

# Fuel AI Training with Real-Time Data Automation

## Challenge: Feed your AI with accurate, up-to-date data

AI initiatives fail due to bad data - scattered data - out of date - mislabeled. AI models then create delays, poor predictions, and the “garbage in, garbage out” trap and cannot move beyond the strawman pitch.

- **Interoperability Crisis:** Lack of enterprise standards, expensive manual remediation, broken fields, and incompatible sources
- **Data Discovery Gridlock:** Legacy systems, vague naming, and silos prevent teams from finding, trusting, and validation of training data
- **Integrity & Trust Issues:** "Orphaned records", missing keys, and decaying or conflicting information compromise datasets to erode confidence in outputs and slow AI adoption
- **High Maintenance Costs:** Without systematic governance and automated curation, organizations rely on fragile pipelines which block real-time AI integration

### Data Subject Expertise

- Land & Environment
- Forest & Timber
- Energy & Utilities
- Wildland Fire
- Physical Assets
- Earth Science
- Health

What is needed is a roadmap and iterative lab approach to develop an integrated, automated, and orchestrated data solution to support the needed workflows - quality check, context validation, training data refresh.

## Fuel Unified Intelligence through End-to-End Automation and Integration

- Establish a trusted AI foundation through high-volume ingestion and unification of complex **Geospatial, IoT, Voice, and Big Data** streams breaking silos across legacy systems and power advanced analytics
- Leverage an API-centric metadata-driven **Smart Data Pipeline** to continuously automate discovery, curation, and validation via rules and AI-assisted checks to ensure fitness, trust, and freshness of training data
- Apply essential **Policies Overlays** to enforce security, lineage, and governance to transform raw, inconsistent inputs into authoritative, continuously verified assets at speed
- Deliver seamless real-time **Analytics Integration** to feed your models with the trusted, continuously updated training data required for operational superiority and **eliminate model drift**

### ORCHESTRATE

### AUTOMATE

### VALIDATE

### INTEGRATE

#### Unify Data for AI Readiness

- Connect fragmented systems into a single intelligence layer
- Automatically discover and route enterprise data into AI pipelines

#### Power Continuous AI Training

- Replace manual processes with always-on, high-volume data flows
- Normalize and transform Big, Fast, and Geo Data at scale

#### Ensure Trusted, AI-Ready Data:

- Enforce semantic, structural, and policy checks before models ingest information
- Convert raw inputs into authoritative, context-rich knowledge layers

#### Deliver Real-Time Intelligence:

- Feed models and analytics with continuously updated training data
- Provide low-latency delivery through API-centric integration



# Example Solution Highlights

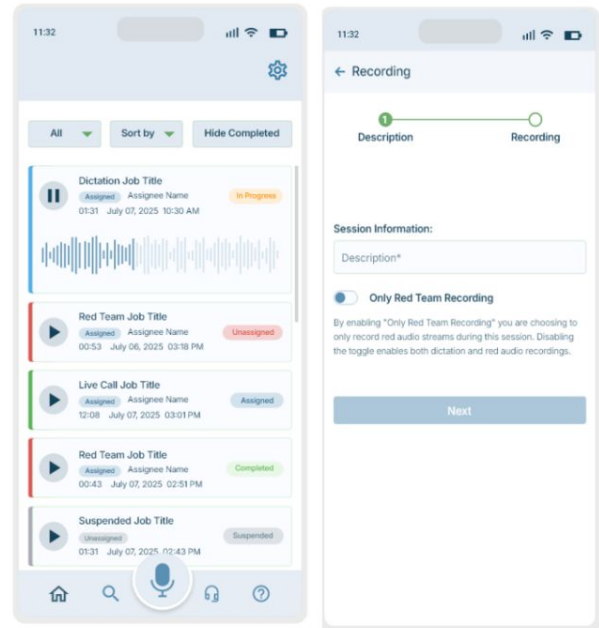
## Clinical Data for Healthcare Real-Time Integration

Clinicians struggled with delayed patient record updates due to slow, fragmented and disconnected dictation workflows from real-time systems.

### Solution:

- Implemented near real-time Multimodal raw voice dictation to text AI-based trained and validated in medical ontology
- Application integrated with role-based cloud data pub/sub for sensitive medical information
- Accelerated provider workflows by 75%

This transformation achieve 50% gain on productivity and established a strong foundation for future AI-driven transcription, coding, and clinical decision-support models.



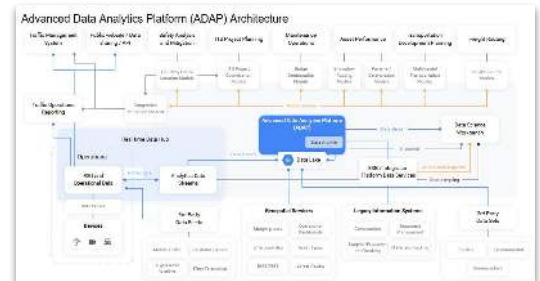
## Real-Time & Geospatial Advance Data Platform

State Transportation Departments orchestrates massive volumes of real-time data hundreds to thousands of data points, videos, and imagery every second. Data from roadway IoT devices requires rapid integration of congestion, side-fire radar, weather sensors, fleet GPS, dynamic message signs, and third-party and crowd-sourced feeds to guide rapid decisions.

### Solution:

- Federated cloud-native, high velocity serverless architecture.
- Integrated telemetry and sensor data into a unified data lake with automatic scaling
- Reduced infrastructure maintenance potential by 80%

This continuously updated environment fuels advanced AI use cases, enables predictive modeling for traffic flow, safety risks, and winter maintenance operations which further enables the future of transportation in areas such as connected vehicles.



## Meet with Xentify

Xentify is a leading Large Data Program Integrator specializing in geospatial, open, big data, IoT/remote sensing, and voice data. Over 20 years of experience, we have served a diverse client base of over 300 clients.