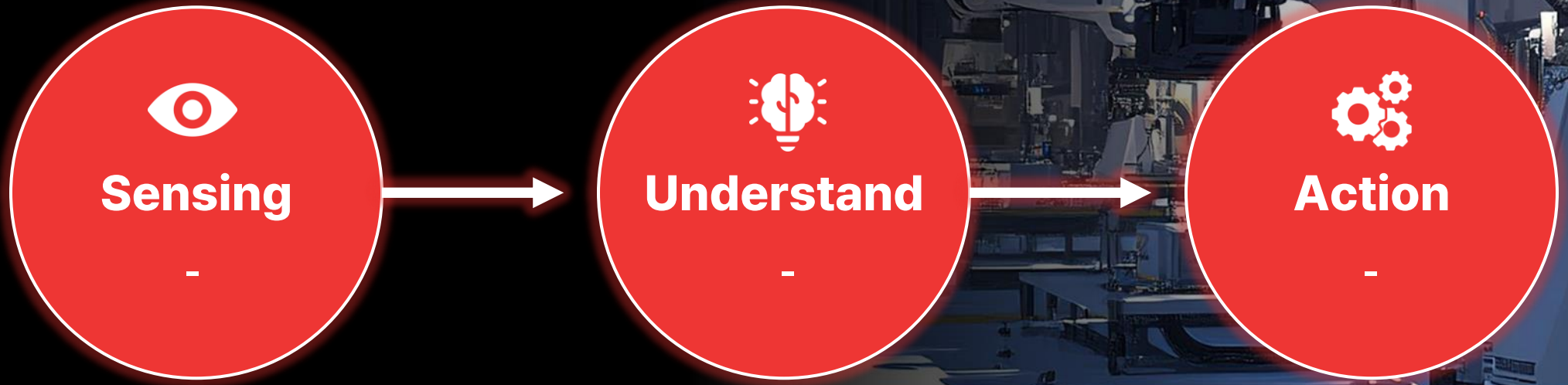

Beyond Digital,
Empowering Reality.
Powered by EVA, The Brain of Physical AI
mellerikat

Physical AI

AI that **senses** and **understands** reality,
directly acting upon the world



Evolved Vision Agent

mellerikat EVA

An intelligent automation solution that understands and judges, extending all the way to on-site control

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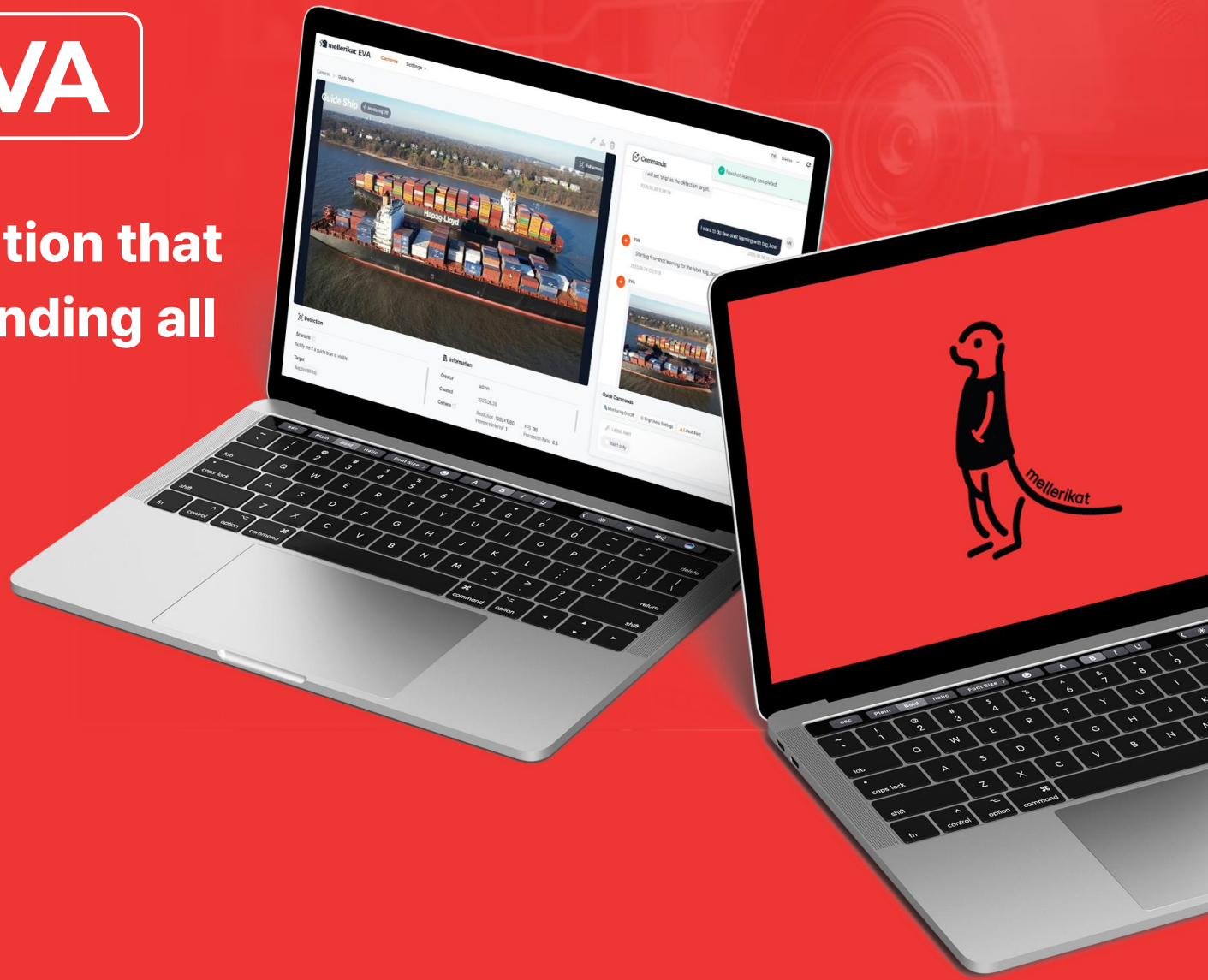
More Precision

More Safety

More Convenience



Problem

Key limitations of traditional AI CCTV systems

Accuracy

Reliance on fixed object-detection algorithms, resulting in frequent false positives

Detection Scenario

Limited to predefined scenarios, making it difficult to respond to diverse situations

Scalability

Additional cameras require upgrade costs, and model deployment is difficult

Ops Simplicity

Configuration and maintenance require specialized expertise

Sustainability

Ongoing maintenance costs are incurred for continuous learning

Problem

Limitations of existing AI CCTV solutions

On-device or server / VMS-integrated architectures

ML-based solutions require significant operational effort, while AI-based solutions impose a heavy burden in terms of compute 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 ▼
Learning Effort	HIGH ▲	LOW ▼	LOW ▼

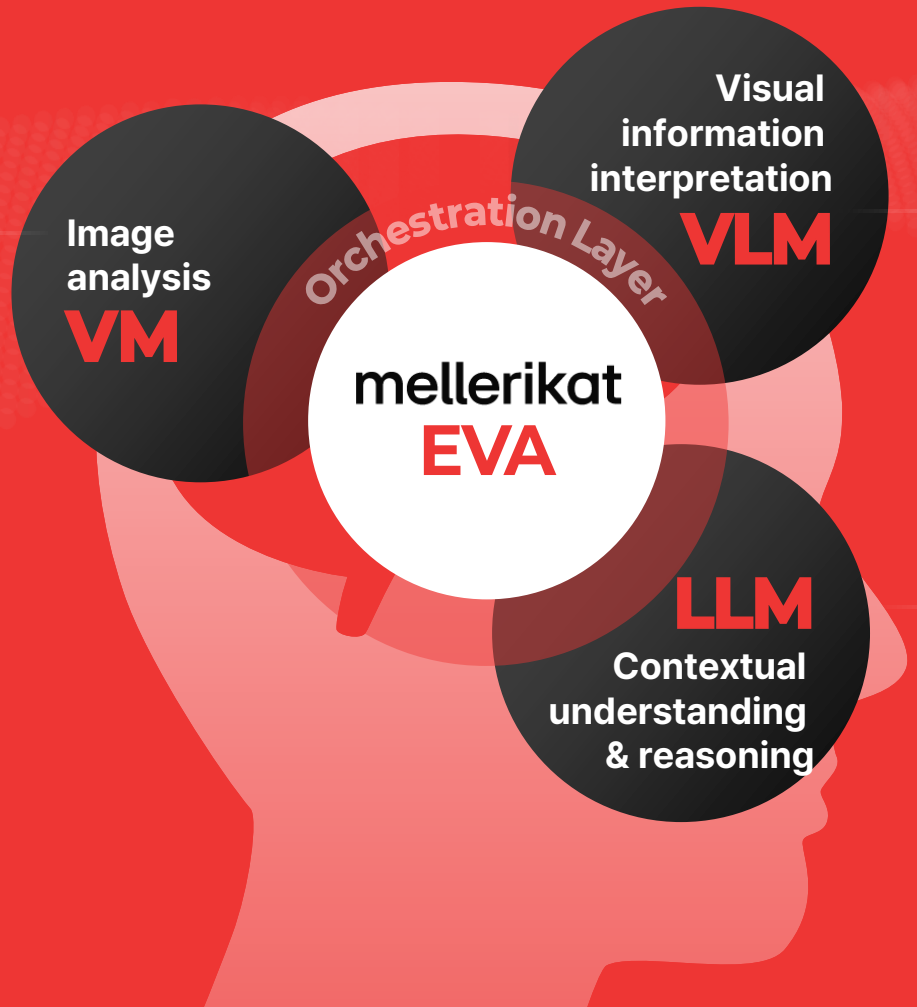
Solution

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



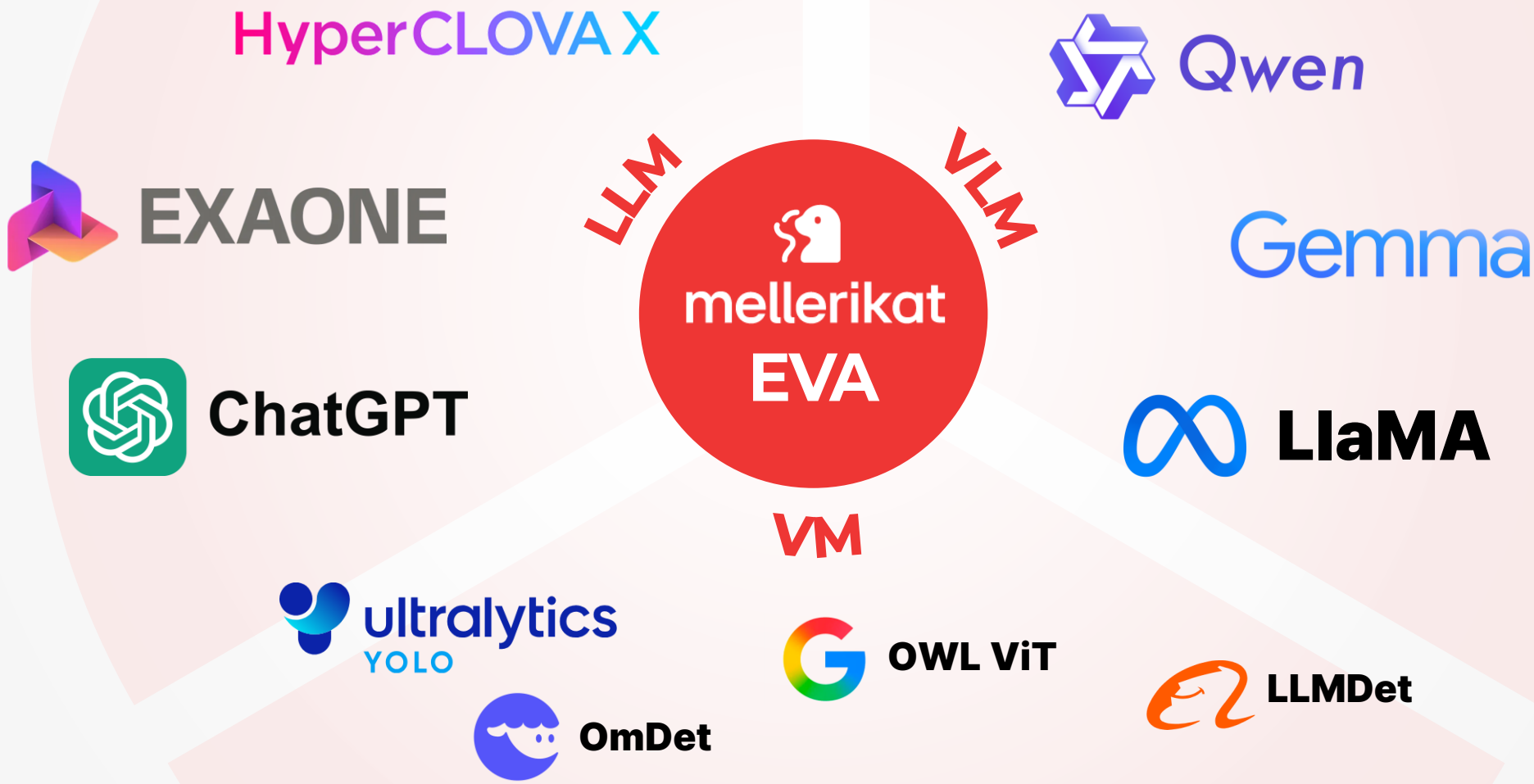
Vision Languge Model

Observing and understanding

Large Language Model

Explaining, reasoning, and coordinating through conversation

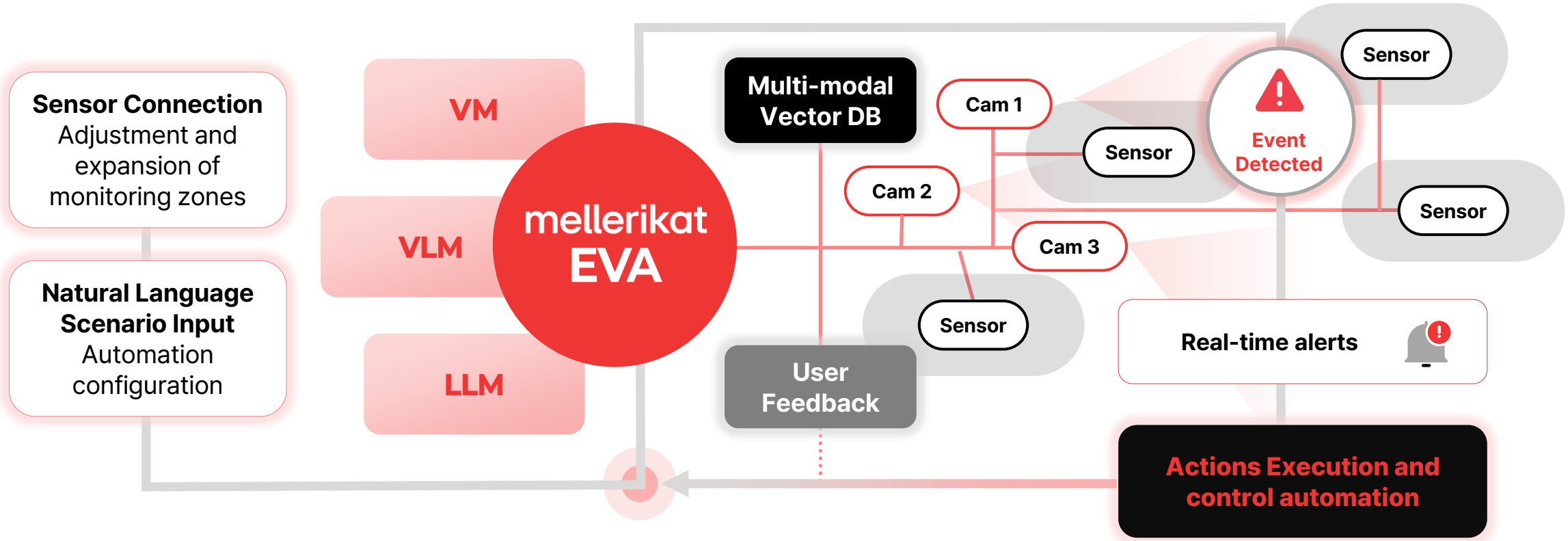
Flexible selection and combination of an AI stack optimized for the customer's environment



Solution

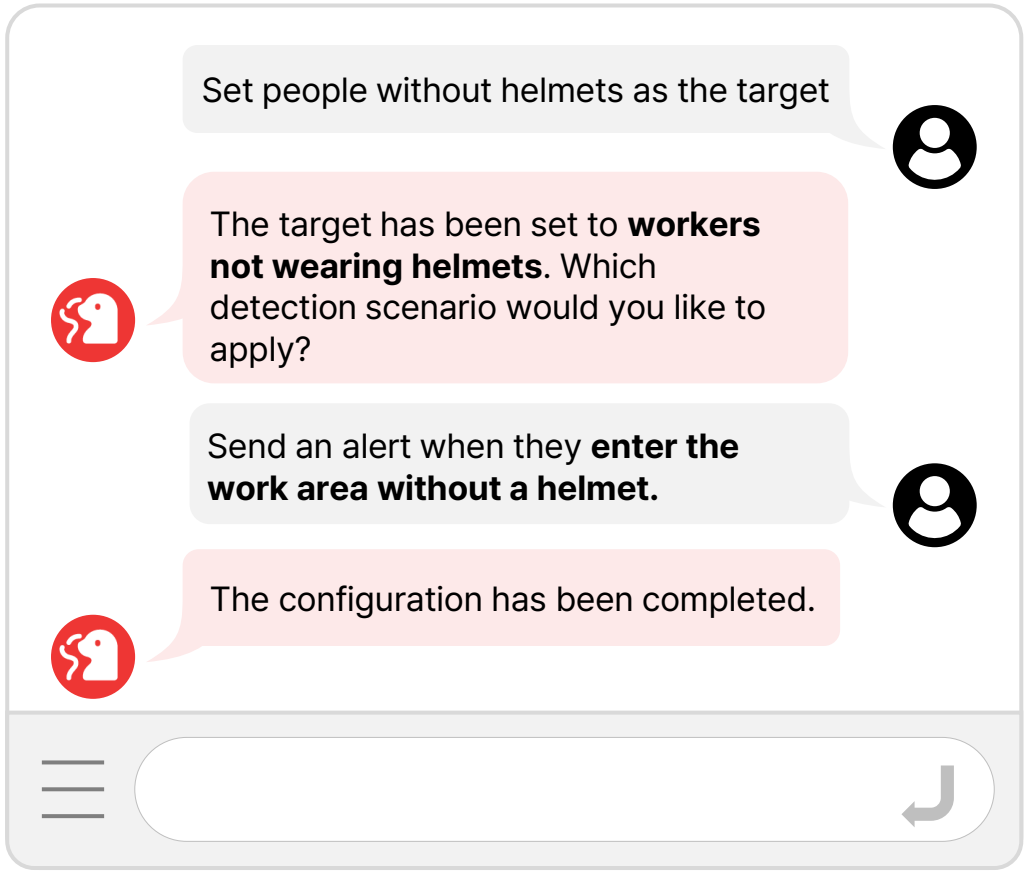
An intelligent loop of scenario-based Detection → Decision → Control, created through conversation

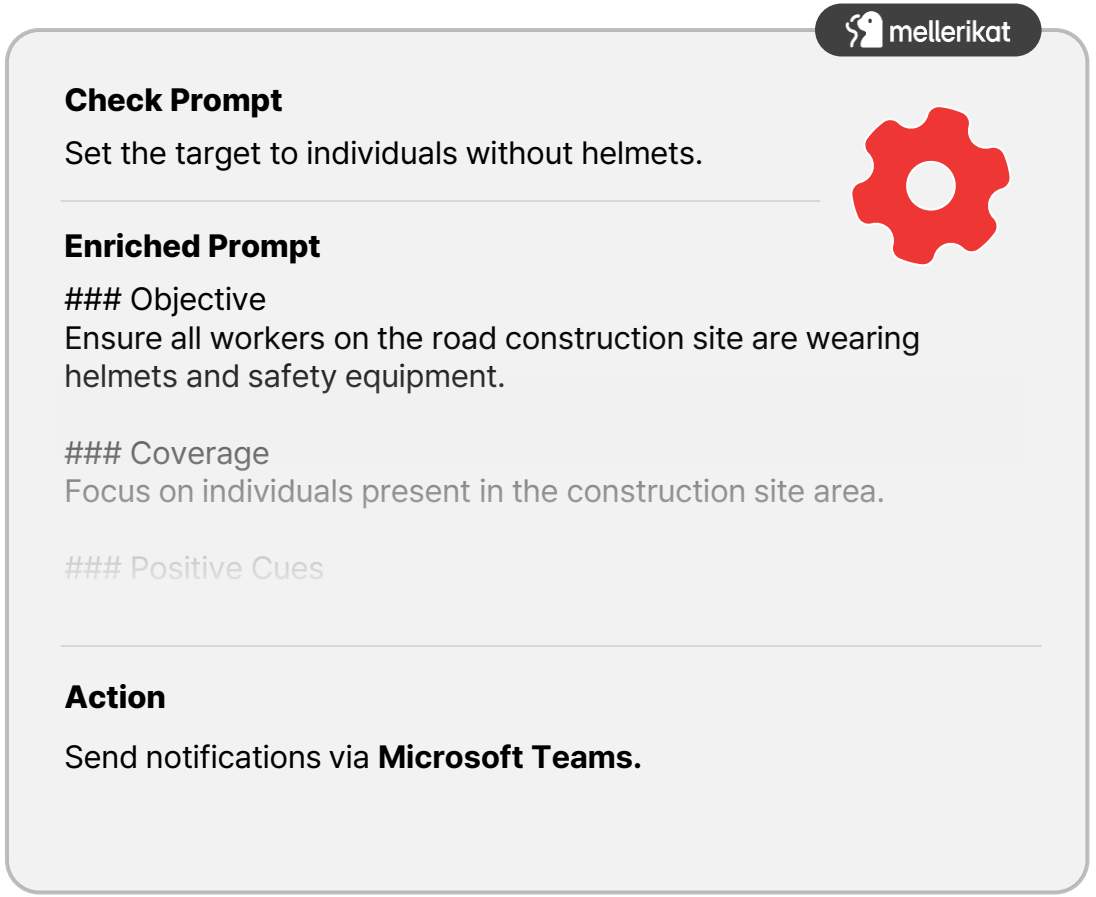
Scenario | Detection | Analysis | Action



Field Scenario Implementation

No complex configuration required! A user-friendly UI/UX that understands and adapts through conversation

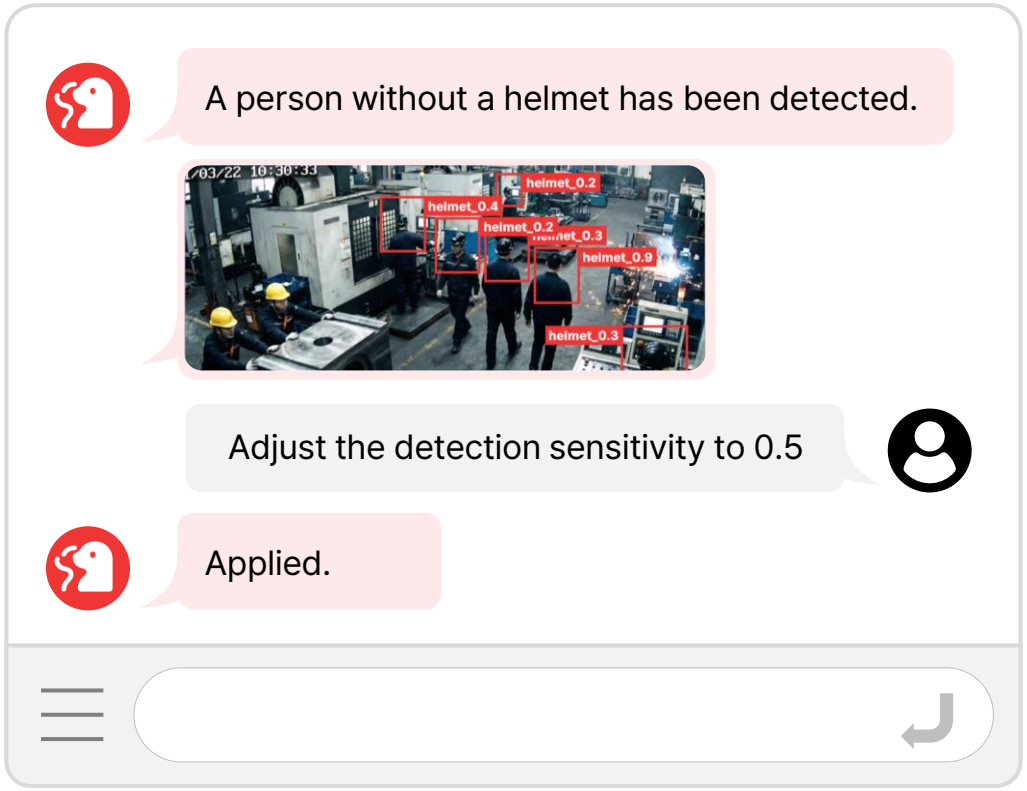


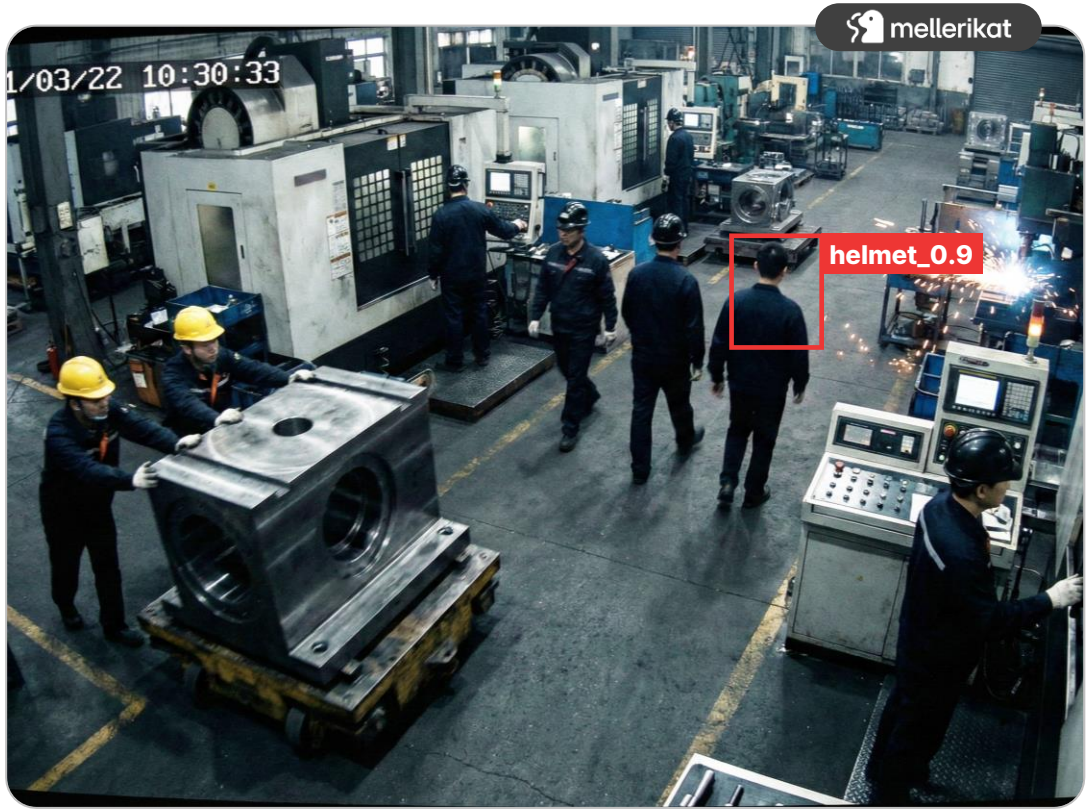


This configuration is for illustrative purposes to aid understanding and may differ from the actual UI/UX

Detection scenario modification

Detection scenarios can be improved through conversation without complex configuration





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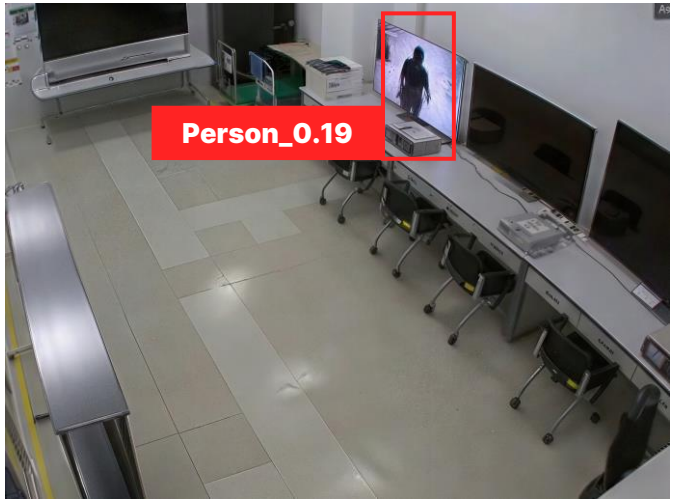
Detection scenario modification

EVA improves and optimizes in real time through user feedback

Before user feedback



A person has been detected.
One person appears to be lying on the ground

User feedback applied

User Feedback

Did EVA make an incorrect detection?"

Have you identified a false positive?
Please click the checkbox below.

☐ **Yes, this was incorrect**

[Optional] Could you provide more details about the incorrect detection? This will be reflected in future detections.

Submit

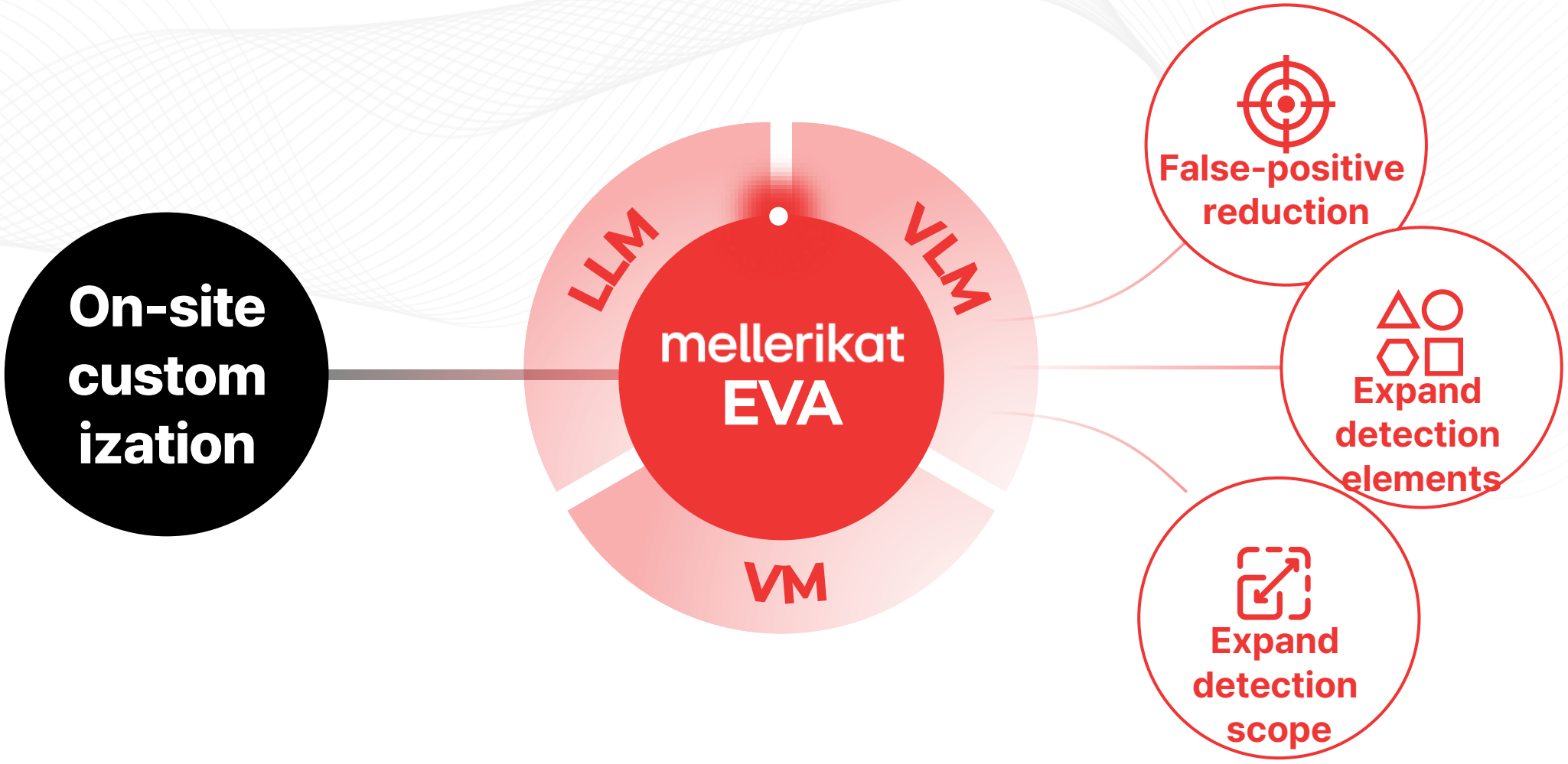
Detection after feedback

Check for any anomalies based on the current criteria

No detection targets at this time.
If any anomalies are detected, an alert will be sent.

AIOps optimization

A self-evolving AIOps platform based on RAG



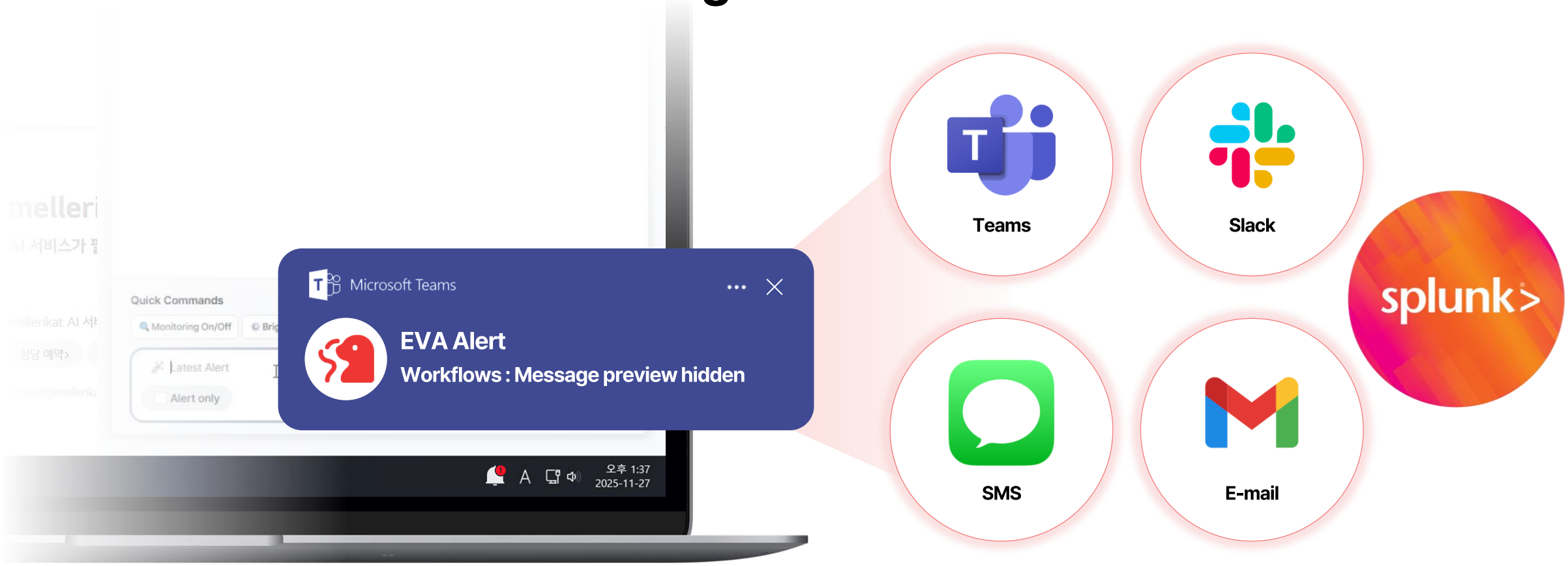
AIOps optimization

Detection scenarios enhanced through natural language conversational feedback

	Step 1 (Initial setup)	Step 2 (Scenario Refinement)	Step 3 (Augmented Detection Scenario)
Use Case 01 **Person detection within a facility**	• Notify me if a person has fallen.	• Exclude people who are sitting on a chair or standing and notify me only if a person is lying on the floor.	**Current Case** Detects individuals lying on the ground **Detection Steps** • A person is present; at least one individual is collapsed on the floor. **Exceptions** • Cases where the person is sitting in a chair or standing. • Cases where the collapsed person's body is difficult to identify (e.g., body is obstructed). • Cases where the physical form is difficult to verify (e.g., only a silhouette is visible, or less than 50% of the body—such as just a shoe—is in view). • Cases where the person is not in danger (e.g., lying down while looking at a phone or resting on a desk).
Use Case 02 **Mask-wearing compliance in the workplace**	• Notify me if someone is not wearing a mask	• Exclude people who are standing, and among those sitting on chairs, notify me only if they are performing soldering work and are not wearing a mask. • Also exclude people who are sitting and using a laptop or a mobile phone.	**Current Case** Detects individuals who are soldering while seated in a chair without wearing a mask. **Detection Steps** • A person is seated and working. • No visible mask is detected on the worker's face. • The worker is actively performing soldering tasks. **Exceptions** • Cases where it is difficult to verify mask-wearing status (e.g., the worker's face is obstructed).

Seamless work environment

Alerts and actions can be executed directly within the user's existing work environment



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PoC

High On-Site Satisfaction! EVA Satisfies Cost, Performance, and Convenience

Safety & Manager

Feedback after implementing EVA

- **Monitoring a large number of CCTV feeds made real-time accident surveillance and prevention difficult.**
- **After adopting EVA, real-time response and pre-accident prevention have become possible.**
- **Managers can now reduce the time spent on constant monitoring and focus more on core safety tasks.**

Process Manager

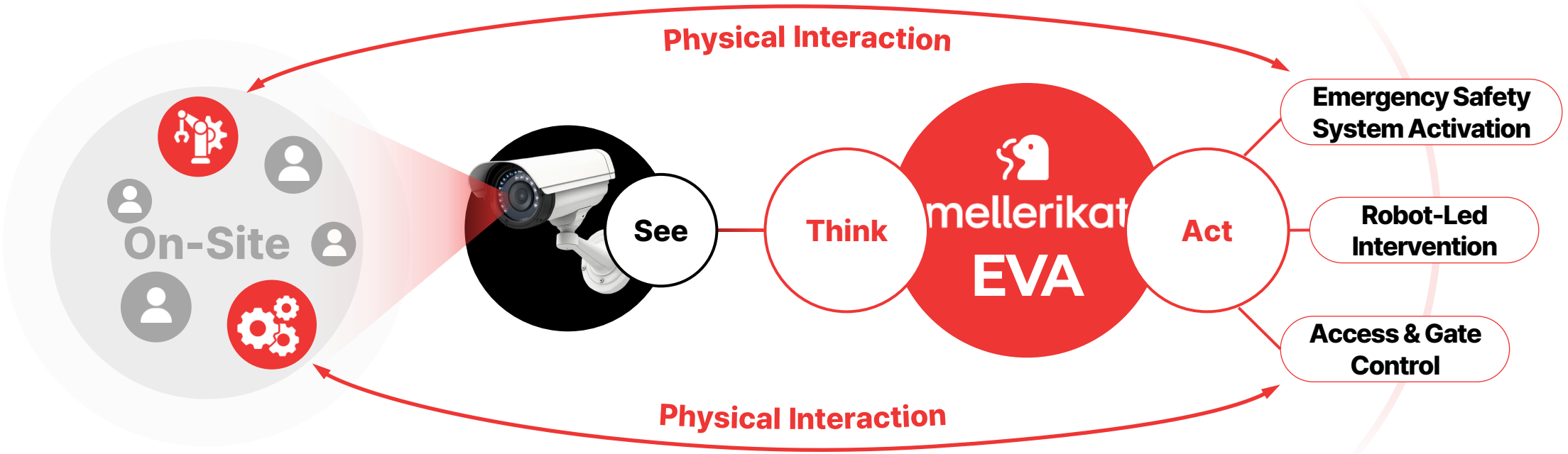
Feedback after implementing EVA

- We were looking for a solution that works in a real-world environment rather than just in theory, and we are extremely satisfied after implementing EVA.
- Even without deep domain knowledge in AI, this solution allows anyone to receive site alerts and take immediate action.
- While previous vision solutions were limited to simple movements, we can now reflect specific on-site needs into the system immediately.
- Rule-based solutions were difficult to improve, but EVA offers high reliability because it continuously improves by learning from "NG" (No-Good/Error) data.

Physical AI

The Physical AI Platform: Controlling the Site Beyond Detection

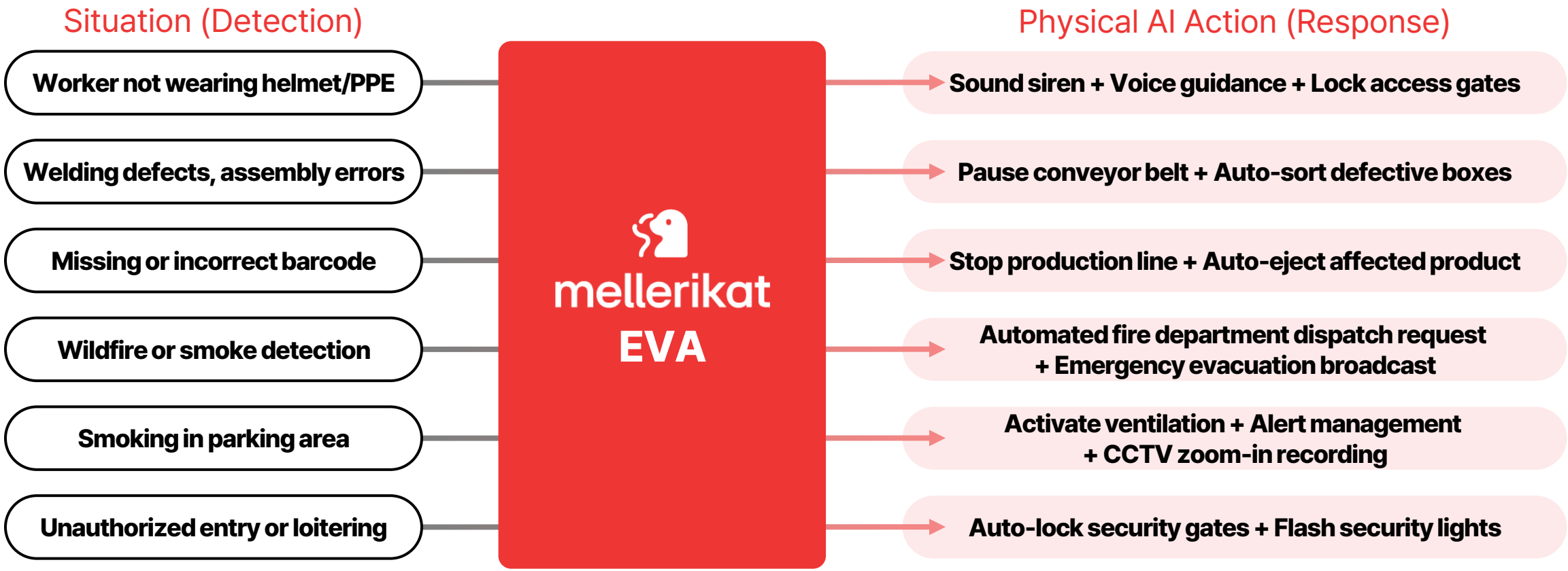
The Completion of a Full Intelligent Loop



Physical AI

Physical AI Actions Powered by EVA

Ensuring 365 days of uninterrupted safety, disaster protection, and defect control.



EVA understands the physical world and drives real actions

Industries can now move beyond detection
toward true autonomous action.

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