

CYIENT

PREDICTIVE ANALYTICS SOLUTION FOR OFF HIGHWAY EQUIPMENT

How we work with our clients to help overcome challenges
for a better tomorrow



Overview

Our client is one of the world's leading manufacturers of off-highway equipment. They approached us to help them reduce their cost of operations and improve the asset longevity through informed and effective decision-making in the maintenance of an asset and its components.

They wanted to reduce downtime and production losses by effectively prioritizing maintenance activities and proactively replacing components before failure.

Our Solution

We designed an ensemble of advanced analytics solutions that could predict when asset components will fail and align replacements with planned maintenance schedules.

We also built predictive algorithms, which evaluate a machine's exception or repair history, operating and maintenance practices, etc. to predict the catastrophic premature failure risk before planned maintenance.

We created a predictive model assessing the relative performance of an asset health, ranging from 100 (new) to 0 (failed) based upon the asset risk categories created, to help evaluate the estimated remaining useful life of the asset.

Key Business Benefits

Maintenance effectiveness:

- 8% reduction in maintenance costs
- 10% reduced asset downtime
- Improved management of asset maintenance schedules and performance through executive and asset manager self-service dashboards

Productivity improvement:

- 13% improvement in overall asset productivity
- Increased efficiency of scheduling fleet and individual machine maintenance

Value add to external stakeholders:

- Potential reduction in parts inventory within the dealer/operations network
- Additional insights, which can be utilized by the end-user for operations and equipment monitoring

About Cyient

Cyient is a global provider of engineering, manufacturing, data analytics, networks and operations solutions. Our solutions include product development and life cycle support, process and network engineering, and data transformation and analytics. We provide expertise in the aerospace, consumer, energy, medical, oil and gas, mining, heavy equipment, semiconductor, rail transportation, telecom, and utilities industries.

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