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Artificial Intelligence Use Cases
Manufacturing

5.8%
Not very important

1%
Not at all important

93%
of organizations say that **AI is integral to their digital transformation**[1]

46.6%
Somewhat important

46.6%
Very important
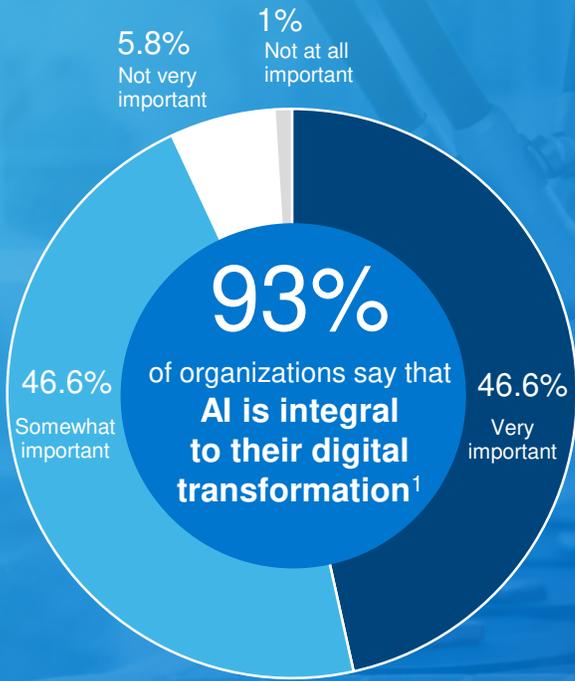
AI-driven outcomes

Powered by AI and a rapidly growing data-centric ecosystem, digital transformation is sweeping through the Manufacturing industry. The combination of a "data first" culture backed by AI insights and unprecedented levels of automation is changing everything—from supply chain, materials, quality and order management to production processes, factory maintenance, order fulfillment, logistics and services. Ultimately, AI-driven insights and automation are transforming how enterprises increase productivity and gain greater control over operations.

The outcomes driven by AI are extraordinary.

| Enhanced customer experience | Efficient operations | Cost reduction | Risk management | Diverse revenue streams |

Who wins with AI

Manufacturers, employees and customers all win with AI. These are a few examples of transformative use cases.

Manufacturers

- Demand forecasting
- Production monitoring and control
- Materials mix and flow transparency
- Predictive maintenance
- Yield enhancement
- Inventory and supply chain management
- Delivery optimization
- Customer insight
- Quality control
- Competitive pricing

Employees

- Time and motion studies (performance)
- Root cause analysis (productivity)
- Knowledge management
- Decision support
- Health, safety and ergonomics
- Automated guided vehicle transport

Customers

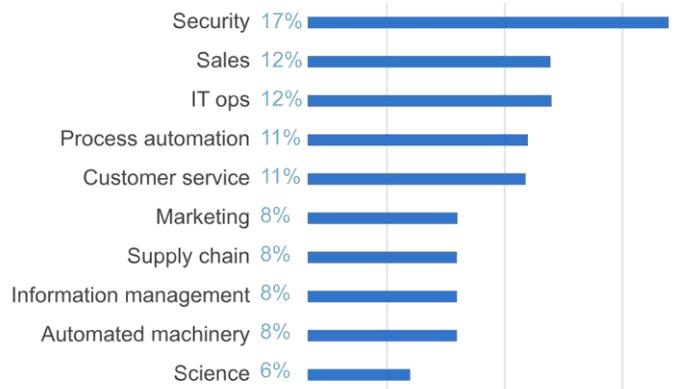- Demand fulfillment (availability)
- Quality control (better products)
- Customer experience
- Customer-driven innovation for more meaningful use

Enabling AI across the enterprise

Research shows that over 55% of organizations are on an AI journey,[2] and the average AI adopter has nine use cases that require four different data types. Across industries, AI use cases are integral to many functions—security, sales, process automation, customer services, marketing, supply chain, information management, automated machinery and science.[3] Successful AI implementations require rethinking people, processes and technology to capture and process volumes of diverse data using machine learning and deep learning models integrated into processes and applications. We can help you do that.

AI use cases by category today

Category	Percent
Security	17%
Sales	12%
IT ops	12%
Process automation	11%
Customer service	11%
Marketing	8%
Supply chain	8%
Information management	8%
Automated machinery	8%
Science	6%

[1,3] 451 Research, Voice of the Enterprise: AI & Machine Learning, Use Cases 2020. Data is based on a survey of multiple industries. Link
[2] MIT SMR Connections. How AI Changes the Rules for Management, 2020. Link

Making transformation real with AI

With insights and automation that increase employee value, streamline processes, and drive quality and efficiency, the manufacturing industry is revolutionizing how goods are made. And, with 28+B connected edge devices projected by 2024,[4] this revolution is poised to escalate, as enterprises take advantage of real-time intelligence to give customers exactly what they need just when they need it.
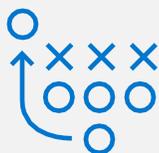
Accelerate intelligent outcomes with AI from Dell Technologies

When AI is done right, organizations can make big decisions and bold moves based on data-driven insights. Whether you're new to AI or ready to take it to the next level, accelerating intelligent outcomes requires alignment, optimization and scale. Here's how Dell Technologies can help you achieve more with AI.

Strategic elements	What our investments in people, process and technology help you achieve with AI
Align business and IT with a data first culture.	Champion an environment in which all functions think first about how data can enable new opportunities while solving high-priority challenges. Create a plan for capturing valuable data so you can seize data-driven opportunities. AI experts in our Customer Solution Centers, AI Centers of Excellence and Consulting Services can guide you in exploring AI use cases, technologies and solutions that help you leverage your data to strategic advantage.
Put any data to work anywhere in any way.	Fast-track innovation and efficiency with solutions designed and validated by engineers for AI workload performance. Based on the industry's broadest AI-ready infrastructure portfolio, these solutions can save you time and money and reduce risk when you're deploying and operating your AI environments. And we can help you simplify IT sourcing, deployment and management across private, public, edge and hybrid clouds—wherever your use case demands.
Achieve success at any scale as you grow.	Whether you're just getting started with AI, enriching existing use cases or expanding into entirely new ones, we can help you move forward with confidence. You can leverage our partnerships with other AI innovators and our flexible IT consumption options to deliver and scale AI use cases at a pace that enables digital transformation on your timeline.

Transforming manufacturing processes can be challenging for even the most advanced organizations, due to the shortage of skills to envision and implement new data-driven ways of solving age-old problems. But the potential rewards are tremendous—delighted customers, engaged employees, and more profitable operations.

For more information, visit DellTechnologies.com/ai or contact your Dell Technologies sales representative.

[4] IDC. Embedded Intelligence: Innovative Outcomes with Edge Cloud, an IDC InfoBrief, Sponsored by Dell Technologies, 2020. Link

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