Leading the farm into the future.

LIC future proof technology platforms with Microsoft Azure.

With 183 servers, and more than 120 terabytes of data from three different data centres, supporting 20 applications, including essential legacy software described as the crown jewels of the New Zealand dairy industry, Livestock Improvement Corporation (LIC) needed state of the art providers to host and manage its IT systems. The outcome is a robust platform designed with 24/7 uptime and the ability to grow and adapt as the needs of the co-operative evolve.

Livestock Improvement Corporation (LIC), a farmer-owned agri-tech and herd improvement co-operative headquartered in Hamilton, New Zealand, provides farmers with solutions to improve their productivity and prosperity. A key part of their innovation-led growth strategy is to move their products and services to the cloud.

Cloud Migration Made Easy

Digital transformation is cutting across every industry in New Zealand, and LIC's business is no exception. With competition increasing, keeping their operations up-to-date is critical for the success of their business. On a practical level, this has meant adopting Microsoft Azure and moving their core products and services to the cloud.

According to LIC chief executive Wayne McNee, being in the cloud is essential to keep abreast of the latest technological innovations.

Their previous technology partner had provided LIC with infrastructure services for more than 10 years. Their products were fit for purpose, but as LIC's demands as an agri-tech business grew, so did the demands on their service provider.

It was time to move to a modern platform, one managed by a cloud service expert. "We gave Microsoft a challenge," explained Wayne. "As a minimum, they needed to meet the same service levels as the incumbent, increase the security profile of our technology stack, move absolutely every service we had, including systems that had grown organically for decades, and then complete the migration in less than six months from start to finish."

Rising to the challenge, Microsoft assembled the expertise required for the analysis and migration, and then identified an operational service provider. Together with LIC, a consortium was formed, spear-headed by Microsoft with Emerging Technology Partners providing the proven engineering excellence to plan and execute the actual changes.

Umbrellar, a Microsoft Azure and Azure Stack partner, was tasked to manage the cloud service platform for LIC.

> **" Our move to the cloud boosts our digital transformation agenda by making available the development, deployment and infrastructure management tools only available in a cloud environment. "**

A Seasonal Business Focus

Due to the seasonal nature of the dairy industry in New Zealand, it was imperative this infrastructure migration was completed outside of the busiest part of the year. The peak mating season is in the spring, and the time imperative added to the complexity of the move. Yet, before anything could happen, several things had to fall into place. The move required a new tenancy in Azure, the establishment of dedicated and redundant connectivity to the cloud, and the migration of LIC's considerable storage footprint.

The data that needed to be transferred included a billion-row database that contained all of their customers' dairy animal events and genealogy, plus more than 100TB of data supporting LIC's scientific and research activities.

Because of the highly engaged expertise from both Emerging Technology Partners and Umbrellar, 180 servers and their respective workloads were moved into Azure between November 2018 and April 2019.

**Wayne McNee,
LIC Chief Executive**

The final touches included fine-tuning and re-sizing applications, so they would run in their best possible state in Azure. **"The smooth implementation meant that preparing for the scale-up of processing for the peak dairy cow mating season between August and December will be straight forward," said Wayne.**

Immediate Benefits of Migration

Not only is the same infrastructure footprint in Azure more cost effective than their previous supplier, they now have the ability to build infrastructure that aligns with LIC's Scaled Agile and DevOps practices. This means servers, and even entire environments, can be built in-house as part of the software deployment process—without even having to engage a third party.

LIC head of service operations, Malcolm Condie explained, "Using Microsoft's Dev Test Labs in Azure, our research departments can now complete their massive computing tasks by easily building machines with CPU and memory capabilities not available with our previous infrastructure provider. When finished, we simply turn those machines off and pay for only what we have used."

The flexibility of the cloud makes it easy to adjust as capacity demand changes. It is now a trivial exercise to grow or shrink storage, memory or computing, for either their core products, their partners, or the corporate LIC business. And the inherently secure nature of the overall Azure footprint gives LIC the assurance that customers' and corporate data is secure.

"Given the seasonality of our business, the ability to quickly scale infrastructure to meet customer demand is a key advantage of being in Azure." says Wayne. "Additionally, the inherent security inside Azure, evidenced by its ISO27001 compliance, is attractive as we continually strive to improve our security posture."

"The success of this project was largely due to the expertise and confidence offered by Microsoft."

Customer Livestock Improvement Corporation (LIC)
Partner Emerging ETP & Umbrellar
Products and Services Microsoft Azure
Industry Farming
Organisation Size 1,001-5,000 employees
Country New Zealand

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A Cloud Company

Microsoft Partner
2019 Partner of the Year Winner
New Zealand
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