

Superior Insights Improve Availability and Reduce Costs for Truck Fleets

Challenge

Reduce fleet operation and maintenance costs, improve vehicle availability, extend vehicle life, and improve safety.

Solution

Configured robust, automated analytical processes to convert maintenance and operational vehicle data into high value actionable information for operational decision making.

Results

Delivery of high value information such as optimized maintenance intervals, vehicles requiring maintenance, and critical fault occurrences with associated operational cost benefits.

Prenscia Solutions developed a system for performing advanced analysis on readily available, low cost data that delivers actionable information for both current and projected operations. The system provides a foundation for vehicle health reporting, diagnostics, understanding key system deterioration and time spent outside rated operating limits, improving availability, optimizing maintenance, reducing costs, and identifying prognostic trends. As a result, the client is also able to identify optimum future investment decisions.



nCode

ReliaSoft

Onnicon

The Challenge

The client, an operator of a large truck fleet, has a variety of vehicles that are used throughout the world under a wide range of different conditions.

An ongoing challenge is to efficiently identify and convert key vehicle operational usage and maintenance data into actionable information to identify cost savings, increase availability, extend vehicle life, improve safety, and reduce vehicle life cycle costs.



The Solution

Prencia Solutions developed an automated software system that was configured and implemented to collect, process, analyze, and report on both operational usage and maintenance data for vehicles.

Advanced analytics converts low cost, readily available data into high value information, providing a better understanding in areas such as operational performance and vehicle health and deterioration; and predicts future trends which serves as a basis for better decision making.

The Results

Preliminary analysis of historical maintenance and cost data revealed areas for reducing high costs. The client saved millions of dollars annually and reduced unscheduled maintenance of its fleet.

Ongoing analysis of operational usage data provides high-confidence insights to identify vehicle and fleet health concerns. Automated reporting supports decisions related to cost savings, improved availability, preventative maintenance, and systemic issues based on usage.



About HBM Prencia Solutions

HBM Prencia Solutions ensures customer success through value-driven solutions for product and process development, and operational monitoring. We are a multi-disciplinary team with expertise in failure analysis; predictive analytics and modeling for reliability, durability, and deterioration; asset health and usage monitoring; prognostics; development and testing of embedded software and electronics to deliver robust solutions to our global clients. Our team of engineers, analysts, software developers, data scientists, and program managers, many holding United States Government security clearance, are readily available to provide technical expertise and deliver value-driven solutions. For more information, please visit www.hbmprencia.com/solutions