan smarter

 Prioritize capital investment with predictive maintenance reports and processes, and proactive surveys of assets and DMAs

## TaKaDu – The Global CEM Pioneer and Leader

TaKaDu is a global leader in Central Event Management (CEM) solutions for water utilities. Since introducing our cloud-based SAAS platform in 2010, TaKaDu has helped water utilities around the world gain exponential value from digital transformation.

Our solution is operational 24/7 in leading water utilities in 12 countries, including Australia, the US, Brazil, Chile, Finland, Israel, and Spain. Our customers span water utilities of every kind: from small to large, rural and urban, private and public.

Based on our 10 years of experience, we continuously improve our patented technology, adding new features and capabilities that reflect the insights and feedback of our large community of users across the globe. Our patented technology has earned notable commendations, including the World Economic Forum ('Davos') Technology Pioneer Award and a Harvard Business School case-study.

Founded in 2009, TaKaDu is headquartered in the high-tech development hub of Israel.

TaKaDu was instrumental in transforming our operation from being reactive ('fire fighting') to have better planning, effective communication between departments, and efficient operations.

Sebastian Otero, Network Manager, Essbio, Chile



