OVHcloud

Operational Resilience in Manufacturing

Building Sovereign, AI-Ready and Cost-Controlled Digital Operations



Executive Summary

Manufacturing operations are becoming increasingly dependent on digital infrastructure. ERP systems, MES platforms, industrial analytics, AI-driven operations and connected supply chains are now directly tied to production continuity.
What was once considered “IT infrastructure” has become part of operational performance itself.

At the same time, manufacturers are facing a new wave of pressure: cyber threats, operational disruption, rising cloud costs, compliance requirements, geopolitical instability, and accelerating AI adoption.

The result is a fundamental shift in priorities. Manufacturers are no longer looking only for scalability or cloud adoption.

They are looking for: operational resilience, infrastructure control, predictable economics, sovereignty, and hybrid flexibility.

The next generation of manufacturing leaders will not necessarily be the companies with the most technology.
They will be the companies able to keep operations continuously available, adaptable and under control.

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The 5 structural shifts reshaping manufacturing IT

Manufacturing infrastructure strategy is changing rapidly. Five structural trends are accelerating transformation across the industry

1

Operational resilience becomes a production KPI

As downtime now directly impacts production continuity, deliveries and customer commitments

European manufacturers increasingly require:

- multi-site resilience,
- disaster recovery,
- low-latency architectures,
- continuous operations.

Cloud repatriation becomes cost and control discipline

The first wave of cloud adoption gave manufacturers speed and scalability. The second wave is about control.

We are observing reassessing cloud strategies due to:

- rising costs,
- vendor lock-in,
- governance complexity,
- unpredictable economics.

2

Industrial AI Requires Infrastructure Close to Data

AI adoption is accelerating across:

- predictive maintenance,
- anomaly detection,
- quality inspection,
- digital twins.

AI initiatives often fail when infrastructure and governance are disconnected from operational environments

3

4

Digital Sovereignty Moves Into Manufacturing

Sovereignty is moving from a public-sector topic into a strategic manufacturing requirement. Manufacturers are increasingly concerned about intellectual property protection, industrial data governance, geopolitical risk, supply chain exposure and regulatory compliance.

Data is becoming anessential part of a manufacturer's industrial competitive advantage

Virtualization & Hybrid Modernization

Manufacturers cannot replace legacy infrastructure overnight. ERP, MES, PLM, virtualized platforms and industrial applications need to coexist with cloud-native services, AI workloads and modern data platforms.

According to IDC's 2026 Manufacturing FutureScape AI, data and cloud innovation are reshaping factories, supply chains and the industrial workforce. The factory of the future will run on the right infrastructure mix.

5

Why operational resilience is becoming a competitive advantage

Modern manufacturing depends on continuous digital availability.
Even short interruptions can impact production scheduling, warehouse operations, ERP workflows, supplier coordination, AI-driven automation.

As manufacturing becomes more connected, resilience moves from technical architecture to business strategy. This is changing how organizations design infrastructure.

Instead of isolated systems, manufacturers are adopting:

- hybrid cloud architectures,
- multi-datacenter resilience
- distributed workloads
- integrated backup and recovery
- high-availability platforms

On top of recovering from disruption, the objective is preventing disruption from impacting operations in the first place.

CUSTOMER EXAMPLE:
ARCADE BEAUTY

The Challenge: *consolidate global manufacturing IT infrastructure while supporting ERP and production systems across multiple sites.*
The Outcome: *improved operational scalability, resilience and infrastructure efficiency for industrial operations.*

Sovereignty, Security and Industrial Control

Manufacturers are increasingly treating infrastructure sovereignty as an operational requirement rather than a regulatory topic.

Industrial environments now manage intellectual property, production data, AI models, supplier ecosystems and sensitive operational workflows.

At the same time, European regulations are increasing pressure around cybersecurity, AI governance, data control and operational resilience.

Frameworks such as NIS2, the AI Act, the Cyber Resilience Act, and the EU Data Act are accelerating the need for transparent and controllable infrastructure models.

The Sovereign Manufacturing Control Stack



CUSTOMER EXAMPLE:
SENSEERING

The Challenge: *Enable manufacturers to securely exchange and monetize industrial production data across supply chains.*

The Outcome: *Creation of a scalable and secure industrial data platform supporting connected manufacturing ecosystems.*

Industrial AI requires a different infrastructure approach

From experimentation to operational deployment

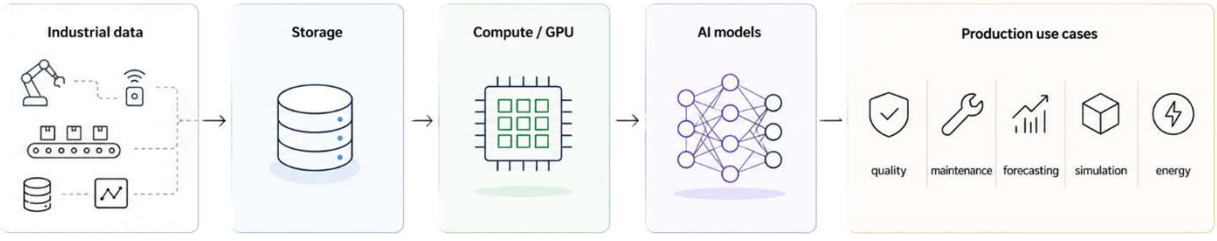
The most impactful use cases are increasingly connected to production environments: predictive maintenance, quality inspection, anomaly detection, energy optimization & digital twins.

However, many AI projects struggle because data is fragmented, latency is too high, governance is unclear and infrastructure is disconnected from operations.

Industrial AI performs best when compute, data, and production systems remain closely connected.

We observe an increasing demand for:

- GPU-ready infrastructure
- sovereign AI platforms
- low-latency architectures
- scalable data environments
- hybrid AI operations.



Cost control and hybrid modernisation

After a first wave of adoption many manufacturers are rethinking cloud strategy.
Their objective is to place each workload where it makes most sense:

- public cloud for flexibility
- private cloud for control
- bare metal for performance
- hybrid models for legacy integration

This is where infrastructure choice becomes strategic.

What is now vital is to achieve predictable costs, transparent pricing, workload portability and the ability to modernise without disrupting existing systems.

OVHcloud helps industrial companies build hybrid architectures combining public cloud, hosted private cloud, bare metal, storage, backup and managed services, allowing them to to modernise at their own pace while maintaining operational and financial control.

Workload	Best-fit infrastructure
ERP / MES	Hosted Private Cloud / Bare Metal
Analytics / AI	GPU / Public Cloud / Object Storage
Web / customer apps	Public Cloud / Kubernetes
Backup / archive	Object Storage / Backup
Legacy systems	Hybrid / Hosted Private Cloud

From Infrastructure Choice to Industrial Advantage

CIOs in manufacturing are being asked to do more than modernise IT. They need to protect production continuity, reduce technology dependency, control infrastructure costs and run AI-driven operations without slowing down the business.

This requires a trusted cloud foundation designed for resilience, sovereignty, performance and flexibility.

With OVHcloud, industrial organizations can run business-critical systems, support hybrid modernization, protect sensitive data and scale new AI use cases with greater control.

Build your next industrial cloud foundation

Explore how OVHcloud can help your organization:

- Strengthen business continuity and resilience
- Modernise hybrid infrastructure at your own pace
- Keep strategic industrial data under control
- Scale data-intensive and AI-ready workloads
- Improve cost predictability and infrastructure freedom

Next steps

- Assess your infrastructure readiness for AI, resilience and sovereignty.
- Start building a more resilient, sovereign and AI-ready manufacturing platform.

How OVHcloud is accelerating industrial cloud transformation

OVHcloud is helping industrial companies modernize their infrastructures and fully leverage the potential of Cloud and guarantee reversibility, best price/ performance and cost transparency.

Thanks to its Ecosystem it supports connected factories, supply-chain continuity, automation, data analytics and secure hybrid infrastructures.

Besides this OVHcloud can help manufacturers address four priority areas:

- cloud cost control and optimization
- cloud migration
- legacy application modernization and virtualization evolution
- high availability with business continuity.

OVHcloud's trusted European cloud platform, helps manufacturers build infrastructure that is resilient, cost-efficient, sovereign and ready for data-intensive and AI-driven operations.

Get your assessment on your cloud infrastructure today.





OVHcloud.com

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