

Objective measurement technology benefit scenario summary

Scenario	OM enabled value proposition
1	Genetic trait selection for increasing lean meat yield and maintaining (or increasing) eating quality This scenario requires the feedback from the processor to the producers with the introduction of price incentives (value-based pricing) for animals processed. Together Lean Meat Yield (LMY) and Eating Quality (EQ) largely determine total carcass value. This scenario is primarily based on increasing the genetic gain of animals over time. It is assumed that the per head benefits increase over time and OM measurements become more accurate.
2	Genetic trait selection for increased LMY & reduced pH/dark cutters 'Dark cutters' impose significant discounts on beef carcass value. This scenario applies primarily to 30% of beef production in more unreliable northern environments where conditions make it more difficult to get a return on investment in EQ in Scenario 1. Proper use of information should help to inform selection.
3	Genetic trait selection for increased marbling & improved feed conversion This scenario applies to feedlot animals (10% of beef production) destined for high-quality markets where marbling (MB) has a greater impact on finished product value than lean meat yield, but more efficient feed conversion (negatively correlated to MB) is required for higher profitability.
4	Improving on-farm animal health from processor feedback This scenario considers the value opportunity for producers and feedlot owners managing animal health defect or issues, through the utilisation of feedback from manual and/or post slaughter manual/OM detection of animal health conditions.
5	Improved processing efficiencies from increased throughput and reduced labour cost Processing plant efficiency gains, through each area of the plant, resulting from changes in processing process flow.
6	Fabrication of purchased livestock to optimise value Objective measures that enable more accurate processor alignment of carcasses to customer specifications and boning schedules to extract increased value from carcasses. Processors have a range of ways carcasses can be broken down, and this scenario outlines the benefit to processors by greater alignment with processor markets increasing the overall sale value of carcasses through optimisation programs.
7	Enhanced on-farm decision making to better manage live animal impact on yield & eating quality at point of sale The adoption of live animal Objective Measurement (OM) technologies enables producers to manage and select animals to optimise LMY on-farm, ultimately maximising Saleable Meat Yield (SMY) and IMF% (where applicable) at the point of sale. These technologies support more informed decision-making by allowing livestock managers to choose the most suitable market based on measurement outcomes and align with market specifications. Additionally, by assessing animals at various stages of growth, producers can determine the optimal time to sell, improving input efficiency and overall productivity.
8	Enhanced on-farm (or seedstock) genetic selection utilising live animal OM devices Together, Lean Meat Yield (LMY) and Eating Quality (EQ) largely determine the future carcass value. The use of live animal OM devices to give indication of LMY and EQ will enhance genetic selection. The benefits included are based on the improved and advanced selection of animals in the seedstock or production sectors. However, this scenario will enable producers to further reduce the generational interval, with an incremental benefit over the genetic progress already assumed in Scenarios 1,2 and 3.
9	Customer specification-driven livestock purchasing to maximise carcass value Accurate live animal pre-sale OM measurements of LMY and IMF enable processors to selectively purchase animals that align with their customer requirements. At the same time, it empowers producers to apply value-based marketing (VBM) strategies when deciding where and when to sell. This scenario assumes that animals will be scanned at point of sale and information is provided on the animals when sold. This is based on live animal-based auction systems, either through online trading systems or through saleyard operations.
10	Allocation of feedlot feeding patterns based on an individual animal's marbling capacity (IMF) as measured at induction The selection of feeding programs for animals at feedlot entry could increase value and decrease costs associated with mid and long grain-fed supply chains, when animals with the high potential for marbling are allocated to these programs.