Asset performance optimization and predictive maintenance from OpenText

Deploy AI and analytics to optimize performance and increase uptime of industrial plants, transportation machinery and other high-value assets while reducing maintenance costs.

Solution overview

Improving performance by reducing downtime is a continuous focus for operations managers in industries such as transportation, logistics, vehicle and fleet management, energy and utilities. Traditional IT solutions for asset management and maintenance help lower some of the cost associated with asset downtime, but do not go far enough. These solutions have not yet embraced the power of Artificial Intelligence (AI), and have limited or no capability for unlocking value from existing unstructured data.

Asset performance optimization from OpenText leverages the OpenText™ Magellan™ platform to deliver predictive insights derived on a holistic knowledge base, with the ability to improve those insights over time as assets are used, maintained or taken out of service. It powers IoT with AI capabilities to acquire, merge, manage and analyze Big Data and Big Content, including data from sensors, Enterprise Information Management systems and external sources.

The solution increases the efficiency of industrial assets, reduces unexpected repairs and downtime, enables continuity of operations and lowers maintenance costs. By maximizing operational output with intelligent and connected assets, the OpenText solution generates higher operating margins and extends asset life.

Increase uptime by 20 percent
Cut up to 25 percent of maintenance costs
Improve maintenance safety by 14 percent
Optimize decision-making with analytics
Increase uptime by 20 percent

Asset performance optimization helps organizations intelligently forecast repairs to optimize maintenance and reduce downtime, potentially saving hundreds of millions of dollars for a large industrial organization. According to a recent report by Deloitte, “Predicting failures via advanced analytics can increase equipment uptime by up to 20 percent.”

To achieve these goals, OpenText merges sensor data with product specifications and documentation, weather pattern information, compliance requirements, field service technician availability and data from financial, supply chain and procurement applications. It uses Artificial Intelligence to analyze patterns, detect anomalies before they occur and trigger business actions, such as alerts to stakeholders.

Cut up to 25 percent of maintenance costs

Asset performance optimization uses AI and analytics to reduce unnecessary labor costs resulting from unplanned repairs. A recent study determined that predictive maintenance can reduce maintenance costs by up to 25 percent. A similar study notes that predictive maintenance can extend machine life by 20–40 percent. These improvements can result in:

- Higher margins by increasing output.
- Greater customer satisfaction by reducing quality defects and delays.
- Reduced capital investment due to longer asset lifetime value.

Improve maintenance safety by 14 percent

Malfunctioning equipment can cause serious injury, but organizations are not usually aware that a machine is about to misfunction until it is too late. Fortunately, preventative maintenance can improve maintenance safety by up to 14 percent. By using AI and data analysis, asset performance optimization from OpenText can predict likely problems and reduce the number of workplace incidents for employees.
Optimize decision-making for asset managers

Business leaders responsible for asset performance depend on data to make decisions about maintenance schedules, parts procurement and retirement of industrial assets. One study shows that arming supply chain executives with Big Data analytics leads to a 15 percent increase in revenue growth and operating margin. But the amount of data available can seem overwhelming. Asset performance optimization helps asset managers identify key data points and recommends actions based on historical and predictive capabilities.

It allows enterprises to go beyond reactive techniques and achieve optimal efficiency by:

- Incorporating natural language process capabilities for unstructured content.
- Using machine learning to continuously improve recommendations.
- Providing dashboards designed for business users and executives.
- Integrating Big Data analytics and process automation to streamline decisions and actions.
- Procuring replacement parts automatically.

OpenText, an experienced software leader with an unrivalled track record in delivering enterprise solutions and services, is committed to fulfilling customers’ evolving needs for asset efficiency solutions.

Asset performance optimization enables organizations to merge structured data from a wide range of sources, such as machinery sensors, with unstructured data, including maintenance manuals, and external data, such as weather and economic conditions. The solution offers a more complete picture of the environment in which industrial assets operate. And the option to integrate process automation makes these insights actionable so decisions can be implemented efficiently and effectively.

IT benefits in two important ways:

1. Flexible deployment options include the ability to embed the solution into IT environments, whether on-premises, in the cloud or a hybrid model.
2. The solution’s pre-integrated AI, analytics, business intelligence, reporting, text mining and natural language analysis delivers a lower-cost, faster implementation.

Learn more about OpenText Professional Services: AI & Analytics Services
# OpenText Magellan™

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<tr>
<th>Platform components</th>
<th>Benefits</th>
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<tr>
<td>Magellan</td>
<td>Combines open-source machine learning with advanced analytics, enterprise-grade business intelligence and capabilities to acquire, merge, manage and analyze data and content. Enables machine-assisted decision-making, automation and business optimization.</td>
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<td><strong>OpenText® Magellan™ Data Discovery</strong></td>
<td>Analyzes billions of records in an easy-to-use, unified view for fast insights. Enables users to apply advanced analytic algorithms and leverage custom machine-learning models to explore, prepare and enrich data.</td>
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<td><strong>OpenText® Magellan™ BI &amp; Reporting</strong></td>
<td>Generates insights by analyzing data and visualizing it in a wide range of convenient report and dashboard formats.</td>
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<td><strong>OpenText® Magellan™ Text Mining</strong></td>
<td>Extracts key phrases and named entities (people, places, dates, events, organizations, etc.) and identifies topics, mood and subjectivity in text.</td>
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<td><strong>OpenText® Magellan™ Data Science Notebook</strong></td>
<td>Enables data scientists to create and train models with the data lake through a familiar Jupyter™-based interface.</td>
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4. PwC, Predictive Maintenance 4.0: Beyond the hype: PdM 4.0 delivers results, 2018.