

ANALYTIC VIZION

AI Service Dispatch: A Proof of Concept for Smarter Resource Matching

A global manufacturer worked with Analytic Vizion to explore how AI could match service jobs with the right expertise and cost before dispatch.

THE CHALLENGE

A global manufacturer with operations across multiple locations relied on service crews to support its operations. As requests increased, dispatch teams had to decide quickly which type of crew to send and what the job would cost. Those decisions depended largely on expert judgment and limited information available at intake.

This created several barriers to consistent resource matching:

- Requests were manually reviewed and prioritized.
- Estimates lacked consistent historical evidence.
- Crew selection depended heavily on experience.
- Scope mismatches surfaced after arrival.
- Actual costs and outcomes rarely informed future assignments.

Without a more consistent approach, the manufacturer risked budget overruns, repeat mobilizations, and service delays. Senior crews could remain tied up on routine jobs while complex work waited, limiting capacity to meet growing demand.

TOOLS & TECHNOLOGY

FastAPI · pandas · scikit learn · React 19 · TypeScript · Vercel

OUR APPROACH

Analytic Vizion partnered with the client's Head of AI to explore resource matching while keeping operational expertise central to the design. The team designed a workflow connecting intake, job assessment, crew recommendations, dispatch, and outcome capture, with human review and explainable recommendations to help dispatchers evaluate uncertain cases.

Analytic Vizion built a working AI triage and resource-matching POC using client data. The team also proposed a supporting intelligence layer for historical-pattern analysis, complexity and cost scoring, and explainable crew recommendations.

Proposed tracking of overrides, costs, and labor hours would support comparisons between predicted and actual outcomes.

THE RESULTS

The engagement delivered a working demonstration and a defined path forward.

- **Working POC:** Made the concept tangible using client data.
- **Defined prediction approach:** Outlined how complexity, effort, and cost could inform dispatch.
- **Human oversight by design:** Included review of uncertain cases.
- **Feedback and measurement:** Defined how completed jobs inform recommendations and how performance is evaluated.

The POC offered a practical example of AI-assisted resource matching. Operational savings and service improvements have not been measured.