AI Video Platform for Intelligent Facility Condition and Cleaning Quality Monitoring



- ✓ Insufficiently cleaned area
- ✓ Puddle
- ✓ Bin overflowing
- ✓ Cleaner finished cleaning

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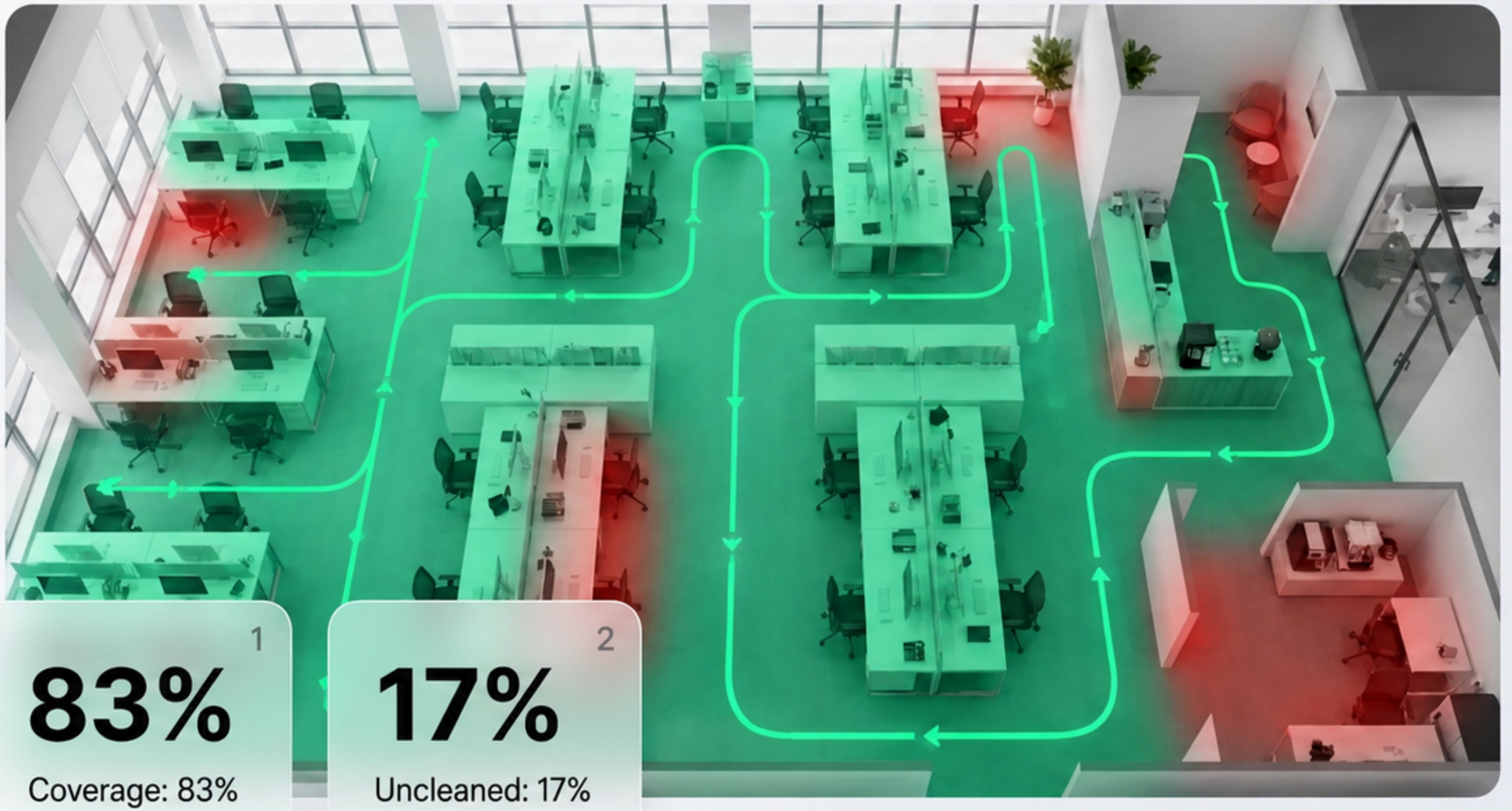
Why Existing Control Stops Working

- Rising facility operation quality standards.
- Large numbers of rooms and recurring tasks.
- Need for objective contractor oversight.
- Lack of continuous information on facility conditions.
- High cost of manual inspections.



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Video-Based Cleaning Quality Monitoring



1

83%

Coverage: 83%

2

17%

Uncleaned: 17%

1

Calculated through the end of the shift interval

2

Quality threshold: 60%

3

Alert:
Ticket created (Cleaning queue)

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Monitoring Logic: From Tracking to Coverage

1



Cleaner detected

~8 frames/sec

2



Track generated

3



Area covered by track

4



Coverage percentage

5

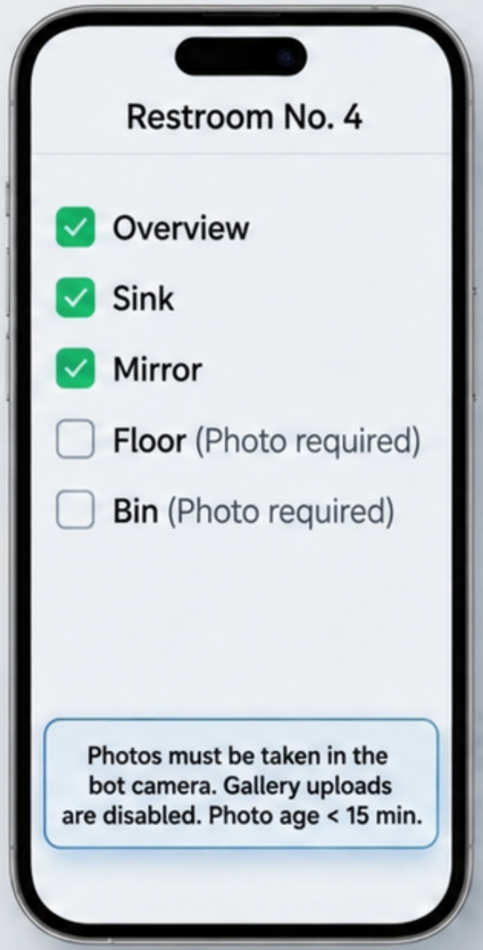


Zone detection

Processing is fully anonymized. The cleaner's identity is not determined.
Only physical movement across the area is counted (standing still is excluded).

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Photo Inspection Workflow and Privacy



AI checks compliance for the room type

↓

Checks that no people are in frame

↓

Detects violations
(creates a ticket with photo evidence)

↓

Deletes compliant photos

Photos without violations are deleted immediately and never stored!

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Examples of AI Photo Analysis



Dirty sink



Puddle on floor



Overflowing bin



Unattended item



Uncleaned flipchart

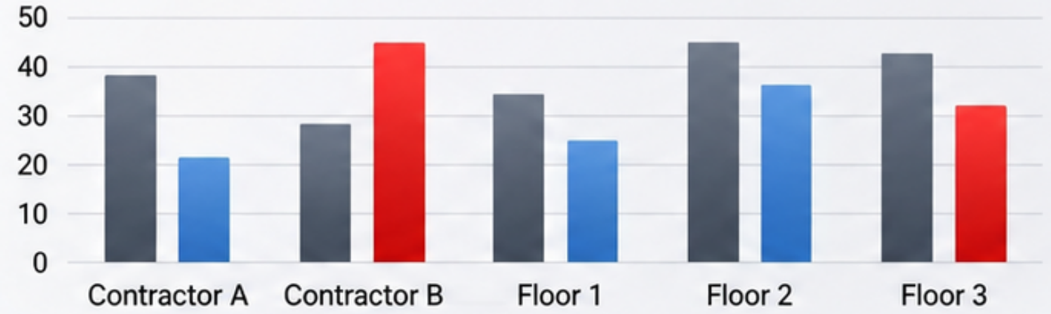


Missing paper

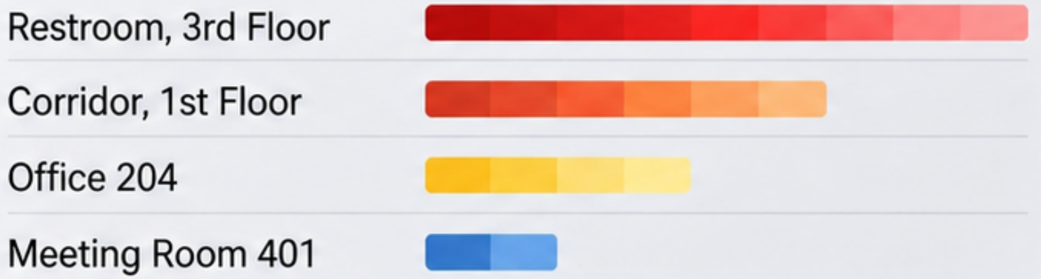
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Dashboards and Analytics: Process Transparency

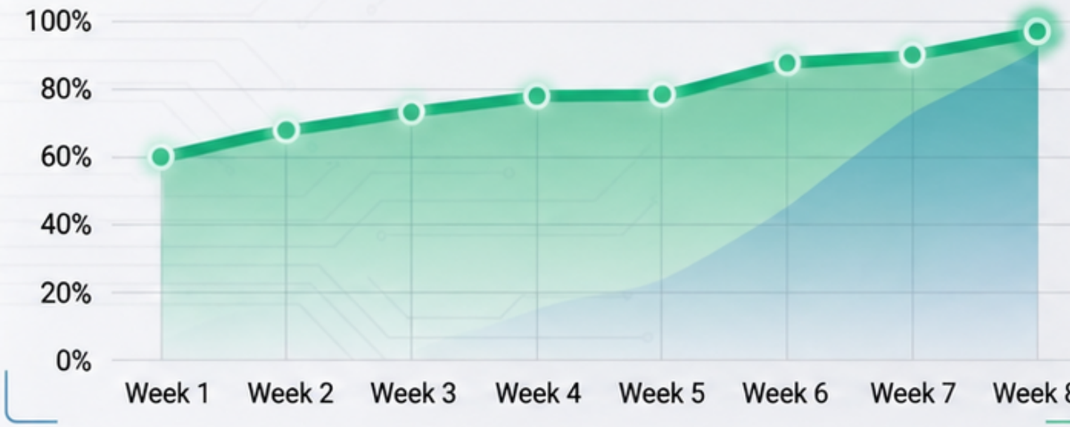
Number of Violations



Most Problematic Rooms



Average Cleaning Coverage



From subjective assessments to management based on objective digital data.

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Scaling: Roadmap to a Digital Twin

End Goal
Creation of a full building operations digital twin.

Near Future
Comprehensive operational monitoring of all building systems.

Tomorrow
Fire safety integration and full contractor SLA monitoring.

Today
Pilot launch — cleaning and baseline facility condition monitoring.



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