

FLASHPOINTS

DATA-DRIVEN SOLUTIONS THAT IGNITE CUSTOMER SUCCESS.



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MARINE ASSET INTELLIGENCE OPTIMIZES HULL CLEANING FREQUENCY

What happened?

Marine Asset Intelligence (MAI) uses advanced analytics to transform raw data into actionable information to guide decision-making. In this situation, MAI used fuel consumption data to identify the optimal schedule for hull cleaning. The vessel of interest had one cleaning in two years, scheduled solely on the basis of calendar days, not condition. Fuel consumption data from before and after the cleaning was evaluated to determine whether condition-based hull cleaning could deliver more value than calendar-based cleaning.

What did the data reveal?

Using highly comparable data (same geographic location and direction) before and after the hull cleaning, MAI calculated that fuel consumption was approximately 350 kg per hour higher when the hull was fouled than when it was clean. Assuming a conservative linear increase in fuel consumption over time, MAI estimated that cleaning the hull only once every two years was costing the owner nearly \$1.3M in excess fuel consumption—\$10M for a fleet of eight vessels.

What is the value to the customer?

The average cost of a hull cleaning for a roll-on/roll-off ship is approximately \$40,000. Using Cost-Benefit Analysis, MAI determined that six cleanings over two years minimizes both the cost of excess fuel consumption and the cost of cleaning. Abiding by a recommended schedule based on the ship's own fuel consumption data could save close to \$1M on a single vessel in two years in fuel consumption alone. That's a savings of approximately \$8M for a fleet of eight vessels (more than \$10K savings per day).

