DCLTechnologies

Build more efficient, safer processes at the manufacturing edge



In a sector where productivity is a key differentiator, edge computing is redefining what today's manufacturers can accomplish.

Watch video

By processing data at the source to generate real-time insights, edge-enabled 'smart' factories are enhancing production quality and safety procedures, reducing mechanical downtime, and closing the skills gap.

Edge and cloud-native technologies are overcoming legacy challenges to enable optimization and innovation, ushering in a new chapter in smart manufacturing.

Edge-enabled innovation

of business leaders say the edge is central to their IT strategy and is unlocking innovation across their organization already¹.



of respondents said they deploy new applications or application updates to their edge locations at least monthly².

IT challenges manufacturers face at edge locations³



Lack of cloud-native tools and processes for continuous integration and deployment of applications



Connectivity issues (e.g., availability, sufficient bandwidth, air-gap requirements, etc.)



Difficulty creating high-availability environments (i.e., application, network, compute, etc.)



Difficulty deploying infrastructure at remote locations

Container and/or Function-as-a-Service application challenges⁴

Difficulty providing secure configurations (e.g., avoiding misconfigurations)

41%

vs. 28% average across all verticals

Unpredictable costs

37%

vs. 27% average across all verticals

Vendor lock-in

vs. 16% average across all verticals

Manufacturers devote more budget to support their edge⁵

52% dedicated 11-15% of budget vs. 49% average across all verticals 11% dedicated 16-20% of budget vs. 8% average across all verticals

Safer, smarter solutions at the manufacturing edge

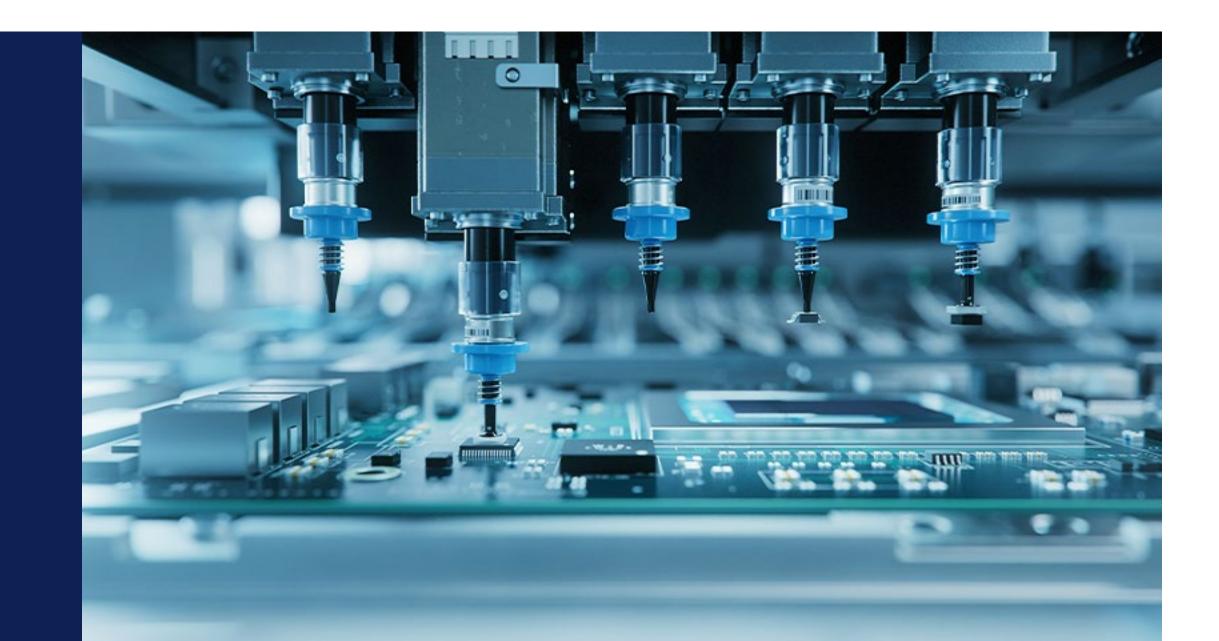
The rise of edge compute, AI and machine learning has revolutionized how manufacturers approach their operations. Forward-thinking manufacturers are actively addressing challenges such as data silos, fragmented technologies and IT/OT communication. 'Smart' factories are pushing new boundaries in operational productivity, automation, employee safety and more.

Smart Factory Transformation

Integrate Industrial Internet of Things (IIoT)

Manage robotics using computer vision

Reconfigure manufacturing machines dynamically





Health, Safety and Compliance

Flag potential hazards via computer vision

Implement shut off and safety procedures

Improve control of sensitive

Processes and Performance

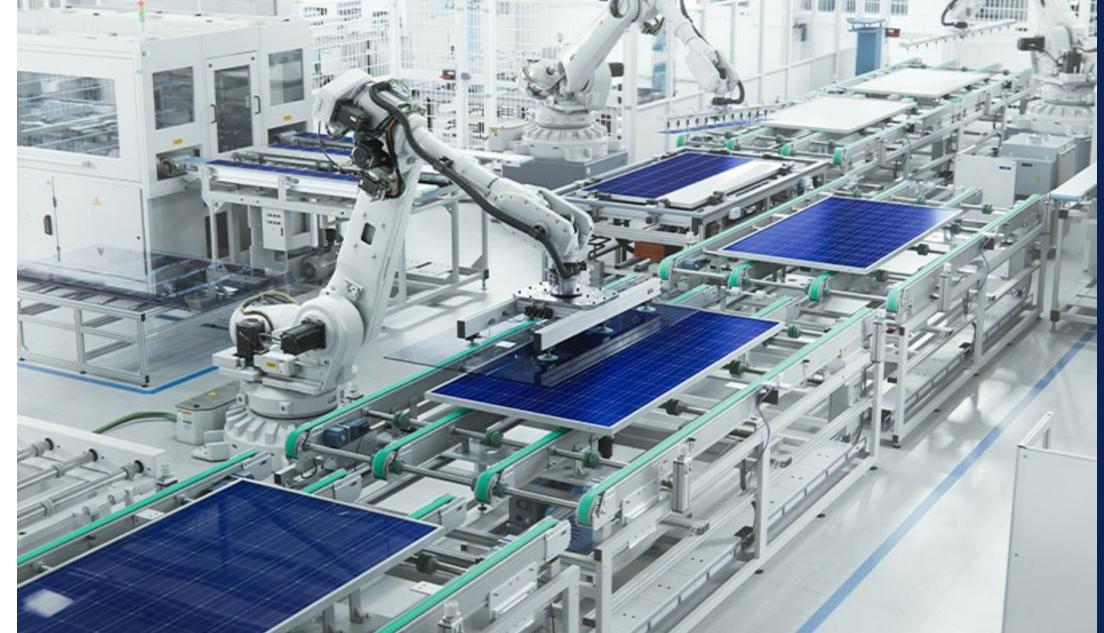
Streamline factory operations via low latency digital twins

Analyze real-time operational data

Maintain machinery proactively







Cost Optimization

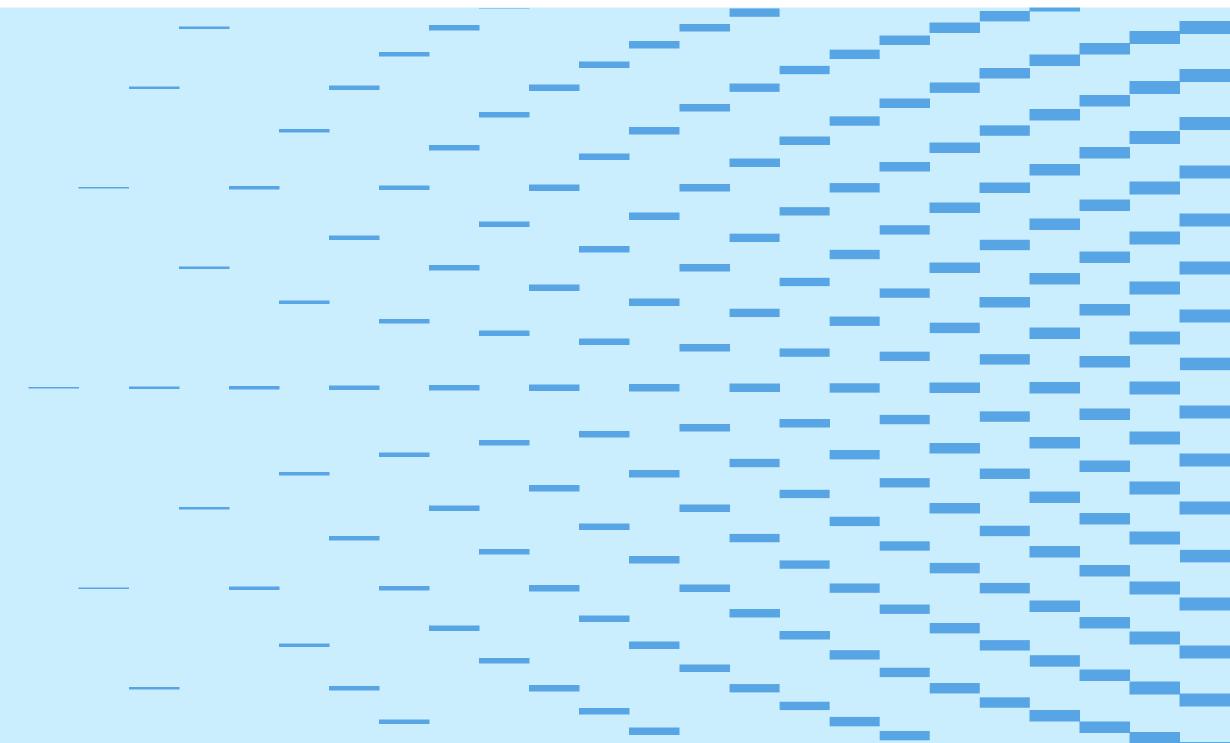
Expand with scalable technology architecture

Automate repetitive tasks

Streamline operations and benefit from faster time to value and improved ROI

Dell Technologies, together with Intel, partner with manufacturers to accelerate from ideas to innovation.

Dell Technologies and Intel work closely with manufacturers to transform their facilities into data-driven, self-improving 'smart' factories. By leveraging Dell's broad portfolio at the edge, manufacturers can develop unique efficiencies that keep them at the forefront of the industry.



Enjoy an edge that's built to last.

Discover why Dell Technologies, together with Intel, are best positioned to be your partners at the edge.

Learn more at Dell.com/Edge

¹ The Innovation Index, Dell Technologies, February 2023 ² Q27 – ESG Research Edge Use Cases in the Enterprise ³ Q28a – ESG Research Edge Use Cases in the Enterprise ⁴ Q33 – ESG Research Edge Use Cases in the Enterprise ⁵ Q14 – ESG Research Edge Use Cases in the Enterprise