



An Azure migration by Codify helps Mosman Council modernise its IT infrastructure and transform its IT operations.

Business continuity impacted by common IT challenges.

Like many local governments, Mosman Council, on Sydney's Lower North Shore, faced two underlying IT issues: a lack of in-house technical IT skills and aging on-prem IT infrastructure.

These issues manifested themselves in different ways for the Council, most notably in a lack of disaster recovery (DR) capability. A DR incident in 2021 took considerable time and resources to return a fire-damaged library infrastructure to its original state. Other issues highlighted by audits included insufficient IT skills to manage physical infrastructure nor the scale to meet their systems management requirements.

The Council relied on old on-premises IT infrastructure, with much of it running on unsupported operating systems and reaching end-of-life. Mosman Council Manager IT Services, James Qi, who joined the Council's IT team in July 2022, was hard pressed keeping his team on top of systems management and maintenance of the aging infrastructure.

A DR test in December 2022 failed, despite detailed preparation by James and his team. It again highlighted gaps in their resilience planning and reinforced James' view that deeper technical skills and IT modernisation were crucial to maintain a more stable and secure IT environment.



"We are proud to count Mosman Council as a valued customer and delighted by the strong partnership fostered during their Azure migration. By utilising Microsoft's robust programs, we were able to de-risk the migration project, offering both technical and financial support."

Ben Parker
Director, CODIFY

Migration and modernisation plan delivers compelling case for the cloud.

While migrating to the cloud seemed an obvious pathway for Mosman Council, it was essential that a clear plan was developed that assessed multiple scenarios, including replicating its physical infrastructure.

“We needed to be clear about the risks and long-term financial impact of our decision, so we were very detailed in forecasting potential costs over a multi-year road map”, noted James. “We needed to understand the cloud’s benefit over physical infrastructure, so we mapped the power usage of Council, power supply costs for server rooms, rental for power generators.... It was a complicated costing analysis.”

To help with their cloud-migration business case and to get a clear view on their technical and financial considerations for the cloud, the Council reached out to Microsoft in March 2023 and began work on a comprehensive cloud migration assessment and modernisation plan.

This assessment de-risked the Azure cloud option with a detailed costing, a migration roadmap, as well as how they would resolve the technical debt—the cost of added rework caused by cutting corners—that had built up in their IT environment.

The business case for their Azure cloud strategy was accepted by the leadership at Mosman Council and by November 2023, a shortlist of technology partners, including Codify, were invited to pitch for their Azure migration and managed support requirements.

As well as requiring a detailed proposal from technology partners, Mosman conducted market interviews to inform the selection process. *“What we heard from the market was Codify is focused on building long-term relationships with councils, not about one-time selling,”* noted James.

So, with their deep Azure expertise, competitive proposal, and strong customer feedback, Codify was selected to complete the migration and deliver ongoing managed Azure support.



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A complex cloud migration in rapid time.

Codify completed the implementation of a new Azure landing zone and migrated all of Council's infrastructure in three months (late November 2023 to February 2024). A monumental achievement given the complexities of the Council's legacy applications and age of their infrastructure.

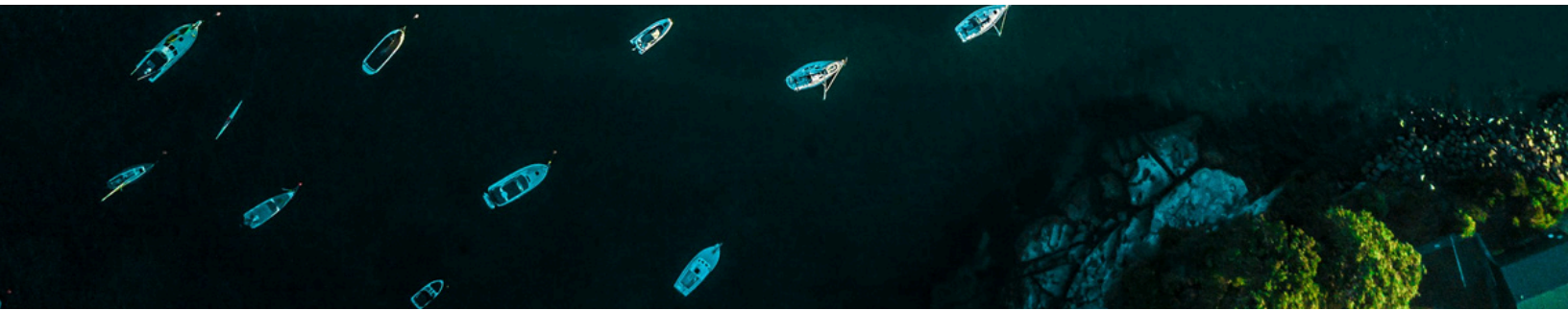
"For our cloud migration, we're not just talking about virtual machines, we're talking about the whole infrastructure, including security, networking, everything," explains James. *"Given the migration period spanned Christmas, the whole program was incredibly fast and problem-free."*

Codify's hallmark is its commitment to outcomes; being focused on understanding a client's business and unlocking strategic transformation opportunities from Azure. So, Codify was 'deep in the trenches' throughout the migration, looking to understand the underlying database landscape and trying to get Mosman Council's legacy applications working in the cloud.

As well as solving for legacy applications, Codify also addressed the Council's infrastructure issues. Servers that were running production workloads were upgraded from old Windows Server 2008 R2—which reached end of support four years ago—to Windows Server 2019 or later.

"At first, I thought Codify would be like any other Microsoft CSP just supporting the infrastructure migration and infrastructure management. But they were applying their deep application expertise to help us get our legacy applications working. They were working alongside us, often through the night, doing deep analysis on source coding to find a solution. Sometimes it was two or three attempts for some legacy systems," explains James.

A key component of Codify's solution for the Council was the adoption of Fortinet cybersecurity solutions to deliver a significant uplift in security capability. Codify deployed FortiGate VM virtual firewalls in Azure, ensuring all client VPNs went through this industry-leading threat protection, site to site.



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The real beauty of the Fortinet solution was in its implementation. With their Azure specialisation, Codify was able to integrate the Fortinet solution straight into Azure, from logs feeding direct into Microsoft Sentinel, through to admin logs feeding into Microsoft Entra ID. What appears as an out-of-the-box solution, was in fact a comprehensive implementation by Codify.

The FortiGate VM architecture implemented by Codify went beyond a basic network virtual application implementation and included full integration with the Azure software defined networking infrastructure via Azure Route Server. This allows Azure and the Council's LAN and WAN to dynamically learn from each other as the network grows and changes over time.

"This Fortinet deployment demonstrates the flexibility of FortiGate VM and the Fortinet Security Fabric in addressing a range of critical technical and operational requirements, and will enable the Council to consolidate several use cases into a single converged platform," said Simon Bray, Cloud and Alliances Manager at Fortinet. *"As Mosman Council advance their network and digital initiatives, future security and networking requirements can be easily incorporated into the platform, reducing unnecessary complexity and doing so in a cost optimised way."*

In February, Mosman Council successfully completed a DR exercise, where Council premises were effectively turned off, relying solely on their VPN into the cloud. The process was seamless with no significant issues outside of regular change windows.

Pivoting to higher-value IT activity

Following the successful migration, Mosman Council is now focused on extracting more value from Azure, including cost optimisation, integrating other SaaS and PaaS products, and security improvement in the detection, responding, and recovery processes.

Through-out, Codify has remained complimentary to James' team: a strategic reinforcement rather than support service. And James is keen for his team to capitalise on this expertise and support his team's own development.

"The evolving nature of cloud means it's hard to keep ahead of all the changes, particularly with the broad scope of skills I need in my team," reflects James. *"Codify provides that deep expertise but also helps expand our understanding of best practices in cloud technology and infrastructure. Codify has helped us acquire great insight into cloud optimisation techniques that generate real and immediate value for Mosman Council."*

"Our journey doesn't end here," notes Ben. *"We're excited about our future roadmap, focusing on continuous optimisation and investing in cloud-native solutions to drive innovation and efficiency for Mosman Council."*

Mosman Council witnessed a real paradigm shift in its IT resilience, in record time. Their IT systems are now more secure, reliable, and efficient. And James' IT team are no longer reactive, fixing problems, but on the front foot supporting the Council improve its service delivery for ratepayers and enabling modern workplace practices for its employees.

