

Growing Your Profits

Production System Market Alignment

CASE STUDY

Background

This agribusiness is one of Australia's leading vertically integrated fresh vegetable operations. Quality focused, innovative and entrepreneurial they grow, process, pack, trade and market in excess of 60,000 tonnes of fresh vegetables annually to retail, wholesale, food service and processor customers in domestic and international markets.

Disrupted by China's entry into long held Asian markets, the business experienced a sharp decline in competitiveness across their domestic and export markets.

The Challenges

- › Approximately 40% of raw material falling outside specification for premium markets
- › Approximately 25% more hectares being planted to meet demand
- › Excessive management, technical and operational resources being consumed by the enterprise
- › Substantial volume of non-premium raw material being transported from field to factory for processing
- › Periodic under and over production disrupting continuity of supply and impacting on shift management and worker fatigue
- › Communication and coordination between departments in the value chain below standard
- › Unstable processing machinery leading to availability, quality and performance issues
- › Over processing in the packing shed increasing wages and wear and tear on plant and equipment
- › Inconsistent volume impacting customer satisfaction
- › Marketing of unwanted non-premium product driving down return pricing
- › Rising processing costs and declining profitability

Market Alignment Plan Formulation

Working with the sales and factory managers, production agronomist and harvest co-ordinator, we:

- › Analysed prices paid and cost of goods sold for every Stock Keeping Unit (SKU) to determine most profitable SKU's
- › Analysed historical packout and planting data to:
 - Determine potential to refine the crop profile
 - Determine planting configuration to maximise premium carrot yields
- › Analysed historical carrot waste data to identify root causes of defects
- › Analysed production line data to understand quality control, product flows, plant, equipment and labour utilisation
- › Formulated an implementable multi-year improvement plan

Market Alignment Plan Implementation

A multidisciplinary value chain team was formed to drive the implementation of the multi-year improvement plan.

Utilising the expertise of the entire value chain team, improvement initiatives were prioritised based on impact, urgency and seasonal implementability.

Over three growing seasons, the team methodically reinvented the primary production system, realigned the production schedule, reengineered the processing and packing facility and redesigned the workforce.

PRIMARY PRODUCTION



- › Tightened soil type, topography & location criteria for paddock selection
- › Improved timing & quality of groundwork/bed forming
- › Optimised planting configuration & precision
- › Altered agronomic practice to reduce raw material waste
- › Refined production programming to level weekly production

MANUFACTURING



- › Levelled processing throughput
- › Enhanced cooling capacity
- › Stabilised shift length and rostering

OPERATIONS MANAGEMENT



- › Introduced whole of value chain weekly planning meetings

WORKFORCE



- › Redesigned the seasonal workforce sourcing, training, supervision & performance management model
- › Identified, developed & retained high performing frontline supervisors
- › Created a whole of value chain team to guide and coordinate strategic, operational & tactical decision making
- › Refined performance measurement & managed systems

MAINTENANCE CULTURE



- › Altered investment strategy to maintain all infrastructure, plant & equipment in 'as new' condition

Outcomes

- ✓ Improved engagement and commitment of value chain team members and wider workforce
- ✓ Increased portion of premium raw material in all crops from 60% to 85%
- ✓ Improved premium packed yield per hectare farmed by 25%
- ✓ Reduced planted area to produce the target number of tonnes by 20% - dramatically reducing the management, technical and operational resources consumed by the enterprise
- ✓ Decreased packing shed downtime by 80% - reducing shift overruns, fatigue and wages
- ✓ Increased hourly washing throughput by 40%, reducing total labour cost per tonne by 30%
- ✓ Improved the integrity of the cool chain and product shelf life
- ✓ Matched weekly production volumes with qualified customer demand, dramatically improving continuity of supply



Simon's unique ability to apply Lean management systems to our agricultural production has removed wasted inputs and actions resulting in a decreased cost of production. We are now experiencing an increase and efficiency in producing crop yields that is accurate, sustainable and drives continual profitability.

Simon's skills continue past field production and into optimising processing, packing and customer delivery. The ability to provide such a broad analysis of a business makes PSVC Advisory unique.