

## CASE STUDY – Sayfa Systems

### CLIMBING THE LEAN RESULTS LADDER



## SAYFA ACHIEVES LEADTIME REDUCTION OF 46% AND PROCESS IMPROVEMENTS OF UP TO 33%

By tackling more than 20 recommendations from value stream mapping for its new warehouse, Sayfa has achieved impressive process improvements. Leadtime has been reduced by 46 per cent and process time has improved by up to 33 per cent for picking items, quality control check, pack, wrap and paperwork.

The company realised a strong return on its investment in Lean, with a payback period of just 8.5 months.

The value stream map identified a number of problems around stock organisation, location, control and picking procedures. There were also issues with work and material flow, goods receiving and finishing areas, and less than optimal use of existing warehouse space.

In total, the value stream map delivered 22 findings. The majority had a low or medium cost and risk factor, and a low level of implementation difficulty. As a result, most delivered a high benefit,

enabling Sayfa to achieve a strong return on investment in a short space of time.

Damian Vos, Sayfa Systems' Operations Manager, says "excellent outcomes" were achieved from the warehouse move and the new design for production areas. "We now have an ongoing program of continuous improvement, but the real benefit is that it has created massive change in the business."

This change largely came about as a result of training (Lean practitioner training, Certificate III in Warehousing and the Diploma of Competitive Manufacturing) for Mr Vos and his co-managers in production and purchasing, along with about a dozen staff in operations, production, packaging and outwards/inwards goods. "The influence of this has helped in other areas where training wasn't carried out. It has affected our

**Damian Vos**  
Operations Manager  
Sayfa Systems

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## OVERVIEW

### INDUSTRY

Manufacturing

### CLIENT PROFILE

Sayfa Group's Safer Systems offer innovative solutions for height safety and fall protection in the commercial, industrial and domestic sectors. Australian-owned Sayfa responds to the evolving needs of its customers by continuously developing market leading systems and solutions. Advanced fabrication techniques and facilities enable Sayfa to customise its modular systems to meet individual specifications.

### BUSINESS SITUATION

Sayfa was relocating to a new warehouse in Boronia, Victoria, and retained Vative to guide the company in developing a new layout and processes to reduce waste and optimise safety, cost, quality and product delivery.

### SOLUTION

The project included a detailed schedule to ensure on-time commencement at the new warehouse, a current and future value stream map to identify and reduce waste, and an 80/20 analysis for parts and products to optimise locations and Kanban quantities. The future warehouse layout focused on three areas: despatch U-Cell and despatch bulk area, inward goods and superbull area, and kitting the U-Cell area. Process and layout improvements were developed to improve safety, cost, quality and delivery.

thinking and our mindset in a wide area of the business," he says.

For example, while training was not delivered for the administration department, staff saw the improvements achieved in other departments and requested Mr Vos's help in applying Lean tools to improve their own work areas.

The project's key issues and solutions were:

# “Excellent Outcomes.”

**Damian Voss**  
Operations Manager  
Sayfa Systems

## 1. Waiting times

**Issue:** waiting for materials and upstream processes in despatch.

**Solution:** eliminate waiting times by improved 5S, material handling, flow of incoming materials and work in process; introduce processing lanes and FIFO (first in first out) methods.

**Issue:** incoming goods waiting to be processed; double handling of goods.

**Solution:** send incoming goods direct to warehouse or supermarket locations.

**Issue:** waiting for fabricated stock and stock from suppliers.

**Solution:** introduce Kanban scheduling system, with minimum/maximum replenishment of stock items.

## 2. Picking processes

**Issue:** picklists not well organised on picking bench; picking errors occur.

**Solution:** improve 5S for managing picklists; introduce Poka-Yoke mistake proofing and use problem-solving methods such as Fishbone/5-Why to prevent errors.

**Issue:** picking and packing methods not standardised.

**Solution:** introduce standard work into despatch.

**Issue:** limited space on desk to organise pick lists into freight designations.

**Solution:** introduce visual control board to organise freight requirements.

## 3. Stock levels, movement and locations

**Issue:** no dedicated incoming goods processing area; no dedicated stock locations.

**Solution:** develop dedicated

incoming goods area with 5S and process lanes; create defined locations for stock.

**Issue:** poor control of stock levels and locations.

**Solution:** improved 5S and possible introduction of supermarket with Kanban for standard stock and finished goods.

**Issue:** transportation of stock and finished goods not standardised.

**Solution:** introduce material handling equipment to transport standard stock items.

**Issue:** using go and see to check stock levels.

**Solution:** use Kanban and minimum/maximum replenishment methods.

## 4. Quality

**Issue:** eliminate QA checking through improvement in quality.

**Solution:** introduce Fishbone/5-Why problem solving methods.

**Issue:** defects from fabrication.

**Solution:** introduce Poka-Yoke mistake proofing and Fishbone/5-Why.

## 5. Orders

**Issue:** over processing through two types of despatch records being used.

**Solution:** decide on one type of despatch record only.

**Issue:** 30% of orders are same day urgent.

**Solution:** implement Lean tools to reduce leadtime in picking/despatch so urgent order can easily be accommodated.

**Issue:** some orders require confirmation back to sales re urgency.

**Solution:** improve visual communication between sales and despatch re delivery targets.

Several additional steps were required in designing the new warehouse layout:

- In the 80/20 analysis, sales data was reviewed to determine the 20 per cent of products that make up 80 per cent of value and volume. Stock locations were determined, with more frequently

## VATIVE

Vative achieves significant business improvement for clients through solutions which are simple, realistic and highly effective. Providing consultancy and training services, Vative's 45-strong team includes Lean and Six Sigma excellence coaches with extensive business management, academic, engineering and trade backgrounds.



picked items located closer to their point of use.

- Standard container type, size and part quantities were determined, along with Kanban lot size based on demand and replenishment leadtimes. Racking configurations were optimised for each part as the layout was developed.
- Detailed layouts were also developed for the:
  - despatch U-cell and despatch bulk area
  - incoming goods and super bulk area
  - kitting the U-cell.

Vative is a ShareTree company that works in collaboration with the **Lean Six Sigma Society of Professionals (LSSSP)**. We are proud to present our business improvement initiatives to all organisations striving for operational and business excellence.