

Build, Buy, or Prompt?

How Agentic AI Is Rewriting the Modernization Playbook

Rethinking build-versus-buy for DAF in the age of AI-accelerated development.

David Norris

Technical Solutions Manager, Alaska Northstar Federal

About David Norris



David Norris

Technical Solutions Manager
Alaska Northstar Federal

B.S. Management Information Systems
University of Alabama

Based in Mobile, AL
Native of Montgomery, AL



Multi-Cloud Depth

10 years across AWS, Microsoft Azure, and Google Cloud Platform.



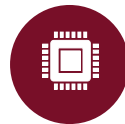
Federal & DoW Experience

7+ years supporting Federal and DoW missions; helped architect the BES Atlassian Toolsuite and has led technical delivery across a range of programs.



Civilian Agency Practice

Supported the Alaska Northstar USDA technical practice; technical leader on the design and deployment of FEMA's GCP cloud environment.



Generative AI

Supporting the U.S. Army Corps of Engineers (Program Control Office), building generative AI solutions for complex, disparate, and non-digitized legacy data.

From On-Prem to Cloud to AI



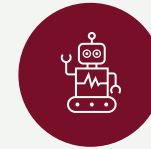
On-Prem

- Self-managed compute
- More specs and new functionality required hardware acquisition, installation



Cloud

- CSPs took over management of the hardware
- Hardware and functionality became a codable resource
- New era: time could be dedicated to the software, not the hardware it runs on



AI

- Built on the hyperscale availability of compute provided by the cloud
- Ability to off-load time consuming tasks
- New era: time can be focused on making informed decisions, not collecting the data needed to make them

Where We're Headed

- 1 The Problem & the Three Levers**
Why the classic build-vs-buy calculus is breaking down - and the new blend.
- 2 Agentic AI & the Requirements Loop**
Coordinated, role-specific agents and the engine that changes everything.
- 3 Rethinking the Decision**
Economics, evolved agile practice.
- 4 Framework, Pitfalls & Taking the Lead**
A practical decision and governance framework you can apply.

The Classic Calculus Is Breaking Down

For decades, technical debt and poor documentation pushed DAF programs toward large, inflexible COTS buys - custom builds looked too slow and too risky to vet. Agentic AI changes the underlying economics.



Legacy drag

Decades of technical debt and thin documentation make custom work hard to scope - and easy to reject.



Slow requirements loops

Months to turn mission narratives and CONOPS into requirements a vendor or dev team can act on.



COTS as the default

“Buy” became the only low-risk answer - even when the fit was poor and tailoring was costly.

Vendor Lock-In

COTS as the default has contributed to vendor lock-in, where regardless of mission needs, leaving the existing platform simply cost too much and took too long to be a viable option.



Proprietary data models and interfaces

Your own data would be hard to take with you.



Prohibitive switching costs

Tests, docs, and integrations would all be rebuilt from scratch.

From Two Options to Three Levers

The question is no longer “build or buy?” It’s how do we blend build, buy, and AI-accelerated configuration to iterate at mission speed?



BUILD

No longer a blank page

Agents generate boilerplate code, integration scaffolding, and compliant documentation - lighter-weight custom builds become viable where they never were.



BUY

No longer the only “safe” bet

Candidate COTS products can be vetted quickly against rich, AI-derived requirements and test suites - fit is measured, not assumed.



PROMPT

The new third lever

AI-accelerated configuration, tailoring, and integration - core platforms purchased, then adapted at mission speed with coordinated agents.

What “Agentic AI” Means Here

Not a single chatbot - coordinated, role-specific agents working a shared backlog, each with a defined job, hand-offs, and human checkpoints.



Analyst agents

Transform mission narratives and CONOPS into structured, traceable user stories.



Architect agents

Generate multiple solution sketches for side-by-side evaluation.



Simulation agents

Exercise workflows and edge cases with synthetic data before code is committed.

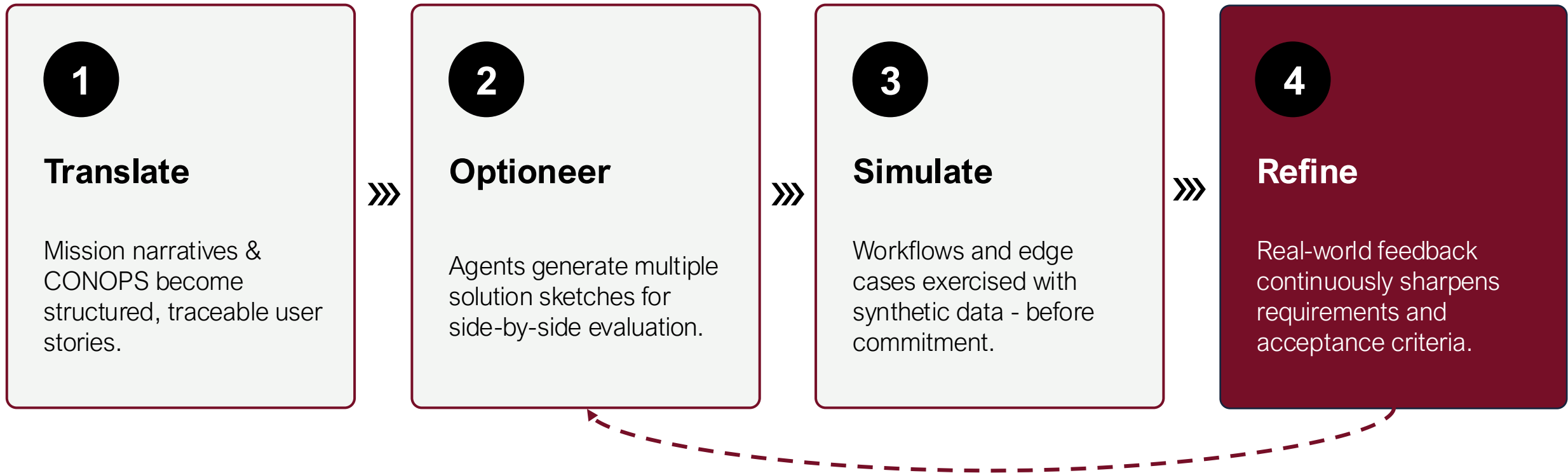


Feedback agents

Continuously refine requirements from real-world usage and operator input.

Humans stay in the loop - agents accelerate the work; they do not own the decision.

The AI-Accelerated Requirements Loop



The loop runs continuously - refinement feeds the next translation, at mission speed.

What Actually Changes | Cost, Schedule & Risk



COST

THEN

Custom work priced in months of analysts, developers, and tech writers - evaluation alone was a budget line.

NOW

Boilerplate, scaffolding, tests, and compliant documentation generated by agents - exploring an option costs hours, not FTE-years.



SCHEDULE

THEN

Sequential: requirements cycle → acquisition → build/config → test, each measured in months.

NOW

Parallel optioneering - multiple candidate solutions sketched, simulated, and compared inside a single planning increment.



RISK

THEN

Risk concentrated in one big, hard-to-reverse decision made on thin evidence.

NOW

Risk retired early - synthetic-data simulation and executable tests expose failure modes before commitment.

How the Build-vs-Buy Conversation Changes

YESTERDAY

BUY

"The only low-risk option - accept the fit we get or highly customize."



WITH AGENTIC AI

One candidate among several - vetted quickly against AI-derived requirements and test suites.

BUILD

"A blank page: slow, costly, hard to document, hard to defend."



Agents generate boilerplate, integration scaffolding, and compliant documentation from day one.

HYBRID

"Expensive tailoring projects bolted onto rigid platforms."



Purchase core capability, tailor and integrate with Agentic AI - increasingly the sweet spot.

When to Build, When to Buy



AI-enabled builds shine when...

- The workflow is mission-unique - no COTS product models it well (e.g., a niche business process or a bespoke data flow).
- Requirements are volatile and mission-driven - the system must change faster than a vendor roadmap.
- Integration burden dominates - agents can generate the scaffolding that made custom work costly.
- AI-derived test suites can vet the build continuously against executable requirements.



Mature COTS still wins when...

- The domain is commodity - finance, HR, ITSM - where commercial products embed years of hardened practice.
- AI-assisted analysis shows strong fit - simulated workflows and edge cases map cleanly to product capability.
- Compliance and sustainment favor a vendor - accreditation baggage the program shouldn't carry alone.

Hybrid can bridge the gap: buy the core, then tailor and integrate with agents at mission speed.

Avoid Vendor Lock-In



AI-assisted development protects against lock-in by...

- Making portability something you engineer.
- Shifting ownership of requirements - AI-derived stories and executable test suites are program assets that outlive any vendor.
- Reducing switching costs - agents regenerate integration scaffolding and documentation against a new platform in days.
- Providing new leverage to insist on open interfaces and data standards - and keep mission-unique logic outside the purchased core.

Same Playbook, New Clock Speed

None of this discards what we know. The logic that made modernizations succeed before is the same logic that works now - AI enables better outcomes, but fundamentals stay the same.



Disciplined Requirements

Clear, traceable requirements have always separated successful modernizations from failed ones. Unchanged - now derived in days.



Incremental, Tested Delivery

Small iterations vetted against reality always beat big-bang cutovers. Unchanged - now iterating at agent speed.



Evidence Over Instinct

The best build-vs-buy calls were always made on analysis, not habit. Unchanged - now the evidence is cheap to produce.

IT WAS NEVER IMPOSSIBLE

It was just harder.

Teams have been modernizing legacy DAF systems successfully for years - with rigor, patience, and expensive analysis. Agentic AI compresses the timeline and the cost, enabling new outcomes. The proven logic stays.

Raising the Bar for Requirements

Agentic AI doesn't lower the bar for requirements—it raises it.

AI-accelerated development amplifies the consequences of ambiguity. A vague requirement used to cost you a sprint. Now it can cost you a fully built - and fully wrong - system, delivered fast.



Speed multiplies error

Wrong inputs propagate through code, tests, and docs in hours.



Provenance matters more

Every requirement needs a traceable origin - mission narrative to story to test.



Rigor is the enabler

Requirements quality must improve - not erode - as development accelerates.

How Agile Evolves with Agentic AI

	<i>Static story writing</i>	»»	Continuous requirements discovery	Backlogs refreshed as agents mine narratives, telemetry, and operator feedback.
	<i>Vague acceptance criteria</i>	»»	Executable requirements	Criteria expressed as runnable tests - verified by agents on every iteration.
	<i>Single-path solutioning</i>	»»	Rapid optioneering	Multiple solution sketches generated and compared before committing.
	<i>Ad hoc architecture decisions</i>	»»	AI-assisted architecture analysis	Architecture explicitly shaped by AI-derived requirements and simulation evidence.

A Practical Framework

- 1 Derive** Run the AI-accelerated requirements loop first - structured stories, options, simulations - before any build/buy position is taken.
- 2 Evidence** Score build, buy, and hybrid candidates against AI-derived effort, risk, fit, and maintainability data - side by side.
- 3 Decide** Choose the blend - build, buy, or hybrid - and record the decision with its evidence and assumptions.
- 4 Govern** Enforce provenance and accountability: every requirement traceable, every agent output reviewed, every test executable.
- 5 Revisit** Treat the decision as living - re-run the loop as mission needs, feedback, and technology shift.

What You Should Leave With

The organizations that leverage AI successfully – and securely will be the ones that rise above the rest.

Modernization advantage compounds: faster requirements loops produce better decisions, better decisions free resources for the mission, and the gap between adopters and everyone else widens every cycle. In Federal and DoW environments, security and governance aren't the brake on that flywheel - they're the entry ticket.



Move First

Stand the loop up now, on real programs - the advantage compounds with every cycle run.



Move Securely

Governed, accredited, provenance-backed adoption is what earns the trust to scale in this space.



Rise Above

The organizations that do both set the pace for modernization - everyone else inherits their playbook.

What You Should Leave With



The equation has changed

Agentic AI shifts cost, schedule, and risk for DAF systems - reassess decisions made under the old assumptions.



Requirements are the engine

AI agents turn mission narratives into structured, simulated, continuously refined requirements - that loop is the real capability.



Hybrid is the sweet spot

Evaluate build, COTS, and hybrid with AI-derived evidence on effort, risk, and maintainability - not habit.



Discipline scales with speed

Adopt the governance framework so requirements quality, provenance, and accountability improve as delivery accelerates.

Questions & Discussion

Build, Buy, or Prompt?

How Agentic AI Is Rewriting the Modernization Playbook

Rethinking build-versus-buy for DAF in the age of AI-accelerated development.

David Norris

Technical Solutions Manager, Alaska Northstar Federal

