

# Case study

## Mining company

### COMPANY OVERVIEW

Our client is one of the leading mining companies in the world and it is known by its endeavor to improve continuously its operational efficiency. Logistics costs are in the top of cost items in a business that deals with transportation of tons of iron ore around the globe every day.

### THE CHALLENGE

The company has a good understanding of some controls and tools that would improve operational efficiency, either on their own fleet, or in their hired fleet. However, the use of spreadsheets didn't provide the real-time and analytics capabilities needed. Using spreadsheets was time consuming and error prone.

#### THE MAIN CHALLENGES WERE

- ▶ Reduce the fuel consumption on their own fleet;
- ▶ Establish proper controls and methods in order to be able to claim for performance clause on hired fleet;
- ▶ Detect off-hire hours that are difficult to perceive, so called ghost off-hire;
- ▶ Prevent fuel frauds.

# Intelie's solution

Intelie's Live solves both own and hired fleet challenges. Intelie's data platform allowed efficient consolidation of engine data, weather data, and AIS data.

For each ship is possible to track fuel consumption compared to an expected value due weather, vessel engine model, and vessel historical fuel performance. It is also possible to benchmark between similar vessels or compare captains' and ship managers' performance.

It is also possible to monitor vessel actual speed and the expected one due to weather conditions and port areas. Using this technique, it was possible to track invisible lost time on off-hired hours due to under performance. The company named this waste time as the ghost off-hire.

Clearly, this strict and automated control also makes any fraud attempt much more difficult.

## THE RESULT

The mining company have successful applied the solutions over their owned and hired fleet.

Intelie's data solution saved costs in order of magnitude of millions in one year. These savings do not yet include the logistics gains of better time arrival estimation, to be developed in a second phase of solution implementation.



Intelie was a critical enabler to achieve current savings by allowing our client to:

- ▶ Reduce fleet fuel consumption;
- ▶ Establish proper controls of performance service levels, being able to claim when needed;
- ▶ Detect and do not pay for off-hire, even those events most difficult to identify;
- ▶ Establish proper controls that difficult any fraud attempt;

**The Intelie solution allowed the company to be more fuel-efficient on own fleet and costs.**

## TESTIMONIAL

“My duty as an engineer is to empower all the management team with a trustworthy and on-time data analysis. On this way, all fleet operation can be properly managed with a unique perspective.”

**PROJECT LEAD ENGINEER**





# Discover Intelie Live Solution for fleet management

**INTELIE LIVE** IS A STREAM ANALYTICS PLATFORM THAT HELPS YOUR COMPANY TO TRANSFORM DATA INTO RESULTS. CLOUD OR ON-PREMISES.



COLLECT  
DATA



CONTINUOUS  
PROCESSING



ACTIONABLE  
INFORMATION

## How it works

Intelie Live can collect data from any source, from meteorological information to GPS, from engine to fuel consumption performance, process these data in real-time (filter, aggregate, correlate, enrich) and transform it into actionable information.

The platform combines the power and flexibility of Intelie Pipes, one of the world's most advanced stream processing and query language, with an easy to use interface for the final user.

The real-time data visualization gives you the insights you need to improve your operational intelligence. And its continuous monitoring scenarios and predictive analytics capabilities deliver alerts with the information you need to prevent problems and to foresee opportunities.

# Our fleet management solution can help you

- ▶ Optimize fuel consumption;
- ▶ Apply performance clauses on hired fleet;
- ▶ Detect ghost off-hire;
- ▶ Understand how weather affects your performance;
- ▶ Detect fraud.

Some important KPIs Intelie Live fleet management solution can provide for your operation:

## **CONSUMPTION MODULE**

- > Off-hire hours
- > Current speed
- > Additional consumption
- > Average speed x Daily consumption
- > Vessel activity (by duration)
- > Port stays (by duration)

## **ENGINE MODULE**

- > Engine speed
- > Mean indicated pressure
- > Water temp diff
- > Scavenge air pressure



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