

## "AI gave me my curiosity and courage to lead towards institutional asset management"



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Sustainable Highways | Traffic Infratech Expo 2025

#### **UPI - A model of Digital Infrastructure**

- 420+ Million active UPI users in India (24% of population)
- ₹24.9 Lakh crore processed in Sep 2025 alone
- **84%** Retail payments now via UPI
- **55%** Rural population of India uses UPI for digital payments
- ₹9,000 Crore UPI Lite+ enabled offline transactions in Q1 2025
- **40%** Reduction of Al-powered fraud detection false positives
- More fraud detection through AI & reduce Investigation time







#### AI + Drones - Agricultural Sector Leading Adoption



4.7B\$ Al Market Size Projected to reach by 2028, growing at 23.1% CAGR
30% Increase in yields through AI-driven precision farming
50% Indian farmers expected to use AI-powered tools by 2025
30% Farms using high-precision AI tools for irrigation, fertilization, and pest control
95% Accuracy in detecting crop diseases (e.g., apple scab, yellow rust)
30% Reduction in fertilizer and water usage by,

improving sustainability

#### AI in Prediction – Real-Time Use Cases





#### **Healthcare Prediction**

Al models enhance seizure prediction accuracy by analyzing complex time-series healthcare data in real-time.



#### **Finance Fraud Detection**

Real-time AI fraud detection and credit risk scoring strengthen financial security and improve decisions.



#### **Retail Demand Forecasting**

Retailers use AI for demand forecasting and dynamic pricing to optimize inventory and boost satisfaction.



#### **Manufacturing Maintenance**

Predictive maintenance powered by AI and IoT identifies failures early, reducing downtime and costs.

#### **How Al Gave Me Curiosity & Courage**

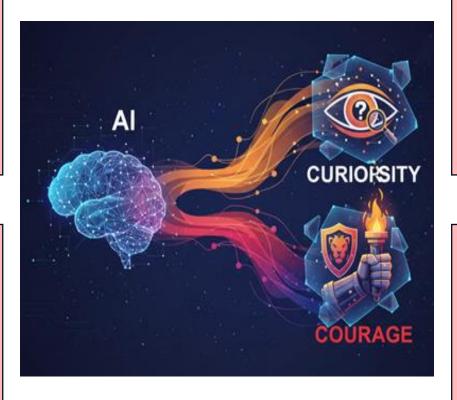


#### **Personal Transformation**

Al acted as a catalyst, fostering curiosity and courage for visionary leadership and personal growth.

#### From Data to Vision

The journey evolved from data-driven decisions to proactive leadership inspired by AI experimentation and learning.



#### **Innovation and Risk-Taking**

Embracing AI tools encouraged innovation, risktaking, and a purpose-driven leadership approach.

#### **Driving Meaningful Change**

Al empowers individuals to move beyond analytics, fostering visionary thinking that drives meaningful organizational change

#### **Curiosity, Courage & Collaboration**



## **Curiosity Drives Exploration**

Curiosity encourages seeking new knowledge and exploring innovative AI solutions to complex problems.

## **Collaboration Ensures Success**

Cross-functional teamwork and openminded collaboration foster inclusive innovation and shared AI vision.



### Courage Fuels Transformation

Courage empowers leaders to embrace change and implement transformative Aldriven strategies effectively.

#### Vision-Led Leadership

Transitioning from data-driven to vision-led leadership enables impactful and future-ready Al adoption.

#### **Challenges in Highway Asset Management**



Data silos and inconsistent collection hinder effective highway asset management and maintenance planning.

# Resistance to change and limited technical expertise delay adoption of modern asset management technologies.



## Short-term budgeting limits long-term infrastructure investment and efficient resource allocation.

#### alignment, stakeholder engagement, and technology investment are vital for resilient infrastructure management.

**Strategic** 

#### Al as a Catalyst for Change





#### **Automated Defect Detection**

Al enables real-time automated detection of road defects, reducing inspection time and increasing accuracy.



#### **Predictive Maintenance**

Predictive models use AI to schedule proactive maintenance, cutting costs by 20–30% and preventing failures



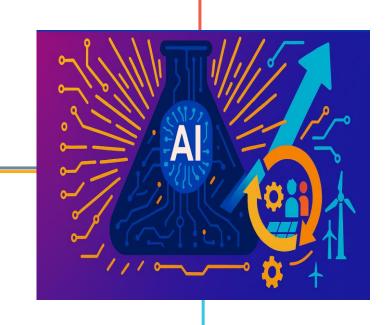
#### **Data-Driven Decision Making**

Al tools analyze vast road condition data to support strategic planning and optimize resource allocation.



#### **Successful AI Implementations**

Case studies from NHAI show effective use of AI and drone surveys improving highway safety and management.



#### **Building an AI Ecosystem**





#### **Core Components Integration**

Building an AI ecosystem requires integrating data, cloud infrastructure,
AI models, governance, and skill development seamlessly.



#### **Collaborative Partnerships**

Effective AI ecosystems depend on partnerships among government, private sector, academia to drive innovation & scale



#### **Ecosystem Impact**

Robust AI ecosystems enable cross-industry adoption, increase competitiveness, and promote sustainable development.



#### **Continuous Growth and Learning**

A well-structured AI ecosystem supports seamless deployment, continuous learning, and collaborative growth over time.



#### Institutional Asset Management Reimagined



- > Traditional vs Al-enhanced asset management.
- Use cases:
  - Automated inspections
  - Integrated platform
  - Smart Procurement
  - Compliance Intelligence patch tracking
  - Audit readiness, change management
- McKinsey's estimate: All could impact 25–40% of cost base in asset management





#### **Vision Forward**





Your roadmap for AI-led asset management.



Call to action: Collaborate, experiment, and lead with courage.



Closing quote: "Al gave me the courage to lead not just with data, but with vision."



