

Light's Out Manufacturing: The Era of Autonomous factories



Digital Factories



Industrial IoT



Robotics & Automation



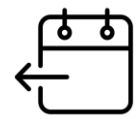
Data Sciences AI/ML



From Digital to Autonomous Factories

Pioneering the next evolution in manufacturing excellence. Vegam guides industry leaders through the transformation from digital operations to fully autonomous factories, combining decades of expertise with cutting-edge innovation in AI, robotics, and self-optimizing systems.





Yesterday: Manual Operations

Paper-driven processes with limited automation capabilities. Heavily dependent on human oversight for quality control, maintenance, and operational decisions.



Today: Digital Factories

Connected operations with data-driven insights. Digital tools enable enhanced visibility but still require significant human intervention for optimization and decision-making.



Tomorrow: Autonomous Factories

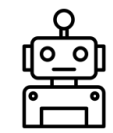
Self-optimizing systems powered by AI and advanced robotics. Minimal human intervention required as facilities automatically adapt to changing conditions and requirements.





Key Technologies Driving the Shift




The foundation of autonomous factories is built on four interconnected technological pillars that work together to create self-sustaining manufacturing ecosystems.

 **Adaptive Robotics**
Flexible, collaborative systems that reconfigure based on production needs. These robots adapt to changing conditions without requiring reprogramming.

 **Generative AI**
Advanced algorithms that optimize product design, workflow efficiency, and process parameters in real-time, continuously improving operations.

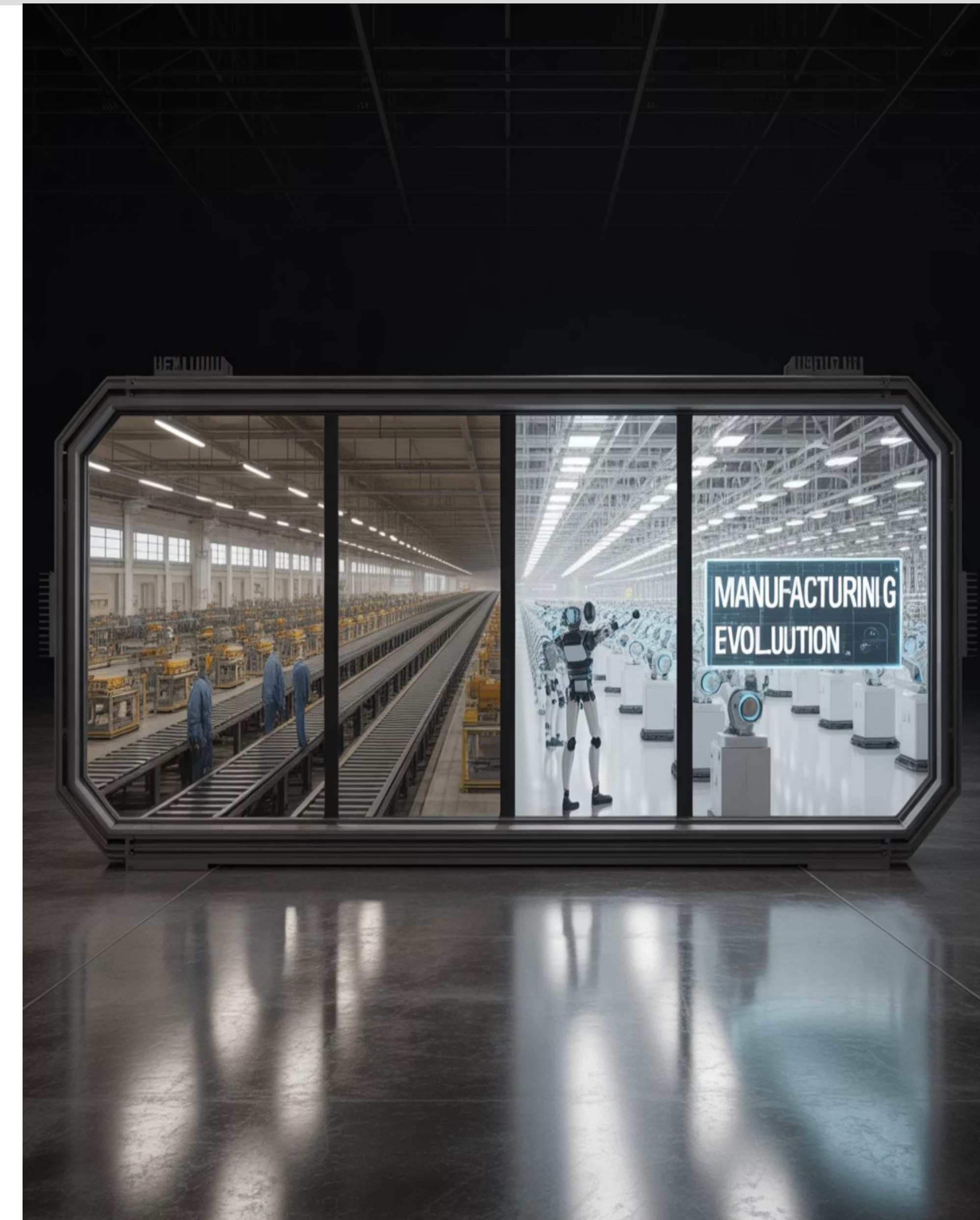
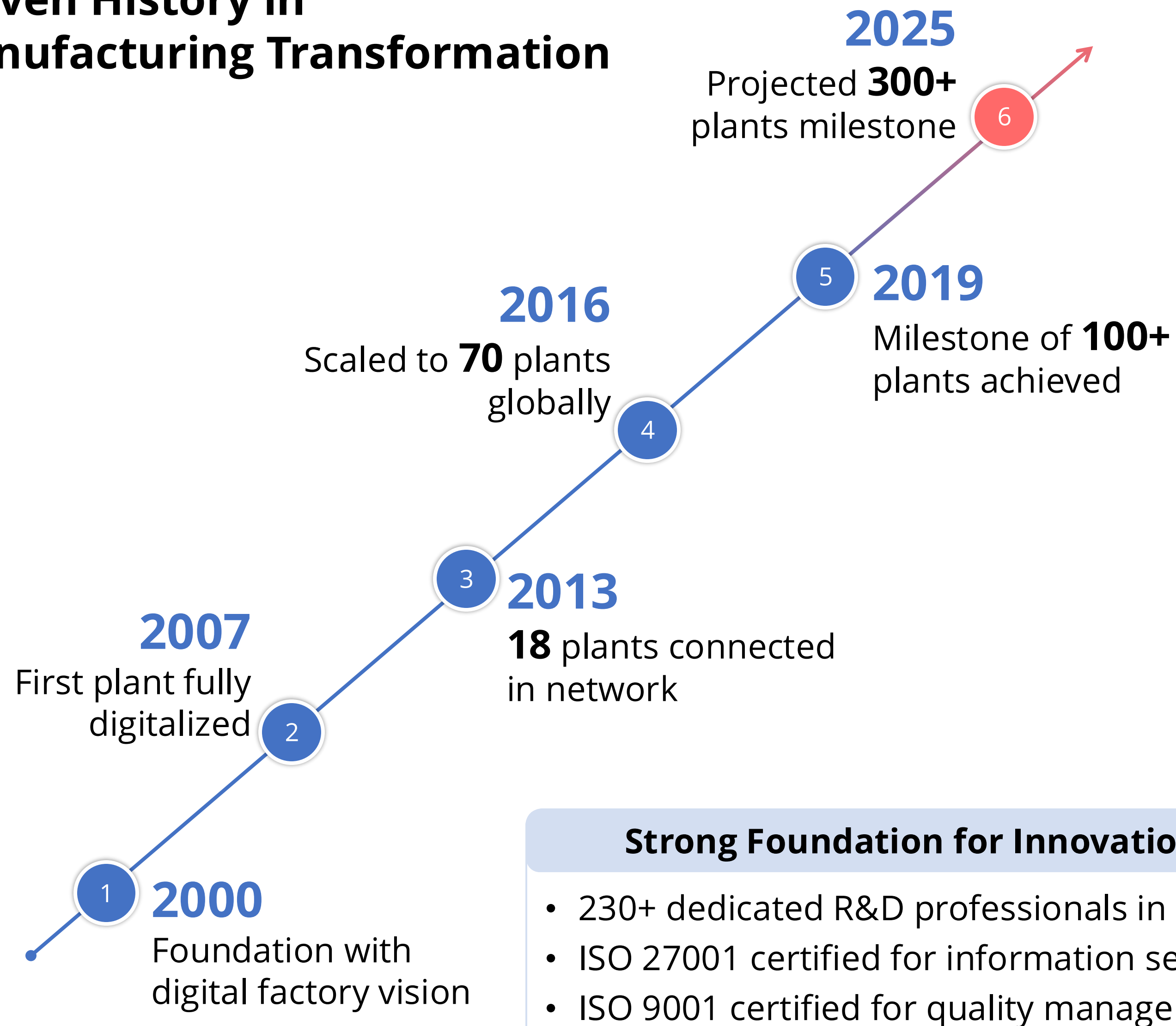
 **Cognitive Interfaces**
Natural human-machine interaction systems that allow intuitive control and monitoring through voice, gesture, and contextual awareness.

 **Self-Optimizing Systems**
Predictive, resilient networks that identify potential issues before they occur and implement corrective actions autonomously.

Vegam Journey



Proven History in Manufacturing Transformation



Global Partnerships & Big Wins



Strategic Partnerships

Trusted Long-Term Partner to Global Leaders in Chemicals & Manufacturing



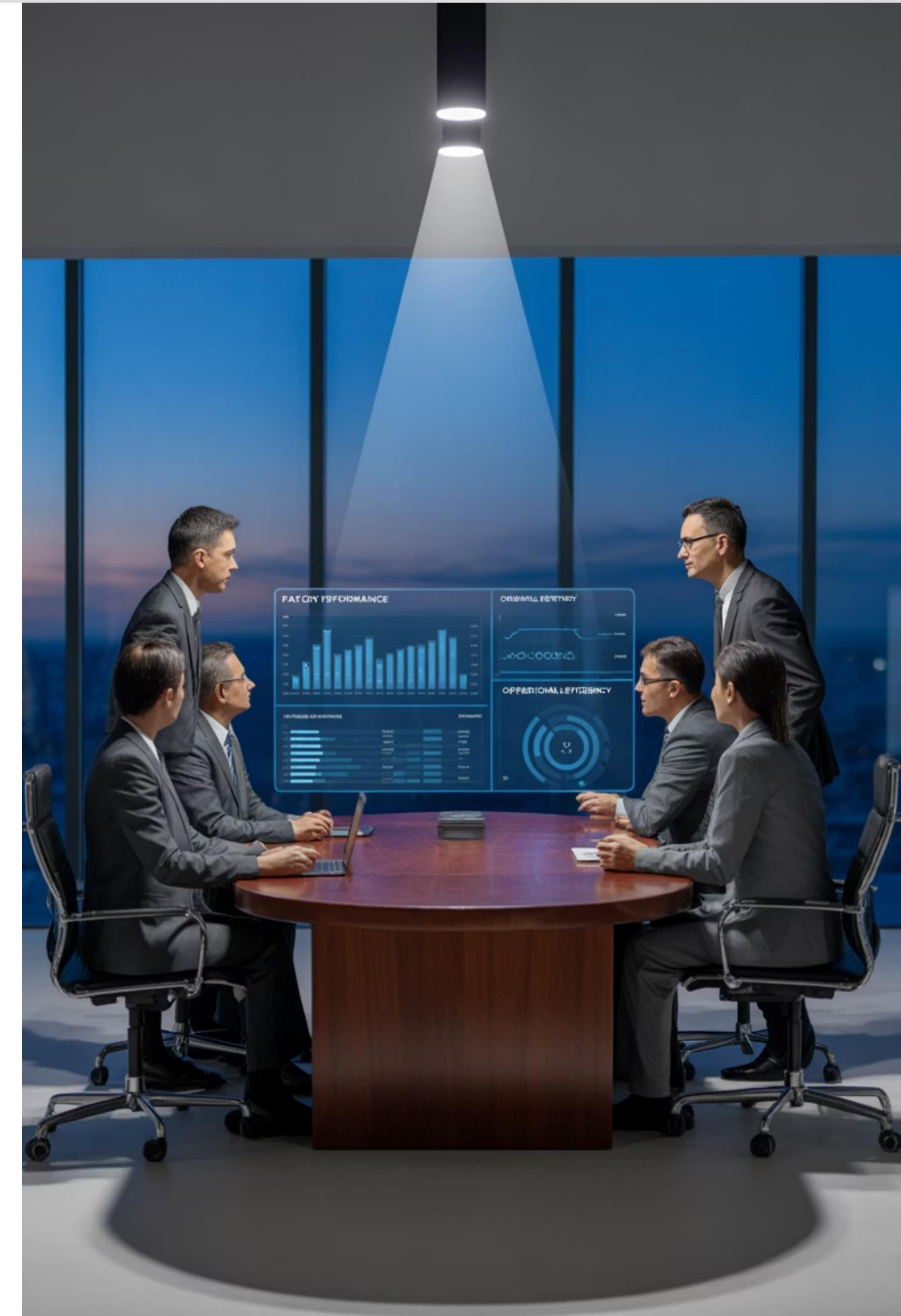
Implementation Excellence

Comprehensive digital manufacturing operations management tools with proven track records of delivering sustained improvements across facilities worldwide.

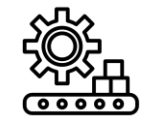


Continuous Support

24/7 global support infrastructure ensuring optimal operations and rapid troubleshooting for mission-critical manufacturing systems across time zones.



Vegam's Offerings



Manufacturing Operations Management (MOM)

End-to-end digitalization of shop floor operations with real-time visibility and control



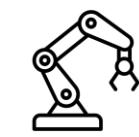
Global Operations Management (GOM)

Cross-facility optimization with standardized metrics and centralized control capabilities



AI, ML & Generative AI Integration

Advanced analytics that transform data into actionable insights and autonomous decisions



Robotics & Smart IIoT

Seamless integration of physical systems with digital infrastructure for autonomous operations



Unified KPIs

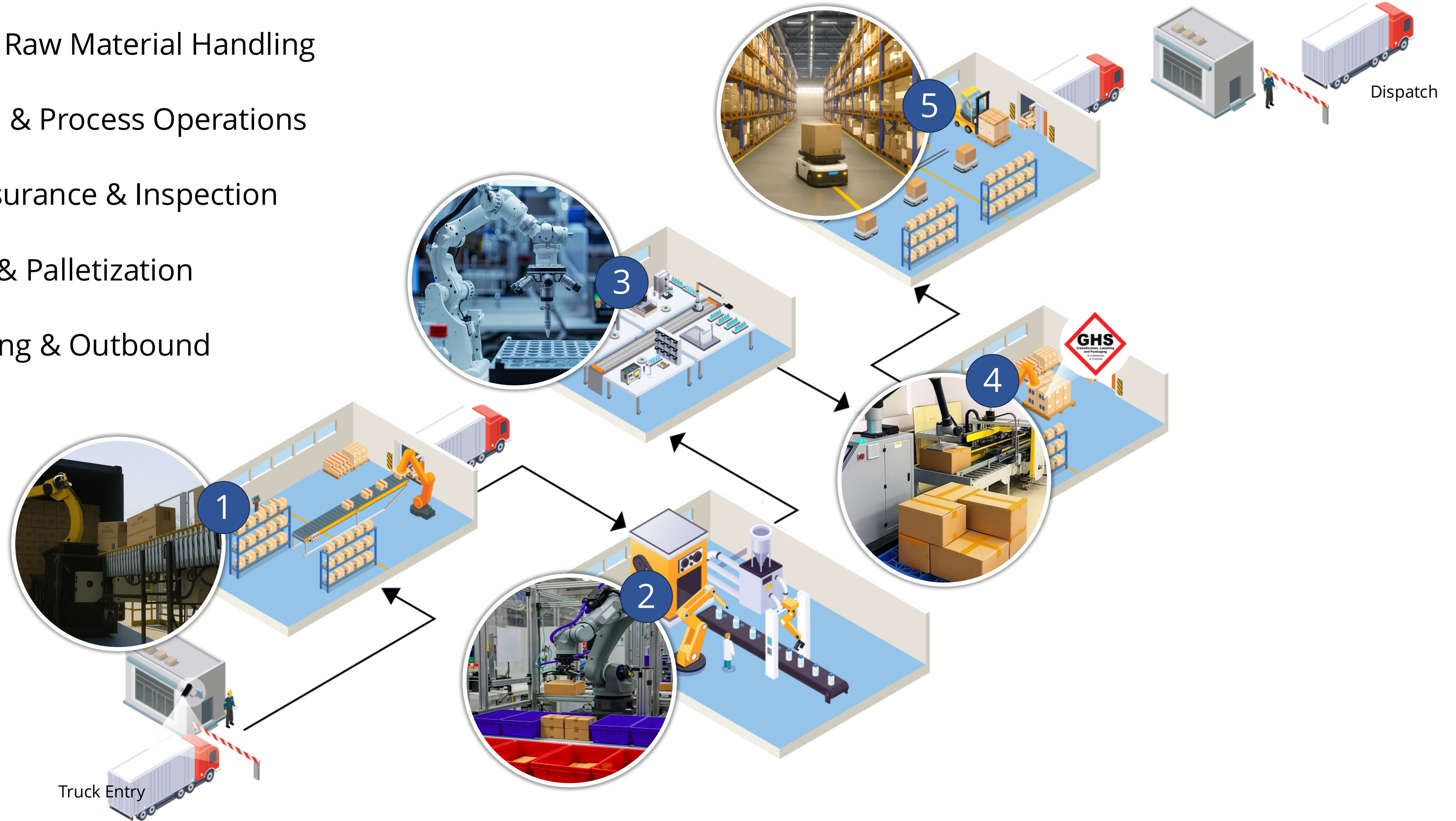
Standardized performance metrics across regions and plants for true global optimization



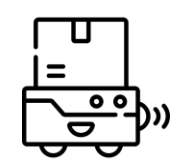
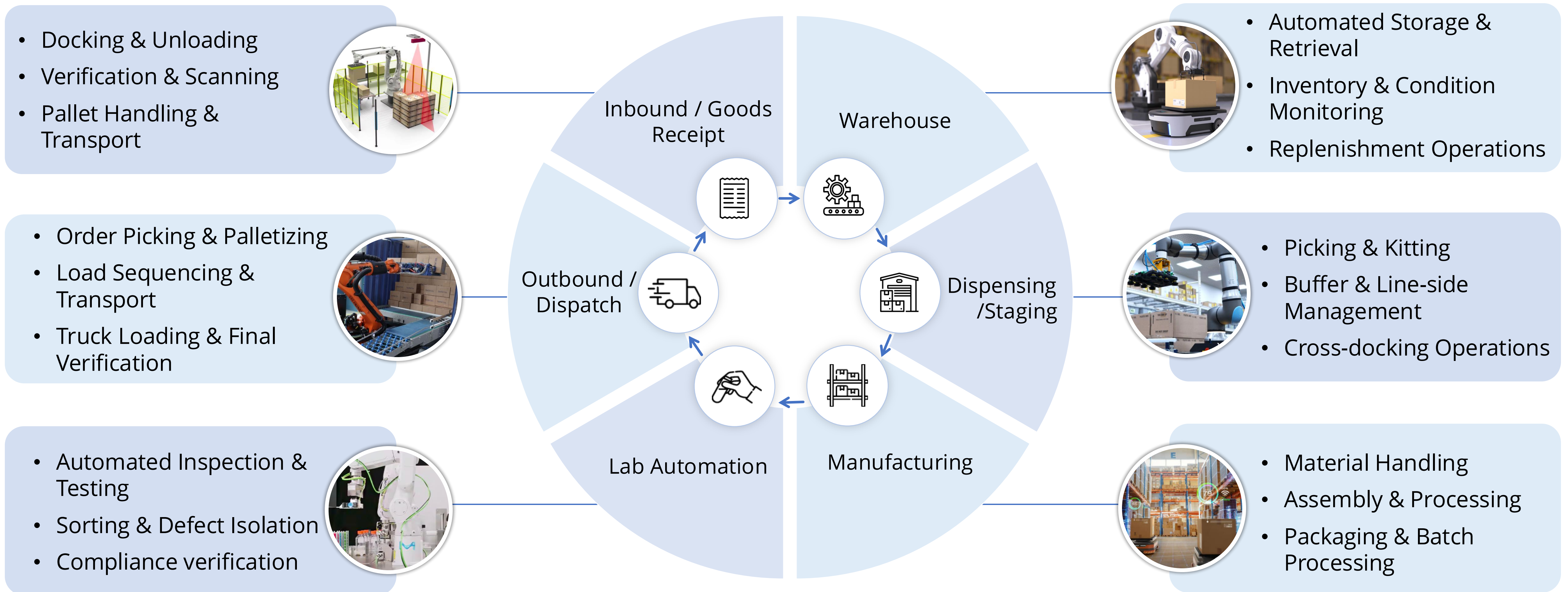
Our Integrated Shop Floor Automation Portfolio



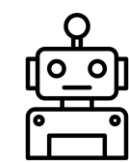
- 1 Inbound & Raw Material Handling
- 2 Production & Process Operations
- 3 Quality Assurance & Inspection
- 4 Packaging & Palletization
- 5 Warehousing & Outbound



Our Integrated Shop Floor Automation Portfolio



Autonomous Material Handling and transport



Collaborative Robotics (Cobots)



AI Driven Control & Orchestration



Smart inspection and Quality Control

Why Vegam?



Core Enterprise Value Drivers



Modular & Scalable

Designed to grow with enterprise needs.



Digital Transformation Ready

Roadmap toward Industry 4.0.



Unified Data Management

Integrated data to boost innovation.



Complete Ownership

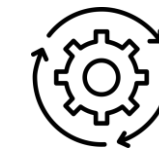
On-premise deployment with full control.



Customized Optimization

Proprietary algorithms for competitive edge.

Future-Ready, Autonomous Factories



Autonomous Operations

Self-driven execution across plants & processes.



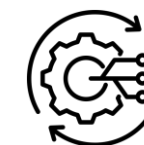
Proactive Risk Mitigation

AI-enabled robotics predict & prevent hazards.



Hyper-Scalable Manufacturing

Intelligent orchestration across geographies.



Continuous Optimization

Real-time workflow, energy & downtime efficiency.



Transformational Growth

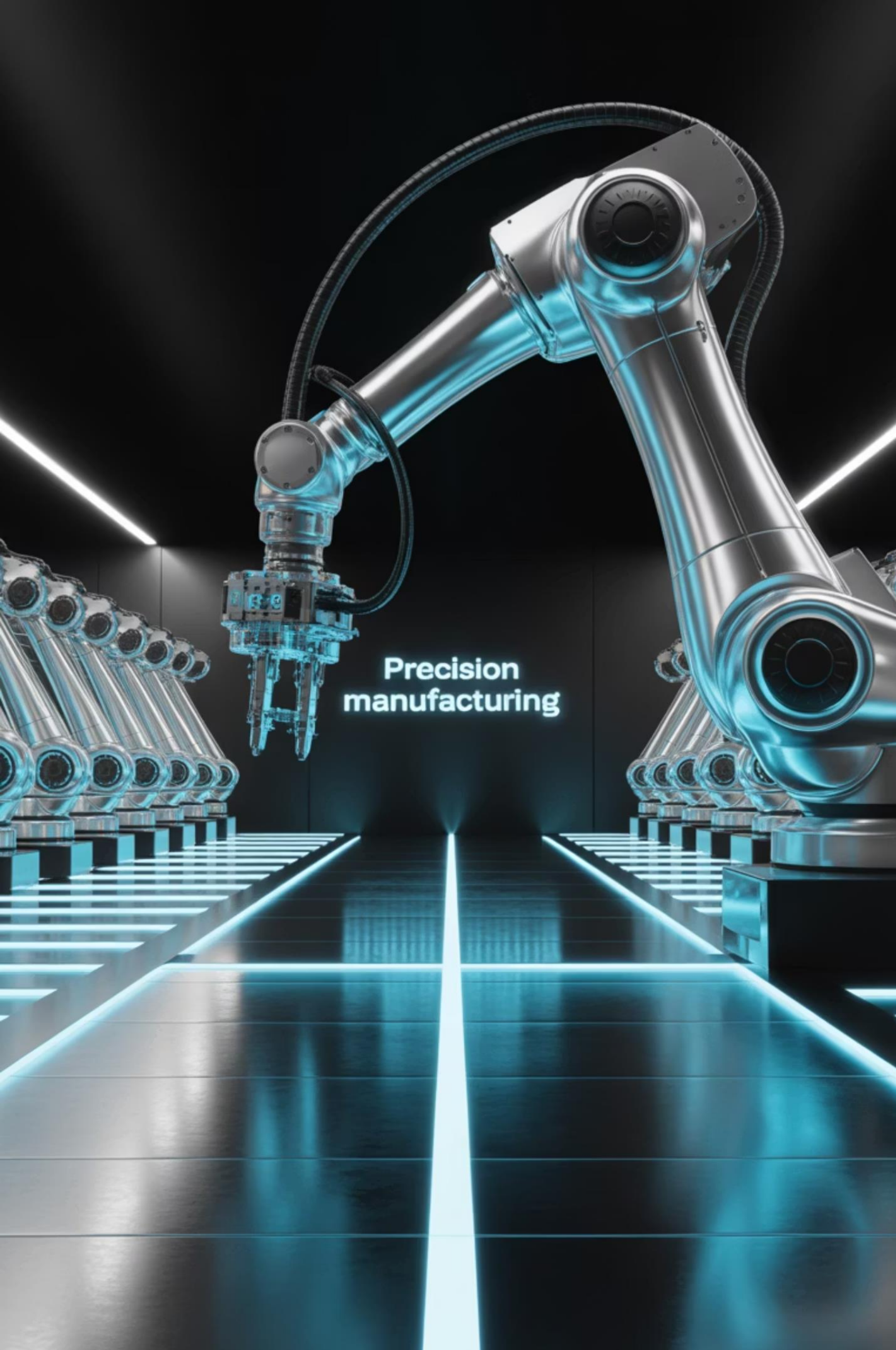
Unlock new business models & value creation.

Future-Ready Autonomous Factories

The Lights-Out Vision

Autonomous operations transform manufacturing by creating self-sustaining production ecosystems that operate continuously with minimal human intervention. These facilities leverage predictive robotics with proactive risk mitigation capabilities to anticipate and resolve potential issues before they impact operations.-

The future factory features hyper-scalable orchestration across geographies, enabling seamless production shifts based on demand, resources, and efficiency. Continuous optimization of energy usage, downtime prevention, and workflow efficiency unlocks new business models and growth opportunities previously impossible with traditional manufacturing approaches.



“The agility and professionalism the **Vegam Team** has shown was tremendous.”

Vice President Operations & Supply Chain Asia, Adhesives

“Thanks **Vegam** Team for being such a good partner. I appreciate it a lot!”

VP Operations, IMEA, Fine Chemicals

“**Vegam SFS** helps us achieve performance at the highest granularity with just a click of a button.”

Head of Operations South East, European Chemicals Major

“**Vegam SFS** deployment offered great improvements in terms of productivity, labor efficiency, site safety and lean mind set.”

Manufacturing Operations Manager – Chemicals Factory, Melbourne

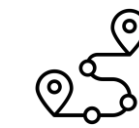


Why Vegam?



Modular & Scalable Architecture

Systems designed to grow with your business needs, from single-plant deployment to global networks



Industry 5.0 Ready Roadmap

Strategic implementation path that aligns with your organizational readiness and capabilities



Unified Data Management

Comprehensive data architecture that breaks down silos and enables true enterprise intelligence



Proprietary Optimization Algorithms

Advanced mathematical models developed specifically for manufacturing challenges



On-premise & Full Ownership

Complete control of your manufacturing data with solutions that prioritize security and sovereignty



Customized Competitive Edge

Solutions tailored to your specific manufacturing challenges and market differentiators

Partner with Vegam to Shape Your Autonomous Future



Two Decades of Expertise

Leverage our proven track record in digital factory transformation, built on real-world experience across hundreds of facilities.



Trusted by Global Leaders

Join an elite group of forward-thinking manufacturers who rely on Vegam to stay competitive in an increasingly automated world.



Cutting-Edge Innovation

Harness the power of Robotics, Generative AI, and Cognitive Interfaces with a partner who understands both the technology and manufacturing realities.

"Take the first step toward your autonomous manufacturing future"



Vegam
Making Factories Smarter

Global Partnerships & Big Wins



Strategic Partnerships

Trusted Long-Term Partner to Global Leaders in Chemicals & Manufacturing

BASF

Henkel

Arkema

MBCC Group

Our partnerships span strategic consulting through implementation and continuous improvement.



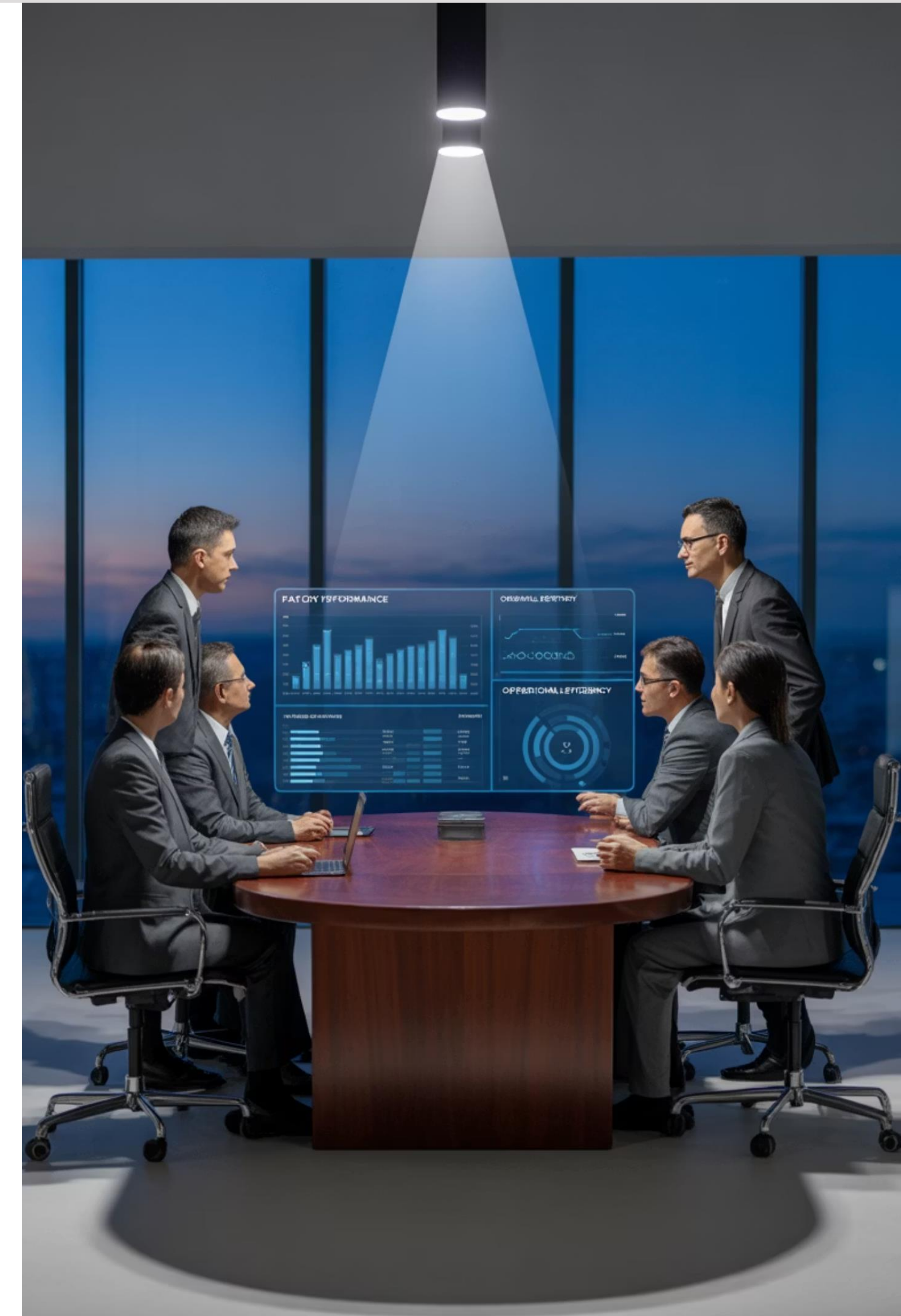
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Continuous Support

24/7 global support infrastructure ensuring optimal operations and rapid troubleshooting for mission-critical manufacturing systems across time zones.



Global Partnerships & Big Wins



Strategic Partnerships

Long-term relationships with global chemical and manufacturing giants including **BASF, Henkel, Arkema, and MBCC Group**. Our partnerships span strategic consulting through implementation and continuous improvement.



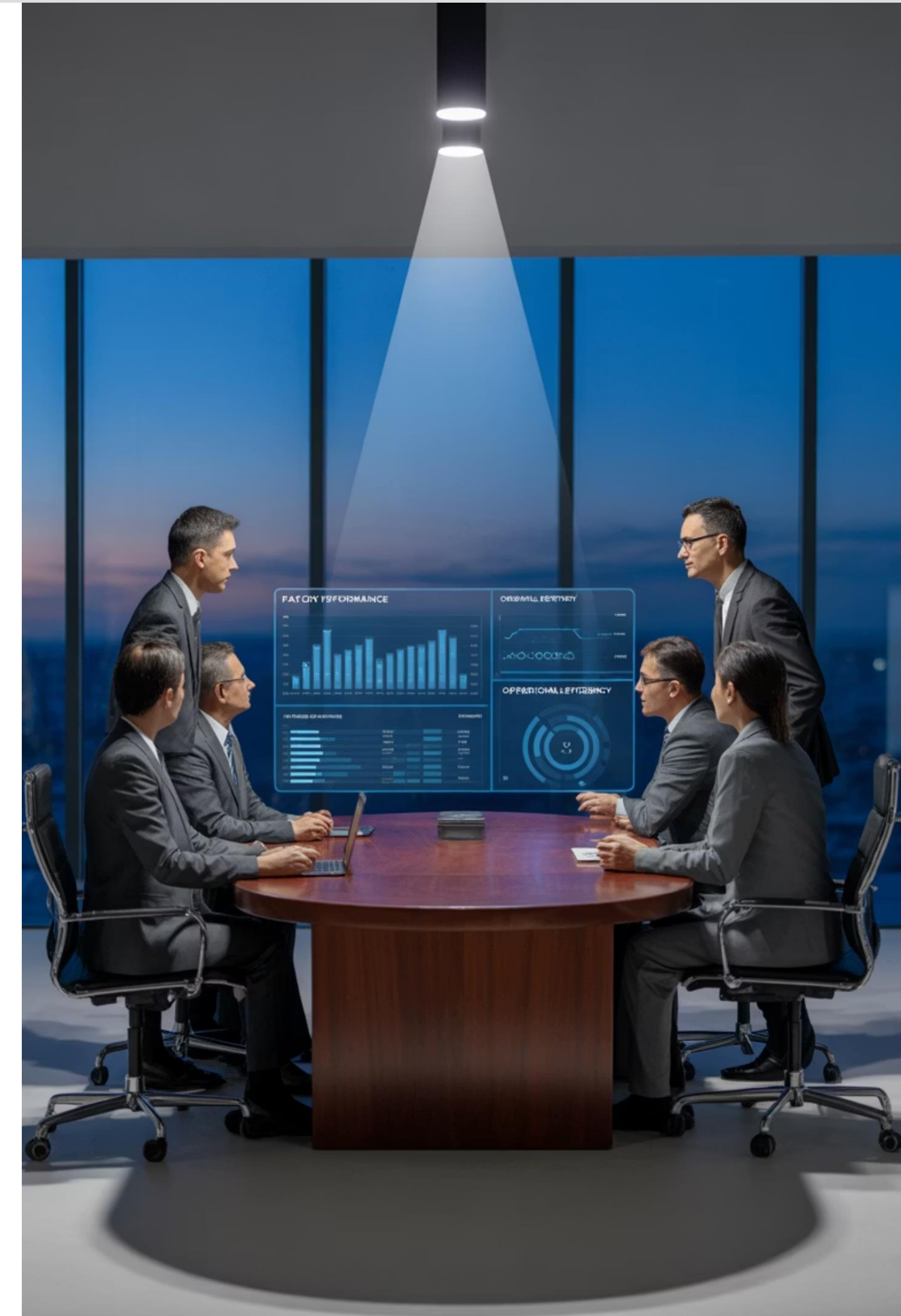
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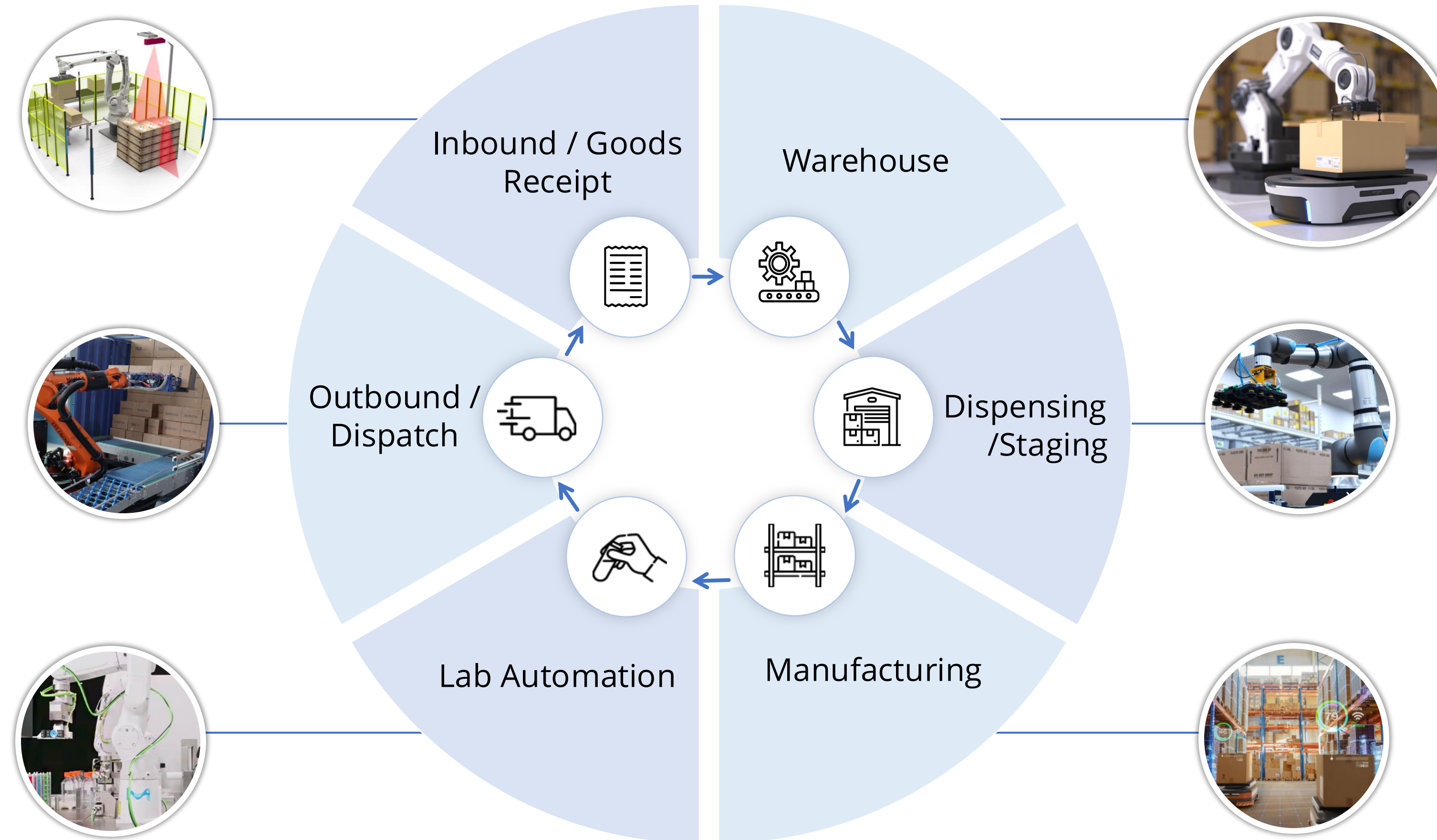


Continuous Support

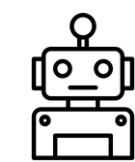
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Driving Efficiency Across the Manufacturing Value Chain



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