

Cisco and Deloitte Showcase Industrial Smart Operations at the Smart Factory @ Wichita



Benefits from smart manufacturing operations:

- 20–35% optimized costs from reduced labor cost, lower operating expense, lower inventory levels, and less maintenance
- 10–35% improved process efficiency with lower scrap rates, less rework, and reduced warranty cost
- Up to 25% increase in annual revenue by implementing smart factory solutions
- 10–20% improved asset efficiency from more uptime, optimized capacity, and increased throughput
- 3–10% improved safety and sustainability from new practices, improved worker health and satisfaction, reduced safety incidents, lower energy consumption, and lower environmental impact from the facility

The power of the digital supply network

The traditional, linear supply chain path of design, plan, source, make, and deliver limits an organization's ability to improve performance and increase profits. Technology advancements that include big data, analytics, and higher processing speeds have ushered in the era of Industry 4.0. Changing how businesses operate can be difficult. To transition to an Industry 4.0 operational model, organizations need:

- Advanced technologies for increased agility and efficiency
- Ability to collect and analyze the right data to gain business-critical insights
- Convergence of IT and OT for interconnected systems that use information to drive smart factory operations

The digital supply network (DSN) establishes a dynamic, interconnected system that evolves over time, incorporates ecosystem partners, and fundamentally changes how an organization operates. A continual information flow improves work processes, delivers network-wide operational insights, increases visibility across the supply network, and provides end-to-end transparency.

Using Cisco® technology and solutions from 20+ other ecosystem partners, Deloitte created the Smart Factory @ Wichita. The facility showcases how organizations can merge existing technology with new innovations to support Industry 4.0 transformation and growth.



The Smart Factory in action

A smart factory is a responsive, adaptive, and connected system that optimizes its own performance by learning and adapting in near real time. By autonomously running production processes, it maximizes efficiency and reduces costs. By converting to smart factory-based operations, organizations can establish entirely new operating models and sources of value.

The Smart Factory @ Wichita presents a technologically advanced, end-to-end smart production line (see Figure 1) in a 60,000 square-foot facility with net-zero emissions. Visiting organizations can work with our team to pinpoint opportunity areas and build a personalized road map tailored to specific digital transformation goals.

Figure 1 The Smart Factory @ Wichita smart production line



The fully functioning manufacturing production line brings together cutting-edge technologies such as artificial intelligence, machine learning, big data, cloud and edge applications, robotics, and vision solutions. While the Wichita facility focuses on manufacturing, the lessons learned support use cases across numerous industries:

- Manufacturing and warehousing
- Retail and distribution
- Transportation
- Oil and gas
- Mining
- Utilities
- Smart buildings

The Cisco solutions used by Deloitte create a true cross-architectural framework, tightly integrated between collaboration, security, and industrial networking. For example, Cisco sensors collect data across any type of network or infrastructure, and the information feeds into artificial intelligence and business intelligence processing by Deloitte.

Deloitte brings deep industry knowledge in all functional areas of the supply chain to help organizations transform to a digital supply network. They create strategic roadmaps, build and deploy the solution, and operate across multiple types of environments.

Use cases

The following use cases from [Cisco Portfolio Explorer](#) are encompassed within the Smart Factory @ Wichita.

Cisco use case	Outcomes delivered	Key Cisco technology / solutions
Industrial Security Foundation	Improved safety and compliance, minimize damages, and integrated security features	<ul style="list-style-type: none"> • Cisco Cyber Vision • Cisco Identity Services Engine • Cisco SecureX™ and Cisco Secure Firewall
Remote Operations	Increases in worker productivity and equipment usage, reduced repair times, and lower travel	<ul style="list-style-type: none"> • Cisco Webex® • Cisco Cyber Vision • Cisco Identity Services Engine • Cisco SecureX and Cisco Secure Firewall
Asset Visibility and Control	Improved use of assets with greater productivity, reduced waste, and increased worker safety	<ul style="list-style-type: none"> • Cisco Industrial Asset Vision • Cisco Wireless

Cisco Industrial Ethernet Switches, Industrial Routers, and Industrial Wireless Access Points

Experience the digital supply network in action

Reach out to your Deloitte or Cisco seller to schedule your visit to the Smart Factory @ Wichita.

smartfactory-wichita@cisco.com