

# Operational Analytics

## Improve equipment uptime and efficiency with operational analytics

### Summary

Producers in asset intensive industries need to drive better efficiency and uptime from connected machines to stay competitive. Gaining real insights from data for connected equipment has traditionally been a challenge, either in connecting the machines or in interpreting the results.

With limited insights from machine data and an over-reliance on human inspection, many firms have been forced into a reactive posture for maintenance activity. Staying reactive limits the ability of maintenance activity to break-fix actions, and doesn't allow for proactive improvements to be made to drive better efficiency and equipment performance.

With connected data tags and converged IT data, improved analytics and uptime are now possible.

## Operational machine data and analysis enable predictive maintenance

This solution use case, provided by Bentley on the MindSphere platform, provides operational analytics for connected equipment that enables a proactive approach to machine performance and maintenance.

Sensors and controllers continually monitor, measure, report, and record relevant parameters including temperatures, pressure, flow rates, and vibration. Typically data is provided in real-time or near-real time.

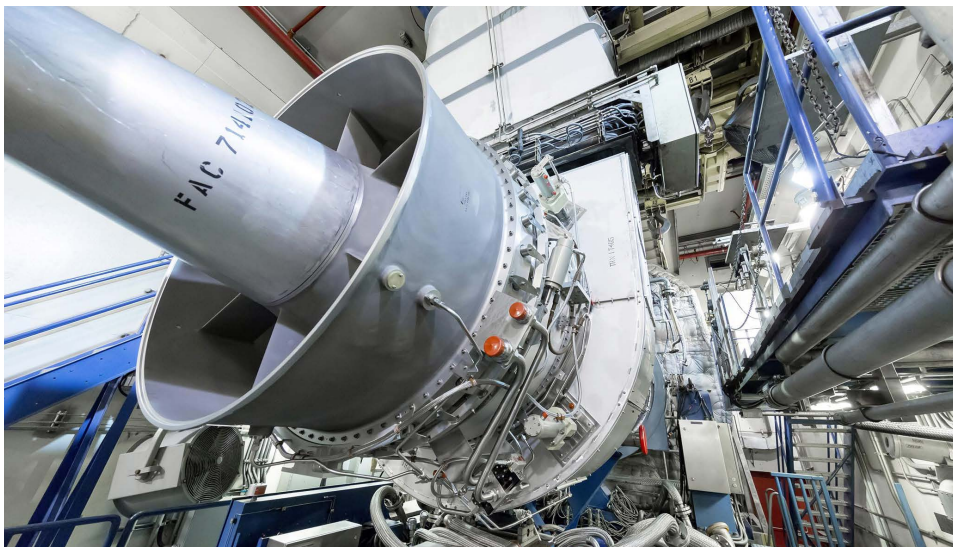
Real-time advanced analytics, machine learning and dashboards help predict future performance and patterns to allow for proactive interventions or actions to improve equipment uptime and performance. Visualizations include KPIs that showcase status and operational performance across a whole operation or network.

## Benefits

- Increase machine availability and performance.
- Improve efficiency of maintenance cycles.
- Extend working life of equipment through improved decision making and maintenance.
- Reduce risk and ensure regulatory compliance.
- Predict future performance and patterns of connected equipment.

## Features

- Real-time dashboard with operational monitoring for connected assets and components.
- Predictive operational analytics.
- Integration with multiple enterprise data sources, machine data tags and the MindSphere platform.



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