Atos Smart Factory Say Goodbye to Disconnected Assets, Processes and Plants



Smart factory - A US\$324 billion market by 2032 globally

Atos offers a comprehensive portfolio solutions for Smart Factory

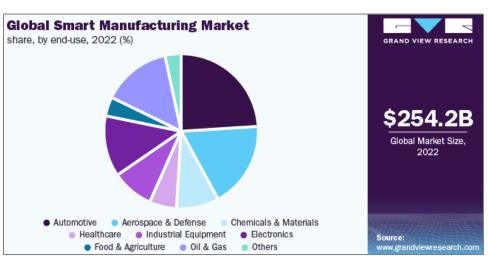


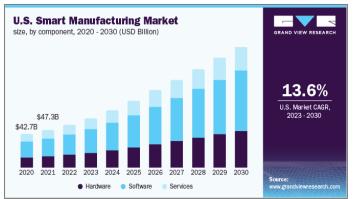
Only 30% of Industry 4.0 programs are really scaling today (McKinsey)

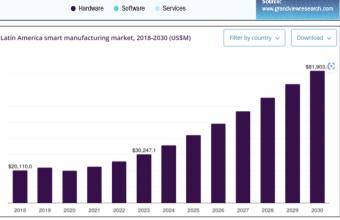


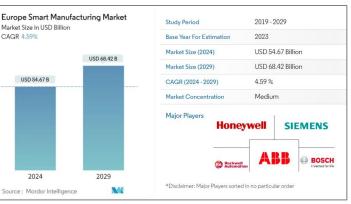
Smart factory - A US\$324 billion market by 2032 globally from \$254

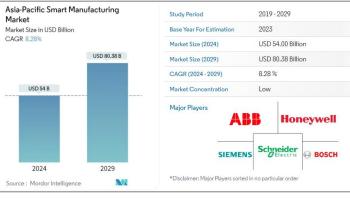
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Smart Factories industry challenges

An increasingly complex landscape affects performance targets.

Manufacturing companies face critical challenges, including cost inflation, market volatility, supply chain disruptions, skills gaps, an aging workforce, increasing regulations, and the need to reduce carbon dioxide emissions—making it more challenging than ever before to deliver the sustainable productivity improvements required to maintain profitability and investor returns.



17%

increase in input costs compared to pre-covid levels, despite recent decrease in price inflation on materials, energy, and labor



77%

of mid-sized manufacturing businesses facing persistent supply chain disruptions due to ongoing market volatility and unforeseen events



34%

decrease in profit earned over five years on new products that are six months late to market



22%

of manufacturers lacking timely data to operate resilient supply chains



Smart Factories offerings

Atos provides specialized industry 4.0 consulting and technology solutions across offering components

MES/MOM Devlopment, Integration and Migration

We provide a strong integrated solution for Manufacturing Operations (MOM) and Execution Systems (MES) We model manufacturing processes, and interface to third party applications on various cloud platforms to 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), PLM, SCM, and maintenance schedulers.

Full security integration

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

Al-powered edge innovation and Industrial Data at Scale

We provide a strong foundation for cross-plant scaling. We model industrial processes, not equipment, to standardize to and scale across plants.

Thus, we harness the latest technological innovations for its AI-powered quality inspections & alerts.

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.



Smart Factories offerings

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

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 o 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 Al inference at the edge

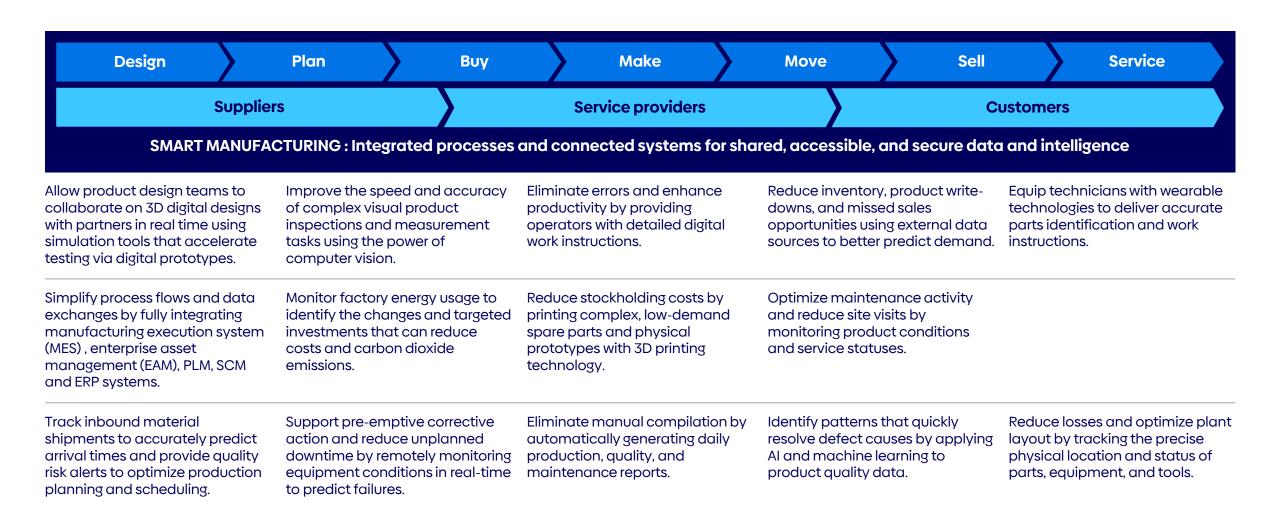
Quality inspectors

- Enhanced industrial data with AI-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 manufacturing outcomes - how we do it?

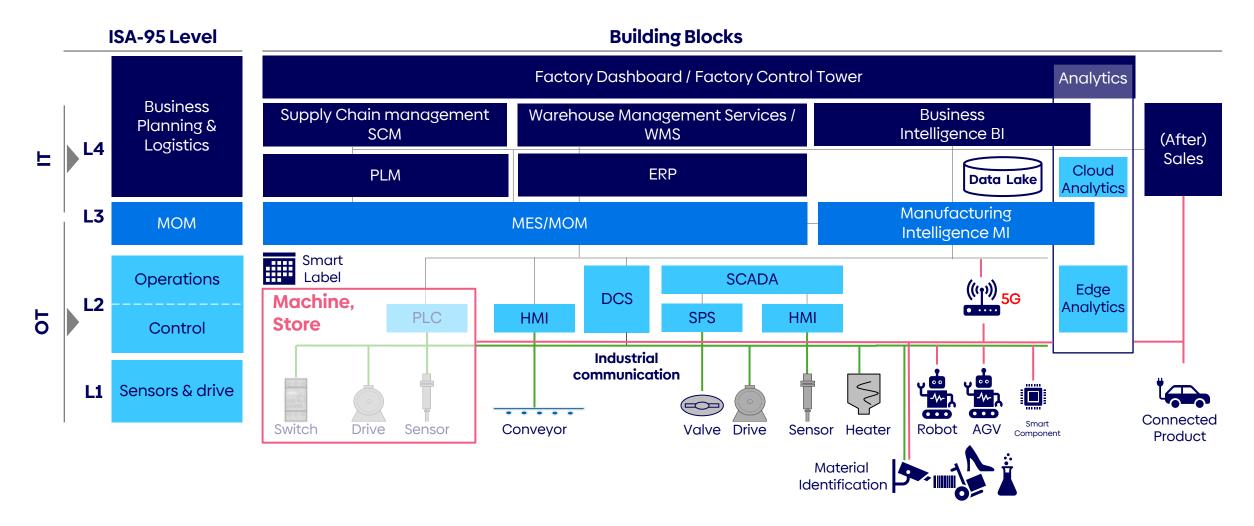
Atos Smart Factories generates business gains across the value chain and partner ecosystem.





How we do it?

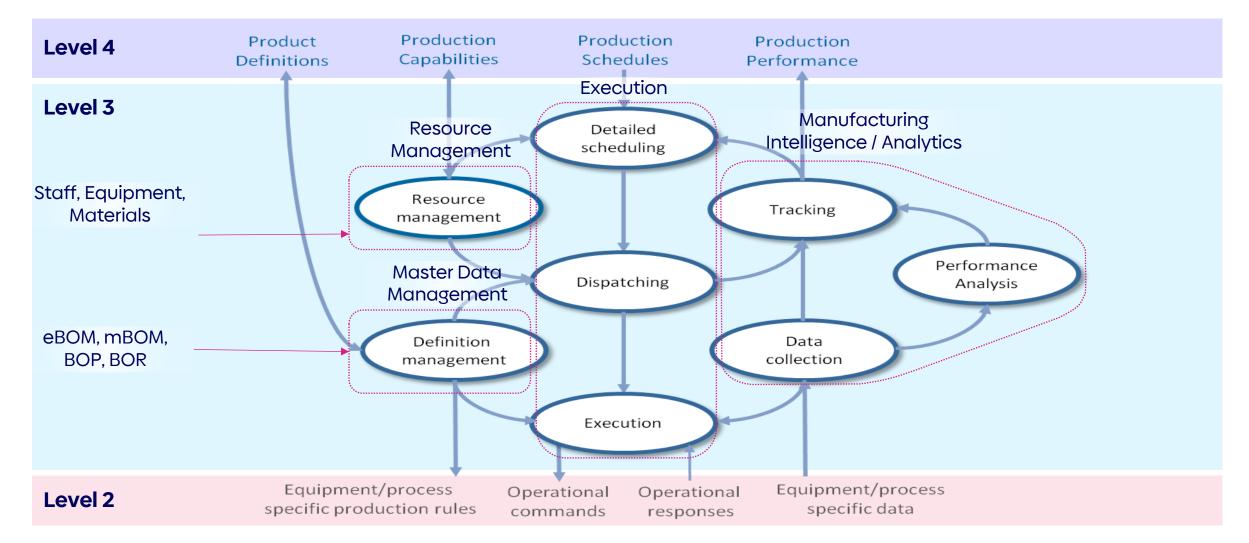
Starting Point - Generic Reference Architecture





ISA95 Manufacturing Operations Management

ISA-95 Level 3 Activity Model for Production Operation





Smart Factories benefits

Businesses can transform performance through the power of smart manufacturing

Leading companies rely on **smart manufacturing capabilities** to address the challenges of today's complex digital landscape by becoming leaner and more responsive to change. And it's working — **companies investing in smart manufacturing capabilities achieve a 26% higher level of profitability than their peers.***

The value of Atos's support is in the numbers. We have helped our clients achieve the following:

15-20%

reduction in inventory-holding costs

15-30%

increase in labor productivity

30-50%

reduction in machine downtime

10-30%

throughput increase

85%

improvement in forecasting accuracy

10-20%

cost-of-quality improvement



^{*}Source: "Capturing the True Value of Industry 4.0," McKinsey Report, 2022.

Smart Factories - Industry 360-degrees shop floor analytics

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

Our innovative Industry 360-degree shop floor analytics solution portfolio can help you build a connected shop systems:

Our Industry 360-degree shop floor analytics drivers:

In today's world of technology, AI, Machine Learning, and Big Data are what we consider 'the Big Three', along with 5G connectivity solutions enabling a new wave of intelligence, autonomy, and visibility.

We bring our unique connected Assets, Processes and Plants solutions transforming manufacturing operations, processes, providing end-to-end visibility, improving efficiency, reducing cost, predictive maintenance, real-time decision making, agile planning & scheduling, and continuous adaptation.

They Trust us!



Truck Manufacturer

Built seamless integration between ERP and MES, enabling the tracking of 100+ KPIs with Cloud-based actionable Insights.



Built seamless integration between ERP, MES and shop floor for cloud-based real-time plant and warehouse visualization, EWM collaboration, OEE and plant maintenance.



European Engineering Materials Manufacturer

Packing line SAP ME/MII implementation, with ERP integration, routing and BOM integration, real-time plant and warehouse visualization, EWM collaboration, OEE, plant maintenance and cloud-based data archive and analytics..



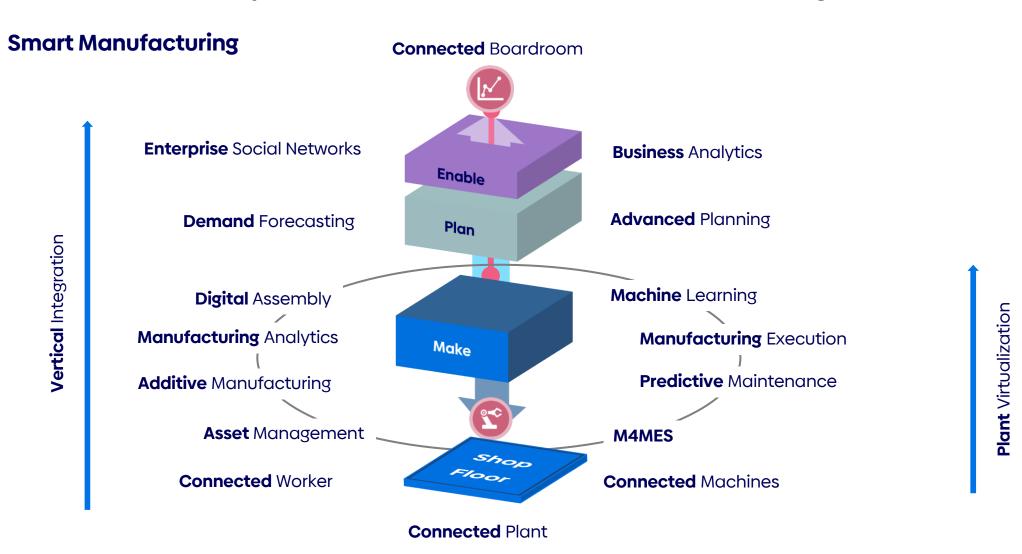
Multinational Manufacturing Company

MS Azure based data lake to support functionality like part location, SAP shipment generation, as well as remote inspection, test and acceptance.



Industry-360 shop floor analytics solutions

Integration solution encompasses the vertical solutions within a customer organization





Thank you

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