

# CASE STUDY

Stockpile strategy optimisation

# BlendOpt



**Paradyn**

**Integrated  
Value-chain  
Optimisation**



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# CASE STUDY

Stockpile strategy optimisation

Make High-Quality Decisions

BlendOpt Value-chain  
Optimisation Platform

## The Challenge

A mine wanted to investigate whether changes to ROM stockpile capacities would allow for a higher margin for their operation. Often the operation was forced to sell products that exceeded quality requirements thereby destroying value. There were limited options to change the mining schedule creating other challenges known only to the client.

Site technical services believed that some stockpiling of selected materials might alleviate the issue. They wanted to understand:

- how large the stockpile capacity needed to be, and
- whether benefits could be achieved from changes in stockpile definitions

The decision to stockpile ROM was to be balanced against rehandle costs. Additionally, some materials could not be stockpiled for long periods due to rapid negative changes in material attributes (oxidation and maximum fluidity).

## The Solution

BlendOpt 'what-if' automation was used to explore a range of scenarios evaluating different value-chain conditions.

## The Value Unlocked for our Client

BlendOpt can function as a versatile coal management software application, and as a result of BlendOpt actionable insights, the client implemented a moderate change in stock capacity along with several changes in stockpile definitions and improved 12 month forecast revenue by \$24M per year.

## The BlendOpt Solution

Paradyn's BlendOpt value-chain platform powered by Collaborative Mathematical Optimisation (CMO) can help you:

- Satisfy constraints in your value-chain
- Optimise for any objective including tonnage, revenue, and cost
- Optimise and integrate operational, tactical and strategic planning from minutes to years
- Improve collaboration and synchronisation between planning and operations
- Publish reports to relevant stakeholders
- Reconcile forecast with actuals
- Optimise reserving, processing, blending and logistical decisions
- Product portfolio optimisation
- 'What-If' scenario analysis

Read our articles to learn about Paradyn's innovative value-chain optimisation technology and how it can help your operation.



## The Benefits

 BlendOpt Recommended  
Modified Stock  
Capacity



BlendOpt Recommended  
Modified Stockpile  
Definitions



Revenue  
Improvements of  
\$24M per Year


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