HACK-AI-THON

PACKET WEAVE | GIGAPULSE
11.19.2025

FRONTIER
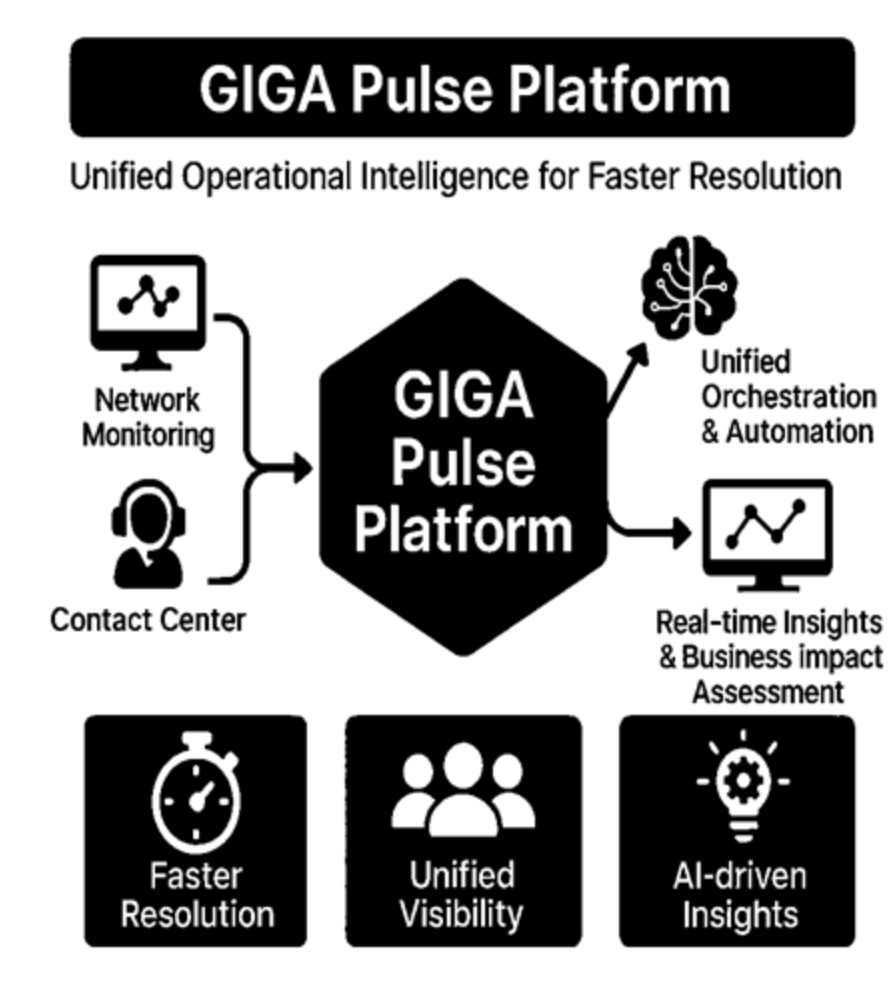
Team Packet Weave:

- Shannon Nowell – Director, Strategy
- Shazaly Musa – Tech, IT Support I
- Robert Sigmundik – Engineer, Network IV
- Stacey Jones – Product Sr. Manager
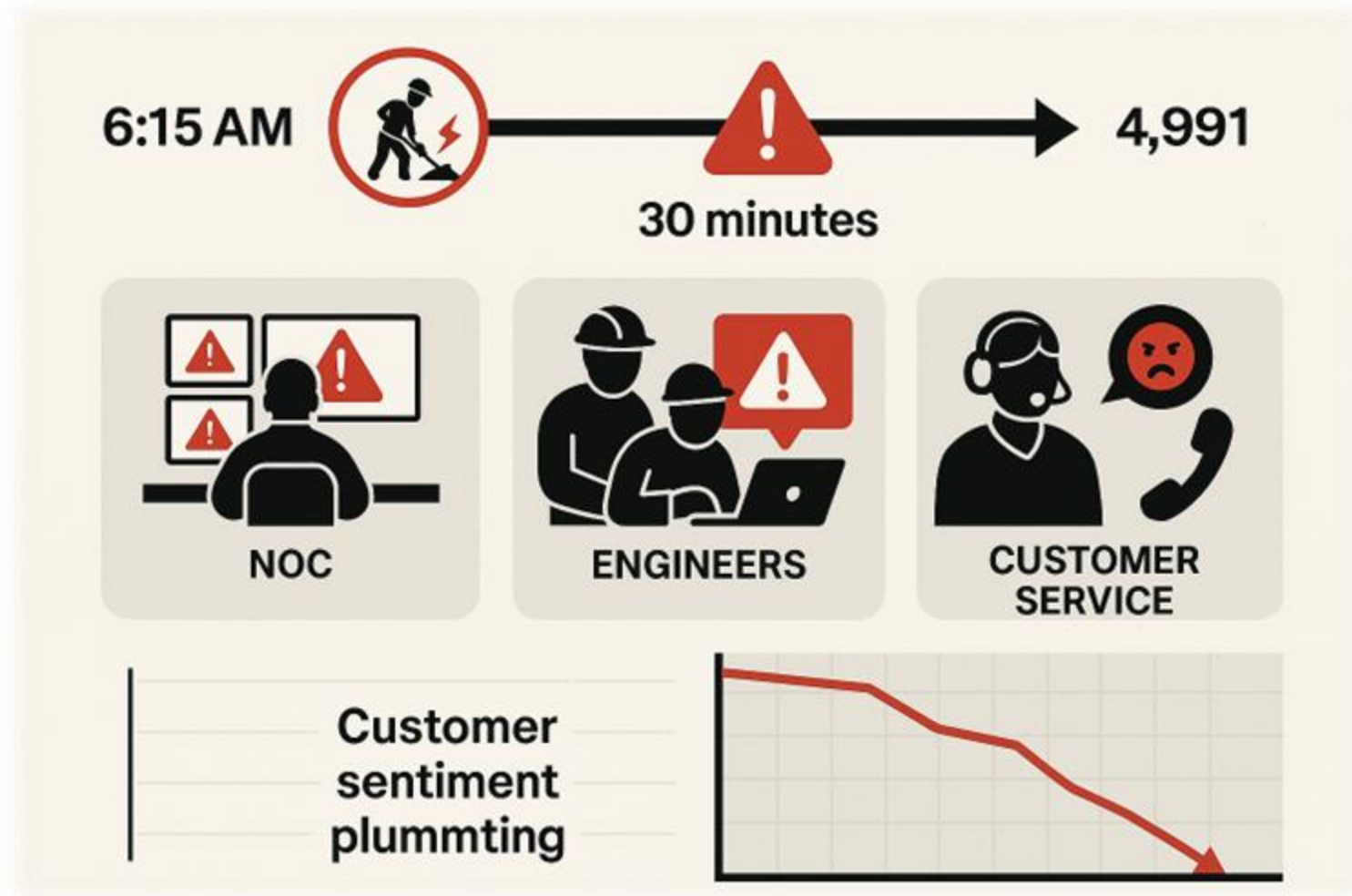
Feel the pulse of Gigabit America

Coordinated AI Agent Orchestration + Interactive Knowledge Graph

GigaPulse unifies network operations, AI orchestration, and customer journey into one interactive, actionable visualization.
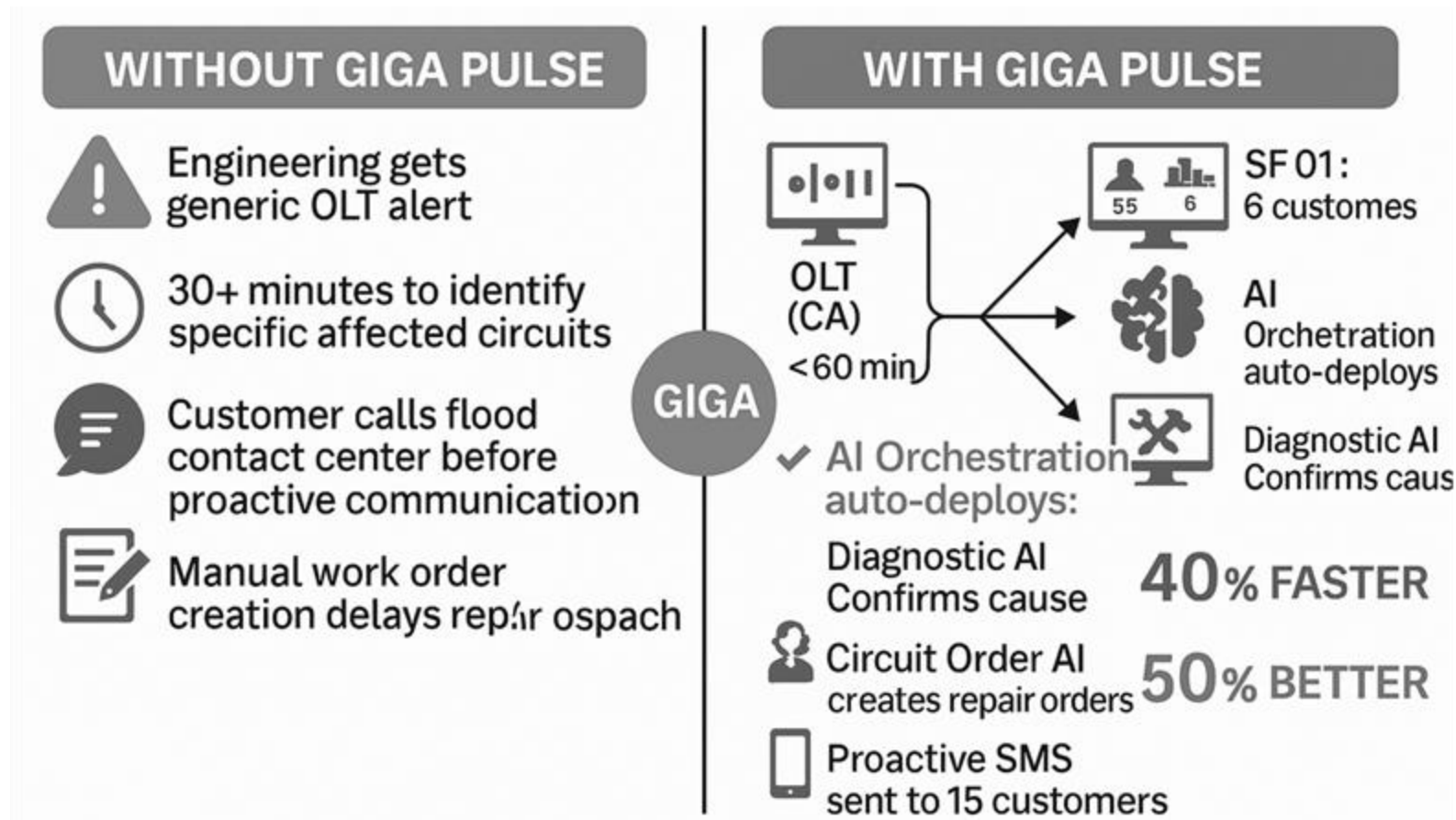
Scenario: November 17th, 2024. 6:15 AM. A CalTrans construction crew cuts our main fiber trunk in San Francisco

The GigaPulse Solution

Problem Statement: Frontier's Network Designs and Operational Network Systems (alarm data) exist siloed across multiple systems and needs to be more centrally accessible and streamlined (AI analyzed/prioritized).
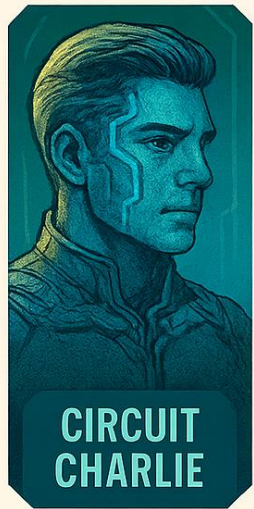
Meet the AI Agent Chain of Heroes

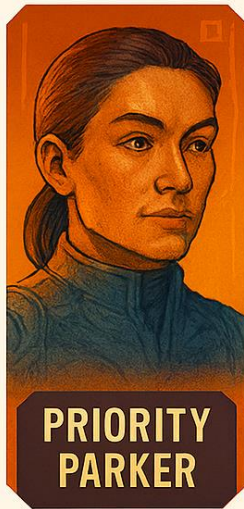**The five AI agents that transform crisis response**

- **Circuit Charlie** analyzes infrastructure – 89% accuracy in root cause detection"

- **Priority Parker** triages incidents and consolidates tickets automatically"

- **Dispatch Dana** coordinates field crews and creates work orders via M3 integration"

- **Sentiment Sophie** manages customer communications and churn prevention"

- **Deep End Louie** mentors agents and up and coming network engineers
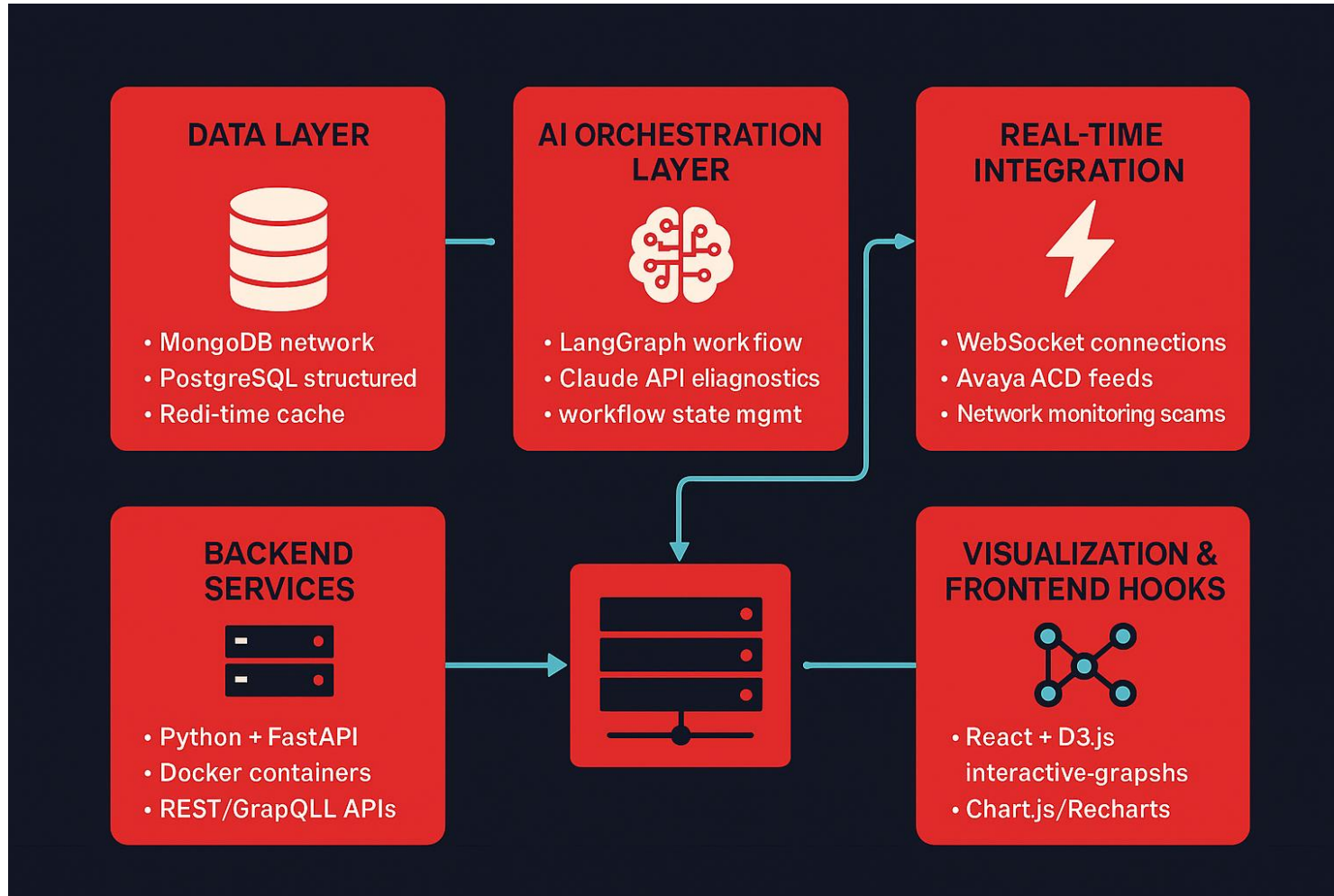
Introducing GigaPulse (Live Demo)

Our living knowledge graph - infrastructure, customers, AI agents, all connected in real-time"
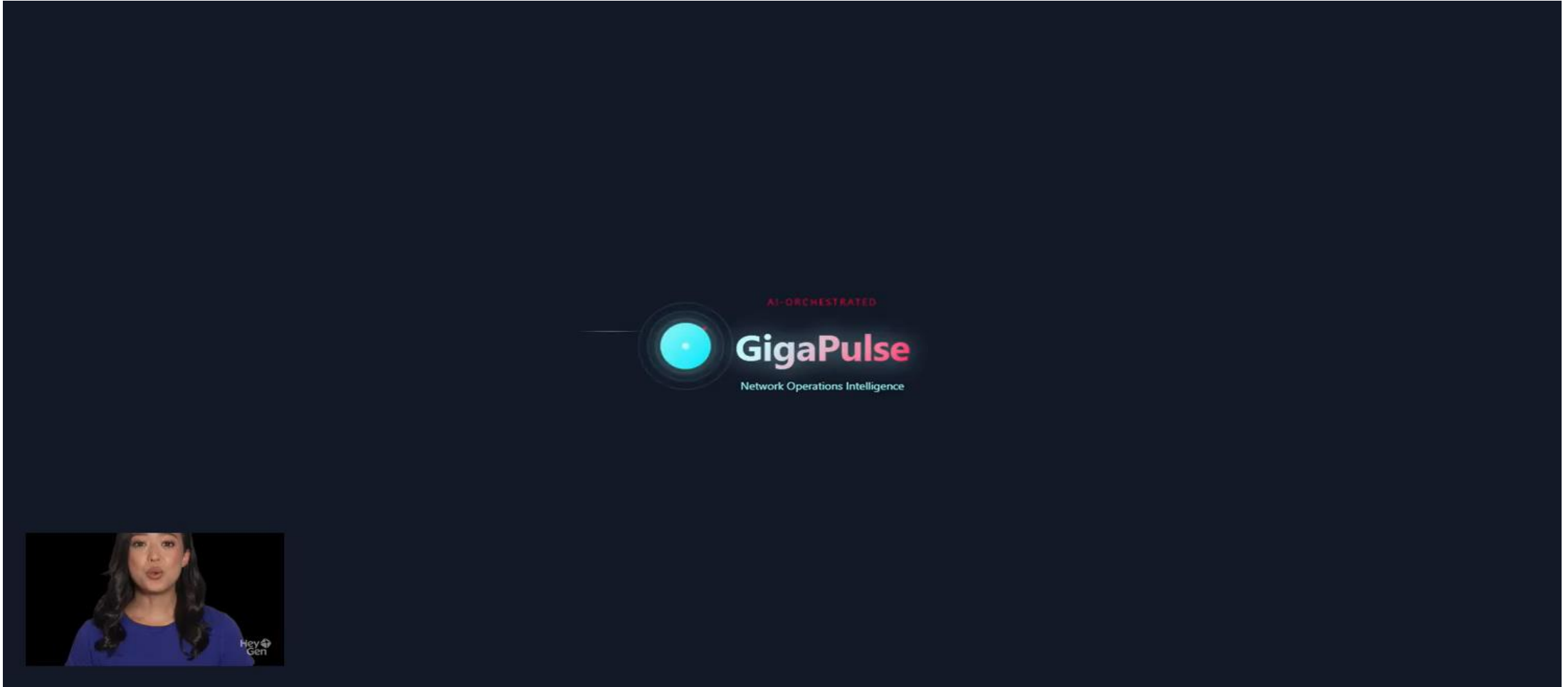
Future Implementation Vision & Roadmap

Core Programming Architecture

- **Phase 1 (Complete):** Interactive proof-of-concept with synthetic data

- Phase 2: Real-time data feeds, natural language queries, AI training

- Phase 3: Predictive alerts, mobile interface for field techs

- Phase 4: Multi-region deployment across all Frontier territories

- Executive Dashboard: Real-time business impact visibility for leadership

Strategic Alignment & Impact

Connection to Frontier's mission and strategic objectives

- GigaPulse ensures the gigabit infrastructure we build delivers exceptional customer experiences
- AI orchestration reduces operational complexity as we scale nationwide
- Transparent AI builds trust – NOC teams are the Human in the Loop
- Cross-functional collaboration breaks down silos between engineering and customer experience

ARE YOU READY?