# **Predicting value:** The business case for predictive and prescriptive maintenance

## Realizing rapid ROI from predictive maintenance solutions

Amid overlapping global crises and countless marketplace upheavals, companies from every sector are looking to shore up their operations against future disruptions. Industry insiders have long seen improving asset health monitoring and maintenance as a winning strategy to achieve resilience, agility, and efficiency.

However, it can be hard to identify which digital tools will deliver the maximum impact, and harder still to convince diverse groups of stakeholders that they should prioritize a given project over another. After all, what department wouldn't benefit from additional resources? In the end, a solid business case for prioritizing spending on asset health and predictive maintenance comes down to demonstrating fast return on investment (ROI).

As with any aspect of digital transformation, scalability is key. Predictive maintenance, enabled by artificial intelligence (AI) and machine learning, needs an easy-to-scale solution that maximizes ROI up-front and continues to build returns as an organization further refines its digital capabilities. But how do executives determine the most cost-effective place to start?

## Identifying your predictive maintenance priorities

Many organizations already use real-time data to conduct condition-based maintenance of their assets. Given recent supply chain disruptions, however, insight into spare part delivery time becomes much more important. Risk-based maintenance integrates aspects of reactive, preventive, condition-based, predictive maintenance techniques, and spare parts inventorying to improve asset availability and build resilience.

No matter where your organization is in its digital transformation, identifying where to invest for maximum returns is pivotal. Enterprises should look not only for discrete software but scalable digital solutions that are part of a robust portfolio.

AVEVA™ Asset Strategy Optimization, for example, lays the foundation for higher-level capabilities. With AVEVA Asset Strategy Optimization, organizations can assess asset criticality, which they can use to determine the assets they will focus on with predictive analytics.

AVEVA Asset Strategy Optimization gives a clear overview of all of your assets, helping you pinpoint maintenance investments with ROI in mind. It lets you tailor strategies to your company's unique position. For example, if leadership is looking to further a sustainability initiative, AVEVA Asset Strategy Optimization will show you which asset strategy will best achieve that goal.

## Scalability drives ROI

The use of artificial intelligence (AI) has become commonplace for detecting asset performance irregularities. The belief persists among some, however, that algorithms are the most important part of any predictive maintenance program. In reality, an algorithm only accounts for a small fraction of the comprehensive solution needed to deploy a holistic predictive and prescriptive maintenance strategy.

AVEVA™ Predictive Analytics is one such scalable, comprehensive solution. It incorporates AI models that provide early asset performance anomaly detection and diagnosis. The solution's asset libraries provide reliability data that prescribes the best remediating actions in the event of a failure, allowing you to minimize downtime and take action quickly to address equipment health and performance problems enterprise-wide.

To achieve maximum value, any complete predictive maintenance solution must be easy-to-scale and operationalize for all stakeholders, not just data scientists and software programmers.

Solutions like AVEVA Predictive Analytics can be easily scaled to encompass a single asset in one plant to all of your assets worldwide.

# Why AVEVA?

The insight into asset criticality AVEVA Asset Strategy Optimization provides, coupled with the easy-to-scale benefits AVEVA Predictive Analytics delivers, demonstrates that AVEVA's solutions represent the most comprehensive predictive analytics portfolio in the market, ensuring maximum ROI.

Operating an RCM program can be a resource-intensive process. Because AVEVA™ Asset Strategy Optimization enables collaboration between experts and non-experts, you can minimize the time it takes to collect and verify information. Users can input data directly into a web-based interface, which is then easily accessible to reliability engineers at any time anywhere. Using this method, teams have cut the time it takes for an RCM study by half. AVEVA Asset Strategy Optimization accelerates RCM from study to deployment by bringing together people and data. With AVEVA's Asset Strategy Library, deployment time of asset strategies can be sped by up to 90%.

AVEVA Predictive Analytics complements AVEVA Asset Strategy Optimization. AVEVA Predictive Analytics is an equipment-agnostic solution that includes templates for fault diagnostics and prescriptive actions for commonly monitored assets, so it's easy and quick to deploy.

Because it can be integrated with AVEVA™ PI System™, the system is highly scalable. You can monitor a single asset, plant, or a whole host of remote assets across multiple sites, allowing you to scale continuously with a minimal IT footprint.

AVEVA's solutions also present information in context, empowering reliability and maintenance personnel alongside their engineering counterparts. Pre-built model templates from AVEVA's asset library make information more accessible to workers company-wide, regardless of expertise. AVEVA Predictive Analytics can also infer behavior when a complete training data set is lacking, removing the worry of data gaps.

AVEVA Predictive Analytics makes it easy for users to train proven algorithms quickly and operationalize them. Prescriptive actions, coupled with integrated fault diagnostics, speed up asset remediation. No-code architecture allows a wide range of users to quickly implement model management strategies using templates. The solution also shows users the forecast for time to failure.

When deployed in tandem, AVEVA Asset Strategy Optimization and AVEVA Predictive Analytics create an easily scalable, comprehensive predictive and prescriptive maintenance toolkit, ensuring maximum ROI and allowing you to achieve your predictive maintenance goals.

For more information about Predictive Analytics, please visit:
aveva.com/en/products/predictive-analytics