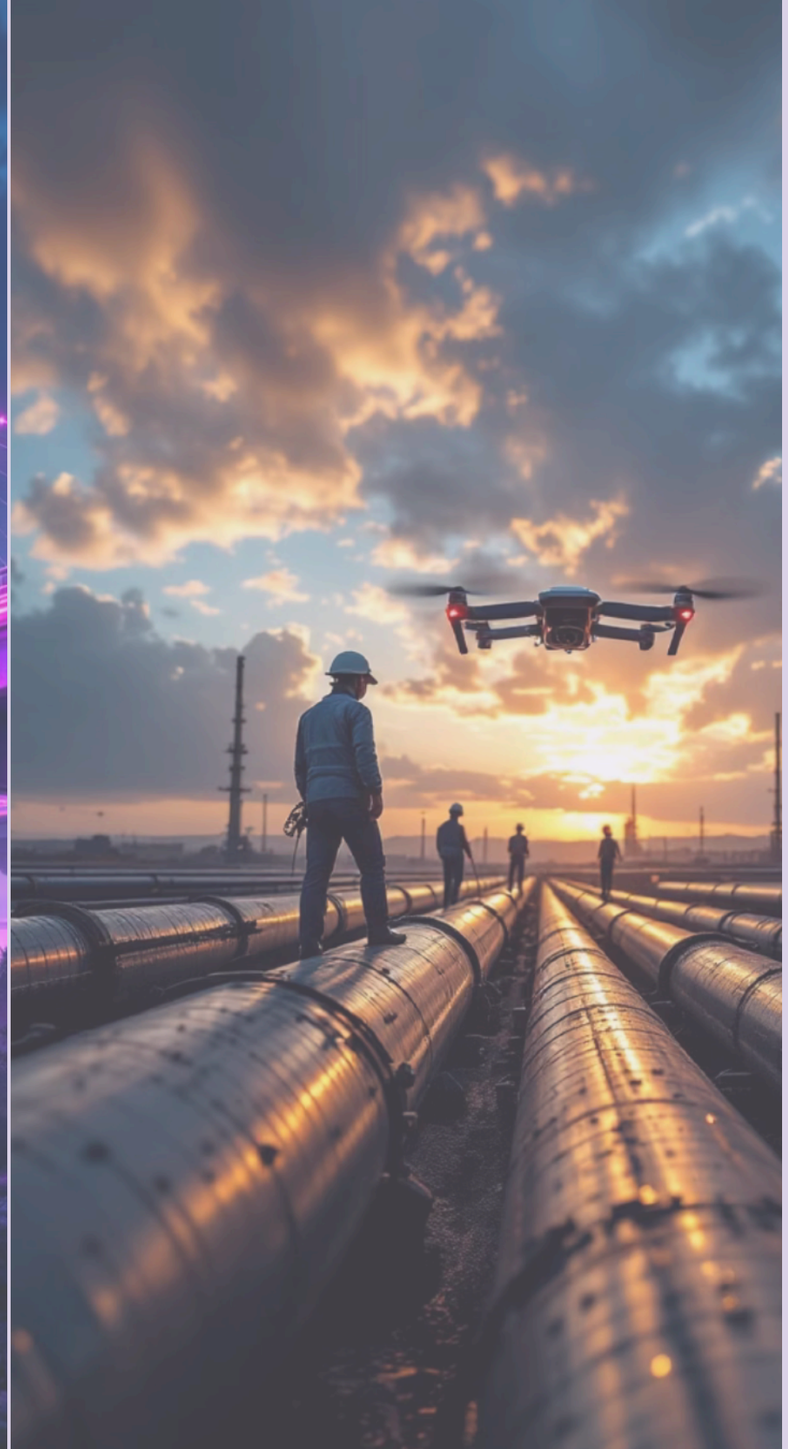


TEVAH SOLUTIONS

Smarter Inspections | Safer Operations

Tailored Drone & Robotic Solutions

Your Assets Talk. Are You **Listening**?

Measuring What Matters

Are you tracking meaningful parameters that predict failure, or just the easiest metrics to collect?

Real-Time Insights

Can you analyze sensor data when it matters, or are you stuck reviewing information days later?

Actionable Intelligence

Are you making informed decisions on the fly, or waiting for reports about problems that already occurred?

Case in point :
The High Stakes of Infrastructure Neglect (US)

500+

Deficient Bridges

US bridges rated "structurally deficient"

2.5M

Pipeline Spills

Gallons spilled annually, costing $1.3B

$150B

Power Grid Failures

Annual cost to US economy

60%

Missed Defects

Manual inspection failure rate

The Critical Gap: The need for COTS+ or bespoke solutions

Infrastructure is Aging — But Monitoring Tech Hasn't Kept Up

Critical assets demand frequent, precise inspections, yet available solutions lack adaptability to site-specific hazards. Traditional solutions aren't designed to solve a customer's problem and are usually one size fits all.

Commercial Systems Fail in Harsh Environments

Off-the-shelf platforms struggle with extreme heat, confined spaces, and EM interference common in industrial settings.

Sensor Redundancy & Fusion Are Rare — But Critical

Real-world missions demand multi-sensor fusion for fail-safe operation, yet most solutions rely on single points of failure.

AI-Driven Decisions Remain Untapped

Most inspections still rely on manual interpretation of raw data, missing opportunities for faster, unbiased assessments.

Cut ***Costs***, Save ***Time***, Improve ***Safety***—by Matching the ***Right Sensors*** & ***Platforms*** to the ***Right Problem***

Speed & Time efficiency

Manual bridge inspection

Hours: 8 People: 4

Drone bridge inspection

Hours: 2 People: 2

(Michigan Dept. of Transportation)

Hours People

75% 50% ↓

Cost Reductions & Labor Eff.

Manual bridge inspection

Cost: $1000-5000
Setups: Scaffolding, Traffic distr. etc.

Drone bridge inspection

Cost: ~ $250
Setups: 1 drone v/s ‘n’ inspectors

(Industry reports)

Operating cost

90-95% ↓

Data Quality & Analysis

Manual inspection

Quality: Visual
Analysis time: Days - Months

Drone inspection

Quality: High Res, Thermal, Lidar etc.
Analysis time: NRT

(Industry reports)

Defect detection rate

95%+ ↑

Safety Improvements

Manual inspection

Exposure: High
Injuries: Med- High

Drone inspection

Exposure: Negligible
Injuries: Negligible

(Industry reports)

Operational Safety

90%+ ↑

What sets **Tevah Solutions** apart ?

We're not a third-party service provider **we act as your extended engg. team**, diagnosing problems from the inside out and **designing tailored sensor-based solutions t**hat work.

We specialize in **multi-sensor, multi-hazard detection systems** with built-in redundancy—so even if one sensor fails, the mission doesn't

From thermal, ToF, GPS-denied navigation to sensor fusion, we **engineer solutions** that are resilient, reliable, and rooted in your operational reality

Our endeavour is to reduce human guesswork with **AI-enhanced insights**, delivering clear, rapid Go/No-Go decisions when they matter most.

Our **End-to-End** Solution : COTS+ & Bespoke sensor platforms

1

Needs Assessment & Business Advisory

We analyze your infrastructure challenges and operational workflows to identify automation opportunities.

2

Solution Design & Technical Planning

Our engineers craft specialized drone and robotic systems aligned with your specific requirements.

3

Technology Development & Customization

We build and optimize hardware and software for your unique infrastructure monitoring needs.

4

Pilot Testing & Proof of Concept

Rigorous real-world testing ensures our solutions deliver reliable, accurate results.

5

Full-Scale Deployment

Seamless integration of automated monitoring systems across your infrastructure network.

6

Training & Change Management

Comprehensive support ensures your team maximizes the value of new technology.

7

Continuous Monitoring & Optimization

Ongoing refinement keeps your systems at peak performance as needs evolve.

8

Data-Driven Decision Making

Transform collected data into actionable insights that drive future innovations.

Our experience: Real-World Applications

1. Airport Infra Monitoring (Canada)

- 75% inspection cost reduction
- Weekly autonomous scans
- Real-time data with thermal/RGB

Project Value: $6M

2. Spillway Inspection (Canada)

- 20x more acoustic data captured
- Inspection time: 2 weeks → 3 days
- 95% delamination detection accuracy

Project Value: $200K

3. Vertical Dam Inspection (Australia)

- Eliminated hazardous manual rappelling
- UAV-mounted contact inspection tools
- Enhanced erosion detection precision

Images are representative to maintain site secrecy

Our experience: Real-World Applications

4. Bridge Inspection (New Zealand)

- UAVs with acoustic sensors digitized structural assessments
- ML-based defect detection for remote joints
- Enabled predictive maintenance

5. Tunnel & Wall Inspection (UK)

- GPS-denied UAVs eliminated scaffolding needs
- AI rovers detected cracks in confined zones
- Generated real-time defect maps

Images are representative to maintain site secrecy

Our experience: Real-World Applications

GPS-Denied UAV

Specialized drone uses hammer-tap sensors for inspections where GPS fails.

Our **patent-pending** solution leverages ToF sensors and ML to detect subsurface defects.

Solenoid Acoustic Rover

ML-powered concrete analysis increases data points by 20x.

We've slashed deployment time by 80% while building at 25% of commercial cost.

Modular Airfield Rover

Gantry system supports multiple payload types for comprehensive airport scanning.

Real-time data sync enables immediate analytics across Canadian, Australia, India airports.

HITL Simulation System

US Army-funded project created closed-loop AI drone interceptor testing.

Our innovation was showcased at the Smithsonian Museum for its breakthrough approach.

Images are representative to maintain site secrecy

Our experience: Consulting & Implementation

National Strategy (NKW)

Co-developed a strategy paper to enable India's aim to transition towards a Non-Kinetic Warfare (NKW) leader and achieve national ambition of ~USD 26 billion by FY32

R&D Strategy - Defence PSU

Technology specific R&D capability development strategies : Short term, long term and futuristic to increase y-o-y growth from CAGR of 12% to 20% (~ 5 years)

Design & Optimization – RAS & FAS

Optimized and indigenized the design for Replenishment and Fueling at Sea (RAS/ FAS) gears reducing net cost by 60%

Our experience: Consulting & Implementation

Greenfield ERP rollout ; ERP-PLM integration

Digitizing workflows across design to production lifecycle

- Achieved 75% reduction in manual tasks and $23K in cost savings
- Orchestrated ERP integration with PLM and design tools
- Coordinated across cross-functional teams to ensure seamless automation

ICG - Interceptor Boats (18 units)

Delivering speed, efficiency & scalability through process innovation

- Streamlined delivery of 18 boats using automation and operational enhancements
- Enabled repeat orders through improved timelines and reliability
- Marked India's first indigenous Interceptor Boat production success

Landing Platform Docks – Indian Navy

Strategizing one of India's most ambitious naval platform builds

- Led development of Master Build Plan for dual LPD construction
- Aligned technical, scheduling, and resource strategies for $1.5B project
- Supported strategic decision-making for complex multi-year naval program

Our experience: Consulting & Implementation

Fund Traceability (UN IFAD)

Improving financial transparency across multi-country initiatives

- Led Agile development of fund tracking system; showcased in 4 countries
- Drove stakeholder buy-in, international alignment & data standardization
- Received client recognition; featured in seminars & field demonstrations

(USD 300K Pilot)

Traceability – Nagoya Protocol (UNDP)

Digital bridge for biodiversity IP rights across 129+ countries

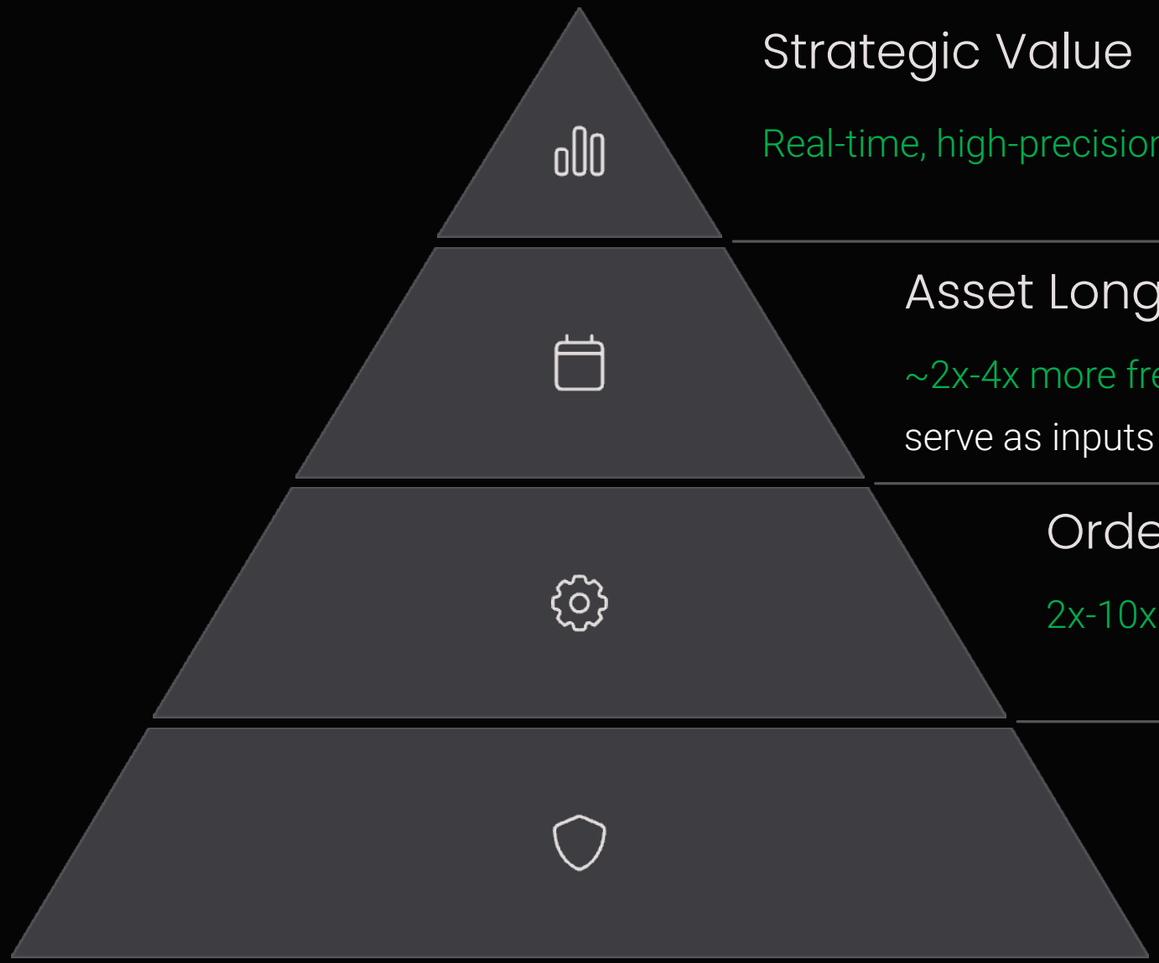
- Led strategy and execution for a global policy-tech pilot
- Enabled economic participation of local communities in biogenetic IP

Regulatory Sandbox F/w – UAE MoF

Empowering fintech innovation

- Led design of UAE MOF's **Regulatory Sandbox Framework**, enabling safe fintech experimentation
- Supported startup innovation through structured, real-world testing environments

The ROI : Tangible Benefits



Strategic Value

Real-time, high-precision data for faster and more informed decision making

Asset Longevity, Uptime & Predictive Maintenance

~2x-4x more frequent inspections enabling true predictive maintenance, real-time data serve as inputs to predictive Maintenance data models

Order of Magnitude efficiencies

2x-10x reduction in inspection cost [1]; upto 4x faster data collection [2],

Safety & Compliance

Zero-risk inspections, full regulatory compliance

About Tevah Solutions

- Small Agile focused team operating out of Canada , NA
- **22+ years** of combined experience across mechanical engineering, unmanned systems, and strategic consulting.
- Expertise in sensor-driven solutions, autonomous systems, and defense-grade engineering.
  - One member brings 12+ years of core engineering experience, having led high-stakes naval design and shipbuilding programs across Asia, followed by a strategic consulting career advising global clients across Canada, the Middle East, and Europe.
  - Another brings 10+ years in autonomous system design, is a patent holder, and has founded multiple startups.
- Together, **we blend deep technical know-how, field-tested engineering, and business strategy**—offering clients solutions that go beyond off-the-shelf capabilities

Christy Sunny
Principal Consultant
B.E. (Mech), MBA (Strat, Ops)

Sujith Mathew
Tech Solutioning Lead
B.E. (Mech), MS (Unmanned Sys) - US

TEVAH SOLUTIONS

Industry Experience

BC Hydro Power smart
Water Security Agency
Beca
wsp
Kempegowda International Airport Bengaluru
WaterNSW
YVR
भारत इलेक्ट्रॉनिक्स BHARAT ELECTRONICS
रक्षा मंत्रालय MINISTRY OF DEFENCE
UNDP
IFAD INTERNATIONAL FUND FOR AGRICULTURAL DEVELPMENT
UNITED ARAB EMIRATES MINISTRY OF FINANCE

Experience Across

Partner with Us: Solutioning for Smarter Inspections & Safer Operations

Contact Us

Schedule a consultation to discuss your operational and systems engineering challenges

Assessment

We'll evaluate your current processes and identify opportunities.

Proposal

Receive a solution tailored to your unique needs – ranging from R&D support, product design, PoC, full blown implementation, training and upgrades

Implementation

Experience the impact of precision-engineered drone and robot solutions—powered by smart sensor integration, tailored to your operational challenges.

Name : Christy Sunny

Principal & Founder

Email : business@tevahsolutions.com

Phone number : (+1) 431-726-6775

www.tevahsolutions.com

TEVAH
SOLUTIONS

Thank you !