





# final report

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Prepared by: Kevin Wallace EPRAKT Pty Ltd

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Meat and Livestock Australia Limited
Locked Bag 1961
NORTH SYDNEY NSW 2059

## **Value Chain Mapping Research**

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## **Executive Summary**

The output of this work contains significant findings for the Red Meat Industry. It provides clarity on programmes and management competencies that will reduce commercial, customer and safety risks while enhancing profitability.

The work was undertaken to develop a set of actions that will create value in a vertically integrated Red Meat Industry player ("The Company") who is transitioning from a "push" and commodity manufacturer to a "pull" and branded product red meat supplier.

The Company was supported in this project by two external consultants, mQ Intelligence and EPRAKT Pty Ltd who worked in collaboration. The consultants brought experience and knowledge of the Red Meat Industry, vertically integrated value chains, supply chain effectiveness, process optimisation, value creation and leadership behaviours.

The project involved interviewing senior management from across the whole value chain, analysis of internal Company data from across the whole value chain, observational auditing at the meatworks facility, development of a "first stage" value chain map for the facility, structured one-on-one interviews, structured workshops, external research and benchmarking.

Benefits were quantified on a "two-year out" basis and include a greater than 15% reduction in total expenses, significant reduction in safety incidents and an increase in ontime in full delivery performance.

Business improvement opportunities were identified and categorised under key "imperatives", which are in principle applicable and required for maximising value from all Red Meat Industrry processing facilities. In addition management competencies and behavioural attributes were also identified.

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## 1 Background

Changes in business equity presented an opportunity for the Company to redesign their value chain to best capture strategic growth opportunities which are now attainable given the level of integration.

An essential initial stage in this work is to determine where and how value is being created and where opportunities for enhancing outcomes exist at the meatworks facility in the context that it is now part of a broader integrated value chain. This work has been completed.

The completed project provides both a set of actions with quantified benefits relevant to the meatworks facility, as well as the starting point to complete a total system value chain analysis.

This work is significant for the red meat industry as it identifies business initiatives that enhance commercial, safety and customer outcomes and profiles the management competencies required in red meat processing facilities.

## 2 Project Objectives

The value chain map which will be developed capturing product flows, information flows and the nature of relationships will become a diagnostic tool to identify opportunities within the broader innovation program.

The research will involve the physical mapping product movements from production facilities and third party sourced product from vendors to customers and include the management of retail stocking and inventory within all market achieving an accurate representation of current activity and the identification for innovation opportunity.

- Provide a clearer picture of the multiple processes that are occurring within the business
- Develop a list of potential initiatives to innovate across people, plant and process
- Identify and exploit the synergies of a newly integrated business
- Identify aspects of the value chain where there are overlaps, disconnections are occurring
- Contribute to the development of strategies that will allow the Company to become a more consistent, streamlined and efficient business
- Provide direction and inform the Company's innovation strategy specifically with regard to the Company's value chain design and business model innovations.

## 3 Methodology

The project was conducted with the assistance of external consultants experienced in manufacturing process management, integrated supply chain analysis and the red meat industry.

There were a number of phases in this project. Initially there were briefing sessions with senior Company management in order to scope the work and define desired outcomes. From these sessions internal Company data was provided. The consultants used management feedback and the supplied data to develop their project approach including where and how to focus their attention.

This was followed by three consultants visiting the meatworks facility over a two day period. During this visit the entire process was reviewed step-by-step with first line supervisors and local management was interviewed both on the shop-floor as well as in formal and structured meetings.

This led to a series of "hypotheses" on where value was being destroyed and where opportunities for improvement lay.

With further input from senior management the external consultants then developed methods of testing each hypothesis. In some cases this meant collecting and analysing data, in other cases conducting small group structured workshops or one-on-one interviews and in some cases observation auditing of behaviour and process at the meatworks facility.

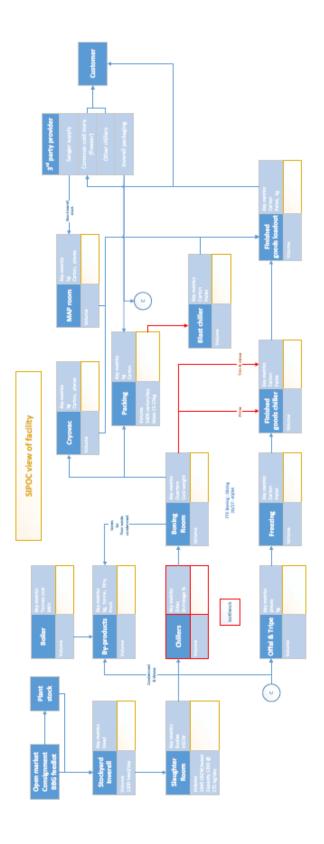
These activities were completed at the facility by two consultants over a three day period.

A report was then prepared and reviewed by Company senior management. This report details confirmed learnings and methods of implementation showing actions by who and over what time period. It also quantifies benefits.

Principle People Engaged	Activity
Administration Manager 1	Workshop
Administration Manager 2	Discussion, Workshop
Administration Manager 3	Workshop
External Contractor	Discussion
Finance Manager	Discussion, Workshop
First Line Supervisor 1	Discussion, Workshop
First Line Supervisor 2	Discussion
First Line Supervisor 3	Workshop

First Line Supervisor 4	Shop floor discussion	
First Line Supervisor 5	Shop floor discussion	
HR Executive	Discussion, Workshop	
HR Manager 1	Discussion, Workshop	
HR Manager 2	Discussion	
Line Manager 1	Shop floor discussion, Discussion	
Line Manager 2	Shop floor discussion	
Line Manager 3	Workshop, Shop floor discussion	
Line Manager 4	Workshop, Shop floor discussion	
Line Manager 5	Discussion, Workshop	
Line Manager 6	Shop floor discussion	
On-Site Project Facilitator	Discussion	
Quality Manager	Discussion, Workshop	
Quality Officer	Workshop	
Senior Executive 1	Discussion	
Senior Executive 2	Discussion, Shop floor discussion, Workshop	
Senior Executive 3	Discussion	
Training and Competency Officer	Discussion	

# 4 Results



Quantification details including FTEs, volume of product, waste calculations, re-work assessments etc. have been removed from the above for Company Confidentiality reasons.

#### 5 Discussion

In order for the Company to develop and maintain a thorough and more usable value chain map of the integrated value chain a single and effective ERP system will need to be introduced.

#### 6 Conclusions/ Recommendations

While the project identified business strengths in many areas it also showed a wide range of improvement opportunities available.

The following key "imperatives" required for maximising value from a red meat processing facility have been identified

#### a. Production planning

Red meat processing is by nature a series of interdependent and multiple production flows, many of which are physically and/ or time separated. In addition that process output has high variability by product type.

In this environment, an absence or weakness in production planning will result in poor productivity, wasted energies, unnecessary downgrading of product and lower levels of on-time delivery.

A robust production planning system is dependent on management rigour and disciplines on "adherence to plan" and "forecast accuracy". It also required a common language (descriptions, coding etc.) through the process and bills of material.

#### b. Handling materials

Physical handling and moving of product within and between processing steps adds no real value but exposes the red meat industry to significant commercial, safety and customer risks.

While automation may represent the ultimate solution this is not always practical or commercially viable. As a consequence a significant proportion of total conversion costs are in people, time and space devoted to handling materials.

Safe (eliminating handling injuries), cost effective and customer focussed (traceability of product, hygienic) materials handling methods and practices are a key driver of outcomes.

#### c. People management

People are the largest cost after COGS and so people management systems and practices need to be mature and have productivity as a core objective.

Step change improvements in productivity and safety outcomes should be targeted via people engagement and competency development. Areas of focus are likely to be in managing turnover, building competency rather than training and managing on-the-job behaviours to standards that are set, agreed and communicated.

#### d. Process improvement

At an overview level, the red meat industry manufacturing process has remained largely unchanged for some years. However within the basic process there are a wide range of smarter processes and systems being used and/ or available for use that enhance quality, safety and productivity.

A significant challenge is to prioritise and sequence process improvement initiatives in a way that realises value and does not create new manufacturing bottlenecks elsewhere in the facility or value chain.

That is, a detailed plant efficiency improvement plan with a combination of shorter-term and longer-term initiatives is required. This plan must reflect customer and market insight obtained on emerging needs and not be driven solely by the latest equipment available.

#### e. Plant management

Contemporary manufacturing process management focusses on "levels of work" and the unique contribution each management role has. This leads to clear position descriptions and short to medium term job goals that are in synergies with each other.

Development, use and review of job goals and outcomes through lead and lad indicators will help enable the red meat industry plant management achieve best practice outcomes.

The project also identified the competency profile required at a red meat facility as shown below

Role	Description	Key Competencies
"Running the Chain"	Line Management covering single stream process of Yard, Slaughter, Chillers, Boning Room and By- Products	Process management
Finishing	Line Management all activities (multi-stream) post Boning Room to Load-Out	Materials management, streaming, warehousing, logistics
Technical	Functional management including QA, process improvement, project management, new technologies	Deep understanding of Industry practices, processes and technologies Market insight
Engineering	Maintenance (breakdown and preventative), in-house capital projects	Manufacturing engineering
HR	Responsible for design and implementation of people management systems	HR
Services	Management of site planning function, IT, business analysis, procurement	Integrated supply chain management Business services

## 7 Key Messages

Finally the project identified the attributes and behaviours required to lead the transition from a successful family manufacturing business to an integrated supplier of premium branded product.

#### **Attributes Required**

- Working across the entire value chain, promoting transparency, communication and driving department activities to deliver optimal Group outcomes – removing vertical and horizontal silos
- Ensuring team members work within agreed standard practices, procedures and systems
- Defining excellence in terms of safety, customer and financial outcomes,
   setting benchmark or stretch objectives based on broad Industry standards
- Creating time to provide and receive specific, timely and constructive performance feedback that drives learning in both individuals and teams