



Microsoft Cloud for Manufacturing

Overview and FAQ for partners

July 2023





About this document

Purpose: This Microsoft Cloud for Manufacturing Overview and FAQ is designed to help partners answer common questions about Microsoft Cloud for Manufacturing and understand how they enable and benefit from the cloud offerings.

Audience: Microsoft partners and others interested in learning more about Microsoft Cloud for Manufacturing and related partner opportunities.

When to use: Use this document when seeking to understand the Microsoft industry clouds or Microsoft Cloud for Manufacturing. This document is not designed to be customer facing or provide customer-facing messaging. In addition to this FAQ, we recommend that you take advantage of the full breadth of partner resources on the [Microsoft Cloud for Manufacturing Partner Assets](#) page, which includes customer-facing material.

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June 2023 update for Microsoft Cloud for Manufacturing

Q: What will be announced in July 2023 for the Microsoft Cloud for Manufacturing update?

We're excited to share that we are expanding [the Microsoft Cloud Partner Program \(MCP\)](#) with a manufacturing-specific designation. As part of this expansion, we will be including manufacturing partner solutions in the program via the Microsoft Industry Cloud ISV Designation.

This designation represents our commitment to bringing the best partner solutions to our customers on top of the Microsoft Cloud. The program provides a certification that validates that our partner's solutions meet the high standards of data accessibility specific to our industry.

Our customers tell us that data accessibility is their number one priority, especially as they look to adopt AI technologies at scale across the value chain. This new designation will ensure they can access not only the data they generate, but also data from partner solutions in a way that removes silos and improves operational efficiency and visibility.

This focus on data accessibility and closer collaboration with partners signals a new stage for the Microsoft Cloud for Manufacturing; we are open for business and ready to tackle our customers' biggest challenges with a robust ecosystem of partner solutions, complemented by the security and scalability of the Microsoft Cloud and products. This closer collaboration with key industry players with certified solutions will drive greater integration with Microsoft products, with a focus on our leading portfolio of AI tools. To go deeper into the Microsoft Cloud for Manufacturing capabilities, visit the [Microsoft Cloud for Manufacturing Website](#).



Introduction to industry clouds

Q: What are Microsoft industry clouds?

Microsoft industry clouds are new extensions of existing Microsoft Cloud services. Each of these offerings is designed to work as one, bringing together the breadth of our solutions with new capabilities, customizations, and standards tailored specifically for each industry. Customers do not need to migrate any existing deployments to take advantage of these capabilities as industry clouds do not have dedicated data centers.

The clouds are composed of industry-specific solution plays. Each solution play represents a high-level business outcome that the customer is trying to achieve (e.g., Unlock Innovation & Introduce New Products). Within each solution play are a set of "customer scenarios," or solutions that apply a technical capability to solve a customer's specific pain point. These end-to-end, industry-specific customer scenarios offer existing and new capabilities that unlock the power of Microsoft Azure, Microsoft 365, Microsoft Dynamics 365, Microsoft Power Platform, and more.

Q: What value do the industry clouds offer that surpasses traditional cloud services?

Microsoft industry clouds combine the power and value of Microsoft 365, Azure, Dynamics 365, and Microsoft Power Platform with solutions tailored to specific industry needs. Those industry-specific solutions are built with components that are available exclusively as part of the industry clouds and are not available as part of Microsoft's other cloud services: industry apps, sample apps, workflows, AI models, connectors, open standards, third-party connectors, common data models (CDM), common data services (CDS), and Synapse. These solutions lower the

barrier to entry for new development and reduce time-to-market to enable you to deliver more value to your customers in less time.

Q: Why is Microsoft focused on industries?

Microsoft's deep commitment to industry is not new, but it's taken on a new urgency as businesses increasingly need to apply tools and technology to ensure resiliency. While every organization needs resilience and agility, their specific opportunities and solutions are unique to each industry. That's why Microsoft has invested in industry-specific cloud solutions—vertical IP offerings tailored to address the unique needs of industries while removing friction and accelerating the time to value.



Overview of Microsoft Cloud for Manufacturing

Q: What is Microsoft Cloud for Manufacturing?

Microsoft's value proposition for manufacturing is articulated via four value propositions that represent the manufacturing value chain; **Enable Intelligent Factories**, **Resilient Manufacturing Supply Chain**, **Unlock Innovation and Introduce New Products**, and **Modernize Manufacturing Customer Experience**. Across all of these, there are two emerging technologies that differentiate us from our competitors and that will shape the future of the industry, namely: **Artificial Intelligence**, which will further increase automation and new levels of worker productivity, and the **Industrial Metaverse** which will provide a connection between physical (machines), digital (data) resources and people to increase productivity, drive sustainability, and create resiliency.

Microsoft Cloud for Manufacturing is composed of four "solution plays," built on an industry data model that enables interoperability and innovation.

- **Enable Intelligent Factories:** Drive safe and secure production with reliable quality and yield, optimize resource utilization and asset maintenance with industrial IoT, data and AI. Strive for lean, agile, automated, and sustainable manufacturing with an empowered workforce.
- **Resilient Manufacturing Supply Chain:** Ensure business continuity, agility, and resiliency. Reduce risk with a secure, flexible, and resilient end to end supply chain through real time visibility, intelligent planning & execution. Drive for autonomous and sustainable supply chain.
- **Unlock Innovation & Introduce New Products:** Discover and engineer new business values with sustainable products, operations, and digital services. Embrace new design and manufacturing paradigms and prepare for the future with the Industrial Metaverse.
- **Modernize Manufacturing Customer Experience:** Increase customer satisfaction and profitability with new digital experiences across marketing, sales, and service channels.

Q: What Manufacturing verticals does the cloud support?

The Microsoft Cloud for Manufacturing initially focuses on five verticals:

- **Industrial Equipment and Machinery:** Machinery and equipment manufacturers continue to push ahead optimizing their portfolios to focus on areas of specialization, often increasing digital capabilities by M&A activity. The industry is pushing for new business models under the banner of machine-as-a-service and power-by-the-hour; this has increased the efforts around machine connectivity, intelligence, and digital services.

- **Vehicle OEMs and Suppliers:** Automotive OEMs manufacture vehicles for consumer and commercial uses, and suppliers manufacture finished parts and components that form the vehicle bill of materials. The industry faces pressure and consolidation from tech companies making inroads into autonomous driving and from the steady rise of Chinese manufacturers and their focus on EVs. Investments in software-defined vehicles will start paying off in terms of connected ecosystems that provide delightful digital experiences to customers.
- **Chemicals:** The chemicals industry is under the spotlight to lead the material transformation the economy needs to achieve its sustainability goals by 2030. The industry needs to maintain this focus while dealing with volatile energy prices, higher costs, and fracturing trading patterns. Chemical companies are looking to technology providers to help them advance their sustainability agenda, and to stabilize their current platforms and capabilities with a focus on near term revenue to fund their portfolio expansion aligned to new materials.
- **Semiconductors:** This vertical is focused on design and mass production of circuit-boards, semiconductors, fiber cables and other electronics components. The semiconductor industry has been highly susceptible to supply chain disruptions facing both shortages and oversupplies of critical materials at the same time, they are looking at nearshoring/ friend shoring strategies coupled with supply chain resilience to mitigate these risks.
- **Aerospace:** Focused on commercial aeronautics and astronautics, this concentrated segment of asset-intensive manufacturers is at the forefront of digital engineering, with advanced processes and applications to design, simulate and manufacture products like planes, satellites, and rocket systems. Like other asset-intensive industries, they are facing unprecedented headwinds from economic pressures to talent competition and supply chain issues.

Like most of our investments across industries, we have a growing ecosystem of partners that can help organizations with integration services, and/or build-upon, extend, and enable the value of the Microsoft Cloud to customize solutions that address the most pressing challenges manufacturing organizations are facing today.

Q: What customer scenarios are included in Microsoft Cloud for Manufacturing?

The combination of new industry and existing capabilities enable a wide set of customer scenarios. These include:

Enable Intelligent Factories	
Key customer scenarios	<ul style="list-style-type: none"> • Connected & Enabled Workers: Utilize digital tools to enhance factory workers' performance via seamless communication and collaboration, data capture and immersive training for onboarding and upskilling. • Production Monitoring & Optimization: Leverage production data from sensors, machines, programmable logic controllers (PLCs), factory, and enterprise systems to gain visibility into operations and identify opportunities for optimization with AI. • Maintenance & Quality: Use applications and AI-based solutions to track materials within the factory and automate complex quality inspection processes and launch predictive maintenance solutions

Resilient Manufacturing Supply Chain

Key customer scenarios

- **Visibility & Risk Management:** Gain always-on supply chain visibility to make fast decisions and avoid disruptions.
- **Forecasting & Planning:** Leverage your supply chain, customer, and market data to create advanced demand forecasting models and optimize supply chain planning.
- **Warehousing & Fulfillment:** Leverage supply chain data to optimize inventory allocation and achieve perfect fulfillment. Modernize warehouse operations with innovative digital solutions.

Unlock Innovation and Introduce New Products

Key customer scenarios

- **Digital Twins & Simulations:** Create data representations of your physical products, assets, and factories. Simulate different scenarios for product design optimization, process improvement or factory set-up decisions, with greater speed and with reduced data sampling.
- **Product Lifecycle & Design:** Run PLM and CAD workloads on the cloud to gain agility, efficiency, and scalability.
- **Connected Products:** Embed connectivity and intelligence into your products based on a modern edge-to-cloud architecture. Launching new business models like product-as-a-service, and digital ecosystems for additional features.

Modernize Manufacturing Customer Experience

Key customer scenarios

- **Connected Field Service:** Provide service agents with the latest mixed reality tools to solve complex service use cases with live-remote assistance or step-by-step interactive instructions.
- **Transform B2B Customer Engagement:** Get closer to the end customers by creating delightful digital and physical experiences, and by being proactive to their needs based on customer360 solutions.

Q: Who is the best customer target for Microsoft Cloud for Manufacturing?

Manufacturers and customers who have already purchased our underlying technology will be most open to this discussion as the cost of entry will be much lower.

Q: What business opportunities can Microsoft Cloud for Manufacturing create, and what roles in the customer's organization stand to benefit?

Microsoft Cloud for Manufacturing creates the following opportunities for roles across the organization including Chief Product Officer (CPO)/ VP of Product Development/ VP of Engineering/ VP of R&D, VP of Production/ VP of Manufacturing, and VP of Sales & Service/ VP of Service:

Unlock innovation and introduce new products

- Product Lifecycle & Design
 - Modernize product lifecycle, engineering, and design applications in the cloud

- Digital Twins & Simulations
 - Create and manage product digital twins
 - Power advanced product simulations (e.g., computational fluid dynamics, mixing simulation, etc.) in the cloud with high performance computing
- Connected Products
 - Product connectivity: Over-the-air updates, product health, product monitoring, edge machine learning models, geofencing and security.
- Analytics and insights: Customer usage analytics, fleet monitoring, engineering, and design insights.
- Product-as-a-service ecosystem.

Enable Intelligent Factories

- Connected and enabled workers
 - Communications
 - Data capture
 - Onboarding and upskilling
 - Remote assistance
- Production monitoring and optimization
 - Control tower
 - Remote monitoring
 - Overall equipment efficiency
 - Reinforce learning / Control loops
- Maintenance and quality
 - Predictive maintenance
 - Material track and trace
 - Quality inspection with computer vision
 - Safety inspection with computer vision
 - Quality root cause analysis

Modernize Manufacturing Customer Experience

- Connected Field Service
 - Remote assistance
 - Mixed reality instructions
 - Digital twins
 - Fleet monitoring
- Predictive maintenance

Q: Are there any customers already using Microsoft Cloud for Manufacturing?

We have several Manufacturing organizations and partners in the process of deploying and/or using various Microsoft capabilities. Customer stories can be found at <https://customers.microsoft.com>.



Partner opportunity

Q: What is the opportunity for partners?

Microsoft Cloud for Manufacturing scales through partners and offers a value-additive platform for them to seamlessly integrate their solutions. Here are the ways partners can benefit from going to market jointly with Microsoft:

- **Accelerate innovation and reduce time to market:** Deliver innovative solutions and increase deployment success leveraging Microsoft Cloud Platform and industry-specific capabilities that are built on a foundation of security and compliance.
- **Quickly scale your go to market:** Learn, develop, and launch industry solutions with Microsoft's industry skilling, designations, and marketing assets.
- **Win new customers with industry solutions:** Reach more customers by co-selling industry solutions alongside Microsoft sellers and scaling on the Microsoft commercial marketplace.

Q: What is the value I get as a Microsoft Cloud for Industry ISV?

Microsoft Cloud for Industry value for ISVs include the following:

Product

- Access to Industry IP
- Technical documentation in Microsoft Learn
- Microsoft Cloud Solution Center

GTM

- ISV Solution Designation Badge
- Marketing Bill of Materials and Sales Enablement assets
- Marketing campaigns

Co-Sell

- Industry Cloud Gallery in Microsoft commercial marketplace
- Inclusion in Microsoft Industry digital properties
- Priority placement with Microsoft Industry sales team

Q: What is the value I get as a Microsoft Cloud for Industry SI?

Microsoft Cloud for Industry value for SIs include the following:

Product

- Access to Industry IP
- In-a-Day Training in Microsoft Learn
- Microsoft Cloud Solution Center

GTM

- Marketing Bill of Materials and Sales Enablement assets
- Marketing campaigns

Co-Sell

- Industry Cloud Gallery in Microsoft commercial marketplace

- Inclusion in Microsoft Industry digital properties
- Priority placement with Microsoft Industry sales team

Q: How do partners bring Microsoft Cloud for Manufacturing to life?

Partners play a central role in our Cloud for Manufacturing strategy. They are deeply integrated into our customer and prospect base across sub-verticals, and they extend the Microsoft Cloud Platform with industry-specific solutions.

We look to partners to facilitate integration of Cloud for Manufacturing specific to each customer's needs and environment, expand offerings and current capabilities while breaking into new markets, and transform customers' businesses while helping them realize value.

Together, we offer customers an integrated Microsoft and partner solution.

Q: I am an ISV or SI that offers capabilities to Manufacturing customers. Is Microsoft now competing with me?

No, Microsoft is not competing with our partners. Cloud for Manufacturing offers a vast array of interoperable building blocks designed to solve problems unique to the Manufacturing industry. Microsoft's growing ecosystem of services and ISV partners extend the robust cloud capabilities of the Cloud for Manufacturing. Partners can extend the solutions available in Microsoft Cloud for Manufacturing to customize or augment what a customer would experience out of the box. Partners can also create new and differentiated experiences using these building blocks.

Microsoft Cloud for Manufacturing helps customers with security and compliance requirements. Partners who integrate with or build upon Microsoft Cloud for Manufacturing are requested to adhere to and will benefit from inherited platform controls built in to meet customer demand.

Q: What role do SIs and GSIs play in enabling Microsoft Cloud for Manufacturing?

Global Systems Integrators (GSIs) and Systems Integrators (SIs) help deliver functional implementation of Microsoft Cloud for Manufacturing by deploying, building-upon, and enabling cloud capabilities. They drive integration and interoperability with each Manufacturing customer's on-premises and cloud-based solutions.

Because the Cloud for Manufacturing is built on Microsoft Cloud's extensible architecture, services partners customize our cloud capabilities to fit each customer's unique needs. Additionally, they provide a breadth of services for data management and governance, as well as advisory services and planning, documentation, and readiness for organizational change and adoption.

Q: What role do ISVs play in enabling Microsoft Cloud for Manufacturing?

Independent Software Vendors (ISV) build SaaS, PaaS, and other software solutions on the Microsoft Cloud, including Microsoft Azure, Microsoft Dynamics 365, Power Platform, and Microsoft 365.

These partner-developed solutions can integrate or connect to Microsoft Cloud for Manufacturing capabilities through connectors, APIs, and other integration layers.

Q: In my role as an SI, I have created industry-specific accelerators and solutions, some of which overlap with the customer scenarios of the Microsoft industry clouds. How can I decide what IP to continue investing in? Can you share a roadmap so that I can confirm my investments won't conflict with future customer scenarios?

Microsoft does not and will not control partners' intellectual property or provide guidance on your IP investments. That said, we are invested in being transparent about our industry cloud customer scenario roadmap, information

that you can use to inform your investment decisions. We urge partners to consider customer value, cost to market, and agility of solution deployment when evaluating first-party native solutions vs. building solutions atop Microsoft Cloud for Manufacturing platforms.



Industry standards and compliance

Q: How does Microsoft Cloud for Manufacturing help me meet my compliance requirements?

You can find the most up-to-date information about Microsoft Cloud for Manufacturing compliance on [Microsoft Learn](#).

Q: Are there industry standards that Microsoft Cloud for Manufacturing meets out of the box that are not met out of the box by Azure public cloud?

Just like Microsoft's existing core services within Microsoft 365, Dynamics 365, and Azure, the solutions within Microsoft Cloud for Manufacturing are designed to support compliance requirements. Beyond the foundational platform customer scenarios that Microsoft Cloud for Manufacturing is built on, it contains first-party scenarios that make it easier and quicker to build solutions and lower maintenance costs. This in turn helps customers accelerate deployments and remove friction in addressing regulatory compliance:

- We provide greater interoperability and transparency into shared responsibility with our unique tools and programs, solving some of the initial industry customer adoption challenges related to risk assurance and support.
- We support customers through their compliance journey by integrating and streamlining our security, compliance, and assurance documentation and related learning resources.



Deploying Microsoft Cloud for Manufacturing

Pricing & Licensing

Q: How do I buy Microsoft Cloud for Manufacturing?

Microsoft Cloud for Manufacturing represents a portfolio of Microsoft and partner solutions that you can deploy, configure and use, depending on which capabilities you want to adopt. A separate Cloud for Industry license is not required.

Contact your Microsoft account executive or PDM to get started.

Technical information

Q: Will additional capabilities be added over time?

Yes, there will be Wave updates every 6 months.

Q: Are there reference architectures available for Microsoft Cloud for Manufacturing?

Yes, you can learn more in the upcoming Microsoft Cloud for Manufacturing site on [Microsoft Learn](#).

Regions and languages

Q: What regions and languages is Microsoft Cloud for Manufacturing available in?

The international availability of Microsoft Cloud for Manufacturing solutions is based on the availability of each of the individual products and services. Visit the following link for more information on regions and languages availability:

[International availability of Microsoft Cloud for Manufacturing | Microsoft Learn.](#)



Resources

Q: Are there trainings I can attend or documentation that I can review to familiarize myself with Microsoft Cloud for Manufacturing?

Learn more in the [Microsoft Cloud for Manufacturing Website](#) and you can learn how to become a partner on the [Microsoft Cloud Partner Program Website](#). Documentation will be available on [Microsoft Learn](#).

Q: How do I stay informed about what's to come?

The best way to stay informed is to keep in touch with your Microsoft Partner Development Manager (PDMs). Partner information can also be found on the [Microsoft Cloud for Manufacturing Website](#).