A new chapter in asset management

Five reasons to adopt connected reliability
Linking people, software, hardware assets and services in a single unified ecosystem, connected reliability enables industrial leaders to power up a new era of operational resilience and transform workplace practices and performance.
Rethinking operational performance with reliability and sustainable value in mind.

Today’s manufacturing leaders are pursuing reliability-centered maintenance to reduce costs, enhance safety and production quality and compliance, and improve the performance benchmarks of their assets.

With asset management key, businesses are embracing a new generation of technologies and approaches to predict and prevent equipment failure, tackle unplanned outages and minimize resource wastage.

But having invested in a variety of point solutions – CMMS (computerized maintenance management systems), EAM (enterprise asset management), connected digital monitoring and AI tools – operations leaders are struggling to bring all these siloed solutions together.

Enabling systems, machinery, and people to communicate with one another easily and effectively, connected reliability is rewriting the rulebook – increasing efficiencies and standardizing maintenance operations across national and global facilities.

And, with a connected reliability framework in place, it’s easier to unleash new AI-enabled predictive capabilities, while taking advantage of integrated data acquisition and analytics to empower maintenance teams to work smarter and more effectively.

Let’s take a look at 5 key reasons to move to a connected reliability future.
Connecting people to data and systems

To optimize productivity, today’s maintenance and reliability (M&R) professionals need to be able to make better data-driven and results-oriented decisions.

That means being able to collect asset and system measurements in the moment, in the way that works best for them – with a handheld meter, a wireless sensor, a supervisory control and data acquisition (SCADA) system, or any other condition/process data.

Connected reliability enables manufacturing leaders to augment how M&R teams work. By bringing together people, data, and systems, M&R personnel working on the frontline have instant access to a unified view of all operational systems. So they can make the right choices at the right time.
Automating routine data collection activities reduces the need for interaction between people and hazardous places and keeps the M&R workforce safer.

For example, installing remote monitoring sensors on inaccessible assets such as fans near ceilings, motors in areas with excessive heat or noise and pumps under gratings keeps people out of harm’s way.

It also increases workplace efficiency by eliminating manual and often reactive maintenance activities, particularly on Tier 2 or lower category assets.

Manufacturing leaders can also reduce manual routes and deploy M&R teams on more engaging and strategic tasks — automating the collection of monitoring data to support the real-time data analysis that’s core to enabling preventative maintenance programs.

These measurements can be automatically aggregated into a cloud-based repository that delivers enterprise-wide visibility of asset performance.
By adopting a connected reliability framework, maintenance teams always know the exact condition of every asset in real-time.

This enables organizations to reframe maintenance practices and progress towards a condition-based maintenance strategy that improves asset uptime and availability in the most efficient way possible.

Rather wasting resources by repairing equipment to pre-set schedules, transitioning to a condition-based maintenance approach that utilizes remote monitoring enables M&R teams to extend the amount of time between repairs and intervene only when assets are approaching a critical failure point.

Alongside enhancing their strategic planning capabilities, organizations will be able to integrate their condition-based maintenance works with continuous improvement programs such as Lean, Sigma-6 or 5S to further streamline processes and do more with existing resources. For example, utilizing advanced AI-powered diagnostics to help industrial teams prioritize and schedule maintenance tasks and undertake diagnostics with no need for human intervention.
With connected reliability, organizations can ensure their frontline workers stay as mobile by providing them with all the vital information needed to undertake tasks.

Using cloud-based data captured from IIoT sensors, M&R professionals have instant access and visibility of real-time and historical asset data via smart devices. When existing databases are integrated with the EAM/CMMS system, it also becomes possible to provide front line teams with actionable event-driven insights. But that’s not all.

Receiving information from assets with a mobile workforce is another key aspect of a connected reliability program. Software systems that automatically aggregate measurements from sensors can also send alarms – the moment measurements exceed user-set thresholds, alarms can be sent direct to M&R teams’ mobile devices.

No matter where they are – on the shop floor or at home – they’ll receive instant notification of an asset problem. A move that improves uptime by ensuring that assets never become critical in the first place.
Today’s industrial leaders need a new approach to reliability.

One that brings together disparate data sources, makes it possible to incorporate cutting edge Industry 4.0 technologies and AI, and leverage the power of the cloud to empower reliability engineers to work in new ways.

By using a connected reliability framework, maintenance and operation teams will be able to make data-driven decisions on which work orders (root cause and corrective action, safety work, corrective maintenance, total productive maintenance) to prioritize.

Similarly, by pairing sensors and software and centralizing data from different systems, senior leaders and M&R teams gain global visibility of the current reliability maintenance status-quo and can collaboratively transform maintenance practices, focusing on the continuous improvement of the organization’s predictive maintenance strategies.

Now industrial leaders can make reliability an explicit priority that everyone is able to pursue in a streamlined and informed way, thanks to AI-generated insights on the maintenance actions needed to optimize operational effectiveness.

Using connected reliability, organizations will also be able to accelerate the rollout of Industry 4.0 technologies and execute preventative maintenance and equipment monitoring at scale. Utilizing AI to close the looming skills gap and support M&R teams to work smarter and more productivity using AI-generated intelligence and recommendations.
Ready to get connected?

Heightened business interdependencies, competitive and financial pressures and intensifying regulatory scrutiny means reliability is now a top priority that everyone – not just maintenance engineers – needs to own.

Today’s connected reliability frameworks enable industrial leaders to connect machines, data systems and people to empower maintenance managers to improve the lives and workflows of M&R teams and provide them with the information they need to succeed. It also makes it possible for leadership teams to:

- Gain greater visibility into their daily asset-management operations
- Leverage advanced analytics to predict machine failures and deliver real-time insights to front-line teams
- Unleash human/machine collaboration – using AI-powered automation to provide decision support and streamline anomaly detection
- Utilize advanced analytics to predict machine failures and deliver these real-time insights to front-line teams
Looking to transform your operational approaches and embrace the next phase of maintenance? At Fluke Reliability, we offer a complimentary connected reliability assessment to guide your next steps.

Our seasoned team of experts are here to support you every step of the way.

Discover more and schedule your free assessment at

FlukeReliability.com.