

AN OUTDATED PLANT MAINTENANCE MODULE

CLOUDED THE OVERALL VIEW.

THE SITUATION

Sometimes companies want to maintain the status quo; sometimes they want to push boundaries. This is the story of a manufacturing company determined to do both—simultaneously.

As a mining equipment manufacturer, the company excelled at physical production. It had leveraged automation, robotics and smart factory processes to gain advantage, and it wanted to keep its assembly lines, welding and paint shops, and facilities running smoothly.

The manufacturer, like much of its industry, had shifted to a more proactive approach to maintaining its manufacturing facility equipment rather than primarily addressing issues and repairs after equipment begins to malfunction. It utilized machines equipped with sensors capable of delivering immediate error/malfunction notifications when technical issues emerge, as well as tracking an asset's usage life cycle to issue an alert for predictive maintenance.

The mining equipment manufacturer implemented a desktop-based computerized maintenance management system (CMMS) in several facilities, but it was very basic. While SAP integrated new advancements and features into subsequent releases, the legacy system used by the mining equipment manufacturer lacked essential features and integration with back-end enterprise resource planning (ERP) processes. This led to inefficient asset maintenance, poor inventory visibility, and disconnected financial systems. A bigger challenge? By the end of 2026, that CMMS will no longer be supported.

Company leaders saw an opportunity.

Several hours north of a major European city, the mining equipment manufacturer operates a large manufacturing plant where it produces massive earth-moving vehicles. Their manufacture requires the use of even larger equipment, such as cranes, lifts, jigs and tools, robotic machines, etc., and tasks that are too time-consuming, or potentially working in hazardous environments, for humans to complete on their own. The plant had been benchmarked for its maintenance practices and was recognized as a leader within the enterprise. The company leaders believed this facility was well suited for exploring further technology implementation to help prevent costly failures, safety risks, depreciated assets, accounting risks, and reduced productivity.



THE SOLVE

The mining equipment manufacturer and Deloitte had a longstanding relationship. Keenly aware of Deloitte's multidisciplinary capabilities, the company's US-based leaders engaged Deloitte to help the manufacturer transition from its legacy CMMS.

The Deloitte project leader journeyed across the Atlantic to gain firsthand insights into the manufacturing process and plant asset maintenance. Using the <u>IndustryAdvantage™</u> approach, Deloitte's deep experience in industrial products and construction, and firsthand knowledge acquired from the site visit and strategy conversations with company leaders, the team formulated a solution to support the transition and help drive future growth.

Initially, company leaders thought they wanted a new desktop application that could integrate with back-end systems. Instead, Deloitte recommended a native mobile solution for SAP Plant Maintenance and Asset Management. The mobile solution could not only deliver the desired *visibility* and *maintenance efficiency*, but it could also enhance *worker performance* and boost *productivity* throughout the plant. The Deloitte project team developed a business case and rolled out a customized solution just four months later.

SAP Service and Asset Manager (SSAM), which uses the SAP Business Technology Platform, features the SAP Service & Asset Manager Mobile Application, SAP Business Application Studio, and Dynamic Forms. It is device-agnostic, compatible with multiple operating systems, and designed to facilitate seamless communication and collaboration between the manufacturer's technicians, supervisors and back-office teams. SSAM also enables remote diagnostics so the

manufacturer can schedule predictive maintenance and address repair and operational needs before they escalate into costly downtime.

Technicians can receive their assignments on their mobile phones or tablets, alerting them to the required maintenance work. They can use those same devices for support while working in the field—accessing complex information and business logic, including a digital workflow that can guide them through procedures and help maintain compliance with regulations and standards.

SSAM also facilitates real-time inventory and procurement by enabling field workers to use a barcode scanner on their mobile devices to record parts they use and to requisition parts from elsewhere in the manufacturer's network.

The solution was crafted to simplify administrative tasks, giving technicians and supervisors more time for their work. It's also designed to reduce paperwork: SSAM supports digital signatures and through its Dynamic Forms solution, business users can create and manage forms intended to enhance workflow execution—quickly, intuitively and without the need for coding.

The live app syncs data every 15 minutes, and integration with ERP processes means back-office teams can access information when they need it, instead of upon periodic reconciliation. By bringing previously disconnected data—labor and maintenance expenditures, operations metrics, asset life cycle insights, and more—into one module, the SSAM can provide the manufacturer with a clearer, fuller view.

PLANT MAINTENANCE AND ASSET MANAGEMENT, RIGHT AT YOUR FINGERTIPS

THE IMPACT

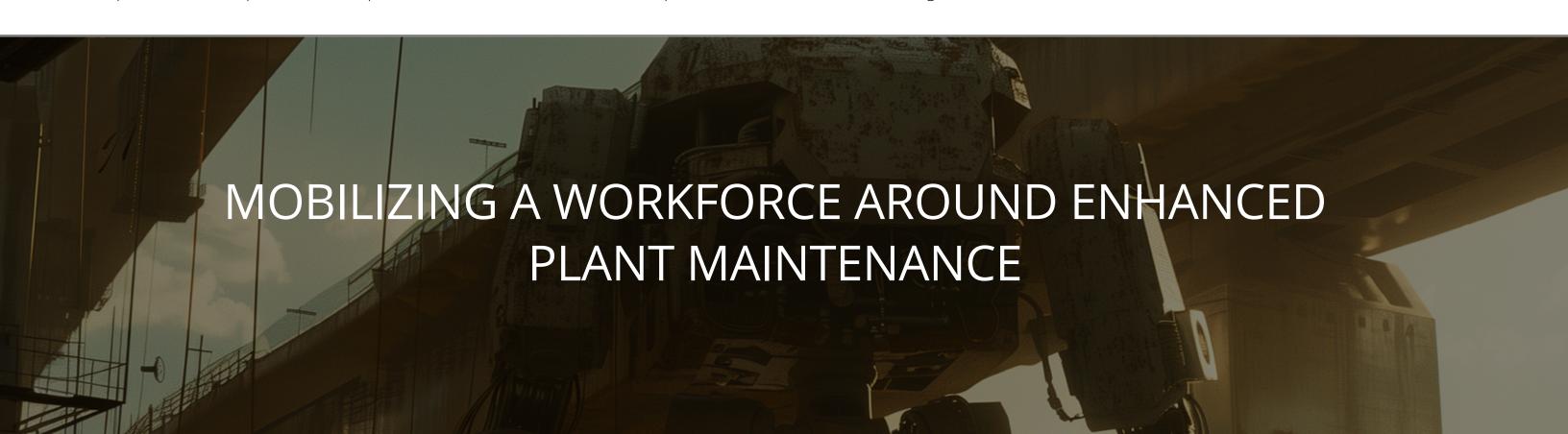
The SSAM solution was built in just four months. Deloitte "trained the trainers," who have transferred that knowledge to the manufacturer's entire maintenance/technical resources department, including general maintenance, facilities, robotics, and jigs and tools (J&T).

The plant had already been recognized for its maintenance capabilities and implementing SSAM builds upon them. SSAM's improvements on the legacy system include:

- Increased maintenance and worker productivity
- Greater operational efficiency
- Entirely paper-free asset maintenance
- · A full audit trail available for plant assets
- Timelier maintenance, contributing to enhanced safety
- · Real-time integration with financial accounting and controlling
- Instant visibility into inventory levels
- Precise reorder points for inventory

The manufacturer has gained a clearer view and continues to collaborate with Deloitte to broaden it. A Deloitte Operate team has come on board to coordinate day-to-day issue resolution and manage support tickets created within the plant. Together, the Deloitte project and Operate teams intend to use leading practices and learnings from the initial implementation and replicate them in the manufacturer's facilities throughout the enterprise and around the world.

And the horizon is always moving. As SAP introduces new features and technologies, Deloitte can help the manufacturer explore how advancements in automation and agentic AI can help maintain a sharp focus on its expansive vision for efficient and effective plant maintenance and asset management.



LET'S CONNECT.

Do these challenges sound familiar?

Learn more about Deloitte IndustryAdvantage™



SANJIV SHAHRAWAT

Managing Director

Deloitte Consulting LLP

sshahrawat@deloitte.com

+1 630 258 2322



PIYUSH GANDHI
Specialist Leader
Deloitte Consulting LLP
pigandhi@deloitte.com
+1 443 678 2472



GAURAV DHUPPAD

Senior Manager

Deloitte Consulting LLP

gdhuppad@deloitte.com

+1 540 257 4466

Deloitte.

About this publication

This publication contains general information only and Deloitte is not, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any action that may affect your business, you should consult a qualified professional adviser.

Deloitte shall not be responsible for any loss sustained by any person who relies on this publication.

About Deloitte

As used in this document, "Deloitte" means Deloitte Consulting LLP, which provides strategy, operations, technology, systems, outsourcing and human capital consulting services, a subsidiary of Deloitte LLP. Please see www.deloitte.com/us/about for a detailed description of our legal structure. Certain services may not be available to attest clients under the rules and regulations of public accounting.

Copyright © 2025 Deloitte Development LLC. All rights reserved.