Milking it: Contec's JADE-based milk analysis software corners global dairy market.

Software developer Contec Group International is blazing a trail in the global dairy sector. The company's biggest product, MADCAP (milk analysis, data capture and processing), processes close to 40% of the world's traded dairy products. Their secret? Applying New Zealand dairy industry know-how to software customized for different overseas markets. The JADE™ platform's intelligent combination of data, logic and graphical user interface ensures Contec develops software faster and more cost effectively.

World class from the bottom up

Just like cloud-based accounting system Xero and health systems provider Orion Health, Contec is making international waves from New Zealand. How has the Christchurch-based company made such an impressive foray into the global dairy market?
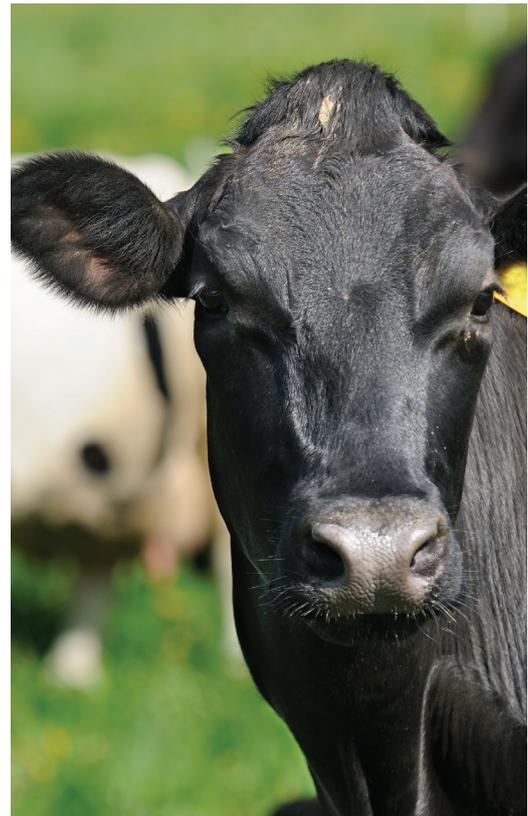
The company's technical director, Jeremy Ridely, says Contec's success came from taking a global outlook and finding the right development tools to do the job. "Exporting was always the plan, with the right tools to get the job done. We understood how things worked in different countries and built in functionality at the ground level. When we enter a market we offer customized functions and advanced features tested and refined in New Zealand's world-leading dairy sector."

By building in JADE, Contec can customize MADCAP to each market, and serve thousands of customers around the world, while avoiding a lot of the usual rework or difficulties.

Working with JADE

In 1997, when MADCAP was already 23 years old, Contec selected the JADE platform to redevelop MADCAP for the Windows-based computing era. The software originally automated aspects of milk testing and integrated data with supplier payments, leaving a lot of room to grow.

Ridley said Contec considered several development options, but JADE appealed on several fronts. "The tool had everything we wanted in a database: concurrency controls, scalability, and that type of thing," he said. "Typically, our competitors develop different systems for customers at each end of the market. But that requires two development teams, and we didn't want to go down that path. So it was good that JADE scaled down and up."

JADE development at Contec

One JADE-based system processes close to 40% of the world's traded dairy products

Scalability - customers use the same system to manage twenty suppliers, or 25,000, or any number in between

Efficiency with fewer developers using fewer, simpler tools

Easy change management - concurrent code changes with no check outs

Market-by-market customization without affecting the base product or upgrades

And when Ridley says 'scale down and up', he means it. MADCAP's smaller users have as few as twenty suppliers, while its single largest customer to date manages 25,000 suppliers in forty countries.

Small but perfectly formed

Twenty developers seems an unfeasibly small number for a software company that successfully operates on the world stage. JADE's integrated environment lightens Contec's development load. Just one set of skills is required to manage end-to-end development and support. Contec's developers can work concurrently, too.

"We'd probably have sixty people sitting in our offices if we wrote in another language," said Ridley. "With other languages there are all sorts of management tools that run over the top to control source code changes. JADE's not like that. You don't have to check things in and out – we just do the work and track the entire history of changes."

The joy of integrated development

The business side of making software can be as intricate as the development side. Time and effort spent on the base product is just the beginning. Real costs lie in more onerous ongoing development, upgrades and customization. And this is where unwary developers are caught out. Multiple development tools create layers of work while connections between systems add complexity. It all means extra work for developers.

With JADE's integrated environment, MADCAP development and customization is faster and more cost effective. Every MADCAP module operates from a shared, common database. The arrangement establishes a base of reusable functionality that simplifies the creation of multiple logical databases and their connection to applications. Development is faster because it reuses past work, and commonality ensures everything hangs together better.

"Developing new functionality is faster and it's much easier to understand and modify," said Ridley. "JADE is really, really good at that. Our system branches into layers, and at the end of the tree there's a customer layer. Customer modifications generally occur in that area, so they don't affect the base product."

Making successful software starts with the right development environment. With sound design taking shape in an integrated environment, Contec has turned MADCAP into a truly world-leading product.

"One of the things that JADE is really good at is layered development. We're able to customise software without breaking the base product. We can work faster and upgrades are easier."

Jeremy Ridley, *Technical Director,* **Contec**

About Jade

Since 1978, Jade has been working with leading companies around the world to solve complex business problems through the design and delivery of innovative software solutions. Our expert, passionate people develop high performance enterprise solutions, create engaging customer experiences through digital strategy and design, as well as develop advanced technology platforms used by thousands of companies globally.

For more information, visit us at jadeworld.com.