Remote Digital Visual Inspection

Applus Digital Services

The Inspection Evolution

Manual Observation

Recorded Inspection

Visual Capture

Remote Digital Capture

Digital Twin & Analytics

AI-Enabled Asset Intelligence

RDVI transforms inspection from human observation into structured, traceable, analytics-ready asset intelligence.

From field inspection to data-driven decision support

Applus+

EXECUTIVE MESSAGE

The opportunity is bigger than remote inspection

RDVI turns inspection activity into structured evidence and a reusable asset data layer.

Today

Visual findings and reports remain dependent on access, availability and interpretation at a point in time.

RDVI

Findings become traceable records with location, evidence, severity, extent and action status.

Next

Consistent labelled datasets create the foundation for analytics, assisted review and machine learning.

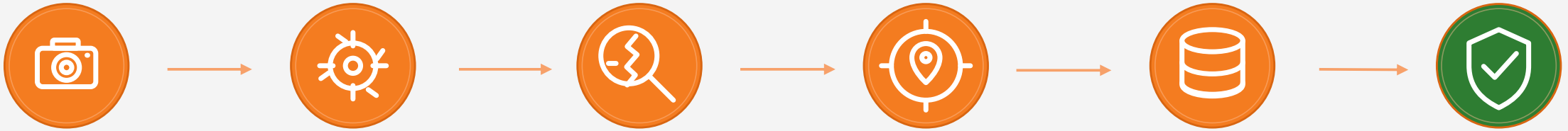
Strategic position: RDVI is the digital evidence layer for asset integrity, not only a drone service.

This is what the data confirms.

END TO END DELIVERY

A controlled workflow from capture to verified output

The value is created by disciplined execution, not by the platform alone.



Capture

RPAS, terrestrial, LiDAR and visual evidence captured to agreed quality rules.

Process

Data processed, quality checked and published into the controlled model.

Inspect

Qualified inspectors and SMEs review the evidence remotely and consistently.

Tag

Findings are tagged with location, type, extent, severity and description.

Export

Structured CSV and evidence links support dashboards and audit trails.

Validate

QA review confirms completeness, accuracy and decision readiness.

Outcome: **One model, one evidence set and one governed dataset that can be inspected, audited, trended and reused.**

DATA DISCIPLINE

Machine learning starts with a consistent inspection record

Every finding should be captured with the same core fields and verification logic.

01 **Asset / Area**
Asset hierarchy and inspection boundary

02 **Unique Location**
Traceable point in the model

03 **Anomaly Type**
Agreed defect taxonomy

04 **Extent / Size**
Measured or qualified condition

05 **Severity**
Priority and risk basis

06 **Action Owner**
Customer, inspector or SME

07 **Status - (Open, Close, Pending, WIP)**
Progress and closure tracking

08 **AI**
Automate, predict, Machine Learn

This is the bridge from inspection reports to analytics, automation and predictive decision support.

Migration to AI and Machine Learning

MATURITY PATHWAY

AI is the next phase, but the evidence layer comes first

The objective is not to replace inspection judgement. It is to strengthen consistency, speed and decision support.

Phase 1
Digital Evidence

Capture, QA and model-based inspection records.

Phase 2
Analytics

Power BI dashboards, trends, progress and SLA control.

Phase 3
Assisted Review

Computer vision support for anomaly cues and comparison.

Phase 4
Predictive Insight

Learning models that support risk-based maintenance planning.

Critical control point — **AI will only be credible where data is governed, labelled consistently, verified by SMEs and repeatable across assets.**

Analytics Available

CSV Data

Easily available CSV data of all anomaly entries

Anomaly information

Important anomaly information available (location anomaly type, extend severity description, etc)

Graphs visualising Metrics Generated

For easy identification and future planning.

Anomaly Information Table Example

Record ID	Area Name	Component / Item	Anomaly Code	Anomaly Name	Severity No.	Inspector Name	Date Identified	Interim Control Notification Flow Initiated	Comments	Site Inspection Required (SIR)	IG Comments
0edd8f9e-bb77-4e45-adb3-2e5fdaee2eab	Upper Level 2	OTHR	OTHR	Other - Specify	S2	John Doe	1/12/2025	No	N/A	Yes	
01b8e799-a15f-4c46-8a61-f51ce3dd6a6c	Main Deck	DP	LEAK	Leak/Stain/Weep	S2	John Doe	1/12/2025	No	N/A	No	
138f91ae-bf94-4a2a-92f6-d7a2b7eb9cc7	Main Deck	SC	OTHR	Other - Specify	S2	John Doe	1/12/2025	No	N/A	No	
69abbf42-e6a2-4acd-9688-5981ac519c02	Main Deck	SC	OTHR	Other - Specify	S3	John Doe	1/12/2025	No	N/A	No	
74b71472-3efa-406a-8fd4-03cde58d1ff3	Main Deck	SC	OTHR	Other - Specify	S2	John Doe	1/12/2025	No	N/A	No	
94727a0a-5a8f-4901-95b2-6d9358890e95	Main Deck	SC	LEAK	Leak/Stain/Weep	S2	John Doe	1/12/2025	No	N/A	No	
be4fd57c-07d0-40bf-b34c-8d3738691849	Main Deck	SC	OTHR	Other - Specify	S1	John Doe	1/12/2025	No	N/A	No	
098edf02-8917-4cf1-b6bf-3161baed35f9	Main Deck	VS-SC	CORS	Section Loss - Severe	S3	John Doe	1/12/2025	No	N/A	No	
0a81a993-b9e9-40e8-a573-87c01c604257	Main Deck	FW	CORD	Corrosion - Local/Discrete	S3	John Doe	1/12/2025	No	N/A	Yes	
0b4975cc-468d-43f3-b8d4-16ccca8b5918	Main Deck	VS-GR	OTHR	Other - Specify	S4	John Doe	1/12/2025	No	N/A	Yes	
0e8291c8-befc-4712-bb78-6a63d8fdee1f	Helideck	SL	CORG	Corrosion - General	S3	John Doe	1/12/2025	No	N/A	No	

Using Metrics to support Decisions

What RDVI Enables (Benefits & Differentiators)

A structured dataset is created as inspectors work — enabling trending, prioritisation and transparent progress reporting.

Safety & access

Fewer people offshore; reduced exposure to height, over-water and confined space hazards. Utilisation of experienced Inspectors not Bosiet certified

Productivity & cost

Less mobilisation and rework; progressive reporting at time of inspection; Report with Metrics to meet Customer SLA's

Evidence & compliance

Tagged, Traceable & reviewable findings with precise location and photographic evidence.

Analytics & decision support

CSV export enables Power BI dashboards, trending and prioritised maintenance actions.

Implementation steps:

Standardise anomaly taxonomy + severity/SLA rules • Expand to process plants (internal/external) • Build dashboard templates • Establish continuous improvement loop (lessons learned → better capture → better assurance)

Partnership with Technology Leader

Partner-Led RDVI Delivery Model

White-Label Capability. Predictable Cost-Plus Delivery.

Applus sells the customer relationship, capture, processing, visualisation platform, reporting metrics and future development through a cost-plus model with clear margins and no fixed software burden.

1 Capture
White-labelled field capture

2 Processing
Data processing as required

3 Applus Vision
Visualisation platform

4 Metrics & Reporting
Dashboards and inspection reporting

5 Future Development
Analytics, AI and customer growth

Commercial Model

- No inherent software licence costs
- No credits or hosting overhead held by Applus
- All delivery components priced cost-plus
- Known cost base and agreed schedule of rates
- Clear margins for Applus

Why it works for Applus

- Easy quoting and costing
- Predictable pricing to the customer
- Known costs and protected margins
- Scalable without building overhead

Why it works for RemSense

- Clear agreed schedule of rates
- Consistent demand through Applus
- Straightforward delivery and support model
- Win-win partnership for growth

Principle: standing on the shoulders of giants, with Applus+ leading the architecture, governance and customer assurance model.

RemSense has demonstrated the quality of capture, trained technicians, software pathway and responsiveness to support this delivery model.
I would now like to invite Warren Cook, CEO of RemSense, to introduce RemSense.

No fixed licensing, hosting or credit burden. Just clear delivery, clear cost, and clear margin.

Thanks!

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