



6 reasons to accelerate your adoption of remote asset monitoring with AI

Whenever a new technology comes along, you need to make a decision. Do you forge a new future through early adoption? Or wait to see how the general market responds? Often, in the absence of historical information, people think they're smarter to delay implementation.

In some cases, waiting pays off. In others, it has costly repercussions. While you wait patiently and pragmatically, your competitors leap in and gain an early advantage.

The ability to deploy AI-powered remote monitoring at enterprise scale is a game changer in the way assets are maintained and operated. With this new technology, technicians can be deployed only when there's true value in doing so—before small problems become big problems. You optimize valuable resources and can improve productivity and profit.

The addition of artificial intelligence (AI) to remote monitoring is beginning to revolutionize industrial operations. It may well be one of the most important developments to impact asset operations in recent years. Discover how you can improve performance through the introduction of essential intelligence for a new era of asset maintenance and operation. Learn why you mustn't delay your decision to adopt AI and remote monitoring within your organization.

1

You need it. Now.

The benefits of using AI to monitor your assets is quantifiable. The cost of downtime is on the rise. Between 2014 and 2016, just one hour of downtime for all businesses leapt 60% to \$260,000.* The problem is that there is too much data. Operators today have to consider hundreds of process variables and thousands of instruments values. Without the help of AI, operators risk making the decision to assign resources where they may not be needed—and not assigning them where they are.

With current non-AI enabled systems, it can be challenging and costly to pull data from even relatively new connected assets. The data can be siloed by OEM, asset class, and location, giving you an incomplete picture of your operations. Even when you have the data, the traditional set-points for alerts are fixed. This leads to a high volume of alerts that fail to take operational context into account and often fail to identify patterns until it is too late. New AI-powered asset monitoring systems provide near real-time visibility across operations including multiple asset classes and locations. They surface only the most important alerts by identifying critical anomalies based on continual learnings, assessing them, providing accurate insights into what is causing the failure, and presenting them on a single, simple customizable dashboard. This means you can resolve the issue more quickly to reduce costs and optimize operating performance.

Bottom line

The good old methods are no longer good enough. There's now a better way.



Unplanned downtime can
cost an average of USD
260,000 per hour¹

2

You can build toward the future.

Supplement what you already own without replacing or disrupting the SCADA infrastructure that your organization has been investing in for years. Asset monitoring with AI can help you extract more value from the existing control systems infrastructure and other technology investments you already have in place.

That's because the solution sits on top of your existing fragmented control systems to drive integration. It breaks down the data silos that prevent you from getting a reliable, near realtime view of your operations. It also connects multiple data sources like PLCs, existing sensor enabled assets, and other repositories like enterprise asset management systems that are already your asset systems of record. This means that you can build on existing technology to get enterprise-wide visibility into performance, reliable analytics and early anomaly detection to identify small problems that have the potential to become big problems.

Bottom line

You've only scratched the surface of your existing infrastructure. When you install AI-powered remote asset monitoring across your enterprise, you'll be better able to manage your assets and you'll gain more value from your operations.



34% of companies said they are adopting AI technology, up from 14% a year ago. Exploration of AI is at 40%.²

3

You can scale across your entire enterprise.

Solutions can now scale and expand beyond your production line across multiple processes, locations, and on premises.

The solution that sits on top of your infrastructure must be built with enterprise needs in mind and be able to efficiently handle large amounts of data from multiple sources. So choose one that starts with a global cloud-based infrastructure that can help you connect disparate facilities and systems to build a single view.

Ensure that the vendors you work with understand your industrial requirements and work closely with your organization's IT teams to manage full deployments.

Bottom line

Solutions that scale quickly across the enterprise are powerful and more efficient.



“AI brings three things to the table: It brings opportunity to be able to look at everything all at once, it allows you to look at everything in near real time, which is also an extraordinary capability, and it allows the system to be able to become self aware.”

Rob Mora

Executive Vice President
Novate Solutions

4

Solutions can be custom made for your challenges.

The hardest thing to do is to make something simple. That's why this is a job for experts. A lot of them: experts in IoT sensor connectivity, legacy control system infrastructure, data integration, advanced analytics, engineering processes, security, and easy-to-use KPI dashboards...just to name a few. If your internal team doesn't have years of experience in these disciplines, which is becoming increasingly hard to find, your solution will be challenged from the start.

The better approach is to depend upon the expertise of an organization committed to analytics and AI. They can provide you with a modern web-UI-based software architecture that is supported with ongoing maintenance and new functionality.

Bottom line

The right expertise is invaluable. The best solutions arise out of partnerships with a provider that specializes in IoT, AI and enterprise assets. Why spend the thousands of development hours when you don't have to?



40% of respondents currently deploying AI said they are developing proof-of-concepts for specific AI-based or AI assisted projects²

5

Your employees will be safer.

Human resources are by far your most valuable asset. Your organization invests a lot in them. You care about their wellbeing and do your utmost to keep your workers safe. Conversely, they trust you to provide a safe and secure environment where they're protected from accidents and injury.

Enterprise asset monitoring solutions with AI make it possible to identify and eliminate hazards in the workplace before they present risks to your staff. Sophisticated new systems integrate and analyze holistic data: biometric data from wearables, measurement and event data from beacons and environmental sensors, and third-party data such as weather conditions.

Using real-time insights, AI enables safety offices, work site supervisors and technicians to support worker safety and safety plan compliance. And that makes everyone feel more safe and secure in the workplace.

Bottom line

The wellbeing of your workers is critical. New AI technologies enable you to provide a healthier environment, reducing the threat of injury and solidifying your commitment to protect and safeguard your staff.



51% of executives indicate that their organizations have difficulty protecting workers and achieving safety compliance.³

6

Your ROI will be fast and meaningful.

Operations professionals throughout the world have started to seek smarter ways to reduce downtime and improve productivity. They're eager to implement economical, scalable SaaS technologies that provide them with insights into their operations and help them extract every bit of value from their existing investments.

Remote monitoring with AI can be deployed quickly to detect anomalies, mitigate expensive unplanned downtime and extend the lifecycle of the assets it monitors. You begin to accrue the value of the solution quickly so your investment is soon paid back in better intelligence and better performance.

Bottom line

Industrial operations are in the middle of a global transformation. By 2030, there will be over 125 billion connected devices streaming endless. With so much new data, making decisive action with just the traditional methods of identifying anomalies will become obsolete.



82% of asset failures appear random.⁴
But are they really?

Introducing IBM Maximo Asset Monitor

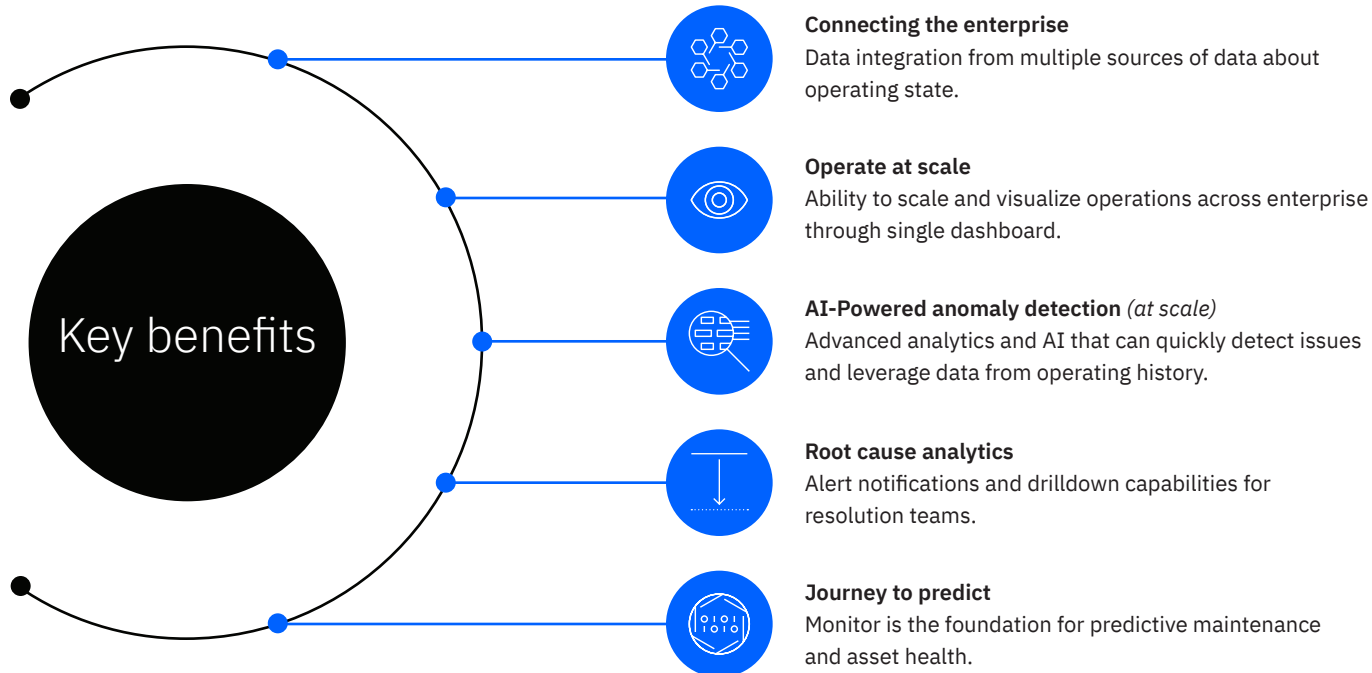
IBM Maximo Asset Monitor solution aggregates operating state data and process parameters across legacy systems, historians, IoT sensors, and other repositories to provide enterprise-wide visibility into performance. The solution scales quickly and easily across the enterprise. AI-powered anomaly detection identifies only the right alerts while helping you understand complex relationships between factors causing failures. This enables you to act with speed and confidence to understand root cause and drive digital re-invention.

Powered by IBM's investments in artificial intelligence, fueled by IoT data, and built for hybrid cloud, IBM Maximo is extending its leadership as the most trusted enterprise asset management system on the planet. And with new investments in AI-powered remote monitoring and anomaly detection, IBM Maximo empowers operations leaders with a comprehensive view into asset performance to ensure your business never stops.

Learn how IBM Maximo Asset Monitor can provide your organization with intelligent insights that will help you reduce downtime and improve operations.

Key benefits of IBM Maximo Asset Monitor

Monitoring solution that enables real-time visibility, root-cause troubleshooting, and AI driven alerts at scale



IBM Maximo

Essential intelligence for a new era of enterprise asset management, maintenance and operations

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