



Microsoft

# Microsoft Copilot Manufacturing Operations Agent

Bringing together human knowledge  
and AI-driven insights



## The challenge

Labor pressures continue to adversely impact manufacturers, with 2.1 million skilled labor roles expected to go unfulfilled by 2030, a 3.7 percent increase in labor costs, and an average turnover rate of 40 percent among skilled manufacturing laborers.

## Compounding effects



Limited plant capacity and inability to satisfy customer demand



Increased operating expense and tighter profit margins



Operational inefficiencies and increased downtime

## The solution

**The KPMG Manufacturing Operations Agent for Microsoft Copilot empowers production line operators and maintenance technicians to efficiently respond to equipment failures through artificial intelligence (AI)-enabled workflows. The agent employs generative AI algorithms, enabling personnel to help drive greater production throughput and workforce productivity.**



**Empower production operators to  
diagnose and resolve L0-L1 issues**



**Enable maintenance technicians to  
diagnose and resolve L2-L3 issues**

## Features:

- User-specific guided troubleshooting and resolution steps
- Instant access to equipment manuals and documentation
- Seamless capability to escalate open issues

Our approach to transforming manufacturing operations is underpinned by value, helping ensure AI delivers results. We use historical data to shape our build strategy, identify and prioritize downtime types, and build the agent accordingly with a strong focus on user feedback and iterative enhancements. This value-driven approach helps address common obstacles such as value realization, user adoption, and solution scalability.

## How we deliver value

### Design



Analyze and evaluate historical production data and manufacturing performance to inform agent development and verify estimated value.

### Build



Develop the agent and conduct iterative validation to confirm optimal model performance and usability, refining the agent continuously based on feedback.

### Deploy



Integrate the agent with existing systems, establish mechanism to track and measure value, and provide training to help users adopt a new way of working.

## The value

At KPMG, we work with leading manufacturers to enhance their production processes and enhance workforce efficiency. Our Microsoft Copilot Manufacturing Operations Agent empowers production operators and maintenance technicians help resolve equipment issues more efficiently, irrespective of their experience level. This not only increases asset availability and helps improve production throughput, but also unlocks significant operational improvements, driving increased efficiency, reduced costs, and elevated performance.

## The KPMG advantage



### A value-driven approach

We take a value-driven approach to design, develop, and deploy AI capabilities that mitigates risk and helps maximize impact.



### Agile development practices

We implement agile development practices, engaging the end users throughout the cycle to provide feedback and perform validation.



### Scalable AI solutions

We design AI solutions based on an archetype framework with solution scalability and ongoing support in mind.

## KPMG and Microsoft – Strategic Global Alliance

KPMG brings a decades-long, global alliance with Microsoft. Our solutions allow organizations to better manage their risk, compliance and security agendas, create meaningful data insights to inform intelligent decision making, and take advantage of the latest innovative technologies to drive new business value and growth.

### Forward-thinking approach

At KPMG, we understand that the successful implementation of AI in manufacturing operations requires a strategic, long-term perspective. Our AI agent, designed to assist manufacturing operations, represents just one capability to drive value. We recognize the potential to build additional AI agents within the wide-ranging processes of manufacturing plants, further enhancing value and advancing your company's overall digital transformation. We not only design, build, and deploy leading AI-enabled solutions, but also help you anticipate and plan for the impact of these technologies on your organization in the short and long term.

**KPMG has been recognized as a 2024 full-suite Microsoft Solutions Partner, underscoring the strength of our collaboration with Microsoft in serving over 3,000 joint clients over the past 20 years.**



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