

But why IoT for Predictive Maintenance in industry 4.0?



At the heart of any preventive maintenance process and solution is a massive amount of equipment data, millions of sensors collecting this data, seasoned analytics capabilities, and AI and machine learning algorithms. These capabilities can simply not be achieved with local tools and manual methods. Of course, a team of analysts and seasoned repairmen can help with some of it, but they would need high skills, and the time cost would be extensive.

IoT-based preventive maintenance solutions allow businesses to supercharge their human workforce's capabilities with technology intervention. An IoT-based solution can pinpoint specific issues, save time and effort, and let your staff take action instead of manually evaluating equipment status.

IoT enablement aids data analysis on assets, equipment, or machinery. Sensors and other instruments collect data, prepare dashboard reports on equipment status and predict issues and risks that need immediate attention to avoid outages and preventable downtime. IoT allows your equipment to transmit valuable data and insights through a comprehensive network of connected elements and sensors. Ultimately, it improves your organization's uptime, efficiency, customer experience, supply chain, production outcomes, and more.



Kickstart preventive maintenance in industry 4.0 with Acuvate

With decades of experience working with manufacturers and Fortune 500 companies across North America, Europe, and APAC, Acuvate's product team saw the urgent need for an accessible, lightweight yet ROI-heavy preventive maintenance solution. So our best IoT, ML, data and analytics minds got together to build one.

And this is what businesses like yours are achieving with Acuvate's IoT-based intelligent predictive maintenance solution every single day:

Improved functioning of assets and equipment with continuous measurement of performance indicators of individual components. Our solution achieves this with large-scale sensorization to help businesses increase the life expectancy of each asset



Reduction in equipment downtime and seamless and prompt maintenance schedules by monitoring assets 24x7x365. This results in low maintenance costs, a significant boost in workforce productivity, and reduced recovery costs and time help businesses increase the life expectancy of each asset

Higher production capacity with real-time monitoring of equipment and assets and granular attention to detail, so a broken bolt does not cause a broken supply chain



Reduce overtime costs and optimal maintenance resource utilization with automated workflow and seamless integration of individual machines for high visibility

Improved workforce safety with the ability to identify potential safety hazards due to equipment failure

Higher sustainability index and regulatory compliance by enabling manufacturers and other industrial sectors to identify and prevent biohazards before they happen

Acuvate's intelligent, IoT-based preventive maintenance solution at work: The critical use cases

The traditional mindset among businesses and consumers is that IoT's impact is limited to smart homes and smart cars. This couldn't be further from the truth.

Let's now see how Acuvate's IoT-based preventive maintenance solution is being put to use across industry sectors to help customers achieve significant goals.

Guard railing control valves

Acuvate's preventive maintenance solution is helping industries achieve real-time monitoring and optimization of control valves.

Control valves perform the critical function of regulating mission-critical parameters like pressure, temperature, and flow rate. These factors significantly contribute to the overall operational efficiency of the plant. In addition, with real-time monitoring, businesses are preventing leaks, voltage sags, and safety hazards.

Key takeaway: Benefits of IoT-based preventive valve maintenance



High functioning and operational efficiency



Lean maintenance and time cost



Efficient valve maintenance



Minimal error-prone manual intervention



Improved worker and site safety

Improving backflow valve tracking and monitoring

IoT-enabled sensors help in tracking the position of backflow valves and test pressure. It enables organizations to receive timely alerts in case of valve failure and assess and correct the problem in real time.

A modern metropolitan is using this solution to prevent water supply contamination, deliver high-quality and safe water to citizens, and avoid costly regulatory fines. Organizations are also eliminating unpleasant surprises from the typical annual backflow preventer inspections, reducing instances of unexpected drops in pressure, and saying goodbye to flooding with timely triggered shutdowns.

Key takeaway: Benefits of IoT-based preventive backflow monitoring

- » Continuously measure water pressure
- » Trigger notifications for water supply shutdowns to prevent flooding instances
- » Remote monitoring and control of backflow pressure
- » Reduced water contamination instances
- » Improve site, city, workforce and citizen safety



ABOUT ACUVATE

We are a global player with 16 years of experience in digital solutions, accelerating enterprise-wide digital transformation with our AI accelerators. We provide solutions and services that modernize, automate and support enterprise applications, IT systems, and infrastructure. We have a strong presence in the US, Europe, and APAC, where we serve multiple Fortune 500 companies. We specialize in Data & Analytics, Digital Workplace Solutions, AI-powered Chatbots. Acuvate is a Microsoft Gold certified partner and has transformed various enterprises globally, including many Fortune 500. With our multi-skilled experts and packaged AI accelerators, we deliver unparalleled efficiencies and accelerate time-to-value for our customers



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