

# INDUSTRY 4.0 NETWORK SITE VISITS

Convex – Supplier Technology and Focussing on your Value Add



Convex Plastics is a flexible packaging manufacturer in Hamilton. It has 145 staff, creates thousands of products, and has been delivering bespoke packaging solutions throughout New Zealand and internationally for 45 years.

## Background

As a rapidly growing manufacturer Convex Plastics regularly pushes the boundaries of what is possible in terms of sustainability and performance for the packaging of hundreds of brands that Kiwis' know and love. Convex Plastics' culture is dedicated to ensuring customers get exactly what they need from their packaging, and Industry 4.0 offers a range of opportunities for the company to enhance this offering while maintaining their focus on core business.

The 'Pre-press' part of Convex's printing process is essential in delivering perfect packaging. It involves taking a designer's artwork and converting it into a format that will print and fold exactly as required to optimally display their clients' products. Historically this was achieved through experienced staff on site meticulously ensuring that the dimensions, colour saturations and a myriad of other factors were adjusted to suit the inks and films being used in printing.

However, following the departure of a key member of the team there was some trepidation around how

the department would retain the skills and capacity. The critical role of the department rested with a skill set that was both difficult to train and find in the labour market. Replicating the previous workflow would maintain a single point of failure for the business, while limiting their capacity to grow with customer demand.

## The solution

A strong supplier relationship with Kirks, who supply the final 'plate' required for printing, opened the door for an opportunity to dramatically improve Convex Plastics' process efficiency. Kirks had recently introduced a more serviced-based approach, facilitated by cloud-based portals, which meant Convex could now manage their workflows and subcontract the time-consuming elements of file preparation to experts. Where historically the team were engaged in file preparation, they could now focus on account management, ensuring customers were happy with the end results and samples. >

# INDUSTRY 4.0 NETWORK SITE VISITS

## Convex – Supplier Technology and Focussing on your Value Add

The new workflow process involves remote access to their suppliers' portal, uploading necessary documents and specifications, after which it is processed under a service level agreement and returned for approval. The approval process can also be set up to notify and require sign-off from a set group of individuals, all remotely. This removed consistent roadblocks from delayed email forwarding and responses.

The new workflow delivered multiple positive outcomes for Convex. They no longer have a single point of failure in the business around the critical skill set in file preparation, and their ability to flexibly manage workload is providing the business with the time critical equipment required to deliver products to customers despite increased demand. If they had not pursued this workflow change, they would have been forced to hire additional staff and complete lengthy training processes to achieve their previous capacity, without being able to easily expand.

## Conclusion

This collaboration with Convex's supplier is a great example of how inter and intra company collaboration is an essential dimension to extract maximum value from Industry 4.0 technologies. The cloud-based web portal and seamless collaboration technologies are examples of Industry 4.0 in action and exemplify the simplicity with which the Industry 4.0 journey can be started. The introduction of these technologies has also opened new revenue sources for Convex's strategic supplier, ensuring their on-going success giving greater supply chain confidence.

## Key Learnings

- New technologies are changing the way companies can work with their suppliers
- Service level agreements with industry specialists can maximise the efficiency and accuracy of non-core elements of your business while removing risk and providing flexibility.
- It is important to challenge traditional work flows and ask whether new technologies can open doors to work best suppliers.
- Using new technologies to deliver better outcomes from suppliers is a great way to introduce Industry 4.0 into a business.

## About the site visits & 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 EMA or Frank Phillips at LMAC

### EMA

+64 (9) 367 0900  
manufacturing@ema.co.nz

### Frank Phillips

+64 (0) 27 223 3077  
frank.phillips@lmac.co.nz