**Hamills**

The upgrade of the cowshed involved strategic capital expenditure as there was a significant cost of $xxxx and the impact of this spending should improve the long term profitability of the farm. This should be achieved through avoiding a decrease in production in any season from mastitis. A decrease in production will reduce the income of the Hamill’s farm as they will be paid on the milk solids produced from their milk production. Reduced income is likely to reduce **profitability and cash flow** in a season.

Mastitis is an inflammation of the udder and teat in a lactating cow caused by an immune system reaction to a bacterial infection. It will cause a decrease in milk production and quality of milk. The Hamill’s had a number of options that they investigated but the robotic milking system they invested in was chosen because it was the best for the prevention of mastitis.

The technology provides a mastitis ratio for each cow, the higher the number the greater the chance of the cow having mastitis. Cows can be identified and treated before the spread the bacteria. One of the causes of mastitis is under or over milking of cows and the robotic shed has an automatic cup removing system which prevents under or over milking of cows. Teat condition and damage is another cause of mastitis but the new shed has an automatic teat spray system. As a cow passes a sensor it sprays an anti-bacterial and emollient spray on the teats to keep them in good condition. All of this contributes to happy cow and a happy cow is one without mastitis according to the Hamill’s.

An added bonus of the system is that it has an automated weigh station so that the cows a weighed twice a day providing fantastic information to make good farming decisions.

The Robotic milking shed will have cost $xxxx and will require repayments of $xxx to the bank each month. This cash won’t be available to be spent elsewhere on the farm but the savings it will make in preventing lost income from milk production being reduced, due to mastitis, will be around $ xxxx a season making it a worthwhile investment.