IBM Brings AI and Advanced Analytics to the Industrial World

Georgia's Metropolitan Atlanta Rapid Transit Authority uses IBM Watson IoT tools to help predict, identify and repair potential issues with critical equipment and machinery

ARMONK, N.Y., Feb. 28, 2019 /PRNewswire/ -- IBM (NYSE: IBM) today announced a new portfolio of Internet of Things (IoT) solutions that team artificial intelligence (AI) and advanced analytics to help asset intensive organizations, such as the Metropolitan Atlanta Rapid Transit Authority (MARTA), to improve maintenance strategies. The solution is designed to help organizations to lower costs and reduce the risk of failure from physical assets such as vehicles, manufacturing robots, turbines, mining equipment, elevators, and electrical transformers. IBM Maximo Asset Performance Management (APM) solutions collect data from physical assets in near real-time and provide insights on current operating conditions, predict potential issues, identify problems and offer repair recommendations.

Organizations in asset-intensive industries like energy and utilities, chemicals, oil and gas, manufacturing, and transportation, can have thousands of assets that are critical to operations. These assets are increasingly producing enormous amounts of data on their operating conditions. Keeping these assets up and running is critical to operations and monitoring and optimizing assets on-going maintenance, repair, and replacement decisions requires constant analysis. According to analyst firm Aberdeen Research, unplanned downtime can cost a company as much as $260,000 an hour.

Business leaders can now know if a machine is likely to fail, using advanced analytics and AI to understand timing, predict consequences and identify problems. IBM's APM solutions help organizations shift asset maintenance strategies from preventative to predictive and prescriptive by integrating disparate data sources to find assets in need of attention and recommending actions.

This solution complements a company's existing enterprise asset management (EAM) capabilities, such as IBM's market leading Maximo EAM solution, and integrates seamlessly with other EAM providers. It includes:

- **Asset Health Insights**: Provides asset health assessments in near real-time using asset records, sensor data, and other external data to inform maintenance and replacement decisions.
- **Predictive Maintenance Insights**: Predicts asset health using statistical models and machine learning. Includes failure date/probability, key drivers, degradation curves, and anomaly detection.
- **Equipment Management Assistant**: Enables technicians to repair equipment with an AI-powered
IBM will also offer the APM suite customized for specific industries, beginning with APM for Energy and Utilities (E&U). This provides industry-specific capabilities to analyze and act on insights from utility assets and includes risk/criticality scoring, health and degradation models, standard industry data model, and weather data integration.

"It's critical for companies to think about how effective their maintenance practices are. With the launch of its new Asset Performance Management solutions, IBM is helping organizations make insight-driven decisions with an integrated portfolio of advanced analytics and AI capabilities to help them improve operational effectiveness and efficiency," said Kareem Yusuf, Ph.D., general manager, IBM Watson IoT. "Maximo APM is designed to enhance an organization's existing Enterprise Asset Management system by addressing all aspects of asset performance including health, predictive maintenance and repair optimization."

**MARTA Keeps Atlanta, Georgia Running**

The Metropolitan Atlanta Rapid Transit Authority (MARTA), the principal public transit agency in the Atlanta metropolitan area, is working with IBM to implement a predictive maintenance solution to improve reliability of assets, minimize costs and create a Transit Asset Management (TAM) tool that provides asset inventory, condition assessment, performance measures and decision support. Through data mining, machine learning and AI, MARTA can access and analyze data to better understand the condition of equipment classified in the categories of life safety, operation critical and operation support to identify potential concerns of a "system" with multiple stakeholders. Ultimately, the solution will allow MARTA to seamlessly move from tracking asset performance KPIs to predicting and preventing asset failures.

"MARTA is on track to become the first North American public transit agency to achieve ISO 55000 certification. Collaborating with IBM provides MARTA with the innovation from a technology icon, which fortifies us as an industry leader in Transit Asset Management," said Remy Saintil, director of facilities at MARTA.

**About IBM**

IBM solutions are designed to enable clients to improve the operational efficiency of their physical assets and reduce costs through the power of IoT data and artificial intelligence. By collecting and curating data from billions of connected devices, sensors, and systems worldwide, we empower enterprises to derive new insights from their equipment, vehicles and facilities. IBM's industry expertise, leading security, and solutions built for a hybrid cloud environment firmly establish us as a leader in IoT. For more information on IBM Watson IoT, please visit [www.ibm.com/iot](http://www.ibm.com/iot).

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