

SADAEM: Precision Spatial Intelligence

Transforming Physical Landscapes
into Actionable Digital Data



Aerial Inspection

Topographic Surveying

Geospatial AI Solutions

www.sadaem.com

The Identity

DATA STREAM ACTIVE

GRO RET. RSA AERIAL 001

THE VISION

Redefining aerial inspection and surveying in KSA. We merge advanced UAV technology, AI-driven analytics, and geospatial solutions to set new national standards in precision, safety, and data quality.

DATA STREAMS ACTIVE

000 RET. RSA AERIAL 401

THE MISSION

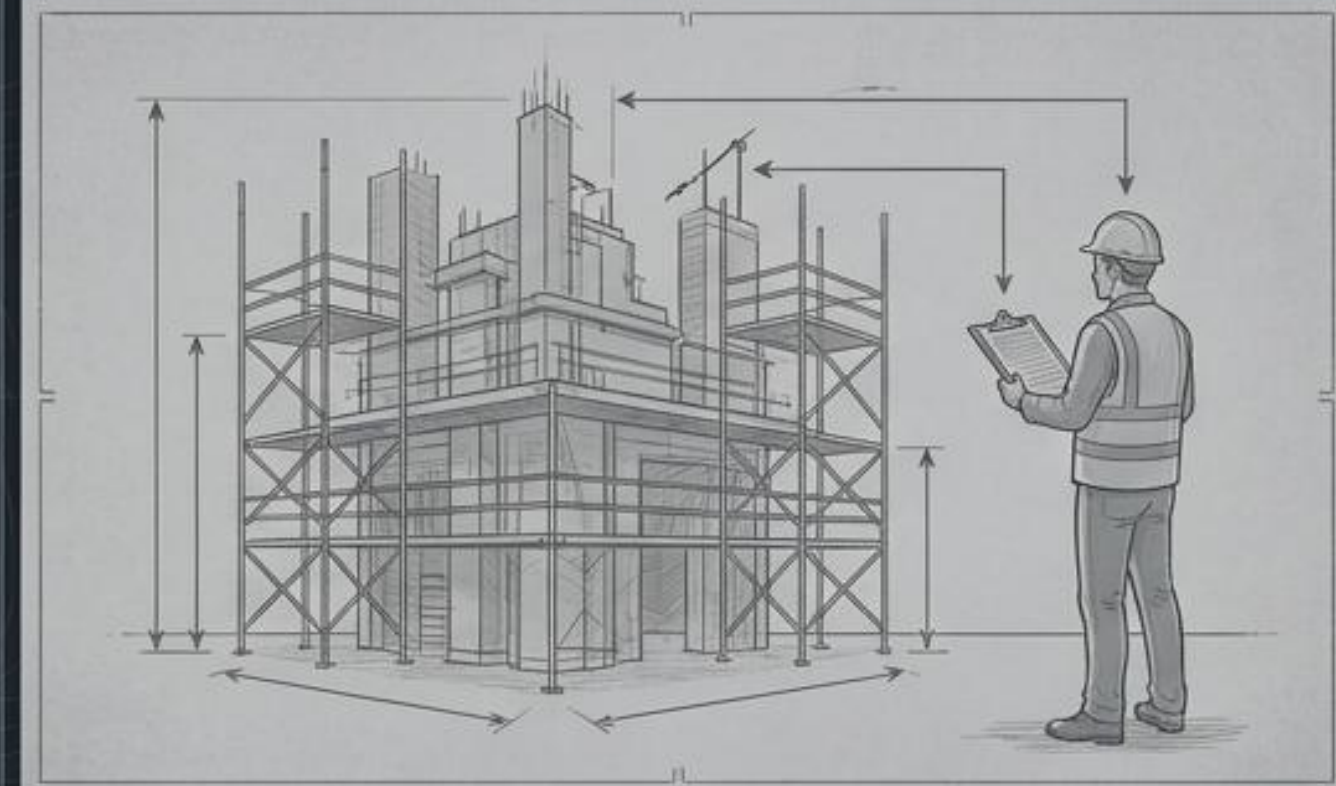
Empowering decision-makers across infrastructure, construction, and asset management with rapid, reliable, and entirely data-backed insights.



DIGITAL TWIN
PRECISION GRID // RSA AERIAL SOLUTIONS

THE EVOLUTION OF INDUSTRIAL INSPECTION

TRADITIONAL METHODS



HIGH
OPERATIONAL
RISK

PROLONGED
TIMELINES

SUBJECTIVE
REPORTING

THE SADAEM APPROACH

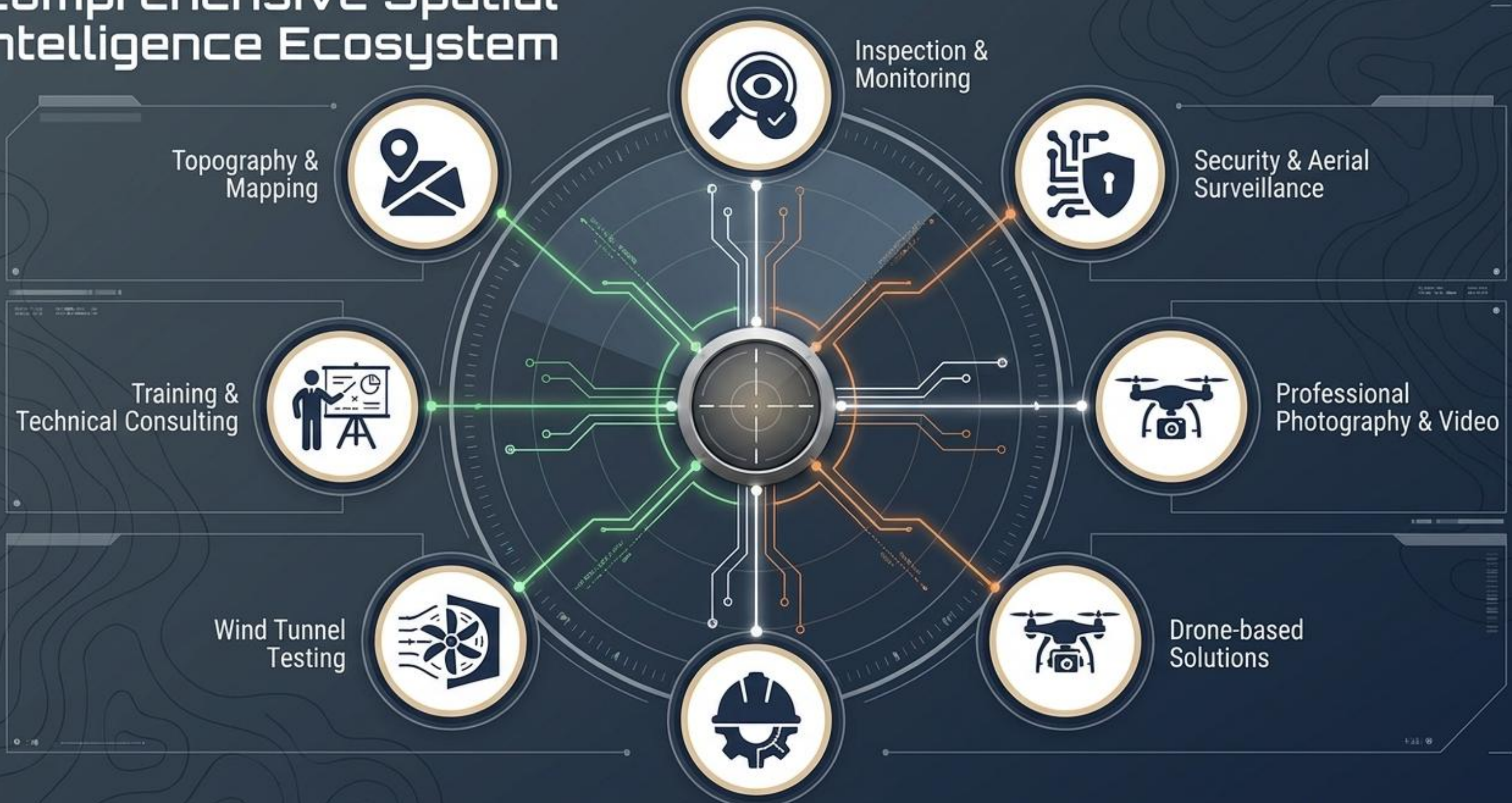


ZERO-RISK
REMOTE
CAPTURE

RAPID
DEPLOYMENT

OBJECTIVE,
DATA-DRIVEN
ANALYTICS

Comprehensive Spatial Intelligence Ecosystem



Topography & Mapping

Inspection & Monitoring

Security & Aerial Surveillance

Training & Technical Consulting

Professional Photography & Video

Wind Tunnel Testing

Drone-based Solutions

Engineering Services

PAYLOAD TO PURPOSE: ADVANCED HARDWARE DIAGNOSTICS



Zenmuse P1



Output:
High-Resolution 3D
Models & Orthomosaics



Application:
Construction Planning &
Urban As-Builts



Zenmuse L2



Output:
Vegetation-Penetrating
Topography



Application:
Mining Volume Calculations
& Civil Engineering



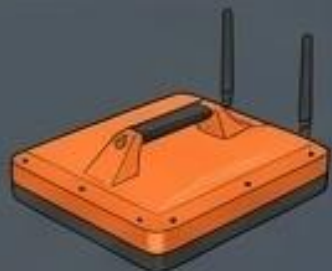
Zenmuse H30T



Output:
Heat Loss & Gas Leak
Detection



Application:
Oil & Gas Pipelines & Solar
Farm Diagnostics



GPR Zond Aero 500

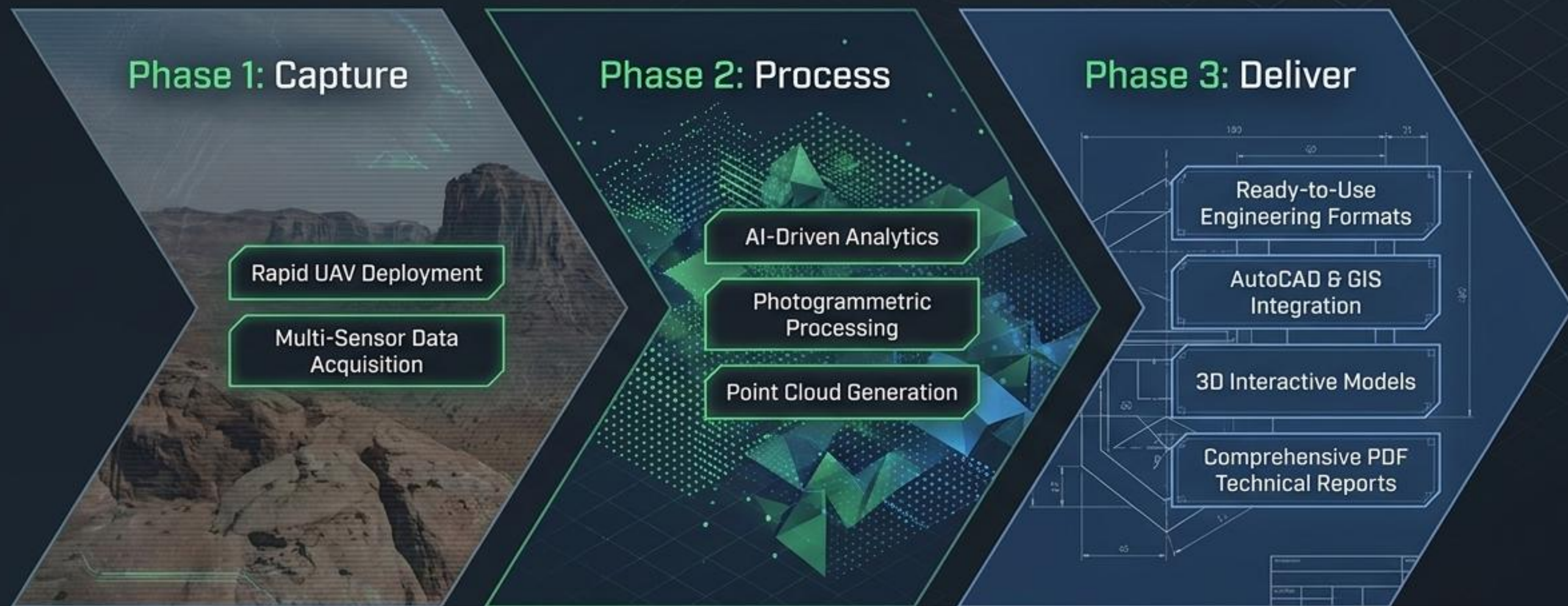


Output:
Deep-Surface Anomalies



Application:
Buried Utility Mapping &
Mineral Exploration

From Flight to Final Deliverable



Sector Applications: Heavy Industry & Resources



Oil & Gas

Aerial inspection of pipelines and tanks.

Thermal detection of gas leaks.

Right-of-Way (ROW) corridor monitoring.

Emergency risk assessment.



Mining

High-precision LiDAR topography.

Stockpile volume calculations.

Mine progression tracking.

Blast planning and geophysical support.



Energy

Thermal fault detection in power plants.

Wind turbine structural assessments.

Solar panel efficiency and operational condition monitoring.

Sector Applications: Infrastructure & Development



Construction



Topographic LiDAR mapping.

Cut and fill volume calculations.

As-Built documentation and 3D modeling.

Project progress tracking.

Telecommunications



5G site surveys.

Antenna and tower structural assessments.

Network coverage planning and safety evaluations.

Transport & Logistics



Route optimization and planning.

Warehouse and yard mapping.

Last-mile remote delivery support.

Real-time operational tracking.

Specialized Applications: Agriculture & Geophysics

Precision Agriculture

Multispectral mapping (NDVI) for crop health analysis.

Irrigation and water stress assessment.

Yield estimation and growth monitoring.

Aeromagnetic Surveys

High-resolution aerial magnetic data collection for mineral exploration.

Detection of magnetic anomalies in vast, rugged terrains.

Support for deep geological targeting.

Full-Spectrum Spatial Intelligence



Layer 1: The Sky

Aeromagnetic surveys sweeping vast topographies for geological targeting.

Layer 2: The Surface

LiDAR and Photogrammetry digitizing infrastructure, pipelines, and stockpiles with millimeter accuracy.

Layer 3: The Sub-surface

Ground Penetrating Radar (GPR) mapping buried utilities (electricity, water, telecom) to eliminate excavation risks. AutoCAD & GIS ready.

Track Record: Mega-Scale Infrastructure



Abu Dhabi Ports (Abu Amama, Red Sea)

250 km² Area Mapped

4 cm Aerial Resolution



Hijrah Road Corridor (Makkah – Madinah)

470 km Linear Topographic Mapping & Profiling

Track Record: Structural Integrity & Deformation



High-precision aerial monitoring deployed to detect, measure, and diagnose visual and structural deformations in sensitive, high-traffic architectural zones. Featuring: KFUPM & Prophet's Mosque Perimeter.

Track Record: Resource Extraction & Mining

Suhanit Mining Company

8 km²

Survey Area

3 cm

Ground Sample Distance (GSD)
Accuracy

Moroccan Mining Operations

- ✓ Comprehensive site mapping
- ✓ Active stockpile inventory management
- ✓ Blast planning
- ✓ Critical infrastructure inspection

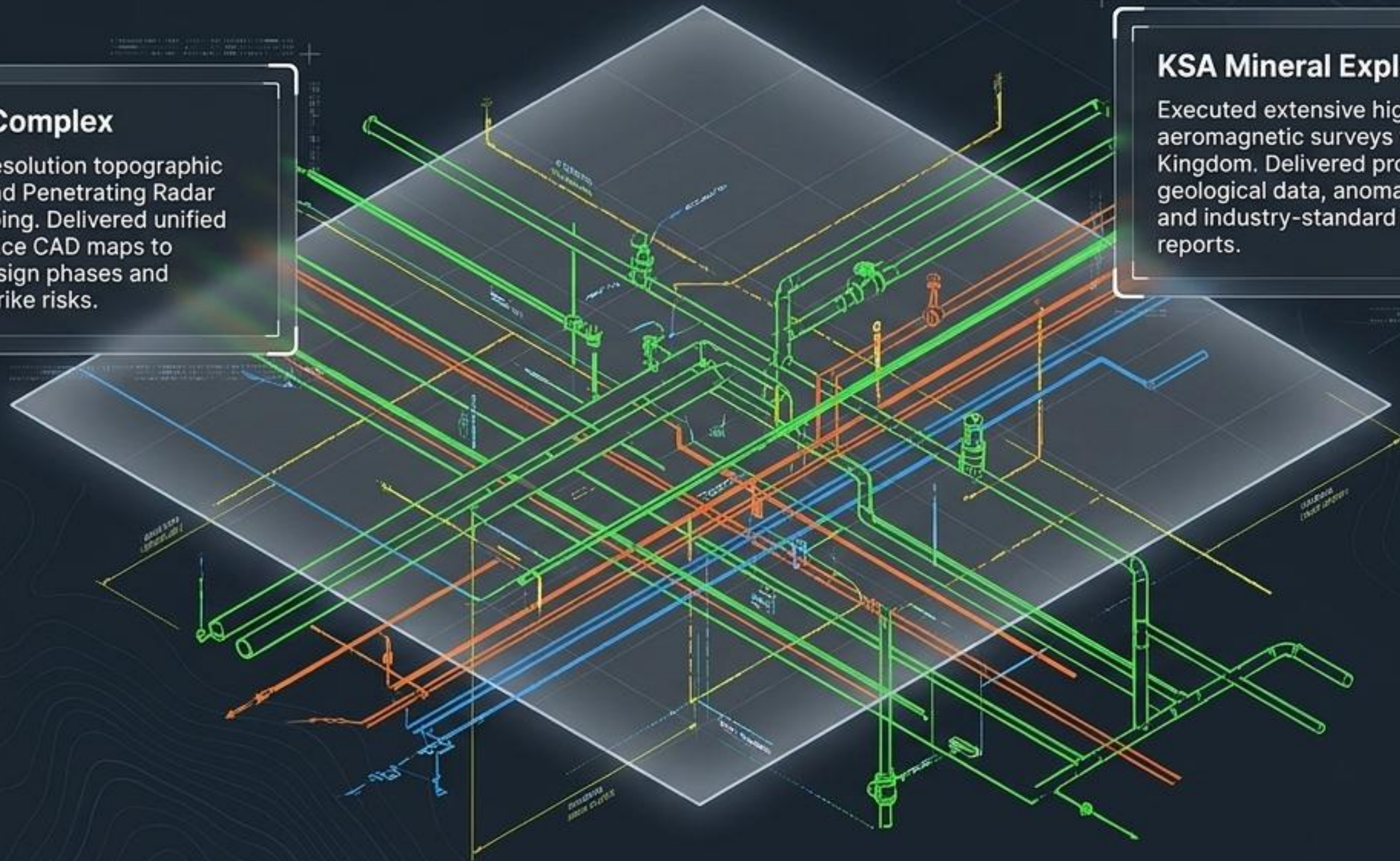
Track Record: Sub-surface & Exploration

Commercial Complex

Integrated high-resolution topographic survey with Ground Penetrating Radar (GPR) utility mapping. Delivered unified surface/sub-surface CAD maps to support active design phases and eliminate utility strike risks.

KSA Mineral Exploration

Executed extensive high-resolution aeromagnetic surveys within the Kingdom. Delivered processed geological data, anomaly interpretation, and industry-standard technical reports.



Initiate Your Next Project.

Deploy precision aerial intelligence for your operations today.



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