Production > Prototype

How a Small Team Replaced a Core Platform in 90 Days

Dustin Warner | Director of Engineering, NRC Health

NRC Health

The Power of Human Understanding®

Founded in 1981 and publicly traded on NASDAQ (NRC), NRC Health generates ~$143M in annual revenue with approximately 425 employees. For over four decades, NRC Health has led the charge to personalize healthcare, helping leading health systems understand each unique individual they serve.

45 Years in Healthcare (Est. 1981)

10k+ Partner Organizations

#1 Best in KLAS 2026

Human Understanding®

Empathic, patient-first approach transforming healthcare experiences

Market Leadership

Largest syndicated healthcare consumer research platform in the nation

Proven Innovation

First to deploy real-time PX surveys, discharge calls & AI-powered insights

The Team

- Dustin Warner, Director of Engineering
- 30 engineers and managers
- Market Insights & Consumer Insights products
- 3 product lines, 30–40% of company revenue

Lincoln, Nebraska · ~400 Employees · ~$143M Revenue · NASDAQ: NRC · nrchealth.com

The Burning Platform

- 3rd-party dependency in a core product
- 3 product lines — 30-40% of revenue at risk
- Tight timelines, constrained resources
- Our CEO viewed this as a strategic vulnerability

The Tech Stack We Inherited

(the scary slide)

Survey & Panel App (Entirely Customized)

Excel as data transport

10,000+ line XML configs

SPSS for statistics

Tab-delimited integration

Less Talk, More Action

01 No months of planning. No RFP.

02 Working prototype in one week.

03 One-week onsite: 2 engineers, 2 operations.

04 Start small. Start fast. Learn first.

Assembling the Team

- Handpicked engineers leading in AI and DevOps
- Laid out the stakes honestly — high vis, high pressure
- Did NOT wait for full product and design teams
- Hired an Engineering Manager: hands-on, AI-excited

Set the stakes: What's the worst that could happen?

Dirty Dozen.
Suicide Squad.
Pick your frame.

You lay out the mission, name the danger,
and find out who’s in.

AI-First Development

The Tools

Claude

Reasoning, architecture, generation

Copilot

In-editor code assistance

But the tools weren't the secret.

The secret was what we built around them.

Our AI Workflow

1 The Lore + Planning

- Shared context repo (“The Lore”)
- Team planning with Claude / OpenCode
- Lore + app repos as context input
- Custom skill → user stories in work mgmt

2 Feature Lead → Agents

- Lead takes plan, spins up agents
- Agents defined at the app repo level
- Customized per developer preferences
- Not locked into one tool or solution

3 CI Pipeline Skills

Zero flags in the pipeline

- SonarQube
- GitHub Adv. Security
- Trivy Scans
- Testing & Coverage

Goal: Give agents everything they need to build, test, and validate locally.

The Lore

Our shared context repository — the institutional memory

- Feature plans generated for each piece of work
- Architectural decisions and patterns
- Code design patterns and requirements
- Fed into every planning session and agent

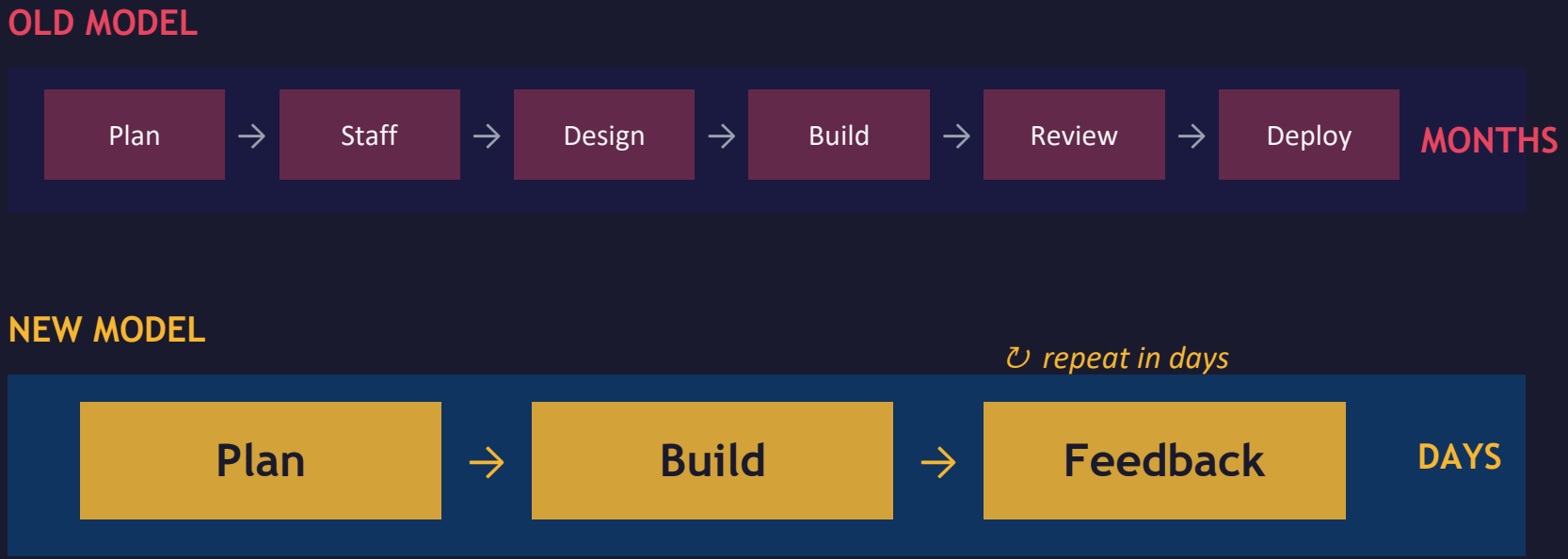
AI + DevOps = Fire — but only when the AI has context to work with.

Feedback as a Feature

- Near-daily feature demos in Slack
- Rapid feedback → rapid fixes
- Built operations tooling alongside the platform
- Surgery, not big bang — one dependency at a time

“Posted at 2pm. Feedback at 3pm. Fix shipped at 4pm.”

The New Operating Model



My new red flag:

“I’ll get back to you in a couple of days.”

No. Let’s do it now.

So what happened?

What We Achieved

3	< 8	3
months	hours	stakeholders
Use case parity	Bug & enhancement cycle time	Independent validation

$ Value Created

30-40%

Future revenue protected

Ownership

Core tech stack — no dependency risk

$500K+

Net vendor spend savings

3 Teams

Transformed to new operating model

“This wasn’t just faster execution, it was a different operating model. AI compressed planning and development to the point where stakeholder feedback, not engineering, became the constraint.”

— VP of Technology Tim Ottersburg

“Their speed, flexibility, and collaborative approach have fundamentally exceeded my expectations for what’s possible on a project like this.”

— Operations Manager, Customer Research Heather L.

“AI flattened the usual hierarchy by enabling people across roles to contribute at a higher level, which turned must-haves into table stakes and kept momentum from stalling in a traditional backlog.”

— Director of Product, John C.

What Actually Changed

1. Proximity over process
2. AI as a teammate, not a tool
3. Feedback as velocity
4. Constraint clarity
5. Leadership coverage

The Honest Part

Validation became the new bottleneck

DORA metrics didn’t look that great

Not everyone’s on board yet

Where does Eng end and Product begin?

The Human Side

Communication is the only constraint

When AI removes the technical bottleneck, human coordination cost becomes the critical path.

Language shapes team structure

We group by language now. Human-to-human communication cost drives team composition.

Tech is changing us

The change in our people is even more amazing than the tools. No sprints. Kanban. Features in the time of a task.

Don’t wait for the perfect tool or the perfect policy.

Use what you can, where you are,
at your current stage of AI adoption.

The constraint is clarity + proximity + willingness to move.

? Help I’m Looking For

Role balance

How are you right-sizing Eng / Product / Design as AI compresses what each role does?

Validation at speed

How do you design for stakeholder validation being the constraint instead of engineering?

Communication overhead

How do you keep channels minimal and high-signal when velocity and team size grow?

Thank You

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