

From Code To Control: AI's Takeover Of Software Development Lifecycle

A FORRESTER CONSULTING THOUGHT LEADERSHIP PAPER COMMISSIONED BY REPLY, FEBRUARY 2026



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Executive Summary

Global firms are under mounting pressure to innovate faster, operate more efficiently, and deliver secure high-quality software at scale. To achieve this, organizations are increasingly turning to AI and automation across the software development lifecycle (SDLC). But many are still without a holistic approach that moves beyond isolated use cases toward systemic transformation across planning, development, testing, and operations.

To stay competitive, firms are also reimagining sourcing strategies to unlock long-term value. Traditional offshoring is under pressure from compliance, quality, and agility risks. Nearshoring, co-sourcing, and insourcing are rising to regain control and collaboration, albeit with trade-offs in cost, complexity, and innovation capacity. In this predicament, firms overwhelmingly view agentic AI as a competitive necessity and strategic alternative that will accelerate releases, improve resilience, and scale delivery without linear headcount growth.

In September 2025, Reply commissioned Forrester Consulting to evaluate the adoption of AI in the SDLC. Forrester conducted an online survey with 536 respondents and interviewed six senior managers across the software development lifecycle in France, Germany, Italy, the US, and the UK to explore this topic. We found that AI in SDLC is accelerating but remains immature, while many firms face multiple challenges including skills and governance gap. Many are also moving toward co-sourcing models to balance control and flexibility and planning to adopt agentic AI in the next two to three years as a more strategic option in the sourcing model landscape.



Key Findings

AI adoption in SDLC is widespread but immature. Most firms remain early in embedding AI into their SDLC. While 76% have adopted AI to some degree, only 20% report pervasive adoption across the SDLC phases. Even this does not imply scaled usage or the reorchestration of operating models, roles, processes, and governance required for AI-driven software delivery.

Firms still focus on isolated use cases, restraining the full potential of AI in SDLC. Firms are reaping benefits from AI in SDLC; however, they are mostly focused on AI-powered tools for better code generation, overlooking the truly differentiating transformation of the entire SDLC which requires rethinking the IT operating model, establishing new governance principles, and investing into workforce upskilling.

Co-sourcing gains traction amid sourcing shifts. Traditional offshoring models are under pressure from compliance, quality, and agility risks. In response, firms are increasingly adopting co-sourcing for greater control and collaboration, though it requires clear accountability frameworks to succeed.

Agentic AI emerges as a competitive necessity and strategic alternative. Agentic AI is poised to redefine software development. An overwhelmingly 93% of leaders report their organizations plan to adopt it within the next two to three years as an alternative to traditional sourcing models. Expectations center on accelerating release cycles, reducing costs, and enabling human-AI collaboration for higher-value work.



AI Is Driving SDLC Reinvention, Yet Integration Gaps Persist

Global firms are navigating a period of profound uncertainty while striving to transform their technology and operations. The root causes of uncertainty firms are facing include economic and geopolitical volatility, regulatory complexity, technology disruption, talent shortages, and emerging cybersecurity threats. These factors combine to create a dual mandate: Protect the business from immediate risks while investing in long-term transformation — a tension that shapes strategic priorities across industries.

The convergence of short-term resilience and long-term reinvention sets the stage for AI-driven disruption in the SDLC, a shift that demands new strategies for governance, sourcing, and talent to unlock agility and competitive advantage. In surveying 536 software development senior leaders in France, Germany, Italy, the US, and the UK, we found that:

- **In the next 12 months, firms will be juggling many different initiatives.** Over 80% of surveyed leaders identify multiple initiatives as critical or high priorities, spanning both near-term risk management and longer-term value creation. Protecting the organization remains central, with cybersecurity consistently cited as a major focus amid an expanding threat landscape and rising regulatory pressure. At the same time, leaders are pursuing growth and efficiency agendas — such as entering new markets, lowering operational costs, and launching new products and experiences — in response to geopolitical uncertainty and sustained margin pressure. Alongside these efforts, firms are also investing in deeper, structural change, signaling an ambition to reshape their operational foundations through talent retention and upskilling, accelerated digital transformation, and modernization of legacy technology.

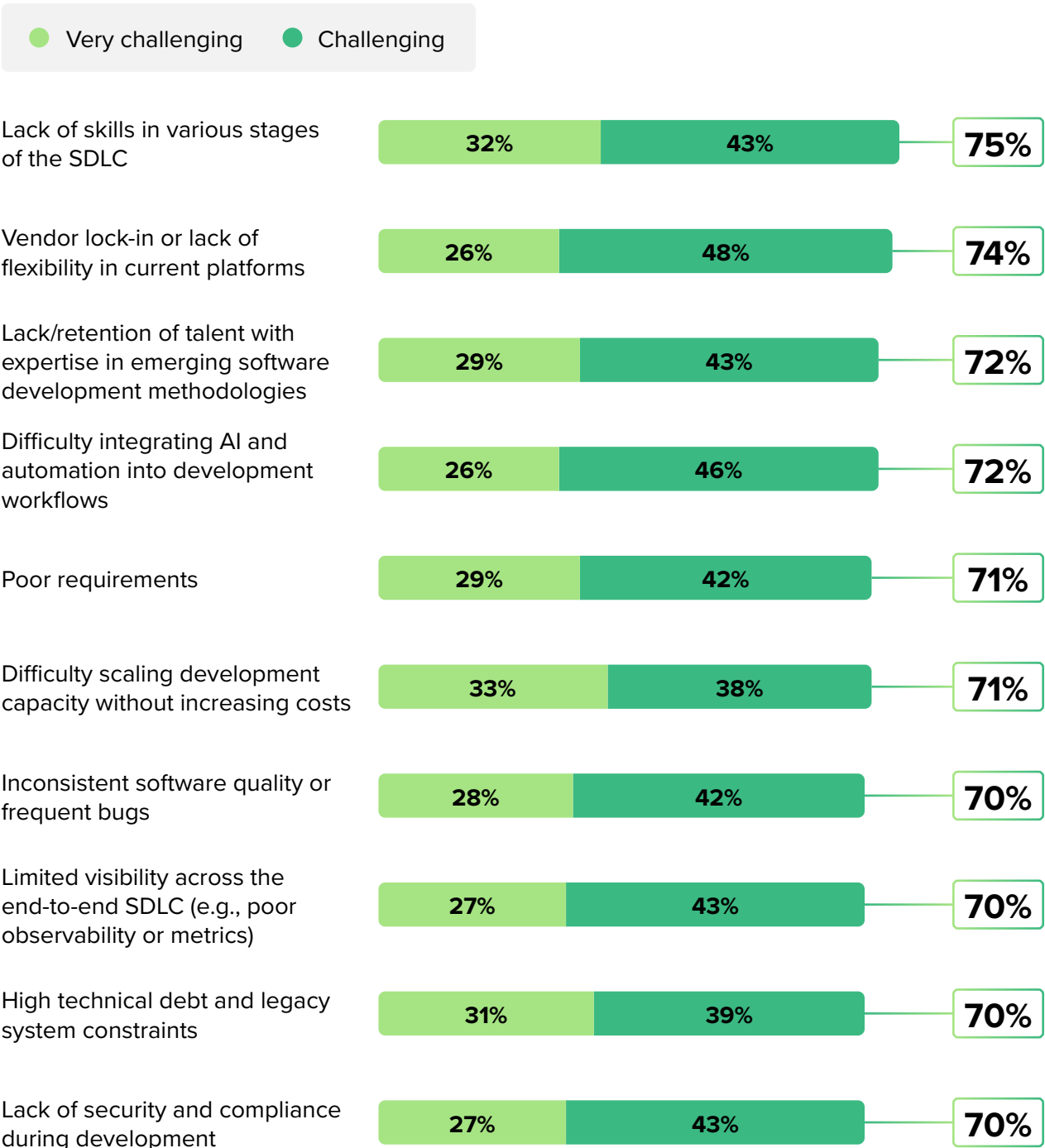
“Our ultimate goal is to become a digital-first bank and automate as many processes as possible. This involves incorporating AI and ML extensively. We are also exploring a Zero Trust architecture and transitioning to a multicloud strategy. This shift is motivated not only by regulations like DORA but also by the need for increased resilience.”

HEAD OF TECHNOLOGY GOVERNANCE, FINANCIAL SERVICES, UK

- **Inadequate skill sets and current technology setups are key challenges.** AI-powered SDLC makes skill set and technology gaps emerge quite dramatically (see Figure 1). Seventy-five percent of leaders find that there’s a lack of skills across the entire SDLC, while 72% lack talent — or cannot retain talent — with expertise in emerging software development techniques. Technology setup gaps are perceived just as pressing, as 74% of leaders find vendor lock-in, and 72% integration of AI and automation into development workflows to be challenging or very challenging.
- **AI and automation lead the IT agenda, with cloud, ESG, and talent as critical enablers for the next 12 months.** Strategic short-term IT priorities reflect challenges with navigating uncertainties as well as the aspiration to transform. Most software development leaders (89%) consider AI adoption and automation as a critical or high priority, showing widespread consensus over its value as a key enabler. They also report a significant focus on scalable and flexible infrastructures, with 85% optimizing cloud environments and modernizing their application landscape. Over 80% will prioritize environmental, social, and governance (ESG) compliance and cybersecurity, alongside insourcing software development capabilities, developing talent and skills, and improving business-IT alignment. This reveals the understanding that in order to reap key benefits, firms will have to review their current way of working, driving an IT cultural transformation that hinges on talent, skills, and capabilities.

FIGURE 1

“What challenges does your organization currently face with the software development lifecycle?”



Note: Showing top 10 responses
Base: 536 global software development leaders
Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

- **AI has decisively entered the SDLC, yet most organizations remain in the transition phase.** Overall, only 20% of software development leaders report widespread integration of AI across their SDLC. Yet this does not imply scaled usage or reorchestration of operating models, roles, processes, and governance required by AI-driven software delivery. Conversely, 56% report partial adoption, and 24% are still either piloting or exploring AI use cases (see Figure 2). Respondents from the US show the highest share of pervasive adoption (25%), while UK leaders report the highest partial adoption (61%). Respondents from Italy (28%) and France (27%) show strong piloting activity, indicative of ongoing experimentation of proof-of-concept initiatives. Data reveals that organizations from the manufacturing/automotive industry lead the integration of AI in SDLC, with 28% of leaders from that industry reporting widespread adoption, while the energy/utilities sector lead in partial adoption (65%). In contrast, financial services firms (39%) and governments (38%) show the highest focus on pilot and exploration activities.
- **AI in SDLC is widespread but siloed: It peaks in development and lags in governance and planning.** Survey data shows that the maturity of AI in SDLC is uneven across phases (see Figure 3). More than 60% of leaders report either full or partial adoption of AI in development; monitoring and continuous improvement; maintenance and support; and requirements and analysis phases. Fifty-six percent have adopted AI for testing. Conversely, design, deployments, and governance and planning phases are still mostly in pilot or exploration for 50% of leaders or more. In other words, AI accelerates execution, but upstream decision-making and control mechanisms remain an Achilles' heel.

“We are still in the early stages of AI adoption. Over the past 18 months, we've been evaluating various tools. Currently, the use of generative AI is integrated into 50% of our SDLC, but it remains unstructured.”

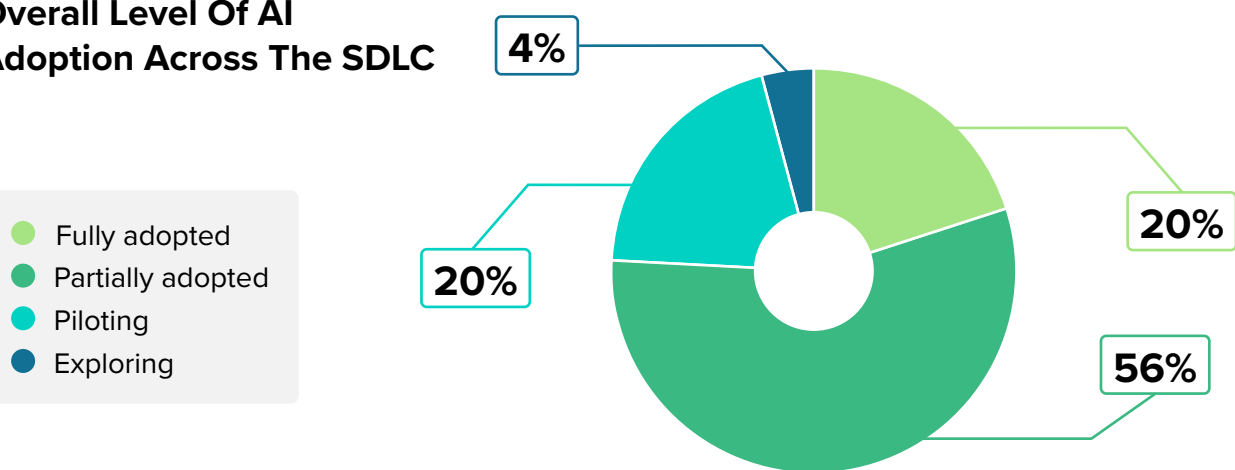
HEAD OF GENAI FOR CX,
TELECOMMUNICATIONS, FRANCE

“I would say we fully adopted AI in SDLC, but then the depth within each cycle is different: For requirements planning, we’ve adopted it probably 70% to 75%, coding 80%, testing 90%, deployment 50%, monitoring and maintenance 95%.”

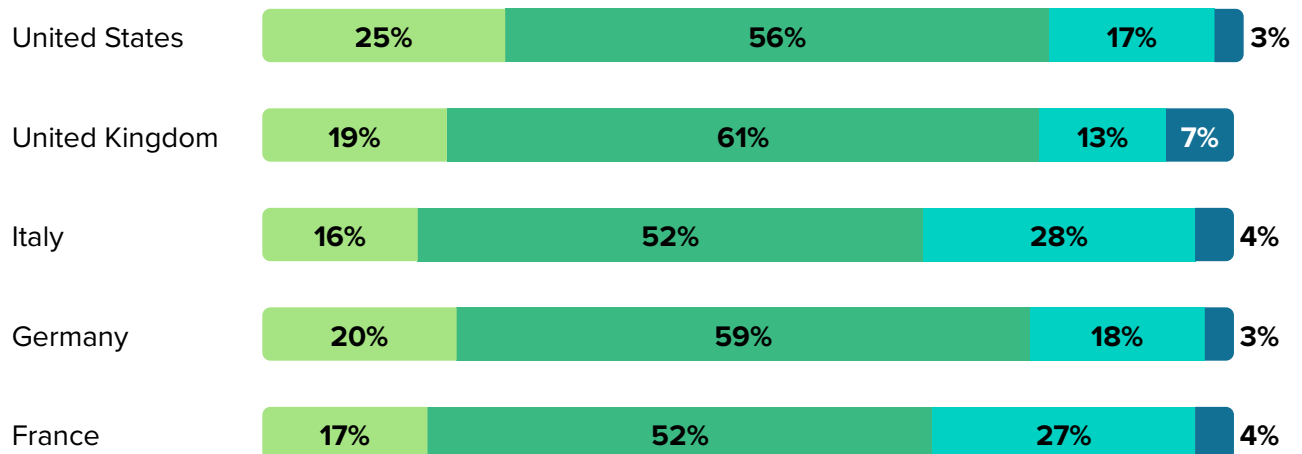
MANAGING DIRECTOR, MANUFACTURING/AUTOMOTIVE, UK

FIGURE 2

Overall Level Of AI Adoption Across The SDLC



Level Of AI Adoption Across The SDLC By Country*



Note: Percentages may not total 100 due to rounding.

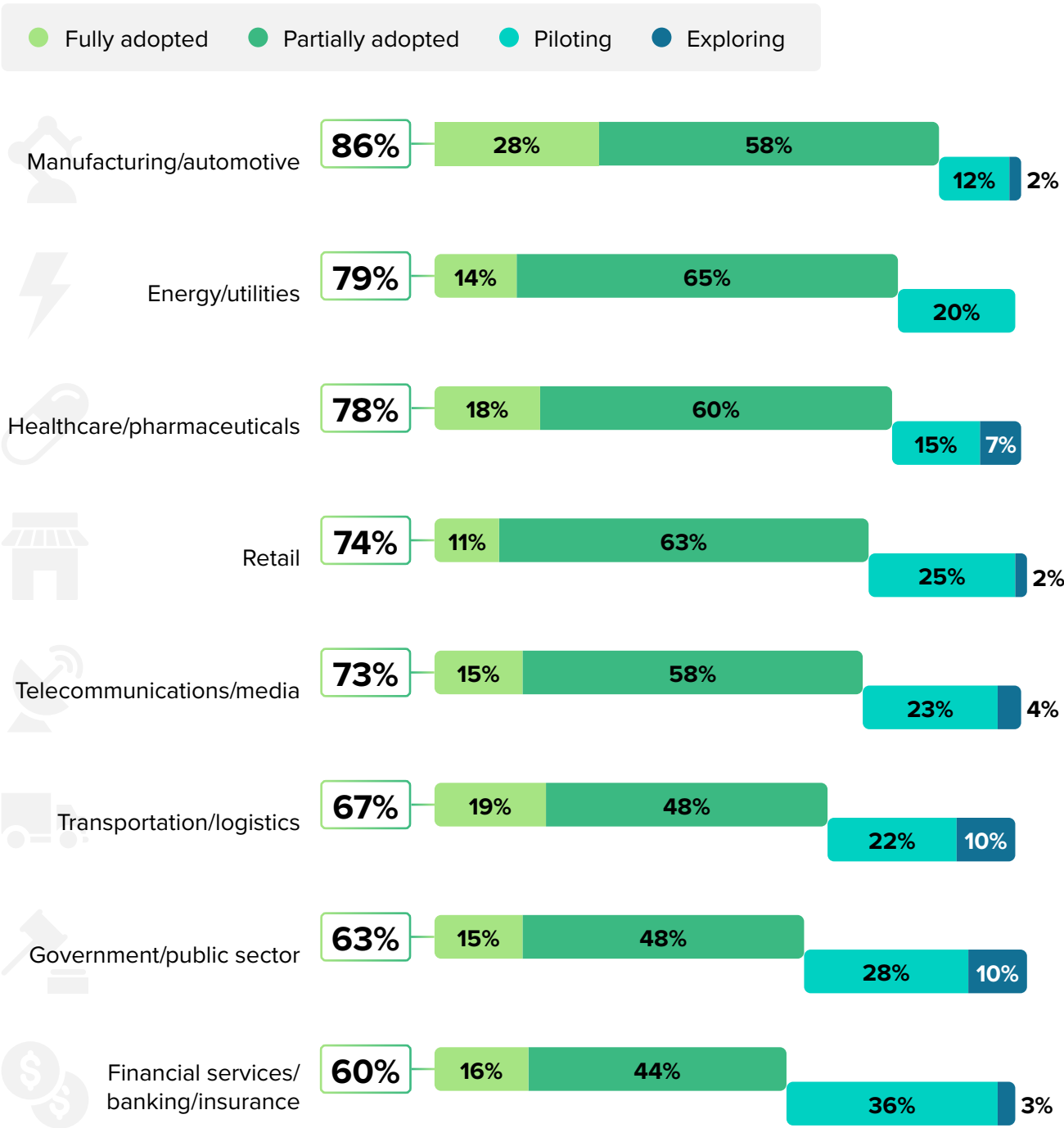
Base: 536 global software development leaders

*Base: 100 to 120 global software development leaders; base sizes vary by country

Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

FIGURE 2 (CONT.)

Level Of AI Adoption Across The SDLC By Industry



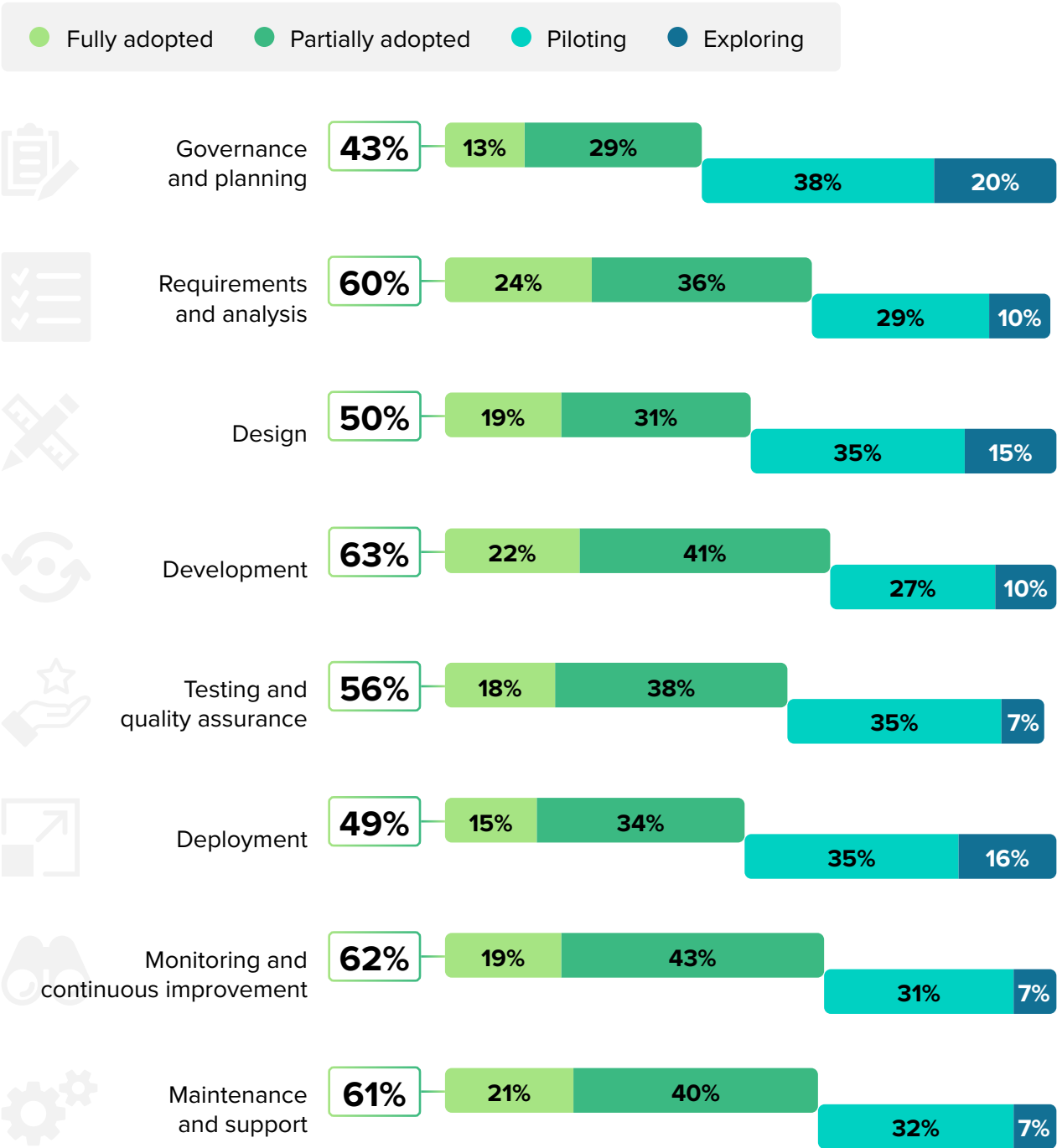
Note: Percentages may not total 100 due to rounding; total adoption percentages showing “Fully adopted” and “Partially adopted”

Base: 48 to 169 global software development leaders; base sizes vary by industry

Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

FIGURE 3

The Adoption Of AI Across SDLC



Note: Percentages may not total 100 due to rounding; total adoption percentages showing “Fully adopted” and “Partially adopted”

Base: 405 global software development leaders whose organizations either fully or partially adopted AI across SDLC

Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

The Maturity Patterns: Local Tooling And Localized Gains Over Systemic Transformation

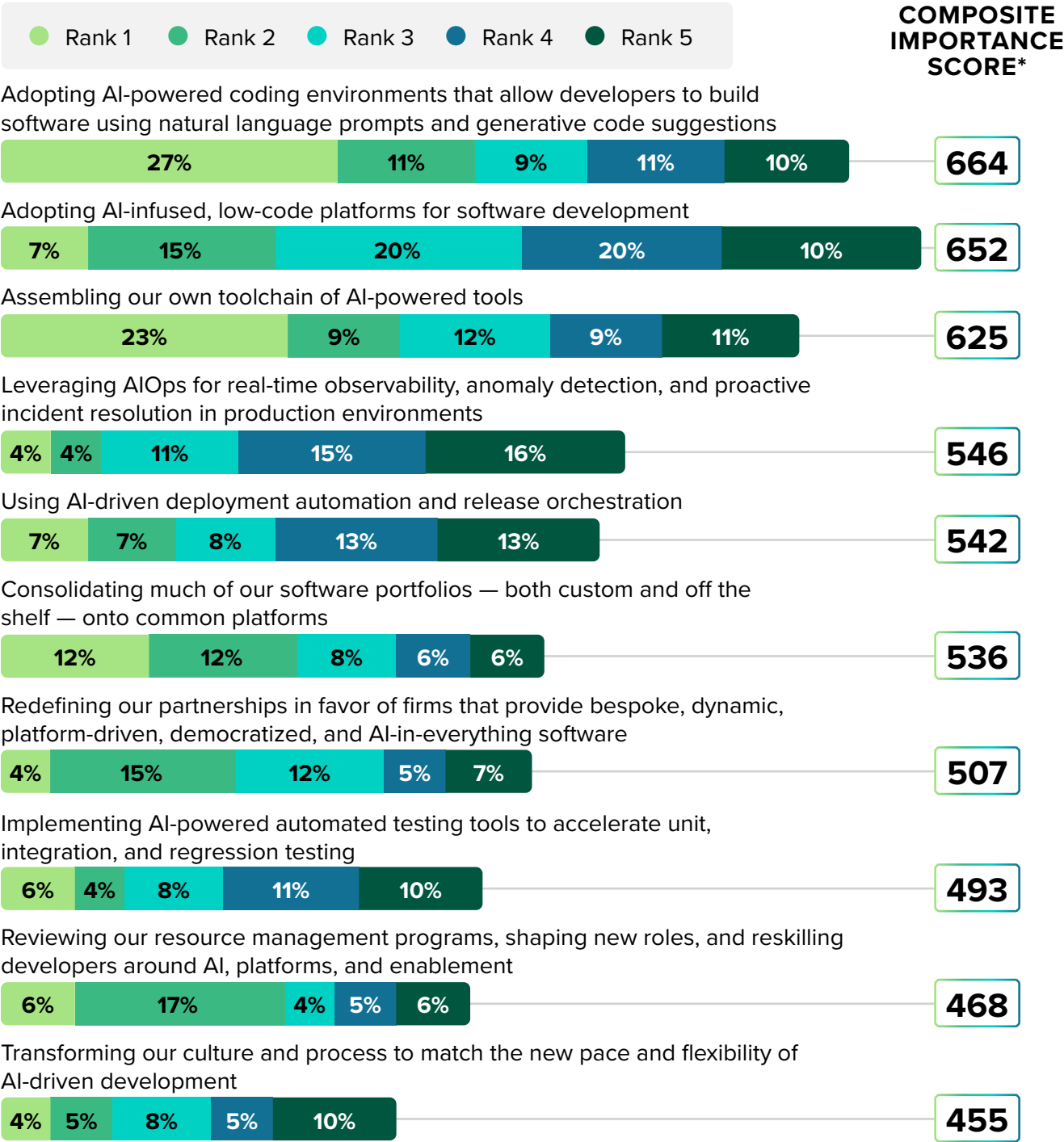
AI is transforming the software development landscape faster than previous waves of innovation, evolving from small, simple code generation experiments into full-cycle agentic software creation. This change is not just technical; it also requires a strategic shift. Leaders must fundamentally reimagine their approach to software development, treating AI not as a supplemental tool but as a core strategic transformation across the entire software lifecycle. This includes rethinking software architecture, talent pipelines, and governance models.

Our research indicates that AI has gained significant momentum in SDLC, but its adoption reveals a critical imbalance. While firms that have integrated AI into their SDLC are experiencing benefits, these benefits are largely confined to technical and operational phases. Many organizations are adopting point solutions but are overlooking the structural changes required to unlock full end-to-end value. Notably, our findings show that:

- **Firms embrace AI-powered development tools first, leaving organizational transformation behind.** Leaders report that their organizations preferentially prioritize AI-powered coding environments and AI-infused low-code platforms — both of which simplify development and accelerate delivery (see Figure 4). Customization is also gaining traction, with assembling proprietary AI toolchains ranking third. Mid-tier adoption includes AIOps for real-time observability and AI-driven deployment automation, signaling growing interest in operation efficiency and proactive incident management. Conversely, practices tied to organizational change and governance rank lowest. Transforming culture and processes and reviewing resource management programs trail behind, indicating that while technical adoption is advancing, structural and cultural shifts remain slow. Similarly, AI-powered automated testing shows moderate uptake, suggesting testing automation is not yet a top priority compared to coding and deployment.

FIGURE 4

Top AI-Powered Software Development Tools And Practices



Note: Showing top five ranks

*Note: Scoring formula = rank %*points*100; Rank 1 is 10 points, Rank 2 is 9 points, Rank 3 is 8 points, Rank 4 is 7 points, Rank 5 is 6 points, Rank 6 is 5 points, Rank 7 is 4 points, Rank 8 is 3 points, Rank 9 is 2 points, and Rank 10 is 1 point

Base: 405 global software development leaders whose organizations either fully or partially adopted AI across SDLC

Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

- **AI delivers local gains, but systemic impact remains limited.** The uneven adoption of AI across the SDLC benefits more technical and operational phases than strategic and creative stages (see Figure 5). Nearly half of respondents report significant benefits in monitoring and continuous improvement and testing and quality assurance phases where AI excels at anomaly detection, predictive failure analysis, and quality enhancement. Governance and planning and development phases follow at 40% indicating growing traction in decision-making and coding efficiency. In contrast, deployment (31%) and design (23%) remain less automated, reflecting their reliance on creativity and manual oversight.
- **AI-powered SD tools are driving tangible benefits with regional nuances shaping impact.** When asked to rank the top three tangible benefits their organizations are experiencing from the adoption of AI across their SDLC, 41% of respondents indicated improved data-driven decision-making as the most recognized gain. Teams increasingly leverage AI analytics to guide prioritization, reducing guesswork and accelerating planning cycles. Close behind are enhanced cross-functional collaboration (39%) and developer productivity improvements (38%), alongside improved software quality (38%) and continuous delivery and real-time feedback (38%). Respondents from the US are seeing greater benefits in strategic insights and team alignment through AI-powered tools (see Figure 6). UK leaders prize AI for better collaboration and higher code reliability. Italian and French respondents report greater impact on process optimization,

“We experienced three major benefits from using AI in SDLC: The first was faster release time, which means the time from idea to first prototype has been reduced to just hours instead of weeks. Second was increased innovation capacity, which includes rapid prototyping and faster go-to-market strategies. The third is lower costs and higher software quality. AI significantly enhances differentiation and revenue generation.”

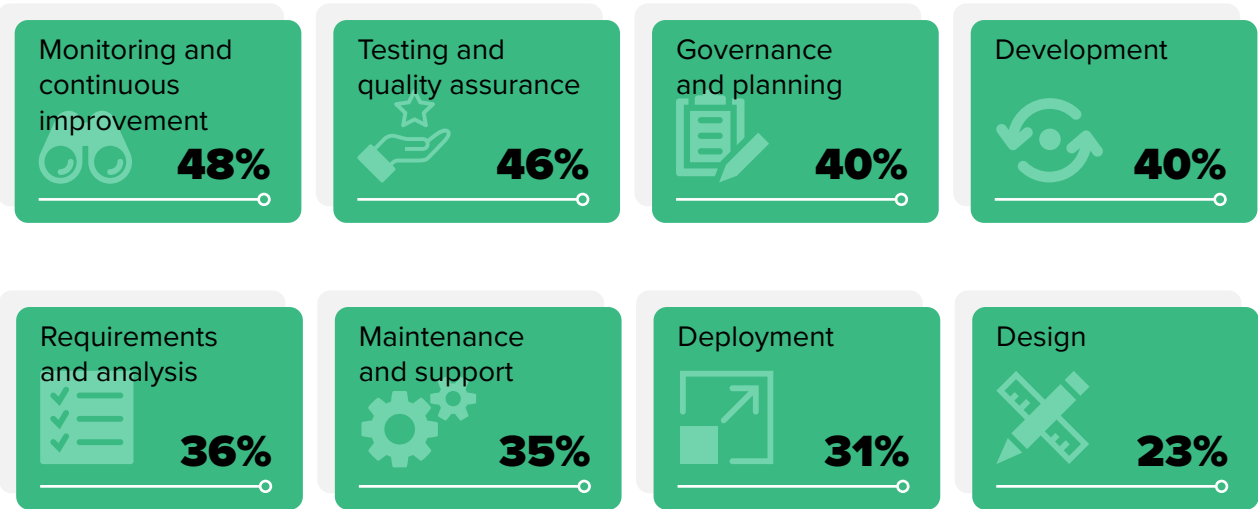
MANAGING DIRECTOR, MANUFACTURING/AUTOMOTIVE, UK

with the latest also reporting better adherence to regulation. German respondents highlight improved cost efficiency and scalability as the top benefit.

- **AI in SDLC is driving localized gains that track each industry’s risk profile and performance goals.** Data shows that each industry’s priorities reflect its operational realities. Highly regulated industries, such as healthcare and financial services, show benefits concentrated in decisioning, quality, and governed delivery rather than raw speed (see Figure 7). This suggests these sectors use AI to reduce risk and raise reliability, focusing on compliance and quality over speed scalability and productivity. In contrast, sectors such as transportation and logistics and telecommunications/media show higher gains in productivity, orchestration, and economic efficiency, prioritizing execution velocity over heavy governance.

FIGURE 5

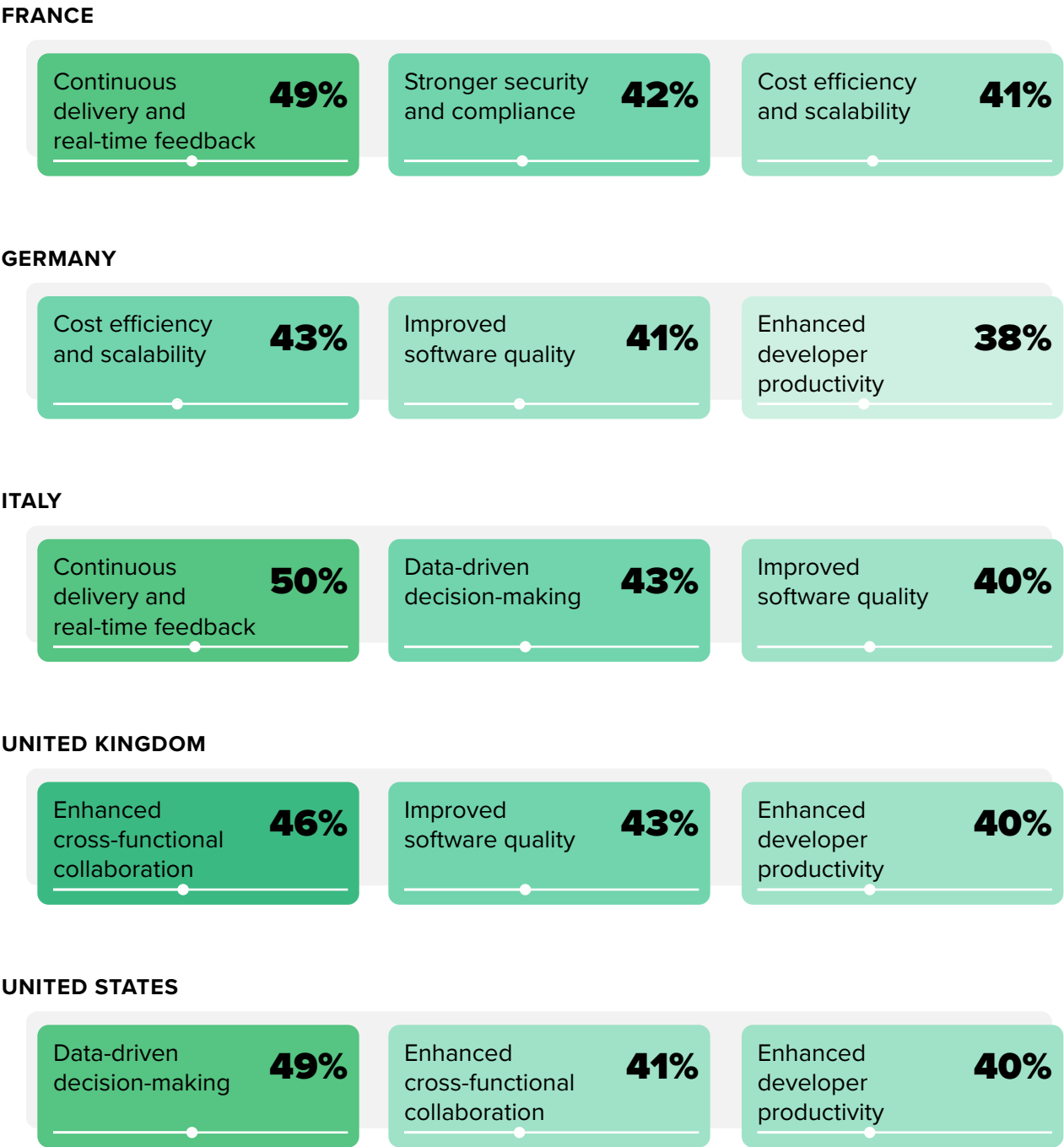
“Based on your experience with the usage of AI-powered tools, which phases of the software development lifecycle benefit the most from automation?”



Base: 405 global software development leaders whose organizations either fully or partially adopted AI across SDLC
Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

FIGURE 6

Benefits From The Usage Of AI-Powered Software Development Tools

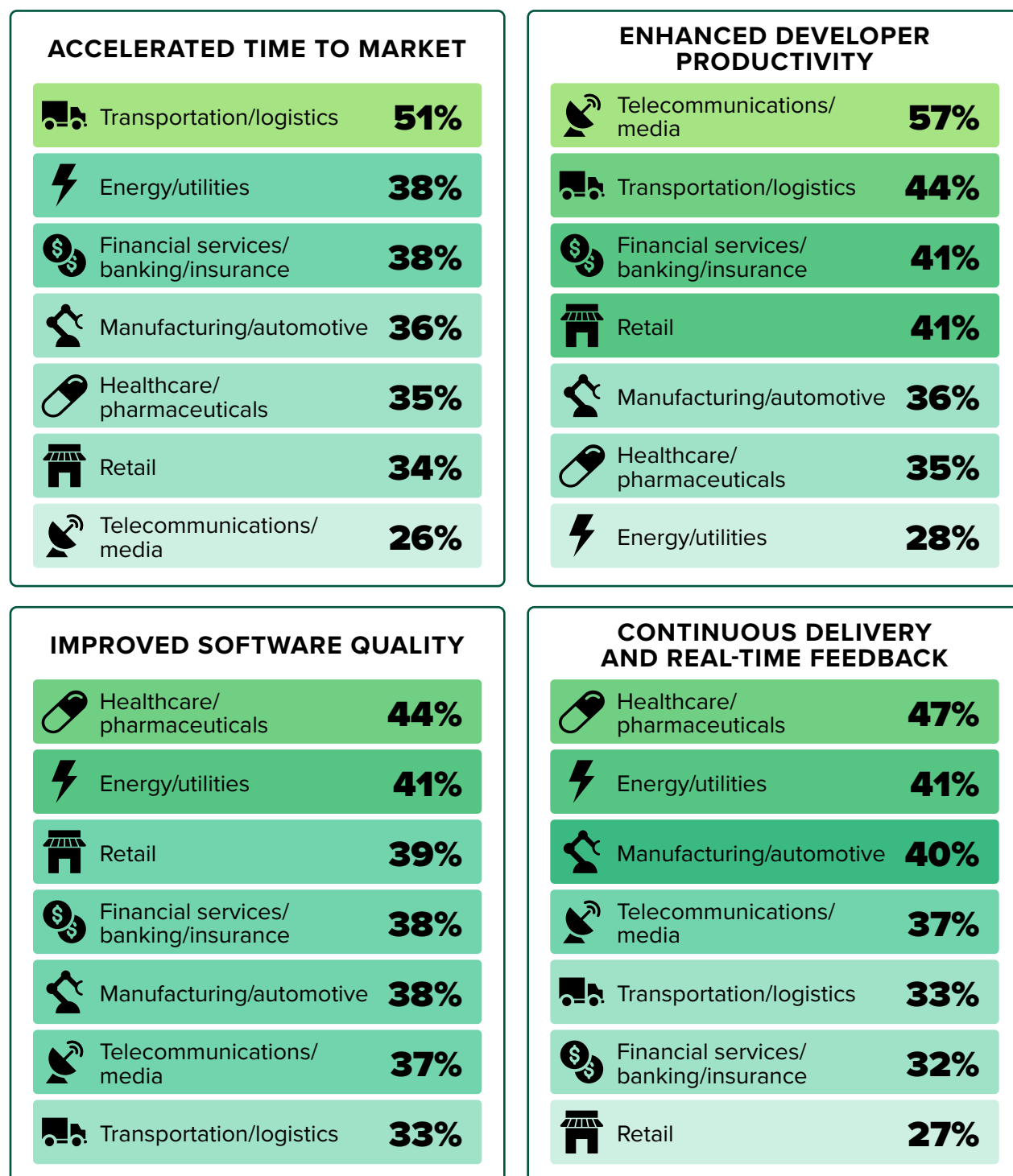


Base: 100 to 405 global software development leaders whose organizations either fully or partially adopted AI across SDLC; base sizes vary by country

Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

FIGURE 7

Benefits From The Usage Of AI-Powered Software Development Tools By Industry

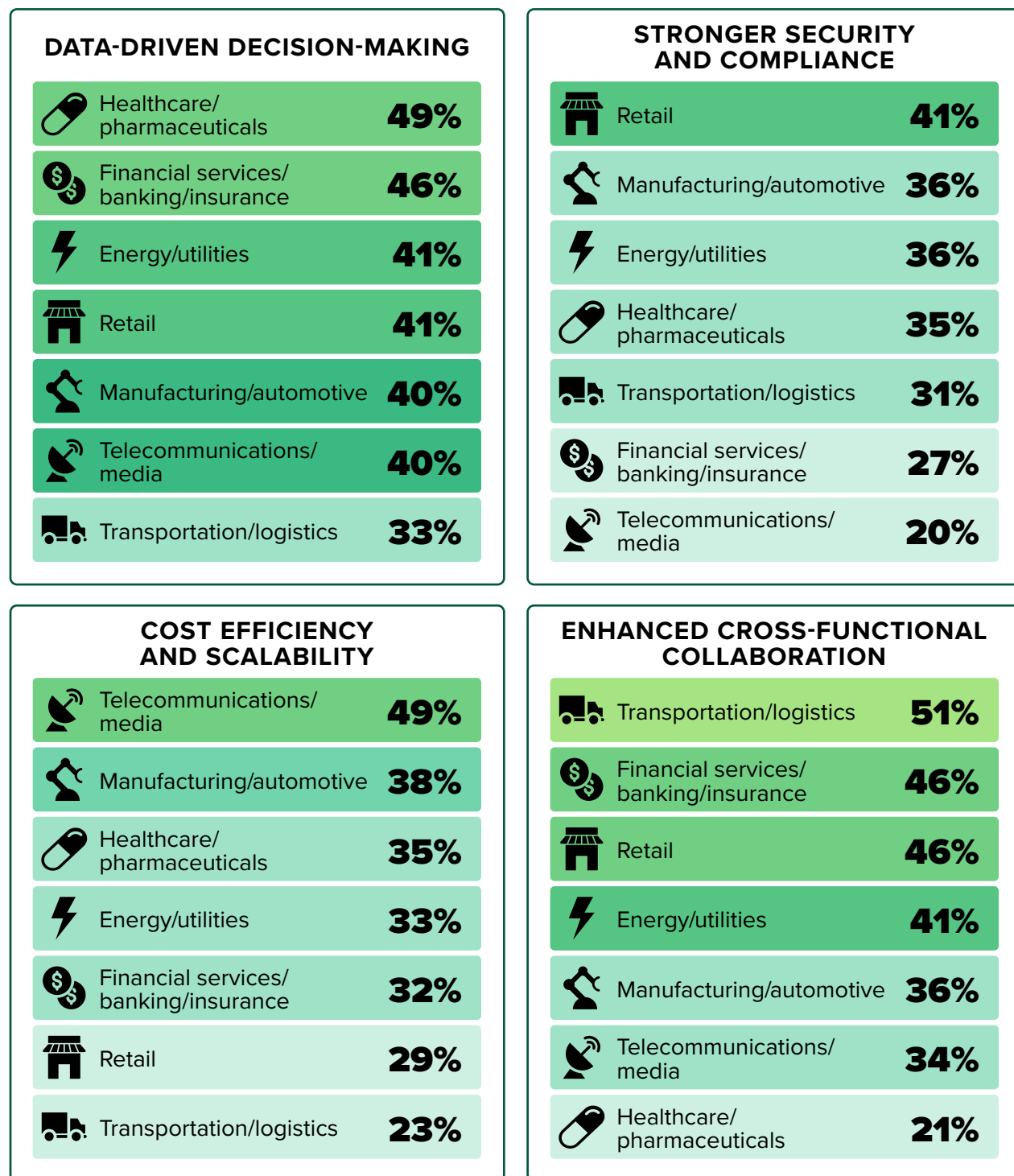


Base: 48 to 169 global software development leaders; base sizes vary by industry

Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

FIGURE 7 (CONT.)

Benefits From The Usage Of AI-Powered Software Development Tools By Industry



Base: 48 to 169 global software development leaders; base sizes vary by industry

Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

Co-Sourcing Becomes The Norm: Collaboration Over Full Delegation In SDLC

Global organizations are rebalancing how they source SDLC capabilities, moving away from one-dimensional lift-and-shift outsourcing toward collaborative, hybrid models that preserve control while still tapping external scale. Our study found that across five countries and eight industries, firms are significantly more inclined toward outsourcing models for software development (see Figure 8). However, 71% of respondents from organizations that predominantly outsource report that they outsource between 21% and 40% of their software development needs. Conversely, they co-source between 41% and 60% of their SDLC, which means that capabilities are developed collaboratively with external partners rather than being completely delegated. Only 5% of leaders outsource more than 60% of their software development capabilities.

Italy shows a strong preference for nearshore outsourcing (43%), indicating a strategic focus on proximity. The UK shows a strong preference for insourcing (39%), indicating a focus on internal control and possibly higher maturity in internal SDLC capabilities. Industry cuts show similarly nuanced choices: nearshore outsourcing dominates in regulated and complex industries such as transportation (48%), healthcare (44%), and government (40%), likely due to compliance, data sovereignty, and collaboration needs. Financial services and manufacturing/automotive industries report the greatest share of insourcing, reflecting a need for tighter control, security, and integration with legacy systems. Telecommunication/media (48%) shows a strong preference for offshore outsourcing, likely driven by cost efficiency and scalability. We also found that:

- **Traditional offshoring is under pressure from compliance, quality, and agility risks.** Firms that have turned to traditional offshoring models to scale operations and reduce costs are grappling with the hidden costs of it — where regulatory compliance, code quality, and operational efficiency are often compromised in pursuit of scale and cost savings

(see Figure 9). Most respondents believe that offshoring complicates adherence to regulations such as GDPR and HIPAA and makes it harder to implement agile methodologies such as scrum and DevOps. Technical consistency suffers, too. Teams working across borders often follow different coding standards and testing practices, leading to integration issues and the increased risk of bugs, rework, and technical debt. Beyond technical issues, respondents consistently report that nonoverlapping time zones and cultural differences hinder effective communication and collaboration. These barriers slow down feedback loops and extend issue resolution.

- **Nearshoring/onshoring does not guarantee that closer is always better.** As firms explore alternatives to traditional offshoring, many turn to nearshoring/onshoring models, expecting smoother collaboration and better alignment. However, our data reveals that these models are not without their own limitations (see Figure 10). Despite geographical closeness, nearshoring still suffers from delays in communication and feedback, echoing some of the same challenges seen in offshoring. Vendor lock-in also emerges, with fewer provider options leading to reduced flexibility. Most respondents also express concerns over the limited talent pool available in near/onshore markets, higher labor and operational costs, and a lack of the global perspective and innovation typically found in international teams. Finally, legal and compliance issues persist even in nearshore setups, suggesting that regulatory complexity is not solely tied to distance but also to jurisdictional nuances and vendor maturity.
- **Insourcing brings control with trade-offs in speed, scale, and specialized skills.** In an era of increasingly complex software development demands, firms may reconsider insourcing — bringing work in-house rather than relying on external vendors. While insourcing may offer greater control and alignment with internal goals, data reveals a consistent pattern of operational strain and strategic limitations (see Figure 11). Most respondents (84%) agree that insourcing leads to higher labor and operational costs compared to outsourcing models, making it a premium model that may not scale efficiently. This is compounded by

the fact that insourcing makes it harder to scale teams quickly, with the same percentage (84%) citing agility as a major challenge. The pressure on internal teams is evident: 84% report that resources are stretched across multiple projects, leading to bottlenecks and reduced focus. This strain contributes to slower time to market, especially for large or complex initiatives where speed and flexibility are critical. Innovation also suffers. Eighty-one percent of respondents say insourcing limits access to specialized skills in emerging technologies, which can hinder competitiveness in fast-evolving markets. Additionally, the lack of external input leads to internal biases and limited fresh perspectives, with another 81% agreeing that insourcing can create a closed-loop mindset.

“Previously, it didn’t make sense to invest in internal software development because the structure was too heavily oriented toward external resources. Now, with agentic AI, it’s possible to envision a hybrid team of humans and agents. A team of 50 to 70 people enhanced by agents can achieve a productivity equivalent to 150 to 200 people. This makes internal investment in coding both realistic and sustainable, even for companies that are not tech focused.”

IT MANAGER, ENERGY/UTILITIES, ITALY

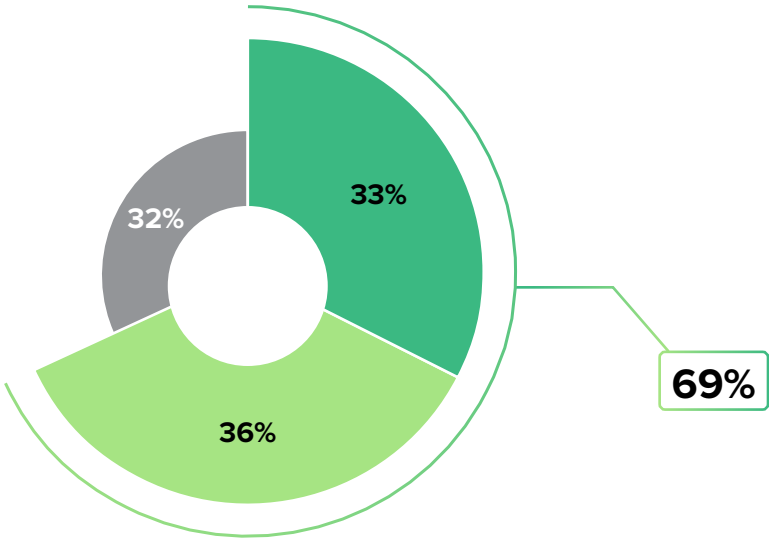
- **Co-sourcing gets momentum but comes at a cost — complexity, conflicts, and control risks rise.** As firms seek more collaborative and flexible sourcing models, co-sourcing has emerged as a hybrid approach, blending internal teams with external partners. However, the data reveals that this model introduces significant operational strategies and strategic challenges (see Figure 12). Most respondents agree that co-sourcing increases the risk of conflicts over priorities and ownership, suggesting that shared responsibilities can blur decision-making lines and create friction in governance. This model also brings management complexity, with 79% of respondents citing high coordination overhead. This reflects

the difficulty of aligning multiple stakeholders across organizational boundaries. Cost control is also a major pain point. While co-sourcing is often seen as a way to optimize resources, our data indicates that hidden costs and inefficiencies are common. Further, respondents note not only inconsistent adherence to internal standards especially in continental Europe — but also slower decision-making and unclear accountability between vendors and internal teams with shared responsibilities delaying execution.

FIGURE 8

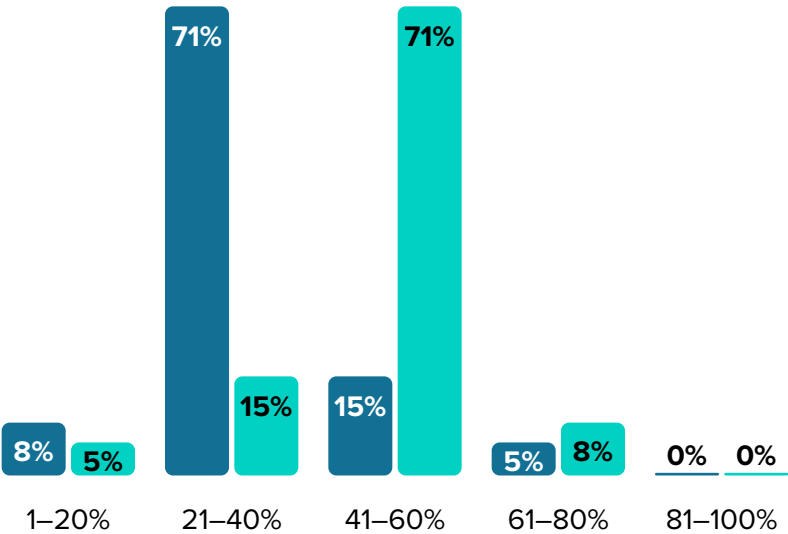
“Which of the following best describes the prevalent sourcing model for software development your organization is currently using?”

- Insourcing
- Nearshore outsourcing
- Offshore outsourcing



“Approximately what percentage of your software development is outsourced to external vendors versus co-sourced (joint teams with vendors and internal staff)?”*

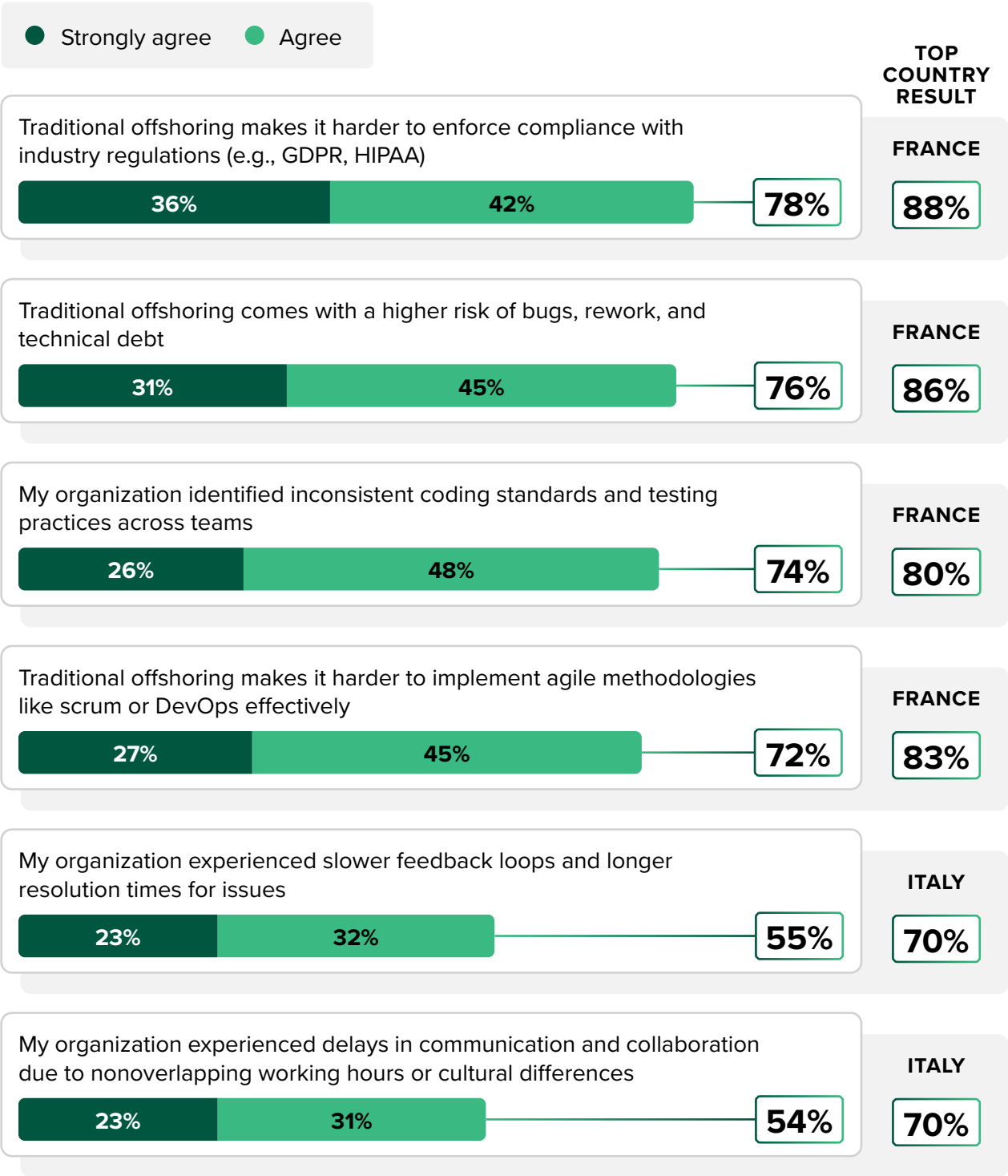
- Outsourcing
- Co-sourcing



Note: Percentages may not total 100 due to rounding.
Base: 536 global software development leaders
*Base: 367 global software development leaders with outsourcing as prevalent sourcing model for software development
Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

FIGURE 9

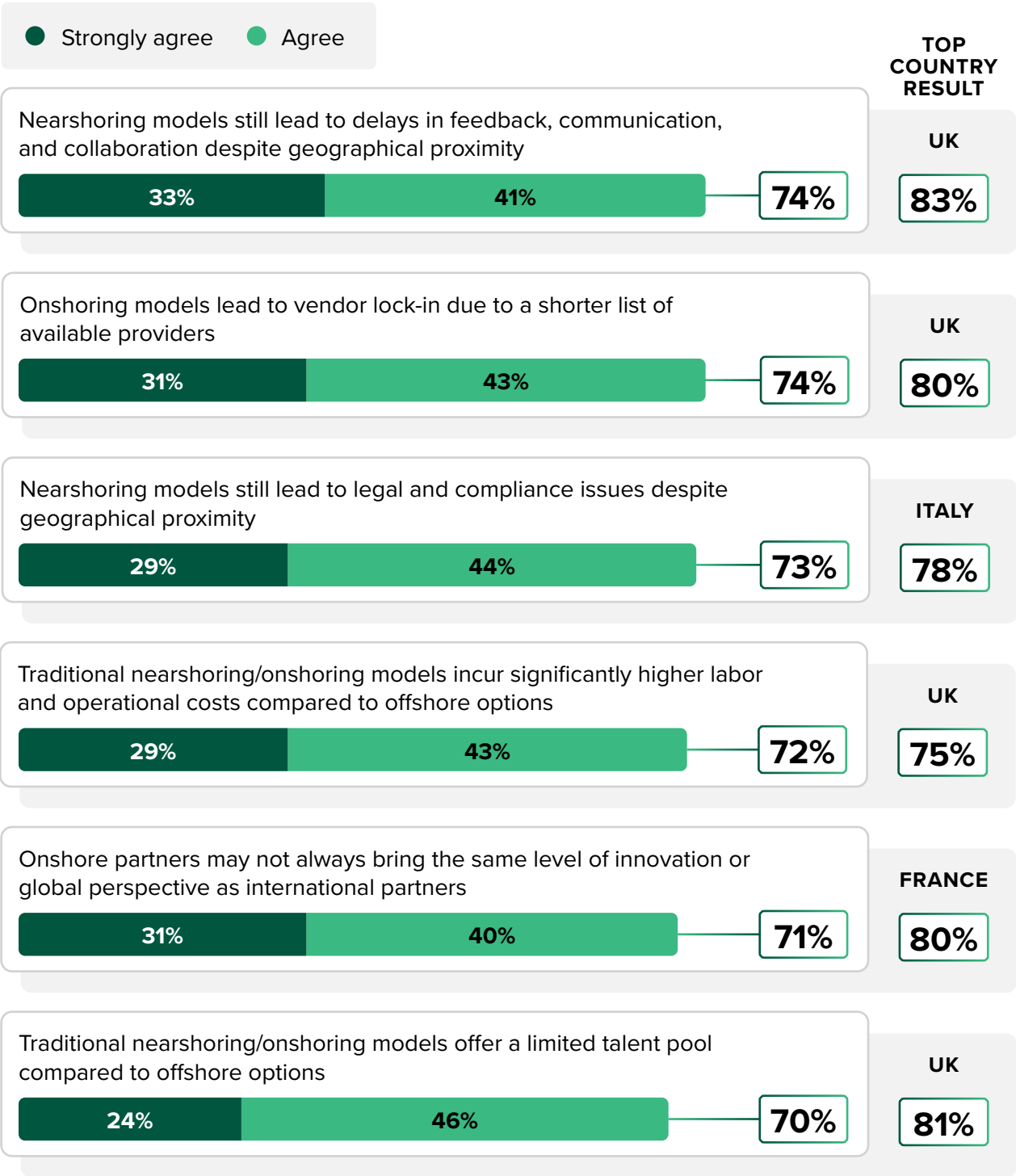
Expected Offshore Outsourcing Outcomes



Base: 176 global software development leaders with offshore outsourcing as prevalent sourcing model for software development
Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

FIGURE 10

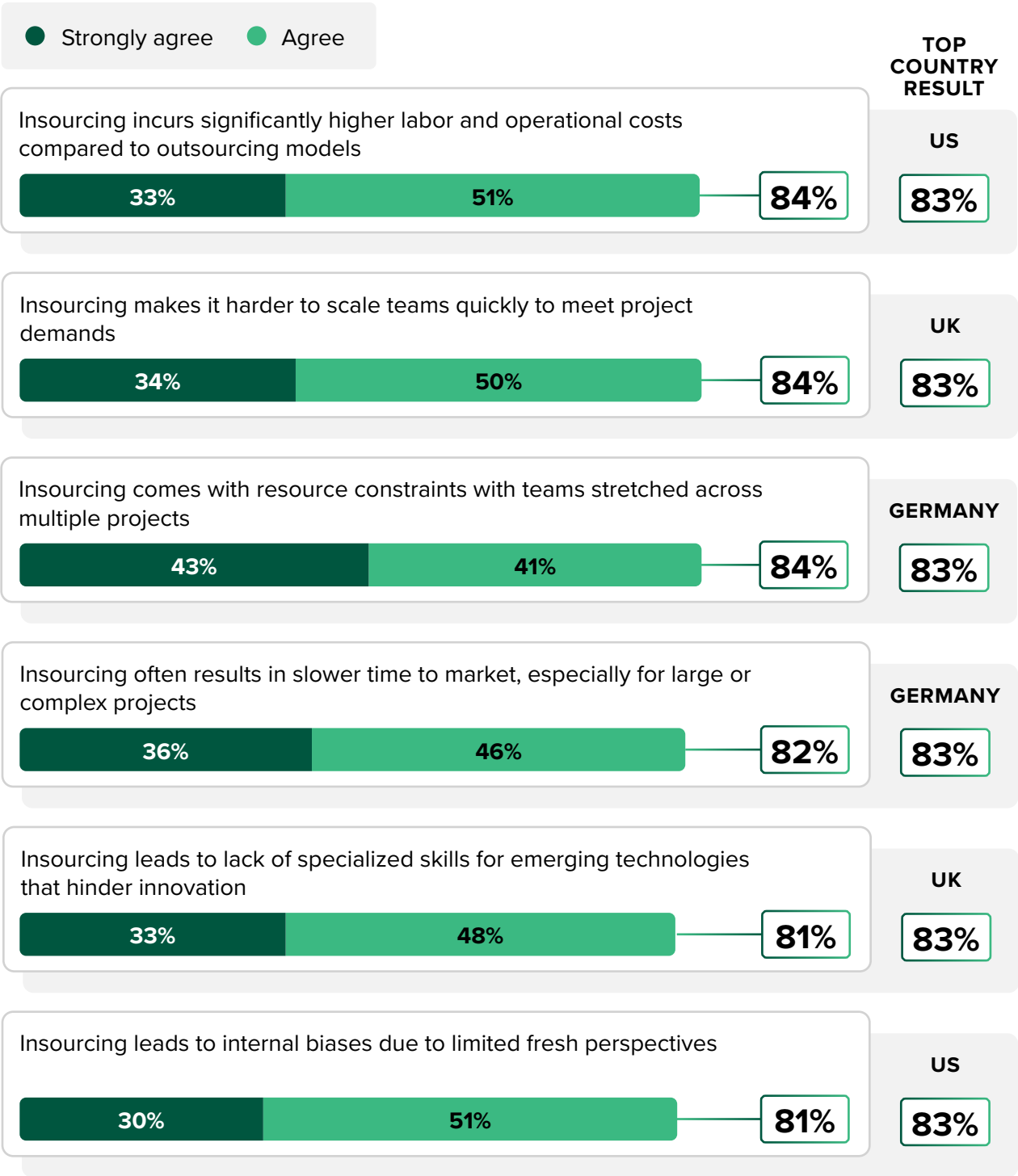
Expected Nearshore/Onshore Outsourcing Outcomes



Base: 196 global software development leaders with nearshore outsourcing as prevalent sourcing model for software development
Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

FIGURE 11

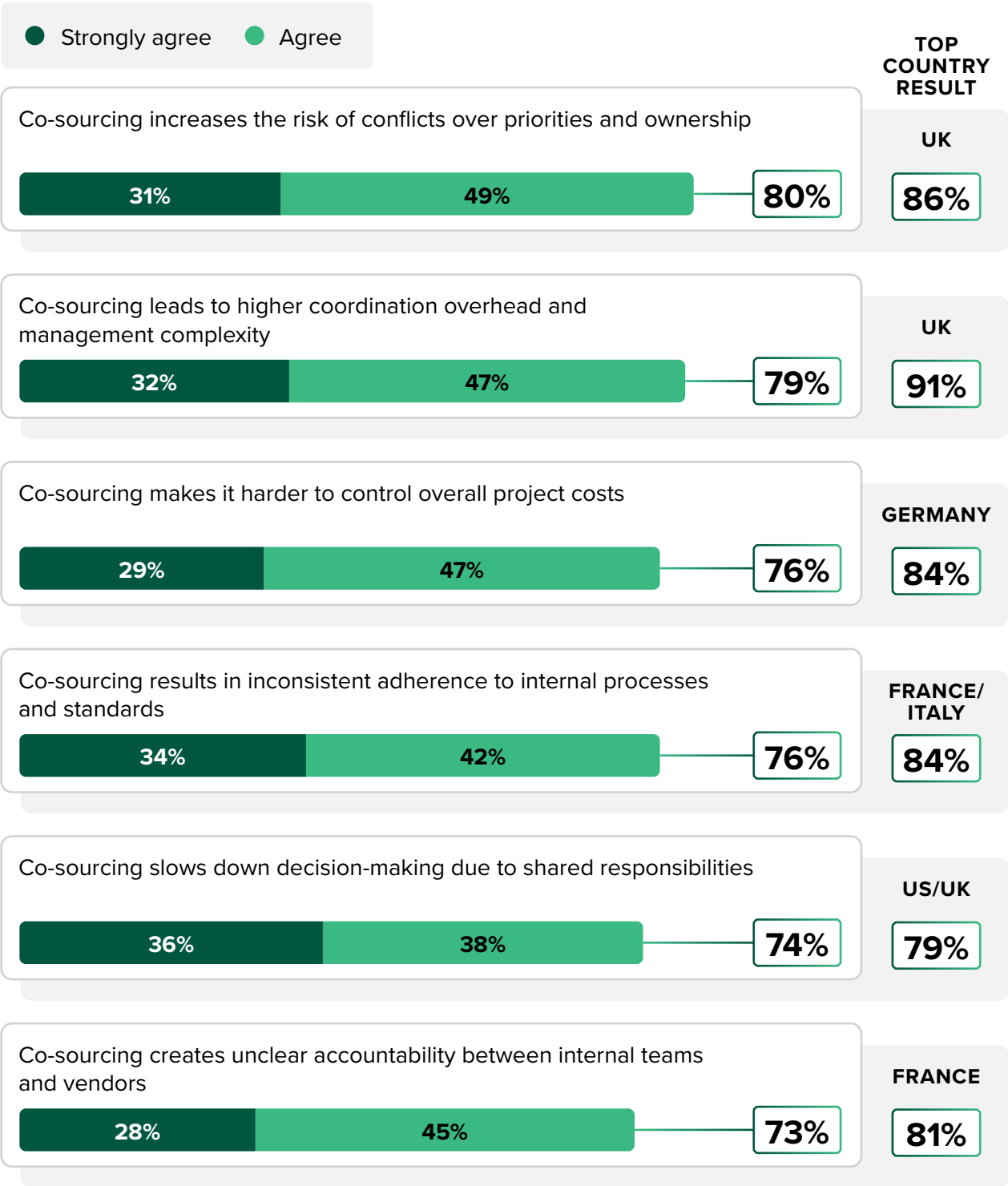
Expected Insourcing Outcomes



Base: 169 global software development leaders with insourcing as prevalent sourcing model for software development
Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

FIGURE 12

Expected Co-Sourcing Outcomes



Base: 293 global software development leaders with co-sourcing as prevalent sourcing model for software development
Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

The Agentic Shift: Human-AI Collaboration And Orchestrated SDLC

Agentic AI is poised to shift software delivery from tool-level assistance to end-to-end orchestration, recasting the SDLC as a system of autonomous, data-driven workflows that collaborate with human teams rather than replace them.

Roughly 80% of surveyed software development leaders expect to increase budgets in the next 12 to 24 months. They expect agentic capabilities to deliver either critical or high impact, with monitoring and feedback standing out as the highest-value domain (an estimated 70% rate anomaly detection and user-behavior analysis as critical/high) (see Figure 13). In testing and QA, nearly two-thirds expect predictive defect detection and self-healing suites to compress resolution times and raise reliability, while teams anticipate intelligent provisioning, CI/CD optimization, and autonomous rollback to usher in autonomous DevOps. Early-phase work will modernize, too: Requirements automation, market analysis, and context-aware architecture synthesis are expected to accelerate backlog creation and design decisions without sacrificing governance. In asking software development leaders about their perception of agentic AI, we found that:

- **Agentic AI is seen as a competitive necessity, driving workflow redesigning and human-AI collaboration.** Respondents overwhelmingly believe that agentic AI will become a competitive necessity and act as a collaborative partner to human developers, with over 75% expressing agreement (see Figure 14). There is strong expectation in agentic AI's role in workflow redesign and governance transformation, signaling understanding that firms will need organizational and structural change to reap the benefits. Realistically, firms are not seeing the full automation of SDLC any time near and are uncertain as to whether it will entail reducing human involvement (neutral sentiments and disagreement rise up to 35% for the latter two, reflecting cultural and ethical concerns). Overall, sentiment suggests a future of human-AI collaboration rather than replacement, with strategic adoption focused on augmentation and efficiency.

“If companies do not incorporate the agentic paradigm into their industrial plans within the next year, it will be difficult for them to remain competitive in three to four years. Firms that adopt this approach will have a significant advantage, but it requires a major cultural shift. Continuing to operate with outdated models and processes is no longer sustainable.”

IT MANAGER, ENERGY/UTILITIES, ITALY

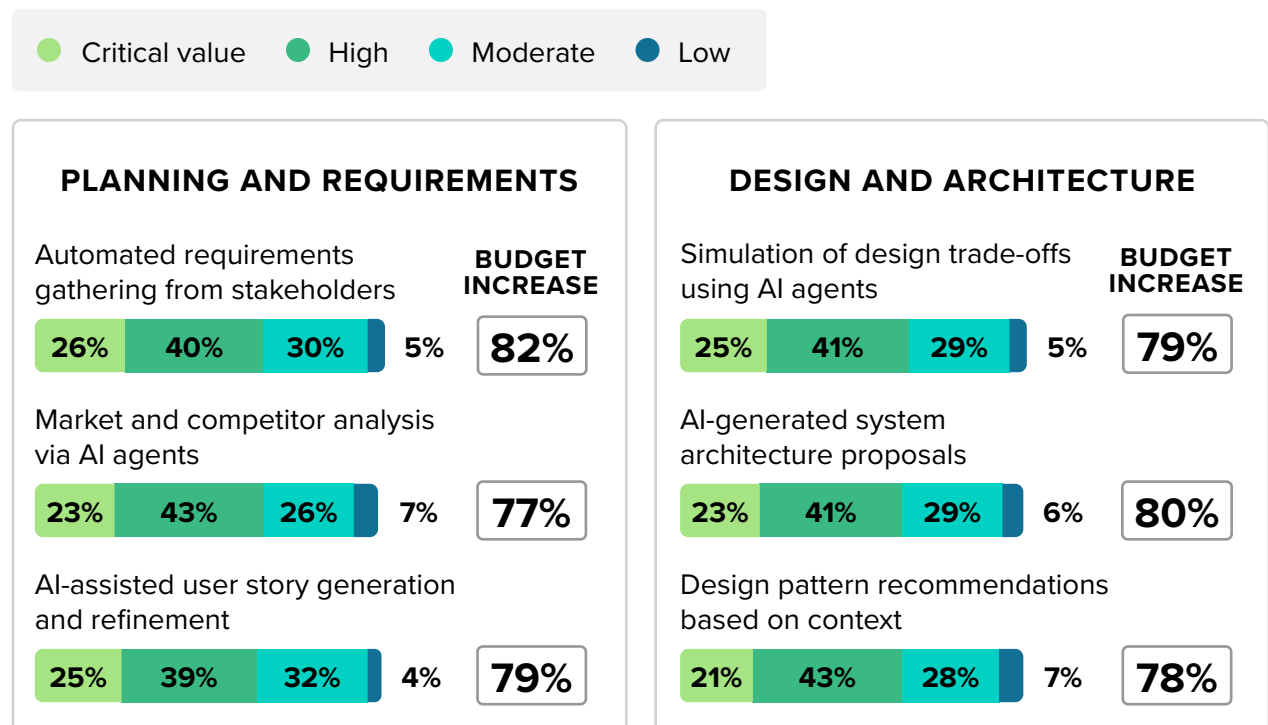
- **Leaders perceive agentic AI as a growth catalyst.** Most respondents agree that agentic AI will deliver strategic business benefits, with nearly 80% endorsing its role in making software development more resilient, innovative, and data driven (see Figure 15). Speed and scalability also rank high, with 77 to 78% expecting AI to accelerate SDLC and reduce costs. Negative sentiment is negligible, signaling strong confidence in AI as a transformative force for software development. The data suggests a clear mandate: AI adoption is not just a technical upgrade — it’s a business imperative for competitiveness and growth.
- **Agentic AI emerges as a competitive imperative, pushing firms toward intelligent automation-powered sourcing.** Data signals a clear shift toward agentic AI as a strategic alternative to outsourcing, with 93% of respondents’ firms likely or very likely to adopt it within two to three years (see Figure 16). This strong intent reflects confidence in AI’s ability to deliver business-critical benefits identified earlier — greater resilience, faster time to market, and improved decision-making. Adoption readiness is particularly high in France, followed by Germany, the US, and the UK, indicating broad geographic momentum. Industry-wise, financial services lead the charge, followed by energy/utilities and telecommunication/media, with healthcare and retail close behind, underscoring AI’s relevance across sectors where agility and cost efficiency matter most.

“In the initial stages, I expect that agentic AI will not significantly impact our reliance on outsourced resources. However, as confidence in the capabilities of AI agents grows over time and with various use cases, I anticipate that they will replace a substantial portion of our current outsourced resources. ... The advantage of using AI agents is that they will be entirely under our control, allowing us to overcome some of the challenges associated with having both internal and outsourced teams. Additionally, there is a cost factor to consider. Once the development costs of agentic AI are reduced and the price of AI agents decreases, it will become significantly cheaper to utilize AI agents instead of relying on outsourced resources.”

HEAD OF TECHNOLOGY GOVERNANCE, FINANCIAL SERVICES, UK

FIGURE 13

Value Agentic AI Is Expected To Deliver In SDLC And Budget Change Over The Next 12 To 24 Months



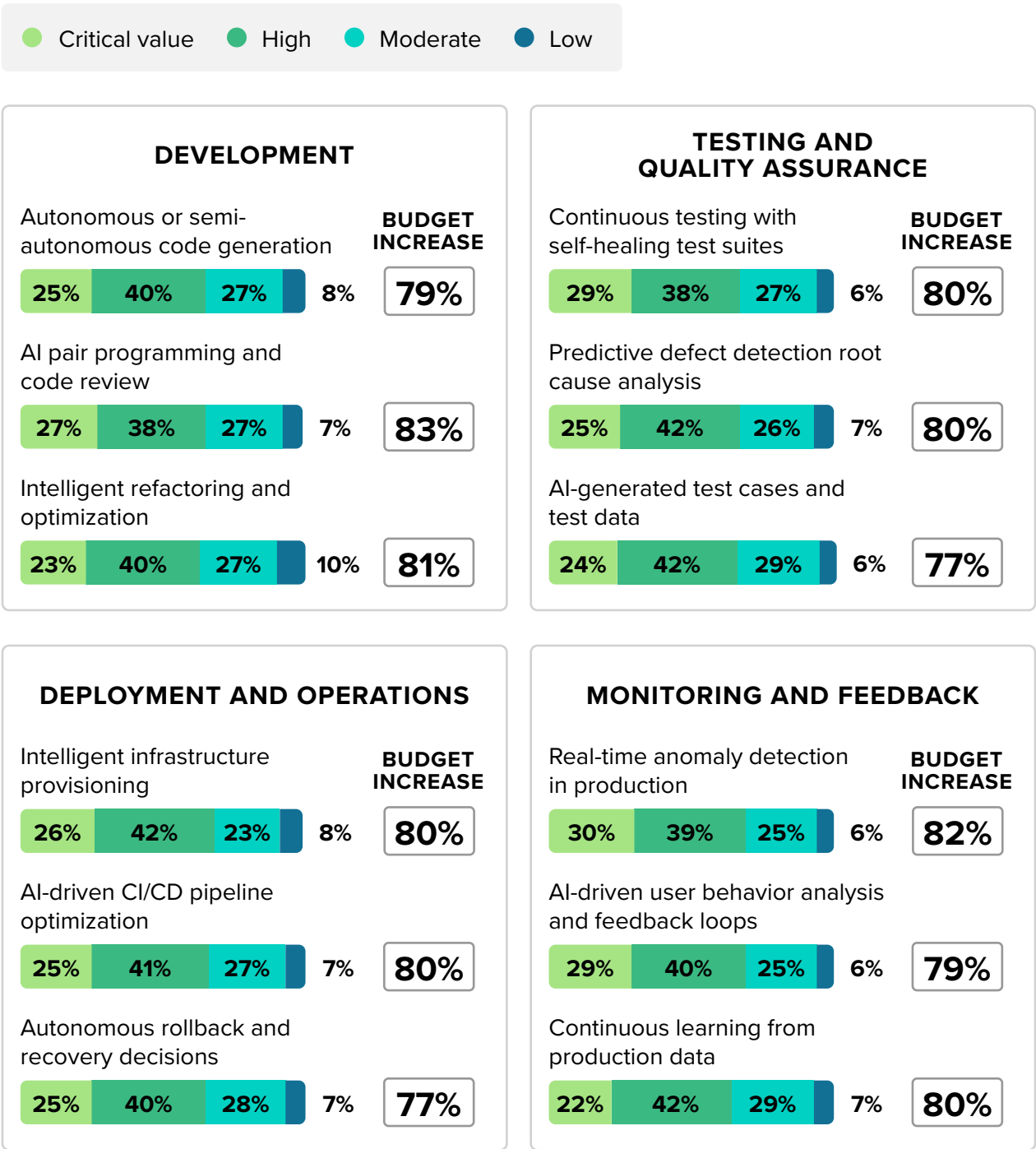
Note: Percentages may not total 100 due to rounding.

Base: 536 global software development leaders

Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

FIGURE 13 (CONT.)

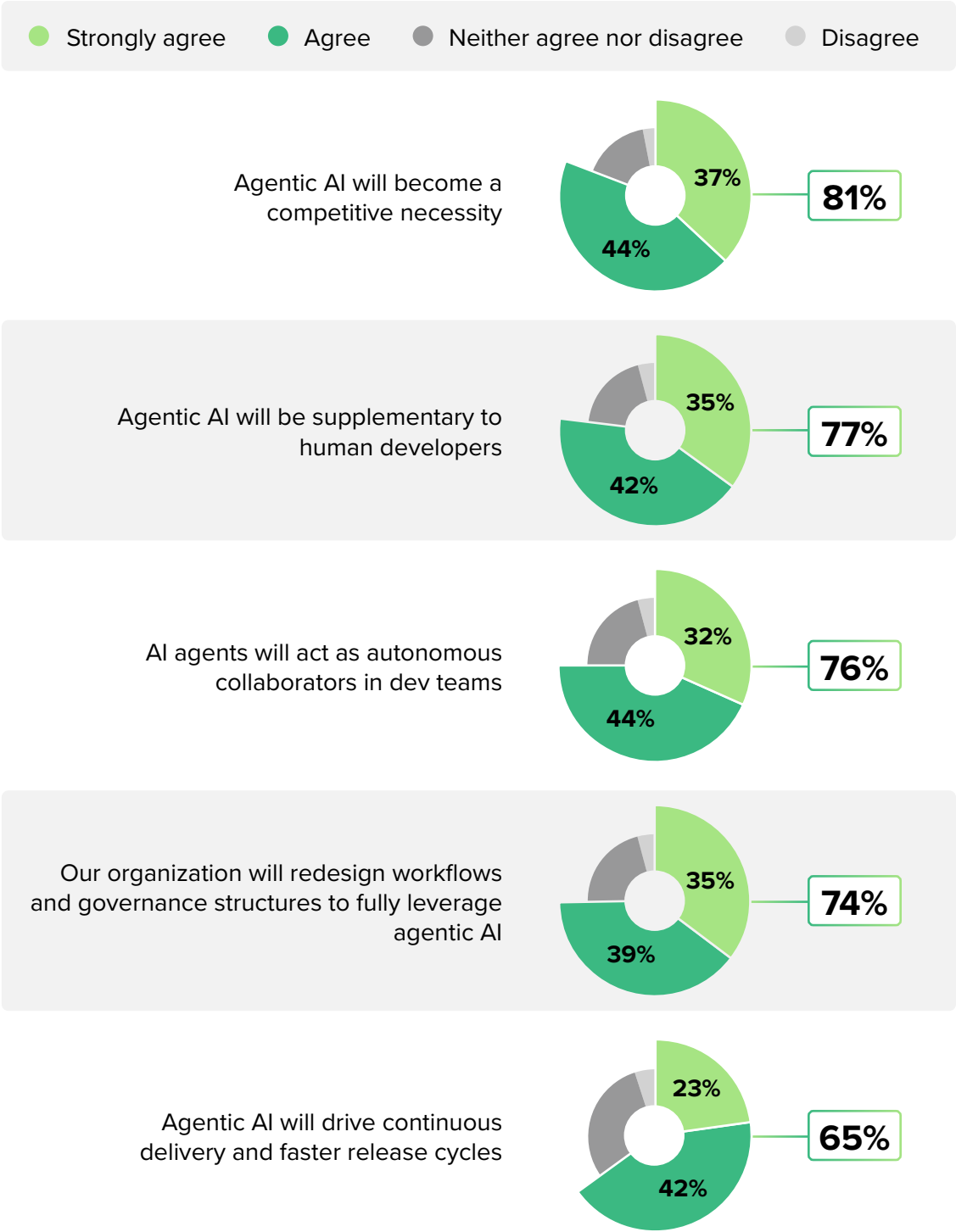
Value Agentic AI Is Expected To Deliver In SDLC
And Budget Change Over The Next 12 To 24 Months



Note: Percentages may not total 100 due to rounding.
Base: 536 global software development leaders
Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

FIGURE 14

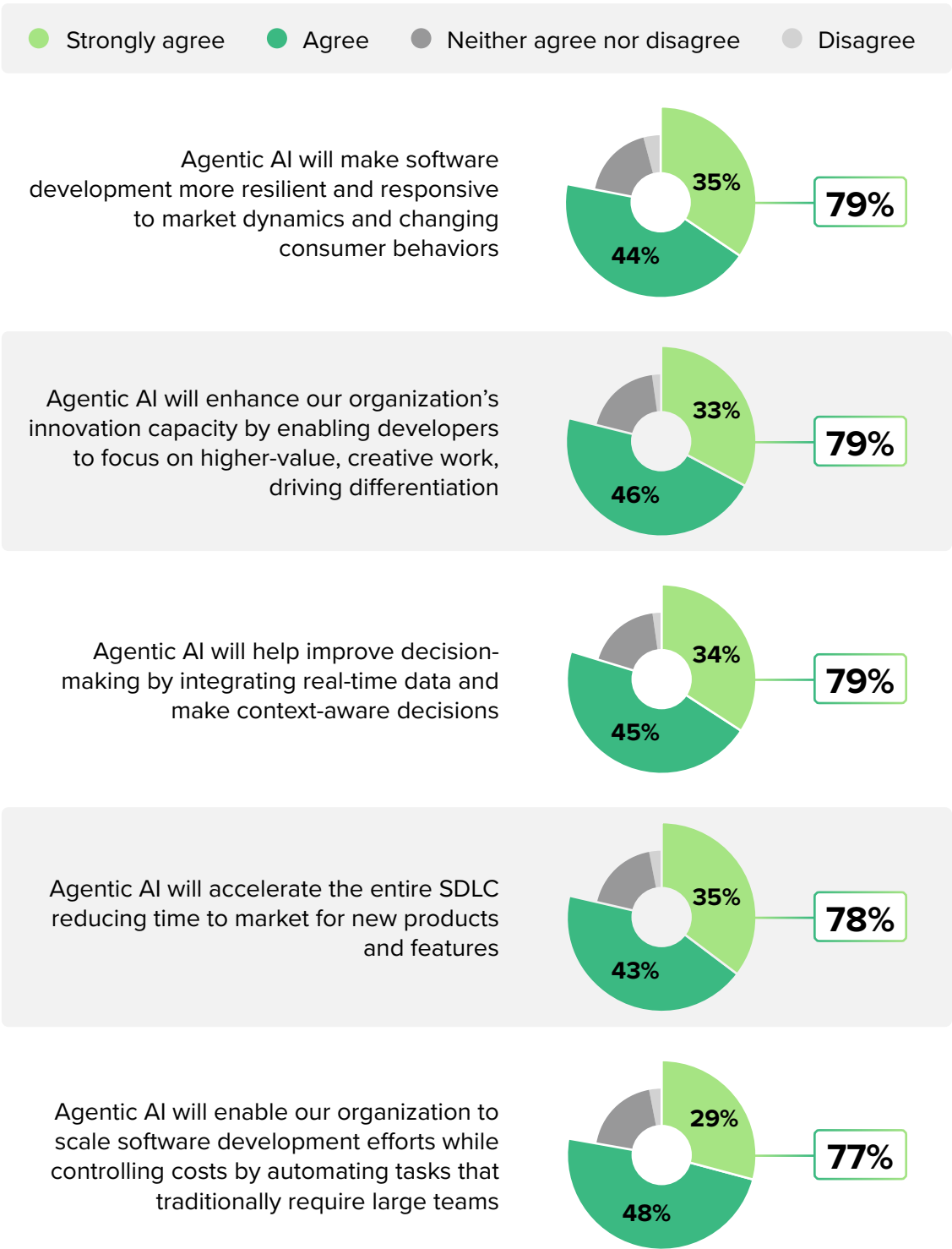
Top Expected Agentic AI Transformations In The Next Three To Five Years



Note: Showing top five responses
Base: 536 global software development leaders
Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

FIGURE 15

Business Benefits Of Using Agentic AI In Software Development

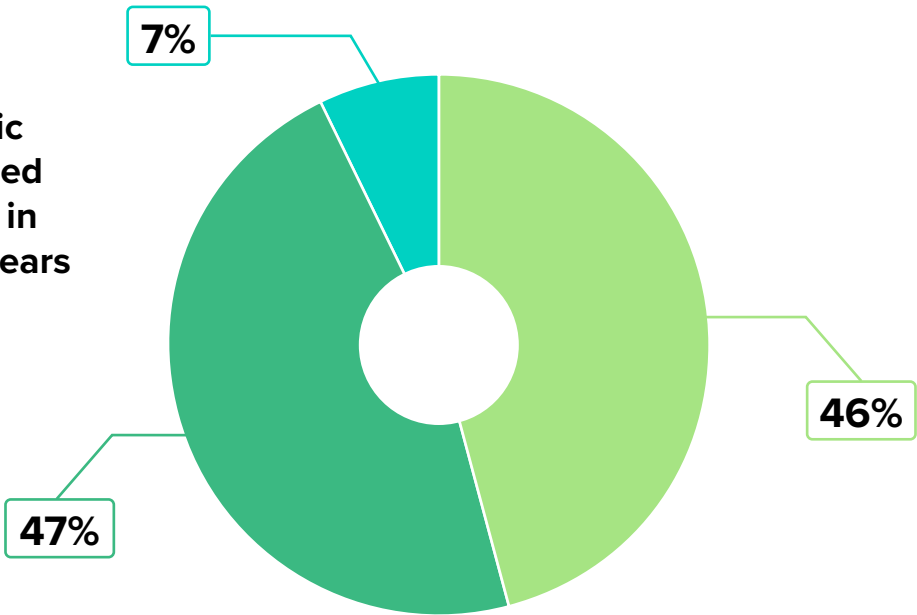


Base: 536 global software development leaders
Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

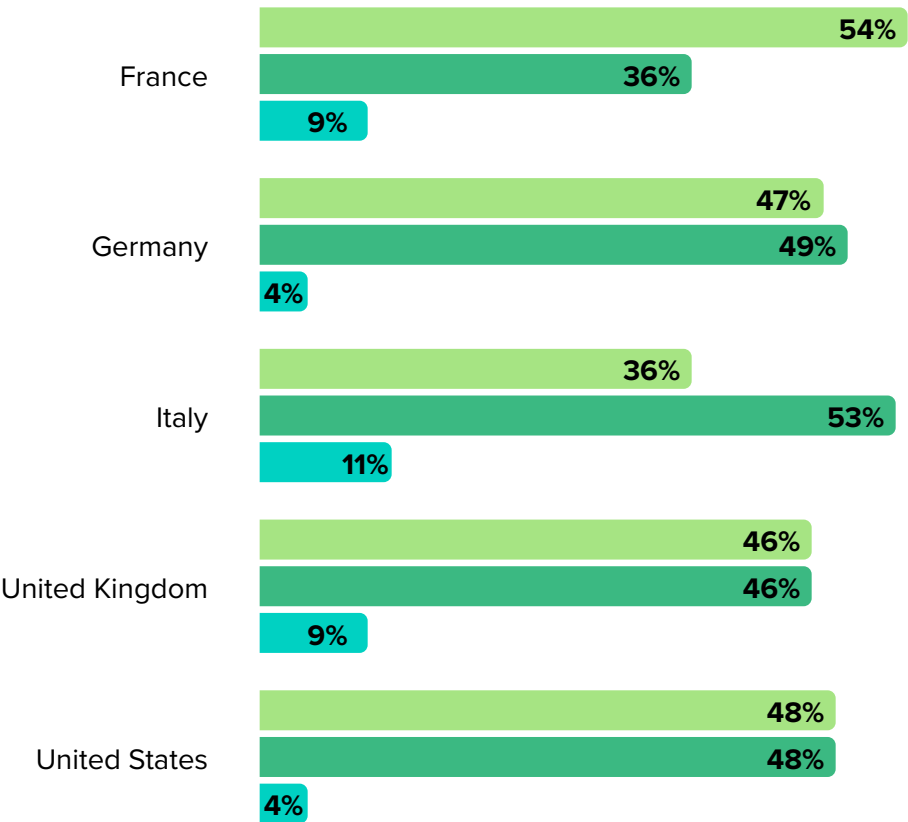
FIGURE 16

“How likely is your organization to adopt agentic AI as a strategic alternative to outsourced software development in the next two to three years to stay competitive?”

- Very likely
- Likely
- Neutral



By Country*



Base: 536 global software development leaders

*Base: 100 to 120 global software development leaders; base sizes vary by country

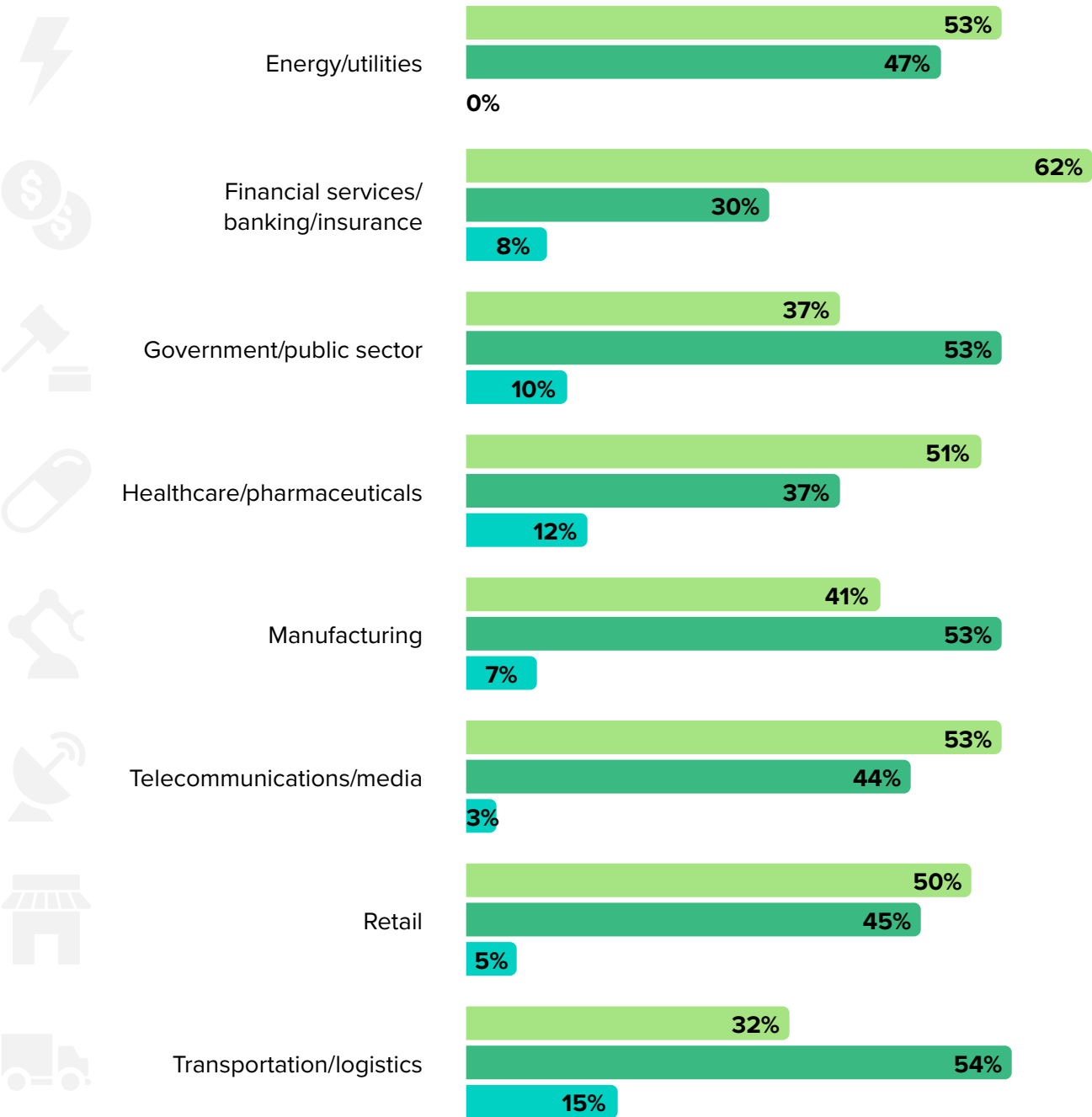
Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

FIGURE 16 (CONT.)

“How likely is your organization to adopt agentic AI as a strategic alternative to outsourced software development in the next two to three years to stay competitive?”

- Very likely
- Likely
- Neutral

By Industry



Base: 48 to 169 global software development leaders; base sizes vary by industry
Source: A commissioned study conducted by Forrester Consulting on behalf of Reply, September 2025

Key Recommendations

Forrester's in-depth survey of 536 software development senior leaders in France, Germany, Italy, the US, and the UK about their organization's current SDLC practices, challenges, opportunities, and expectations for the future yielded several important recommendations:

Embed AI at the core of the software development lifecycle. AI isn't just a productivity booster that can be treated as bolt-on or clever plug-in for isolated tasks — it is an architectural disruptor. Leaders need to adopt a 90-to-120-day roadmap to completely rebuild their SDLC with AI as a foundational layer that not only improves current processes but also fosters a culture of preparedness and continuous improvement.

Reorchestrate software delivery for AI-driven development. AI is reshaping the SDLC faster than most engineering operating models can adapt. Leaders need to move beyond standalone tool adoption and deliberately redesign software delivery operating models, roles, processes, and governance to reflect AI-augmented development. Only by reorchestrating how software work is organized, governed, and executed can firms fully realize AI's transformational potential.

Adopt strong AI governance principles and practices. Establish a governance framework that treats AI-generated code with the same scrutiny as human-written output, tracking authorship, applying Zero Trust principles, and enforcing compliance. Invest in skills and culture like AI literacy, dedicated training across the SDLC to encourage critical review of consolidated ways of working from senior stakeholders, and a mindset of continuous experimentation for new hires.

Review and update IT talent and shoring strategy. As AI improves, technical knowledge about how to best write code will not be as important as it used to be, while architectural and regulatory complexity will increase. This means that the core rationale for offshoring — cheaper human labor for coding/testing at similar quality — is weakening. Firms need to reprioritize their own developers' architectural and business domain knowledge and critically assess their shoring strategy balancing cost, skill, proximity, and risk.

Appendix A: Methodology

In this study, Forrester conducted an online survey of 536 global software development leaders at organizations in France, Germany, Italy, the United Kingdom, and the United States to evaluate the adoption of AI in the software development lifecycle. Survey participants included decision-makers in director, vice president or C-level executive roles. Questions provided to the participants asked about the level of adoption of AI in their organizations’ SDLC, challenges associated with their prevalent software development sourcing models, and their perception about the impact of agentic AI in the SDLC. Respondents were offered a small incentive as a thank-you for time spent on the survey. The study began in August 2025 and was completed in September 2025.

Appendix B: Demographics

COUNTRY	
France	19%
Germany	22%
Italy	19%
United Kingdom	19%
United States	22%

DEPARTMENT	
IT/engineering	73%
Digital experience/CX	15%
Data and analytics	13%

REVENUE (USD)	
\$100M to \$249M	4%
\$250M to \$499M	9%
\$500M to \$999M	24%
\$1B to \$5B	30%
>\$5B	32%

PREVALENT SOURCING MODEL IN SDLC	
Nearshore outsourcing	36%
Offshore outsourcing	33%
Insourcing	32%

ROLE	
C-level executive	11%
Vice president	44%
Director	45%

INDUSTRY	
Energy/utilities	9%
Financial services/insurance	11%
Government/public sector	7%
Healthcare/pharmaceuticals	10%
Manufacturing/automotive	32%
Telecommunications/media	9%
Transportation/logistics	11%
Retail	10%

IT DEPARTMENT	
Software development/engineering	62%
Infrastructure and operations	14%
Cybersecurity	8%
Executive leadership (e.g., CIO, CTO, CISO)	7%
Enterprise applications	7%

Note: Percentages may not total 100 due to rounding.

Appendix C: Supplemental Material

RELATED FORRESTER RESEARCH

[Predictions 2026: Software Development](#), Forrester Research, Inc., October 21, 2025

[AI Is Evolving The Development Workforce In Dramatic Ways](#), Forrester Research, Inc., October 29, 2025

[Create Your AI-Enhanced SDLC Transformation 90-Plus-Day Roadmap](#), Forrester Research, Inc., November 3, 2025

[Role Connection: Redefining Roles In The AI-Augmented SDLC](#), Forrester Research, Inc., November 25, 2025

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