**The context:**

The market price for iron ore nose-dived from $110 to $55 per ton. The business is operating at almost break-even.

**The criteria for success:**

Shave off ~20% of maintenance cost from ore-crusher

**Scope of solution space:**

To maximize profitability, business expenditures are analyzed. Particularly, maintenance cost is the focus since the ore-crusher, purchased to maximize the production of iron ore when the market was high, has the highest discrepancies.

**Constraints within solution space:**

The constraint is the wear and tear. The excess wear is responsible for 80% of the work requests, meaning that the equipment is pushed to the limit. Furthermore, there is OEM limit – one maintenance at every 50,000 tons of iron ore processed.

**Stakeholders to provide key insight:**

Chanel Adams – Reliability Engineer,

Jonas Richards – AssetIntegrity Manager,

Bruce Banner – Maintenance SME,

Jane Steere - Principal Maintenance,

Fargo Williams – Change Manager,

Tara Starr - Maintenance SME

**Key data sources:**

Data Historian – how many tons of ore is processed with the crusher,

Ellipse – old work orders,

SAP – recent work order requests involving the ore-crusher.

Additional data sources: T3000 DCS, Ore Crusher System.