EVOLVE TOWARDS MORE INTELLIGENT MANUFACTURING

with **Manufacturing Operations Management**
from Capgemini and Dassault Systèmes

A traditional approach to manufacturing focused purely on efficiency isn't enough to unlock forward thinking capabilities such as AI, IIoT and AR/VR. The factory must evolve using smart technologies, so that it can become more intelligent and thrive in an increasingly competitive digital age.

That's why Capgemini and Dassault Systèmes have come together. Our Manufacturing Operations Management (MOM) capabilities help you move beyond one-off proof-of-concepts focused on efficiency. We provide you with a central backbone for connecting, monitoring, and controlling your manufacturing operations end-to-end, to help you evolve towards achieving manufacturing intelligence using a succession of smart use cases.

Together we unlock value and help you to transform

Dassault Systèmes

Software solutions that allow manufacturers to take control of their production and operations.

Capgemini

Strategy and solutions aligned to business objectives to help you transform.

Together we help you overcome a number of challenges, to help you evolve towards becoming an intelligent enterprise:

Data siloes

Stand-alone solutions create multiple data siloes which prevent actionable insights to be gained.

System connectivity

The inability to connect between physical factories and multiple systems makes data collection complex and costly.

Application inflexibility

Point solutions are closed and inflexible, getting in the way of continuous learning and evolution.

Strategic alignment

A lack of clear vision and step-by-step strategy make evolving towards becoming more intelligent difficult.

IT ALL STARTS WITH SETTING A CLEAR VISION

Market leaders know they must be proactive about evolving their manufacturing operations. That's why we set out a clear vision aligned to business objectives to help you reach a number of horizons and overcome challenges along the way.

The manufacturing journey towards intelligence

HORIZON 1: DIGITALIZED
Reduce waste and line downtime and use data to drive continuous quality improvement and more robust compliance.

HORIZON 2: CONNECTED
Create centralized visibility and control for disparate processes and data flows, and connect the shop floor to ERP, PLM, and beyond.

HORIZON 3: OPTIMIZED
Optimize operations using smart technologies to drive greater value, and leverage simulation and digital twins for future innovation.

WE DELIVER TWO MANUFACTURING SOLUTION PILLARS

We deliver on this vision by creating a robust and agile technology backbone by modernizing your MES. This foundation then allows you to identify and develop use cases that progressively embed intelligence into the fabric of your operations.

MES modernization

Modernize the MES and surrounding tech stack to create an agile foundation that extracts the most value from your data.

Manufacturing intelligence

Roadmap and implement a succession of use cases to progressively embed intelligence into your business.

MES modernization

Using Dassault Systèmes' 3DEXPERIENCE platform we modernize your MES by turning it into an agile, data-driven platform that extracts value from across your manufacturing ecosystem.

We add value at all levels of your tech stack:

CONNECTIVITY
Data collection and connectivity

We help you overcome the complexity of manufacturing connectivity including ongoing management governance and related data using our IIoT tools and expertise.

INSIGHTS
Data management and analytics

We integrate and optimize your existing MES with intelligent platform capabilities using the latest data management and advanced analytic techniques.

APPLICATIONS
Business processes and collaboration

We leverage Dassault Systèmes' software along with our own IP to support the rapid and iterative development of role-specific applications to improve processes and collaboration.

Manufacturing intelligence

Using the power of Dassault Systèmes' DELMIA Apriso, we help you evolve across all aspects of manufacturing using innovative use cases that progressively embed intelligence into your operations.

Assets: Evolve from asset monitoring to simulation and digital twins.

Asset reliability
Ensure critical equipment in the factory is up and running correctly.

Asset line performance
Maximize asset throughput, both in volume and quality, while optimizing efficiency.

Overall flow optimization
Optimize physical flows, within the factory and across the supply chain.

Modelling and simulation
Advanced modelling and digital twins help optimize assets and processes.

Increasing value ⟶

Production: Evolve from production execution to advanced production management.

2D/3D work instruction
Provide the right information and documents to production users.

Single source of information
Improve the user experience using a unified cockpit with live data.

Time tracking
Compare planned times with actual times to reduce tedious non-value adding tasks.

Operation optimization
Respond to workload, capacity and unexpected, events as triggers to optimize operations.

Increasing value ⟶

Quality: Evolve from quality detection to predicting and addressing quality defects.

Quality defect tracking
Track defects by executing quality controls and quality plans.

Containment management
Detect and isolate non-conformant products early during production and before shipment.

Quality workflow automation
Manage end-to-end quality workflows from detection through to resolution plan.

Predictive quality defects
Identify the probability of default and root cause analysis using advanced methods.

Increasing value ⟶

Logistics: Evolve from a focus on material requirements to more advanced inventory management.

Material requirements
Ensure raw materials are available and delivered to the right workstation.

Material flow management
Synchronize physical and IT flows, within the factory and across the supply chain.

Optimized material flow
Facilitate cross-docking, just-in-time, sequencing using connected AGV, conveyors etc.

Inventory level optimization
Optimize in-stock inventory value and volume with built-in strategies for replenishment execution.

Increasing value ⟶

WHAT SETS CAPGEMINI APART?

Leading engineering partner
End-to-end technology, engineering and transformation expertise.

Bespoke industry solutions
Deep domain industry knowledge informs bespoke industry-specific solutions.

Unique execution method
Results-oriented method delivers with speed, transparency and best-practice governance.

Proprietary accelerators
Accelerators, frameworks, and 'factories' reduce time to value, with less risks.

READY TO TAKE THE NEXT STEP IN YOUR JOURNEY?

For more information, please contact our experts at
digitalcontinuity.global@capgemini.com

About
Capgemini

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of 270,000 team members in nearly 50 countries. With its strong 50 year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fuelled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2020 global revenues of €16 billion.

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