



AI-Powered Factory CoPilot Unlocks Real-Time Manufacturing Intelligence

Overview

Modern manufacturing environments generate vast volumes of plant data across machines, lines, and systems—yet much of it remains underutilized. In this case, a leading manufacturing ecosystem needed a way to transform fragmented data into actionable intelligence. By leveraging a data-first platform combined with generative AI, the solution enabled real-time visibility, simplified analytics, and democratized access to insights across shop floor operators and executives alike.

Fragmented Data Landscape

Production data existed across multiple machines and systems, lacking contextualization, making unified analysis and decision-making difficult.

Limited Data Accessibility

Frontline operators and business users struggled to extract insights due to reliance on complex tools and statistical expertise.

Delayed Decision Cycles

Manual analysis and siloed reporting slowed root cause identification, impacting throughput, quality, and operational efficiency.

Underutilized AI Potential

Despite large datasets, the absence of intuitive AI-driven interfaces prevented effective use of advanced analytics for daily operations.



Unified Data Foundation

Implemented a manufacturing data platform that contextualizes plant-wide data into a real-time digital twin for end-to-end operational visibility.



Generative AI Enablement

Integrated Azure OpenAI (GPT-4) to transform raw production data into contextual insights using advanced large language model capabilities.



Conversational Interface Layer

Developed an always-on natural language interface enabling users to query data, generate reports, and derive insights without technical expertise.



Intelligent Analytics Engine

Deployed machine learning models to perform automated calculations, pattern detection, and root cause analysis across production workflows.



Secure & Trusted Outputs

Ensured all insights are auditable, traceable, and generated within a secure environment, eliminating risks of data leakage and unreliable outputs.

Turning complex plant data into immediate, actionable intelligence across the enterprise:

Faster Root Cause Analysis

Accelerated diagnosis of production issues through guided drill-down investigations and AI-assisted insights.

Improved Workforce Productivity

Enabled non-technical users to independently access and interpret data, reducing dependency on data specialists.

Reduced Downtime Losses

Real-time insights into downtime patterns and performance gaps improved operational responsiveness and efficiency.

Enhanced Decision Velocity

Instant access to contextualized, AI-generated insights significantly reduced time from data to action.

5300+ Employees
Worldwide

225 Million USD
Revenue

22 Development
Centres



Global Footprint

USA, India, Europe, APAC
Established in 1993



Services

Digital Product Engineering (DPE),
Custom Application, Mobility,
Testing, Knowledge Services,
Customer Experience



Digital Technology

Cloud & DevOps, Data & Analytics,
AI / ML, Embedded, Automation,
Enterprise Packaged Services



Verticals

Telecom & Media, Tech, Internet,
and Platforms, Healthcare,
Banking & Financial Services,
Manufacturing, Logistics,
Automotive, Public Services

We Drive Tech-Powered Growth Globally



From Plant Data to Decisive Action— Powered by R Systems.
