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SAPinsider

RESEARCH REPORT

AI Adoption and Maturity in the SAP Ecosystem

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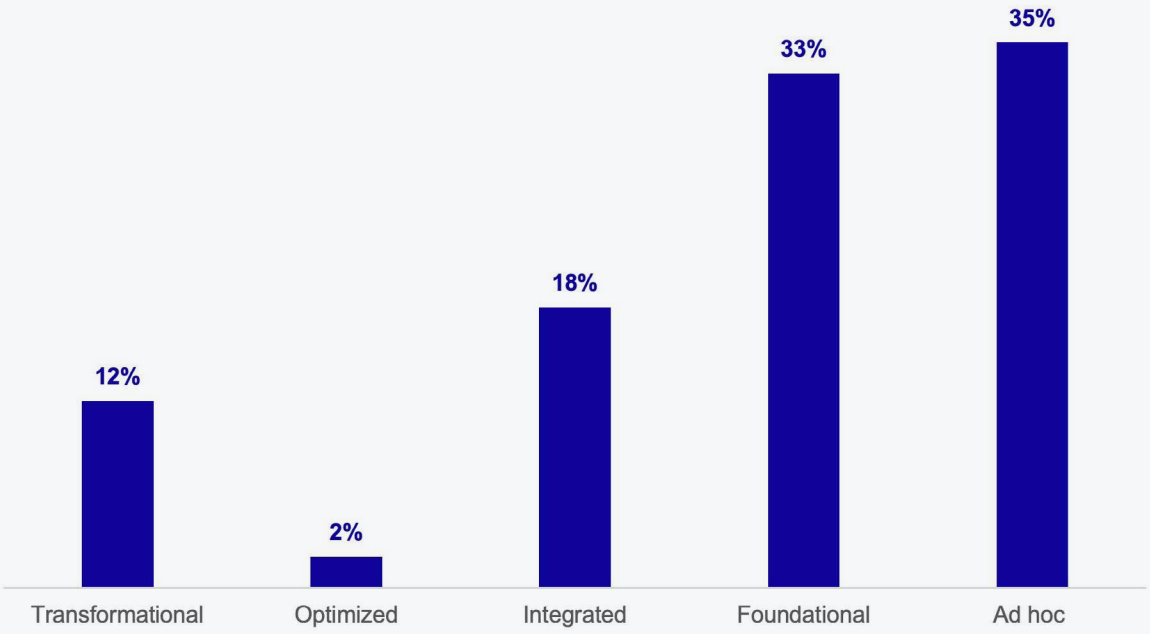
Executive Summary

AI adoption in the SAP ecosystem is broad, but the overall picture is one of early- to mid-stage maturity rather than fully scaled, transformational programs. Most organizations are experimenting with AI or operating at a foundational level, and while 91% report some AI use in their processes and most have at least basic governance in place, only a small minority have AI deeply embedded in end-to-end workflows or tightly aligned with business transformation goals.

In our SAPinsider research into AI adoption and maturity in the SAP ecosystem, most respondents describe their organizations as being in the early or middle of their AI journeys. Ad-hoc experimentation is still the dominant pattern: 35% say their AI strategy and capabilities are best described as ad hoc, and another 33% place themselves at a foundational stage, with a defined strategy but limited deployment. Only 18% report integrated AI that spans several processes, and just 14% indicate they are at an optimized or transformational stage where AI is scaled with monitoring and governance or is core to their business and operating model.

FIGURE 1

AI Strategies and Capabilities



The same story appears when looking at AI-enabled processes. Nearly half (47%) of respondents are using AI experimentally by testing or piloting it in select, often non-critical areas, while another quarter are supporting specific tasks with partial automation where humans remain central. Only 17% say they have embedded AI into core workflows across functions with integrated automation or autonomous and adaptive capabilities, even though 91% report at least some use of AI in processes. The result is broad but still relatively shallow AI usage.

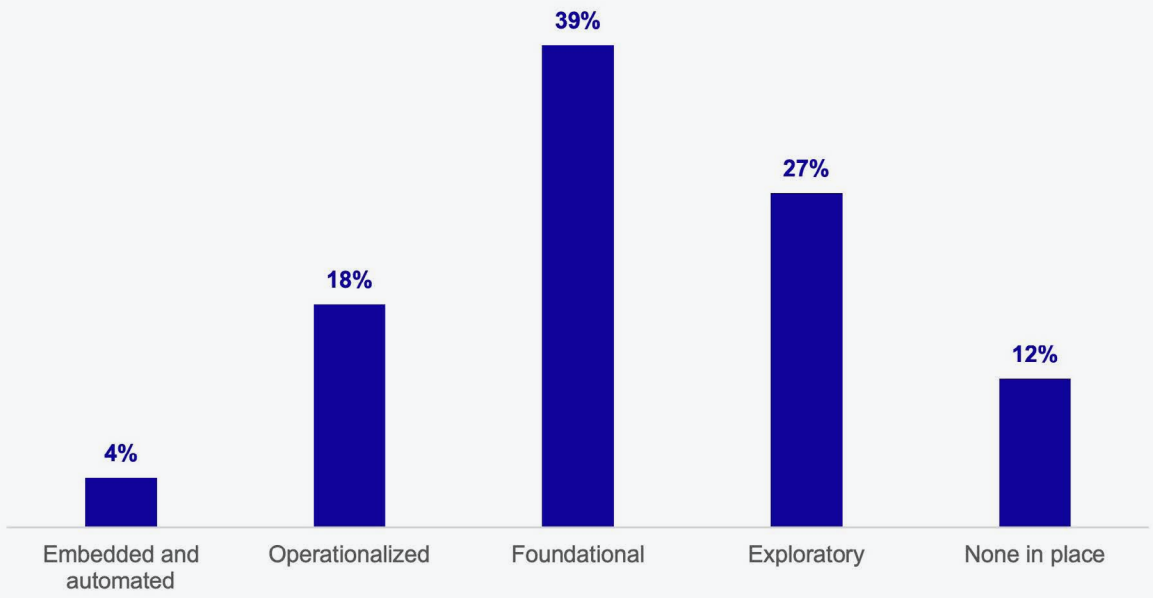
Governance, however, is somewhat ahead of deployment, which suggests that organizations understand the risk and compliance implications of AI, even if their implementations remain limited. Nearly 40% report foundational AI governance policies, such as data privacy controls and model documentation, although many of these policies still lack broad enforcement or scope.

17%

of respondents have embedded AI into core workflows across functions with integrated automation or autonomous and adaptive capabilities

FIGURE 2

Governance and Responsible AI Practices



Just over a quarter are in an exploratory phase, with initial discussions of ethical AI issues but no defined policies, while 18% have operationalized governance practices and 4% have governance that is embedded and automated. At the same time, 12% acknowledge having no AI governance in place at all.

12%

of respondents acknowledge having no AI governance in place at all.

Alignment between AI strategy and business transformation is a more pronounced gap. Seventeen percent say their AI initiatives are not aligned with transformation goals, and 37% describe only tactical alignment, where some AI projects support operational improvements but there is limited enterprise-wide coordination. Almost a third report functional alignment, with AI supporting specific transformation objectives in key business areas, but only 12% say AI is strategically aligned and integrated into enterprise transformation programs, and just 3% indicate that AI is fully embedded and co-driving transformation.

Overall, the current state of AI in the SAP ecosystem looks like widespread experimentation, emerging and in some cases advanced governance, and limited integration into core transformation agendas.

CHAPTER 1

AI Maturity Analysis

To better understand how organizations are progressing, we grouped respondents into three AI maturity segments based on a 100-point score: AI Beginners, AI Adopters, and AI Leaders. AI Leaders score 60 and above, Adopters fall between 31 and 60, and Beginners score 30 or below. The majority of respondents sit in the middle of this spectrum, with 52% classified as AI Adopters, 26% as AI Beginners, and 22% as AI Leaders. The average maturity score across the sample is 44, with a median of 42, which confirms that the typical respondent is still more adopter than leader when it comes to AI.

As organizations move from Beginner to Leader, they tend to expand their ecosystem of AI partners, diversify the tools and platforms they rely on, broaden their use-case portfolios, and strengthen both ownership and governance of AI.

Characteristics of AI Maturity Groups

DATA BEGINNERS	DATA ADOPTERS	DATA LEADERS
• For top AI service and technology partners, primarily SAP or none at all.	• SAP and Microsoft are top AI service and technology partners.	• Use wide variety of AI service and technology partners, with Microsoft the most common.
• Primarily using virtual assistant and copilot technologies from SAP and non-SAP providers.	• Heavy use of Microsoft, OpenAI, and SAP Joule Copilot.	• Using broader AI toolset, including major AI platforms and AI development solutions.
• Low usage of platforms for building, training and deploying AI models.	• If building, training, and deploying AI models, primarily using SAP BTP.	• Utilizing multiple platforms of AI modeling building, training, and deployment.
• Low end-user adoption of AI tools.	• Moderate end-user adoption of AI tools.	• High end-user adoption of AI tools is common
• Few AI uses cases deployed, primarily chatbots or forecasting.	• Focused on content creation, code generation, and virtual assistants primarily for AI use cases.	• Wide variety of AI usage, including but not limited to chatbots, content creation, code generation, forecasting, line-of-business use cases.
• No clear ownership of AI strategy is most common, followed by CIO	• No clear ownership of AI strategy is most common, followed by the CIO.	• Shared or CTO ownership of AI strategy is common.
• Most slightly increased AI investment in 2025, but many didn't change investment.	• Majority increased investment in AI slightly while a quarter also increased it significantly.	• Increasing AI investment significantly most often..

AI Beginners are, in many ways, still laying the groundwork. They are most likely to rely primarily on SAP as their AI services and technology partner or to have no partner at all, and they typically report low end-user adoption of AI tools and only a small number of AI use cases, often limited to chatbots or forecasting. Usage of platforms to build, train, and deploy AI models is low among Beginners, and ownership of AI strategy is often unclear; "no clear owner" is the most common answer, followed by the CIO. Most Beginners slightly increased their AI investment in 2025, but many left it unchanged, and none reported significantly increasing spending.

21%

of AI Beginners and AI Adopters have no clear owner of AI strategy.

AI Adopters, on the other hand, have started to build more robust AI foundations. They commonly work with both SAP and Microsoft as their primary AI partners and make heavy use of Microsoft, OpenAI, and SAP's Joule Copilot. When they are building or deploying models, SAP Business Technology Platform (BTP) is their primary environment, and they report moderate levels of end-user adoption, focused on use cases such as content creation, code generation, and virtual assistants. Even at this stage, "no clear owner" remains a common answer for AI strategy, though the CIO is also frequently named, and most Adopters increased AI investment slightly in 2025, with about a quarter increasing it significantly.

AI Leaders look very different. They work with a wider variety of AI service and technology partners, with Microsoft the most common, and they use a broader toolset that includes major AI platforms and development solutions. Leaders report using multiple platforms for building, training, and deploying AI models, high end-user adoption of AI tools, and a wide variety of AI applications that extend well beyond chatbots to content creation, code generation, forecasting, and line-of-business use cases. Ownership of AI strategy becomes clearer and more collaborative, with shared ownership and CTO leadership common, and this group is most likely to significantly increase AI investment as they see AI delivering measurable value.

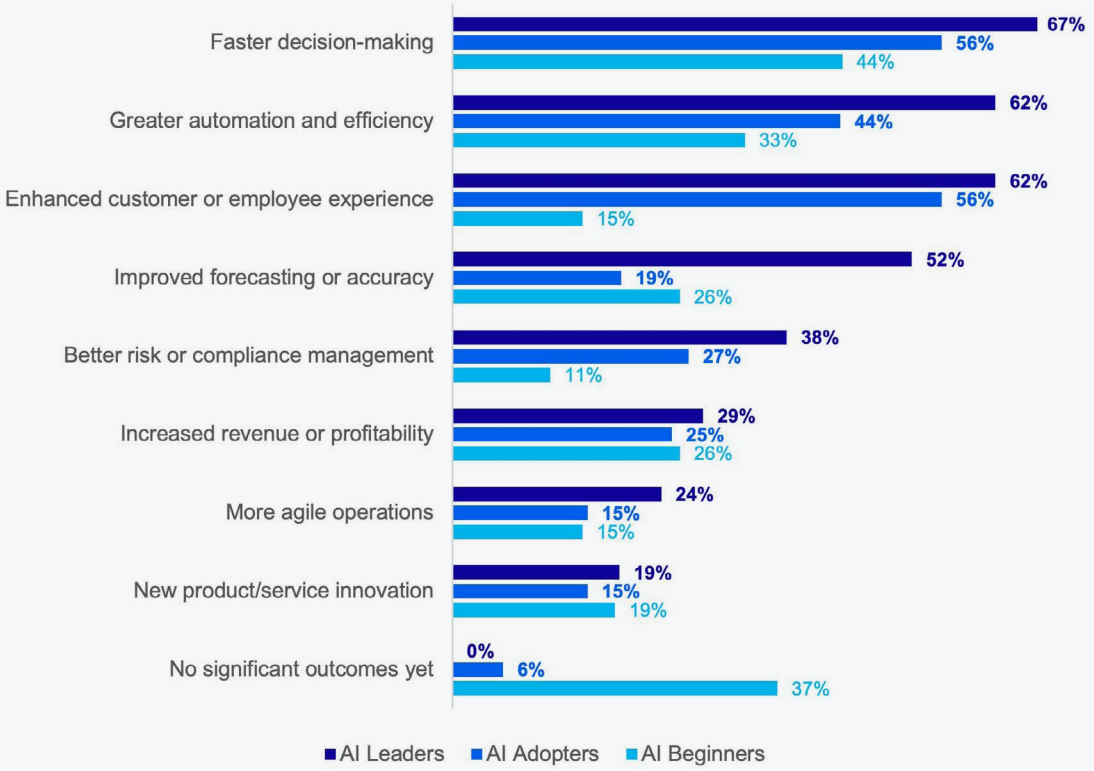
26%

of AI Beginners feature shared ownership for AI programs.

The differences between these maturity groups show up clearly in business outcomes and KPI impact. More than a third of AI Beginners, 37%, say they have not yet seen any significant outcomes from their AI initiatives, compared with only 6% of AI Adopters and none of the AI Leaders. Faster decision-making is the single most common outcome across all groups, with 44% of Beginners, 56% of Adopters, and 67% of Leaders reporting that AI has helped them make decisions more quickly.

FIGURE 3

AI-Driven Business Outcomes



Leaders are also much more likely to report new product or service innovation, more agile operations, increased revenue or profitability, better risk or compliance management, improved forecasting or accuracy, enhanced customer or employee experience, and higher levels of automation and efficiency. For instance, 62% of Leaders cite enhanced customer or employee experience and 62% also point to greater automation and efficiency, compared to notably lower rates among Adopters and Beginners.

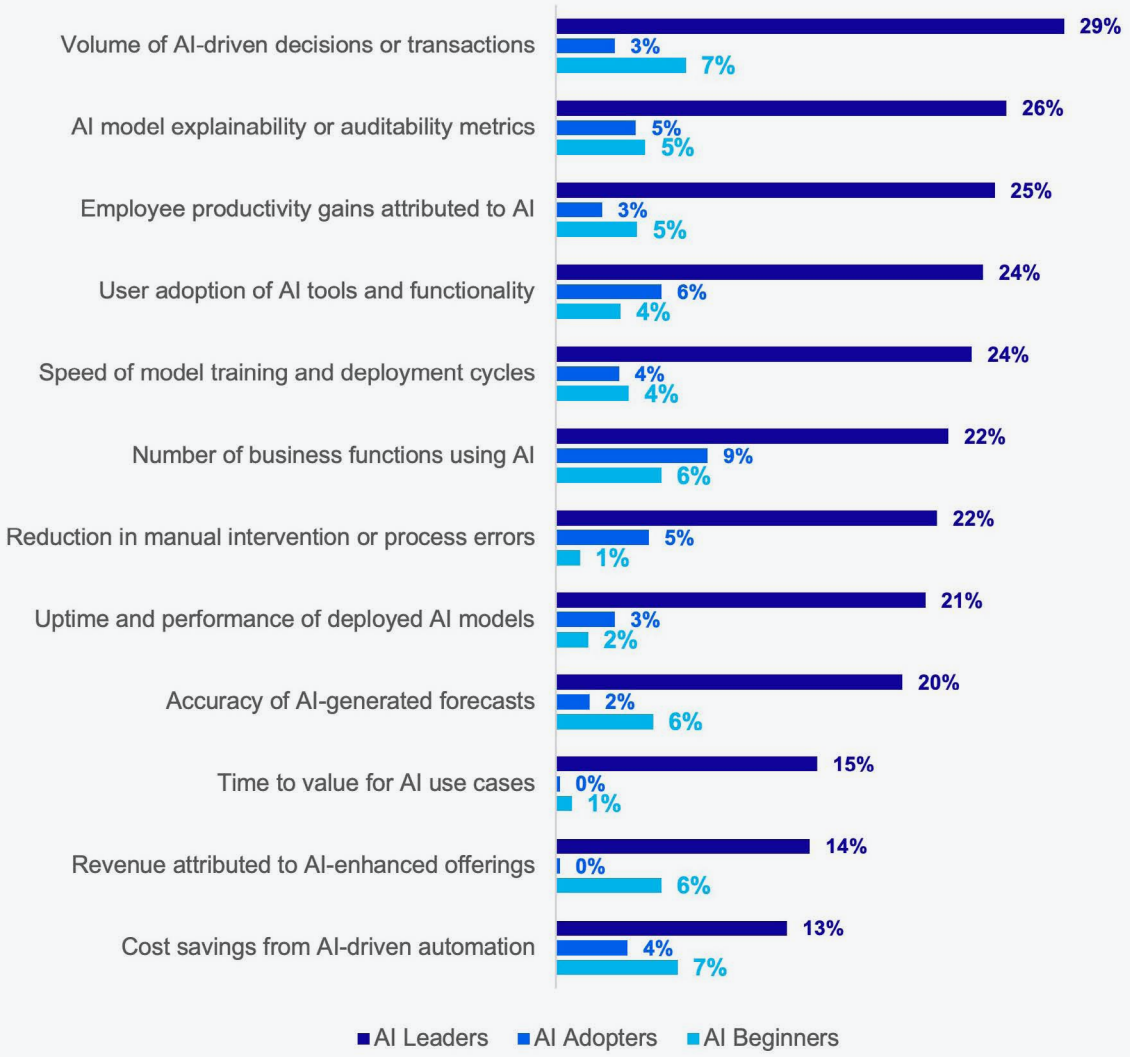
When we examine KPI change, the gap widens. AI Leaders report strong year-over-year improvements across all AI-related KPIs we asked about, from cost savings and AI-attributed revenue to time-to-value, forecast accuracy, model uptime and performance, reductions in manual intervention and process errors, the number of business functions using AI, the speed of model training and deployment cycles, user adoption of AI tools, employee productivity gains, model explainability, and the volume of AI-driven decisions or transactions.

67%

of AI Leaders cited faster decision-making as an AI-related business outcome.

FIGURE 4

AI-related KPI Performance



In contrast, both Beginners and Adopters tend to see modest, often single-digit improvements, which suggests that organizations need to move beyond mid-level maturity if they want AI to drive step-change gains in productivity, accuracy, performance, and financial impact.

29%

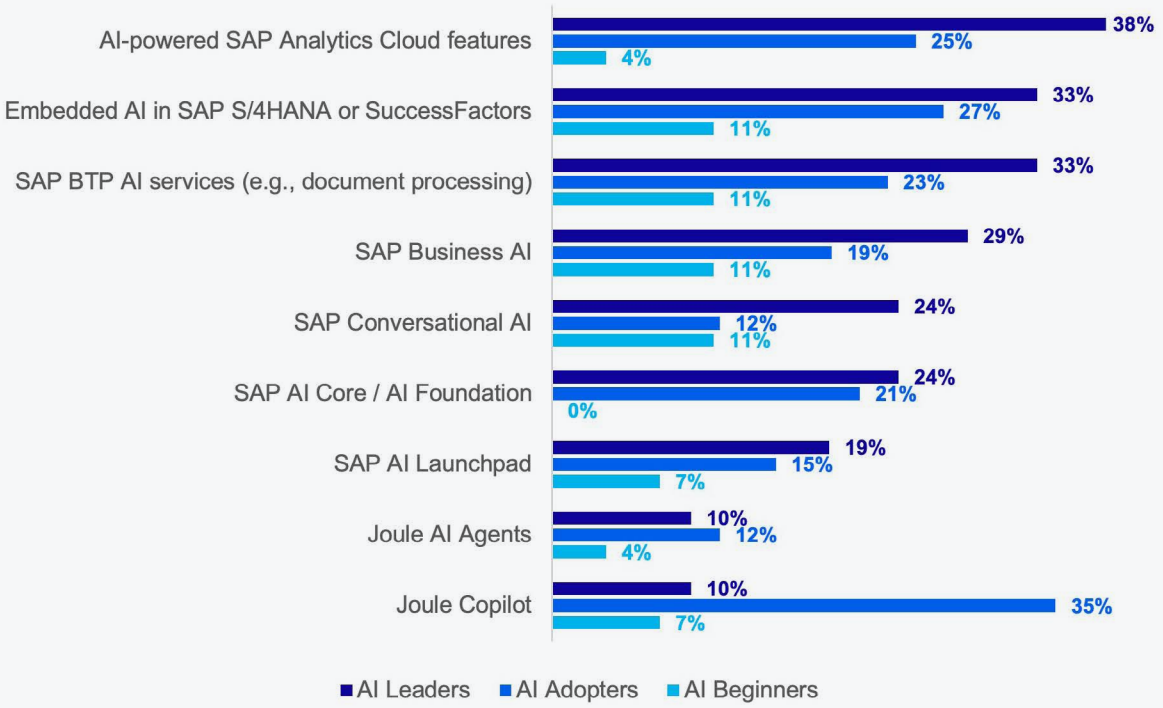
was the increase of AI-driven decisions or transactions for AI Leaders in 2025.

Top AI Technology Providers

Technology and platform choices are tightly coupled with maturity levels in this research. For SAP-specific AI technologies, usage generally increases as organizations mature. We see higher adoption of SAP AI Launchpad, SAP AI Core or AI Foundation, SAP Conversational AI, SAP Business AI, SAP BTP AI services like document processing, embedded AI in SAP S/4HANA or SuccessFactors, and AI-powered features in SAP Analytics Cloud among more mature organizations.

FIGURE 5

SAP AI Technologies in Use

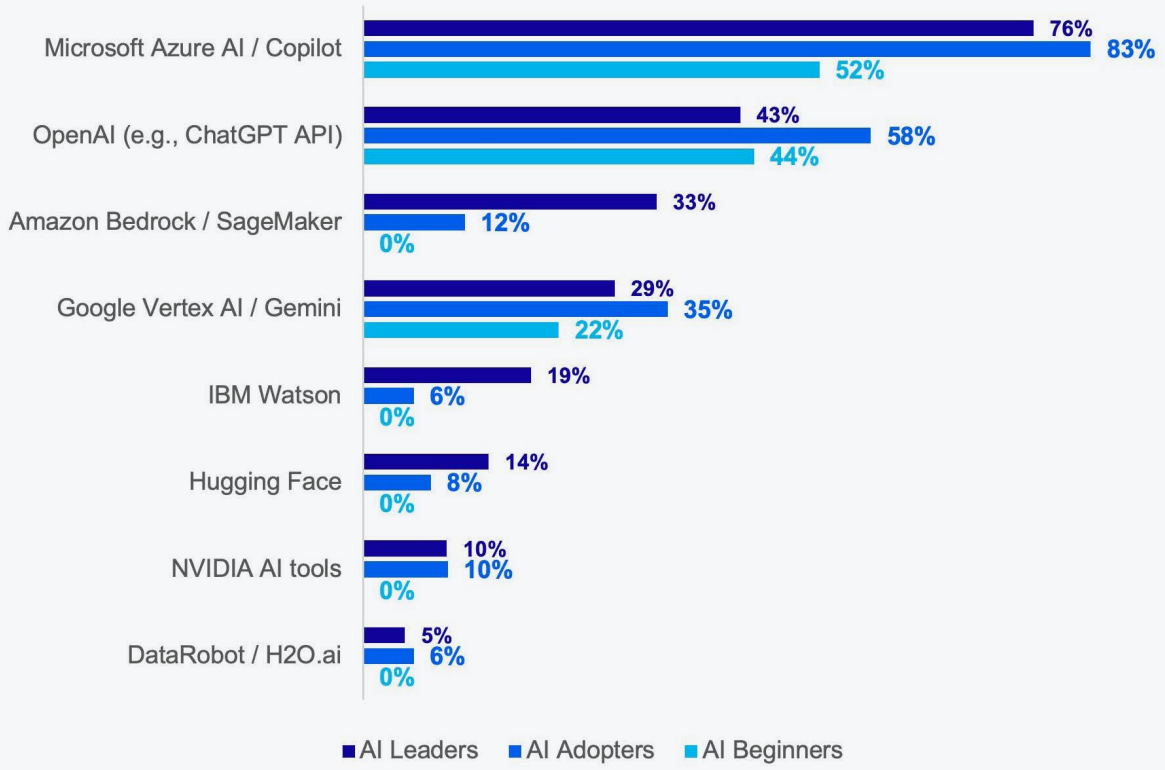


Joule Copilot and Joule AI Agents are more commonly used at earlier maturity stages, which fits the pattern of copilots serving as an accessible entry point into AI adoption. SAP AI Core, which supports running complex AI and machine learning models at scale, is not used by any AI Beginners in this survey, underscoring the difference between experimenting with AI and operationalizing it as a scaled capability.

On the non-SAP side, Microsoft Azure AI and Copilot offerings are the most popular technologies across all maturity levels, particularly among Adopters and Leaders. Beginners lean heavily on OpenAI alongside Microsoft, while more advanced organizations diversify to include IBM Watson, NVIDIA AI tools, Hugging Face, and other platforms; at the Leader level, OpenAI becomes somewhat less dominant as firms gravitate toward more enterprise-focused or specialized tools.

FIGURE 6

Non-SAP AI Technologies in Use



Platform data tells a similar story. Among AI Beginners, 41% report not using any platform to build, train, or deploy AI models, and for those that do, SAP BTP is the most common choice. AI Adopters most frequently use Microsoft Azure Machine Learning, SAP BTP, and Databricks. AI Leaders rely on a broader mix that includes SAP BTP, Snowflake, Azure Machine Learning, Databricks, TensorFlow/Keras, PyTorch, and IBM Watsonx. SAP BTP emerges as the most common platform among Leaders and the second-most common among Adopters, with usage rising steadily with maturity.

83%

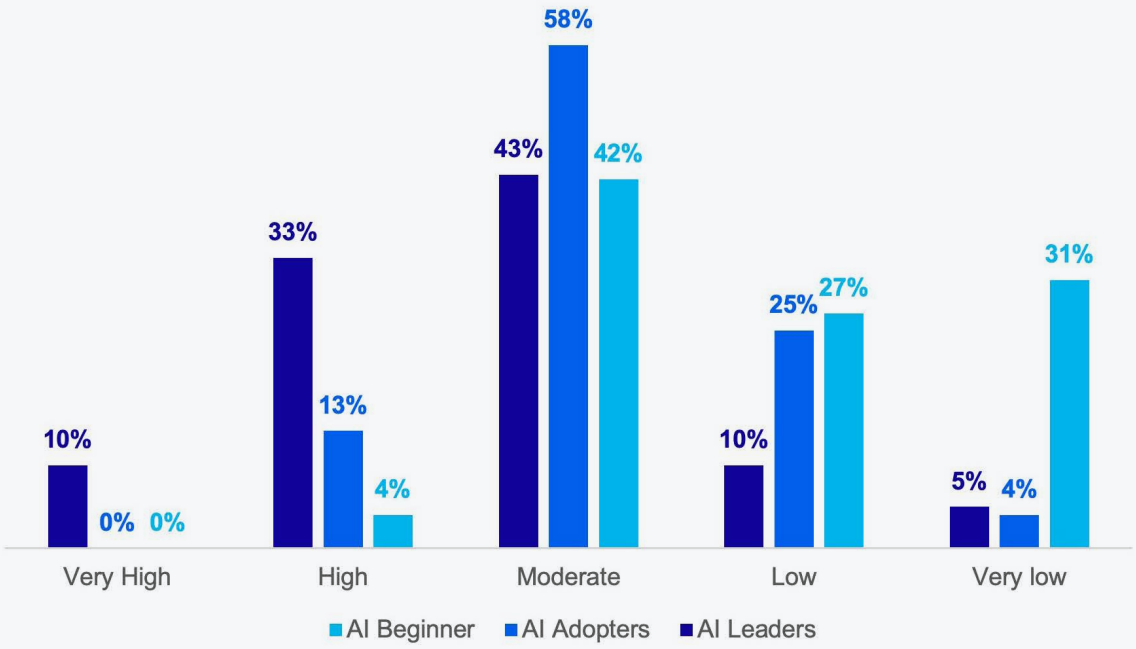
of AI Adopters are using Microsoft AI technologies.

AI Adoption and Leadership

Organizational factors—particularly end-user adoption, ownership, and investment—also play a critical role in determining maturity. End-user adoption of AI-powered tools remains a challenge at the lower end of the spectrum. More than half of Beginners report very low or low adoption, while most Adopters see moderate adoption, and 43% of Leaders report high or very high adoption.

FIGURE 7

End-user Adoption of AI-powered Tools



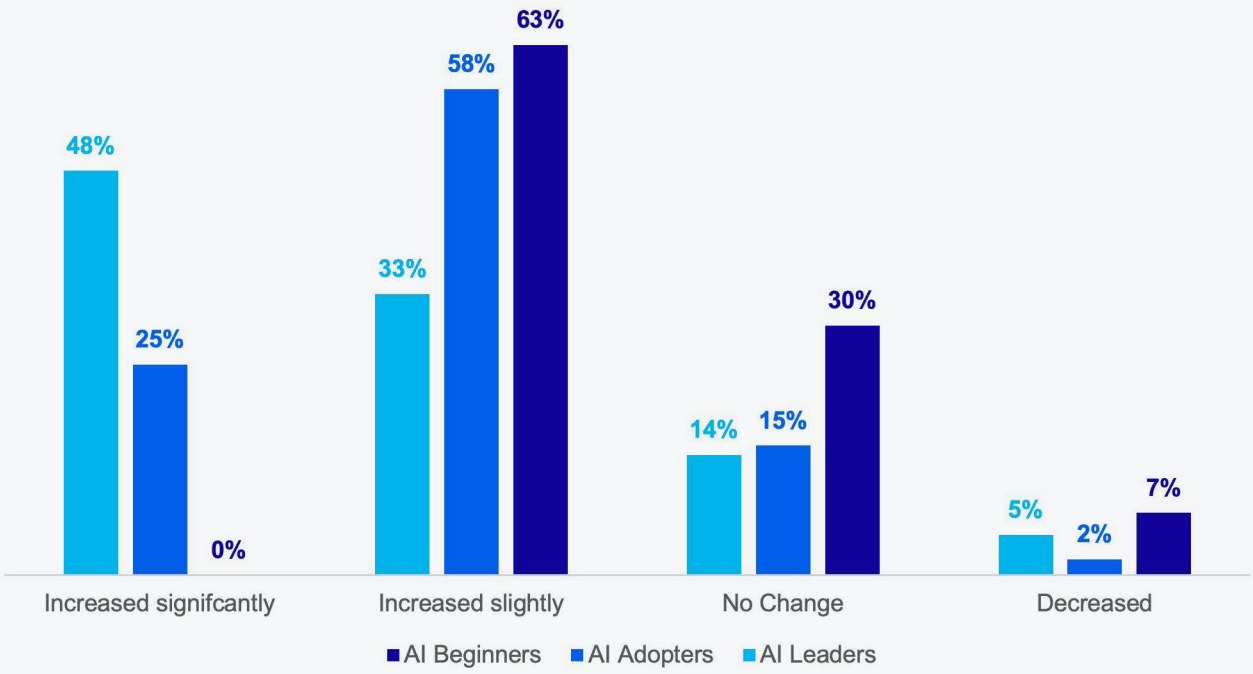
Leading organizations are not just investing in AI tool but also driving real usage among end-users

Ownership of AI strategy is another differentiator. Over one-fifth (21%) of Beginners and Adopters say there is no clear owner for AI strategy, which makes it difficult to coordinate enterprise-wide technology usage, manage use cases, and enforce governance. Among Leaders, ownership looks different. Shared ownership between multiple senior stakeholders and CTO leadership are the most common models, with the CDO and CEO also appearing as sponsors where AI is viewed as strategically important.

Investment patterns reflect the confidence and results that Leaders are seeing. Few organizations in any segment decreased AI investment in 2025, but nearly half of AI Leaders increased their investment significantly, and 81% of Leaders increased AI spending overall. Adopters and Beginners were more likely to increase investment slightly, and no Beginner reported a significant increase.

FIGURE 8

AI Investment Changes



Investment may be growing, but cost and budget constraints remain a prevailing concern across all maturity levels. In terms of other barriers to AI adoption, Beginners are more likely to cite regulatory and ethical concerns, resistance to change or end-user adoption, fragmented systems and architecture, and a lack of skilled resources as primary obstacles.

Leaders, who have typically addressed regulatory and ethical questions through governance frameworks, more often struggle with moving from pilot to production, integrating AI into legacy systems, and gaining clear visibility into AI ROI as they scale their programs.

81%

of AI Leaders increased AI investment in 2025.

CHAPTER 2

Factors Impacting AI Strategy

AI adoption in the SAP ecosystem is not driven by a single factor but by a constellation of pressures and opportunities. Demand for automation and cost reduction leads the list, cited by 35% of respondents and reflecting a focus on efficiency and cost control as central motivations for AI investment. The desire to enhance customer or employee experiences follows at 28%, highlighting AI's role in improving interactions and engagement. SAP S/4HANA or cloud migration initiatives are reported as a driver by 27% of respondents, underlining how major technology refreshes and platform moves often serve as catalysts for AI projects.

FIGURE 9

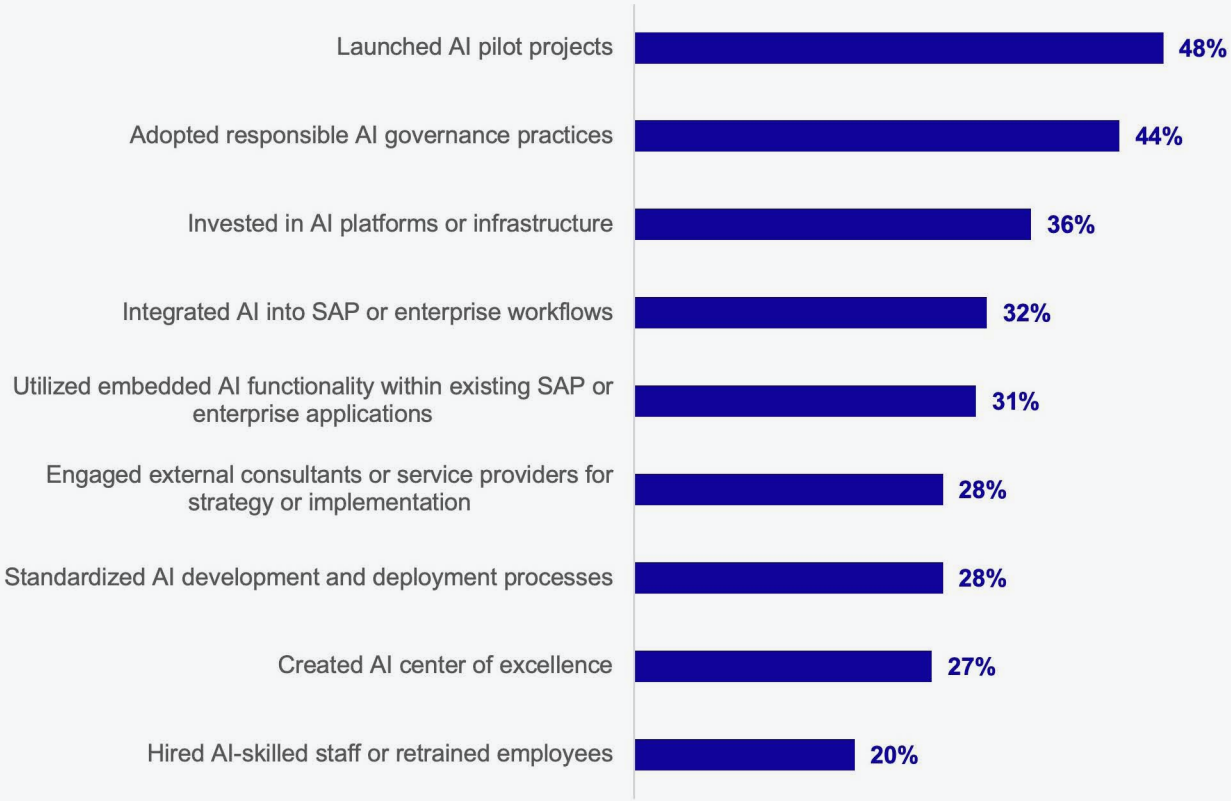
Top AI Strategy Drivers

Competitive pressure to innovate faster and expand into new products, services, or markets is cited by 25%, and alignment with digital transformation strategy is cited by 23%, reinforcing AI's position as both a tactical and strategic lever. It is notable that SAP S/4HANA or cloud migration is more frequently a driver for AI Adopters and Beginners than for Leaders—31% and 26% versus 17%—which suggests that platform or ERP modernization often serves as a starting point for AI rather than a hallmark of the most mature programs.

The actions organizations are taking to support AI adoption show a mix of experimentation and foundation building. Launching AI pilot projects is the single most common action, reported by 48% of respondents, indicating that pilots remain the preferred way to explore AI use cases. Adopting responsible AI governance practices is not far behind at 44%, which reflects the growing recognition that AI needs to be governed thoughtfully as it scales. A significant share of organizations are investing in AI platforms or infrastructure (36%), integrating AI into SAP or enterprise workflows (32%), and utilizing embedded AI functionality within existing SAP or enterprise applications (31%), which points to a gradual shift from isolated pilots toward more embedded, operationalized AI.

FIGURE 10

Top Actions to Support AI Adoption

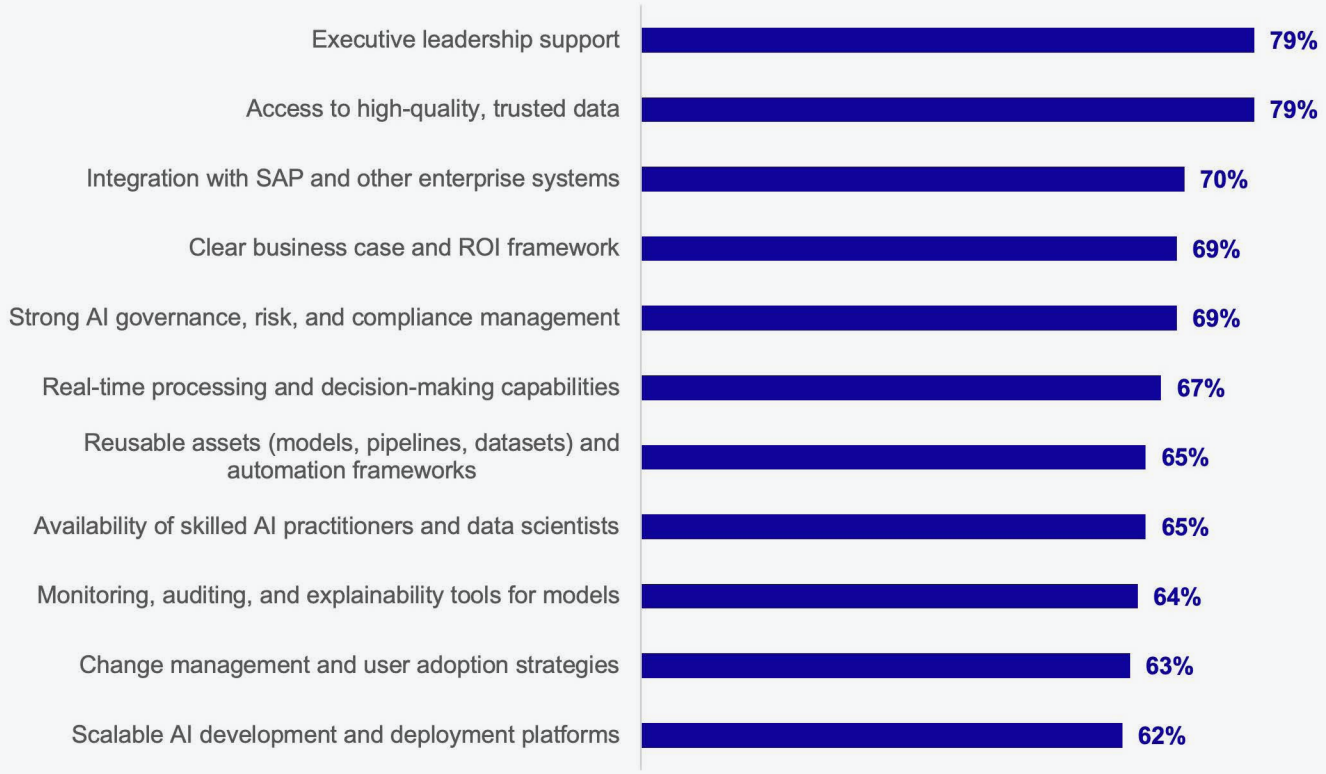


When we break the data down by maturity group, responsible AI governance stands out as the top action for AI Leaders, underscoring governance as a critical enabler for advanced programs. In addition, many respondents report creating AI centers of excellence, standardizing AI development and deployment processes, engaging external consultants or service providers for strategy or implementation, and hiring or retraining AI-skilled staff—actions typically selected by roughly one-fifth to just under one-third of organizations.

In terms of the requirements for adopting and scaling AI, executive leadership support and access to high-quality, trusted data top this list, each cited by 79% of respondents. Executive sponsorship is vital for unlocking investment and ensuring AI initiatives are aligned with strategic priorities, while the emphasis on data quality underscores the direct connection between data management capabilities and AI performance. Integration with SAP and other enterprise systems follows at 70%, reinforcing that AI must be connected into the core application landscape rather than sitting in isolation.

FIGURE 11

Requirements for Successful AI Strategies

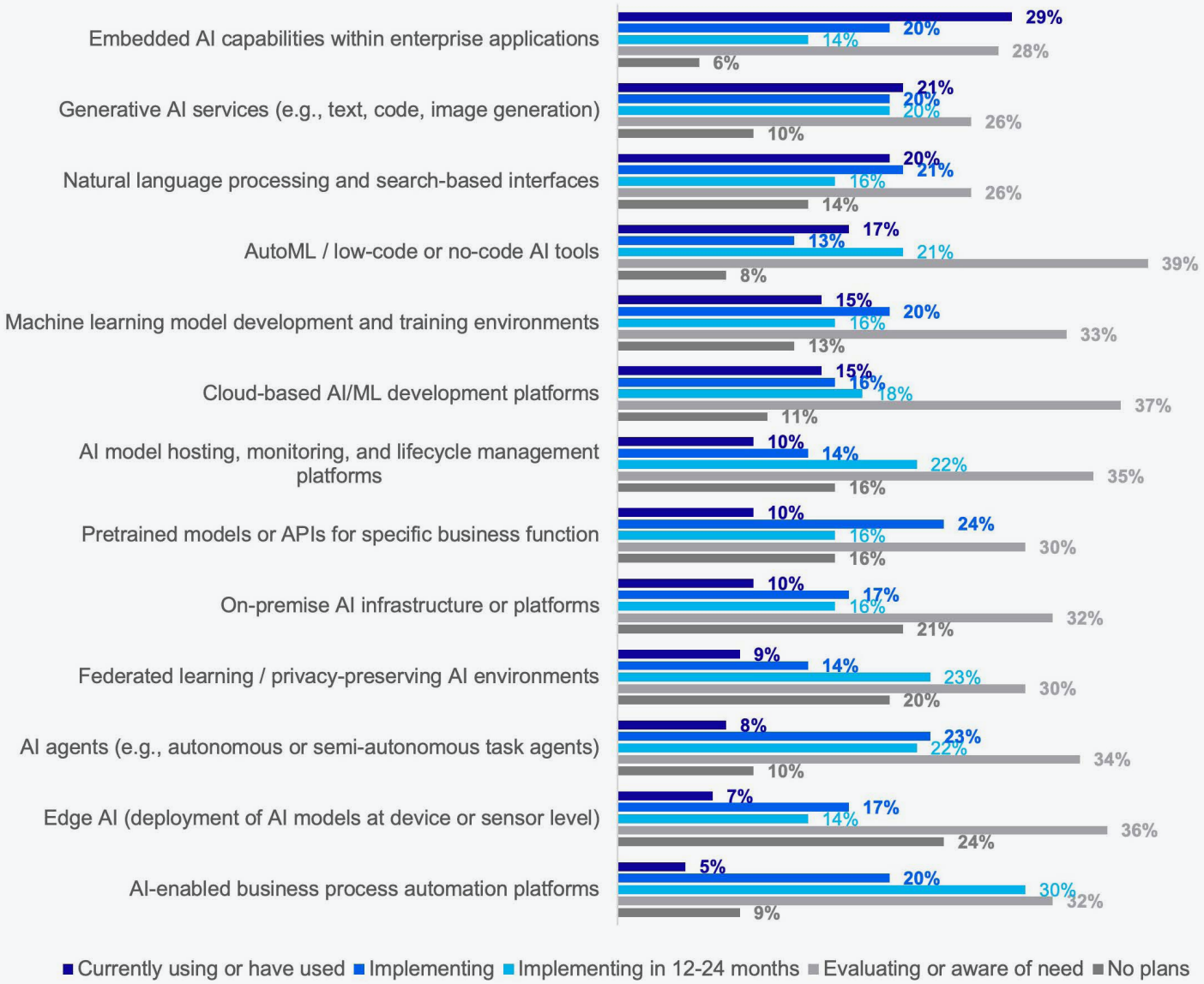


A clear business case and ROI framework and strong AI governance, risk, and compliance management are each cited by 69%, reflecting organizations' desire to both prove value and manage risk. Other requirements that more than 60% of respondents view as important include scalable AI development and deployment platforms, change-management and user-adoption strategies, monitoring, auditing, and explainability tools for models, availability of skilled AI practitioners and data scientists, reusable assets and automation frameworks, and real-time processing and decision-making capabilities.

Finally, when we examine technology adoption, embedded AI capabilities within enterprise applications are the most used or previously used technology, at 29%. That makes sense given that even AI Beginners can access AI embedded in SAP and other enterprise software without needing a formal AI program.

FIGURE 12

Top AI Technologies



Generative AI services for text, code, and image generation and natural language processing and search-based interfaces are close behind, as many organizations look to automate interactions and workflows via chatbots, virtual assistants, copilots, and AI agents. AutoML and low-code or no-code AI tools, traditional machine learning model development and training environments, cloud-based AI/ML platforms, AI-enabled business process automation platforms, and AI agents all show significant levels of current use or near-term implementation plans, often within the next 12 to 24 months. Edge AI and federated learning or privacy-preserving AI environments are less mature but are being evaluated by many organizations that recognize the need to handle data locality and privacy constraints more effectively.

Key Takeaways

When it comes to equipping organizations with the capabilities to support AI adoption and usage effectively, consider the following:

- **Leverage embedded and generative AI capabilities within SAP and surrounding enterprise applications as a scalable foundation.** Systematically catalog and deploy these features to help move from experimentation to integrated automation without relying solely on custom-built models.

- **Formalize and operationalize AI governance as a strategic enabler.** Move beyond exploratory discussions or basic policies toward governance that is embedded in AI programs and covers the full model lifecycle, monitoring, explainability, and risk and compliance across all initiatives.

- **Anchor AI initiatives in clear business cases that tie directly to the top adoption drivers.** This is especially true for automation, cost reduction, and enhanced customer or employee experiences—so that organizations can prioritize use cases with measurable ROI and overcome limited visibility into AI's value.

CHAPTER 3

Recommendations and Required Actions

AI and transformation have become one in the same for many organizations, which are driven by the need to be more efficient. AI offers the potential of more intelligent and sophisticated automation for many key processes. Companies that are investing in AI are seeing results both in their AI-related KPIs and in broader desired business outcomes.

Required Actions

To achieve the best outcomes from their AI strategy, organizations should take the following actions:

Establish clear, shared ownership of AI strategy across IT and business leadership.

Replace “no clear owner” scenarios with a governance model that mirrors the patterns of AI Leaders and involves roles such as the CIO, CTO, CDO, and key business stakeholders to align AI with business transformation goals.

Invest in platforms and skills that enable scaling from pilots to production.

Even among AI Leaders, this is the last difficult step that prevents them from deploying AI models. This should also be done while building up AI-skilled staff, standardizing development and deployment processes, and integrating fragmented architectures.

Drive end-user adoption through structured change-management programs and experience-centric design.

This includes training, communication, and user-experience improvements, so that AI tools move from low or moderate usage to high adoption and translate into faster decision-making, better customer and employee experiences, and greater automation and efficiency.

DART
MODEL FRAMEWORK

STRATEGY AND NEEDS FOR AI ADOPTION AND MATURITY

DRIVERS

- Demand for automation and cost reduction (35%)
- Desire to enhance customer or employee experiences (28%)
- SAP S/4HANA or cloud migration initiatives (27%)
- Competitive pressure to innovate faster and expand into new products, services, or markets (25%)
- Alignment with digital transformation strategy (23%)

ACTIONS

- Launched AI pilot projects (48%)
- Adopted responsible AI governance practices (44%)
- Invested in AI platforms or infrastructure (36%)
- Integrated AI into SAP or enterprise workflows (32%)
- Utilized embedded AI functionality within existing SAP or enterprise applications (31%)

REQUIREMENTS

- Executive leadership support (79%)
- Access to high-quality, trusted data (79%)
- Integration with SAP and other enterprise systems (70%)
- Clear business case and ROI framework (69%)
- Strong AI governance, risk, and compliance management (69%)

TECHNOLOGIES

- Embedded AI capabilities within enterprise applications (29%)
- Generative AI services (e.g., text, code, image generation) (21%)
- Natural language processing and search-based interfaces (20%)
- AutoML/low-code or no-code AI tools (17%)
- Machine learning model development and training environments (15%)
- Cloud-based AI/ML development platforms (15%)

APPENDIX | THE DART™ METHODOLOGY

SAPinsider has rewritten the rules of research to provide actionable deliverables from its fact-based approach. The DART methodology serves as the very foundation on which SAPinsider educates end users to act, creates market awareness, drives demand, empowers sales forces, and validates return on investments. It is no wonder that organizations worldwide turn to SAPinsider for research with results.

The DART methodology provides practical insights, including:

DRIVERS	These are macro-level events that are affecting an organization. They can be both external and internal, and they require the implementation of strategic plans, people, processes, and systems.
ACTIONS	These are strategies that companies can implement to address the effects of drivers on the business. These are the integration of people, processes, and technology. These should be business-based actions first, but they should fully leverage technology-enabled solutions to be relevant for our focus.
REQUIREMENTS	These are business and process-level requirements that support the strategies. These tend to be end-to-end for a business process.
TECHNOLOGY	These are technology and systems-related requirements that enable the business requirements and support the company's overall strategies. The requirements must consider the current technology architecture and provide for the adoption of new and innovative technology-enabled capabilities.

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- Making AI useful and accessible to a broad range of users—beyond specialist data scientists—by offering AutoML, time series, generative AI, and MLOps capabilities that enable "citizen data scientists" and cross-functional teams.
- Helping businesses infuse AI into existing processes while managing risk, with an emphasis on interoperability, security, explainability, and responsible AI that maximizes impact and minimizes operational and compliance issues.

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