Gartner

Break the Cost-Value Trade-Off in Software Delivery

Innovate and modernize to improve software engineering value delivery and costs.

Deliver business impact through modern engineering

Engineering leaders face growing pressure to deliver higher business value without additional budget. Meeting this demand requires innovative new delivery practices, a culture of continuous experimentation, and modernized technologies — anchored in clear measurement of cost and value to drive critical priorities and sustained ROI.

Gartner estimates that over **70%** of agentic AI use cases will fail to deliver the expected value.

Engineering leaders must shift focus from output to value. Modern architectures, platform engineering, a culture for innovation and disciplined cost-value measurement determine which initiatives drive ROI and which dilute it.

Measure what drives enterprise impact:

- → Tie engineering metrics to business outcomes, not activity.
- → Expose cost-to-value gaps across portfolios and initiatives.
- → Prioritize modernization that accelerates ROI and flow of value.

Leaders who modernize how teams build and measure software will outpace cost pressure and convert investment into sustained business impact.

Howard Dodd
Vice President Analyst

Your roadmap to success

Engineering leaders must deliver higher value under cost pressure. Achieving this shift requires modern architectures, stronger platform engineering, a culture of continuous experimentation and new ways of working — grounded in clear measurement of cost and value to sharpen priorities and increase ROI.

Gartner enables software engineering leaders to improve ROI and transform development practices. With Gartner, software engineering leaders accelerate value delivery and better align investments with business goals.

1. **Establish measures of software engineering value that align with broader business objectives.**
2. Pilot use cases to modernize development practices and technologies to optimize ROI and costs.
3. Implement programs to identify and reduce technical debt.
4. Use platform engineering to scale and enable modern practices and technical capabilities.

2 key outcomes to consider in Step 1

Align skills, processes and delivery to future goals to accelerate value flow, improve productivity and strengthen business impact.

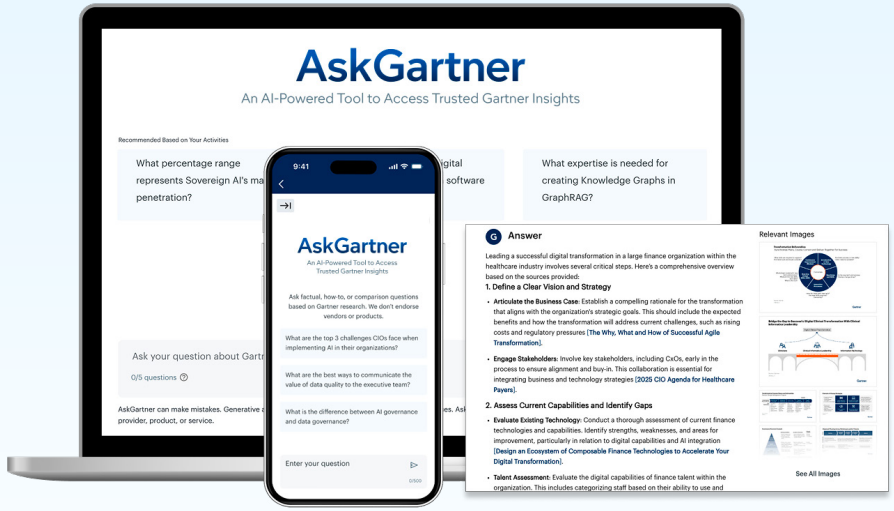
Surface talent and structural gaps early to reduce friction, improve delivery consistency and enable faster, cost-efficient software outcomes.

Key questions your software engineering peers are asking Gartner

Gartner clients can click to explore answers.

How can we measure and improve developer productivity gains from AI?	Explore Answer ↗
What are the most effective ways to measure and communicate the business value of software engineering initiatives?	Explore Answer ↗
How do we foster a culture of experimentation and continuous improvement?	Explore Answer ↗
What are the most effective cost optimization strategies for software engineering?	Explore Answer ↗
What are platform engineering best practices to streamline and standardize software delivery?	Explore Answer ↗

Your peers use AskGartner to answer these questions in minutes.



Learn More

Gartner resources turn your priorities into plans and actions

Establish measures of software engineering value that align with broader business objectives.

Tool: Developer Experience Assessment ↗

Pilot use cases to modernize development practices and technologies to optimize ROI and costs.

Tool: Accelerators ↗

Implement programs to identify and reduce technical debt.

Webinar: Avoid 3 Key Mistakes in Technical Debt Management ↗

Use platform engineering to scale and enable modern practices and technical capabilities.

Video: Top Tech Trends Unpacked ↗

Engage with Gartner

- Connect with an analyst to define, review and refine your strategy for improving and measuring value delivery.
- Get guidance from an Executive Partner on change management best practices throughout your journey, including how to best overcome roadblocks along the way.

Expected outcomes

- Improved productivity and flow of value for software teams
- Cost-efficient software engineering technology portfolio and practices
- Consistent, compliant and efficient delivery of high-quality solutions

Who needs to be involved?

The most successful organizations establish cross-functional teams for their software delivery initiatives. We have outlined the recommended functions to involve and their roles to ensure the best success in hitting the milestones.

CIO/head of technology ↗

Sets a clear enterprise wide AI ambition, identifies use cases; quantifies benefits and risks, aligns teams and competencies, and drives innovation across the organization.

Software engineering leader and team ↗

Drive AI integration by clarifying desired outcomes, establishing engineering best practices, transforming services with an AI-first approach and architecting software development to support AI objectives.

Head of AI ↗

Develops, champions and executes the organization's AI strategy by overseeing AI use case selection and scaling, establishing governance and literacy, implementing solutions, monitoring market trends, building a world-class team and reporting on business impact.

Chief data and analytics officer and team ↗

Lead the organization's AI data strategy by identifying use cases, establishing governance, developing new data value and ensuring data readiness for AI technologies.

Chief information security officer and team ↗

Integrate cybersecurity and data privacy into AI strategy by managing trust, risk, sovereignty and security; overseeing programs; anticipating threats; updating skills; and designing resilient solutions.

Head of enterprise architecture and team ↗

Align AI structure and design with organizational value by guiding use cases and requirements, governing architecture investments, leading adoption decisions and architecting AI solutions.

Use Case

Innovate and modernize to improve software engineering value delivery and costs

Mission-critical priority

To maximize the ROI of software engineering, leaders are modernizing technologies, evolving development practices and improving how value is measured and delivered. This includes aligning engineering efforts to business outcomes through clear value metrics, optimizing costs by modernizing tools and workflows, and proactively managing technical debt.

How Gartner resources help

Gartner helps software engineering leaders accelerate innovation and modernization by providing actionable insights, proven frameworks and analyst guidance across value measurement, development optimization and platform engineering. Leaders gain support to define business-aligned metrics, identify productivity barriers, modernize practices to improve ROI, reduce technical debt and scale platform engineering. Through analyst expertise and peer engagement, Gartner enables organizations to measure impact, optimize costs and drive efficient, high-quality delivery.

Mission accomplished

With Gartner support, organizations transition from fragmented practices and rising costs to optimized, modern engineering ecosystems focused on value delivery. Teams improve productivity and flow of work, reduce technical debt and implement cost-efficient technology portfolios. By adopting platform engineering and modern development practices, organizations achieve more consistent, compliant and high-quality delivery — resulting in measurable improvements in speed, efficiency, cost management and overall business impact.

Address your other mission-critical priorities

Innovate and modernize to improve software engineering value delivery and costs.

Only **50%** of software engineering leaders rate their teams highly effective in meeting target business objectives.

Use AI to accelerate productivity throughout the SDLC.

80% of software engineering leaders use AI to accelerate productivity throughout the SDLC.

Build and integrate AI applications and agents.

Creating and delivering on their AI strategy is the **No. 1 priority** for software engineering leaders.

Establish foundations for AI-ready software engineering technology.

60% of software engineering leaders expect to increase investments in AI-augmented tools, AI capabilities and AI skills.

Future of software engineering: Reenvision organization, teams, talent and workflows.

68% of software engineering organizations say AI-driven automation will cause all engineering roles to evolve.

Connect with us

Get actionable, objective business and technology insights that drive smarter decisions and stronger performance on your mission-critical priorities.

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