Case Study

DESWIK
BOLT

Value chain optimization software to increase profit, reduce costs and maximize efficiency.

Maximizing NPV for an Iron Ore value chain using Industrial Mathematics.

THE CUSTOMER

The client is a leading global mining company with a world class portfolio of mining and processing operations and undeveloped resources. Its portfolio includes one of the world's largest mining projects located in Brazil producing over 15 million tonnes annually.

THE PROBLEM

Planning teams are required to produce strategic and tactical plans which align production targets with contracted demand. The client wanted to explore optimization opportunities across the value chain to ultimately maximize the Net Present Value of the mine. They also wanted to better align production stakeholders to break-down departmental silos and improve organizational collaboration.

THE SOLUTION

Deswik deployed BOLT, a supply chain optimization decision support tool, resulting in:

- A tactical tool that scopes projections from 3 months up to 1 year in advance to better track sales KPIs
- A strategic tool that produces projections on production over a 5 year period to optimize sales portfolios over the longer term
- A historian tool that tracks stockpile actuals to compare with planned projections over time to validate planning process

THE BENEFITS

In a carefully controlled benchmarking test, the tool significantly increased NPV compared to solutions produced by the incumbent tool. With such impressive results, the tool is now being used to support the planning operations of all bauxite assets in the client's global portfolio.

%

Margin Growth

10% improvement to NPV.

Efficient Planning

50x improvement to planning processes.

Scenarios

Rapid what-if scenario planning now possible.

THE CHALLENGES

- Time consuming process requiring manual entry of daily data into Excel to produce a weekly plan (8 hours)
- Excel used to produce estimates for stockpile levels and attributes, no visibility over actuals
- Without optimization, just meeting demand by filling vessel quotas
- Tracking and optimizing supply of four qualities of ore product produced by the beneficiation plant

THE VALUE

BOLT has helped reduce departmental silos by centralising and automating planning efforts. This has resulted in greater visibility of stockpiles to align demand to production as well as make complex blending decisions to optimally fulfill vessel contracts.

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Learn how to maximize supply chain efficiencies with the power of industrial mathematics.

SCHEDULE A DEMO