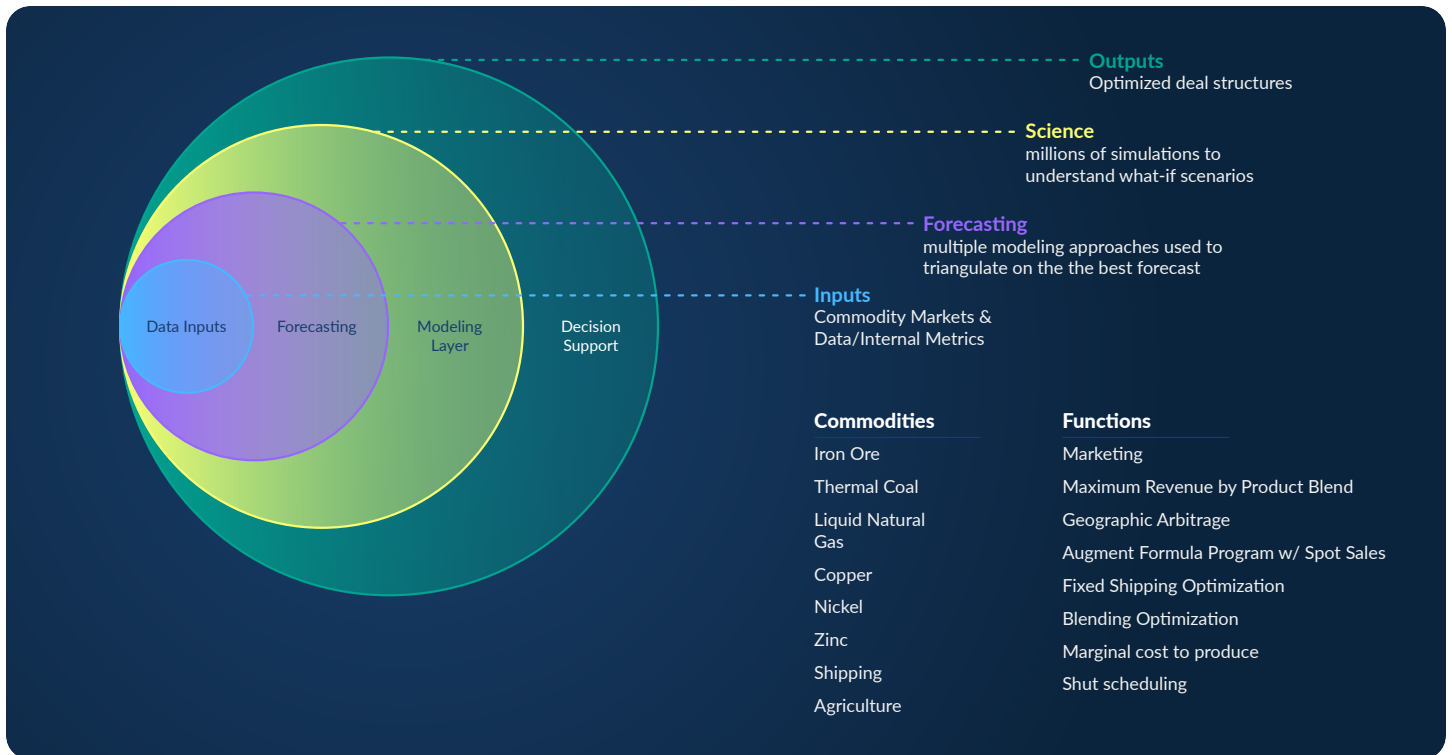# DecisionNext. Decide Better.

Navigating today's volatile commodity markets: Mining

Competing effectively in commodity spaces within the mining industry has never been more challenging. Professionals who are experienced in pricing, marketing, purchasing and risk management are continually looking for ways to improve their performance and manage risk. While there are a number of ways this can be done, having the entire supply chain covered from sell to buy is the best method to ensure success. That's where DecisionNext separates itself from the pack.

Below is a snapshot of how the DecisionNext platform works.

Data Inputs — Forecasting — Modeling Layer — Decision Support

Outputs
Optimized deal structures

Science
millions of simulations to understand what-if scenarios

Forecasting
multiple modeling approaches used to triangulate on the the best forecast

Inputs
Commodity Markets & Data/Internal Metrics

Commodities	Functions
Iron Ore	Marketing
Thermal Coal	Maximum Revenue by Product Blend
Liquid Natural Gas	Geographic Arbitrage
Copper	Augment Formula Program w/ Spot Sales
Nickel	Fixed Shipping Optimization
Zinc	Blending Optimization
Shipping	Marginal cost to produce
Agriculture	Shut scheduling

Market Data and Forecasting:
Commodity markets are notoriously opaque, and data are scattered, making it difficult to stay on top of all the factors driving prices. We can automate the collection of hundreds of data series, bringing those data straight to your models every time they are released. We currently have access to a broad collection of publicly available data and the ability to incorporate customer's syndicated data.

At the core of what we do sits a powerful, machine-learning market forecasting platform. Tested, validated, and always learning, our forecasting tool gives our customers weekly-updated market views using multiple independent approaches — simultaneously. The platform is built to interact with data (proprietary internal, third-party, and publicly sourced).

Fundamentals Forecast: Using our proprietary technology and market experts, DecisionNext searches for the econometric supply and demand driver variables (portside inventory levels, global exports, FX rates, China Industrial Production changes etc.) that have the most predictive power for the price of the given commodity in question.

Machine Learning: A mathematical approach which analyzes seasonality, price history, trend, and the AI-selected data points for the specific commodity in question, using millions of simulations to forecast its future price.

Of course, testing the historical accuracy of the distinct models for a specific commodity is important. The DecisionNext platform affords users the ability to backtest these models at any time horizon, and determine which one works best for their specific needs and relevant decision-making time frames. User interaction with the forecast models is a unique differentiator, ensuring that DecisionNext forecasting is never a black box.

Modeling Layer:
Scenarios: Once users gain confidence with the forecast, DecisionNext allows them to run real-time "what if" scenarios about the impact of events on future pricing. For example, users can test the impact of potential tariffs and their impacts on international trade, and model out the impact on spot market prices in coming weeks. Mining companies and other market participants with specific insight into future events, such as demand or storage levels, can measure that impact right from their desktop.

Certainty: Forecasting a specific price at a given time is one thing, but understanding the certainty of the forecast is necessary for making the right decisions. DecisionNext gives users the ability to see how confident they should be in a forecast by showing the confidence intervals between the expected high and low price for an item. Some parts are more volatile than others and some models perform better than others — we'll show you what that means in terms of upside and downside risk.

Expertise: You have experts in your organization, and what they know matters to the business. They will often have information that hasn't yet been reflected in the data ingested by the application. DecisionNext and the modeling layer give them the platform to share that knowledge to make the best decision. No more spreadsheets and guess work.

Decision Support:
Now it's time to take the forecasts and build some buy/sell alternatives. What separates DecisionNext from traditional forecasting and modeling platforms is our Transaction module. Knowing which specific buy or sell decision best fits your risk profile for a given deal is where things get really impactful.

Iron Ore 62% Fe, CFR China
Price History + Risk Aware Forecast

The DecisionNext Transaction module uses the forecast and associated risk profile to model expected cash flows for each decision, all the way down to the gross margin level. Customizing each decision with variables such as freight; storage; fuel; etc. makes the tool incredibly flexible. This module works for all types of buy/sell transactions and business types. Particularly valuable for long-term planning and contract negotiation.
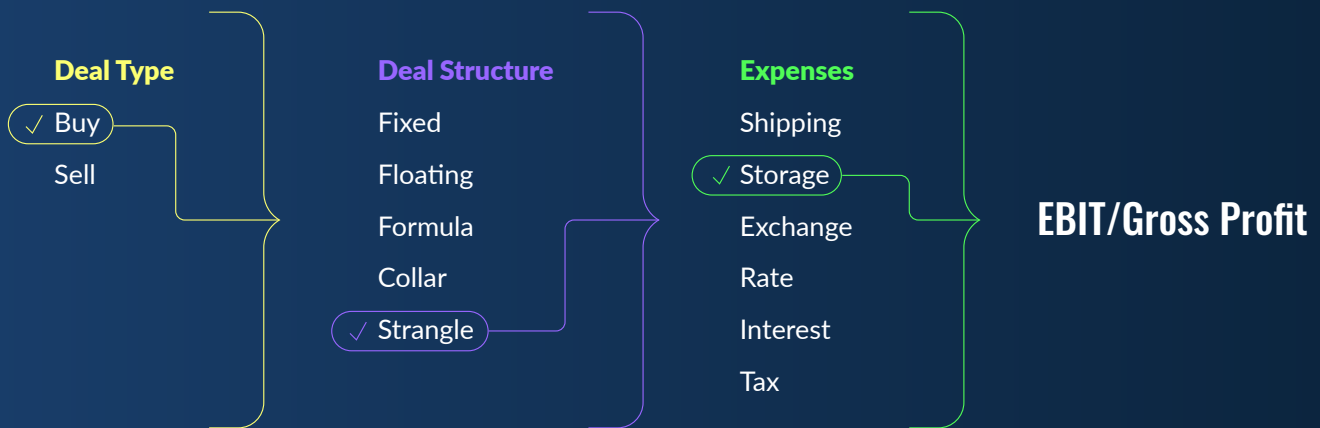
Build a Library:
Users format and store various commonly-used deal scenarios and customized timeframes for things such as buy/sell options, hedging strategies, and risk-sharing structures with suppliers/customers which adds confidence that the deal is right for them. Each future decision is only a few keystrokes away.

What's more, after the deal is made we can watch how it performs and scorecard the decision.

Model future transactions in real-time in any combination

Example: A risk-sharing buy option with storage fees

Deal Type	Deal Structure	Expenses	
✓ Buy	Fixed	Shipping	
Sell	Floating	✓ Storage	**EBIT/Gross Profit**
	Formula	Exchange	
	Collar	Rate	
	✓ Strangle	Interest	
		Tax	

THE ADVANTAGES INCLUDE:

1. **Risk management:** Knowing your comfort level with the deal

2. **Personnel development:** Ability to go back and evaluate each deal after the fact

3. **Succession planning:** Building consistency in your operation, making onboarding easier

4. **Partnership:** Turn the screen around with your key partners to analyze the best deal

5. **Contract negotiation:** Knowing when to renegotiate or formulas to add for risk sharing

Finally, the DecisionNext Customer Success team is there for each step of the process, building and maintaining your models so that your organization can realize value from Day 1. Our customized business support options are designed to work for every commodity need, small or large.

Contact us to learn more, and schedule a demo at DecisionNext.com