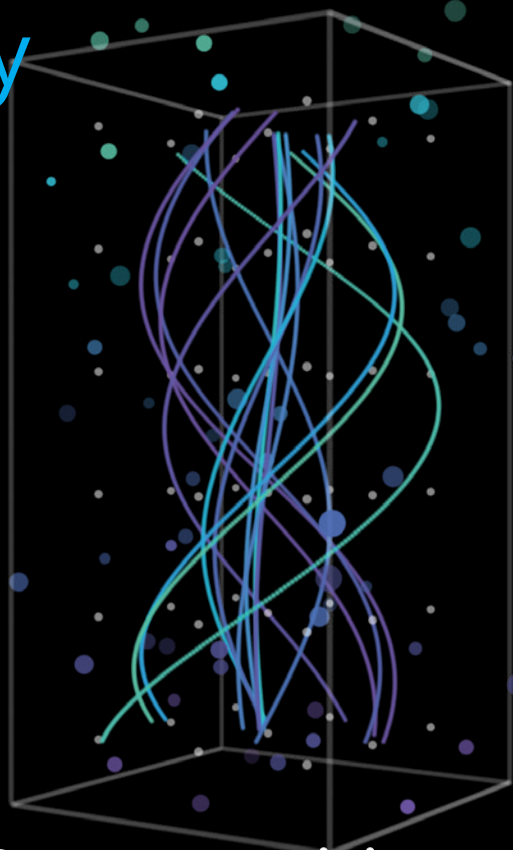


Using AI responsibly in Manufacturing

AI technologies are reshaping the way organizations across industries do business. Manufacturing is no different. Successfully integrating AI into the factory of the future requires business leaders to practice big-picture thinking that considers not just what AI **can** do, but what it **should** do.

At Microsoft, we are collaborating with customers, partners, experts, and industry leaders to create a collective approach to engaging with AI in a responsible way. As you navigate what this shift could mean for manufacturing and industry, we'd like to share key insights and perspectives that we've learned along the way.



Opportunities

Holistic systems design

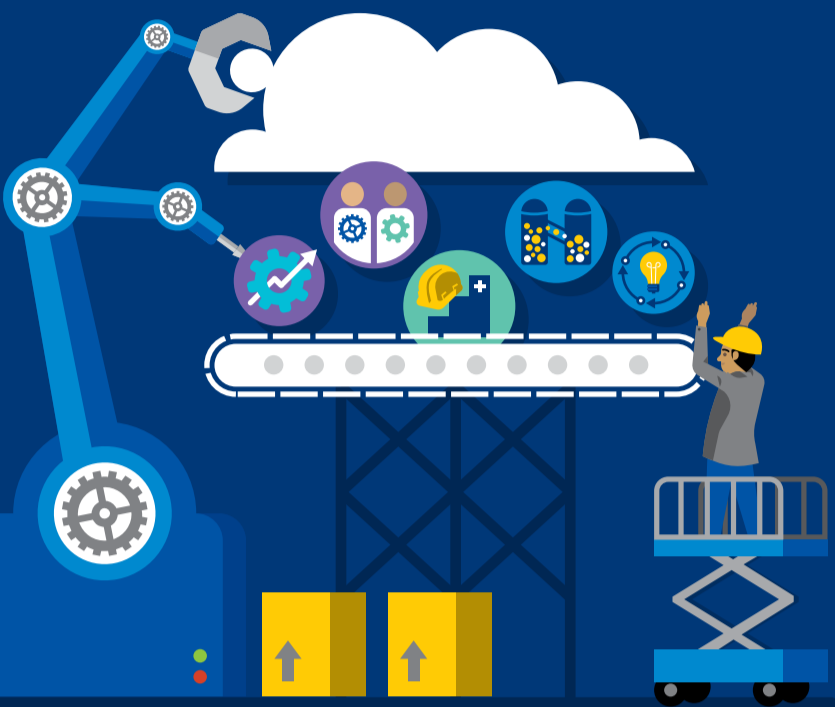
Build and deploy transparency in processes and deploy at scale
Retool and reuse with every customer and end user in mind

Employee empowerment

Reskill for new workflows and processes
Ensure accessibility for all ages and abilities

Streamlined processes

Harness data and use insights to create breakthrough advances
Use intelligent supply chains to drive resiliency and sustainability



Risks

Security and compliance

Keep critical information safe while ensuring operations comply with regulations and smart products respect privacy

System design

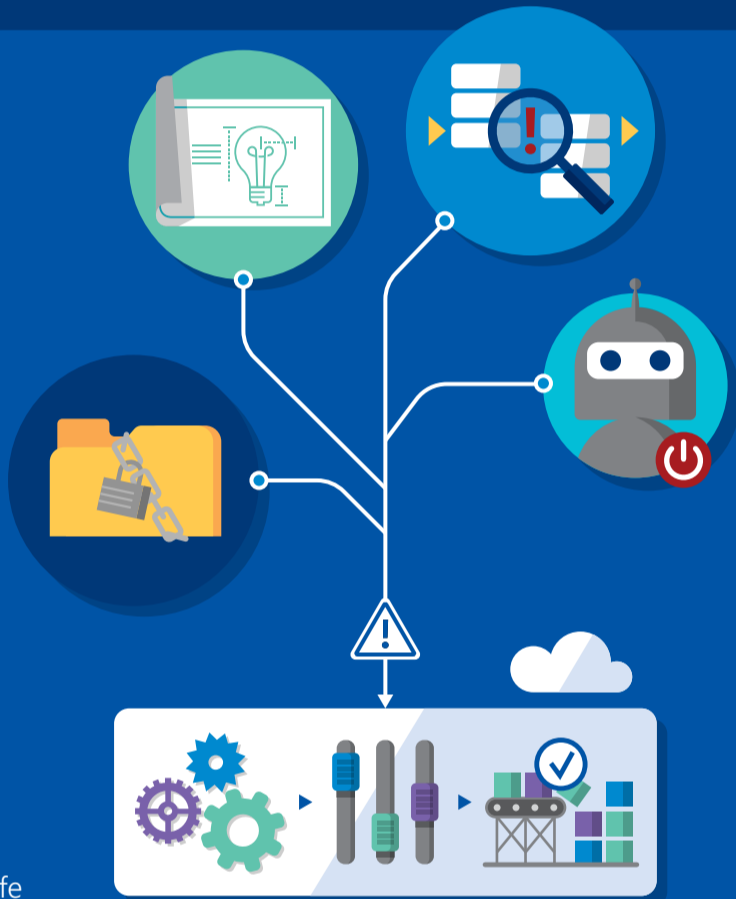
Apply practices and tools to reduce bias, improve accuracy and strengthen data for training of AI systems

Simulations and digital twins

Assessing and mitigating risks before production saves effort and improves reliability

Safety and reliability

Autonomous systems should have failsafe components for humans to override



A responsible path forward

How do you manage AI responsibly?



Develop principles that reflect your organization's values, intent and approach to product innovation, in your supply chain, and in production.



Adopt practices and tools to apply throughout the manufacturing lifecycle



Determine a governance and compliance framework that builds trust and confidence among all stakeholders

For AI to play a role in the manufacturing industry, it's essential that the supply chain and factories responsibly embed technology into its systems while keeping safety and reliability top of mind. AI can foster an inclusive workplace that accommodates the workforce's needs while providing a safe environment optimized to efficiently manufacture its products.

How can you start your own journey to develop responsible AI in Manufacturing?

Visit Microsoft's page on [Responsible AI](#) to learn more about our approach.

Learn more about AI in Manufacturing from industry experts at the [Microsoft AI Business School](#).

Download Microsoft's e-book: [The Future Computed: AI and Manufacturing](#)

