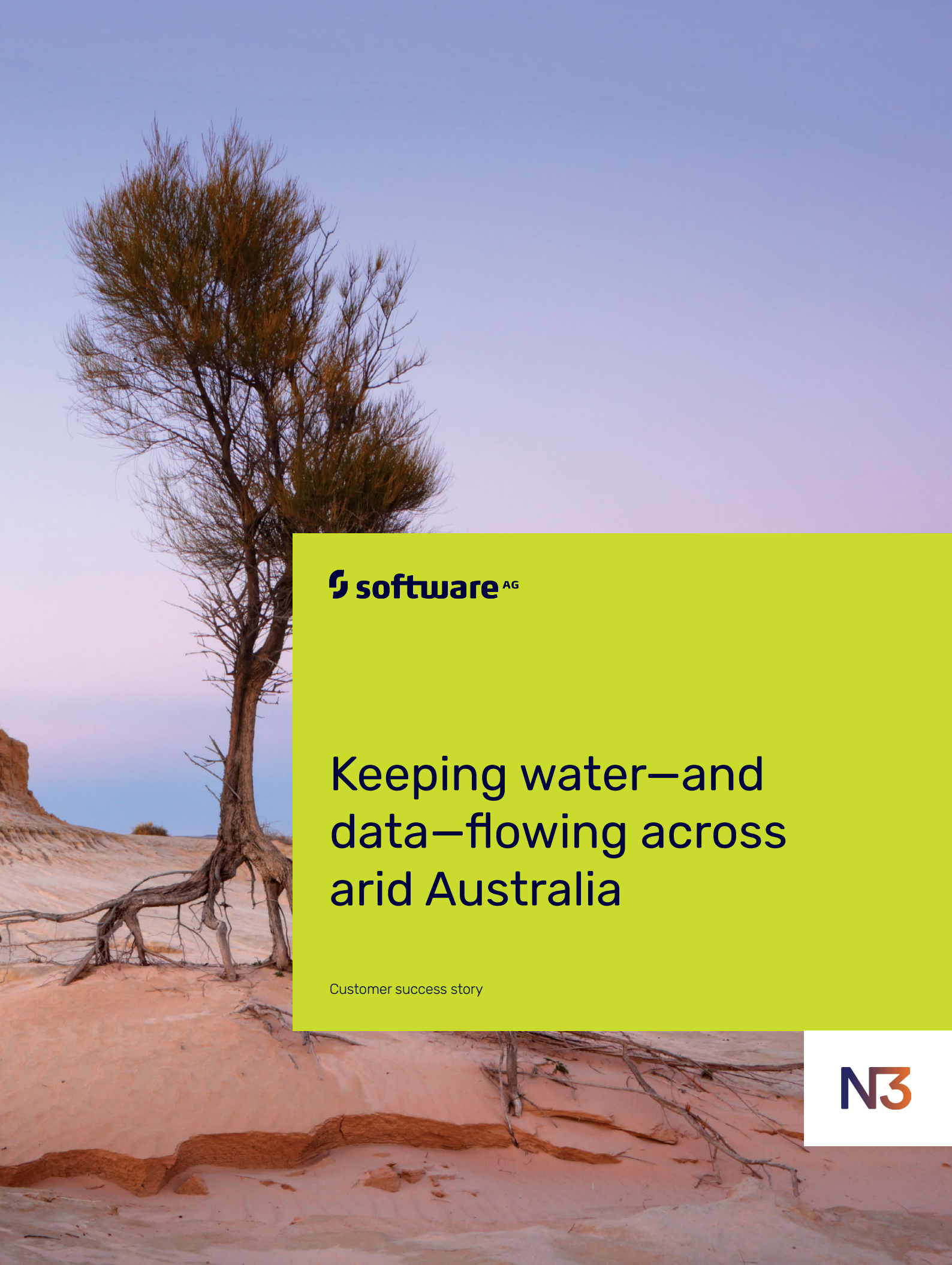

software AG

# Keeping water—and data—flowing across arid Australia

Customer success story

N3

"Utilities want multiple integrations into a variety of system layers including their IoT solutions. We offer our customers a fully integrated IoT solution, which includes device connectivity and management, data capture and analytics."

– **Louis Limnios** | Managing Director at Nucleus3

### Customer Profile

A Melbourne, Australia-based consultancy and systems integrator, Nucleus3 has 50+ advisory consultants focused on the utilities, telecommunications and local government sectors. The firm specializes in digital and business transformation, asset management, regulatory frameworks and compliance, smart grid technologies, as well as traditional operational and information technology.

### New challenges

- Help water authorities save resources and lower costs
- Reduce integration work between IoT and enterprise applications
- Enable utilities to start with small projects and scale them
- Set up alerts, customize real-time messages and track customer locations
- Increase customer engagement with better use and capture of data

### Software AG solutions

- Cumulocity IoT
- TrendMiner self-service industrial analytics
- webMethods for integration

### Key benefits

- Lower water management costs
- Fast identification of leaks to reduce water loss
- Spills and discharges into the environment avoided
- Supply pressure and quality monitored
- Consumers able to understand their water usage

## Quenching a thirst for IoT in Australia

Australia is the driest inhabited continent on earth—hot, prone to drought and one of the highest consumers of fresh water. Its 140+ water authorities serve 25 million+ people and keep 135,000 farms irrigated.

Most Australian water authorities are small but have huge responsibilities. They're tasked with sourcing, storing and distributing clean water, managing wastewater reticulation and treatment, and handling customer administration, including billing.

Budget is scarce for improvements like upgrading treatment plants. Cost-recovery charges permitted by regulatory bodies are well below inflation. To secure funds to make updates, authorities must prove extraordinary circumstances.

It's been tough to balance supplying clean water efficiently while minimizing leaks and managing demand at the lowest OPEX and CAPEX costs. That's why many of Australia's water authorities have turned to connected things, like digital water-measuring devices, and the Internet of Things (IoT) to help them get greater performance from existing assets.

## Getting smarter about IoT

"Utilities like playing with IoT technology," explained Nucleus3 Senior OT Consultant Michael Macfarlane. Nucleus3 has roots in the water industry and has helped the authorities kick-start smaller IoT projects using Software AG's Cumulocity IoT platform for device management.

"The utilities are used to working with SCADA," he said. "In fact, most have well-established centralized control and monitoring of their larger material assets, such as plants, pumps, water pipes and sewers, from traditional SCADA operations. But they don't yet understand how IoT fits in or works in their unique environment."

Smaller utilities are too focused on operations to take time to think deeply about IoT, he added. They have resource constraints and lack the skills, knowledge and bandwidth to do it themselves. Cost of devices and communications has also been a barrier to full IoT adoption.

Moving forward, the utilities want more from the IoT—improved intelligence and the ability to collect data more frequently. They want pressure sensing across networks in near real time, to monitor sensor conditions and sewer manhole levels to prevent spills, as well as to assure asset integrity and push intelligence to the edge of the grid.

## Enter integration and Utilities.io

What's been missing is the integration layer that could take IoT from one-off projects to full-scale integrated enterprise strategies—integrating IoT data with enterprise systems for a fluid flow of data, explained Louis Limnios, Managing Director at Nucleus3.

"Utilities want multiple integrations into a variety of system layers including their IoT solutions," he said. "We offer our customers a fully integrated IoT solution, which includes device connectivity and management, data capture and analytics."

Meet Utilities.io, an end-to-end water management solution by Nucleus3. Ideal for smaller water authorities, the solution combines three Software AG products: Cumulocity IoT for device management and streaming analytics, TrendMiner for time-series analysis of utility data, and webMethods for integration.

"webMethods is already well known in the market and really reduces the amount of integration work our customers have to do," Limnios said.

## Pouring on the benefits

The turnkey Utilities.io offering is a plug-and-play water management IoT solution without complexity or a large capital investment. Systems, expertise and resources are all part of the solution. Connectivity via the cloud reduces capital costs. API adapters enable the utilities to plug enterprise and operational systems into the IoT solution for a complete asset-to-customer view of all operations.

"We love working closely with the end customer to deliver the outcome that they want," Limnios said. Standard with Utilities.io is a consultation by Nucleus3 with each utility to ensure a full understanding of IoT technology and potential financial gains. Nucleus3 also can provide an economic and ROI analysis.

Cost savings comes from many places. Automating water meters can decrease costs by 10-15%. But there are bigger benefits to be had, Macfarlane explained.

"By using Utilities.io, utilities can benefit from managing leaks, improving consumption awareness and streamlining billing," he said. "They can avoid upfront costs for state-of-the-art automated water management or divert capital to other valuable projects."

Nucleus3 is working closely with Software AG's partner Telstra to reach the smaller authorities who cover 1.2 million meters across Australia. The first customer is connected now, already getting value from the new data and integrations.

"Because customers are our number one focus," Limnios said, "we look forward to building long-term relationships with them so they can realize long-lasting benefits of using the IoT with integration. We aim to keep data—and water—flowing freely across Australia wherever it's needed."

**Take the next step**

To learn more, contact your Software AG representative or email us at: customer_marketing@softwareag.com.

www.SoftwareAG.com/customers

### ABOUT SOFTWARE AG

Software AG began its journey in 1969, the year that technology helped put a man on the moon and the software industry was born. Today our infrastructure software makes a world of living connections possible. Every day, millions of lives around the world are connected by our technologies. A fluid flow of data fuels hybrid integration and the Industrial Internet of Things. By connecting applications on the ground and in cloud, businesses, governments and humanity can instantly see opportunities, make decisions and act immediately. Software AG connects the world to keep it living and thriving. For more information, visit www.softwareag.com.



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