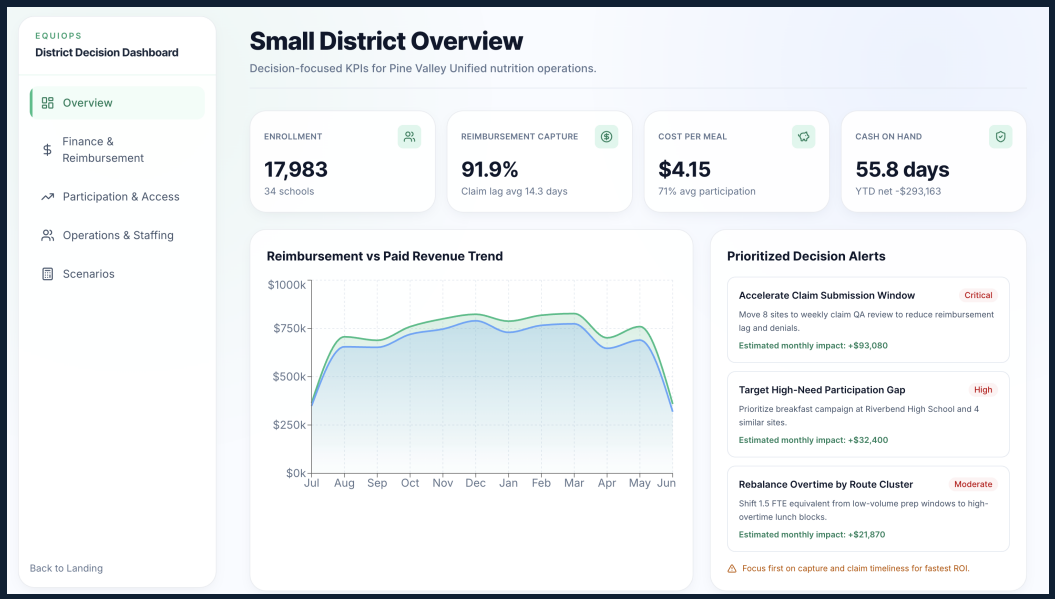
VENTUREREADY CASE STUDY

EquiOps

Operational intelligence platform for public school nutrition programs. Built to convert fragmented district data into measurable reimbursement recovery, staffing efficiency, and student equity outcomes.

This document summarizes the product vision, delivery method, analytics model, system architecture, and enterprise-readiness story for website and stakeholder use.

Category	Delivery Window	Core Value
Data Platform	**5 Months**	**$590K**
Education analytics and district operations	Discovery through pilot-ready release	Modeled monthly upside in balanced scenario



Website-ready description: EquiOps unifies enrollment, attendance, FRL, participation, labor, and reimbursement data into a single decision layer for district nutrition leaders.

PROJECT CONTEXT

Business Problem and Product Mandate

School nutrition teams operate across multiple systems of record that were never designed to answer cross-functional questions. District leaders can see attendance in one place, meal counts in another, labor staffing in spreadsheets, and reimbursements in separate claims workflows - but they cannot see how those inputs interact in one operating model.

EquiOps was commissioned as a decision platform rather than a static dashboard. The build needed to do three things well: identify participation and equity gaps, quantify the financial impact of operational decisions, and present district-level action paths with executive clarity.

- Unify district nutrition, enrollment, attendance, FRL, labor, and finance signals.
- Expose participation underperformance at the school and segment level.
- Model reimbursement capture, claims latency, and labor reallocation opportunity.
- Translate analytics outputs into executive-ready alerts and playbooks.
- Establish a platform narrative credible to operations, finance, and cabinet stakeholders.

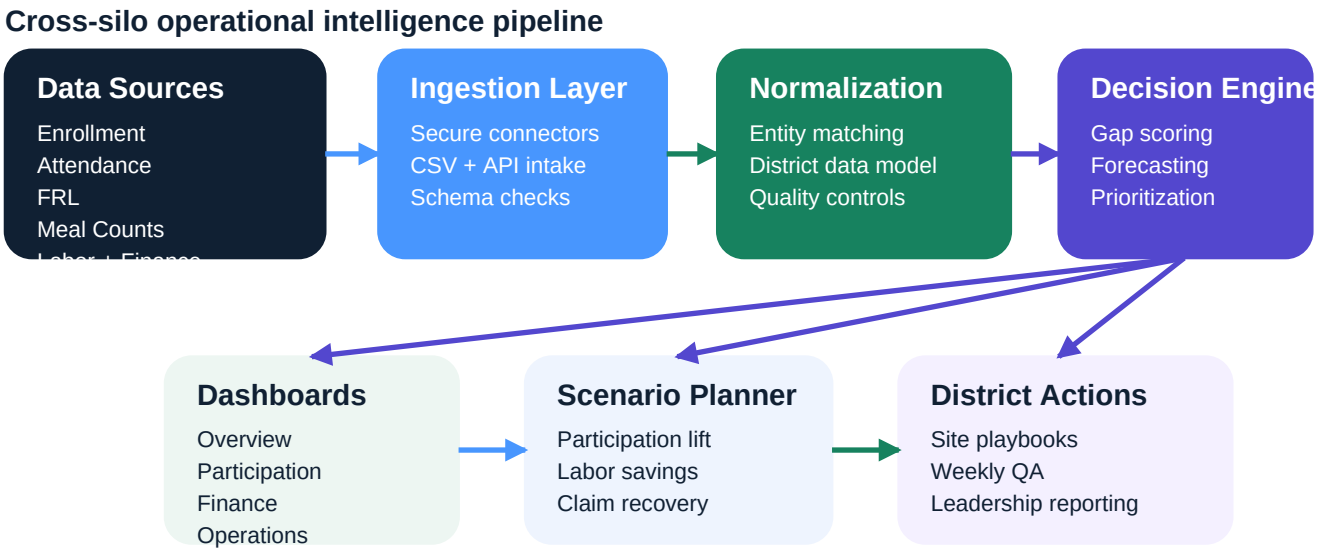
Key modeled outcomes used across the product and the case study:

Schools	Enrollment	Capture	Lift
34	**17,983**	**91.9%**	**$590K**
Unified district operating model	Students represented	Modeled reimbursement capture	Balanced scenario monthly upside

SYSTEM DESIGN

Solution Architecture and Platform Surfaces

The platform was designed as a cross-silo intelligence layer sitting above existing district systems. Inputs are normalized into a district operating model, scored by the analytics engine, and then surfaced through workspaces aligned to how district leaders actually run nutrition operations.



Primary workspaces

Overview
Participation and Access
Finance and Reimbursement
Operations and Staffing
Scenario Planner

Decision outputs

Priority site alerts
Claim acceleration actions
Labor rebalance recommendations
District playbooks
Executive-ready impact summaries

METHODS

Analytics Model, Formulas, and Scoring Logic

EquiOps combines deterministic KPI logic with scenario-based financial modeling. The formulas below are grounded in the shipped dashboard model and are intended to keep the system explainable to district operations and finance teams.

Metric	Formula	Purpose
Participation Gap	Gap_s = Attendance_s - Participation_s	Find sites where meal uptake materially trails student presence.
Capture Gap	CaptureGap_t = ForecastedReimbursement_t - PostedRevenue_t	Quantify reimbursement leakage and claims-cycle friction.
Labor Efficiency	LE_s = MealsServed_s / LaborHours_s	Compare staffing productivity across sites and prep windows.
Net Improvement	NI = M * dP * 2.84 + C * 0.36 * dL + G * 0.09 * dD	Translate operational interventions into monthly financial upside.
Opportunity Score	O = 0.35F + 0.30G + 0.20R + 0.15L	Rank interventions using equity, participation, reimbursement, and labor signals.

Where M = total meals served, dP = modeled participation delta, C = total cost base, dL = labor efficiency delta, G = reimbursement gap, and dD = claim lag reduction days. The shipped scenario workspace operationalizes this model through sliders that quantify the combined effect of participation growth, labor efficiency, and claims-cycle cleanup.

Method stack

- Entity resolution across siloed records
- School-level participation and FRL opportunity scoring
- Claim-lag recovery estimation
- Labor productivity benchmarking by site and segment
- Scenario planning for monthly net improvement

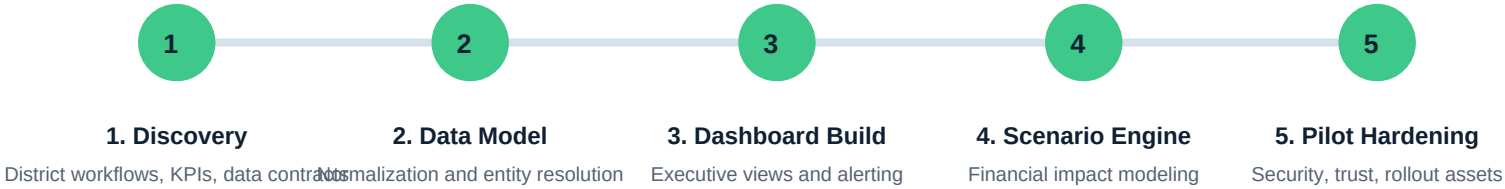
Why it matters

The product does not stop at reporting. Each model is designed to answer, "What should district leaders do next, and what is the likely dollar impact if they do it?"

DELIVERY

Build Process and Enterprise Delivery Motion

The project was executed as a focused product build with a short path to a pilot-ready release. The workstream combined product framing, data modeling, dashboard engineering, and trust-building around security and district adoption.



Engineering workstreams

- Next.js application architecture
- Responsive district dashboard framework
- Data model and seeded district simulation
- Scenario planner and KPI calculation engine
- Intake flows, pilot capture, and trust content

Enterprise delivery practices

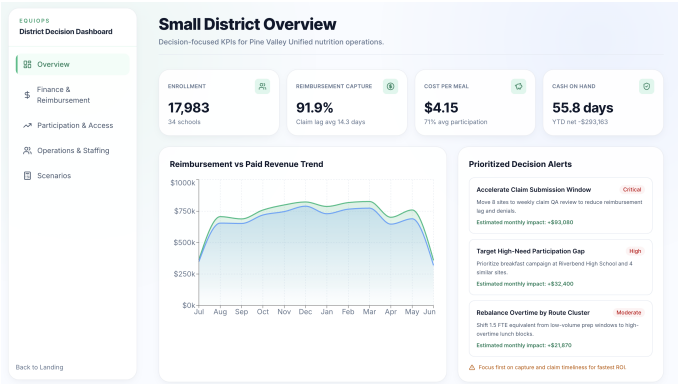
- Clear KPI contract before UI build
- Explainable formulas instead of black-box outputs
- Security narrative designed into the product, not bolted on later
- Executive-ready language aligned to district ROI and student equity

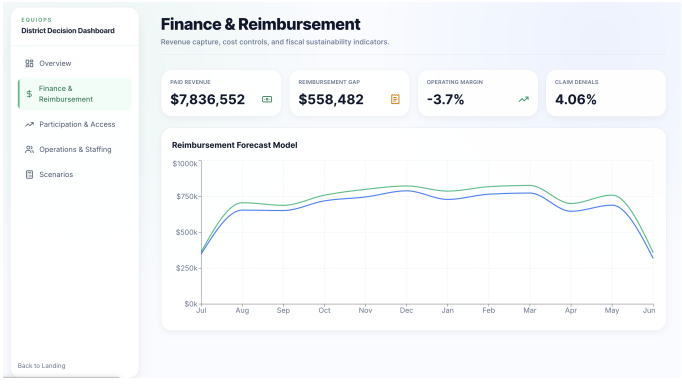
Recommended website positioning: EquiOps is best framed as a district operations intelligence platform - not merely dashboard work - because the product combines data integration, analytics engineering, decision modeling, and a polished executive experience.

PRODUCT EVIDENCE

District Overview and Financial Command Views

The shipped product balances executive readability with operational depth. The overview consolidates district health, while finance surfaces reimbursement leakage, margin pressure, and claims-cycle urgency.



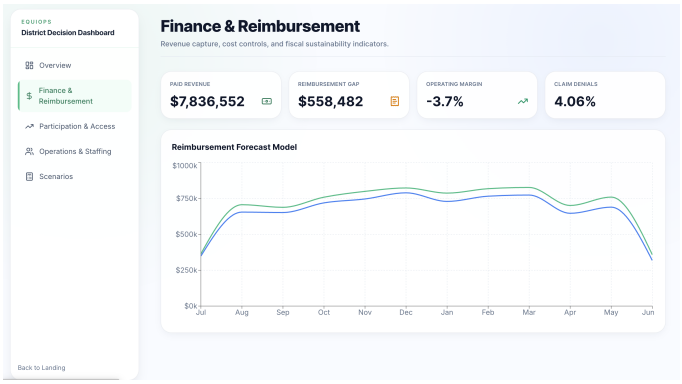


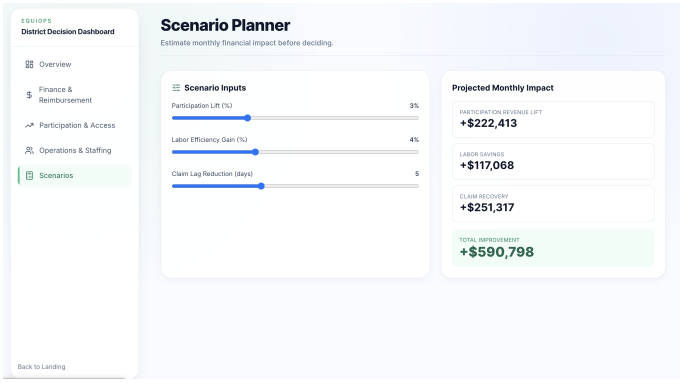
What these views prove: the product can express district-level KPIs, longitudinal revenue and reimbursement trendlines, and prioritized decision alerts without overwhelming non-technical stakeholders.

DECISION LAYER

Participation Prioritization and Scenario Modeling

EquiOps becomes strategically differentiated in the pages that move from observation to intervention. Participation and Access identifies the sites with the largest gap between attendance and meal uptake; Scenario Planner turns those gaps into a quantified operating decision.





Decision logic in action

The participation workspace identifies high-need sites with the largest meal-uptake gap. The operations view translates staffing and productivity variance into intervention targets. The scenario planner then quantifies the financial effect of improving participation, labor efficiency, and claims timeliness before district teams operationalize the playbook.

The modeling logic intentionally stays legible. District teams can see exactly how participation lift, labor efficiency, and claim-lag reduction contribute to projected monthly improvement. That interpretability is a major enterprise advantage in education settings where procurement, budget owners, and operational leaders must align quickly.

ENTERPRISE FIT

Security, Stack, and Website-Ready Positioning

Security and trust posture

- FERPA-aligned data handling
- Role-based access control
- U.S.-based cloud hosting narrative
- Encryption at rest and in transit
- Aggregated analytics to reduce unnecessary student-level exposure
- Security content embedded directly in the product story

Implemented technology profile

- Next.js and React for the application shell
- TypeScript for maintainable product logic
- PostgreSQL and Supabase-backed data workflows
- Python-ready analytics layer for modeling extensions
- Tailwind CSS and motion-rich UI for executive polish
- Dashboard screenshot set ready for case study placement

Recommended website project summary

EquiOps is a district operations intelligence platform for public school nutrition programs. We built a secure analytics layer that unifies enrollment, attendance, FRL, participation, labor, and reimbursement workflows into one executive-ready decision system - helping district leaders identify equity gaps, accelerate claim capture, and model operational improvements before rollout.

This asset is optimized for enterprise website use because it ties a credible technical build story to measurable outcomes, explainable formulas, and a polished visual system that stakeholders can immediately trust.