

Beyond the Pilot

Bringing AI to Life Across the Organization

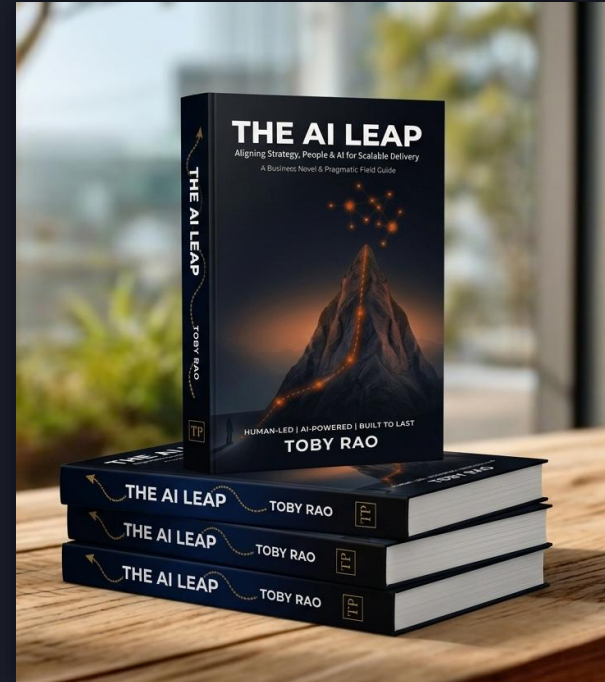


Toby Rao

Toby V. Rao

AI Transformation Leader · AI COE Lead

- ✓ 25+ years in IT – Focus on enterprise AI & Agile transformation
- ✓ Global Director, R&D Operations & AI COE Lead, Exostar
- ✓ Founder, Loudoun AiGile Network (2,385+ members)
- ✓ Author, The AI Leap
- ✓ Speaker at 30+ industry events





**You ran the pilot.
Everyone was excited!
*Then...nothing scaled.***

The AI Success Crisis

42%

of companies abandoned AI initiatives in 2025

46% scrapped POCs before production

95% saw zero ROI despite \$227B invested

70% of AI initiatives stall before impact



The question isn't whether to use AI

It's not the technology that fails. **It's everything around it.**



No shared definition of success

Teams pulling in **different directions.**



Skills gaps go unaddressed

Organizations aren't ready to **absorb AI into real work.**



Without readiness, even the best tools fail to take hold.

People, process, culture, and data all must be ready, not just the technology

The Gap Between Pilot & Scale

The issue isn't the AI tools.
It's everything around them.



Structural Barriers

Unrealistic timelines, procurement cycles, data classification limits, **budget approval constraints** block even great pilots from scaling.



Cultural Barriers

41% more bugs fear of displacement, and **no shared vision** of success keep teams stuck.



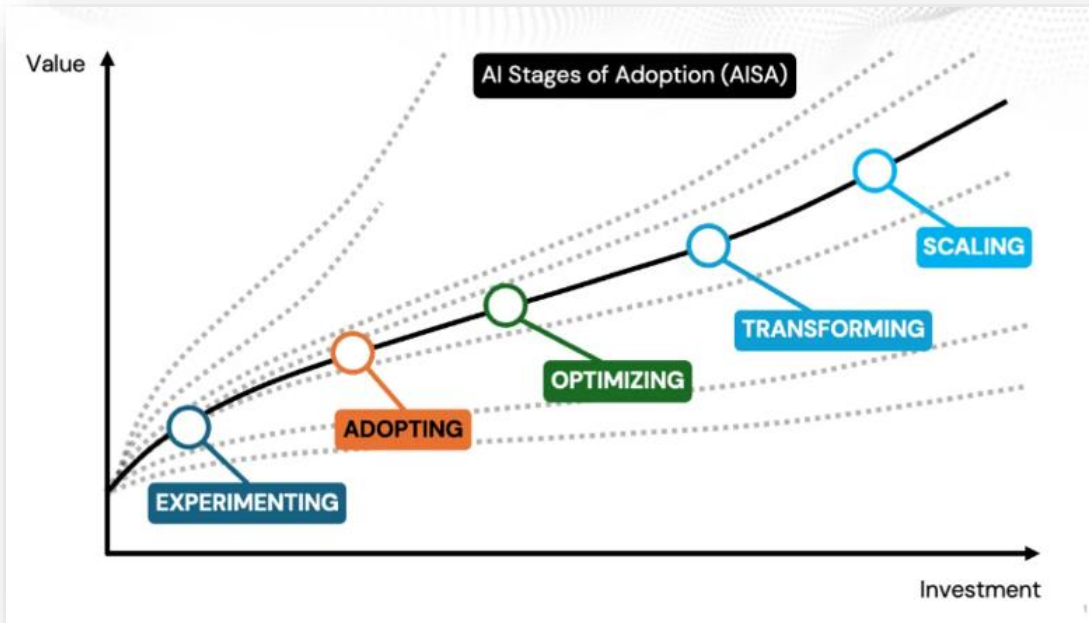
Organizational Barriers

Solutions built but not integrated. Training that doesn't translate. **Metrics tracking activity**, not outcomes.



In complex environments, the gap is amplified by governance, not just technology.

The AI Adoption Journey



AI Stages of Adoption (AISA)

1. **EXPERIMENTING** - Running pilots, exploring use cases
2. **ADOPTING** - Moving tools into production, early wins
3. **OPTIMIZING** - Refining workflows, measuring impact
4. **TRANSFORMING** - Changing how teams work fundamentally
5. **SCALING** - AI embedded across the organization



AI value exponentially grows as organizations progress from experimenting with pilots to scaling adoption enterprise-wide

The AI Adoption Journey

Most organizations are stuck
between Stage 1 and Stage 2.
The window to cross is now.



Experimenting & Adopting

Running pilots, exploring use cases, getting early wins into production. *Most orgs live here.* The excitement is high. The impact is low.



Optimizing & Transforming

Refining workflows, measuring real impact, fundamentally changing how teams work. AI value grows exponentially here.



Scaling

AI embedded across the organization. **Early adopters are pulling ahead:** 3x effectiveness. 30% cost efficiency gains.



Organizations have 12-18 months to cross the chasm from experimentation to scaled adoption.

The SUMMIT Framework

Six strategic moves from pilot success to enterprise scale

The SUMMIT Framework

The summit isn't just the goal - it's the clarity we gain on the way up.

The Six Strategic Moves that help programs move from pilot → organizational impact



S - Share the Vision

S

Align vision to mission, not technology capability

Before: “We are implementing AI to improve efficiency.”

After: “By 2027, AI handles 70% of routine cases so experts focus on high-stakes decisions.”

How: Host vision workshops. Let teams define what success looks like for their role. Make it concrete, specific, and shared.



Connect AI capabilities to specific business outcomes, not tool adoption metrics



Show how roles evolve, not disappear

Paint a future people can see themselves in.



Host collaborative vision sessions

Let departments define their own definition of success.



Make progress visible early and often

Momentum builds when people see the destination clearly.



Set the Goals right

Vague destinations produce vague results.

U - Unblock the Teams



Technical Blockers

Legacy systems, compliance requirements, *and infrastructure limits* AI workloads from moving forward.

Remove the barriers. Create safety to experiment.



Cultural Blockers

Risk aversion, fear of audit exposure, *and displacement anxiety* freeze teams.

Create safe spaces to try new approaches.



Procedural Blockers

ATO timelines, FAR procurement cycles, *and budget approval gauntlets*

Trap pilots in 6-month purgatory.



Hierarchical Blockers

Lack of clarity in the new roles and responsibilities

Roles must evolve.



Most blockers are structural and policy-driven – not technical.

M - Map & Mentor

Map the Journey: Progress needs checkpoints, not a straight line.



Map the Milestones

Q1: Proof of concept in sandbox. Q2: Limited pilot with users. **Q3: Compliance alignment.** Q4: Scaled deployment with support.



Recalibrate Every 6 Weeks

What changed our assumptions? Where are we seeing unexpected resistance or acceleration? What do we adjust?



Mentor & Train

Embed learning into real work. **Pair practitioners with teams.** Run office hours. Share wins AND failures openly.

 AI transformation fails when treated as a tech rollout instead of workforce enablement.

I - Integrate Human Intelligence

AI

AI is best for speed, scale, pattern recognition, 24/7 availability, and processing large datasets consistently.



Humans are best for context, nuance, ethical judgment, creativity, and complex high-stakes decisions.



The Multiplier Effect: Value emerges from how technology is adopted and amplified by human intelligence.



Human-in-the-loop is not optional. It is a requirement for accountability.



Always design for Human-in-the-Loop at critical decision points.



Agentic AI raises the stakes

As agents act autonomously, the human oversight layer becomes more critical, not less.



Design for explainability

Traceability of AI-assisted decisions matters in regulated and enterprise environments.



Set the autonomy dial deliberately

From human leads to agent operates — know where your org is and where it should be.



AI should augment human expertise — not replace human judgment.

T - Track What Matters



Operational Metrics

Mission throughput & cycle time. *Time to decision / response improvement.* Reduction in manual effort for core workflows.

Speed and efficiency of delivery.



Outcome Metrics

Mission effectiveness & program impact. *Cost avoidance & resource optimization.*

Quality and accuracy of AI-assisted outputs.



Workforce Metrics

Operational usage in real workflows. *Confidence and trust in AI outputs.*

Role-based capability growth over time.



Governance Metrics

Compliance alignment & audit readiness. *Traceability of AI-assisted decisions.*

Risk identification and mitigation.



Numbers show what happened. Stories show why it matters.

The SUMMIT Framework: Addressing Each Barrier

Lack of Direction



Share the Vision

People Feel Stuck



Unblock the Teams

Progress Feels Chaotic



Map the Journey

Capabilities Missing



Mentor and Train

AI Feels Disconnected



Integrate Human Intelligence

Impact Unclear



Track What Matters



Real-World AI Transformation

THE STARTING POINT \$100M aerospace/defense SaaS · Boeing, Northrop, U.S. Army · ITAR + CMMC Level 2 · Global teams, 4 countries

Disconnected experimentation

Compliance blocking innovation

Skepticism and trust gaps

Engineering capacity drained by low-value work

Limited AI expertise

Low bandwidth for innovation

INTERVENTIONS THAT WORKED



AI OKRs & Metrics

Aligned efforts to mission outcomes



AI Center of Excellence

Standards, governance, and reuse



AI Hackathon 2025

Built solutions, skills, and momentum



AI Training & Enablement

Upskilled developers, expanded literacy



Process Reengineering

Simplified workflows, increased automation



Team AI Innovation

Built a community of practice



Biweekly AI Demos

Showcased progress, built trust & adoption

REAL-WORLD RESULTS

Baseline: Q4 '25 - 01 '26 · 12 Months

AI ADOPTION

87%

developers actively using AI tools

PRODUCTIVITY LIFT

+144%

output gain per AI-assisted developer

CAPACITY ADDED

112

developer equivalents without new hires

TOTAL DELIVERIES

1,100

+73% vs. Q4 '25 across all products

LEAD TIME REDUCTION

-20%

6.9 days (was 8.7 days)

What Works. What Doesn't.



✓ What Works

Start with real mission problems. *Build capability through enablement.* Make early wins visible across teams.

Let champions emerge organically. Normalize learning through experimentation.



X What Doesn't Work

Generic training without mission context. Top-down mandates without buy-in.

Prioritizing technology over capability.
Measuring activity instead of impact.



Key Takeaway

AI transformation succeeds when teams *build capability while delivering real work.*

The winners are learning while producing – not just training first and applying later.



Common Pitfalls to Avoid

Doing everything at once. Treating SUMMIT as a checklist. *Ignoring organizational resistance.*

Compass, not a checklist. Start where your biggest constraint is.

Ready to get started?

01 Week 1: Find Your Biggest Blocker

Identify the one constraint holding your AI program back — policy, data access, skills, or culture. Find **one mission-relevant** use case you can demonstrate in 30 days.

02 Month 1: Create Visible Momentum

Focus on that single constraint. Remove it. Celebrate the win loudly. Make early progress visible across your organization — **momentum is contagious**.

03 Quarter 1: Expand and Recalibrate

Expand to additional SUMMIT elements. Establish a 6-week recalibration cadence. **Build adaptive capacity** so your organization learns while it delivers.



The organizations that win are learning while producing.

Get started now!



June
2026

Thank you!

