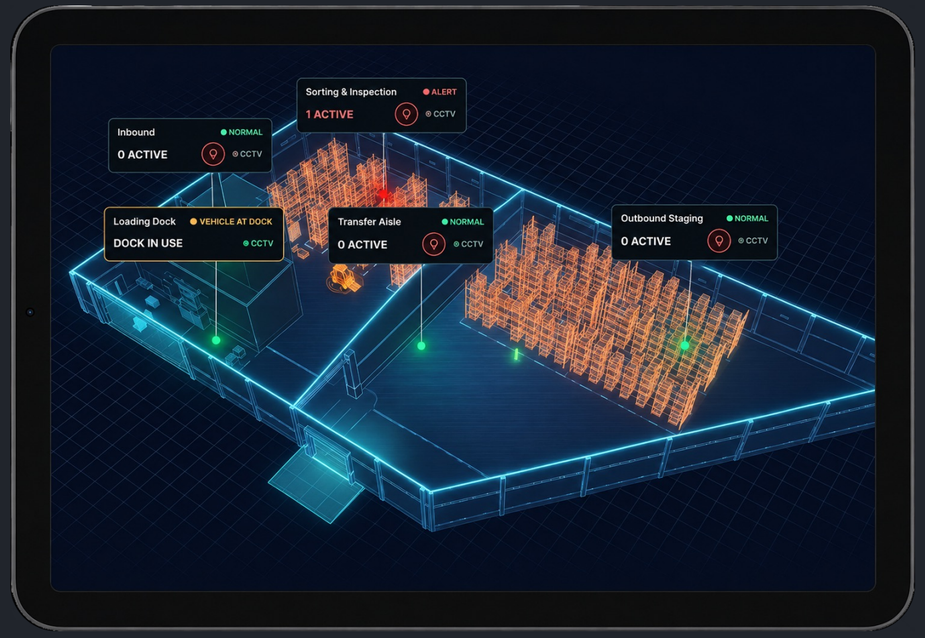
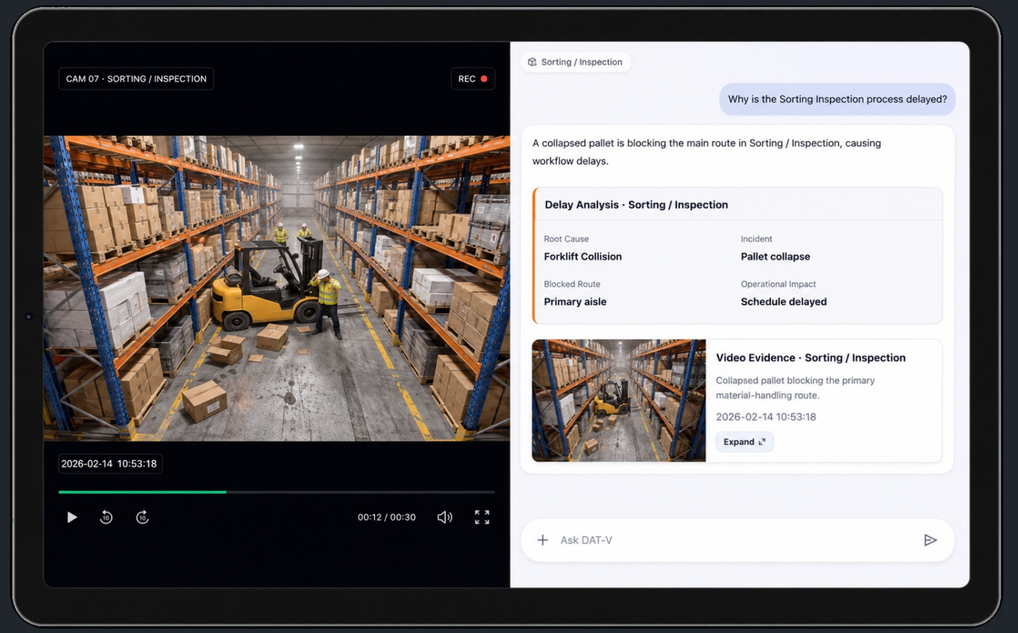




ProboticsOS

Factory AI Operating System

Turn your factory CCTV into a Digital Twin

gypark@probotics.co.kr | www.probotics.co.kr/en

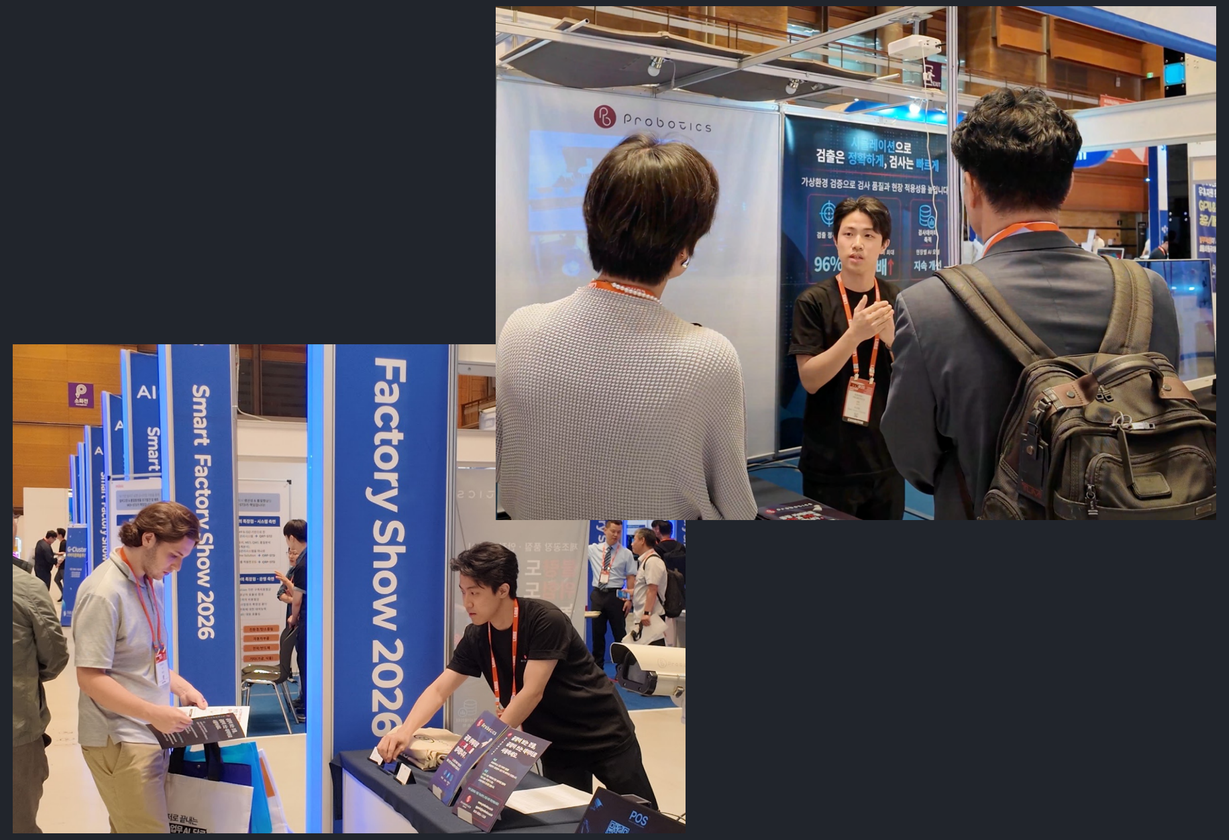
Probotics

Probotics

We bring physical AI to every factory.

Probotics builds ProboticsOS,
An edge AI operating system that transforms existing factory CCTV into a live digital twin.

- Founded in 2025, Seoul, South Korea
- AI × Robotics × Manufacturing



Partners

NVIDIA Inception Program

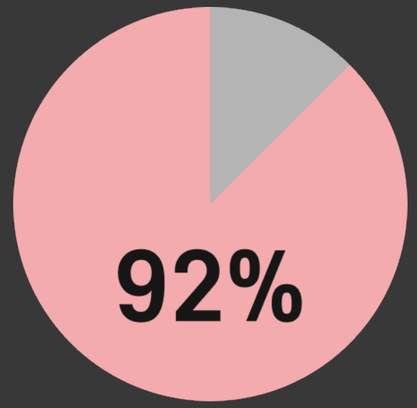
DATCO

MOBILITY ONE

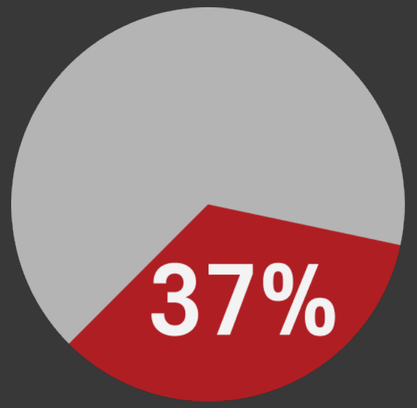
Alpaon

01 Problem

Automation is the future.
Most factories **can’t afford** the way in.



Says automation is essential



Actually have it

Vention × Industry Week, survey of 214 U.S. manufacturers, 2025

01

Problem

Today’s Digital Twins Are Too Expensive.

Industrial Digital Twins Cost(Up to)

$ 135,000

Industry cost benchmarks for industrial as-built documentation
(3D scanning + scan-to-BIM) and single-line digital twin pilots, 2025.

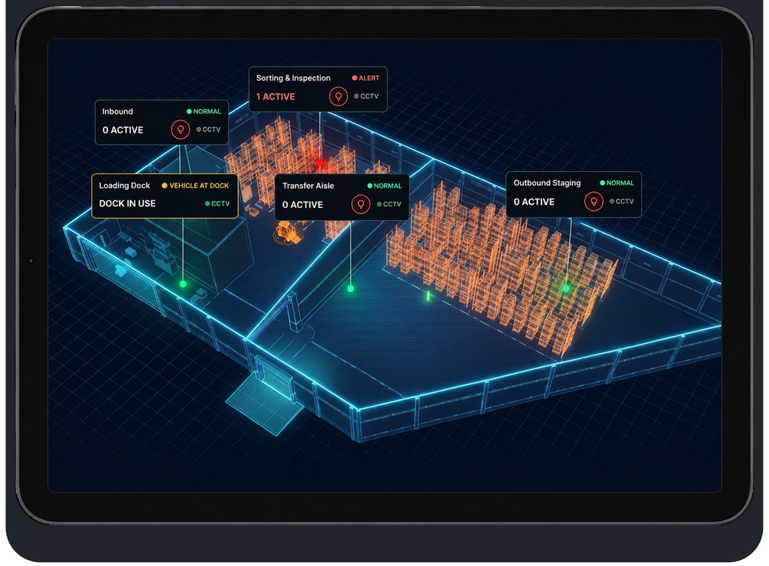
Driven by

- 3D Scan
- As-Built Modeling
- New Sensors

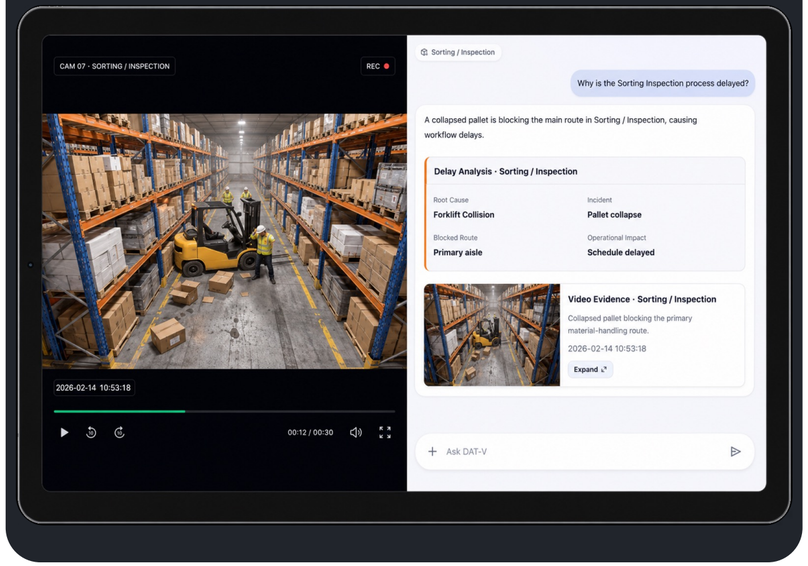
02 Solution

ProboticsOS starts with the CCTV you already have.
Same Camera. New job.

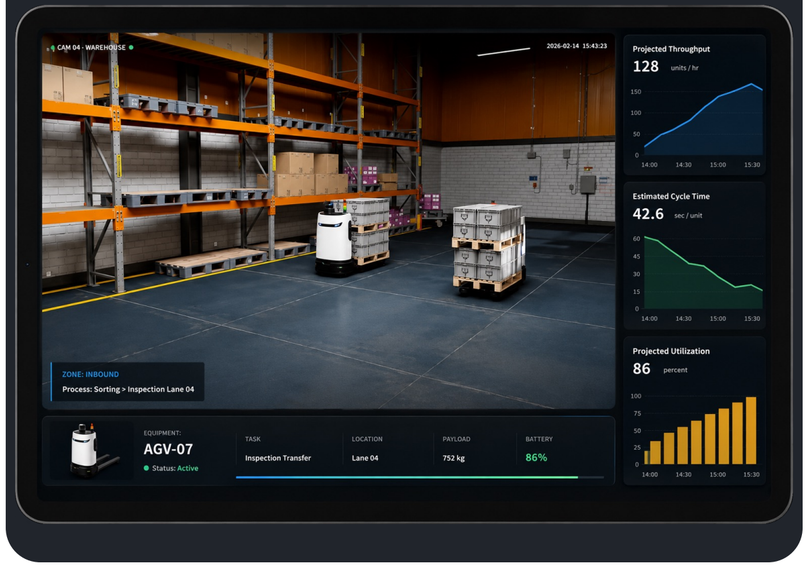
1 CCTV-based Digital Twin



2 Factory Vision AI Agent

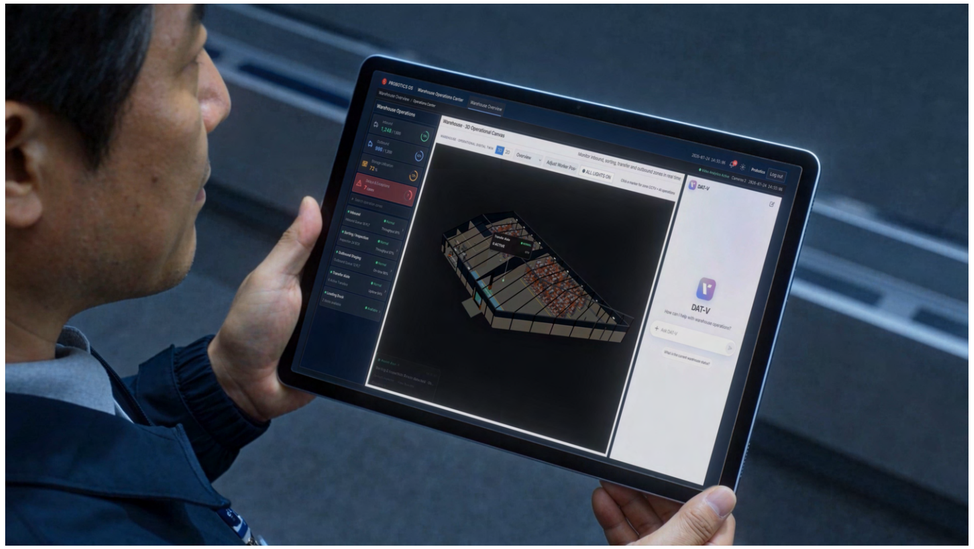


3 Robot Simulation



02 Solution

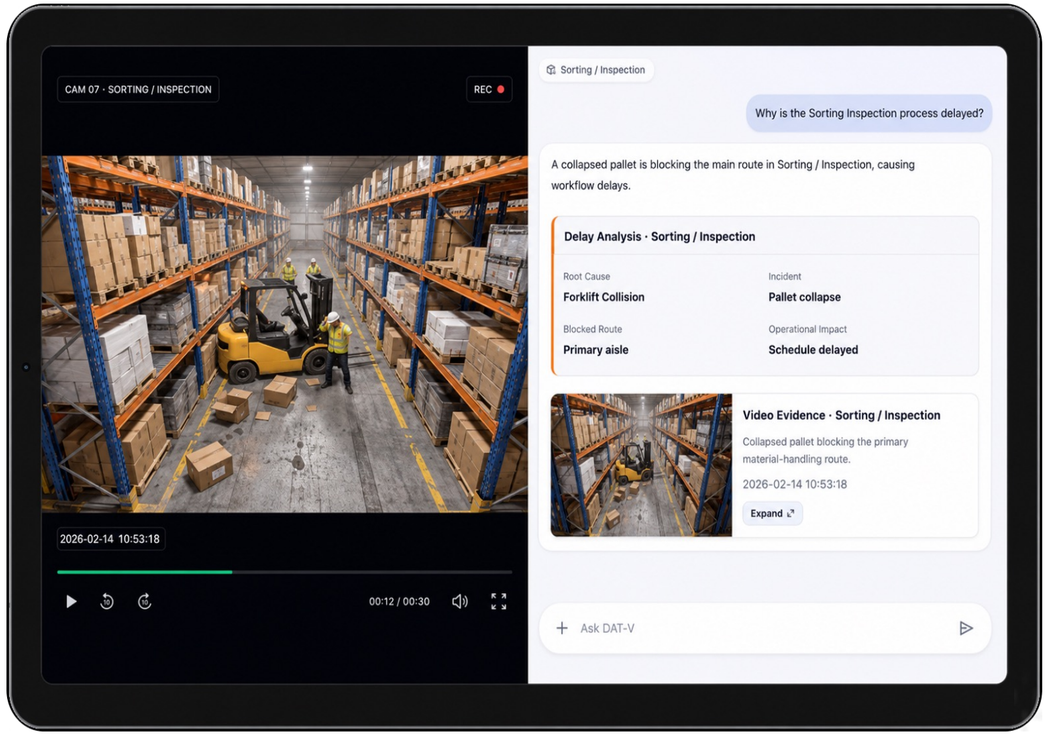
See your whole factory on one screen.

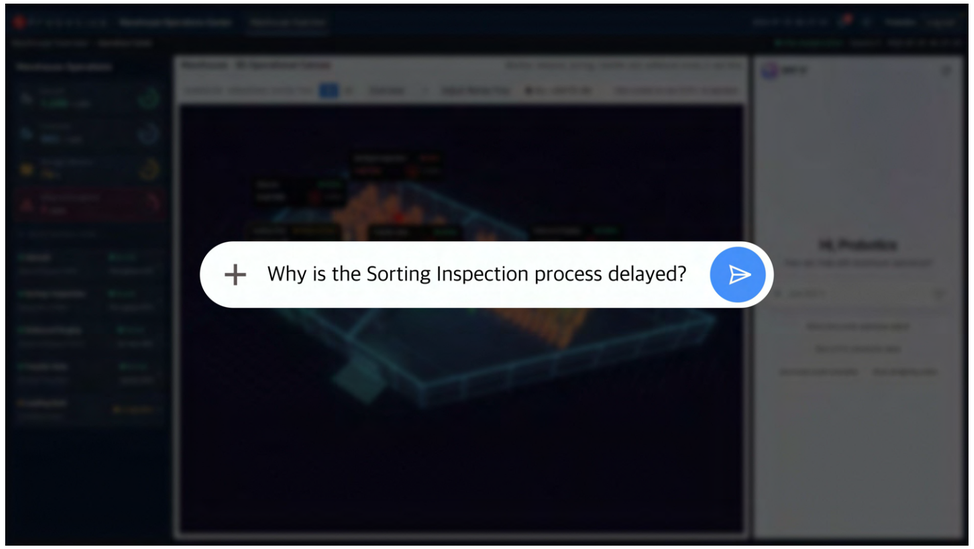


- Reconstructs the floor in 3D from camera footage.
- Zone status and events update in real time.
- No LiDAR, no 3D scanning, no new sensors.

02 Solution

Ask your factory why. It answers with the footage.

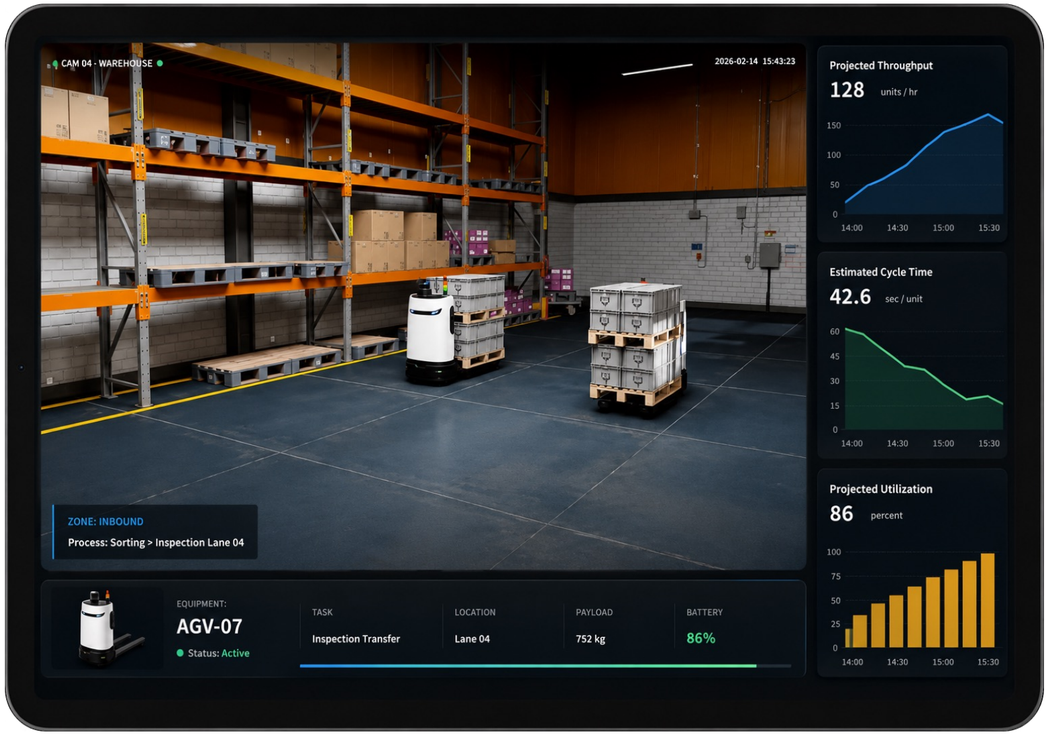


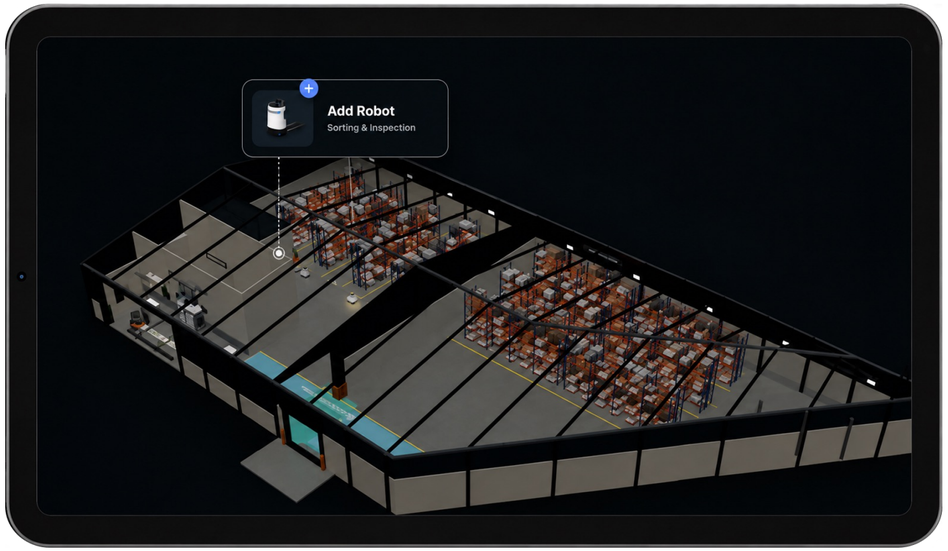


- Ask "why did this process fall behind?" and get an answer
- Every answer comes with the video that proves it
- Finds the moment no one was watching

02 Solution

Test a robot inside your digital twin before you buy it.





- Drop the robot you're considering into your own factory
- See throughput, cycle time, and where it bottlenecks
- Runs on your real operating data — not vendor specs

03 Impact

Up to 70%
Lower Adoption Cost

Conventional		ProboticsOS
✗ 3D Scanning	vs	✓ Existing CCTV
✗ As-built modeling		✓ Automatic reconstruction
✗ New sensor infrastructure		✓ No new sensors
✗ Months of consulting		✓ 1-2 months
$ 43k – 135k		**$ 8k – 16k**

Comparison covers automation preparation cost only; robot hardware and integration are excluded. Conventional route based on industry cost benchmarks for industrial as-built documentation (3D laser scanning + scan-to-BIM) and single-line digital twin pilots, 2025.

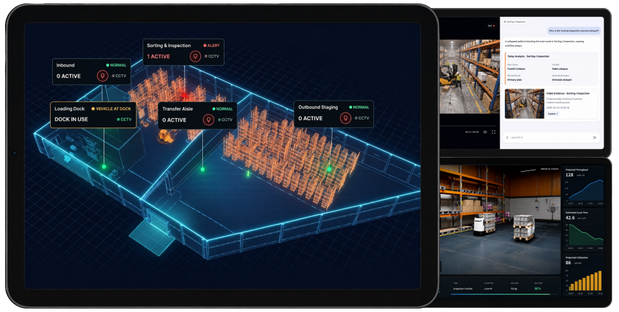
CCTV is the way in – at a fraction of the cost.

04 How It Works

How Factory CCTV Becomes a Digital Twin

Existing CCTV

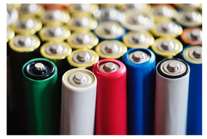
Edge AI Vision



Digital Twin + AI Agent

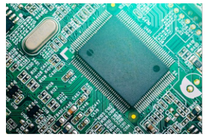
Industries

Food & Beverage



Chemical

Metalworking



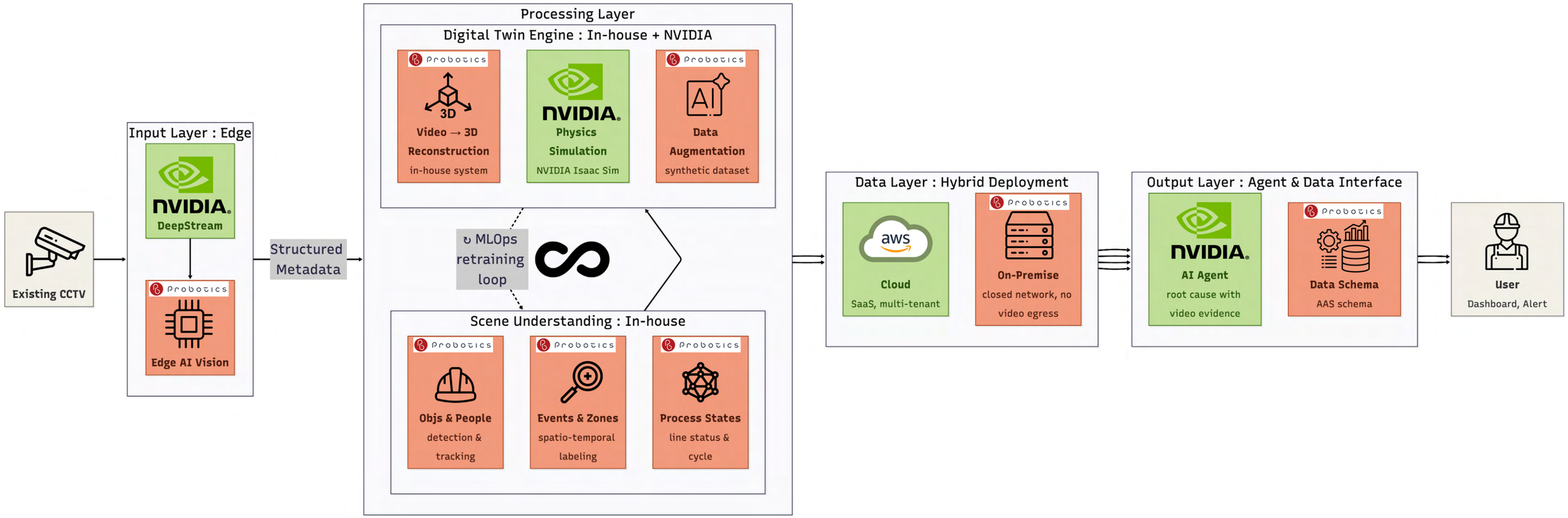
Electronics & Materials

Plastics

Logistics

04 How It Works

Powered by NVIDIA Technologies



05 Deployment

Phase1: 7~ 8 weeks

Phase2: 7~ 8 weeks

Twin live at end of Phase 1

Planning	Deployment	System Integration	Optimization
Verify CCTV access	Install the Edge AI computer	Deploy Vision AI models	Fine-tune Vision AI model
Assess NVR system	Configure the network	Integrate the dashboard	Dashboard training
Define deployment areas	Install the central server	Connect the mobile application	Application Training

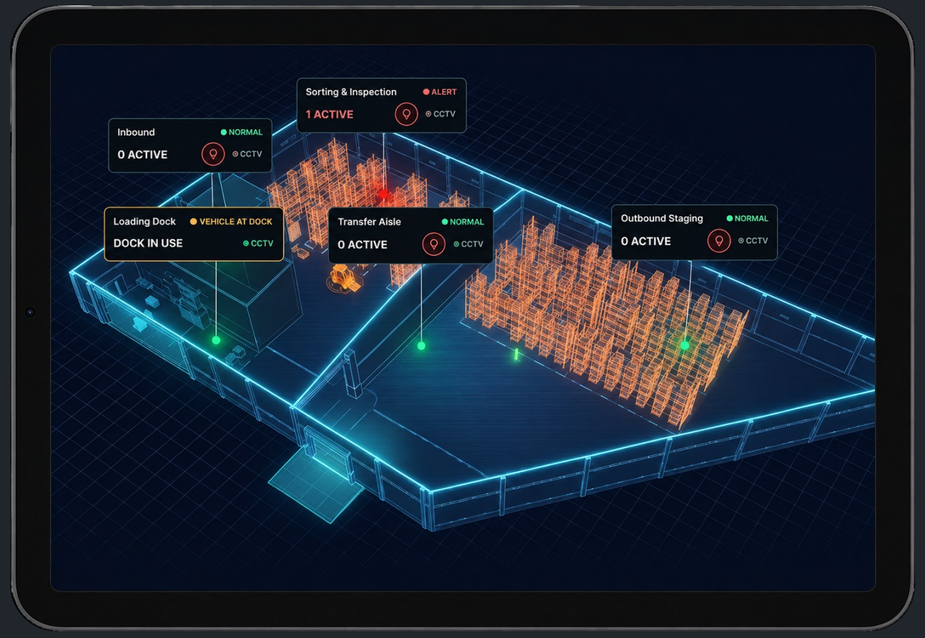
Additional Vision AI models can be deployed within 1 month after installation whenever new requirements arise.

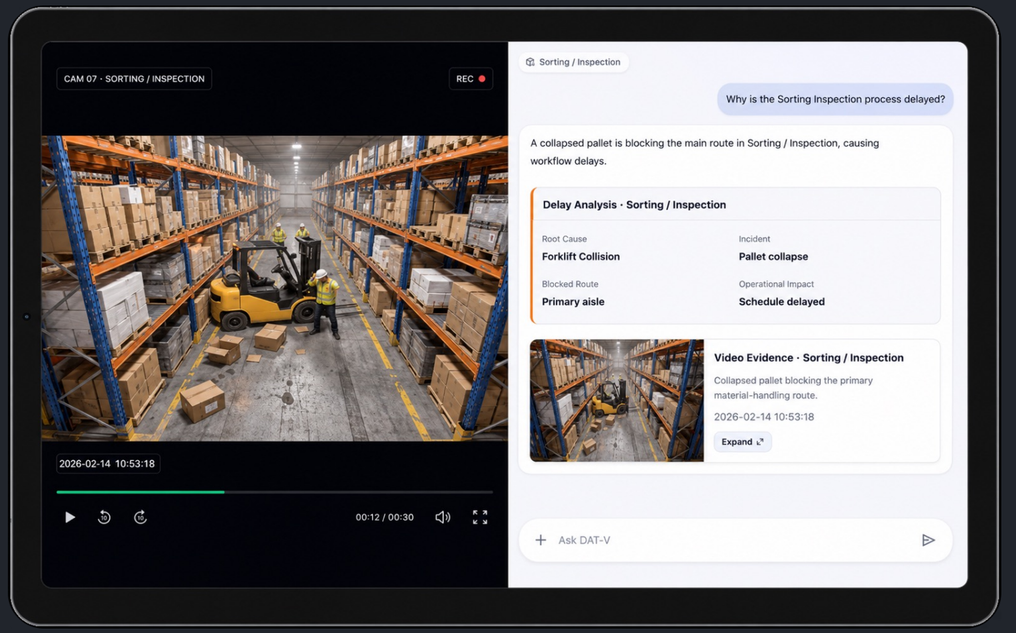
A Appendix

Edge AI Vision Computer

Specifications	Basic	Pro	Enterprise
AI Performance	40 TOPS	100 TOPS	275 TOPS
Memory	8GB	16GB	64GB
Storage	Optional NVMe SSD	NVMe SSD / High-Capa Storage	RAID / NAS / Server Integration
Networking	GbE	GbE / Optional 2.5 GbE	2.5 GbE / 10GbE / Intranet
Video Inputs	**Up to 4** x 1080p @ 24fps	**Up to 8** x 1080p @ 24fps	**Up to 16** x 1080p @ 24fps
	Channel capacity verified on internal benchmark (YOLOv8n FP16, 1080p @ 24fps).		
Coverage	**Up to 10,000 sq ft** (930 m²) Single line or work cell	**Up to 20,000 sq ft** (1,860 m²) Small to mid-size plant floor	**Up to 40,000 sq ft** (3,720 m²) Mid-size plant, multi-zone
	Coverage estimated at ~2,700 sq ft (250 m²) per camera at 13–20 ft (4–6 m) mount height with 20% overlap. Actual coverage varies with lens, ceiling height, and layout.		

Larger facilities scale by adding units – multiple boxes, one digital twin





Thank you

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