



# Achieving escape velocity

INSIGHTS FROM 180 LEADERS  
ON LEGACY TRANSFORMATION

# Houston, we have a problem: The urgency of escape velocity

**Picture this:** Your organization is sitting on the launchpad, engines rumbling, eyes fixed on the stars of digital transformation. The mission? To break free from the gravitational pull of legacy systems and reach the autonomous enterprise frontier. But here's the catch: No matter how ambitious your transformation goals or how much investment you pour into upgrading them, legacy systems – the outdated engines powering your enterprise – keep you tethered to the ground.

Incremental upgrades, patchwork fixes, and surface-level tweaks? They're like strapping a few extra boosters onto engines that were built for a different era. The result is a lot of noise, little movement, and a growing sense that you're burning precious resources while still staying earthbound.

This isn't a new story, but it is getting more urgent. We recently partnered with NewtonX to survey 180 enterprise business leaders about their experiences with legacy transformation. What we heard was a mix of frustration and hope – and a whole lot of reality checks about what's really holding enterprises back from their autonomous futures.

**Let's start with the hard truth:** 75% of leaders say legacy limitations are significantly impacting their organizations. Not "kind of impacting" or "sometimes getting in the way" – significantly impacting. And it's not just abstract organizational concerns. 72% say it's affecting their goals, and 70% feel the impact on their own roles. When three-quarters of your leadership team is fighting against their own infrastructure, you've got a problem that demands more than incremental fixes.

## Measuring the impact of legacy systems

From strategy to execution, leaders are feeling the weight of outdated infrastructure.

**75%** of leaders say legacy limitations are significantly impacting their organizations.

**72%** say it's affecting their goals.

**70%** feel the impact on their own roles.



The emotional toll is real, too. 46% report feeling frustrated by legacy constraints. But here's the thing that caught our attention: 38% still remain hopeful. That hope matters. It's the spark that fuels transformation. But hope without a plan is just wishful thinking, and the data shows that most organizations are still searching for the right approach.

We know why you're reading this report. You already know the problem. And you're not alone. This report is your mission briefing, built to help you validate your experience with peers, get a benchmark for where your organization stands, and most importantly, get clarity on a path forward. Because the countdown clock is ticking, and standing still isn't an option anymore.

## MISSION REPORT



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**46%** are frustrated by legacy constraints



**38%** still remain hopeful for the future



# The gravity of legacy systems

**Legacy systems are more than just old tech** – they're the force keeping organizations trapped in outdated processes, siloed data, and manual workarounds.

And while 82% of enterprises want to reduce costs and 70% want to reduce risks, legacy tech is what's holding them back.

61% agree their legacy systems are driving up maintenance costs. That same percentage says these systems are hampering organizational agility. When you're spending more to move slower, something is fundamentally broken. But it gets worse: 53% say legacy tech is negatively impacting employee productivity, and 29% report it's dragging down morale. Your people are trapped in a cycle of working harder to accomplish less, which makes it that much harder to innovate.

**Then there's the customer experience problem.** 51% say legacy tech is a significant barrier to delivering the experiences customers expect. In a world where customer expectations are set by the best digital experiences they've had anywhere, not meeting those expectations isn't just disappointing – it's the path to extinction.

**And the broader strategic cost? It's massive.** 79% of leaders say legacy tech is a significant barrier to delivering new levels of automation. And 71% say it's blocking AI innovation – including 74% who cite it as a barrier to agentic AI and 75% who see it preventing autonomous operations. In other words, the very systems that once powered growth are now the biggest obstacles standing between you and the future.

## Legacy systems analysis: Points of friction

Leaders reveal where legacy technology creates turbulence on the path to autonomous operations.

**77%**

Data trapped in silos

**67%**

Difficulty integrating with modern systems

**58%**

High maintenance costs

**55%**

Disconnected systems

**55%**

Fragmented customer journeys

**45%**

Stifled agility to adapt to change

**35%**

Security vulnerabilities

**29%**

Difficulty retaining talent to work on outdated tech

**One thing is certain: The legacy tech your organization might have relied on for years just wasn't designed for today's connected, AI-driven world.**

That's why 77% of organizations see their data trapped inside outdated systems, and why leaders point to legacy integration challenges (71%) and data quality and accessibility (55%) as the biggest obstacles to innovation. And here's the kicker: Agentic AI can't thrive without open, connected data. When legacy systems keep information locked down, your AI agents are stuck on the launchpad, unable to reason, decide, or act with real context. So don't treat "data silos" as a side quest – make legacy transformation your main mission. Free your data, and you unlock the fuel for innovation. That's how you go from data bound to autonomous.

## ***CRITICAL INTERFERENCE: INNOVATION AT RISK***

Key warning lights reveal where legacy systems and structural barriers are blocking forward momentum.

**66%**

ENTERPRISE COMPLEXITY

**63%**

LEGACY SYSTEM LIMITATIONS

**50%**

ENVIRONMENT CONSTRAINTS

**50%**

REGULATORY CONCERN

**50%**

LACK OF SKILLED PERSONNEL

**50%**

BUDGET CONSTRAINTS

**34%**

ORGANIZATIONAL RESISTANCE TO CHANGE

**27%**

UNCLEAR BUSINESS CASE

**11%**

LACK OF LEADERSHIP SUPPORT

# Failed launch attempts: Why incremental updates can't achieve escape velocity

Let's be honest: Most organizations aren't sitting idle. They're busy tinkering – a patch here, a new dashboard there, maybe a shiny AI pilot bolted onto the control systems. Your shuttle – your enterprise – is full of smart people with bold visions. But if you're still running on the same old legacy engines, you're not going to break free. You're just burning fuel, not charting a new course.

Here's the uncomfortable truth revealed in our research: Only 11% of enterprises are taking a comprehensive, "all-in" approach to transformation. The rest? 34% are relying on gradual modernization, and 30% are completing selective replacement of specific components.

These incremental approaches made sense in the past. When transformation meant months of discovery, armies of consultants, and high-risk manual re-platforming, moving slowly was the prudent choice. The problem? Today's AI-driven reality has changed the equation entirely.



## What if an “all-in” approach didn’t mean years of disruption and sky-high costs?

What if AI could let you rethink and replace legacy systems fast – going from legacy to future-ready in one comprehensive step? That’s exactly what AI has unlocked. And it’s why the organizations moving first with AI-accelerated transformation will unlock advantages that compound over time.

Think about escape velocity for a moment. In physics, escape velocity is the minimum speed needed for an object to break free from a planet’s gravitational pull without further propulsion. For Earth, that’s about 25,000 mph. Below that threshold, you’ll eventually fall back, no matter how long you keep trying. It’s not about gradual acceleration. It’s about reaching a critical threshold of force that overcomes the relentless pull of gravity in one decisive push. The same principle applies to legacy transformation. Incremental updates might adjust your strategic trajectory slightly – shifting priorities, tweaking processes, or updating parts of your tech stack – but they’ll never generate enough concentrated force to break your entire enterprise free from legacy’s gravitational field.

*So what’s the cost of incrementalism?* Today’s AI-driven reality has elevated transformation from competitive advantage to survival imperative. The cost isn’t just missed opportunities or dwindling resources. It’s the erosion of competitive edge, the loss of key innovation and growth opportunities, and the steady decline of market position while nimbler competitors race ahead.

## So how are leaders thinking about breaking free?

The data points to a clear dividing line, and it’s all about approach.

67% of leaders say replacing legacy systems in one step is important when evaluating transformation solutions. These are the organizations taking a “rethink and replace” approach. Instead of maintaining the old, they’re looking at legacy transformation as a way to help them shift focus to innovating at scale (65%); getting new products and features to market faster (55%); capitalizing on the latest tech advancements (53%); and scaling to meet changing business needs (53%).

## MISSION BRIEF: RETHINK AND REPLACE

Forward-thinking organizations see one-step legacy replacement as the launchpad for innovation at scale.



Leaders expect replacing legacy systems to help them:





But here's what really matters: They're not just looking to become more efficient and productive today (60% say improved efficiency is important when evaluating legacy transformation efforts) – they're focused on securing long-term strategic advantages (58%) that will compound over time. While incrementalist organizations are busy patching, these groundbreakers are looking to build entirely new engines.

If the benefits are so clear, why do so many organizations stick with incrementalism? The answer is a mix of very real concerns and very human fears:

- 55% are extremely or very concerned about the complexity of migration.
- 49% worry about business disruption.
- 45% cite high costs as a top concern when considering transformation efforts.

These aren't irrational fears – they're legitimate considerations that deserve serious attention.



Both business and IT leaders feel the tension between the need for change and the risks of moving too fast. And while they're weighing options and running pilots, the gravitational pull gets heavier. The longer you wait, the harder the eventual launch becomes, and the more expensive the incremental approach gets.

The choice isn't between safety and risk. It's between comprehensive transformation and the slow spiral of increasing costs, decreasing agility, and missed opportunities. One leads to orbit. The other keeps you earthbound.

# Expanding beyond earth's orbit: Your transformation mission plan

Here's the thing about reaching orbit: It's not the end of the journey – it's the beginning of a new era. In orbit, you're no longer fighting to escape the past. You're charting a course toward possibilities that were previously impossible. But to go interplanetary, you need more than momentum. You need a mission plan.

This is your flight plan for how to achieve liftoff in the first place – by building your enterprise around the work and outcomes that truly matter.

Traditional transformation approaches won't get you there. Drawn-out discovery phases, endless analysis, and legacy code that gets modernized into... more of the same. That's the old playbook, and it doesn't generate escape velocity.

Today's opportunity? AI-led transformation that lets you rethink and replace legacy systems fast – going from legacy to future-ready in one step. The organizations that break free first, using AI to accelerate their transformation, will unlock advantages that compound over time.



# The AI advantage: How Pega Blueprint changes everything

This is where transformation stops being theoretical and becomes tangible. **Pega Blueprint™** uses AI to revolutionize three critical aspects of legacy transformation:

## 1. **Jumpstart with AI:**

Instead of spending months (or years) mapping legacy systems and manually reverse-engineering outdated logic, **Pega Blueprint** uses AI to quickly uncover the logic embedded in your legacy systems. It analyzes documentation, workflow diagrams, data structures, integrations, process mining outputs, legacy source code, screenshots, and even demo videos to rapidly produce an understanding of your “as-is” architecture and customer journeys. What used to require armies of consultants and endless documentation reviews now happens in a fraction of the time – unlocking insights that would take human analysts years to discover, with transparency and governance built in from the start.

## 2. **Optimize customer journeys fast:**

Blueprint doesn't just digitize your old processes – it reimagines them for an autonomous future. It automatically incorporates industry best practices, identifies opportunities for intelligent automation you might never have spotted manually, and generates an enterprise-ready application Blueprint in minutes. You can quickly drive business and IT collaboration to optimize workflows and live preview changes, and deploy new applications in days instead of months. This is AI injecting new best practices and ways of working to rationalize processes, increase automation, and dramatically improve customer experience.

## 3. **Set the foundation for full legacy retirement:**

Blueprint helps you go-live with automated, cloud-native workflows infused with AI agents fast – so you can finally turn off and retire legacy systems. You're not just replacing old systems with new ones; you're fundamentally rethinking how work gets done. Pega's AI-powered platform pulls all logic and processes into a core, intelligent customer journey built on case management, AI-powered decisioning, and process automation. This combination:

- **Delivers digital-native experiences** for customers, agents, and employees with consistency across all channels.
- **Frees data to the cloud using Pega Live Data** – rationalizing data models, virtualizing intelligently, and storing data on cloud-native platforms with AI-driven retrieval.
- **Creates seamless, efficient, and intelligent processes** across the enterprise, breaking down data silos and enabling unified, orchestrated operations that deliver outcomes, not just outputs.

This combination transforms how enterprises approach modernization. You're not just replacing old systems with new ones; you're fundamentally rethinking how work gets done. Proactive engagement means anticipating customer needs before they arise. AI-driven workflow automation means processes that adapt in real time, learning from every interaction and continuously optimizing themselves. And intelligent processes across the enterprise mean breaking down those data silos and creating unified, orchestrated operations that deliver outcomes, not just outputs.



# From launchpad to leadership

Legacy transformation isn't just a technical upgrade – it's a strategic imperative that determines whether your organization remains tethered to the past or leads your industry into the autonomous future.

The data is clear: Incremental fixes won't achieve escape velocity. But with AI-powered transformation through Pega Blueprint, you can rethink and replace legacy systems fast, laying the foundation for intelligent workflows, AI agents, and the autonomous capabilities that define competitive advantage.

The countdown is over. The question isn't whether to transform – it's how fast you can move.

**Ready to chart your course? Explore Pega Blueprint and see how AI can accelerate your transformation journey.**



## About Pegasystems

Pega provides the leading AI-powered platform for enterprise transformation. The world's most influential organizations trust our technology to reimagine how work gets done by automating workflows, personalizing customer experiences, and modernizing legacy systems. Since 1983, our scalable, flexible architecture has fueled continuous innovation, helping clients accelerate their path to the autonomous enterprise.

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