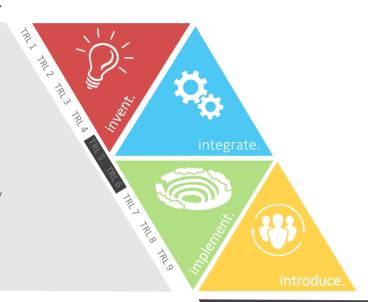
Developing a risk management model to support new technology adoption in the mining industry

PROJECT P4-009

The identification and analysis of risk associated with new technologies within the mining sector (including CRC ORE with Grade Engineering) is a significant factor in determining the value proposition and uptake of the technology.

A different approach to risk assessment that is more relevant to the nature of transformational technology (including Grade Engineering) could better represent the risk profile of the new technology and improve the ability to accurately establish the value proposition.

This enables end-users to more appropriately assess the risk and value associated with introducing GE solutions which will lead to increased uptake.







Project Scope

Technology uptake in the mining industry is low in comparison to other industries. A contributing factor to this is the approach to risk analysis and assessment that exists within the industry. Traditionally, this approach has a bias towards known change, producing low risk rankings for small, incremental and continuous improvements.

Whilst this has clear benefits to promoting a culture of continuous improvement within the industry, there exists the possibility for unknown, step change improvements to be given excessive risk weighting. This is typical of technology driven change.

There are other industries that have enough similarities to the mining industry to provide relevant comparison. Many of these have both a different approach to risk and a different rate of technology uptake. Where relevant learnings from these industries can be identified and introduced to the mining industry, improvements in technology uptake can be predicted.

The project will identify latent methodologies from other industries.

Garth Hamilton, CRC ORE Program Manager:

Project Leader: Tim Rose, QUT Sep 2019 - Feb 2021 Timing:

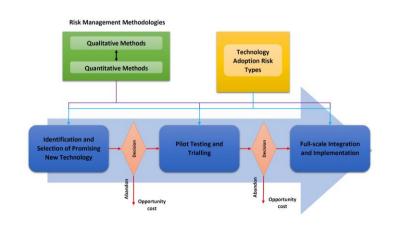
Participant: QUT

Project Outcomes & Learnings

The project will deliver an innovation risk management model specific to the mining sector to assist in the selection and timing of risk management methods in the technology adoption process.

The developed model will incorporate varying levels of risk evaluation which can be considered throughout the technology adoption process in a systematic manner to inform decision-making. The model will be developed to capture specific risk features relevant to the mining sector that can be applied at the mine site and corporate office.

Building on the developed model, the project will also provide strategies for enhancing technology risk management capability. These strategies will be developed from a detailed analysis of the technical methods used in the evaluation and management of innovation risk and opportunity in the mining sector, in comparison to related capital-intensive sectors that are also experiencing rapid technological change.



Risk management and new technology adoption process



