NTT DaTa | Microsoft

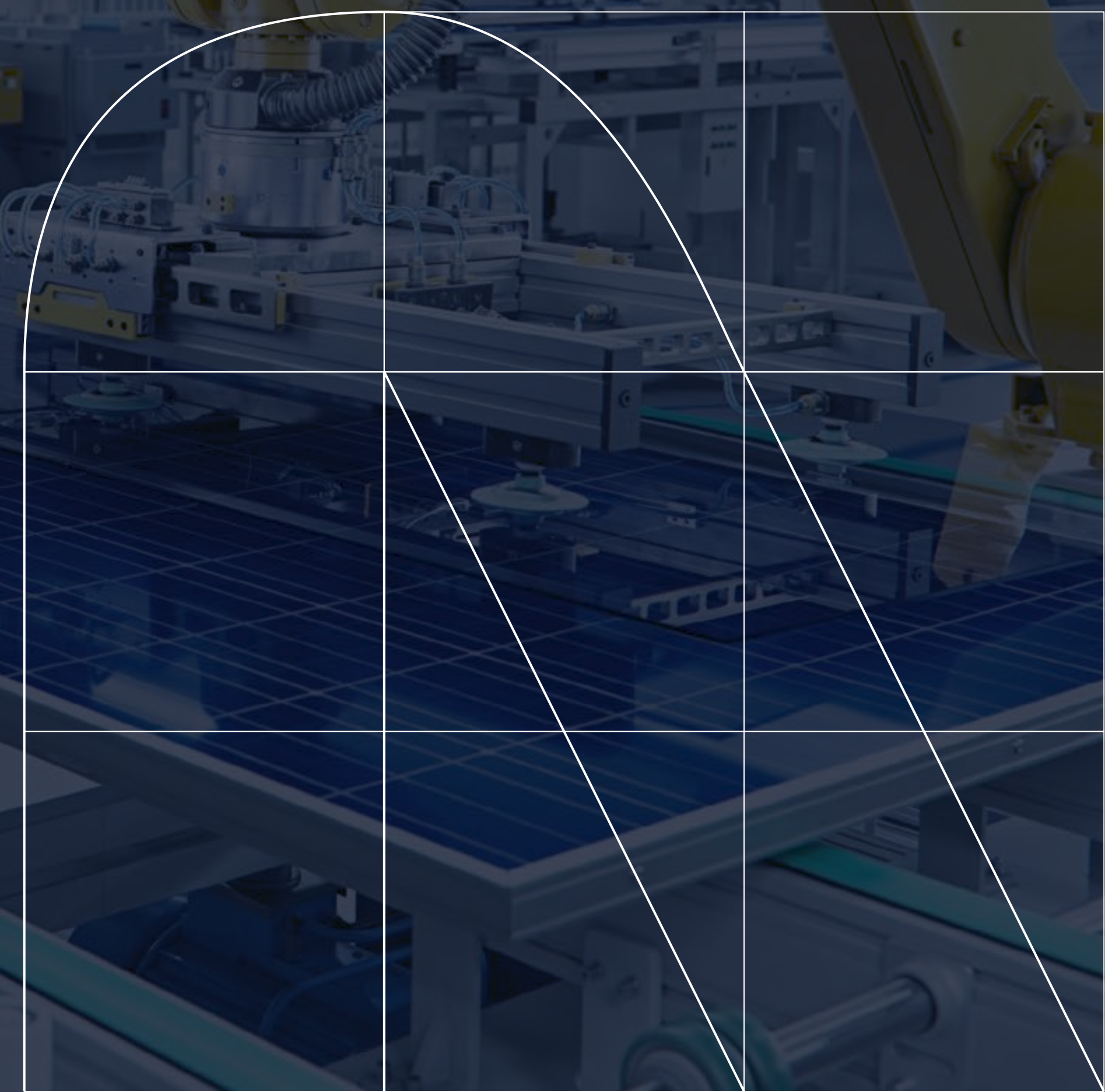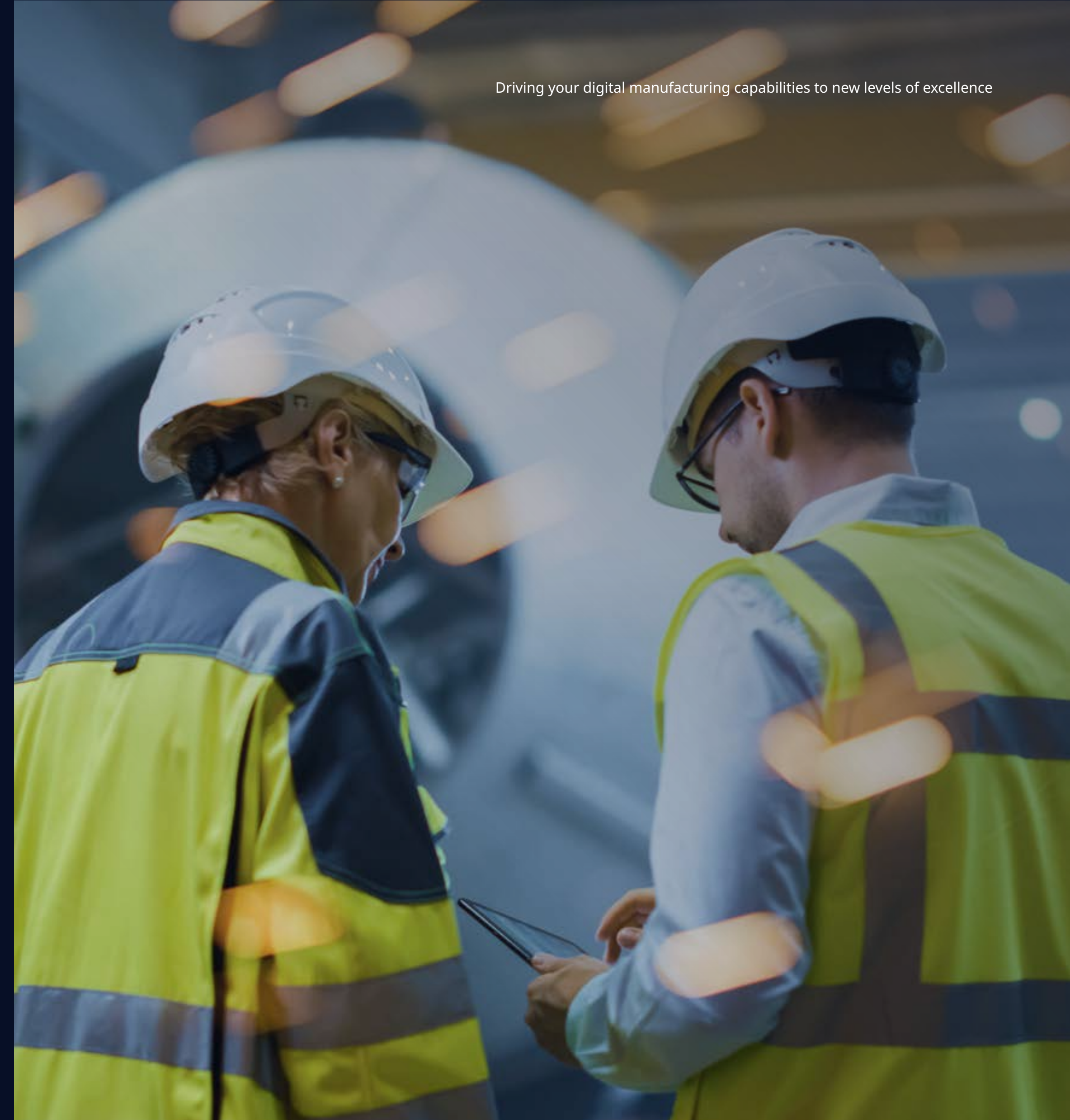# Driving your digital manufacturing capabilities to new levels of excellence

In partnership with NTT DATA and Microsoft

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The manufacturing industry is undergoing a profound transformation driven by rapid changes in technology, consumer preferences, environmental regulations and global events. To thrive in this dynamic and competitive environment, manufacturers need to leverage digital solutions that can enhance their operational efficiency, agility and innovation.

However, adopting new technologies and business models is not a simple task. It requires a strategic vision, a holistic approach and a trusted partner who can guide you through the journey. That's why NTT DATA and Microsoft have joined forces to help you achieve your digital manufacturing goals. With our deep industry expertise, comprehensive technology portfolio and long-standing partnership, we can help you design and implement the solutions that you need.

In this guide, we will share some of the key benefits and use cases of our joint solutions for manufacturing, covering three main areas: efficiency, agility and innovation. We will also show you how we can help you transform your manufacturing operations into a smart factory that leverages data, AI, cloud and IoT to deliver superior products and services to your customers.

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Manufacturing efficiency gains

Manufacturing effciency gains

Efficiency is a key factor for success in the manufacturing industry. It can help you reduce costs, optimize resources, improve quality and increase profitability. However, achieving efficiency is not easy, especially when you face constant challenges such as supply chain disruptions, changing customer demands, sustainability requirements and security risks.

To overcome these challenges, you need to modernize your IT infrastructure, streamline processes and leverage data-driven insights. You also need to ensure that your technology solutions are secure, compliant and scalable. That's where NTT DATA and Microsoft can help you.

We can help you migrate to the cloud and take advantage of the powerful capabilities of Microsoft Azure, such as AI, IoT, digital twins and edge computing. We can also help you integrate and manage your cloud and edge environments, ensuring security, reliability and performance.

Through cloud migration, organizations are able to achieve:

10-40% – reduction in reactive maintenance

2-6% – increase in availability

5-10% – inventory cost reduction

3-40% – EH&S incident reduction

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Manufacturing effciency gains

With our end-to-end solutions, you can achieve greater operational efficiency and foster sustainable growth.

Leveraging Generative AI for **operational efficiency** and cost optimal manufacturing operations.

Develop products faster and improve supply chain efficiency and management: We can help you use AI to shorten design cycles and personalize products.

Reduce energy consumption and carbon emissions: We can help you implement Azure Digital Twins for end-to-end sustainability solutions that optimize energy consumption and reduce carbon emissions.

Enhance security and compliance: We can help you secure and align your cloud and edge solutions with industry standards and regulations, using tools like Azure Sentinel and Azure Security Center.

Build and maintain a data foundation: Enable a single source of truth through data governance and certification.

Maximize operational efficiency: Speed up decision-making capabilities and modernize your operations with edge computing and IoT applications.

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Boosting business resilience and agility

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Boosting business resilience and agility

Agility is another key factor for success in the manufacturing industry. It can help you adapt to changing market conditions, customer expectations and competitive pressures.

It can help you innovate faster and create new value for your customers. Achieving agility is not easy, especially when you have to deal with legacy systems, siloed data and complex processes.

To achieve agility, you need to transform your tech capacity, enabling faster and smoother collaboration, communication and innovation. You need to minimize the impacts of disruption and downtime, ensuring business continuity and resilience. That's where NTT DATA and Microsoft can help you.

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Boosting business resilience and agility

We can help you leverage the cloud and the edge to create a flexible and scalable IT infrastructure that supports agility. We can help you modernize your applications, adopt a microservices architecture and develop cloud-native applications in Azure. With our agile and DevSecOps methodologies, you can accelerate your product development and migration, while ensuring quality and security.

Accelerate product development and migration: Migrate to the cloud faster and take advantage of Azure and Microsoft AI to innovate and adapt to market changes quickly.

Enhance factory operations through IIoT and Smart Factory: We can help you minimize production downtime with real-time monitoring and predictive maintenance capabilities.

Optimize supply chain management: Respond faster to market shifts and disruptions, using tools like Dynamics 365 and Power BI.

Build a culture of continuous improvement: Empower your business to navigate changing environments with technology and strategy foundation for continuous improvement.

Ensure OT security: Enable a zero trust security posture for secure manufacturing operations to protect against escalating OT security threats.

Create a human-centered factory: Facilitate adoption of transformative technologies through workforce skill development and training.

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Realizing innovation

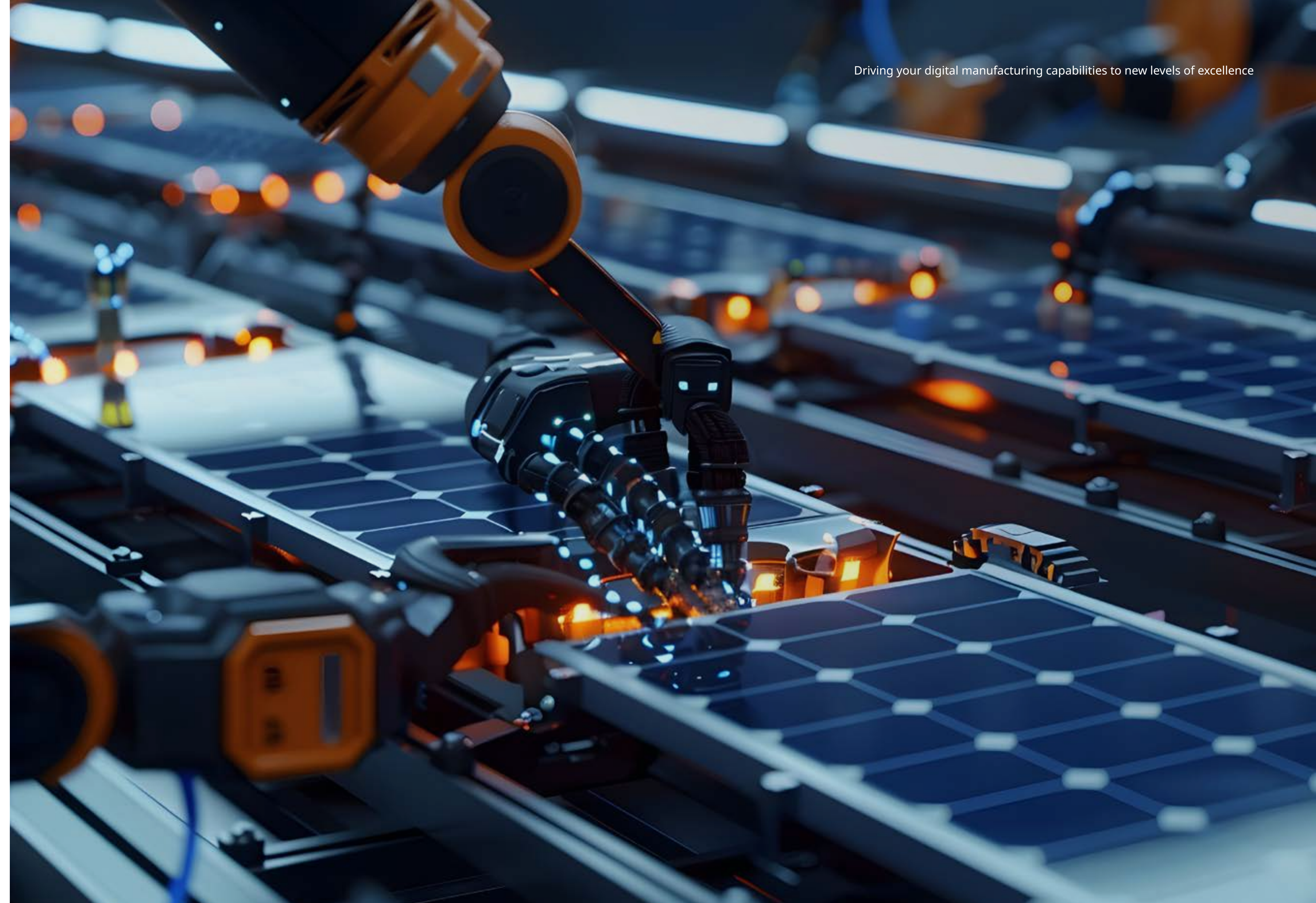Manufacturing efficiency gains | Boosting business resilience and agility | Realizing innovation | What makes NTT DATA a better technology partner for manufacturers?

Realizing innovation

Innovation is the ultimate goal for the manufacturing industry. It can help you create new products and services, differentiate yourself from your competitors, and increase your customer loyalty and satisfaction. However, realizing innovation is not easy, especially when you must deal with complex and diverse technologies, use cases and scenarios.

To realize innovation, you need to explore and experiment with new technologies and business models. You also need to ensure that your innovation efforts are aligned with your business priorities, ethical standards and customer needs. That's where NTT DATA and Microsoft can help you.

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Realizing innovation

By giving you access and applying the latest and most advanced technologies from Microsoft, such as Azure OpenAI Service, Azure Synapse Analytics and Azure Digital Twins, we can co-create and test new solutions, using our proof of concept and innovation lab services. With our deep pragmatism, AI and data expertise, and attunement to your specific situation and priorities, we can help you realize innovation faster and more confidently.

Enhance operational efficiency: We can help you integrate AI tools to improve product quality, boost productivity and cut costs.

Gain sustainable competitive advantage: We can help you access and leverage Microsoft innovations that keep you ahead of the technology curve, while staying compliant with evolving laws and regulations.

Ensure sustainable, circular manufacturing operations: Our Digital Twin capabilities, AI-powered Data Analytics and Sustainability Consulting services support greener, more efficient operations.

Accelerate product development cycles and improve factory efficiency: We can help you use tools like Azure OpenAI Service and Dynamics 365 to create and deliver personalized and customized products and services.

Build smart factories: We support the smart factory of the future with cutting-edge technology to empower your performance. With robust network solutions (5G, IoT, Wi-Fi) to connect machines, sensors and devices we unlock advanced capabilities to help you realize your strategic goals.

What makes NTT DATA a better technology partner for manufacturers?

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What makes NTT DATA a better technology partner for manufacturers?

Manufacturers faces incredibly complex and diverse challenges and require a technology and strategy partner who understands you. We can help you create efficiencies while you innovate with AI and cloud technologies, transform for agility and retool operations for sustainable growth.

We offer solutions made for manufacturing: From supply chain management to data-driven efficiencies and innovations such as digital twins, IIoT and smart factories.

We offer full-stack solutions: We have deep expertise in Microsoft solutions, and our services range from consulting to application development to cybersecurity and cloud migrations and management.

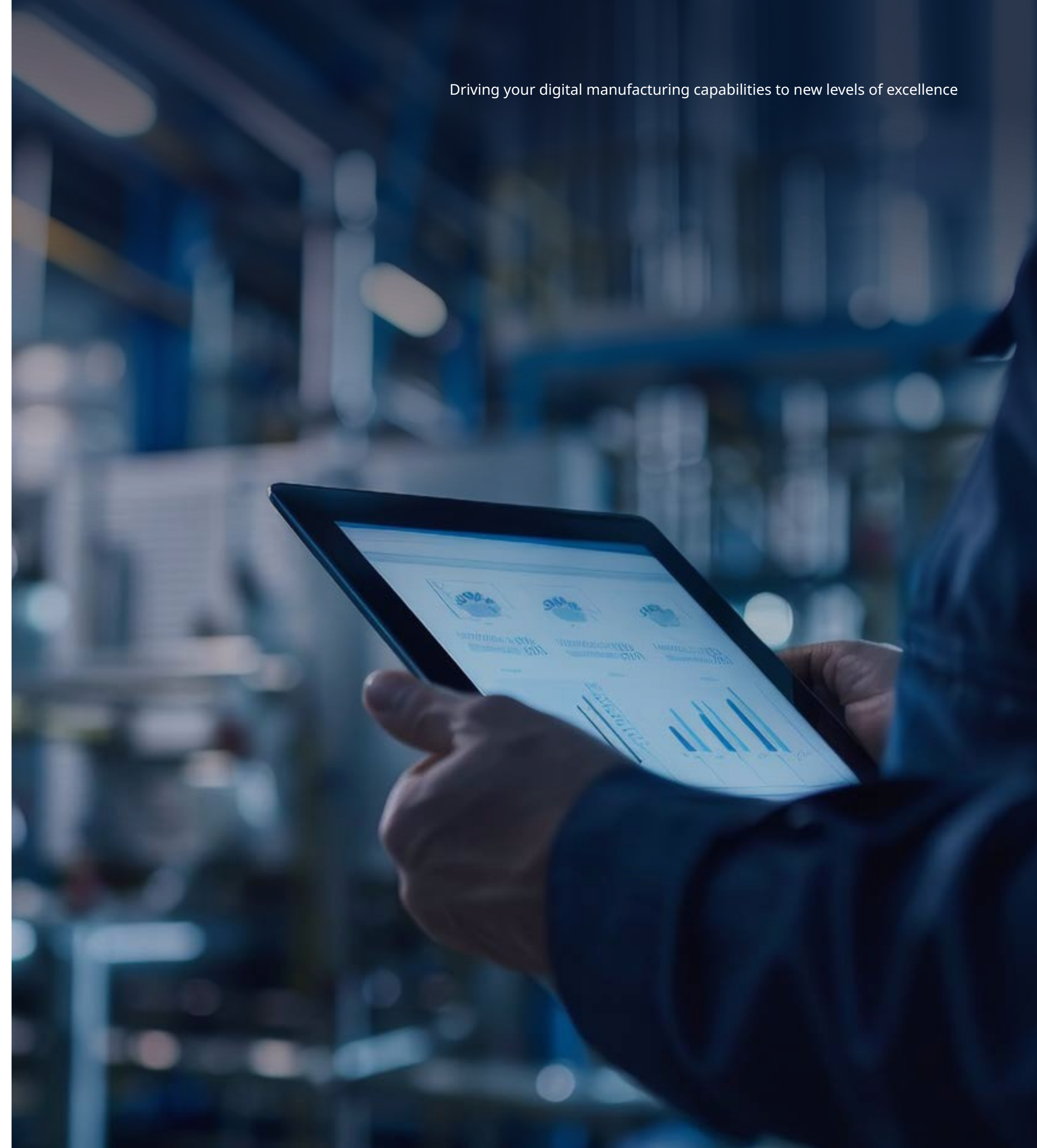**We can help you grow ethically and sustainably:** We have signed the Microsoft Partner Pledge to ensure we are building AI and IoT technologies in a responsible and ethical way.

NTT DATA Manufacturing Cloud is a tailored solution for manufacturers, offering real-time insights into production, supply chain, and quality control. By harnessing AI analytics and using IoT, it helps predict equipment issues, minimize downtime, and drive informed business decisions for growth and innovation.

We have proven expertise: We have partnered with Microsoft for more than 25 years, achieving more than 20 partner accreditations and 17 Advanced specializations in areas such as Azure, security, data and AI, infrastructure and application innovation. Our track record of proven success means you can feel confident in our roadmaps and implementation skills.

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The strategic partnership between NTT DATA and Microsoft empowers manufacturers like you to lean into the future as a hyperconnected, continuously improving digital manufacturer. With our expertise and partnership, you can streamline your production processes, cut waste and optimize resources.

We can help you integrate technologies to bring agility to your plants, deploy predictive maintenance to reduce production downtime and improve your supply chain visibility and efficiency.

We are committed to helping manufacturers innovate in areas like rapid prototyping, product customization and new business models. Right-sized, strategic technology transformation is your jumping-off point to agility, sustainability and competitiveness.

Find out more

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