

MONASH INDUSTRY TEAM INITIATIVE (MITI)

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Milk Movements Model

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BChemEng/BPharmSc, Master of Applied Finance, BChemEng/BCom, Master of Business Information Systems

Project Supervisor: Tim Newton (Milk Optimisation and Supply Manager) **PROJECT SCOPE**

To build a prototype intuitive online model to optimise milk collection and delivery into each processing site in Australia.

METHODOLOGY

Developed understanding of Parmalat's current scheduling systems

Brainstormed ideas and methods to forecast future milk supply

Created a forecasting tool that outputs regional milk production Produced an online tool that allows sites to communicate required demand

Project Aims:

- 1. Optimise milk supply from farm to processing sites
- 2. Produce a daily delivery schedule for each production site, specifying the source location (Region or 3rd party) for each load of raw milk
- 3. Produce a daily 3rd party milk purchase requirement schedule





Constructed a computer based system that efficiently allocates farm milk to sites with a transportation schedule



ENJOYMENT

- "The opportunity to work in a fantastic environment with great people and the ability to contribute to a real life project was an invaluable experience" – Harry Kaladis
- Forecasting tool that predicts Parmalat's regional milk production in both the short and long term
- Online tool that allows Parmalat's processing sites to communicate required quantity of milk
- Tool that efficiently allocates regional milk to processing sites based on freight cost
- Scheduling system that plans milk delivery between dairy farms and processing sites
- "This experience provided a real eye opener into the dynamic and fast-moving nature of the dairy industry with a global company" - Nikhil Kant
- "Working with team members from different educational disciplines allowed for great collaboration and the ability to achieve a successful outcome" – Kaushal Kulkarni
- "The entire experience was amazing. I got to learn a lot of new technologies and with the support of the managers, I was able to produce what they required" – Dhara Thakkar

A project initiative of the Victorian dairy industry proudly sponsored by the Gardiner Dairy Foundation in partnership with Monash University





