

## Developing a risk based asset management and maintenance reporting framework and tool

### the challenge

Our client is an Australian electricity network business that had suffered successive serious failures of a key zone substation. The failures resulted in prolonged loss of supply for certain customers, and attracted a high level of public and political scrutiny.

As a result of the second failure, the State Government commissioned an independent investigation into the root causes. The investigation found serious issues on many levels, including fundamental problems in our client's Asset Management systems.

Our client then undertook to provide total Board-level transparency of the condition of its assets, the risks the business faced as a result, and its progress in addressing those risks. Marchment Hill Consulting was engaged to develop that reporting framework and tool.

### What Marchment Hill did

Marchment Hill conducted a series of workshops with client executives to develop a comprehensive hierarchy of electricity transmission and distribution assets, and the associated framework for reporting asset condition and the status of the maintenance program. This framework was based on: (i) Asset Planning reporting which included indices for asset condition, criticality and risk, and (ii) Asset Delivery reporting which included traditional measures with respect to maintenance expenditure, maintenance progress versus planned, and reliability for individual asset classes.

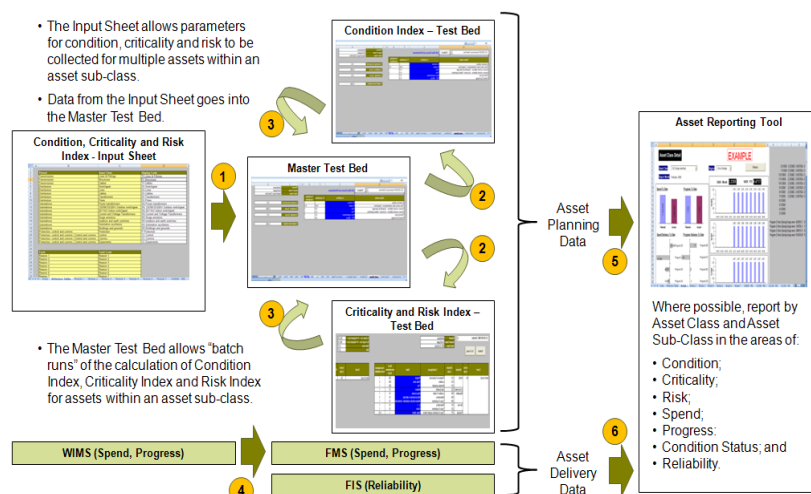


Figure 1: Automated Asset Management and Maintenance Reporting Tool

A number of individual asset information tools were developed and integrated to create a single Asset Management and Maintenance Reporting Tool.

# MARCHMENT HILL consulting

Our client collected data for nearly one hundred (100) individual assets and applied the reporting framework to them. Marchment Hill then worked with the organisation to refine and calibrate the reporting framework.

Through our intellectual capital and extensive client consultations, Marchment Hill was able to develop an innovative, risk based asset management and maintenance reporting framework for critical electricity transmission and distribution assets.

This framework was complemented by an excel-based reporting tool which automated the development and reporting of indices for asset condition, criticality, risk and maintenance for individual asset classes. The outputs of the tool were tailored for reporting at various levels within the organisation.

## the benefit

Our client met their immediate need for a user-friendly tool for the reporting of asset condition, criticality, risk and maintenance completion for key assets. Moreover they gained, with Marchment Hill's help, a much more explicit (and documented) understanding of the organisation's collective knowledge on what drives asset condition and criticality.

The Board approved the reporting framework for use, and the organisation is compiling the necessary field data to populate the reporting tool. After a bedding-in period, the framework and reporting tool is likely to be rolled out across other utility assets.

Marchment Hill Consulting has offices in three locations which serve Australia and New Zealand, Asia and the Middle East.

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