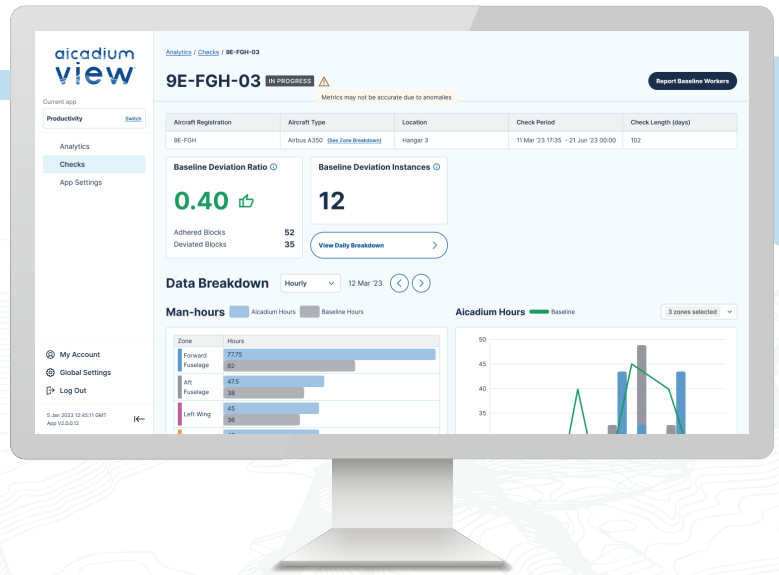


Let's disrupt MRO together

Computer vision is transforming MROs across the globe, catapulting them to new levels of quality and productivity.



The problems >>>

MRO operations are costly and labour-intensive. They require a large, highly skilled workforce to handle intricate maintenance and repair tasks that include defect identification, parts counting, quality checks, and more.

There is also growing concern about the retirement of highly skilled workers and a lack of interest in the job from the incoming workforce. This is happening alongside the demand from Airbus and Boeing for over 40,000 new commercial jets in the next 20 years to meet increasing travel demands and replace older jets with more fuel-efficient models.

The need to efficiently manage workforce productivity, improve throughput, maintain high-quality levels, and reduce waste has become more critical than ever.

The solution >>>

AI-powered computer vision to address critical MRO areas of operation.

Aicadium View™ leverages existing CCTV camera infrastructure to provide MROs real-time monitoring of key KPIs related to workforce utilisation and time spent in various defined work zones as well as asset inspection for anomalies and changes all while ensuring employee safety.

CCTV camera feeds stream into Aicadium View, which uses AI-powered machine learning models to monitor work zones and the activities, people, and objects within them. The system then provides actionable data on workforce distribution, efficiency, and more based on the outputs of the AI machine learning models, providing opportunities to:

- ▶ Enhance day-to-day operations for hangar managers
- ▶ Achieve continuous improvements and workforce optimisation for business users
- ▶ View and implement strategic insights for company-wide impact
- ▶ Locate and identify objects, people, and activities in relation to work areas using only computer vision on any camera



aicadium view™

Aicadium View is an AI-powered computer vision application with state-of-the-art models designed to work with streams and images from any camera. It's offered in three base packages that can be customised to meet specific productivity, inspection, and safety needs. Each application comes with an easy-to-use interface equipped with dashboards, trend data, task management, and more to ensure a seamless operation.

Our flexible deployment and modular architecture enable easy scaling, allowing you to effortlessly transition from a trial to a company-wide implementation.

Productivity >>>

Aicadium View for productivity empowers floor managers with insights to ensure an organised and efficient flow of people, materials, and equipment in hangars.

Inspection >>>

Aicadium View for inspection empowers product line operators and quality assurance professionals to ensure quality control, serving as a co-pilot workers need to go that extra mile.

Safety >>>

Aicadium View for workplace safety empowers safety teams to proactively shift safety programs, identifying potential hazards early on, and preventing incidents before they happen.

Key Features

Input

Images, videos, and camera streams

Output

Summary reports, real-time alerts and visuals

Governance

Model, dataset versioning, and security

Updates

Software and model updates

Computer vision

AI for classification, detection, segmentation, tracking, counting, change detection

Flexible deployment

- ▶ Cloud
- ▶ On-premise

Modular product

- ▶ Configurable
- ▶ Customisable to different MRO use cases



How we work together

Use Case Evaluation

Our AI experts help you define the computer vision AI use case that will bring the most value to your organisation.

Pilot

Quickly bring your idea to life in a real-world environment to optimise for broader deployment.

Scale

Maximise the value of your AI investments by taking your successful pilot to the rest of your enterprise.

The process >>>



Ideation

At this stage, it's crucial to work with us to understand your industry and business objectives. Together, we can articulate your use case, define clear goals, and develop a roadmap for achieving them.



Pilot/POC

During the proof of concept (POC) or pilot phase, we quickly prototype and test the solution to validate its feasibility and effectiveness. We also work closely with your team to gather feedback and make necessary adjustments to ensure the solution meets your requirements.



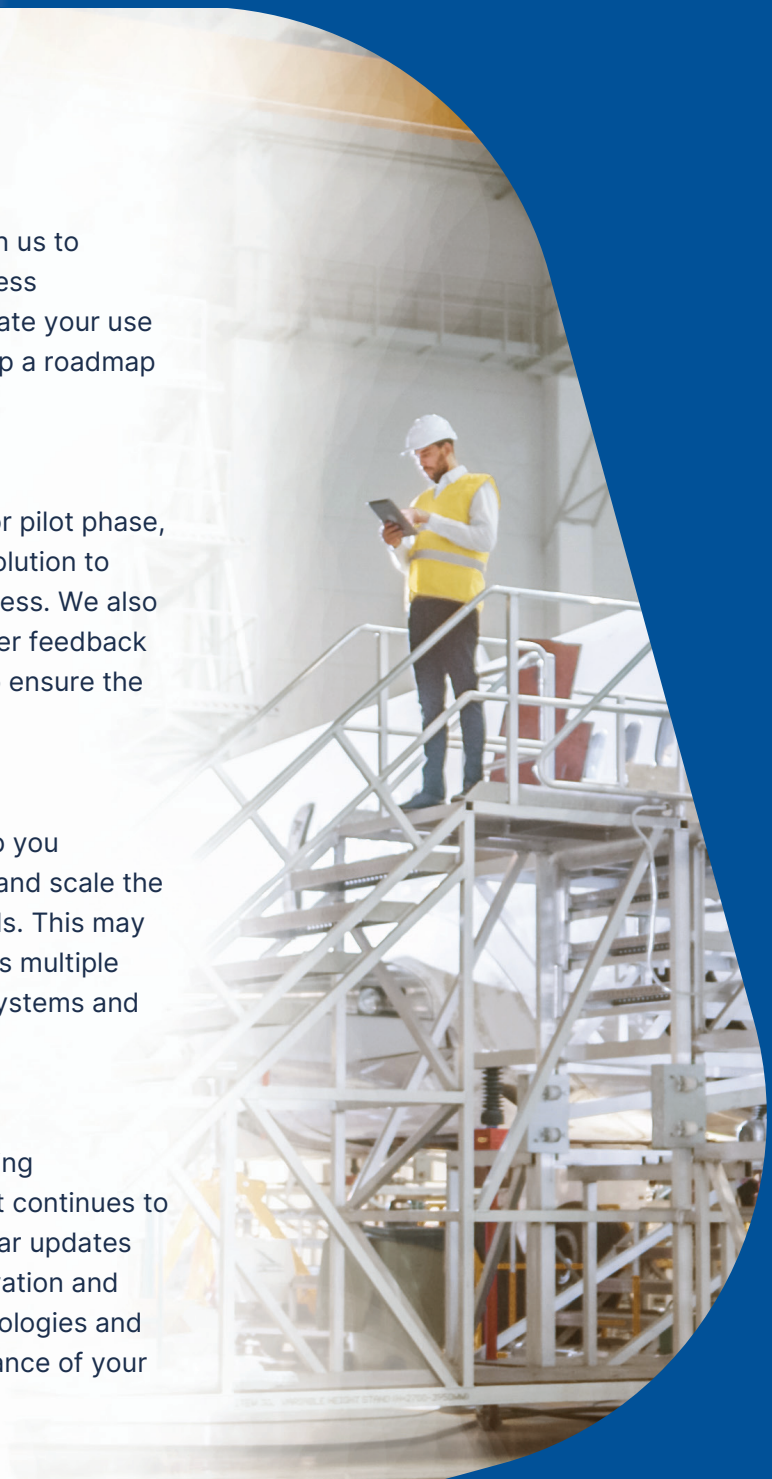
Production

Once the pilot is successful, we help you seamlessly transition to production and scale the solution to meet your business needs. This may involve deploying the solution across multiple sites or integrating it with existing systems and processes.



Maintenance

After the solution is deployed, ongoing maintenance is essential to ensure it continues to perform optimally. We provide regular updates and are committed to ongoing innovation and improvement, leveraging new technologies and techniques to enhance the performance of your solution over time.



Benefits and value to you...

Starting from scratch is challenging, but opting for an off-the-shelf solution that only partially fits is even more difficult. With Aicadium View, you receive:

A turnkey solution

- ▶ We deliver the full solution, including software with AI and hardware

A modular product

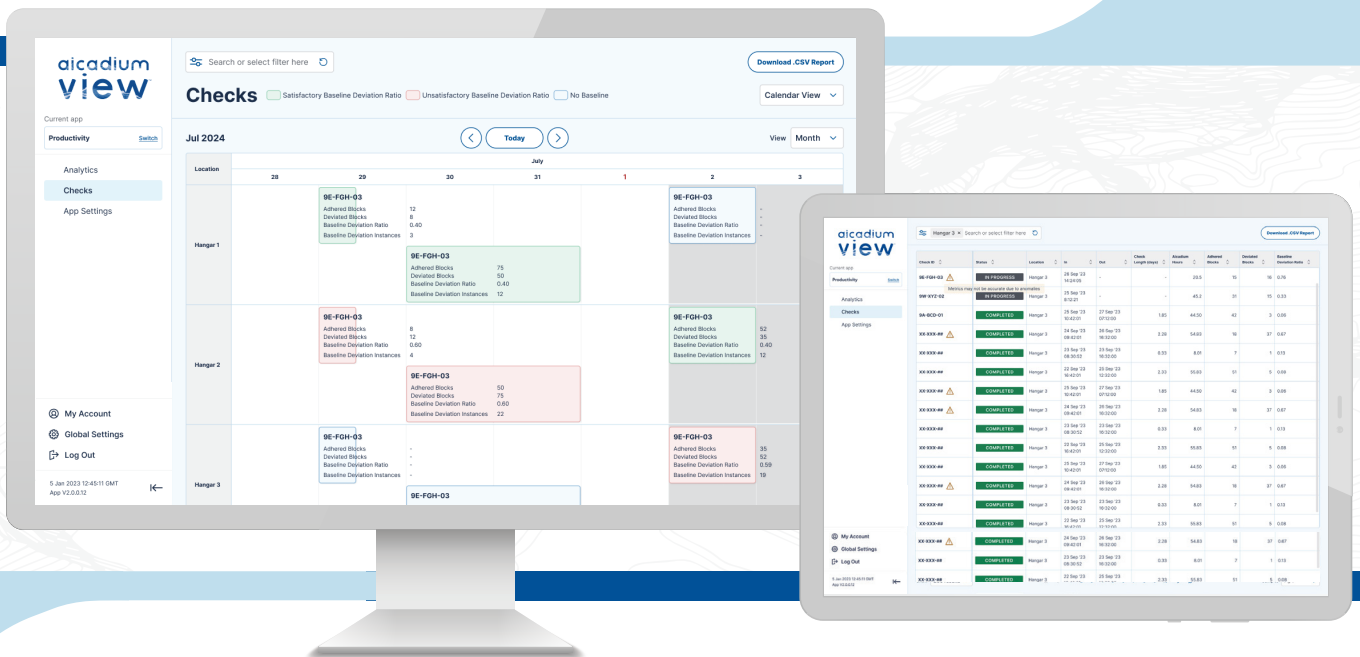
- ▶ Fast deployment, configuration and customisation

State-of-the-art AI models

- ▶ Foundation models
- ▶ Deep-learning models
- ▶ Ability to fine-tune models on customer data

Ongoing updates

- ▶ Full solution monitoring, maintenance and upkeep
- ▶ Governance and traceability
- ▶ New product features



...that results in:

- ▶ **Faster time-to-value**
Our advanced data pipeline, model development, and training allow us to operationalise AI building and deploying quickly to provide you with faster time-to-impact.
- ▶ **Use case-specific applications**
We collaborate with you to address your unique pain points. We offer deployment options for on-prem or cloud environments and robust data security to meet industry standards.
- ▶ **World-class technology**
Our product uses advanced technology and state-of-the-art computer vision models to tackle challenging high-value issues, making organisations more efficient.

For pricing inquiries, contact us for further information.

Use cases

Aicadium View capabilities

Productivity optimisation >>>

Efficiency and productivity are paramount in MRO. By streamlining maintenance and repair processes, downtime is minimised, and aircraft availability is maximised, serving customer demands and cost savings.

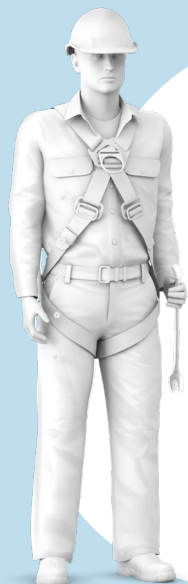
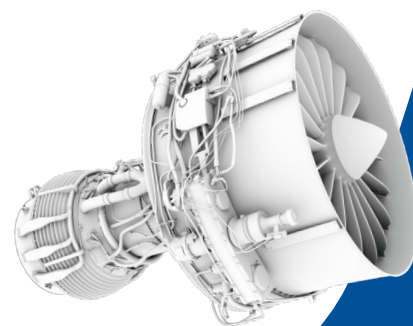
- ▶ Aircraft detection and projection into 3D coordinates
- ▶ People detection and tracking across multiple cameras to aggregate time spent in work zones
- ▶ People flow / movement analysis within the maintenance facility
- ▶ People time spent across different work zones for evaluating workforce productivity
- ▶ Planned maintenance hours vs. actual hours, pinpointing the root causes of unproductive processes



Engine inspection >>>

Engine inspection is a crucial process in the MRO industry. It ensures that aircraft engines operate safely and efficiently. Aicadium View aids in both the efficiency and electronic documentation of maintenance activities.

- ▶ Identifying key components on engines
- ▶ Inventory checks to detect part presence (yes/no) in images captured
- ▶ Alert and task creation from anomalies detected
- ▶ An easy-to-use interface that shows pending and in-progress work, pending reviews, and completed jobs
- ▶ Note capabilities enable annotation of images for future maintenance tasks
- ▶ Create a curated dataset for future AI use cases



Safety enhancement >>>

Maintaining stringent safety protocols and standards is essential for accident prevention and regulatory compliance. This commitment is instrumental in assisting safety operations to create a safer and more secure work environment.

- ▶ Personal Protective Equipment (PPE) detection, including safety caps, vests, and safety boots worn on the ground
- ▶ Door safety nets detection at aircraft doors
- ▶ Safety harness detection while working at heights
- ▶ A holistic overview of surveillance and unsafe act data, compliance trend analysis, and other safety information to proactively improve safety standards



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For pricing inquiries, contact us for further information.