Futurum
RESEARCH

1H 2026 Software Lifecycle Engineering Decision Maker Survey Report

Survey of AI Development, Platform, and ITOps Decision Makers to better understand the current state, use, and intents of software development, platform engineering, and AI.

Analyst(s): Mitch Ashley
Published: January 2026
Document #: 1H26DMSLCEMA202601

This written report serves as a "highlights reel" of findings from our 1H 2026 survey of 828 global enterprise IT professionals focused on software development, delivery, and modernization.

This is a "companion" report to the full survey details within Futurum's interactive visualization dashboard, where users can filter and drill down further into the study details – see app.futurumgroup.com.

Key Findings

- **AI investment has overtaken hiring as the primary driver for software acceleration.** In a clear departure from traditional capacity planning, respondents identify "Increasing investment in Generative AI" (40%) and "AI/ML technologies" (39%) as the two most critical actions for accelerating software delivery, significantly outperforming "Increasing hiring of IT personnel" (23%).

- **While perceived DevOps maturity is high, "Daily" delivery remains an elite capability.** Although the majority of organizations classify themselves as either "Standardizing" (26%) or "Mastering" (17%) their DevOps practices, this confidence is contrasted by release frequency data where "Weekly" (37%) and "Monthly" (30%) releases remain the industry standard, while only 12% have achieved a "Daily" release cadence.

- **Operational complexity drives the prioritization of AIOps and Automation over infrastructure modernization.** The need to manage sprawling cloud-native environments is forcing a shift toward automated operations, with "Increasing adoption of IT Automation or AIOps" ranking as the third most critical driver for acceleration (37%), outranking foundational efforts such as "Cloud-native architectures" (25%) or "Modernizing data center infrastructure" (24%).

Recommendations

To optimize their chance for success in this vast-ranging, competitive, fast-moving market, Software Life Cycle Engineering vendors should:

1. Scale Velocity Through AI. Shift the acceleration strategy from "hiring more" to "increasing capacity." With "Increasing investment in Generative AI" (40%) and "AI/ML technologies" (39%) identified as the top two critical actions for acceleration—far outpacing "Increasing hiring of IT personnel" (23%)—leaders must stop viewing AI as an experimental pilot and treat it as their primary scaling lever. Successful organizations are redirecting budget toward AI skills and the development of AI agents and copilots that remove manual bottlenecks in code generation, documentation, and testing.

2. Prioritize AIOps to Tame Cloud Complexity. Focus automation efforts on the "run" phase, not just the "build" phase. As operational complexity grows, "Increasing adoption of IT Automation or AIOps" (37%) has emerged as a more critical driver than foundational "Cloud-native architectures" (25%). Leaders should prioritize platforms that offer predictive observability and automated remediation, acknowledging that the bottleneck is no longer building microservices, but operating them at scale without burning out teams.

3. Operationalize AI and DevOps Maturity to Break the "Weekly Release" Ceiling. Bridge the gaps to achieving Continuous Delivery. A significant discrepancy exists where the majority of organizations self-identify as having high DevOps maturity ("Standardizing" or "Mastering"). Yet, only 12% achieve "Daily" release cadence, with most stuck at "Weekly" (36%) or "Monthly" (30%). To realize the true ROI of DevOps, organizations must target the specific testing and deployment friction points that prevent them from moving from a weekly sprint cadence to true on-demand delivery.

4. Embed Security as a Velocity Accelerator and Treat DevSecOps as a Mechanism for Speed, Not Just Compliance. "Increasing investment in software security testing" (31%) ranks as a top-tier driver for acceleration, significantly higher than infrastructure modernization (24%) or hiring (23%). Vendors and leaders should position security tools not as "gates" but as "guardrails" that allow developers to ship faster with confidence, integrating automated vulnerability scanning directly into the IDE and pipeline to prevent late-stage rework.

5. Bridge the Velocity Gap with Extended and Automated Observability. Organizations are realizing the extensibility and value of observability in ITOps and SecOps, and are extending it to AIOps, agent and software development, user experience, and FinOps. To extend observability into these areas, organizations must pivot from manual monitoring to predictive observability, which is currently prioritized as a critical

©2026 The Futurum Group, LLC. All rights reserved.

acceleration driver by only 19% of decision-makers. With 30% of organizations planning a "Significant Increase" in observability spending over the next 18 months, vendors should position these tools as the primary solution for managing the complexity of Kubernetes, which is now the default for 66% of internal business software. Vendors should also position their offerings to extend beyond ITOps and SecOps, as organizations indicate they are using observability today for AIOps (28%), end-user monitoring (41%), and cost optimization (38%) from third-party services.

TABLE OF CONTENTS

Executive Summary

The 1H 2026 Software Lifecycle Engineering Decision Makers Survey reveals a global market undergoing a critical pivot, shifting from Agile adoption to AI-driven augmentation. While the foundational practices of DevOps are now well-established, organizations have reached a velocity plateau and are shifting their emphasis to AI development, agents, AIOps, and automation.

Daily software releases into production, long held as the gold standard of continuous delivery, remains an elite capability achieved by only 12% of respondents. The vast majority remain tethered to Weekly (36%) or Monthly (30%) cycles, constrained by the friction of managing increasingly complex cloud-native environments rather than by a lack of ambition.

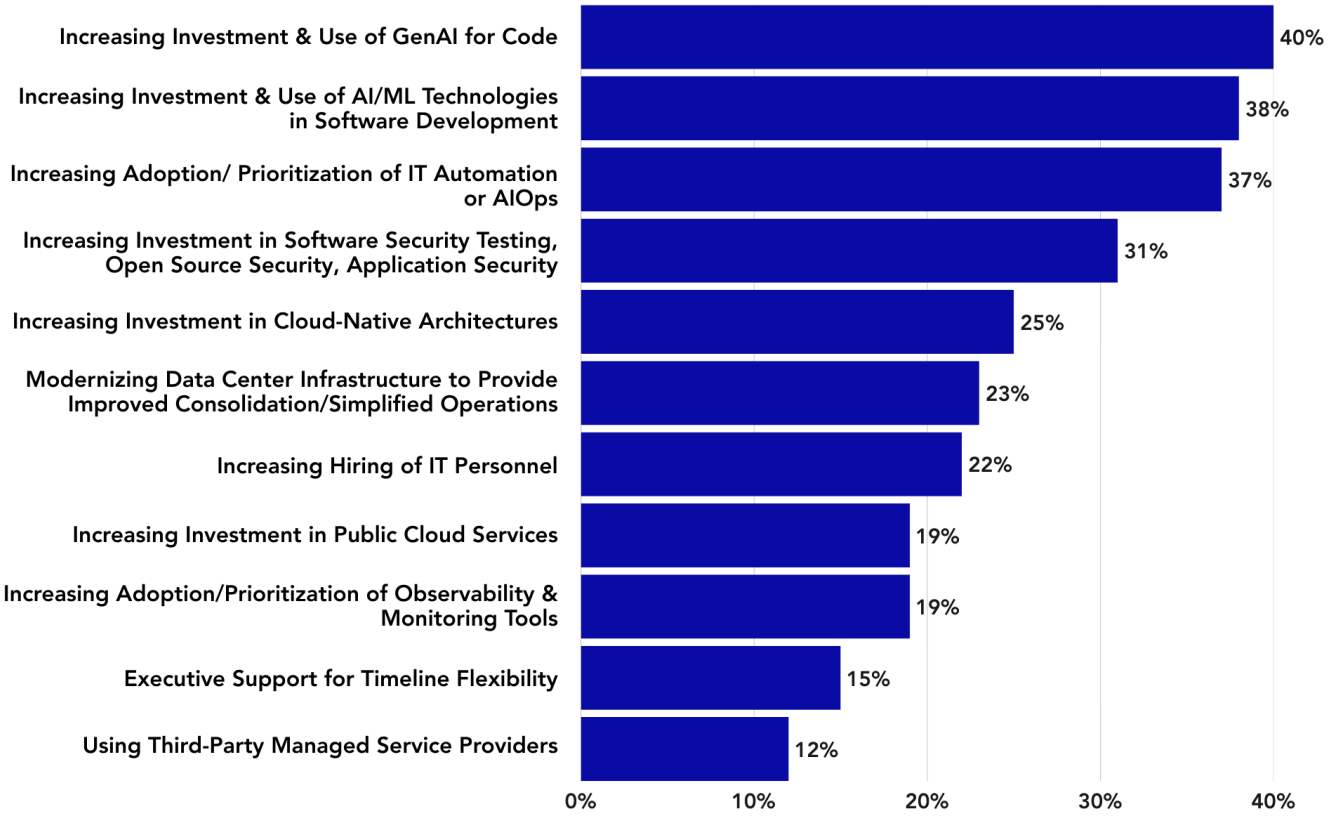
The response to this plateau is a definitive shift in investment strategy. In a striking reversal of previous trends, AI investment has firmly overtaken headcount expansion as the top priority for accelerating delivery. Organizations are now betting on Generative AI, Machine Learning,

©2026 The Futurum Group, LLC. All rights reserved.

Agents, and AIOps to remove the cognitive load from their teams, prioritizing tools that automate code generation, development workflows, and operational resilience over the brute force of hiring.

For vendors, the mandate is clear. The market is no longer buying tools for development; they are buying technologies that increase the velocity of the business and capacity within their organizations. Winners in this space will be those who can demonstrate how their platforms use AI not just as a feature, but as an AI platform that serves as a workforce multiplier, a weekly release ceiling, and adds more agility to the business.

Figure 1: Top Drivers for Accelerating Software Delivery



Q: Which of the following actions are most critical to meeting your organization's requirements for accelerating software development and delivery into production? n=828 | Source: Futurum Research, December 2025

The most significant finding of 2026 is the decoupling of software velocity from headcount growth. For over a decade, "hiring more engineers" was the default strategy for increasing output. That era has ended. When asked to identify the most critical actions for accelerating delivery, respondents overwhelmingly pointed to technology over talent. "Increasing investment in Generative AI" (40%) and "AI/ML technologies" (39%) now rank as the top two drivers for speed, nearly double the priority assigned to "Increasing hiring of IT personnel" (23%).

©2026 The Futurum Group, LLC. All rights reserved.

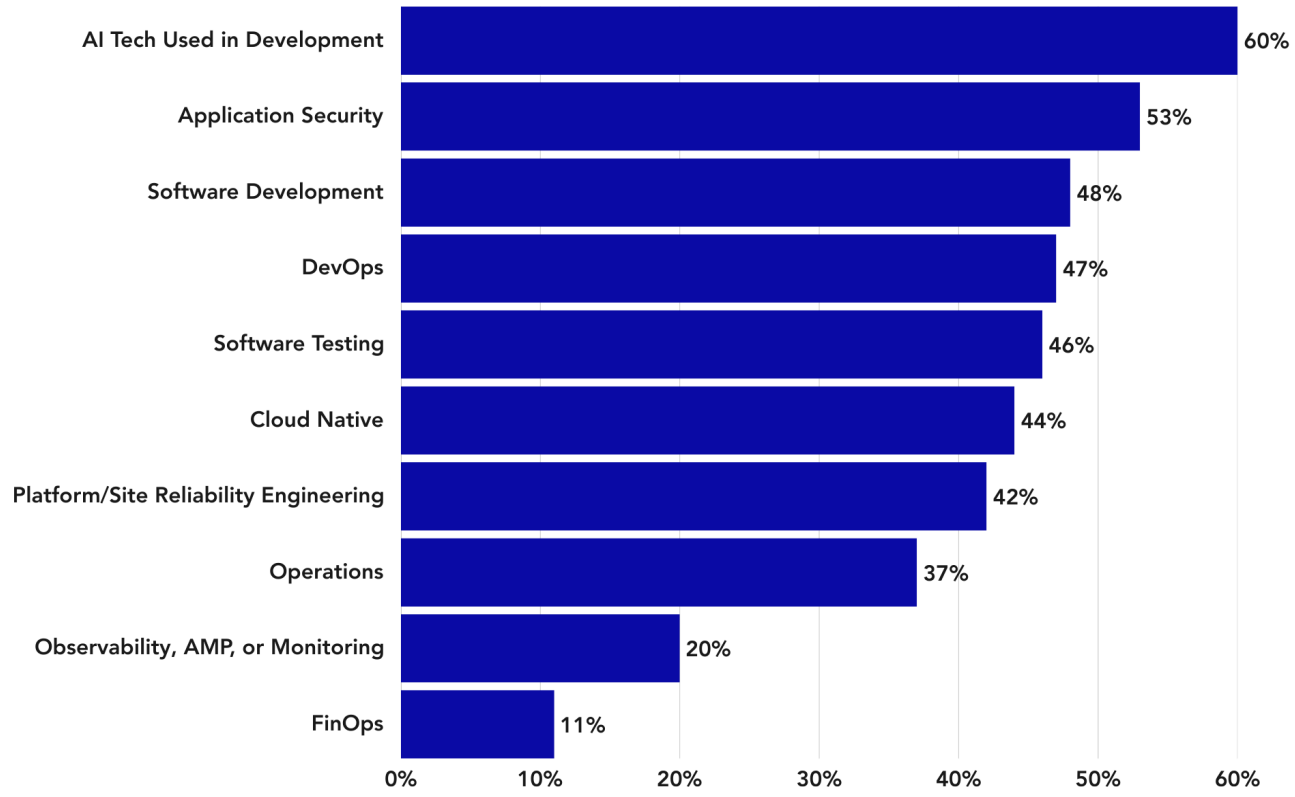
This shift is not merely a reaction to budget constraints; it is a recognition of the changing nature of software friction. The bottlenecks slowing modern delivery—complex testing matrices, documentation debt, and boilerplate coding—are better addressed with increased investment in AI across several areas of spending.

The AI Acceleration Mandate

AI adoption is already most prevalent in software development, with 60% of organizations reporting active use, and Futurum data shows this adoption rippling quickly across the rest of the software development lifecycle. Application security follows closely at 53%, exceeding general software development, DevOps, testing, and cloud-native usage, which highlights how AI and security are being prioritized together rather than sequentially.

This pattern reflects a market that is embedding AI where execution risk is highest and where automation delivers immediate leverage across the lifecycle.

Figure 2: Technology Products or Cloud Services That Organizations Use



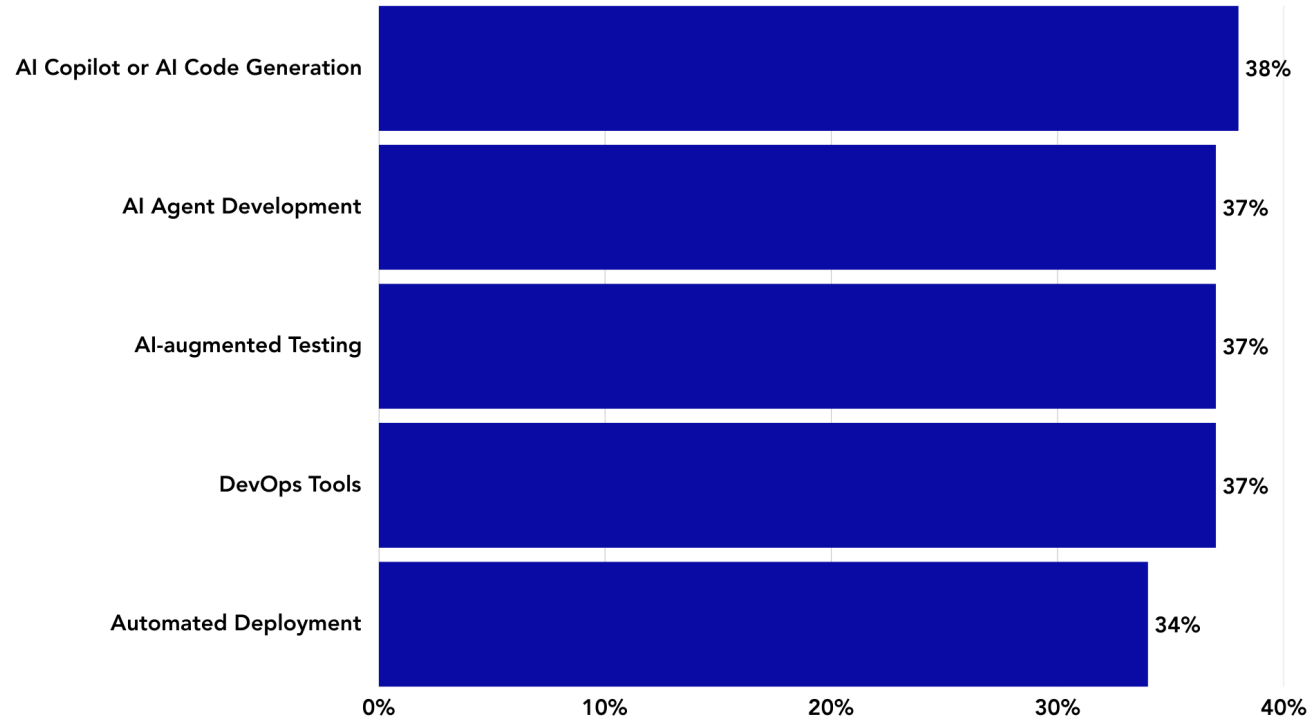
Q. What technology products or cloud services does your organization use? n=828 | Source: Futurum Research, December 2025

©2026 The Futurum Group, LLC. All rights reserved.

What is equally important is how relatively narrow the adoption gap has become across these domains. There is only a 23-point difference between AI use in development (60%) and operations (37%).

The planned investment trends reinforce what current usage already signals. Organizations expect investments in AI across the software lifecycle to accelerate over the next 12 to 18 months. Increased spending across AI code generation, agent development, and AI-augmented testing indicates that teams are moving from initial development toward deeper uses across the software development lifecycle, expanding AI beyond developer productivity gains into AI-augmented testing (37%) while also increasing investments in DevOps (37%) and automated deployment technologies (34%).

Figure 3: Significantly Increased Spending Planned in Development and Deployment, Next 12 to 18 Months



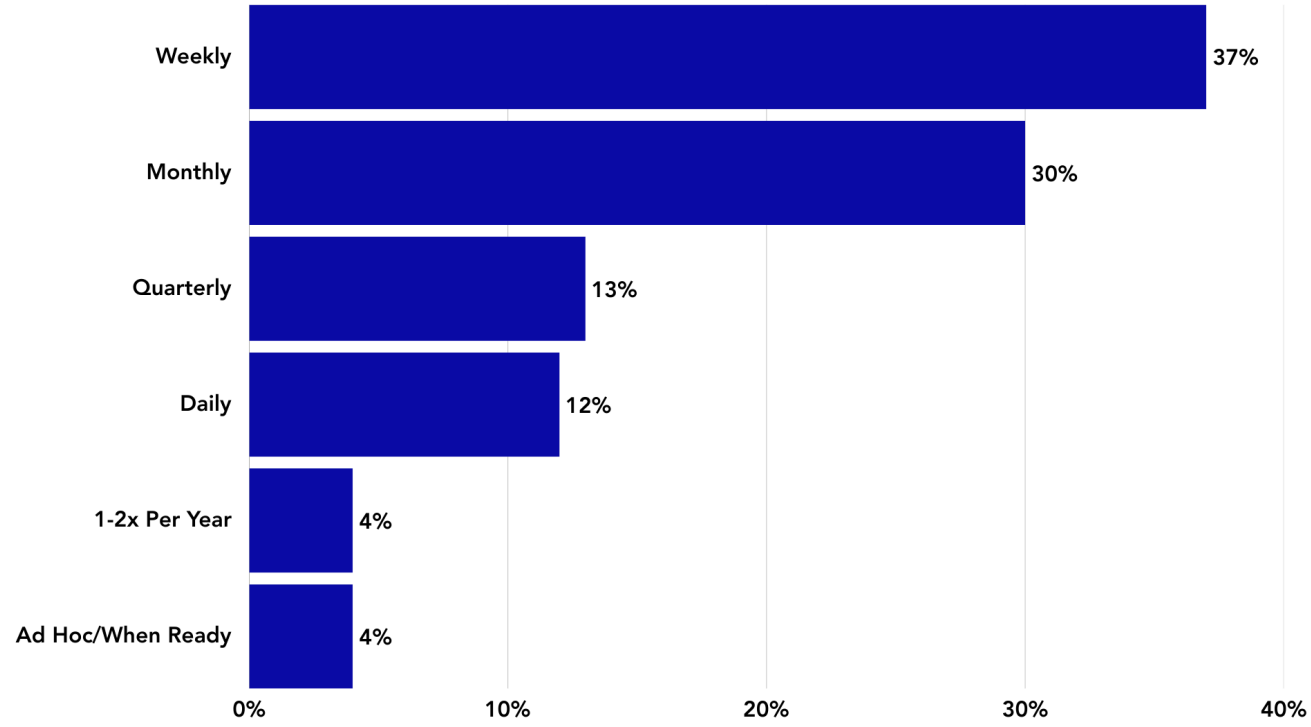
Q. How will your organization's investment in these areas (development, testing, deployment, and DevOps) change over the next 12-18 months?, n=393 | Source: Futurum Research, December 2025

The increased reliance on AI across multiple areas of the software development lifecycle creates a new operational imperative. As organizations substitute human scale with machine speed, the quality and governance of AI-generated code become the new critical path. With 37% of organizations planning to rely on AIOps in the future, the data suggests the checkbook is moving toward AIOps, even as the operational processes to manage this "agentic workforce" are still being defined.

©2026 The Futurum Group, LLC. All rights reserved.

The Velocity Gap: Maturity vs. Reality

Figure 4: New Code Production/Release Frequency



Q: How frequently does your organization release new code into production? n=828 | Source: Futurum Research, December 2025

A paradox lies at the heart of the data: confidence is high, but velocity remains static. A combined 43% of organizations classify themselves as having high DevOps maturity, describing their state as either "Standardizing" (26%) or "Mastering" (17%). Yet, when measured against the harsh metric of release frequency, this maturity often fails to translate into continuous delivery.

The "Daily Release"—the theoretical pinnacle of agile DevOps, and the centerpiece of the widely accepted DORA metric—remains an elusive goal, achieved by only 12% of respondents. Instead, the market has settled into a "Weekly" (36%) or "Monthly" (30%) cadence. This disconnect indicates that while the culture of DevOps (collaboration, agile rituals) has been widely adopted, gaps remain in the engineering and processes required to ship on demand (automated testing, CI/CD reliability).

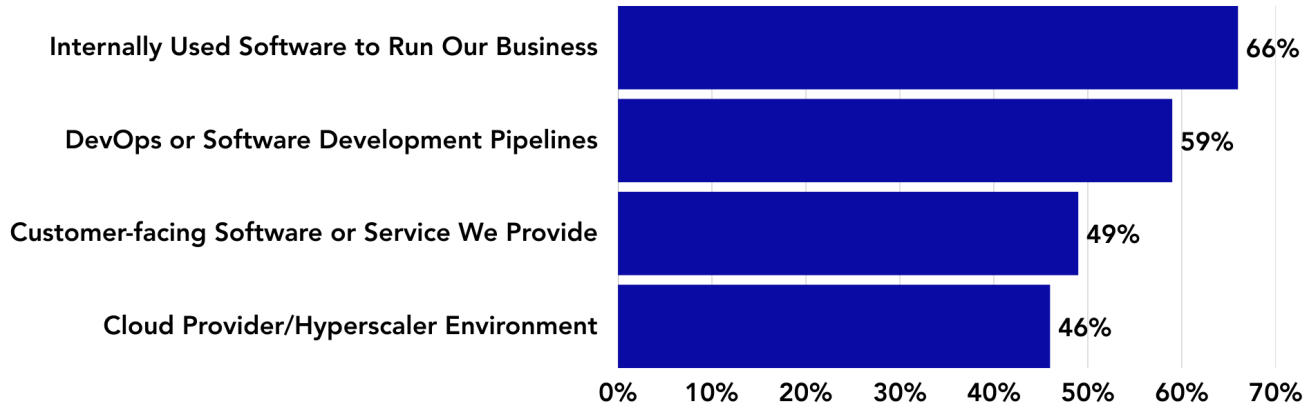
This "Weekly Plateau" suggests that most organizations have successfully automated many aspects of the development pipeline but are still blocked by friction points, including manual approval gates, fragile test environments, or legacy monolithic architectures that resist

©2026 The Futurum Group, LLC. All rights reserved.

incremental deployment. For the majority of the enterprise, "Continuous Delivery" is still "Scheduled Delivery."

Automating the Cloud Complexity

Figure 5: Use of Kubernetes by the Organization



Q: Where does your organization use Kubernetes today? n=828 | Source: Futurum Research, December 2025

As cloud native architectures become the standard, the complexity tax of managing them has skyrocketed. The survey reveals that Kubernetes has become the default operating system for the enterprise, with 65% of organizations using it for internal business software and 48% for customer-facing services.

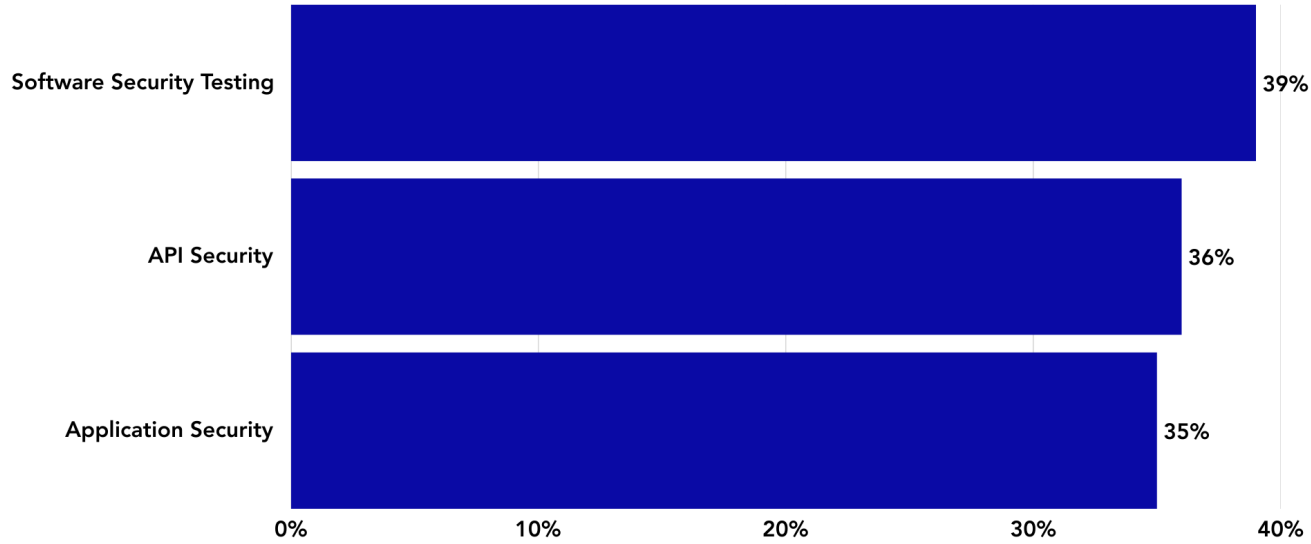
With microservices spanning hybrid and multi-cloud estates, the sheer volume of signals, alerts, and configuration changes requires automated intervention. This is why "Increasing adoption of IT Automation or AIOps" (37%) has emerged as a top-tier priority for acceleration. Leaders are recognizing that they cannot run a 2026 architecture with 2015 operations tools.

AIOps is no longer a "nice to have" optimization; it is the necessary counterbalance to complexity sprawl. Organizations are pivoting their focus from "building more services" to "keeping the services running," using machine learning to filter noise and automate remediation. The data suggests that for the majority of enterprises, the only way to survive the complexity of their infrastructure is to automate it.

©2026 The Futurum Group, LLC. All rights reserved.

Security as a Velocity Accelerator

Figure 6: Increased Spending Across Software Security, Next 12 to 18 Months



Q: How will your organization's investment in these areas [software security testing, API security, and overall application security] change over the next 12-18 months? n=828 | Source: Futurum Research, December 2025

Perhaps the most encouraging trend in the dataset is the reframing of software security. Historically viewed as a bottleneck, security investment is now explicitly cited as a driver of acceleration.

Futurum's 1H 2026 decision maker survey shows IT organizations planning to increase spending, above and beyond current budgets, for software security, with significantly increased spending plans over the next 12–18 months in software security testing (39%), API security (36%), and application security overall (35%).

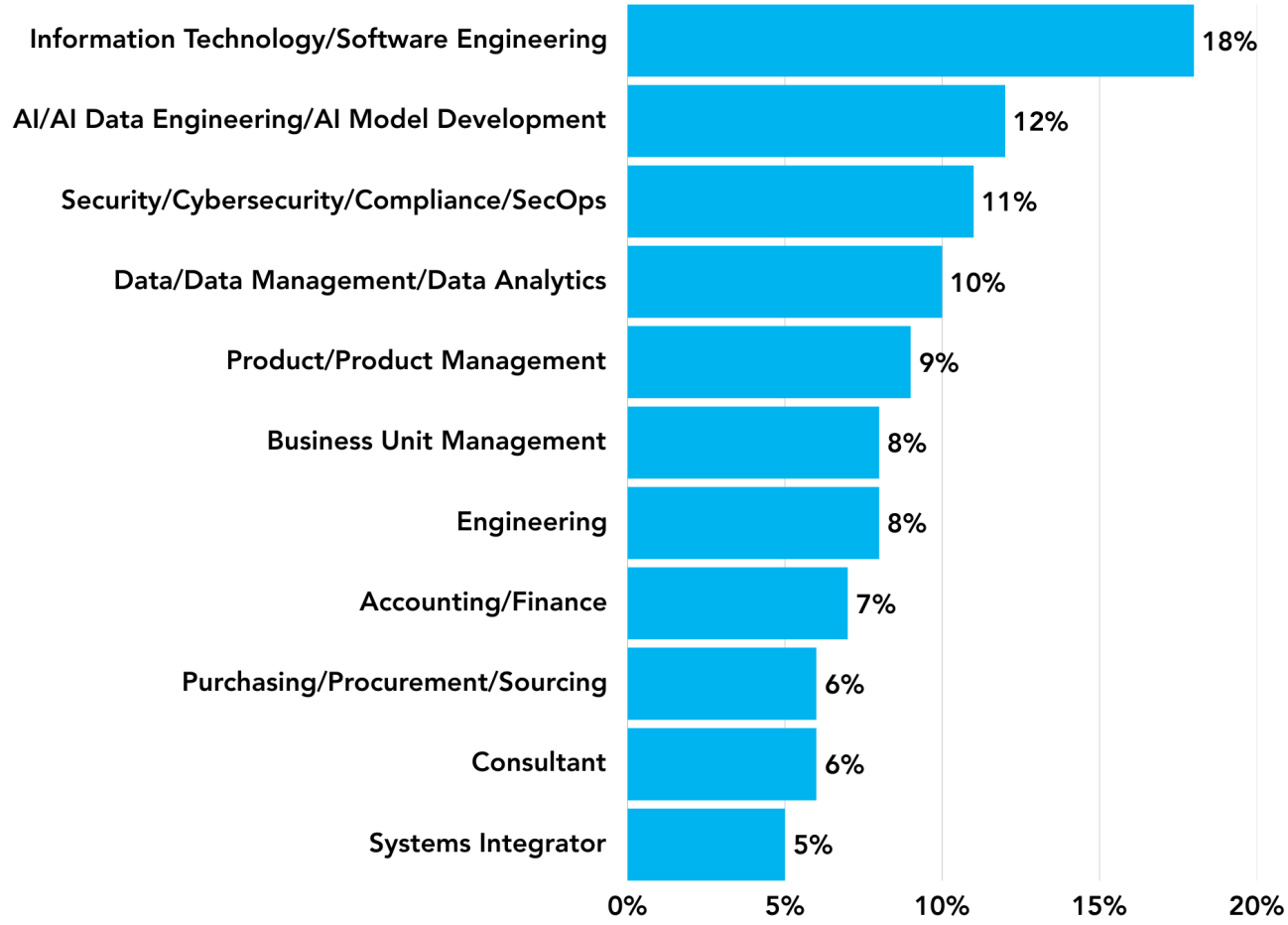
This indicates that DevSecOps continues to transition from a buzzword to an operational imperative. Leaders understand that the fastest way to slow down a release is to find a critical vulnerability later in the development process or in production. By integrating automated scanning and policy checks directly into the CI/CD pipeline, organizations are removing the late-stage rework loops that kill velocity.

The data confirm that high-performing organizations are making gains in the trade-offs between security and speed; they use security automation to improve speed. This "security as guardrails" approach allows developers to move fast with the confidence that the platform will catch critical errors before they reach production.

©2026 The Futurum Group, LLC. All rights reserved.

Demographics

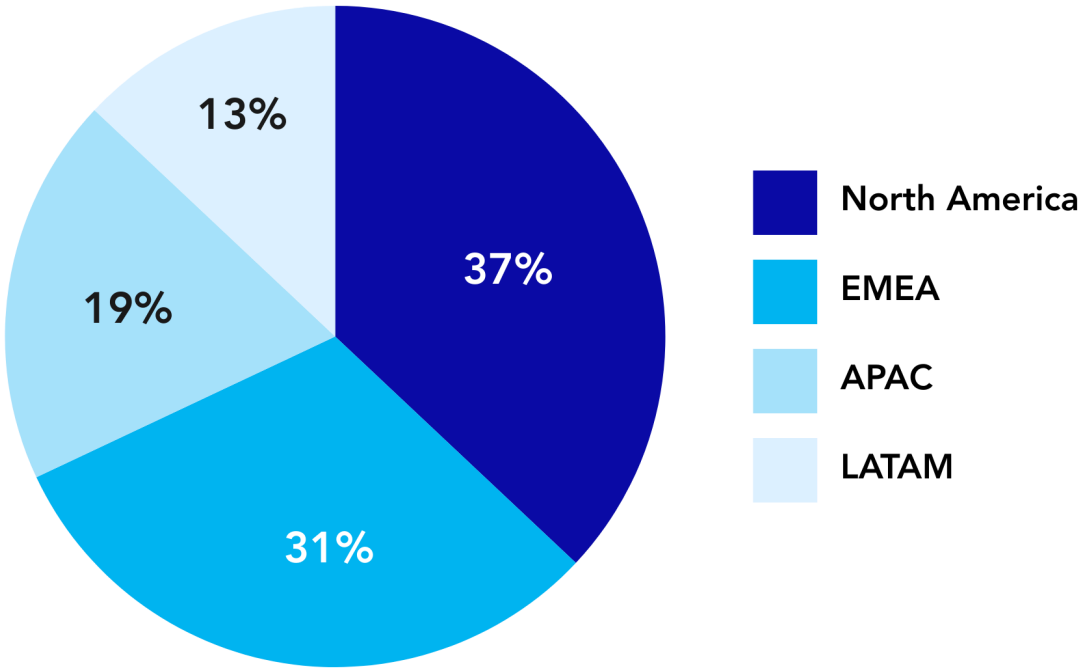
Figure 7: Role in the Organization



Q: Which of the following best describes your job functional area? n=828 | Source: Futurum Research, December 2025

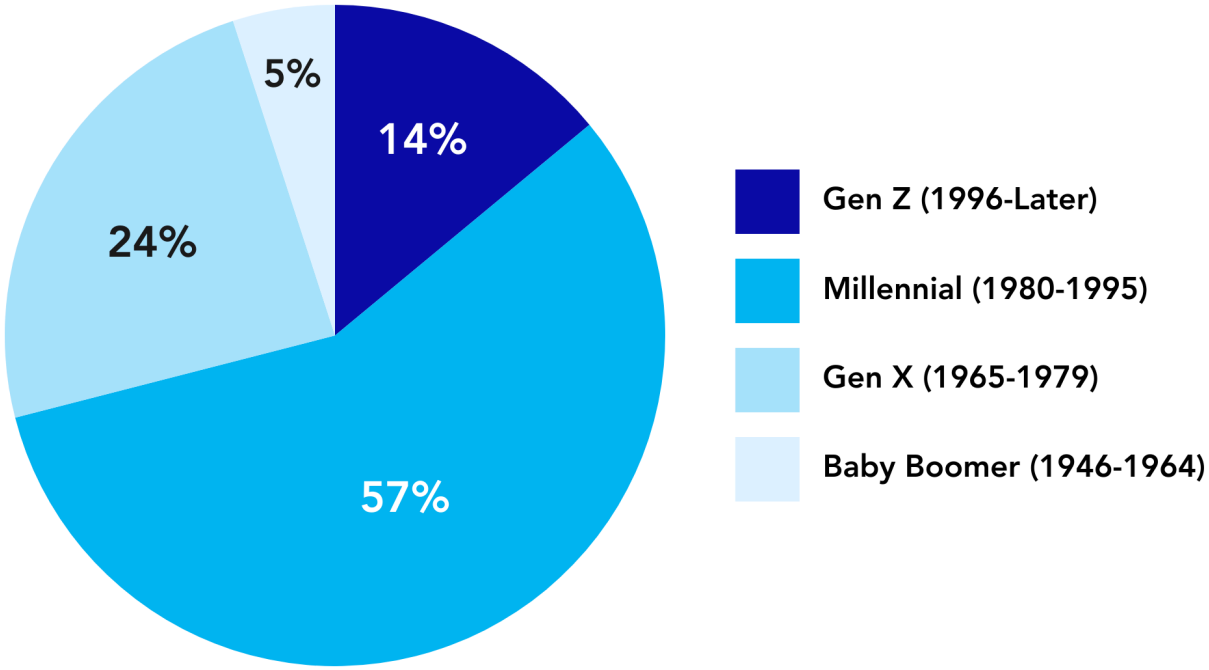
©2026 The Futurum Group, LLC. All rights reserved.

Figure 8: Regional Location of Respondents



Source: Futurum Research, December 2025

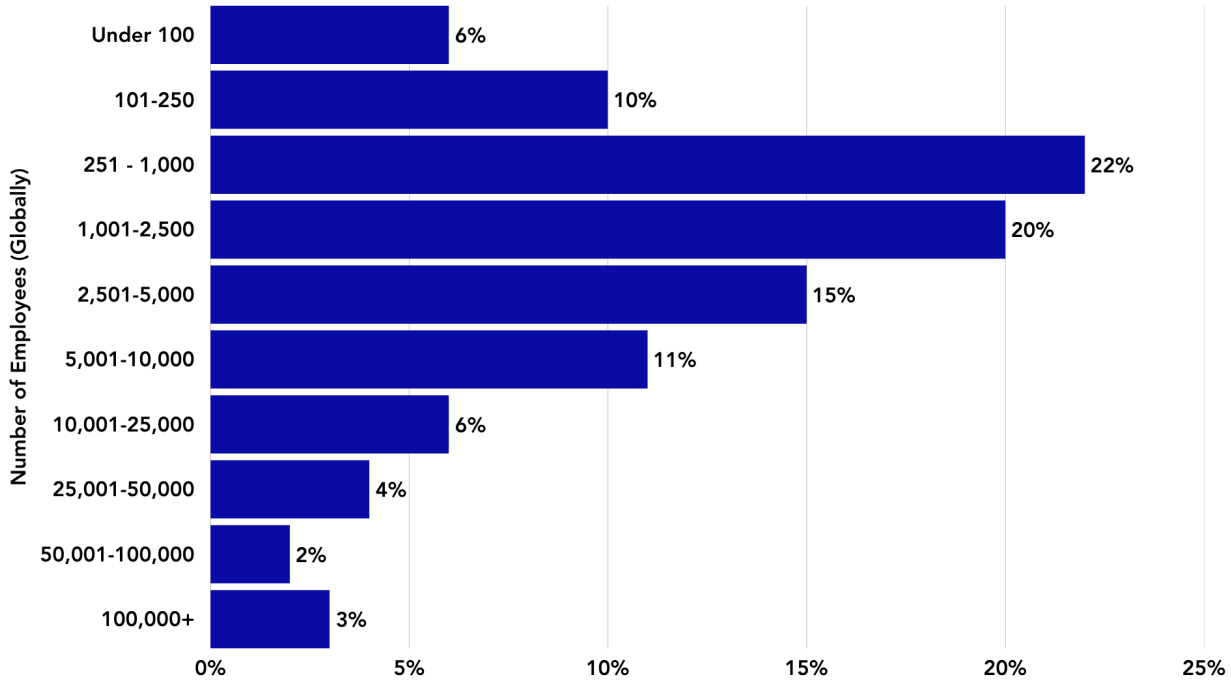
Figure 9: Respondent Generation



Source: Futurum Research, December 2025

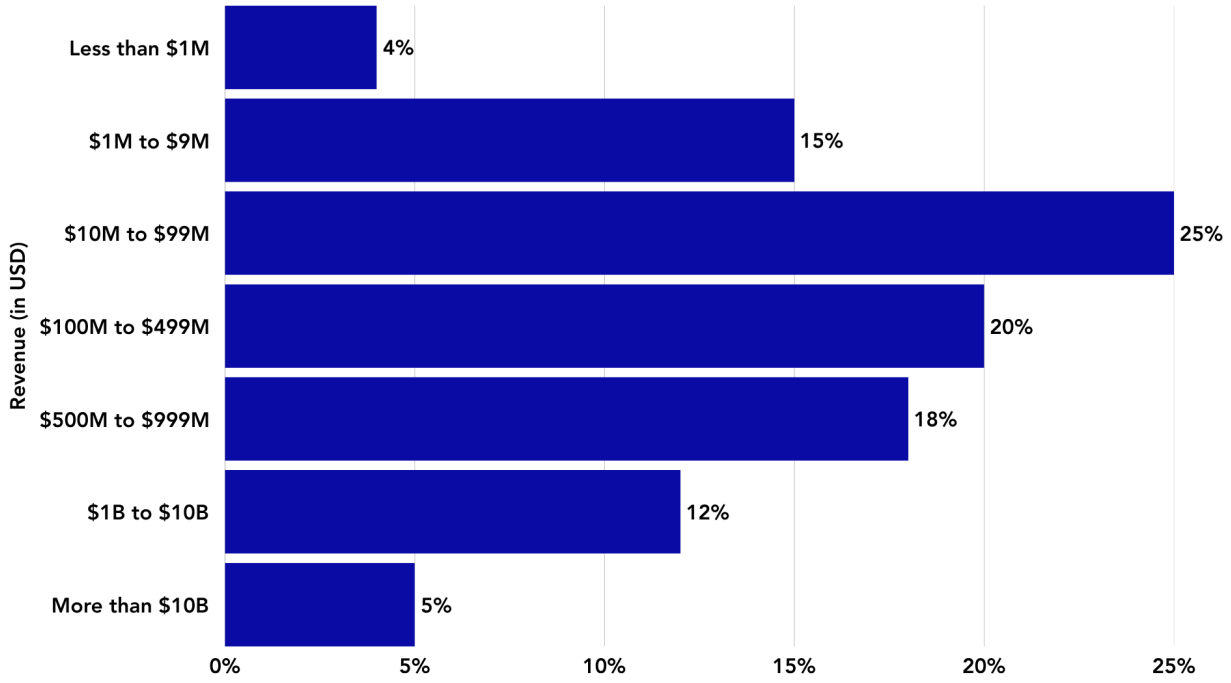
©2026 The Futurum Group, LLC. All rights reserved.

Figure 10: Size of the Organization, by Number of Employees



Source: Futurum Research, December 2025

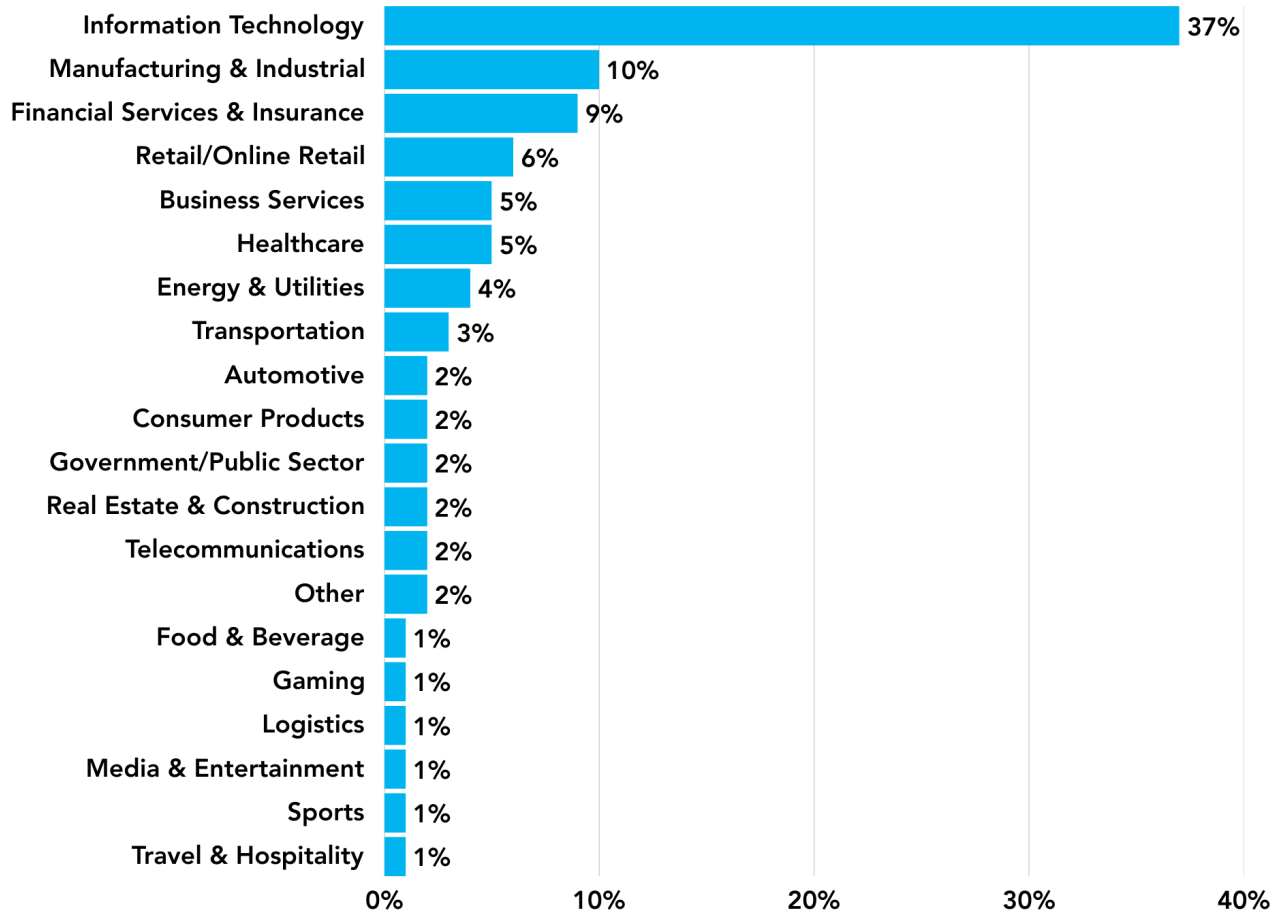
Figure 11: Size of the Organization, by Revenue (in USD)



Source: Futurum Research, December 2025

©2026 The Futurum Group, LLC. All rights reserved.

Figure 12: Respondent Organization Industry



Source: Futurum Research, December 2025

©2026 The Futurum Group, LLC. All rights reserved.

Methodology

This quantitative online survey had a sample size of N=828 qualified respondents and was conducted in December 2025.

Participants were screened to ensure they are IT, DevOps, or Platform Engineering decision makers, influencers, or practitioners with operational knowledge of software delivery lifecycles, tools, and strategies within their organizations.

Qualification criteria include:

- Role: Affirmative response to being a decision maker or influencer in IT, Software Engineering, Platform Engineering, AI/Data Science, or Security Operations.
- Geography: Global coverage including North America (309), Europe, Middle East, & Africa (258), Asia Pacific (156), and Latin America (105).

Structure: The survey covers demographics, organizational maturity (Agile/DevOps), and deep dives into specific technical domains, including Cloud Native architectures, Artificial Intelligence, AIOps, and Tooling.

Format: Questions are a mix of single-select, multi-select, and ranking scales designed to assess adoption stages, top challenges, and purchasing drivers. Data collection was conducted via an online platform, with quotas applied to regions and job functions to ensure a representative sample of the global market.

Full Question Set

Demographics & Strategy

- Which of the following best describes your job functional area?
- Where are you located?
- Do you have influence over the decision-making, evaluation responsibilities, or budgeting allocation in the purchase of software, development, or AI tools?
- How knowledgeable are you about your organization's internal software development, applications, cloud, or security?
- Of all the business applications used by your organization, approximately what percentage are internally developed applications?
- Approximately how many total production business applications does your company run worldwide?
- Which of the following actions are most critical to meeting your organization's requirements for accelerating software development and delivery?
- Approximately what percentage of your organization's revenue is directly tied to internally developed or custom applications?

©2026 The Futurum Group, LLC. All rights reserved.

DevOps Maturity & Architecture

- Which of the following best describes your organization's current level of DevOps maturity?
- Which of the following best describes your organization's current level of Agile maturity?
- Please estimate the percentage of your organization's production applications that run on-premise, in the cloud, in containers, as microservices, or as serverless functions.
- How frequently does your organization release new code into production?
- On average, approximately what percentage of your organization's development time is allocated to new innovation vs. maintenance vs. modernization?
- Approximately what year did you begin using DevOps in your career?
- Which best describes your organization's commitment to using DevOps as part of your software development lifecycle?
- Please estimate what percentage of your projects apply DevOps in their software development lifecycle.
- Will you move to an integrated DevOps platform solution over the next 12–18 months?

Tooling, AI & Modernization

- What technology products or cloud services does your organization use (e.g., CI/CD, Observability, Testing)?
- Which of the following vendor solutions do you use (software or cloud-based)?
- Are you currently using AI/ML/Generative AI tools to aid or augment software development, testing, or DevOps?
- What technical challenges are AI-augmented development or DevOps tools currently helping address?
- How is AI changing job functions in your organization?
- Are you planning to utilize AI code transformation technologies to modernize existing mainframe applications?
- Are you planning to utilize AI code transformation technologies to move existing applications to cloud-native microservices?

Budget & Spending

- How much did your total organization spend on SDLC-related software solutions in 2025? (Estimated 2026?)
- How much did your organization spend on cloud-based SDLC-related services in 2025? (Estimated 2026?)
- How will your organization's investment in DevOps and software development areas change over the next 12–18 months?
- Who in your organization owns the budget for application and software supply chain security?
- In US Dollars, how much did your total organization spend on AI/ML/GenAI solutions to augment software development in 2025?

CI/CD & Testing

- How many CI/CD solutions does your organization use?

©2026 The Futurum Group, LLC. All rights reserved.

- Are you considering replacing or upgrading one or more of your CI/CD solutions in the next 12–18 months?
- Which types of CI/CD tools or services does your organization plan to add or increase investment in?
- What percentage of your software testing is automated?
- What percentage of your software is tested using software security tools?
- Do you currently use software testing tools aided by AI?

Kubernetes & Cloud Native

- Where does your organization use Kubernetes today?
- What is your organization's current level of Kubernetes adoption?
- Which Kubernetes distribution or platform does your organization primarily use?
- What types of workloads does your organization deploy on Kubernetes?
- Does your organization utilize a "Cloud Native Application Protection Platform" (CNAPP)?
- What is your organization's current level of serverless adoption?

Platform Engineering

- Which of the following best describes your organization's current level of Platform Engineering maturity?
- How does your organization define and measure the success of platform engineering?
- What are the main functions performed by Platform Engineering in your organization?
- What tools or technologies does your organization use in platform engineering?

Observability & AIOps

- Approximately how many total observability tools does your organization currently use?
- For your organization's monitoring strategy, which of the following are the most important priorities?
- Where are your organization's IT monitoring and observability deployed?
- Which of the following monitoring or observability tools does your organization leverage for production environments?
- Which functional groups most often leverage observability tools at your organization?
- Which of the following improvements has been most impactful to your overall organization as a result of its monitoring strategy?
- Please select the primary vendors your organization currently uses for AIOps, APM, Network Monitoring, Security Monitoring, and Cost Optimization.
- Which vendors are you considering adding in 2025?

©2026 The Futurum Group, LLC. All rights reserved.

About Us

About the Authors

Mitch Ashley is Vice President and Practice Lead, Software Lifecycle Engineering for The Futurum Group. Mitch has over 30+ years of experience as an entrepreneur, industry analyst, product development and IT leader, with expertise in software engineering, cybersecurity, DevOps, DevSecOps, cloud, and AI. Mitch comes to The Futurum Group through the acquisition of Techstrong Group (devops.com, securityboulevard.com, and techstrong.tv), where he serves as CTO and founder of Techstrong Research. Mitch can be reached at mashley@futurumgroup.com.

About The Futurum Group

The Futurum Group's analysts, researchers, and advisors help business leaders anticipate tectonic shifts in their industries and leverage disruptive innovation. Unlike traditional analysts, The Futurum Group works in analysis and research and takes that insight and knowledge even further, engaging through the go-to-market process.

Futurum Research provides in-depth research and insights on global technology markets using advisory services, custom research reports, strategic consulting engagements, digital events, go-to-market planning, and message testing. It also creates, distributes, and amplifies rich media content that all stakeholders read, watch, and listen to.

See more details on The Futurum Group at futurumgroup.com.

Copyright & Use License

Copyright Notice

Copyright ©2026 by The Futurum Group, LLC. All rights, including translation into other languages, are specifically reserved. No part of this publication may be reproduced in any form, stored in a retrieval system, or transmitted by any method or means, electrical, mechanical, photographic, or otherwise, without the express written permission of The Futurum Group futurumgroup.com. United States copyright laws and international treaties protect this publication. Unauthorized distribution or reproduction of this publication, or any portion of it, may result in severe civil and criminal penalties and will be prosecuted to the maximum extent necessary to protect the publisher's rights.

License Notice

This document may be distributed only to the licensed organization.

The following acts are prohibited:

Transmittal to others outside your immediate organization, including partners, resellers, external consultants, etc., in any media format

Posting on a website that is accessible to others outside your immediate organization

The possession or use within an unlicensed organization

Limitation of Liability Notice

The information contained herein has been obtained from sources believed to be reliable. The Futurum Group shall have no liability for errors, omissions, or inadequacies in the information contained herein or for interpretations thereof. The reader is responsible for selecting these materials to achieve their intended results. The opinions expressed herein are subject to change without notice.