

Computer Vision for Asset Condition Assessment

AI-driven inspection, expert validation, and continuous model improvement for utilities and energy networks

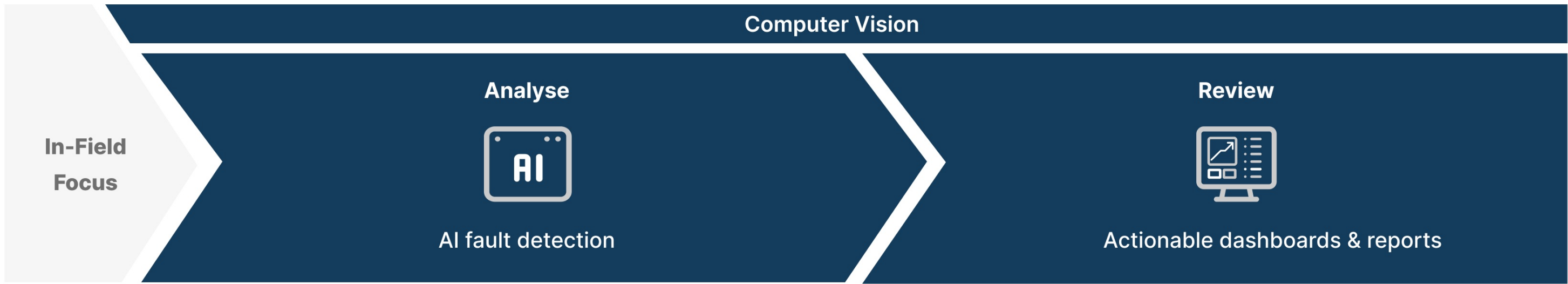


OPERATIONAL CHALLENGE

Utilities face an operational challenge managing aging networks, where faults can rapidly lead to outages or safety risks. Inspections are often manual, slow, and inconsistent, and teams struggle to scale operations and convert visual data into actionable insights.

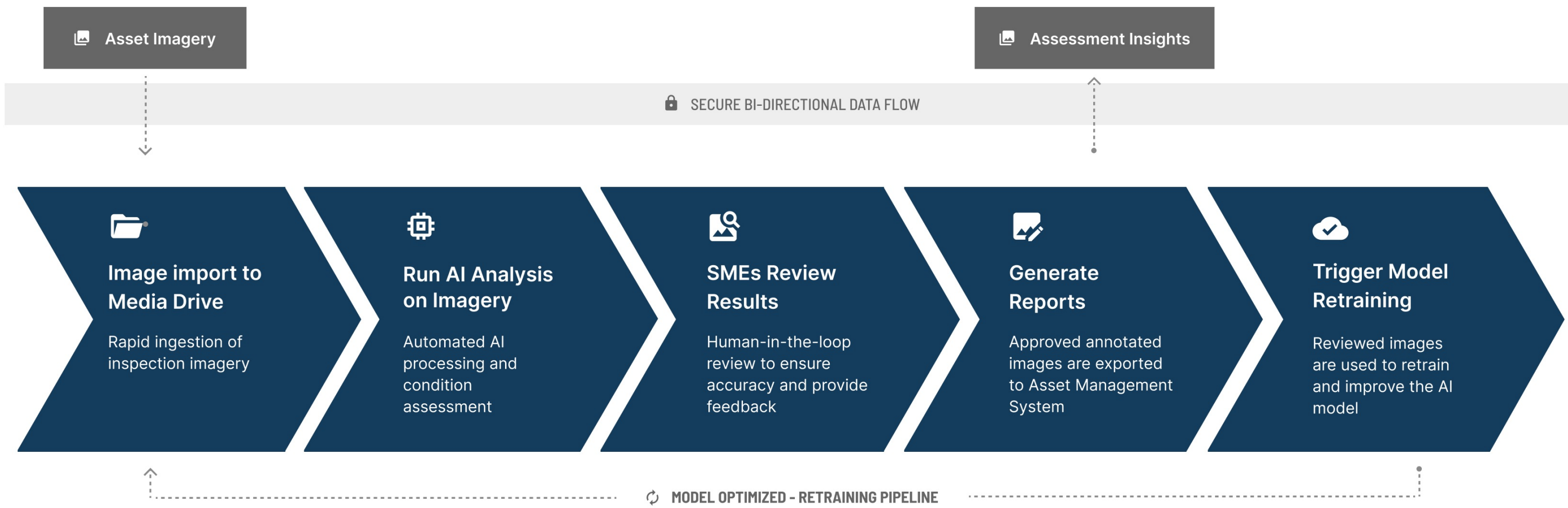
COMPUTER VISION SOLUTION

Computer vision interprets images and video, making it ideal for utility inspections. Turn imagery into trusted asset insights, combining automated analysis, expert review, and continuous learning for faster, more accurate assessments.



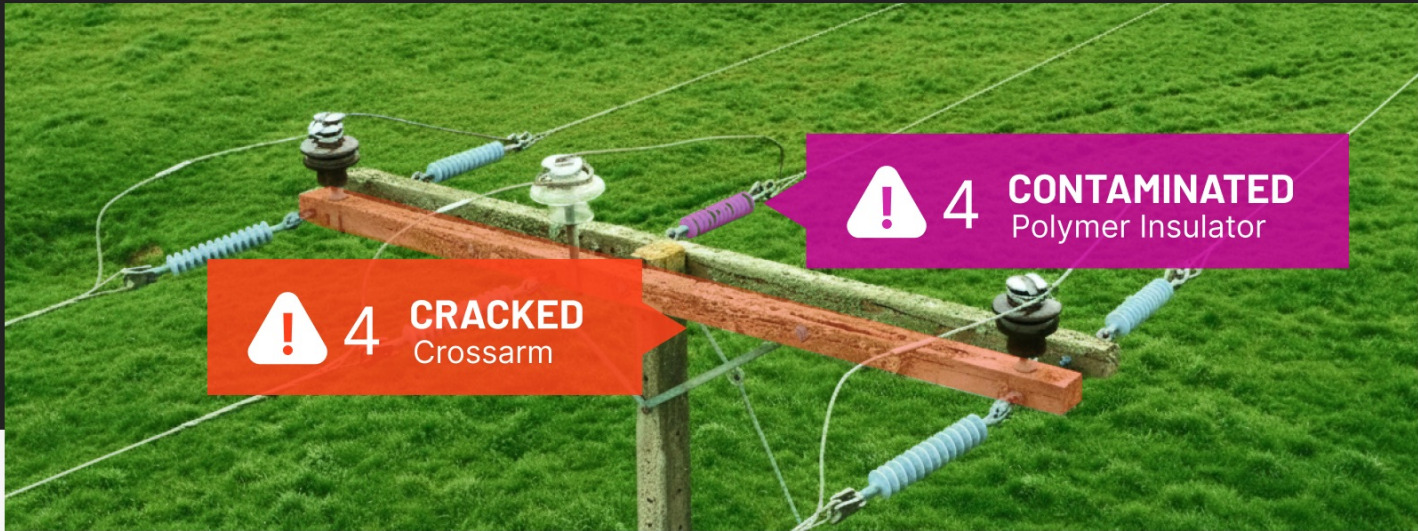
KEY CAPABILITIES

- Seamless integration with operational platforms (ADMS, EAM, ERP)
- Data-driven decision making
- Centralized storage & retrieval
- SME review of AI output
- Custom AI models for energy



Computer Vision

AI-Driven Assessment for Utility Networks



FEATURES & BENEFITS

- AI detects assets & faults and assigns severity for prioritization
- Expert review validates results for confidence and action
- Models continuously improve through ongoing learning
- Faster identification of high-risk faults reduces outages
- Flexible models support poles, conductors, substations, vegetation, and emergency response

REPORTING

Consolidated Dashboards

A unified view of inspection results enables teams to monitor network health, spot anomalies, and prioritize critical issues

condition summaries, and historical performance metrics for accurate audits and stakeholder reporting.

Customized Reports

Generate compliance-ready reports with actionable insights from raw inspection data, including fault trends, asset

Enable Asset Maintenance

Teams can schedule work based on verified insights, reducing downtime, optimizing resources, and continuously refining inspection cycles for greater accuracy and efficiency.

Media	Annotation	Severity ↓	Tags
	Damaged Porcelain Insulator	5 4 3 2 1 N/A	Needs review Rejected
	Cracked Wooden Crossarm	5 4 3 2 1 N/A	Approved

Inspection summary allows faults to be filtered by type and severity

ROI

Drive higher productivity, smarter maintenance, faster defect detection, reduced downtime, and lower emissions.

High Performance AI

91% ↑

F1-Score for precision and recall

Defect Identification

300% ↑

Identification increased in the first year (vs helicopters)

Rapid Identification

< 24hrs ↓

Overnight identification of critical faults for prioritized remediation

Learn More

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