Gartner

Navigating the $90B Manufacturing AI Race

A strategic guide for tech services leaders

To compete in the projected $90 billion manufacturing AI market, tech services leaders must move beyond generic AI and build industry-specific portfolios. Key steps include:

1

Focus on measurable business value.

Work consultatively with business leaders to design repeatable, scalable solutions that drive revenue growth, operational excellence and cost optimization.

2

Prioritize likely wins.

Instead of general AI applications, focus on highly feasible, high-value, manufacturing-specific use cases.

3

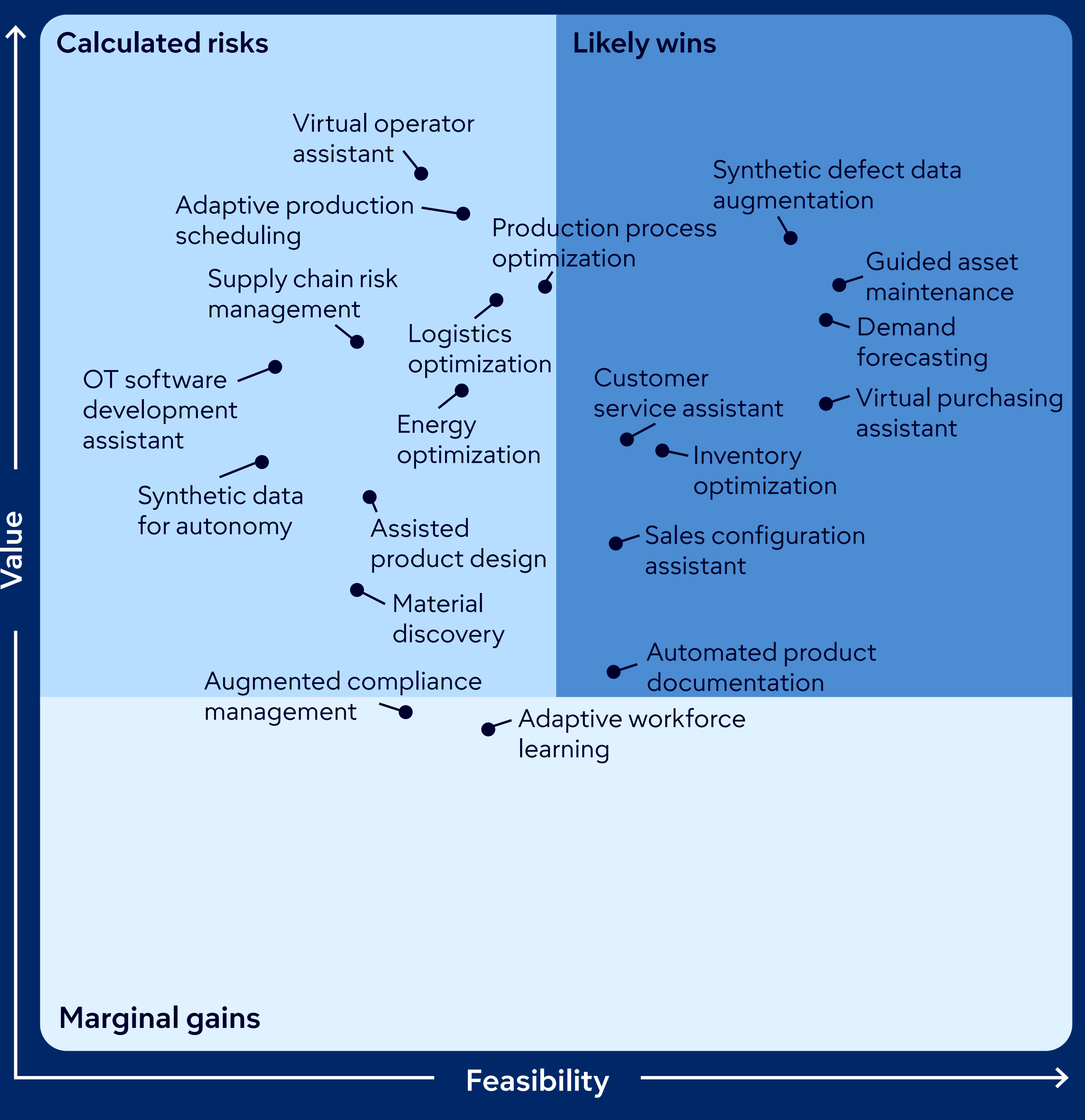
Leverage strategic partnerships.

Partnering with established AI vendors with deep, proprietary knowledge of the manufacturing industry bridges expertise gaps and delivers validated solutions.

Focus on measurable business value

Gartner analysts have mapped high-value manufacturing AI use cases, offering a strategic roadmap for tech services leaders to sharpen and expand their offerings.

Generative AI use-case assessment for manufacturing



Prioritize likely wins for immediate impact

Synthetic defect data augmentation

Address data scarcity, labeling inaccuracies and unconventional defect types by generating synthetic defect data to streamline AI data augmentation and improve accuracy.

Guided asset maintenance

Use AI-based analytics to identify failure conditions before they occur, reducing downtime, increasing equipment utilization and lowering maintenance costs.

Demand forecasting

Anticipate market fluctuations, customer behavior and supply chain disruptions with AI-driven forecasting to improve agility and competitiveness.

Virtual purchasing assistant

Automate complex purchasing processes with AI assistance, managing the diverse procurement demands of manufacturing operations.

Inventory optimization

Use IoT-enabled sensors and smart inventory management to improve working capital efficiency, enable real-time visibility and support data-driven production decisions.

Customer service assistant

Automate customer service using subindustry-specific conversational AI tailored to the unique requirements of manufacturing operations.

Sales configuration assistant

Bridge the gap between external sales teams and internal technical experts by embedding advanced AI into product life cycle management (PLM) systems to handle complex product configurations and fast-moving market demands.

Automated product documentation

Integrate generative AI with PLM systems and low-code platforms to automate product documentation updates, while improving traceability, compliance and technical debt.

Leverage strategic partnerships

Access the full Gartner insights and identify leading partnership opportunities. Talk to us today ↗

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