IBM **Maximo**

IBM Equipment Maintenance Assistant

An AI-powered assistant for your field technician

Improve the availability and performance of critical equipment by using artificial intelligence (AI) to accelerate problem diagnosis and repair.

What is IBM Equipment Maintenance Assistant?

Today's asset-intensive organizations are facing rigorous requirements to improve their ability to efficiently andbidentify and resolve problems that impact the health of critical assets in the plant or in the field.

IBM® Equipment Maintenance Assistant augments your asset maintenance program with artificial intelligence (AI) for improved failure diagnosis and prescriptive guidance on the most effective repair. Ensuring standardized and optimal repair, it helps reduce knowledge gaps/silos in your organization, which reduces the mean time to repair, reduces your repair costs, and helps extend asset life. With this technology, every maintenance technician can now be as good as your best technician.

Our AI approach is powered by IBM Watson® technology and builds our knowledge base using your structured and unstructured data associated with repairs, maintenance, and procedures, technical documents, diagrams, and more. (See Figure 1) Our approach goes beyond traditional text search to understand the interrelationships between assets and the impact of cause and effect. This offers enhanced insights and recommends optimum repair methods. It improves key maintenance-related KPIs used by many maintenance organizations including improving mean time to repair rate (MTTR), first time fix (FTF) efficiency, and reduces mean time between failures (MTBF).

What is driving change?

— Loss of talent and knowledge due to an aging workforce—70 percent of service organizations say this will be a major challenge in the years to come

— Increased number of critical assets generating large volumes of operational data

— Increase in asset complexity and scarcity of "tribal knowledge" in many industries

— Rising maintenance costs and pressure on margins

Regulatory standards

Documents

Checklists and procedures

Industry blogs and forums

Work order history

Written repair notes
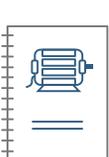
Repair manuals

Diagrams
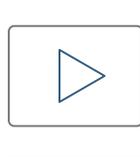
Videos

Repair standards

Optimum

Insights
Expertise
Methods
Recommendations
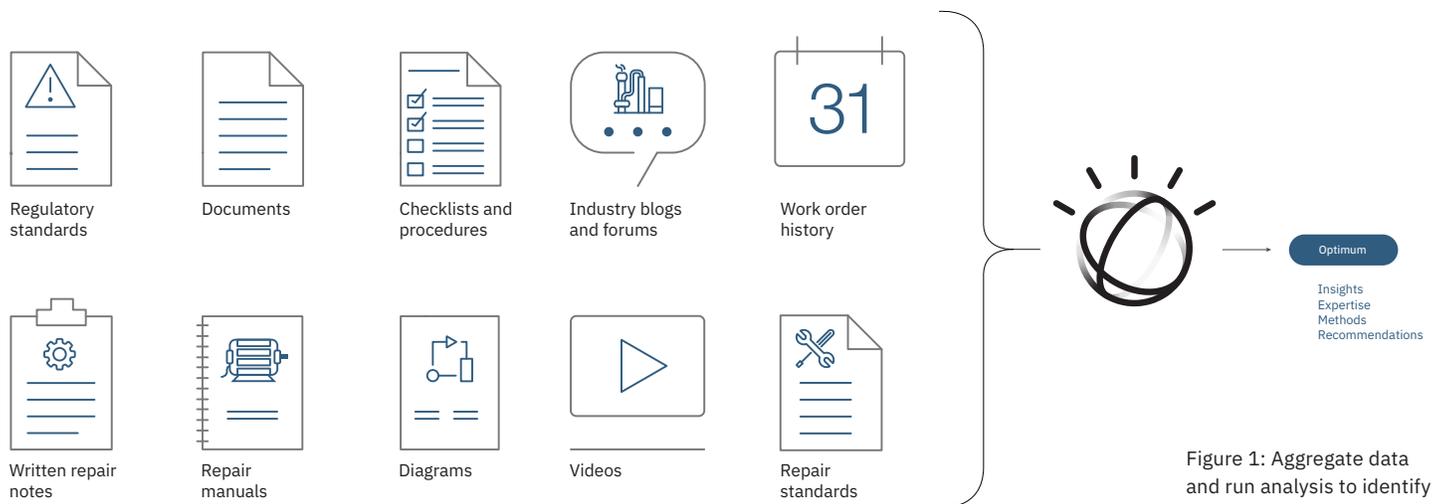
Figure 1: Aggregate data and run analysis to identify the optimum repair.

Benefits

Reduce knowledge siloes
The technician workforce is aging and knowledge gaps are becoming more prominent. Equipment Maintenance Assistant can help any new technician perform as well as your most experienced workforce.

Increase asset availability
Improve troubleshooting capabilities and offer prescriptive repair guidance to reduce unplanned downtime.

Extend asset life with optimal repair
Provides step-by-step repair guidance that can extend asset life and provide compliance based on current standards, regulations, and best practices.

Improved maintenance KPIs
Improve efficiency of repair by prescribing the right repair based on analytics—improving first-time fix (FTF) rates and mean time to repair rate (MTRR).

How it works

1. Sensors provide information about the equipment.

4. Visualizations are immediately updated displaying early warnings.

IBM **Maximo**.

Predictive   Cognitive

2. Data is processed through the Watson IoT Platform or EAM systems.

5. Diagnostics are performed. by searching unstructured text, historical maintenance data and contextual information to identify potential repair recommendations.

3. Condition-based monitoring rules or predictive analytics are run to evaluate equipment status and provide early warning of issues.
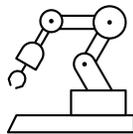
6. Optimum repair is identified

7. Once repair is complete, it collects response effectiveness to improve future diagnosis.

Learn more

Speak to your sales rep for more information on how this solution can help you improve asset performance and reduce repair time or visit the **IBM Marketplace.**

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