

Case Study Nufarm: Supply Chain Improvement

Xelocity helped Nufarm get the best systems and processes in place to satisfy its sophisticated production planning requirements.

Customer overview

Nufarm is a major agricultural chemical company with its headquarters in Melbourne, Australia. It has over 2,100 product registrations, and markets products in more than 100 countries.

Manufacturing crop protection and specialist seed products in Australia, New Zealand, Asia, Europe and the Americas, Nufarm employs more than 3,000 people worldwide.

Business challenges

In the pursuit of operational excellence, Nufarm had chosen a single ERP system to manage all aspects of its organisation. However, the standard production planning module that came with their ERP system was falling short of Nufarm's complex production requirements.

Nufarm needed to manage the intricacies unique to their multi-stage batch manufacturing processes, like different equipment of different capacities being involved at various stages along the production line.

Using the rudimentary planning module in their ERP system, significant amounts of time were being invested to manually overhaul production schedules before they were suitable for deployment. This intervention was inefficient, costly and risky.

Project summary

Working alongside Nufarm staff, Xelocity consultants first built a solid understanding of Nufarm's current manufacturing practices and system capabilities. Having confirmed that the realities of continuous flow and multi-stage batch sizing were outside of current system capabilities, focus turned to identifying a solution that could support Nufarm's quest for superior performance.

Xelocity's substantial experience in production modelling and optimisation meant that a strong candidate system was readily identified, and to check for fit, consultants built a proof-of-concept model that simulated Nufarm's process-oriented manufacturing practices.

The model delivered feasible production plans, not only for short-term execution, but also for medium-term planning. The short-term plan was down-to-the-minute in detail, and proved to substantially decrease effort and increase efficiency on the production line. The medium-term plan bridged the realities of production and process constraints and wider supply chain planning activities such as demand forecasting and procurement planning.

Xelocity solution

Extensive supply chain planning knowledge and expertise from Xelocity was applied in:

- Identifying the fundamental reasons for the current practices falling short
- Educating Nufarm on production scheduling approaches, especially constraint-based methods appropriate to their business
- Designing a feasible and effective model for production planning, incorporating the intricacies of Nufarm's products and production limitations

Throughout the engagement, Xelocity coordinated with operational specialists from across the Nufarm business. Effective collaboration was an important success factor for this exercise.

Benefits to Nufarm

Out of this piece of work Nufarm gained a new and effective production planning model that supported:

- Faster reaction time to unforeseen events
- "What-if" analysis in advance of publishing the plan to the ERP system
- Department-based views for various subdivisions of the manufacturing operation
- A reallocation of time into managing execution to the plan, rather than making the plan executable

An important by-product was detailed documentation of the approach and rules involved in planning – creating organisational memory and reducing the risk of key processes being understood only by lone individuals.

Such was the success of the engagement that full-scale implementation of the new planning approach and tools took place straight away.

Contact us to learn more about how we can set you on the path to success.