

PREDICTIVE MAINTENANCE BY CAPGEMINI



Staying ahead of maintenance requires agility, insight and above all prediction

Capgemini's mature automotive industry expertise applied to Software AG's technology results in a Predictive Maintenance solution uniquely geared to the automotive manufacturers and their Tier 1 suppliers.

Business needs

As an Original Equipment Manufacturer (OEM) or supplier, it is imperative to deliver a high-quality product and manage the availability of the product. In this demanding market, the expectations are only increasing and the bar keeps getting higher. The ability to measure equipment reliability and intervene before an issue occurs is critical and thanks to highly automated production lines, it is now possible. This mode of **preventive** (as opposed to **predictive**) maintenance has its advantages but is expensive and can still result in machine failure and unplanned downtime.

With Internet of Things (IoT), manufacturers can access usage and status data coming directly from sensors and actuators embedded in the equipment. This data can then be continuously analyzed by streaming analytics, coupled with predictive models. This enables anticipation of equipment failures and triggers maintenance activities if needed. Based on the predictions, actions such as requesting a spare part, calling a technician or providing an automated corrective feedback can be triggered automatically. Ultimately, predictive maintenance improves asset utilization and reduces maintenance costs while driving improved product quality and availability.

Benefits

The **Predictive Maintenance solution for manufacturing** is proficiently turning a costly operational expense into a source of competitive advantage for both OEMs and Tier 1 suppliers. It can help you:

- Increase equipment availability and higher production quality
- Improve operating margins due to decreased maintenance costs
- Improve remedial planning in case maintenance requests cannot be completed during planned downtime periods
- Improve insights into preventive measures since predictive maintenance is the basis for triggering maintenance activities

" We are entering a new era in manufacturing. The combination of IoT and predictive analytics will revolutionize how manufacturers manage and maintain equipment to increase efficiency, utilization and reduce overall maintenance spends. "

– **Dr. Uwe Dumsclaff** | CTO, Corporate Vice President, Capgemini Germany

Software AG and Capgemini

Staying ahead of customer maintenance needs requires agility and insight. At the heart of our solution is leading-industry expertise and an award-winning platform:

- 14 out of 15 large OEMs and 13 out of the 17 largest Tier 1 suppliers work with Capgemini globally
- More than 16,000 associates servicing manufacturing customers globally, supported by CHROME Center of Excellence for Automotive & Manufacturing
- Capgemini helps clients transform to improve business performance
- Expertise on sensors, machine data and predictive analytics working on cutting-edge IoT solutions across industries
- Established thought leadership in the IoT, cyber security and the 4th industrial revolution in manufacturing

Features

Capgemini's expertise ensures that the industry's best practices are hard-wired into the solution, for both current and future needs, effectively considering the evolution of product equipment and maintenance challenges. This expertise is combined Software AG's Predictive Maintenance offering, featuring IoT and machine sensor integration, messaging, enterprise integration, streaming analytics and business process management.

Connectivity, speed and scale with webMethods Integration & Terracotta

- Handle huge volumes of data for improved system performance
- Access, analyze and deliver data to any device in real time
- Turn big data into the opportunity to generate more revenue, improve customer service and differentiate product offerings

Flexibility with webMethods BPM

- Interact with service providers in real time
- Get real-time event and process data at your fingertips
- Increase business productivity and deliver process-driven situational and case management applications that enable you to quickly respond to changing business and customer needs

Combined streaming and process analytics with Apama and webMethods Optimize

- Monitor sensor data to determine equipment condition
- Analyze and act on high-volume business operations and customer interactions in real time
- Correlate, aggregate and detect patterns across large volumes of fast-moving data from multiple sources, allowing you to take the right action at the right time and leverage the data in advanced prediction engines

Partner overview

Capgemini, one of the world's foremost providers of consulting, technology and outsourcing services, enables its clients to transform and perform through technologies. With more than 145,000 people in over 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2014 global revenues of EUR 10.573 billion.

Together with its clients, Capgemini creates and delivers business and technology solutions that fit their needs and drive the results they want. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

ABOUT SOFTWARE AG

Software AG offers the world's first Digital Business Platform. Recognized as a leader by the industry's top analyst firms, Software AG helps you combine existing systems on premises and in the cloud into a single platform to optimize your business and delight your customers. With Software AG, you can rapidly build and deploy digital business applications to exploit real-time market opportunities. Get maximum value from big data, make better decisions with streaming analytics, achieve more with the Internet of Things, and respond faster to shifting regulations and threats with intelligent governance, risk and compliance. The world's top brands trust Software AG to help them rapidly innovate, differentiate and win in the digital world. Learn more at www.SoftwareAG.com.

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