

NVA

Nota Vision Agent

NVA (Nota Vision Agent)

A Generative AI-Powered Vision Agent

NVA (Nota Vision Agent) is a Vision-Language Model (VLM)-powered surveillance solution that autonomously perceives and understands on-site situations. It instantly detects and analyzes potential hazards from real-time video streams, dramatically enhancing safety management efficiency across industries.

Nota Vision Agent

One Agent. Any Domain.

Industrial Safety : PPE & Coworking

Monitor safety compliance, such as wearing PPE or collaboration rules

This image shows two construction workers in a building under construction. One worker is standing on a ladder, and another is on the floor. Yellow bounding boxes highlight the workers' safety vests and hard hats, indicating they are wearing the required PPE.

Industrial Safety : Forklift Collision Risk

Monitor the risk of collisions or accidents in the workplace

This image shows a warehouse interior. A forklift is moving near several pallets of goods. A yellow bounding box highlights the forklift operator, and another highlights a worker standing nearby, illustrating the system's ability to monitor for potential collision risks.

ITS : Traffic Accident Report

Discover a traffic accident and create a step-by-step report in real time

This image shows a night-time view of a road where a car has been involved in an accident. A green bounding box highlights the damaged vehicle, and a red box highlights a person in high-visibility clothing who appears to be a responder or investigator at the scene.

Smart City Surveillance

Detect public order issues or illegal dumping

This image shows a street scene with a white van parked on the side. A yellow bounding box highlights a person walking away from the van, possibly indicating a public order issue or illegal dumping.

Smart Building Security

Detect security or safety issues in the building

This image shows the interior of a modern building lobby. Two people are interacting near a sofa. A red bounding box highlights one of the individuals, likely detecting a potential security or safety issue.

Retail Security

Detect security or safety issues in the store

This image shows a retail store interior. A person in a black shirt and cap is interacting with a customer. Red bounding boxes highlight both individuals, suggesting a security or safety concern being monitored.

Key Features

Real-time Contextual Scene Understanding



- Enables proactive awareness and accurate detection of previously unseen anomalies
- Delivers instant alerts to enable swift response and prevent accidents

Automated Prompt-driven Intelligence



- Defines detection scenarios through natural language prompts
- Supports intuitive video search and auto-generated reports, reducing manual workload

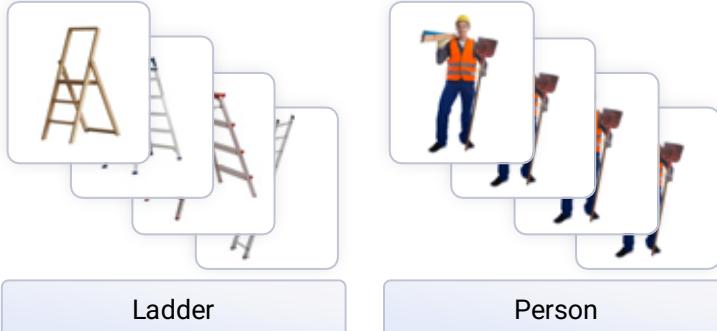
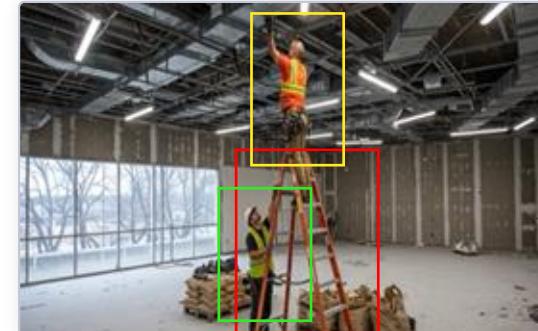
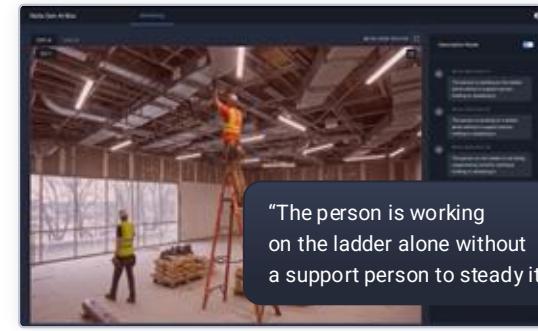
Edge-oriented Execution



- Processes video data entirely on-site, ensuring privacy and compliance
- Delivers low-latency inference on resource-constrained hardware

Technical Capabilities

Combined Strengths of CV and VLM

Detection Methodology		Strengths
CV	 <p>Ladder</p> <p>Person</p>	
	 <p>Two workers are working together using a ladder</p> <p>Two workers are working together using a ladder</p>	<ul style="list-style-type: none">High-speed, high-precision detection of trained objectsReliable for repetitive, rule-based detection tasks
VLM		
		<ul style="list-style-type: none">Interprets complex situations and environmental contextIdeal for behavior and judgment-based detection

Proficient in Both CV and VLM, Nota AI Delivers Optimal Solutions Tailored to **Each Customer's Needs**

Technical Capabilities

#1

Well-Defined Object Detection



Detecting hazardous elements with distinct characteristic in specific areas

Both **CV** and **VLM** Appropriate

Scenario-Based Model Application

#2

Requiring Value Judgement



Analyzing and predicting potential damage levels or spread areas based on current condition

#3

Behavior-Based Hazard Detection



Identifying potential risks such as SOP violations, negligence, and unsafe actions to proactively prevent incidents

VLM Required

Competitive Advantage



Market Positioning

Evaluation Criteria		Nota AI	A	B	C
Technical Maturity	VLM Capability	✓	△	✗	✗
	Vision Model Versatility	High	Limited	Low	Limited
	Edge Deployment	✓	△	✓	✗
Commercial Scalability	Commercial Deployment	High	High	High	Limited
	End-to-End Delivery	✓	△	△	✗
	PoC-to-Production	✓	✓	✓	△

Evaluation Criteria

* **Technical Maturity:** Expertise in developing and deploying diverse Vision AI models

* **Commercial Scalability:** Proven ability to deliver end-to-end solutions from PoC to full-scale production

Legend

- ✓ Available
- ✗ Not available
- △ Partial

High: Multiple commercial deployments

Limited: Few deployments

Low: PoC-level only

Competitive Advantage



Multi-Model Vision AI Expertise

Ability to develop and deploy vision AI models—including VLM and CV—in the most effective combination for each scenario.

Key Differentiators



Edge Deployment Capability

Designed to operate reliably within constrained hardware and network environments, powered by proprietary AI compression and optimization technologies.



Proven End-to-End Delivery Experience

Validated through commercial deployments, scaling from PoC to full production systems.

Customer Benefit



Achieving High Detection Performance

- Combines various vision AI technologies to address a wide range of detection requirements
- Customizes model configurations based on site-specific characteristics and detection complexity



Maximizing Business Productivity

- Compatible with existing CCTV and video management systems without the need for additional equipment purchases
- Can be applied on-site within 2–3 weeks without complex pre-training



Improving Operational Efficiency

- Reduces administrative workload with features such as automated analysis reports and video search
- Enables efficient personnel allocation through automated CCTV monitoring

NVA In Action

Real-Time Monitoring

The screenshot shows the NVA real-time monitoring interface. On the left, a sidebar lists hazard detection zones and channels, with '출고 대기장' selected. The main area displays four camera feeds from '출고 대기장 1번 카메라', '출고 대기장 2번 카메라', '출고 대기장 3번 카메라', and '출고 대기장 4번 카메라'. The 2nd camera feed shows a warning for 'PPE 미착용(안전모) 경지됨'. A red callout box highlights this alert, which reads: '출고 대기장 2번 카메라에서 PPE미착용(안전모)이 검지 되었습니다.' with a timestamp of '2025-02-15 12:49:01'.

Searchable List of Hazard Detection Zone and Channels

Real-Time Hazard Alerts

- Enables proactive safety measures through integrated real-time alerts
- Allows monitoring personnel to respond immediately to detected hazards

NVA In Action

Dashboard



Industrial hazards are categorized, tracked, and converted into data

Displays the precise location of each hazardous incident

Visualizes and analyzes incident occurrence data by month and category

NVA In Action

Rule Setting

The screenshot shows the NVA Rule Configuration interface under the Industrial Safety tab. On the left, a sidebar lists detection tasks: 'All List' (+), 'Search name' (input field), 'NVA_01_PPE' (expanded, showing 'Action Violation Detection Rule' and 'PPE Safety Rule'), and 'NVA_02_Forklift' (expanded, showing 'Forklift Violation Detection Rule'). A blue dotted arrow points from the 'List of Detection Tasks' section to the sidebar. The main panel shows 'NVA_01_PPE - Action Violation Detection Rule'. It has tabs for 'Basic settings' (selected), 'ROI settings', and 'Prompt settings'. Under 'Basic settings', there are fields for 'Cropping Padding' (5), 'Number of image sequence' (0), 'Crop type' (set to 'People'), and 'Frame drop' (0). Under 'ROI settings', there is a section for 'Assistant Detection ROI'. Under 'Prompt settings', there is a text area with a prompt: '<image> Analyze this CCTV footage and:
Ladder Safety:
- Detect if anyone is working on a ladder
- Verify if there's a person supporting the ladder
- Note if the support person is actively holding/steadying the ladder
Provide response in this format:
- Ladder Safety: [Complied/Not Complied]
* If Not Complied: [Brief explanation of the reason]'.

- List of Detection Tasks**
 - Easily search existing rules
- Video Analytics Setting**
- Monitoring Specific Hazard Zone**
 - Allows setting customizable zones for focused analysis of collected video and images
- Add or Edit Detection Rules**
 - Define detection rules using natural language prompts
 - No coding required

NVA In Action

Incident Search

조회

이벤트 조회

기간: 2025-02-24 ~ 2025-03-10 사이트: 전체 이벤트: 전체 위험 레벨: 전체 정렬: 최신순

모든 화이트보드 표시 CSV 다운로드

확인 상태: 전체 6개 항목 표시

일시	사이트명	체널명	위반 이벤트	위험 레벨	확인 상태
2025-01-17 19:50:01	출고 대기장	1번 카메라	건설기계 출동 예방	위험	미확인
2025-01-17 19:50:01	출고 대기장	2번 카메라	컨베이어 벨트 침입	경고	확인
2025-01-17 19:50:01	출고 대기장	1번 카메라	안전모 미착용	주의	확인
2025-01-17 19:50:01	지게차 이동통로	1번 카메라	안전모 미착용	주의	확인
2025-01-17 19:50:01	출고 대기장	3번 카메라	안전모 미착용	주의	확인
2025-01-17 19:50:01	피킹 작업존	2번 카메라	안전모 미착용	주의	확인
2025-01-17 19:50:01	입고 처리구역	4번 카메라	안전모 미착용	주의	확인
2025-01-17 19:50:01	출고 대기장	4번 카메라	안전모 미착용	주의	확인
2025-01-17 19:50:01	지게차 이동통로	2번 카메라	안전모 미착용	주의	확인
2025-01-17 19:50:01	출고 대기장	2번 카메라	안전모 미착용	주의	확인
2025-01-17 19:50:01	입고 처리구역	3번 카메라	안전모 미착용	주의	확인

2025-02-15 12:49:11

» 컨베이어 벨트 침입

발생 정보

일시: 2025-01-17 19:50:01
사이트명: 출고 대기장
채널명: 2번 카메라
위험 레벨: 경고
확인 상태: 확인

비고: 작성된 내용이 없습니다.

이벤트 확인

검지 기록



Search Specific Incident

- Search specific events by applying filters from all collected footage
- Supports natural language search
- Eliminates the need for manual review of all footage

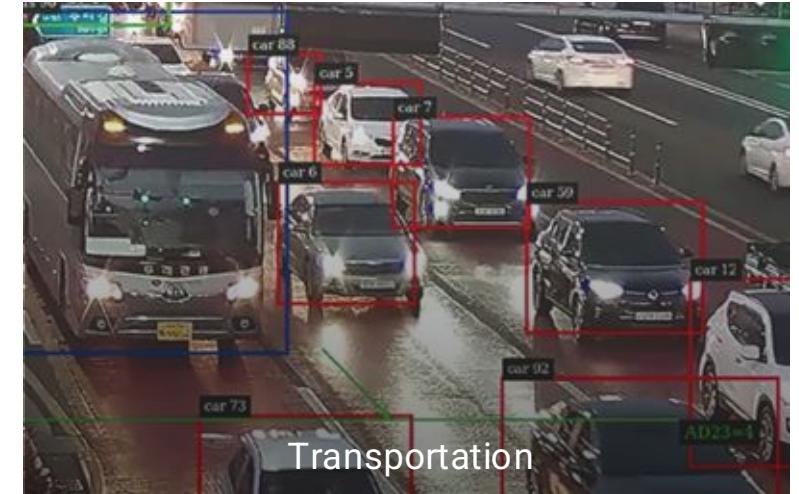
Applicable Industries



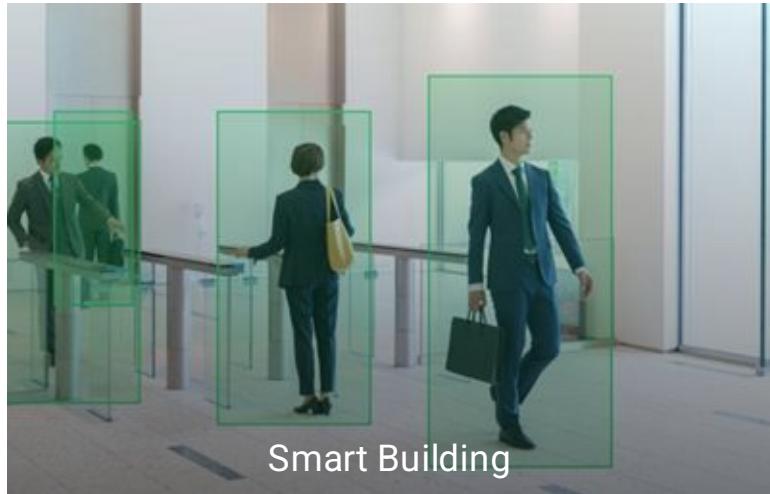
Industrial Safety



Surveillance



Transportation



Smart Building



Retail



Child care / Senior care

Use Cases

Industrial Safety

Chemical & Textile Manufacturer "K"

Challenge

Solution

Result

Problem 01

Traditional monitoring systems lack the ability to interpret complex worker behaviors

Equipment Interlock

as a potential safety mechanism to halt machinery in hazardous zones

Proactive Accident Prevention

Proactively detects and blocks human error-based hazards, preventing accidents at the source

High SOP Compliance Accuracy

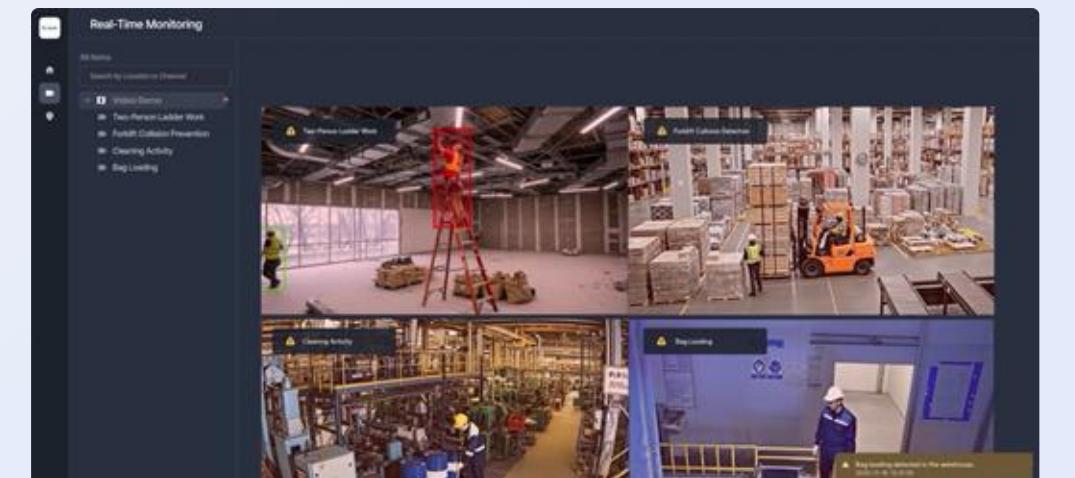
Achieved F1 Score of 85+ for SOP compliance accuracy across all tested tasks

Problem 2

Personal protective equipment (PPE) violations and unsafe behaviors often go unnoticed until incidents occur

SOP Compliance Monitoring

detects violations such as improper cleaning, incorrect loading, and floor-level repackaging through VLM-powered analysis



Use Cases

Surveillance

Municipal Government "G"

Challenge

Solution

Result

Problem 01

Illegal dumping is difficult to monitor consistently across widespread public areas

Edge-deployed NVA

detects smoke and burning activities to prevent fire incidents in real-time

Enhanced Public Safety Response

Improved response efficiency for public safety incidents

Privacy-Compliant Monitoring

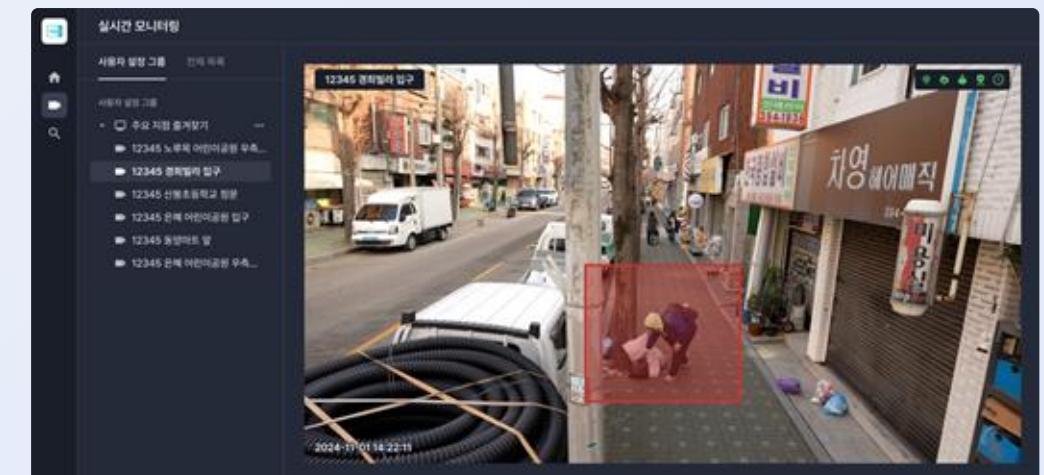
Enabled consistent monitoring while maintaining strict privacy and data governance compliance

Problem 2

Smoke and burning activities often go undetected until fire incidents escalate

Contextual video intelligence

identifies illegal dumping behaviors that traditional monitoring systems miss



Use Cases

Transportation

UAE Roads and Transport Authority

Challenge

Problem 01
Rapid detection of road incidents is critical across vast highway networks with high-speed traffic

Solution

VLM-powered NVA
detects road incidents and anomalies in real-time directly on edge devices

Result

High Incident Detection Accuracy

Achieved 95%+ accuracy in road incident detection during PoC validation

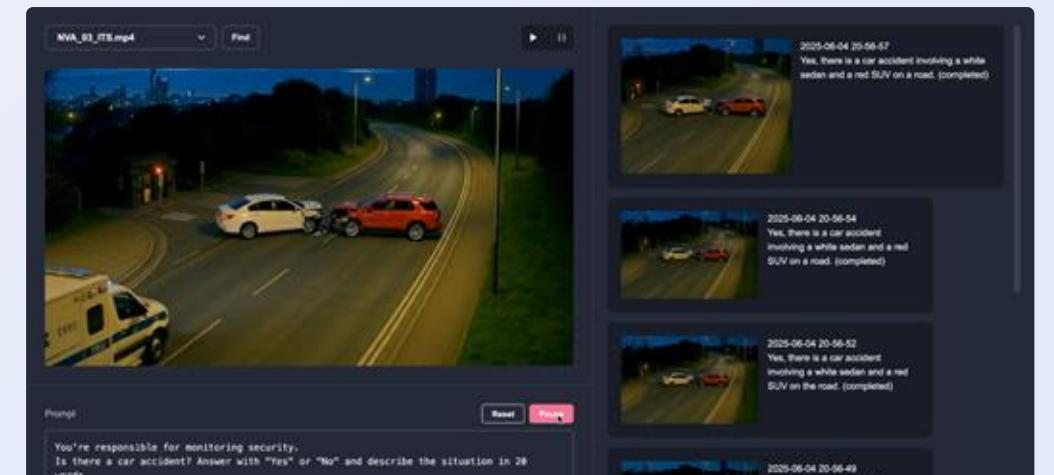
Operational Cost Efficiency

Reduced cloud dependency, lowering operational costs while enabling real-time response

Problem 2

Cloud-dependent systems pose challenges in latency, operational costs, and data security compliance

On-device processing
ensures minimal latency while maintaining strict data privacy and security standards



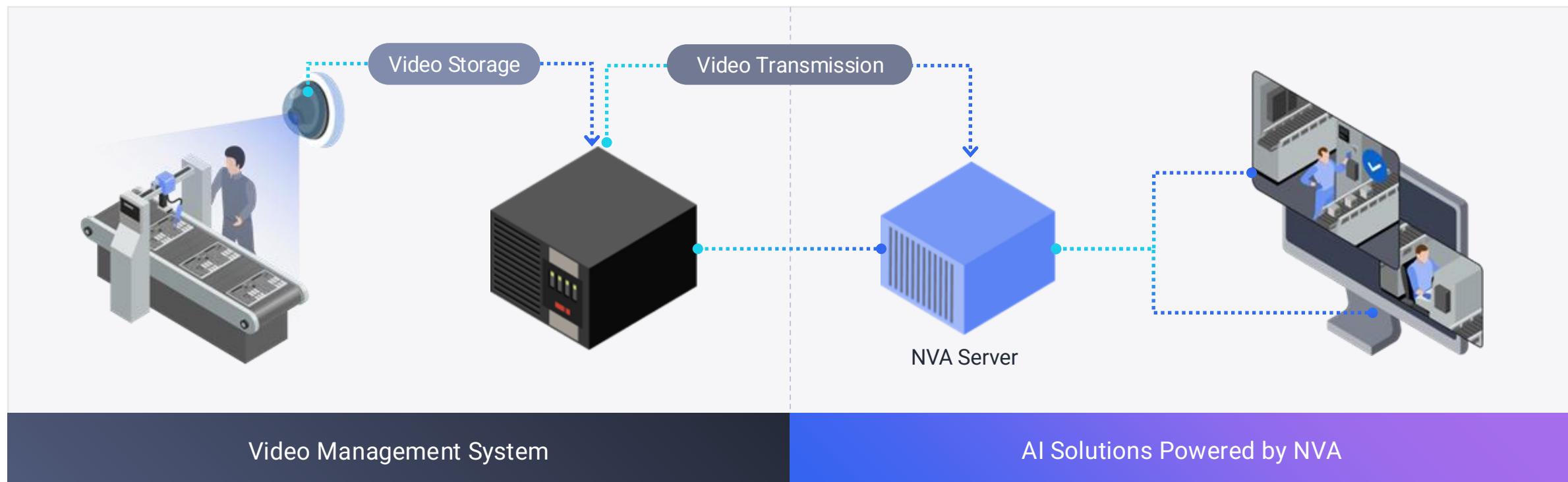
Pipeline

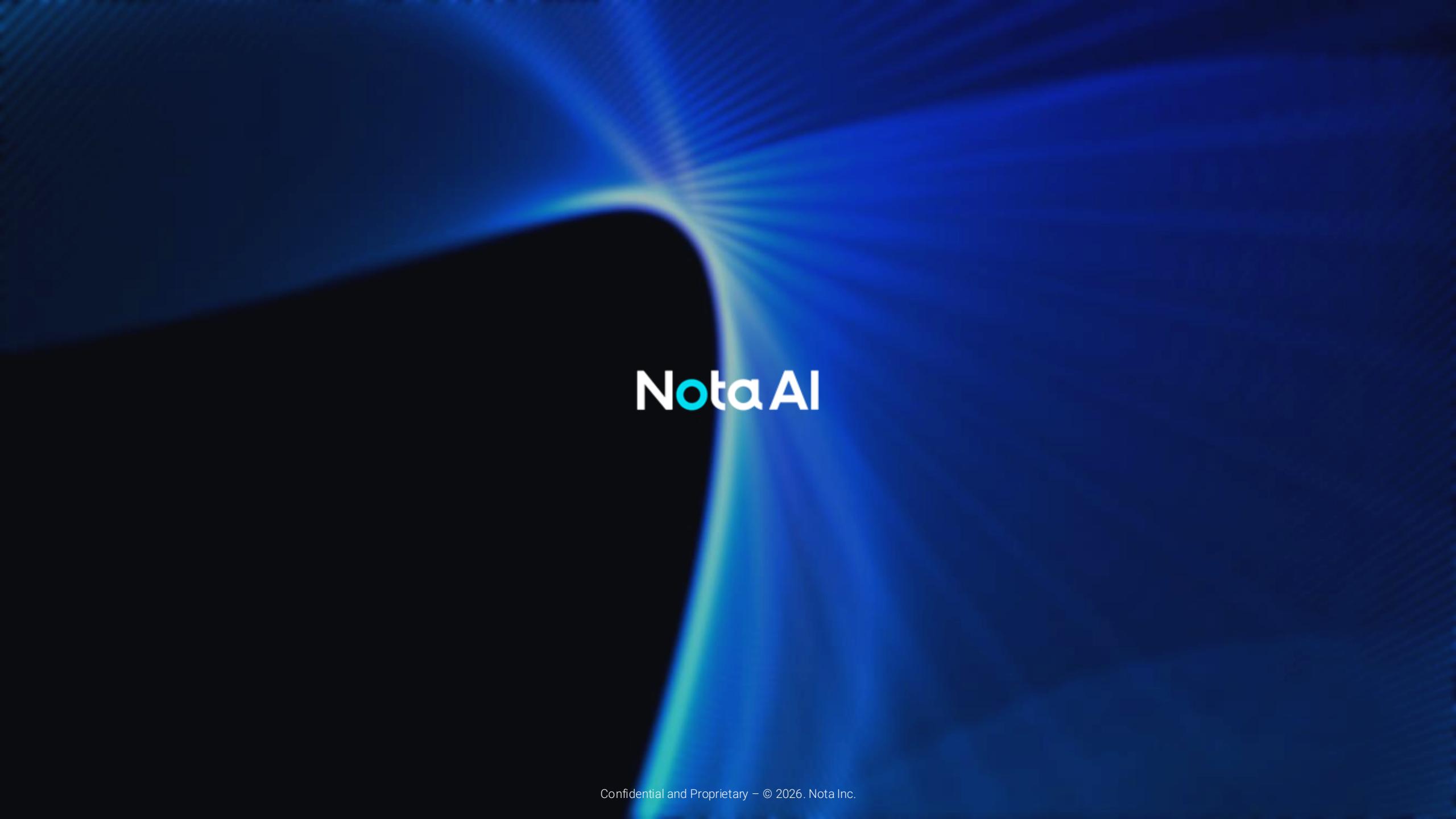
No additional equipment required

Easily integrate by connecting the 'NVA server' to existing video management systems.

Rapid On-Site Deployment

NVA can be rapidly implemented in the field within just 2–3 weeks, without complex pre-training processes.



The background features a dark blue gradient with a bright, glowing blue light effect that radiates from the bottom left towards the center, creating a lens flare or starburst effect.

NotaAI