

Case Study: Making AI Stick in a Construction Company

Role: Head of Finance (also leading HR, Legal, Insurance & Technology), commercial construction company (21 staff); also run finance and software for its sister residential company

Scope: Designed, built, deployed, and trained staff on an internal AI tool platform, from the office out to the field

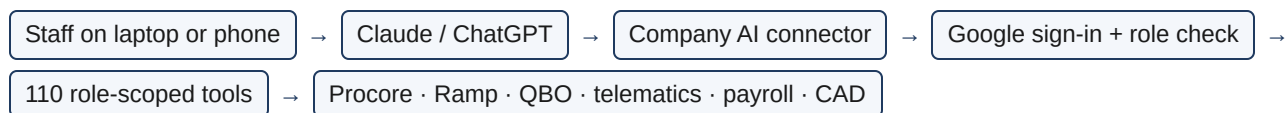
Timeline: 2025 to present. Started on Gemini, moved the company to Claude, and rolled out Grok Bot agent workflows in 2026.

THE PROBLEM

Construction runs on people who are not paid to use software. I run finance, HR, legal, insurance, and compliance on a stack I selected and implemented (Procore, Ramp, Rippling, Fleetio, Linxup, Coast, QuickBooks Online). The data was connected; the daily work was still manual. Off-the-shelf AI chat let individuals experiment, but it did not touch our systems, respect who should see what, or reach the crews in the field.

WHAT I BUILT

- **110 purpose-built AI tools** across finance and accounting, project controls and estimating, legal and contracts, insurance and compliance, HR, and fleet.
- **One cloud-hosted platform** that plugs into the AI assistants staff already use (Claude and ChatGPT). Nothing to install: it works on a laptop or on a phone at a jobsite.
- **Google sign-in with role-based access:** each employee sees only the tools and data their role allows.
- **Live connections to business systems:** tools call the Procore, Ramp, and QuickBooks Online APIs (through a Ramp developer app I built, with write access unlocked by request through Ramp support), and connect to Bluebeam and AutoCAD through MCP.
- **A built-in feedback loop:** staff report what worked and what didn't; that feedback drives fixes and new tools, usually within days.
- **Agent workflows** (Grok Bot, rolled out to the team in 2026, plus Cursor team accounts) for multi-step work like month-end close, with hands-on training in agentic workflows.



Staff feedback goes to a feedback queue that drives new and improved tools.

HOW I ROLLED IT OUT

1. **Office first.** I trained the office staff myself and built tools from their real requests, not from a roadmap written in isolation.
2. **Fast iteration.** Requests typically become working tools in 1–2 days, sometimes hours. The connector ships several releases a day (now v0.55), with 2–5 new tools a week plus refinements.
3. **Field next.** Field adoption is slow across construction, so crews get full training last. It is already in use there: our senior superintendent runs it from his phone and laptop with no setup.

RESULTS

Measure	Result
Adoption	11 of 11 people with access use it every week (11 of 21 staff; field rollout underway)
Time saved	~1 hour per person per week across all users (measured in Claude usage analytics); individual tools save far more
New work brought in-house	First 3 shop drawings produced in-house in two weeks; previously outsourced at \$600–750 each
Iteration speed	2–5 new tools per week , plus several releases per day
Request → working tool	1–2 days , sometimes hours
Headcount leverage	Payroll grew less than any other G&A line; more output at the same or lower headcount

EXAMPLE WINS

- **Earned-revenue reporting on demand:** one tool combines estimates (Procore), expenses (Ramp), and accounting (QBO) through their APIs into the monthly earned-revenue report.
- **True job costing:** telematics, project geofences, and payroll data combine to put fully burdened labor cost on the right project. That cost was previously booked as overhead.
- **Faster estimating:** Bluebeam and AutoCAD connected through MCP speed up takeoffs, change requests, and bid volume.
- **Legal and insurance in-house:** contract review, addenda, term negotiation, legal request tracking, and compliance and insurance requirements, handled at far higher volume than before.
- **HR and finance operations:** commission tracking, policy development, recruiting pipeline, time-tracking cleanup, vehicle expense tracking, expense fraud flags, and agent-assisted month-end close.

WHAT MADE IT WORK

- **Meet people where they already work:** inside the AI assistant, on the device they carry.
- **Access control from day one:** role-gating made it safe to connect real business systems.
- **Feedback as the engine:** adoption kept growing after launch because users shaped the tools.
- **Systems thinking:** years of implementing and migrating finance, HR, fleet, and payment systems (including multiple QuickBooks Desktop → Online migrations and a round-trip) meant the AI layer was built on clean, connected data. Before LLMs, I built custom Excel tools in VBA and the company's internal item database in QuickBooks Desktop.

WHAT'S NEXT

- Company-wide rollout to all field employees.
- Agentic systems across both entities (commercial and residential).
- Dedicated AI hardware to fine-tune models for business-specific tasks, plus exploration of robotics for management and training.

Built and deployed for my employer, which owns the tools; details generalized to protect confidential information. Building with language models since GPT-2 (2019).