Monalco Problem Statement [Junko Takasawa]

Problem context

With the increase in the market supply over demand, the price of iron ore is dropping. How can Monalco cut 20% of its maintenance fee over the year to be able to maximize its profit.

Criteria for a successful solution

Find out what the discrepancies are in our Year-on-Year spending patterns, and create realistic action plans to cut down 20% of costs over the year.

Scope of the solution space

Reviewing OEM guide and re-evaluate our maintenance schedule as it may need to happen less frequently.

Find out if strategic allocation of the production volume would contribute in reducing excess wear and maintenance cost.

Study current operation cost and identify what part can be reduced.

Constraints within the solution space

We may face resistance from the reliability engineering team for cutting down maintenance event.

Possible increase of the maintenance cost to $45M next year is a big challenge.

Stakeholders involved

Chanel Adams – Reliability Engineer

Jonas Richards – Asset Integrity Manager

Bruce Banner – Maintenance SME

Jane Steere - Principal Maintenance

Fargo Williams – Change Manager

Tara Starr - Maintenance SME

Data sources required

Data Historian – how many tons of Iron Ore processed

Ellipse – older record of equipment work orders

SAP – up-to-date record of equipment logs and work orders

T3000 DCS - raw streaming data on conditions of ore

Ore Crusher System – high level process map