Smart Factories

Scale your smart manufacturing capabilities



Smart Factories



How it works

Our innovative solutions help you build a connected shop floor supported by the following:

- Industrial data collectors
- Edge computing
- Operational technology cybersecurity
- Manufacturing execution systems and manufacturing operation management
- Supply chain and logistics
- Smart manufacturing and I4.0
- Al quality inspection
- Digital twins

We offer full lifecycle support—from consulting assessments and strategy development to roadmaps and business case scenarios.



Strategies and solutions

This solution provides the following:

- A single data model for analysis across a range of operational use cases
- Cloud-based platform with a variety of connectors that support enterprise data and IT integration
- Integration with existing IT security and access tools to improve user experiences
- Common process modeling using OPC Unified Architecture information standards

EVIDEN

Smart Factories

Eviden helps address manufacturing challenges with a tailored approach to building smart manufacturing capabilities that maximize value.

What We Offer

Our innovative solution portfolio can help you build a connected shop floor supported by the following technologies:

Industrial data at scale

- Standardized data models that unlock immediate data insights
- Unique data source policies that support multiple use cases
- Universal connection policies that achieve immediate value with consistent data models

Digital twins

- Ability to create virtual replicas of products and systems
- Monitoring, predictive maintenance, and performance optimization
- Improved efficiency, cost reduction, and extended lifespans for physical assets

Secure industrial data and

cybersecurity tools

- Governance, risk, and compliance
- Operational
 technology security
- Identity and access
 management
- Zero-trust consulting
- Cloud security consulting
- Penetration testing
- Incident response
 consulting

Edge computing

- Advanced computing powers for any workload
- BullSequana Edge Devices that provide fast, on-site inference
- Edge vertical solutions, including edge infrastructure and computer vision with AI inference at the edge

Quality inspectors

- Enhanced industrial data with Al-based quality indicators
- Comprehensive controls for assembly, surface defects, welding, inspection, and cosmetic quality across various manufacturing processes using advanced technologies like augmented reality, x-ray testing, and digital twins



Smart Factories differentiators

Eviden provides specialized industry 4.0 consulting and technology solutions across offering components.

Industrial data at scale

We provide a strong foundation for crossplant scaling of Eviden Smart Factory. We model industrial processes, not equipment, to standardize to and scale across plants.

360-degree shop floor analytics

Our digital twin solutions help unlock more advanced cause-to-effect analysis and seamlessly connect operational technology data to your IT landscape, including manufacturing execution systems (MES), enterprise resource planning systems (ERP), and maintenance schedulers.

Full security integration

Our cybersecurity solutions integrate multiple levels of segmentation, converged networking, secure SD-WAN, and comprehensive multicloud and hybrid-cloud security into a single platform to simplify operations, increase security, and reduce costs.

Al-powered edge innovation

We harness the latest technological innovations for its AI-powered quality inspections to support early identification of defects and real-time alerts across use cases.

Quality and flexibility

Our flexible solutions adapt seamlessly to industrial infrastructure and policies, resulting in immediate data insights through standardized models and promoting widespread data usage.



A virtual, connected model for a British multinational pharmaceutical company

Our digital twin provides a 360-degree view of products and processes to drive business outcomes and mitigate production challenges.

Challenge

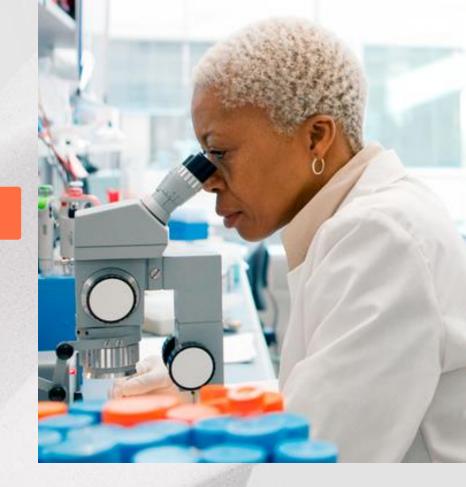
Solution

This company faced the following challenges:

- Delayed time to market due to numerous complex processes, physical experiments, and staff trainings
- Limitations on operational excellence due to complex quality criteria, compliance regulations, and high maintenance costs
- Cost inefficiencies due to raw materials and batch waste, research and development costs, and out-of-spec products

Eviden's fully integrated approach transformed our client's manufacturing facilities with the following solutions:

- A digital twin model that simulates the chemical mixing process, allowing multiple variants to be tested to ensure the right combination in live production
- A collaborative approach that drew on our IT and digital solutions expertise
- Physical processes replicated as virtual processes
- Testing live data against the control to measure KPIs



Outcomes

Reduced development lifecycle and costs Data-driven process design and optimization Virtual training for engineers and operators Operational excellence, guaranteed product quality, and more robust processes with advanced control strategies

Continuous process verification, in-line quality control, real-time performance monitoring, and process visualization Higher yield through reduced raw material waste and preventive maintenance



Contact Us

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