

Applying AI responsibly to secure water utilities

91%

of all threat investigations are conducted autonomously

264

analyst hours saved in a single month

99%

reduction in phishing emails

Visibility

revealed unseen risks, from suspicious lateral movement to misconfigurations and login attempts.

Find out how a lean team responsible for securing water treatment systems around the world relies on AI-powered precision for an intelligent, targeted, and scalable defense across networks, endpoints, email and cloud environments.

At a glance

- The Darktrace ActiveAI Security Platform™ is considered an integral part of the Osmoflo security team, providing **24/7 protection** and autonomous investigation for **91%** of all threats (on average).*
- Darktrace saved **264 analyst hours** on investigations within a single month.*
- Phishing emails that once created serious risk have virtually **disappeared** with Darktrace.
- The trial instantly **revealed unseen risks**, from suspicious lateral movement to misconfigurations and login attempts.
- IT now has **full visibility** into Osmoflo's digital estate, arming leadership with quantifiable metrics and insights.

“Darktrace was doing something others weren’t by delivering **real insight**, not just noise. That gave us the confidence to trust the technology, and it’s a decision that’s paid off.”

■ IT Manager

Osmoflo

When Nick James, IT Manager at Osmoflo, first explored artificial intelligence (AI) for cybersecurity, he wasn’t following a trend, he was taking a calculated leap into the future.

While the market remained uncertain about AI for cybersecurity in 2021, James recognized its transformative potential. By choosing the Darktrace’s ActiveAI Security Platform™, he aimed to fuel a bold vision for the future: securing a global business in smarter, more scalable, and sustainable ways – even with limited resources.

Securing a complex, global environment with a lean team

Although Osmoflo is headquartered in Australia, its reach is worldwide – designing and running water treatment systems for clients across the globe.

Lean team. Large responsibility.

The IT group behind it all is **small but vital**, tasked with protecting a sprawling mix of physical sites, virtual networks, and an ever-growing cloud footprint. “Because we support critical infrastructure, reliability is non-negotiable,” says Nick James, IT Manager at Osmoflo. “We needed a way to stay protected 24/7 without the cost and time required to build out a huge team.”

Risks outrun readiness

With ransomware and network intrusions dominating headlines and boardroom agendas, pressure mounted to prove their defenses could withstand modern threats. James conducted a security review and the results confirmed his concern: their existing tools were outmatched by scale and complexity of modern cyber-attacks.

AI expertise backed by real-world results

Osmoflo didn't just want protection. It wanted to leverage AI to create a more intelligent, targeted, and scalable defense strategy. After exploring its options, Osmoflo deployed the Darktrace ActiveAI Security Platform across its network, endpoint, email and cloud environments.

Insight meets innovation

Darktrace was put to the test, and James says the platform proved superior. "During the trial we immediately gained insights we'd never seen before, like suspicious lateral movement, mis-configurations, and login attempts. We knew Darktrace had the potential to completely reshape how we approach cybersecurity."

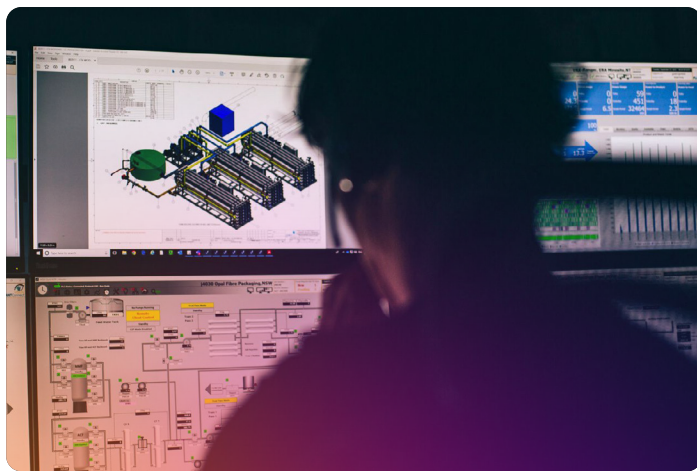
Industry leader with proven technology

Plenty of vendors are building toward having an AI-based solution. But James says what sets Darktrace apart is its early innovation and continued investment in advancing responsible AI for cybersecurity. "Darktrace has been a pioneer in AI. Its modern platform is battle-tested and Darktrace has the customer successes to prove it." He says what's unique about Darktrace's Self-Learning AI is that instead of using outside data like threat feeds, it continuously learns from Osmoflo's own environment based on how the company operates.

"Darktrace learns from our world, not someone else's, and that's how it catches threats in real time that other tools would miss."

A partnership built on trust

Beyond the tech, James says Darktrace's collaborative approach to client success stood out. "We talk a lot about partnership at Osmoflo, and that's exactly what we've found in Darktrace: a trusted partner invested in our future that continues to evolve right alongside our business."



From AI promise to proven performance

A digital teammate on duty 24/7

With Cyber AI Analyst™ conducting autonomous investigations, Osmoflo gained a new team member built for nonstop defense. "Darktrace now conducts about 91% of all investigations autonomously," James reveals. "It has virtually eliminated phishing attempts while saving us hundreds of analyst hours per month."

Less manual work. More meaningful action.

Darktrace monitors Osmoflo's environment round-the-clock, only alerting IT when something genuinely needs attention. "If Darktrace is silent, we trust things are secure. If it speaks up, it's almost always an incident worth investigating," says James.

Visibility that drives decisions

Darktrace's insights into Osmoflo's threat landscape have reshaped how leadership approaches cybersecurity. James explains that before Darktrace, execs didn't recognize the full scale of the constant threats – and risks – they faced.

"With Cyber AI Analyst's insights, I can now present clear, quantifiable metrics that show just how relentless and dangerous these attacks are and how effective we are at stopping them at scale." That data not only proves why Osmoflo's investment in Darktrace is essential but also gives leadership the trends and real-world context they need to make informed, business-level decisions.

The strategic role of AI in modern business

While cybersecurity was the entry point, James sees AI as a cornerstone for broader innovation at Osmoflo and beyond.

Working smarter and better

"We've seen how AI can eliminate repetitive work and help people focus on higher-value tasks. That's a huge opportunity for any organization looking to do more with less," stresses James. Osmoflo is exploring the potential of using AI across other areas of its business, including site design, procurement, contract analysis, finance, and in delivering services to customers.

Enabling people, not replacing them

James emphasizes that the goal of using AI isn't automation for its own sake, but augmentation – giving people tools to work smarter, faster, and more creatively. "AI won't replace our teams. It'll empower them, making engineers more efficient, speeding up tender reviews, and freeing people from manual paperwork so they can focus on what matters most."

Advancing a sustainable future

AI has the potential to play a role in driving sustainability, both environmentally and operationally, notes James. "We're in the business of solving water challenges. If AI can help us design better systems faster or optimize how we operate them, that's a win for our customers and the planet."

The future of AI: Fueling defense, growth and strategic advantage

A smart path to Zero Trust

Darktrace is playing a central role as Osmoflo moves toward a Zero Trust architecture. "We're shifting away from legacy systems that require broad access, and toward SaaS solutions where trust is built on behavior and identity," explains James. "Darktrace gives us the visibility we need to make that transition safely."

Securing every connected thing

Four years into its AI journey, Osmoflo isn't slowing down. With cyberattacks on IoT devices surging due to weak authentication, unpatched systems, and the growing sprawl of connected endpoints, Osmoflo plans to extend Darktrace's capabilities into IoT environments by adding Darktrace / OT™ to their platform capabilities, ensuring security and operational continuity are tightly intertwined.

Investing today to lead tomorrow

James believes the implications of using AI will extend well beyond cybersecurity. He stresses that those companies that embrace AI now, thoughtfully and strategically, will be the ones that lead tomorrow. "People hear 'AI' and still react with fear or hype. But if you apply it responsibly and intentionally, it's not just a tech upgrade. It's a way to make your business more resilient, more efficient, and more human-focused. That's the kind of future we want to help build."



Building cyber resilience through responsible AI

Osmoflo's experience is a powerful testament to how applying the right AI in the right way can both strengthen security and drive meaningful business impact. By embedding AI responsibly, organizations can strengthen resilience and reduce risk with confidence – knowing their systems are secure, transparent and trustworthy.

Darktrace's white paper, [Towards Responsible AI in Cybersecurity](#), explores the principles that make this possible, ensuring AI innovation delivers value while preserving trust, privacy and security. [Download](#) the white paper to learn more about the five principles of Responsible AI and how Darktrace is committed to advancing them across our technology and the wider cybersecurity ecosystem.