



SMART

Driving a world-class global manufacturing and supply chain transformation

Barbara-Frei
Executive Vice President, Industrial Automation
Schneider Electric

Shiva Kumar A
Director, Smart Program, Global Supply Chain
Schneider Electric

Global Supply Chain

A key differentiator for the Group

**ONE GLOBAL
SUPPLY CHAIN**

**WORLD CLASS
COMPETENCIES
AND TALENTS**

**CULTURE OF
CONTINUOUS
IMPROVEMENT**

2021 GARTNER SUPPLY CHAIN



**SCHNEIDER ELECTRIC
RANKED NO. 4
IN GLOBAL**

World Economic Forum . I 4.0



France, USA, Indonesia, Mexico, China, India
5 Advanced Lighthouse
2 Developing Lighthouse
2 Sustainability Lighthouse

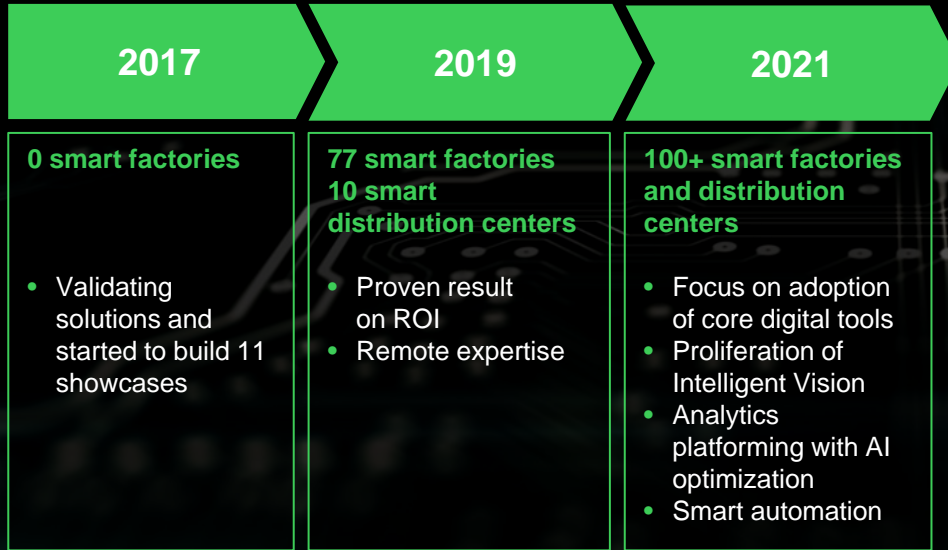
Life Is On

Schneider
Electric

Smart Factory and Distribution Center

A deployment plan that allows us to think big, act small, and scale fast

Fast scaling



7 smart factories recognized

5 Advanced Lighthouse (France, USA, Indonesia, China, India),
2 Sustainability Lighthouse (USA, France)
2 Developing Lighthouse (Mexico, China)

Journey so far...

Energy efficiency: average -30% cost saving

Productivity: 25-30% Capex & Opex reduction,
22% equipment availability

Reliability: average 15% quality issue reductions

Safety: average 20% workforce safety improvements

Sustainability: average 20% CO₂ footprint reduction

Colloborated with customers, partners, sales, supply chain

AVEVA, Schneider Electric Solutions form the core of our smart ecosystem solutions along with 3rd party solutions

Smart Factory powered by EcoStruxure

We EAT OUR OWN FOOD



Resource Advisor

Energy and sustainability data visibility.



Power Monitoring Expert or Facility Expert*

Energy optimization.

* for sites >1GWh/yr



Maintenance

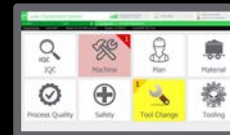
AVEVA Enterprise Asset Management (EAM)

Power Advisor

Performance and power reliability.

AVEVA Lean Digitization System (LDS)

Performance, Andon, work order, Kanban, work instructions.



AVEVA Process Management System – Wonderware System Platform



AVEVA Insight From IIoT to analytics



Augmented Operator Advisor

Maintenance and settings with in-hand information.



Smart operations

Data-driven, decision-making factories powered by analytics and AI



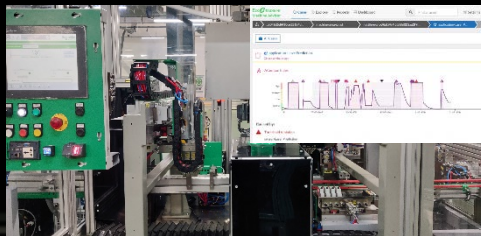
Intelligent vision

Deep learning based
Intelligent Vision Solution

- **Autonomous** vision inspection
- **Integrate** with existing automation
- **Reliable** and **accurate** defect recognition for robust quality

Benefits

- **8-10%** NQC reduction
- **15-20%** cycle time reduction
- Real-time quality data analytics



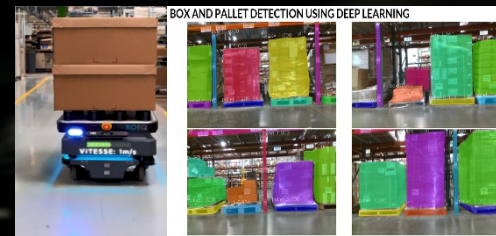
Maintenance analytics

Reactive to prognostic
asset life management

- **Connect** with **AVEVA** Insight
- **Predict** with EcoStruxure Machine Advisor Attention app
- **Integrate** with **AVEVA** Enterprise Asset Management*

Benefits

- **- 25%** mean time to repair (MTTR)
- **+ 55%** mean time between failures (MTBF)
- **+ 10-12%** efficiency



Smart automation

Boost efficiency with Smart AGVs,
drones, AI, and robotics

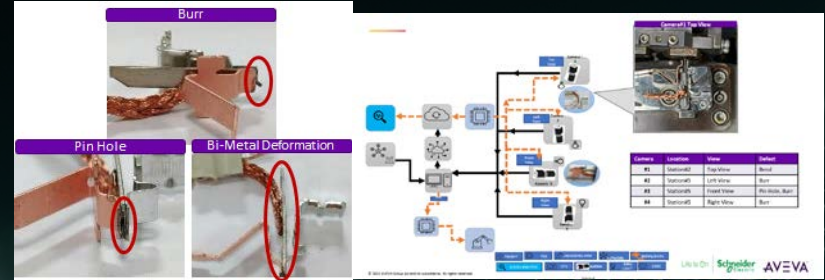
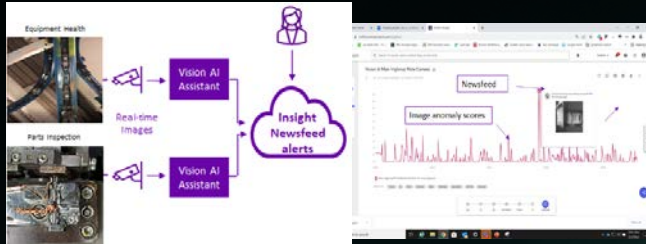
- **AGV/AMR** for efficiency improvement
- **Integrated inventory tracking system**
 - Collaborative robotics
 - Automation orchestration
 - Drones
 - AI quality control
 - Advanced analytics

Benefits

- **+25-30%** efficiency improvement
- **97%** system accuracy
- **80%** picking defect reduction

Extending AVEVA Portfolio

Focus on Quality and Maintenance Analytics



AVEVA vision AI

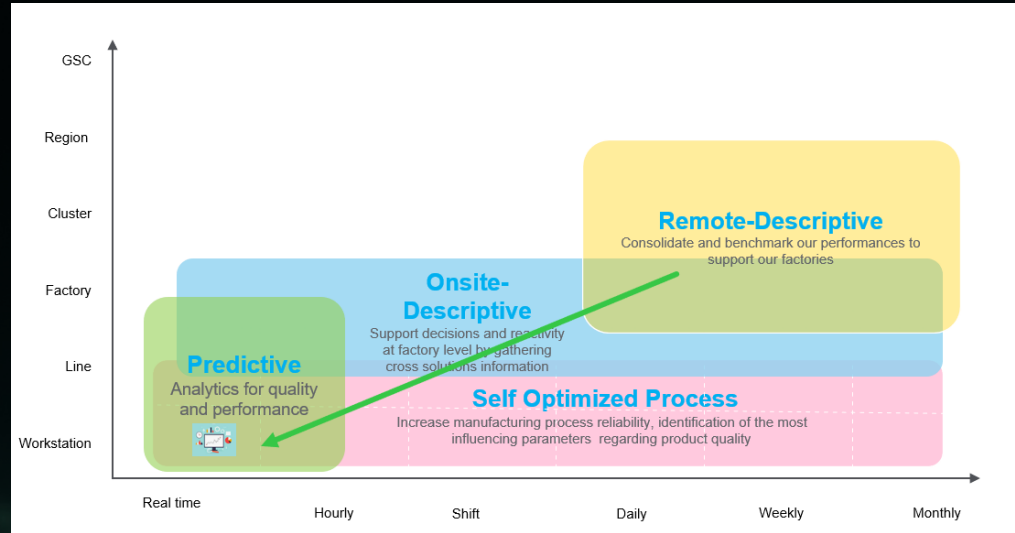
- **Anomaly detection** through Realtime image Processing
- **Integration** to Aveva Insight
- Image anomaly scores & images published to Insight
- Exploring **Image Processing in Cloud** through **5G** (Pilot)

AVEVA Vision AI + Guided Analytics

- **Realtime AI** analysis of images
- **AVEVA Guided Analytics** for Process data and Image correlation
- **Machine Learning** solution to monitor the Process parameters to identify the root cause of faulty assemblies

Data and Analytics in Manufacturing

OT Data Platform as an enabler – To deliver Speed and Performance for Strategic Business and Analytics Initiatives



Evaluate AVEVA PI as a Unified OT data Platform for GSC

Pilots launched with global use cases across GSC to validate Value Proposition

Life Is On

