



# ● THE 2026 LEGACY MODERNIZATION REPORT

● RESEARCH INSIGHTS  
AND  
● STRATEGIC ROADMAP

Technology Research Report



Prepared by **Devox Software**  
<https://devoxsoftware.com>

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# BUSINESS DRIVERS OF MODERNIZATION

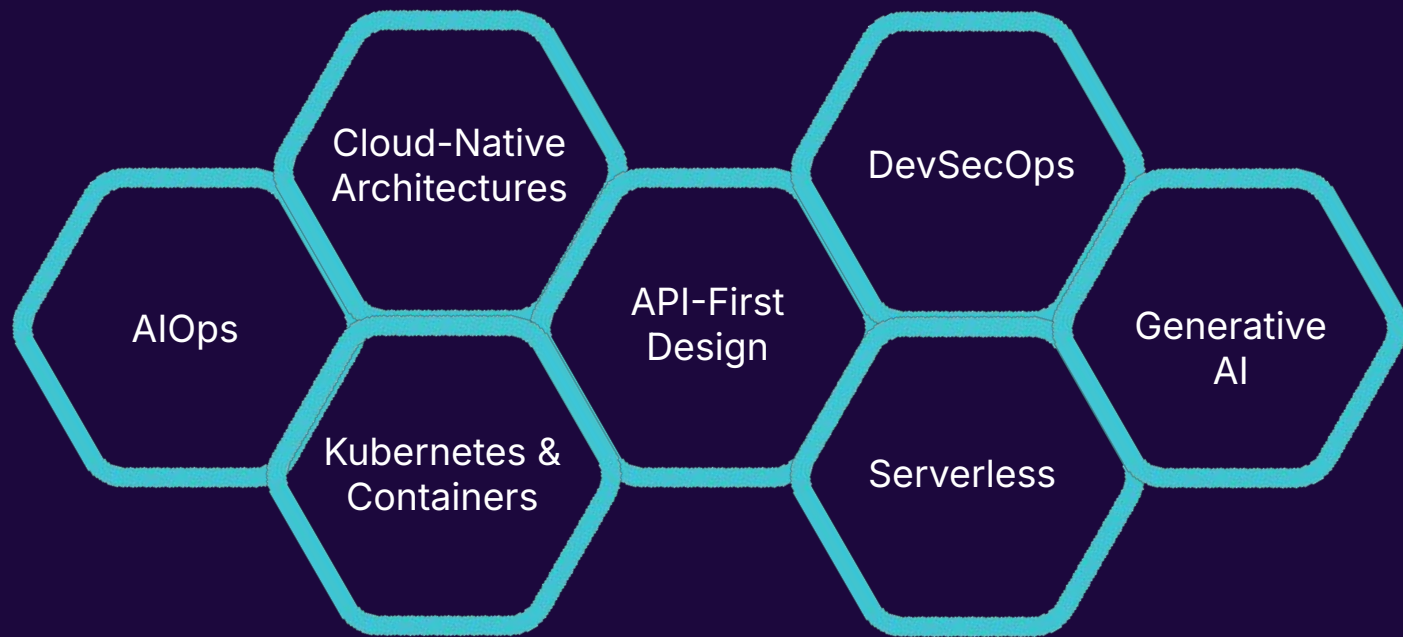


In 2026, legacy modernization is shaped by the convergence of AI-driven code rewriting, infrastructure automation, and modular cloud architectures that are transforming how enterprises evolve their core systems. Analyst data from Gartner, McKinsey, IDC, and Forrester show accelerating pressure on organizations to reduce operational inefficiencies, address security and compliance gaps, and unlock AI-ready data flows, with AI code assistants projected to reach 90% enterprise adoption by 2028 and RPA+ML delivering 10–40% process savings. This research paper synthesizes these market signals into a clear modernization outlook and a practical implementation roadmap: establishing a structured legacy baseline, building an automated foundational infrastructure layer, deploying AI-accelerated SDLC workflows, extending operational automation, and moving toward modular hybrid-cloud environments. Together, these shifts form the strategic foundation for enterprises seeking resilience, speed, and measurable transformation outcomes in 2026.



Business drivers for modernization in 2026 include building resilient AI infrastructure to reduce technical debt through AI-native development platforms, enabling operational efficiency and safeguarding business value. Productivity gains of 20–30% and cost reductions up to 15% via AI and hybrid models for legacy systems drive regulatory compliance and market agility for 40% of enterprises ([McKinsey](#)). Addressing technical debt, security gaps, and data fragmentation through composite AI adoption by 70% of organizations fuels better alignment with business goals and enhanced decision-making ([IDC](#)). Prioritizing AI ROI for growth among 70% of G2000 CEOs compels 80% of organizations to modernize legacy environments, achieving 10% logistics cost cuts and 15% higher operating margins via human-AI collaboration. Expecting AI ROI within three years by 85% of C-level executives pushes evidence-based transformations, governance for trust, and deferral of 25% AI spend to focus on defensible business value. Global digital transformation spending reaching \$3.4 trillion by 2026 is propelled by cloud adoption over 90%, emphasizing productivity, sustainability, and competitiveness in legacy modernization ([Statista](#)).

# TECHNOLOGIES FOR LEGACY MODERNIZATION IN 2026



# RPA + ML IN LEGACY MODERNIZATION



## Enterprise-Scale Agents

McKinsey (2025) reports that 62% of organizations experiment with AI agents and 23% scale them. High performers use agents in IT for legacy optimization at roughly three times the rate of others. AI helps reduce costs by 25–40% across targeted processes, though 51% of respondents report accuracy-related issues that demand tighter controls. ([McKinsey](#))

## Integration Breakpoint

Deloitte (2025) finds that nearly 60% of AI leaders view legacy-system integration as the primary barrier to agentic AI adoption. Physical AI faces infrastructure challenges in 35% of organizations. By 2026, RPA with ML is projected to unlock 10–30% cost savings in manufacturing and logistics through modernization benefits. ([Deloitte](#))

## Automation Investment Wave

IDC (2025) estimates the intelligent process automation (IPA) market — which includes AI/ML-enabled RPA — will reach \$65.3 billion by 2027 (21.7% CAGR from 2021). In 2022 it sat at \$24.5 billion with 16.7% growth. By 2025, two-thirds of businesses will use GenAI with retrieval-augmented generation for self-service across legacy processes, and enterprises will direct more than 40% of core IT spending toward AI-driven innovation. ([IDC](#))

## Precision SDLC Velocity

Forrester (2025) underscores AI/ML as a pervasive force across the software development lifecycle, with 70% of digital transformations slowed by legacy infrastructure that RPA and ML help streamline through targeted automation. ([Forrester](#))

RPA and ML enhancements in legacy-code modernization focus on automating operational flows, enabling predictive maintenance, and extending legacy systems through smarter integrations that cut errors and operating costs.

# INFRASTRUCTURE AS CODE (IAC)



Infrastructure as Code provides a programmable foundation for modernizing legacy systems by automating infrastructure configuration, enabling controlled cloud migration, and applying AI-driven governance and optimization across multi-cloud environments. [mckinsey.com](https://www.mckinsey.com)

## AI Budget Concentration

McKinsey (2025) notes that high performers allocate more than 20% of their digital budgets to AI, with roughly 75% achieving scale. Higher infrastructure maturity correlates with stronger value creation, reflected in a 39% EBIT impact from AI applied to legacy-modernization programs.

## Governance-First IaC

Deloitte (2025) reports that more than half of AI leaders flag infrastructure control as a core challenge. Sovereign AI strategies rely on IaC to coordinate multi-cloud deployments, with a 2026 outlook showing governance taking priority over model performance in legacy-system integration.

## Unified DevOps Shift

Forrester (2025) anticipates that half of enterprises will shift from best-of-breed stacks to unified DevOps platforms built around IaC. Spending on AI infrastructure is expected to decline by 25% for one major vendor due to supply shortages, pushing teams toward more integrated automation ecosystems.

## Accelerator-Powered Infrastructure

IDC (2025) forecasts that by 2027, spending on server accelerators for AI and IaC workloads will overtake CPU investment at a 55/45 ratio (\$37 billion vs. \$32.3 billion). By 2025, 60% of enterprises will mandate automation tied to KPIs, with IaC embedded in modernization programs for legacy environments.

# AI-ASSISTED CODE REWRITING



## AI-Driven SDLC

By 2028, 90% of enterprise software engineers are expected to use AI code assistants across the SDLC, up from under 14% in 2024. This includes autonomous legacy code rewriting that shifts engineers' focus toward orchestration and system design. By 2027, 70% of organizations with platform teams will embed GenAI into their internal developer platforms to accelerate modernization ([Gartner](#))

## Workflow-level change

88% of organizations already apply AI in at least one function, including software engineering for cost reduction in legacy modernization. workflow-level change. Sixty-four percent report innovation gains from AI, while only 39% see EBIT impact above 5%. ([McKinsey](#))

## Developer Role Rebalance

Forty-nine percent of developers already use or plan to adopt GenAI assistants for coding, with only 24% of their time now spent on direct code writing; their remaining time shifts to design, testing, and debugging. A notable forecast: at least one organization will attempt to replace 50% of its developers with AI and fail due to the complexity of its legacy systems. ([Forrester](#))

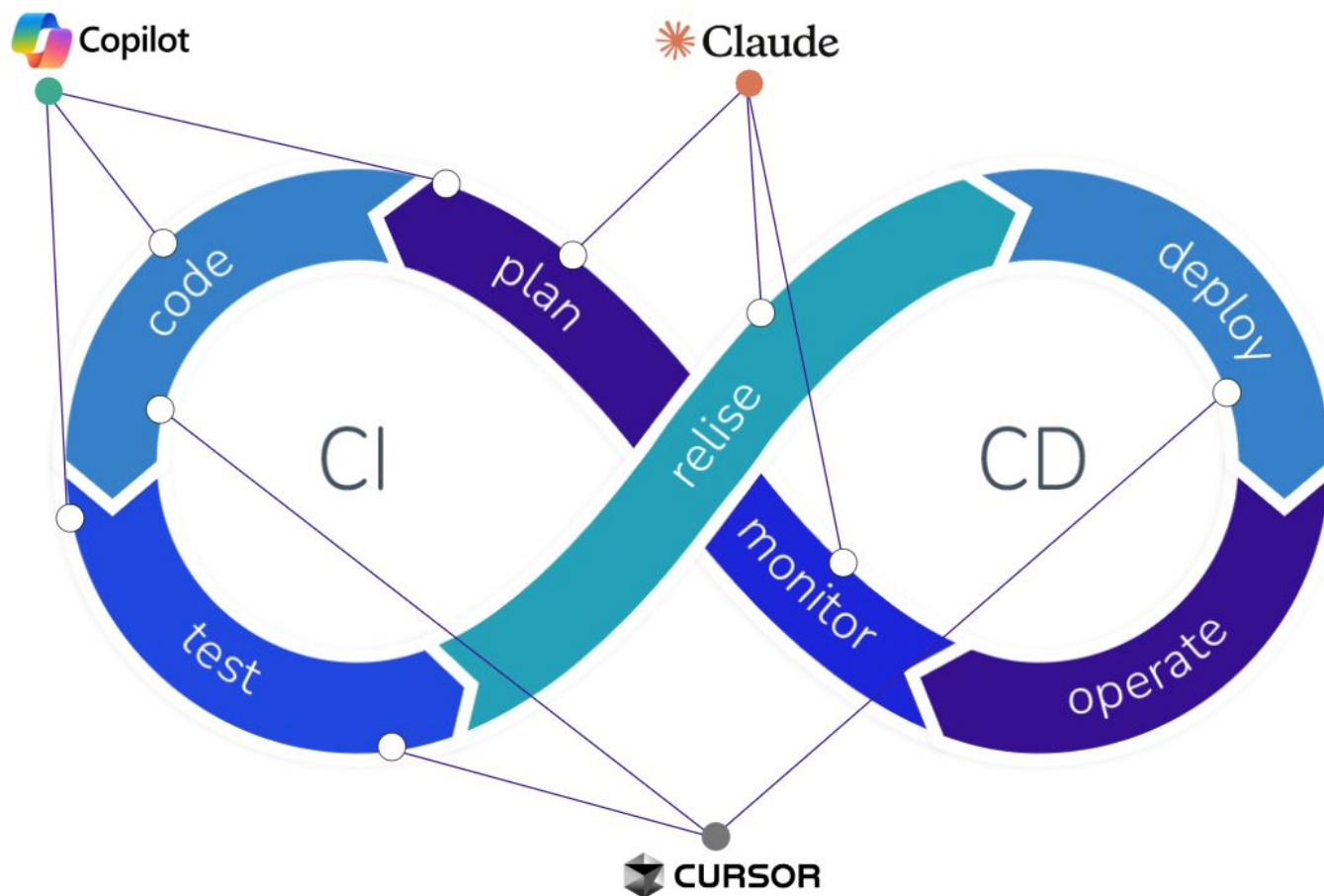
## GenAI as Interface

By 2027, GenAI assistants will serve as the primary interface for 25% of enterprise software interactions, including legacy code modernization. RAG will support domain-specific tasks, supported by projected AI investments reaching \$423 billion by 2027 (26.9% CAGR). ([IDC](#))

Accelerator-Powered Infrastructure, refactoring, and migration across legacy systems such as COBOL and older Java estates, reducing both cost and delivery risk. Key data points paint the scale of the shift.



## AI ASSISTANTS IN THE CI/CD LOOP



In 2025 reports, [McKinsey's Technology Trends Outlook](#) highlights Claude Code alongside tools like Gemini Code and Codex for advanced multistep reasoning in code-related tasks, contributing to broader productivity gains driven by AI projected at up to \$4.4 trillion annually, with software development—including legacy modernization—as a key beneficiary.

[Gartner's](#) Magic Quadrant for AI Code Assistants positions GitHub Copilot as a leader for the second year, emphasizing its capabilities in legacy code refactoring and application modernization through features like multi-file edits, vulnerability detection, and agentic workflows, estimating the market at \$3.0-3.5 billion in 2025 with forecasts of 90% enterprise adoption by 2028 and 30% productivity gains in software development.

Gartner Peer Insights rates Cursor at 4.4 stars for enhancing code refactoring and efficiency in complex codebases, though without explicit legacy focus, while integrated tools like Claude in Copilot ecosystems demonstrate practical legacy code analysis, such as summarizing 80,000 lines of code in under an hour, aligning with Gartner's prediction that AI will automate 70% of routine coding by 2030.

# THE MODERNIZATION ROADMAP IN 2026

The modernization landscape in 2026 is shaped by three key forces: AI-driven code rewriting, infrastructure automation via IaC, and modular hybrid-cloud architectures that enable gradual migration away from legacy cores. These forces form a unified modernization roadmap for the next twelve months.



1

## Legacy Baseline Intelligence

Create a structured assessment of legacy systems that reveals hidden dependencies, operational inefficiencies, and high-impact areas for AI-driven code rewriting, giving leaders a clear view of where modernization efforts will generate the strongest returns.

2

## Infrastructure Spine Activation

Build a foundational infrastructure layer — containerization, IaC, unified APIs, and DevSecOps — to replace fragmented environments with a predictable, automated platform that can absorb rapid AI-driven change without destabilizing core systems.

3

## AI-Accelerated SDLC Flow

Introduce AI-accelerated SDLC workflows that shift engineering work from manual code manipulation to continuous monitoring, automated refactoring, and expert-led review, shortening development cycles while improving architectural clarity.

4

## Operational Automation Lift

Extend automation across operational workflows with RPA and ML to offload repetitive legacy tasks, reduce incident volatility, and create breathing room for teams as the system transitions toward modular patterns.

5

## Modular Architecture Shift

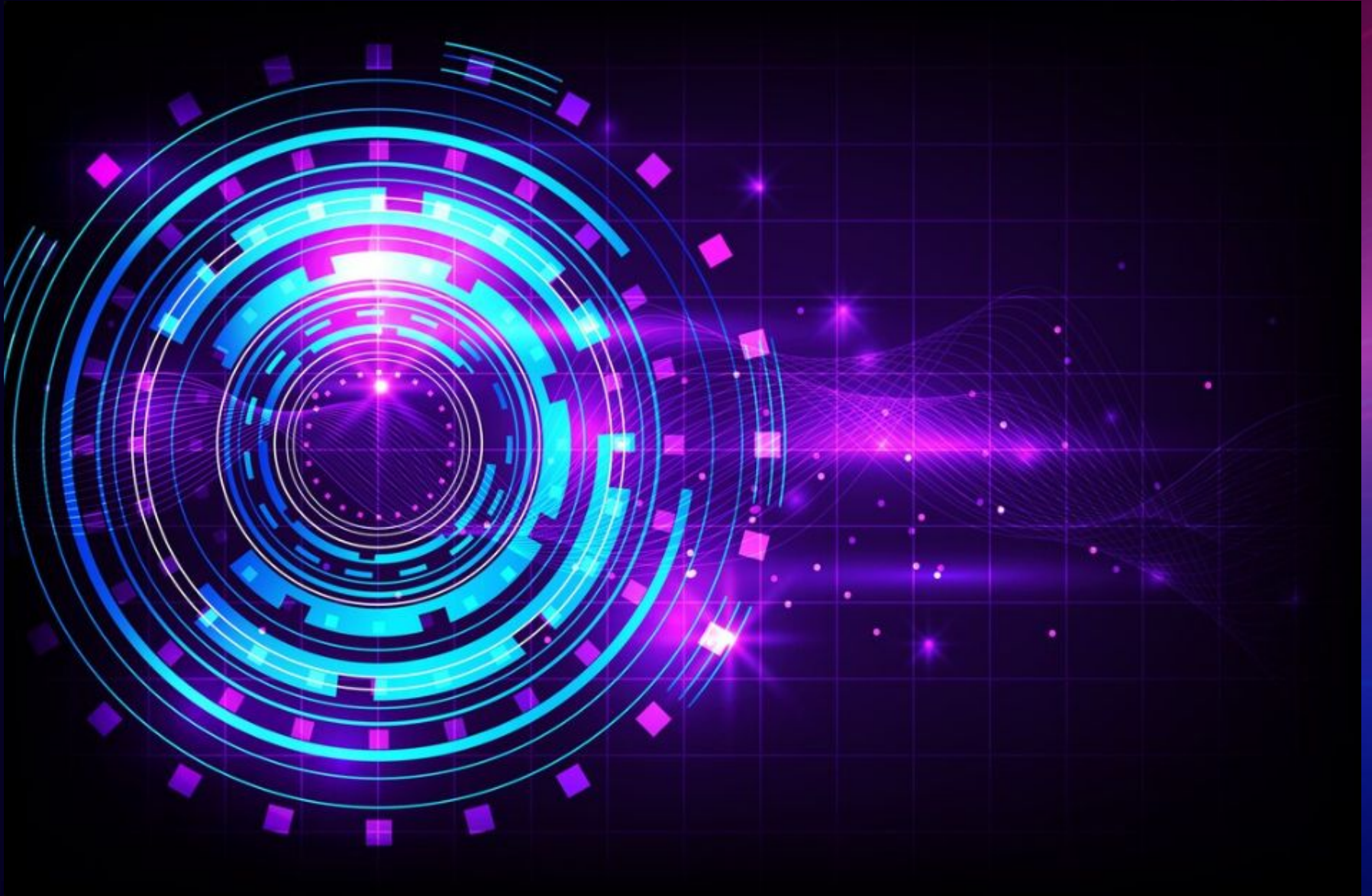
Evolve the legacy estate into modular, cloud-native and hybrid-cloud architectures that decouple change, strengthen resilience, and unlock AI-driven adaptability as the default operating model.

6

## Continuous Modernization Loop

Establish a continuous modernization cycle where telemetry, AI-driven diagnostics, and architectural reviews feed into a repeatable process that keeps the estate adaptive.

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