



**Beyond Digital,
Empowering Reality.**

Powered by EVA, The Brain of Physical AI

Background

Industrial accidents are still happening repeatedly

605 deaths

in 2025 (+2.7% YoY)

Problem

Every accident has a cost. Every gap becomes liability.

CCTV doesn't prevent, it only records.

The JoongAng

ECONOMY
2025.07.3

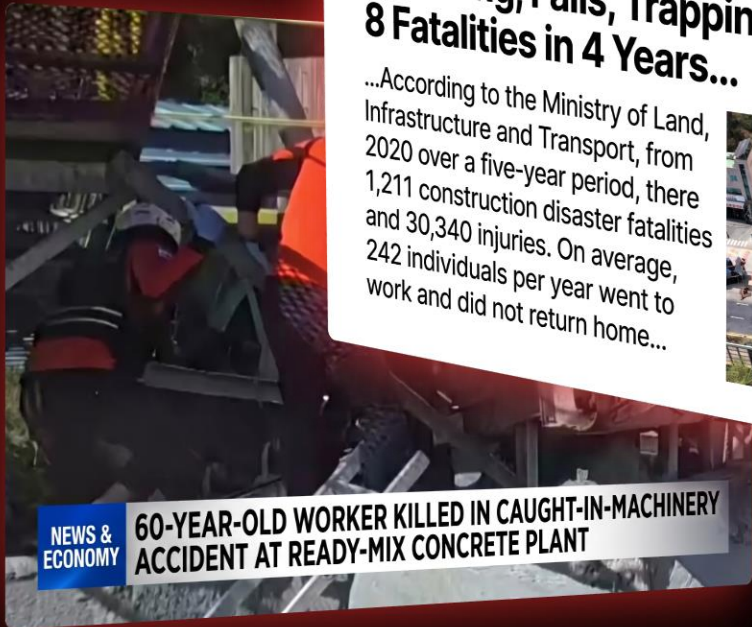
'Crushing, Falls, Trapping, Electrocution' 8 Fatalities in 4 Years...

...According to the Ministry of Land, Infrastructure and Transport, from 2020 over a five-year period, there 1,211 construction disaster fatalities and 30,340 injuries. On average, 242 individuals per year went to work and did not return home...



Serious Accidents Punishment Act
**Stronger penalties
for management**

Prevention is no longer optional,
It's survival.





Problem

CCTV is everywhere, but safety is not.

Limited attention in manual monitoring

Hundreds of cameras per operator

Response happens after the incident

Problem

Limitations of existing AI CCTV solutions

ML-based solutions require high effort,
while AI-based solutions require heavy infrastructure investment



	ML Based	AI Based
Computing Power	LOW ▼	HIGH ▲
Learning Effort	HIGH ▲	LOW ▼

Solution

EVA, combining the strengths of ML and AI

	ML Based	AI Based	EVA
Computing Power	LOW ▼	HIGH ▲	LOW ▼
Human Effort	HIGH ▲	LOW ▼	LOW ▼

Solution

An intelligent architecture based on Multi-Foundation Models

A multi-brain structure that integrates the latest models to interpret situations with high precision

Vision Model

Analyzing visual information

Image Analysis
VM

Visual Information interpretation
VLM

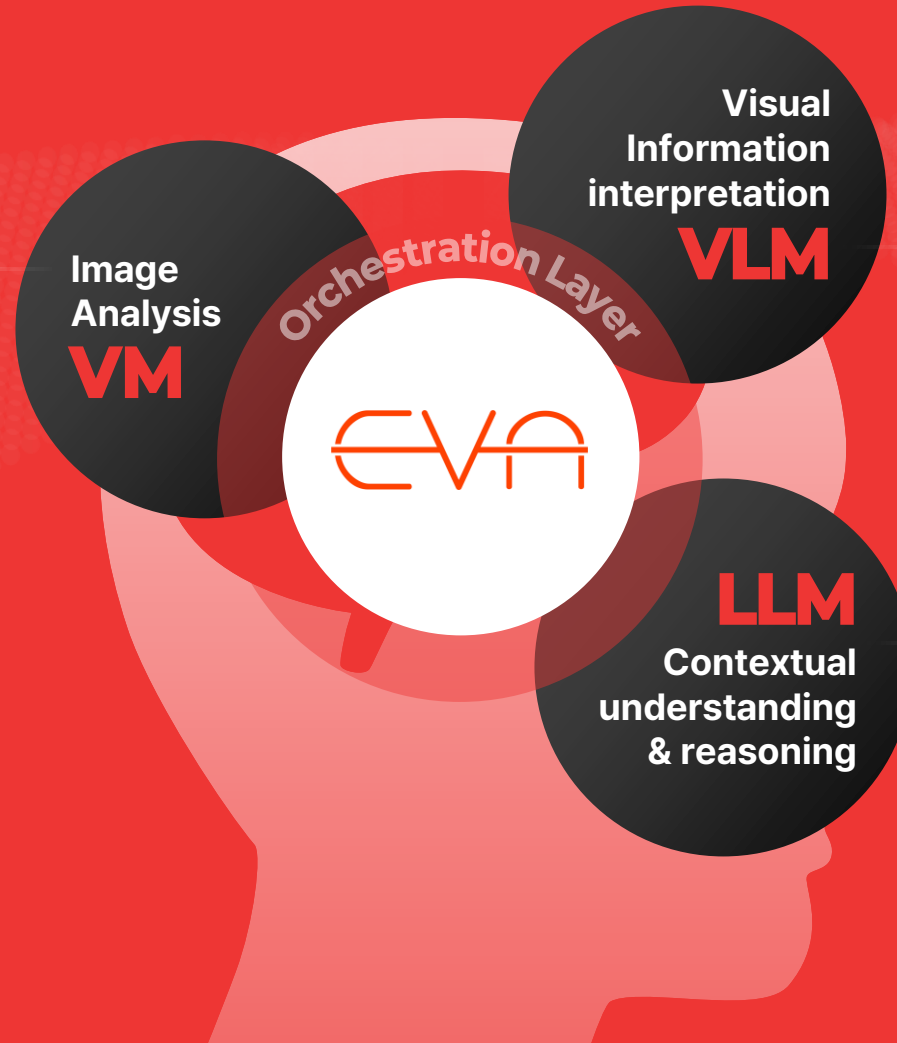
Visual Language Model

Observing and understanding

LLM
Contextual understanding & reasoning

Large Language Model

Explaining, reasoning, and coordinating through conversation



Reframing

A New Starting Point for AI CCTV

**With EVA,
legacy CCTV becomes AI-powered visual infrastructure**

Reframing

EVA turns perception into real-world action

Context Awareness

EVA

Physical Action

Sense

Understand

Act

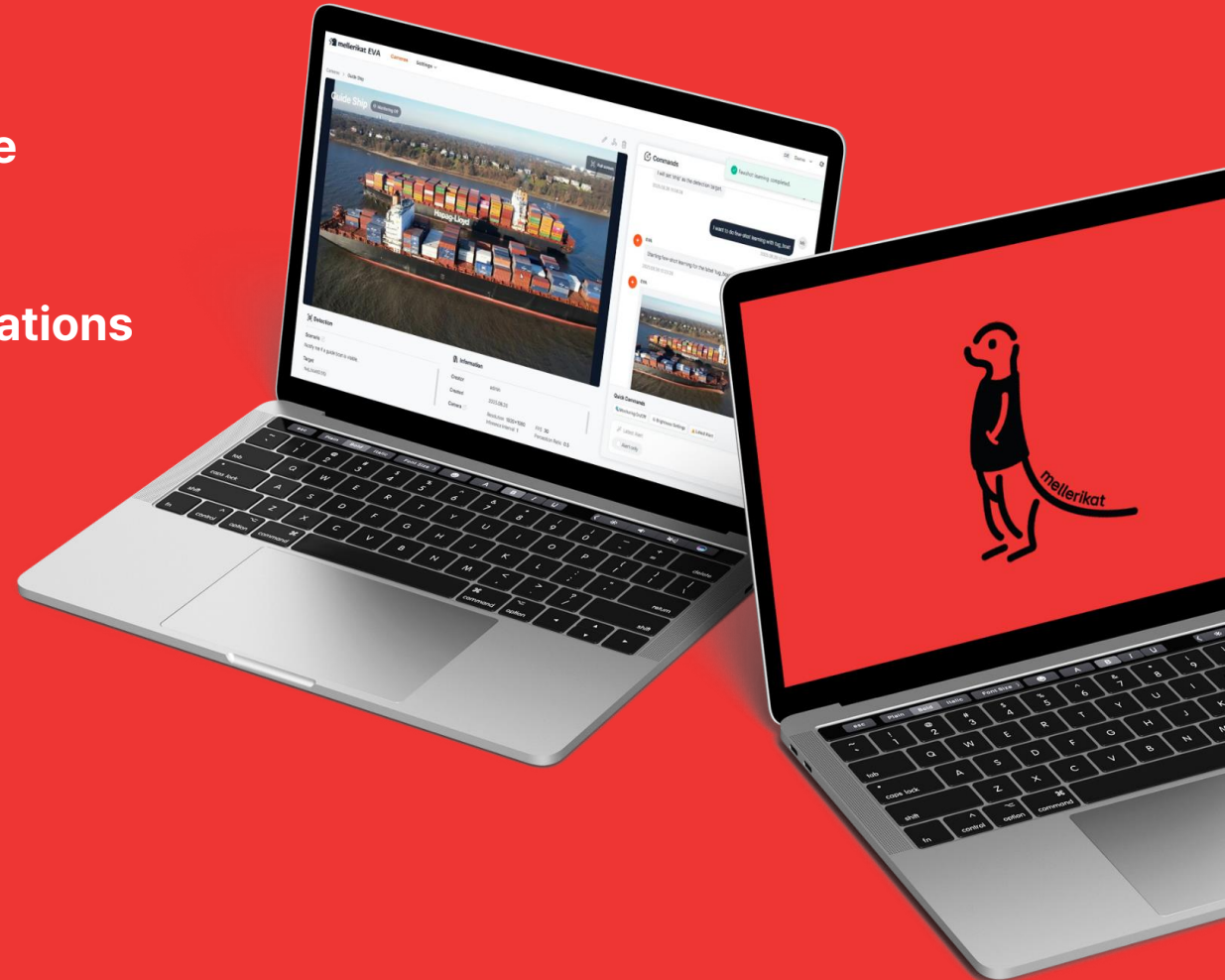


EVA DEMO

1. Define detection scenarios in natural language
2. Understand situations from CCTV footage
3. Connect alerts, feedback, and actions to operations

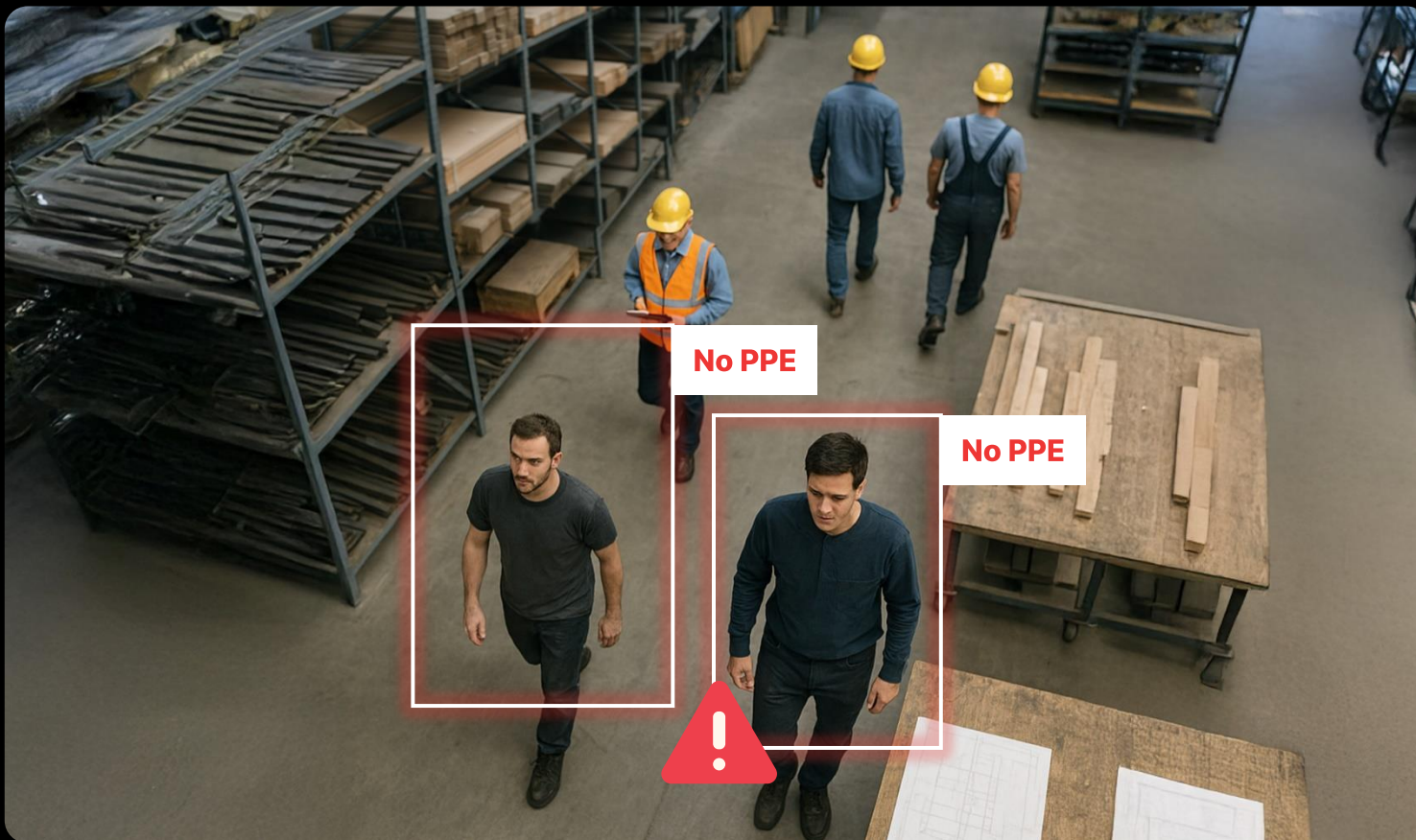
<https://mellerikat.com/en/solutions/eva>

<https://ncp-eva.mellerikat.com/>



Solution

EVA turns existing CCTV into an AI operation system — no replacement needed



Conventional CCTV

EVA

ON

Solution

EVA eliminates barriers to AI CCTV adoption and scale

What makes EVA different

Maximize ROI

High GPU Efficiency (Lower TCO)

Optimized multi-foundation models maximize GPU utilization. Deliver enterprise-grade performance at lower operational cost without compromise.

Zero Deployment Barrier

Natural Language Interface

No AI expertise required—describe scenarios in plain language. EVA automatically converts requirements into executable prompts.

Unlimited Scalability

Hybrid Infrastructure Support

Seamless expansion from SaaS to on-premise environments. Scale freely without infrastructure constraints.

Continuous Evolution

Improves with User-feedback

Learns from user feedback and interactions. The more you use it, the more precise and optimized it becomes.

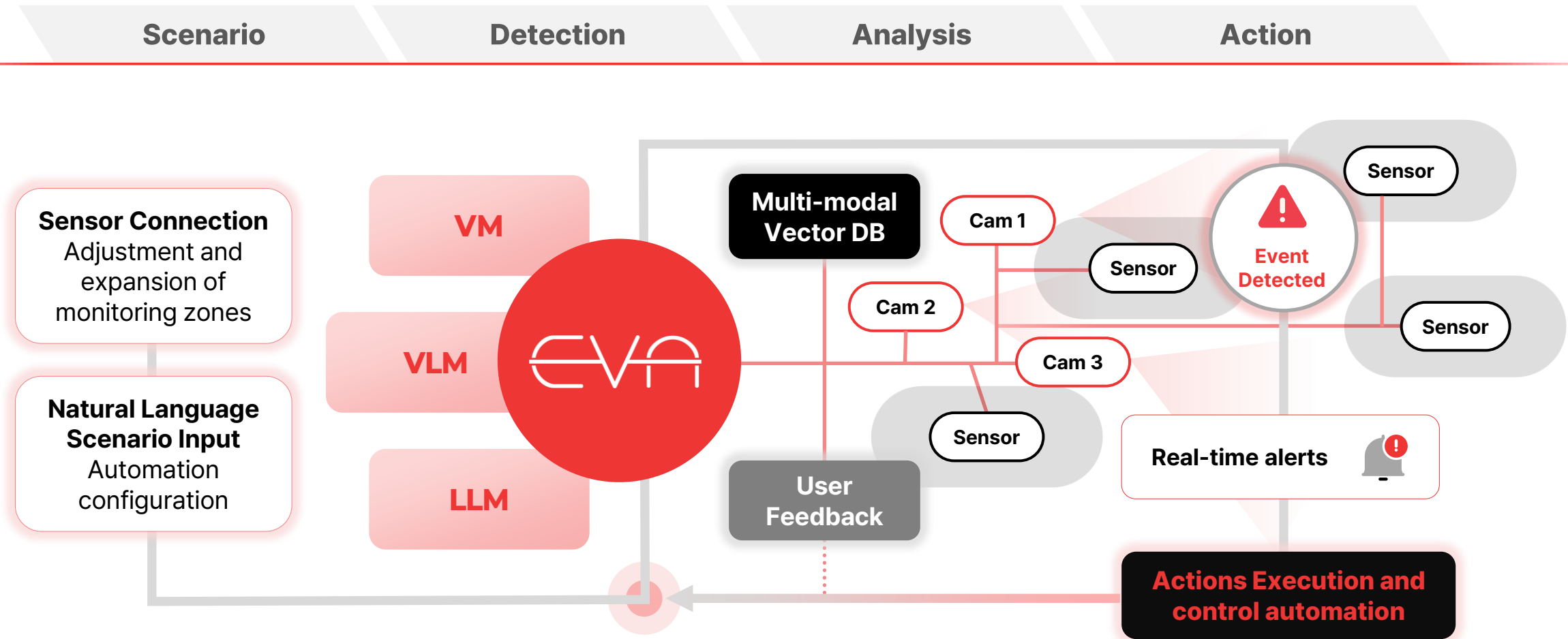
Ecosystem Integration

Seamless Plug-and-Play Integration

Easily integrates with existing cameras via RTSP. Standardized webhooks enable seamless data transfer to third-party systems.

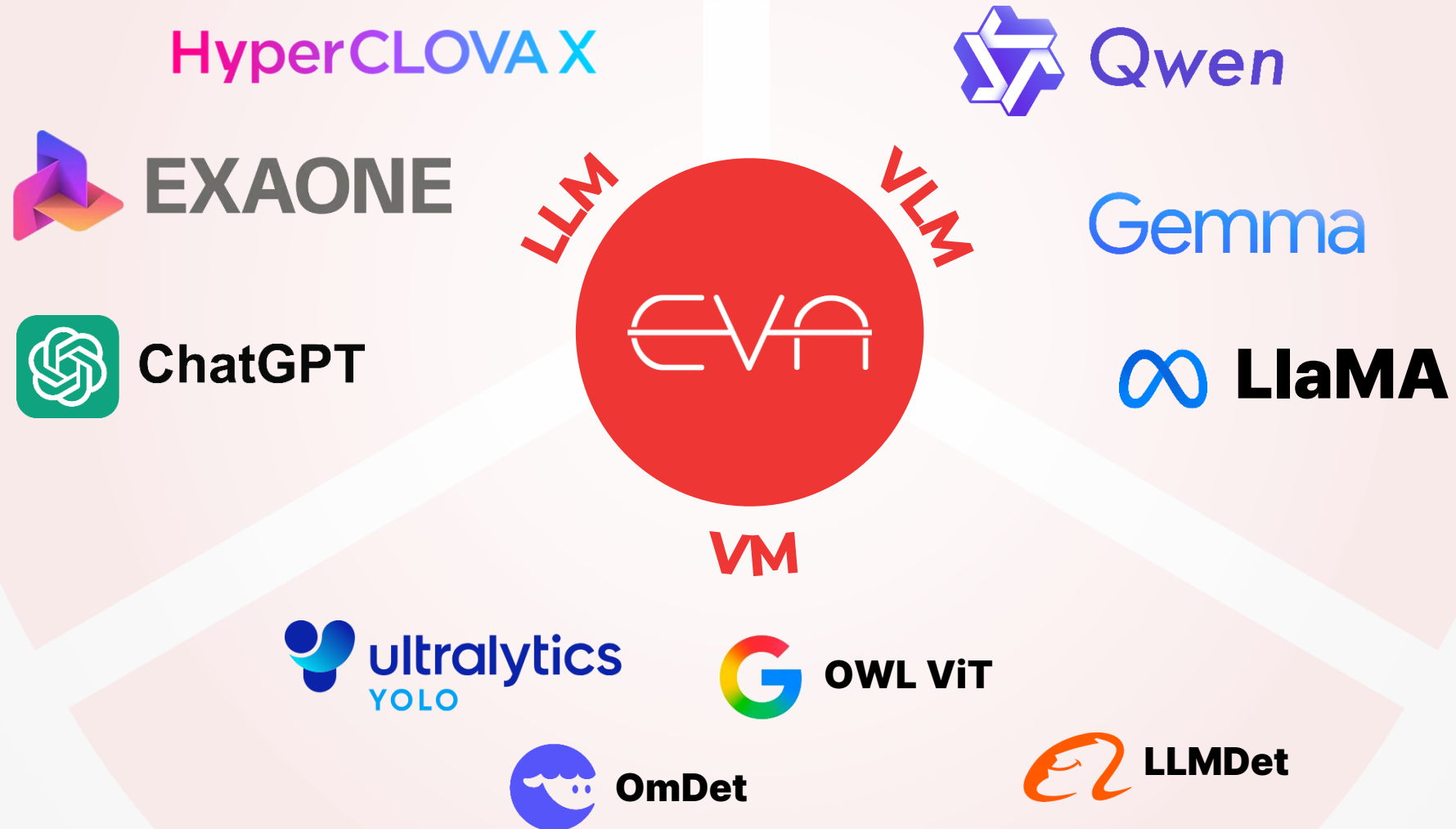
Solution

An intelligent loop of scenario-based **Detection** → **Decision** → **Control**, created through conversation



Solution

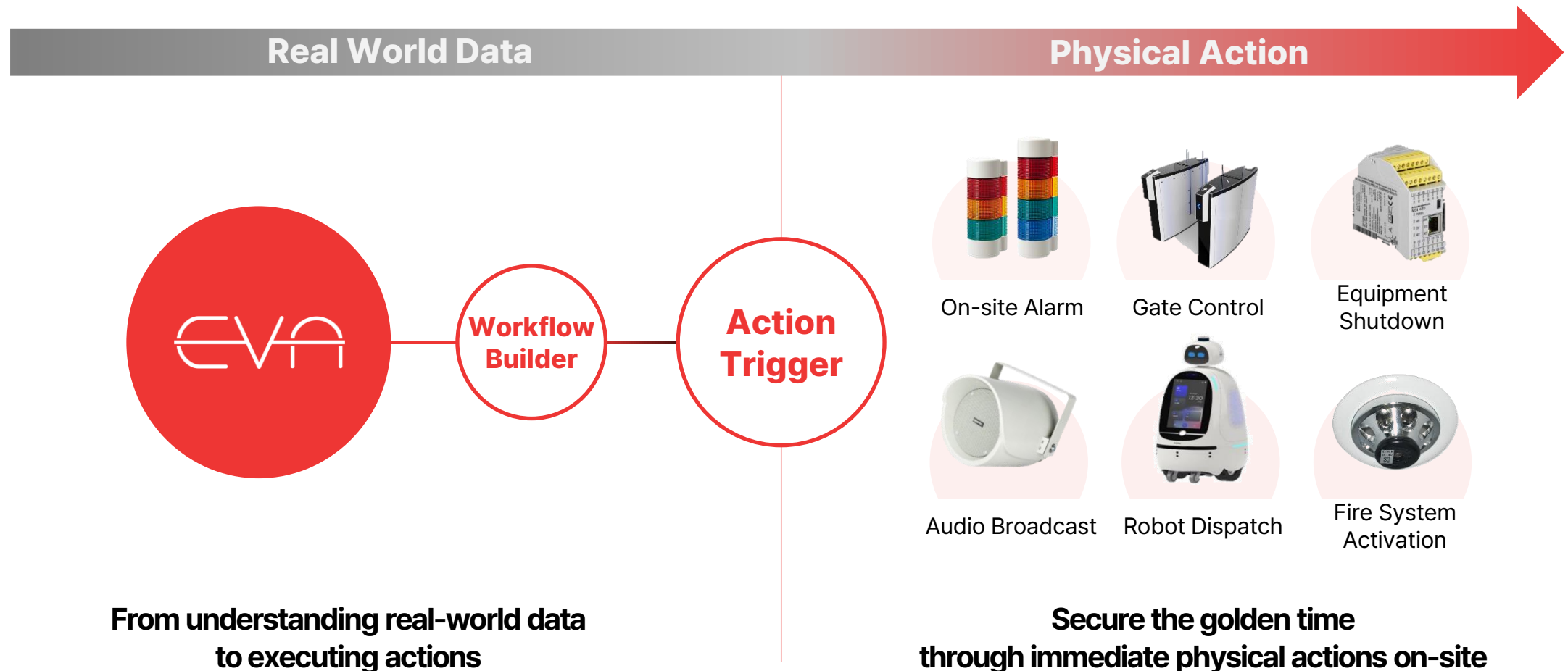
Flexible selection and combination of an AI stack optimized for the customer's environment



Solution

EVA goes beyond CCTV analytics to enable **automated field operations**

A core infrastructure that **understands** real-world data and **executes** or **orchestrates** necessary actions




EVA continuously improves usability through **monthly version updates**

- | | |
|----------------------------|--|
| EVA v2.7 (Apr 20) | <ul style="list-style-type: none">▪ Automatic recommendation of Vision Models (VM) based on detection scenario▪ Precise region configuration using polygon-based areas▪ Expanded webhook channels for Physical AI-driven field automation |
| EVA v2.6 (March 16) | <ul style="list-style-type: none">▪ Improved detection accuracy with multi-image processing▪ Scenario refinement and Vision Model enhancement for higher accuracy▪ Enhanced UX for feedback input and review |
| EVA v2.5 (Feb 22) | <ul style="list-style-type: none">▪ Face blur feature: clear for real-time monitoring, privacy-safe for recording and sharing▪ Strengthened license management: easily check available usage per license▪ Enhanced EVA Agent: easier understanding of EVA features through conversation |
| EVA v2.4 (Jan 20) | <ul style="list-style-type: none">▪ RTSP multi-registration per camera: run multiple scenarios on a single camera▪ Multi-image analysis: more accurate situation recognition▪ Alert priority settings: real-time response without missing critical events across multiple devices▪ Camera favorites: focus monitoring on key locations by user/role▪ Expanded alert image preview via Microsoft Teams → Slack |
| EVA v2.3 (Dec 5) | <ul style="list-style-type: none">▪ Expanded detection scenarios: Common & Custom scenarios▪ Flexible detection area configuration for more precise monitoring▪ Image-Guided Detection: detect based on user-defined reference images |

Solution

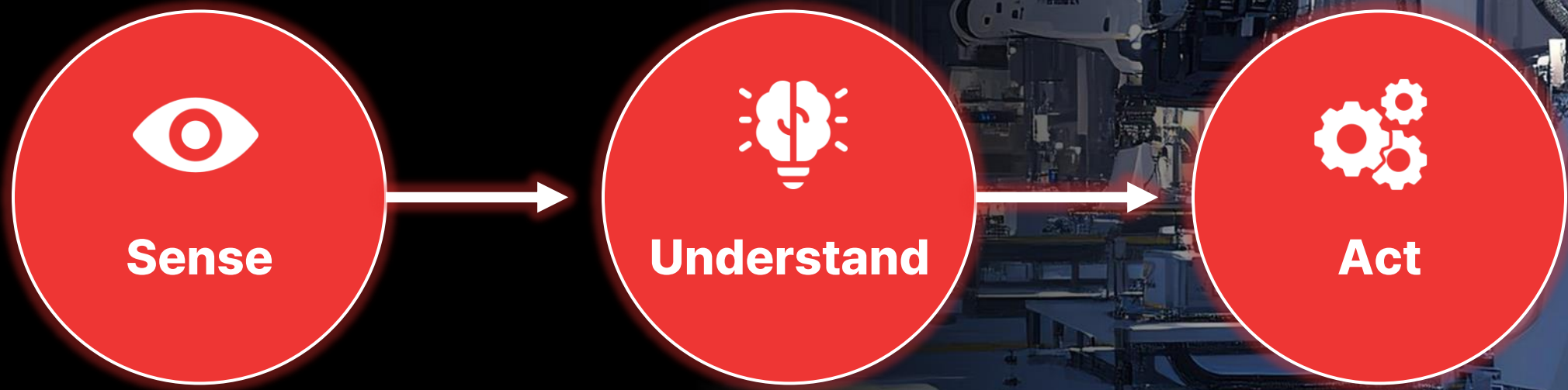
EVA enables faster deployment, lower-cost scaling, and broader actionability

	Traditional AI CCTV		Difference
Core Technology	ML model-based learning Image-based video analysis	Built on latest Multi-AI Foundation Models (VM, LLM, VLM)	Moves beyond similarity-based detection to context-aware reasoning → Improved detection scenario accuracy
Learning Process	Data labeling → Training → Inference	Zero Shot / Few Shot	No heavy upfront investment → Enhanced scalability of use cases
Scenario Configuration	Requires expert involvement (Takes ~2-4 weeks)	Configurable directly on-site (Takes minutes)	Minimizes expert dependency → Anyone can configure
Accuracy Improvement	Retraining & Redeployment needed (Requires specialists)	Scenario refinement + false positive/true positive feedback (Field-driven improvement)	Continuous improves in real usage
Service Scalability	Limited integration, infrastructure-centric	Workflow & App ecosystem (n8n, Teams, Slack, IoT, robots, etc.)	Expanded connectivity with external systems → Broader application scenarios
Deployment Environment	On Device / On-premise	On-premise / Public Cloud (AWS, Naver Cloud, etc.)	Flexible infrastructure
TCO (1,000 cameras)	~\$1.7M (KRW 2.3B) (Initial build ~\$1.5M + annual maintenance ~\$0.2M)	~\$370K (KRW 0.5B) (Initial setup ~\$150K + annual license ~\$220K)	Cost-efficient structure for large-scale deployment

To-Be

AI that senses, understands, and acts on the real world

Physical AI Brain EVA



Beyond Detection, Toward Understanding.

Powered by EVA

mellerikat.com



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