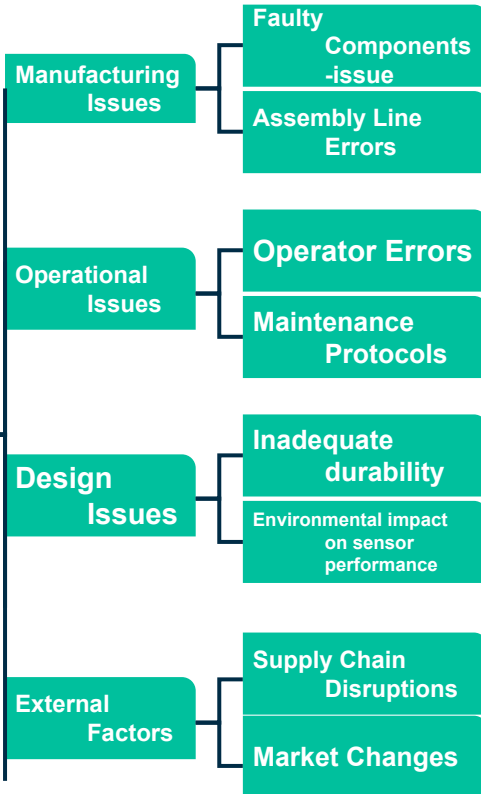# Monalco

How could Monalco Mining reduce its annual operational cost by 20% through a careful restraint of maintenance cost in order to sustain its profitability?

Manufacturing Issues
- Faulty Components-issue
- Assembly Line Errors

Operational Issues
- Operator Errors
- Maintenance Protocols

Design Issues
- Inadequate durability
- Environmental impact on sensor performance

External Factors
- Supply Chain Disruptions
- Market Changes

Each Sub-Issue provides further level of detail for each issue, but is complete and non-overlapping

A Issue Tree is….

✔ Used as a tool to break a problem down into a series of hypotheses or issues that can be tested

✔ Used as an approach to ensure all parts of the problem are considered. In other words, issues are **collectively exhaustive.**

✔ Used as an approach to ensure issues do not overlap and are **mutually exclusive.**

Complete but **non-overlapping** list of conceivable avenues to pursue

H D E I P