

Why enterprise AI initiatives struggle to get past the pilot

The chasm between a pilot that dazzles and production that pays is where AI quietly stalls.



The illusion of progress

Here is the uncomfortable truth about enterprise AI right now: investment is accelerating, but production adoption isn't keeping pace. Most organizations have mastered the first three stages of AI maturity: awareness, exploration, and pilot. They have AI on the horizon. They are experimenting. They have scalable pilots, proofs of value, and early departmental use cases. But then they fall into AI purgatory. That stalled state is the chasm: pilots on one side, production on the other, and very few organizations making the crossing. What does that look like from the inside?

- Endless pilots that never graduate
- Great demos that impress in boardrooms but do nothing in workflows
- Limited scale beyond the teams that built the solution
- Unclear ROI that leadership can no longer defend
- Fragmented ownership where no one is truly accountable for outcomes

The telltale signs are always the same: a growing portfolio of use cases living in PowerPoint, growing fatigue among business stakeholders, and a growing question from the C-suite: “We’ve spent how much, for what exactly?” The challenge is not building AI but turning it into production-ready solutions that deliver real business value.

What separates the organizations that cross over?

Those that move from AI purgatory to production reality are not necessarily the ones with the biggest budgets or the most sophisticated models. They share something more fundamental: **a willingness to do the unglamorous work.** Here is what that looks like in practice.

Five building blocks to cross the chasm between pilot and production

1. Process transformation before automation

Automation applied to a broken process does not fix the problem. It adds another layer of complexity to a process that is already broken. That is the trap most portfolios fall into. The way out is to do the unglamorous work first. The organizations that get this right spend real time with business subject matter experts (SMEs) understanding the current state, identifying failure points and engineering a clean process before a single model touches it. This is the conversation no one wants to have when the pressure is to move fast, but it is also the most important one.

- Think enterprise-wide transformation, not point solutions. AI applied to an isolated step rarely moves the needle; end-to-end workflow redesign is what creates compounding value.
- The process question always comes before the technology question: what are we actually trying to change, and for whom?

2. Scalable pilots, designed to grow

There is a difference between a pilot and a production asset, and it is not the quality of the idea. It is the quality of the underlying design decisions. The best pilots are architected from day one to be extended, not rebuilt. They prove value, generate learning, and are structured to scale without starting over.

- Build pilots you intend to keep, not throwaway experiments. Architecture decisions made at the pilot stage follow you into production, so make them count.
- Treat data access as the bridge between pilot value and enterprise intelligence. In the short term, teams need fast, secure access to relevant data to prove use cases quickly. In the long term, those learnings should feed a governed, reusable data and knowledge foundation that becomes shared intelligence across the organization.
- Create reusable architecture patterns to cut testing cycles, approval turnaround times (TATs), build cycles, and tool variability across the organization.
- Plan for production maintenance from day one. AI is not 'deploy-and-forget.' Models can go stale, data patterns can shift, and workflows may need continuous tuning.

3. Business value and economics, made explicit

Clear ROI is not a finance exercise. It is a strategic discipline. Every AI initiative should have a business owner who can articulate, in plain language, what value it creates, for whom, and by when. If that conversation is uncomfortable, that discomfort is a signal, not a reason to skip it.

Think beyond cost savings. The full value picture includes OpEx reduction, CapEx efficiency, cost avoidance, and opportunity cost: what becomes possible when your people stop doing the work AI can do. Account for the full 'I' in ROI. Most business cases stop at the cost to build and ship the code, and that is where organizations get stuck. The investment that determines viability is ongoing: tokenomics at scale, model monitoring and retraining, drift detection, data de-biasing, and pipeline maintenance. A solution that is cheap to build and expensive to run is not a win. It is a liability you have not priced yet.

4. Change management as a core workstream

AI initiatives rarely stall in production because of the tech. They stall because adoption, trust, and behavior change were treated as bolted-on afterthoughts instead of first-class deliverables. This means starting the change conversation before the build conversation, not after. One approach we have seen work across organizations is creating guild-like structures, or AI Competency Centers, that bring together business leaders, change champions, technology leaders, risk and compliance stakeholders, and functional SMEs to drive adoption in a structured way. An AI Competency Center can help by focusing on:

- Adoption and change leadership: Identifying impacted users early, addressing concerns around role impact, and helping teams feel like partners in the transformation, not targets of it.
- AI literacy and training: Going beyond tool training to help users understand what the AI is doing, where it may fail, when to trust the output, and when to involve a human SME.
- Best practices and governance: Defining reusable playbooks, prompt patterns, review standards, responsible AI guardrails, and common adoption metrics across teams.
- Knowledge sharing and scale: Creating a forum for teams to share lessons learned, successful use cases, risks, and reusable assets so AI adoption does not remain isolated within one project or function.

5. Visibility, accountability, and governance as a non-negotiable investment

Production-readiness is a design criterion, not a milestone. Furthermore, it's not a mere technical bar but a governance one. Before anything goes live, someone must be able to answer who owns it, how it is monitored, and what happens when it drifts. That is why governance cannot be an afterthought bolted onto the go-live plan. It is part of what makes a pilot production-ready in the first place.

- Governance is how you find efficiency, not just control risk. Only a portfolio-wide view catches the overlaps no single team can: two initiatives solving the same problem, three pulling the same data three different ways. That redundancy is where budgets quietly leak.
- It also gives you a common yardstick. When every proposal is framed the same way, on value, cost, and readiness, leadership can compare initiatives and prioritize deliberately instead of funding whichever demo was most persuasive that week.
- Accountability must live somewhere structured, or it does not live anywhere. Create the forums to hold it: AI guilds, outcome reviews, steering committees.
- Governance should be an enabler, not a gauntlet: a lightweight framework that accelerates the path to production rather than stalling it.
- Trust is built through domain understanding, not just guardrails. Knowing where to rely on the model and where to bring in a human SME is what separates responsible AI from reckless automation.

The destination is worth it

The organizations that cross the chasm do not just deploy AI. They deliver real, measurable business value, and that value compounds over time. Sometimes it is a better experience for a customer or a stakeholder: a faster answer, a smoother interaction, a moment of friction removed that elevates the brand and becomes a differentiator competitors cannot easily copy. The form matters less than the outcome. What matters is that someone in the business can point to it and say: this changed how we work. That is the real destination. Not an AI strategy, but a business that works better because of one.

The question worth sitting with today

If you mapped your current AI portfolio right now, every initiative, every pilot, every proof of concept, how many would survive a genuine test of production-readiness? The individual scorecards will not tell you this. Line the whole portfolio up as one picture and ask what it actually amounts to: a workflow that has been genuinely rethought, or a workflow that is only running a little faster. One is an ecosystem. The other is a pile of fixes. The chasm-crossers are building the first. Most of us, honestly, are still assembling the second.

If the answer is uncomfortable, that is not a failure. It is a starting point.

The organizations crossing the chasm share one concrete shift: they stopped approving initiatives based on how exciting the demo was and started funding them based on whether there is a clear owner, a measurable outcome, and a path to production. That filter alone changes everything.

Where does your organization sit on this maturity curve, and what is the biggest obstacle between you and the other side?

About Brillio

Brillio is The Enterprise AI Accelerator helping Fortune 1000 companies move from AI ambition to scaled impact, faster. Powered by our AI accelerator platform – Agentic Data and Application Management (ADAM), Brillio is one of the fastest-growing digital technology service providers, delivering transformation across five core workstreams: business-led transformation, customer experience transformation, AI and data engineering, digital engineering, and infrastructure engineering.

With 14 delivery locations across North America, Europe, and Asia and a team of over 6,000 customer-obsessed professionals, Brillio combines deep industry expertise, modern engineering, and accelerators to deliver measurable outcomes. Headquartered in Dallas, Texas, Brillio serves clients globally with a commitment to speed, scale, and measurable impact.



<https://www.brillio.com/>

Contact Us: info@brillio.com

