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Perils and Promises in the New Coal Market

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Necessity is the mother of all inventions. Today's mining industry faces unprecedented challenges that can only be survived through step-change innovation. Let's be clear on this; incremental refinements of current practices simply will not provide the pace of change necessary to manage cash flow and survive in the current environment.

Commodity value chains are immersed in a data-rich world. The information and insights hidden within this data hold the promise and potential to drive collaborative innovations that are needed to unlock value within a new, lean mining world.

Collaborative Innovation

Collaborative innovation is a topic that Paradyn is passionate about. We believe in technology that facilitates and enhances coordination specifically for business decisions where collaboration is necessary to unlocking value. In mining, arguably the most commercially influential collaborative problem solving takes place within integrated planning; from mine to market.

It's all too common for mine plans to contradict sales plans and it's not always clear how each side should change. The origins of these challenges are found in the very complexity of the mining value chain and uncertainties about future conditions of working sections and markets.

Mining Planning: Mine planners cannot fully evaluate the profit implications of their mine plans because the final value depends on intelligent downstream decisions in processing, blending, and stockpiling to achieve final product quality requirements.

Ore Processing: A processing strategy has its own view of value, which is sometimes narrowly focused around trade-offs in yield and quality for each separate seam, while operations divert from these plans in attempts to reconcile the immediate-term misalignment between product targets and mining realities.

Sales: Marketing managers similarly cannot fully evaluate delivery risks to achieving their product targets because they cannot accurately estimate how upstream decisions will influence the timing and quality of delivered product.

Only technologies that simultaneously address these inter-related decisions within the value chain will enable transformative improvements to the multi-stakeholder decision process that is Integrated Planning. Paradyn is proud to provide a technology that supports these step-change improvements in integrated planning for the mining industry. Our support to the industry is made possible through research and development of next generation cloud-based optimisation and simulation techniques that we have embedded in a collaboration-centric interface.

Integrated Planning Through BlendOpt

Paradyn's BlendOpt planning software focuses on decisions in the value chain that directly impact value-chain coordination and are thus most important to align across the business. Alignment is achieved in BlendOpt by a clever search through millions of plan possibilities that quickly reveals how strategies in one part of the business will unlock or degrade value in others. The planning context can be framed from a mining-centric, supply-chain centric, or marketing-centric basis, which helps bring each party closer to a unified strategy that is best for the business.

Necessity is the mother of all inventions. Paradyn's technology combined with a skilled team and structured organisational learning is helping miners meet their responsibility to shareholders and obtain the best market value from our precious resources.



Paradyn BlendOpt
Smarter Blending, Processing, and Product Planning