



Network Site Visit Case Study

Custom-Pak Custom-Pak's Improved Job Costing Process

INDUSTRY 4.0
Network

POWERED BY

CallaghanInnovation
New Zealand's Innovation Agency

PROGRAMME PARTNERS



Custom-Pak's Improved Job Costing Process



About the Company

It took a pioneering spirit for founder Brian Wilson to make the move from farming to the totally different world of manufacturing plastic packaging in 1989. He purchased what was then Sullivan Plastics in Christchurch and expanded into Auckland in 1997. This move, having manufacturing facilities on both the North and South Islands, allows Custom-Pak to provide exceptional service, flexibility and short lead-times to customers.

Custom-Pak specialise in clear, thermo-formed, ridged and semi-ridged PET packs for fresh produce, meals, salads, baked goods and fresh meat and fish.

Whether you're opening a cream cake in Cape Reinga or a punnet of blueberries in Bluff, it's probably in a Kiwi-made container from this Kiwi-owned company. Custom-Pak brings fresh food

to hungry mouths all over the country, in tip-top condition and bursting with goodness.

Background

To enable Custom-Pak to accurately cost and price their jobs, an Excel tool had been developed. This would take into account the material, labour and machine costs, and allow the sales team to then set a price. It also set the standard for the production teams to measure their performance.

Using the job costing tool was difficult and often inaccurate, requiring several tweaks and adjustments to get it right. It also took a significant amount of time and input from the production manager for each job.

Because this tool was standalone, it led to additional administration work. There were

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also challenges with keeping accurate levels of raw material stored in their system. The tool was limited in terms of flexibility and didn't allow changes to the speeds and feeds of various machines, and the type of raw material used in the job, so the pricing was being based on static data.

Another challenge for the team at Custom-Pak was that all the rules for how to use the Excel tool were held in people's heads. This made it difficult to respond quickly to pricing requests when people were unavailable.

Once the jobs were priced and released, there was a requirement for verbal communication to teams and between shifts on the target times for each job, which would sometimes make it difficult to keep track of job progress and performance.

Solution

Custom-Pak decided to build a module within their business system to support their job costing.

The main aim of this tool was to improve accuracy, give them some flexibility and save time.

The team reviewed the calculations that had been built into the Excel document that they had been using and adapted them to account for additional variables, including the ability to allocate a particular machine to the job. This was important as the various machines could run with different cycle times. These additional variables were needed to support more accurate estimates.

The team then worked with their systems provider to update and create the required additional fields within their database. The agreed algorithms were then built into the system.

Finally, the front-end user interface was designed with input from the key management personnel who would be using the system.

An additional opportunity identified by the team as part of this activity was to enhance the way they communicated the agreed job specification to the production team, and how they would use the plan vs actual data to support their problem-solving activities.

This was managed by creating two reports. The first helped to communicate the key requirements of the job to the production team and the second allowed the lead production team to compare actual performance vs plan, to support more proactive and timely problem solving.

As quality is a key focus for the team at Custom-Pak, they also decided to use this as an opportunity to incorporate key "quality watch-outs" into the report, for the various products and jobs. These were historically based and captured information from within the business system from previous runs. This included operator sign-off aligned with the quality checks that they had built into the process.

One of the unexpected benefits of building this information into the system was that they could now integrate their system for past pricing vs actual performance and begin reviewing and analysing the trends for common themes and improvement opportunities.

The next steps the Custom-Pak team are planning to take is to incorporate the new systems and reporting into their production area for data capture using tablets.

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Key benefits:

- Saving over 4.5 hours of management time each week on job costing
- Reduced quality issues, through improved quality focus and clear "quality watch-outs"
- Ability to identify key issues and trends with actual performance to support problem solving
- Visibility of key data to support senior level decision making around profitability
- Increased accuracy of job costing leading to improved profitability

Key takeaways:

- Taking institutional knowledge and methods and building them into systems, and reduced risk of losing that information
- Using and adjusting existing systems to complete core business tasks can save significant time
- Being clear on what variables will have an impact on core business performance is important, and having a place to store these
- Having historic information allows the opportunity to analyse and break down trends which can often enable a real and significant performance improvement.



About the site visits and Industry 4.0

The purpose of the Demonstration Network is to drive uptake of Industry 4.0 technologies among New Zealand manufacturers with the aim of increasing their productivity and global competitiveness. The Network of Site Visits (NSV) are part of the [Industry 4.0 Demonstration Network](#), which also includes a mobile showcase and smart factory showing cutting-edge industry 4.0 technologies in action. The NSV takes selected companies through a fully-funded assessment process to help them accelerate their own journey towards Industry 4.0, and sees them share their knowledge with other manufacturers.

Further questions?

To find out more please contact the
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CASE STUDY DESIGNED BY

