IBM Signature Solution — Predictive Asset Optimization

Optimize operational performance to drive enterprise-wide efficiencies and profitability

In today’s asset-intensive marketplace, operating, maintaining, and managing assets throughout their lifecycle can be costly on many fronts. The benefits associated with preventing asset down time can be huge. Even a small delay in detecting a problem can result in large costs from process proliferation, spare parts inventory, reworked or scrapped products, containment or recalls of defective products, increased overtime, increased warranty expenses, loss of customer satisfaction, and potentially even legal liability.

Predictive maintenance anticipates asset failure based on usage, wear, and surrounding conditions to determine when and how something breaks, and improves overall operational efficiency by enabling a proactive response to prevent or minimize potential issues. IBM Signature Solution — Predictive Asset Optimization is a holistic solution that helps maximize operational performance and associated processes to drive enterprise-wide efficiencies and profitability.

From highly complex and “connected” products to manufacturing equipment and field assets, predictive analytics solutions exist to help you reduce asset down time and failures. Predictive Asset Optimization offers two value drivers: 1) monitor, maintain, and optimize assets for better availability, utilization, and performance, and 2) predict asset failure to optimize quality and supply chain processes.

However, IBM’s solution goes beyond monitoring asset sensors—it has the capability to leverage input from other domains such as environmental, facilities monitoring systems, and even text information such as maintenance logs. Our solution also tightly integrates enterprise asset management (EAM) and analytic systems capabilities to offer distinctive benefits across your enterprise.
Predicting asset failure to optimize quality and supply chain processes
Organizations that lead in analytics outperform those that are just beginning to adopt analytics by three times. Using predictive and advanced analytics, the Predictive Asset Optimization solution provides a proactive analysis process using equipment and application data from multiple structured, unstructured and streaming data sources to make informed operational, maintenance, repair or component replacement decisions. Your organization can empower business users to develop predictive models and combine them with business processes and rules, resulting in decisions that can help you better understand and eliminate problems quickly to reduce costs and improve efficiency and quality.

Monitoring, maintaining and optimizing assets for better availability, utilization and performance
Predictive Asset Optimization integrates IBM’s industry, services, software and research expertise including IBM Global Services—Global Business Services Business Analytics and Optimization, Business Analytics, Information Management, Tivoli, Systems and Technology Group, and IBM Research to:

- **Extend** the useful life of asset infrastructure while increasing “return on assets”
- **Increase** the operational efficiency and agility by leveraging new operational technologies
- **Improve** time to market and life cycle warranty costs for new products
- **Proactively address** threats and regulations for critical infrastructure protection and health/safety
- **Align** the most appropriate resources to the most important actions.

Our solution brings user-friendly, industry-specific dashboards, accelerators, and methods to create predictive models. This effective dashboard is designed to enable faster navigation of vast amounts of data and apply recommended actions to solve issues.

Accelerating time-to-value
The IBM Predictive Asset Optimization solution leverages mature, proven offerings to deliver both asset optimization and improved product quality. Delivered by IBM Global Business Services industry specialists and world class analytics experts, predictive asset optimization is deployed as a modular and integrated solution designed to fit the needs of your business. With our enhanced advanced analytics methodology, pre-configured dashboards and templates and our resource pool of highly talented analytic subject matter experts, IBM is uniquely positioned to bring you value quickly.

As a proof point, IBM worked with an auto manufacturer to reduce its scrap rate by 80% in 12 weeks. This was possible by monitoring the production quality and predicting the conditions that led to poor quality by using real-time data, subsequently resolving issues quicker, increasing productivity, reducing costs and ultimately increasing customer satisfaction.

IBM Smarter Analytics Signature Solutions are a portfolio of outcome-based analytic solutions designed to address the most pressing industry and functional challenges clients are facing in today’s evolving marketplace—a marketplace in which organizations need Smarter Analytics to stay ahead of their competitors.
Getting started by understanding your current analytic capabilities and issues
A business value assessment workshop can help you get started and evaluate your current business issues, concerns and future directions. This short duration engagement is designed to define problem metrics and potential benefits, and analyze available equipment and process data plus methods of accessibility. We present an overall architecture and solution roadmap to address business needs and prepare a limited scope pilot proposal to validate estimated savings and architectural blueprint that proves fast value and helps you evaluate possibilities.

IBM Signature Solutions
IBM Signature Solutions is a holistic approach that turns information into insight and insight into business outcomes.

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The IBM Signature Solutions are built on the knowledge and experience of IBM’s global team of researchers, consultants, sellers and software specialists. These solutions bring together the breadth and depth of IBM’s intellectual capital, software, infrastructure, research, and consulting services to deliver break-away results to clients seeking to tackle key business challenges using Smarter Analytics. Signature Solutions represent a portfolio of proven innovation that has been implemented at clients worldwide, and brings the best of IBM capabilities together to deliver accelerated client value.

For more information
To learn more about how IBM Signature Solutions can help you optimize your operational performance and drive enterprise-wide efficiencies and profitability, please contact your IBM representative, or visit ibm.com.