SAPinsider

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AI — State of Adoption 2024

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Executive Summary

INSIDER PERSPECTIVE

"To leverage advanced AI models like generative and predictive AI, organizations require high-quality enterprise data. AI aids in identifying opportunities, addressing data blind spots, and improving decision-making by applying confidence intervals to business analytics."

JOE BARNETT, DIRECTOR — GLOBAL SUPPLY TECHNOLOGIES, BLUE DIAMOND GROWERS

FROM THE INITIAL HYPE surrounding AI to its emerging adoption by many organizations, AI has begun to drive significant value across various sectors. It is opening new avenues for innovation and growth, fundamentally transforming the way companies operate and compete. The technology is revolutionizing businesses by unlocking valuable insights, enhancing decision-making processes, and automating manual tasks. As AI adoption continues to expand, its impact on business efficiency and competitiveness is expected to grow, marking a pivotal shift in the technological landscape.

With most AI innovation happening in the cloud, SAP is embedding AI across its solutions to encourage its existing customers to transition to the cloud, aiming to drive business growth and attract reluctant adopters. While the impact of this increased AI focus on customer interest remains uncertain, it is clear that AI will be a fundamental component of SAP solutions moving forward. By integrating Business AI into its enterprise cloud portfolio, SAP continues to redefine innovation in global businesses, enabling organizations to achieve tangible results and unlock the agility and innovation needed to thrive in a rapidly changing business environment.

SAP anticipates that by the end of 2024, end users will be able to manage 80% of the most-used SAP business transac-

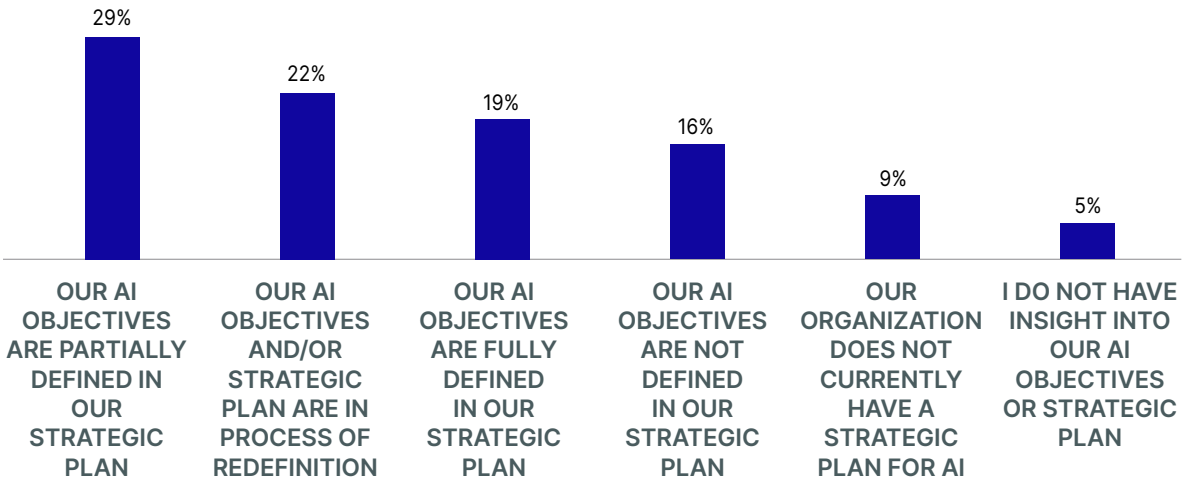
tions through Joule, SAP's AI copilot. Recently, SAP also announced 100 embedded Business AI use cases for 2024, with over 60 already released and more than 90 partner use cases currently in development for the GenAI Hub on the Business Technology Platform (BTP). Additionally, SAP's strategic categorization of AI into Base AI and Premium AI underscores its commitment to delivering tailored AI capabilities to meet diverse business needs. The integration of Base AI capabilities into solutions like SAP S/4HANA provides significant value at no extra cost, enhancing the overall functionality for users. On the other hand, the option to activate Premium AI use cases across business solutions with an additional license demonstrates SAP's flexible and scalable approach, allowing customers to invest in advanced AI functionalities as needed.

To provide insights and understanding related to SAP customers' AI adoption practices and identify the key factors driving their organization's AI strategies, SAPinsider surveyed 164 members of its community between April and July 2024, on strategies, challenges and priorities around AI adoption. The primary objective of the survey was to gather insights from professionals who play a pivotal role in taking decisions pertaining to the adoption and use of AI in their organizations, including understanding the technology prerequisites for AI and exploring the decision-making process behind choosing whether to build, buy, or combine both approaches for AI solutions.

The survey revealed varying degrees of AI integration into strategic plans. While AI strategies are still evolving, which could be driven by rapid advancements in AI technology, changing market dynamics, or the need to stay competitive, the survey data suggests a spectrum of maturity and readiness across organizations. Almost one-third of organizations have their AI objectives partially defined in their strategic plans (29%) **(Figure 1)** which indicates that while AI is a consideration, organizations are still in the process of fully integrating it into their strategic frameworks. And while organizations with fully defined AI objectives (19%) are likely to be more advanced in their AI journey, those in the process of redefining (22%) or lacking AI plans (9%) might still be exploring the potential benefits and applications of AI.

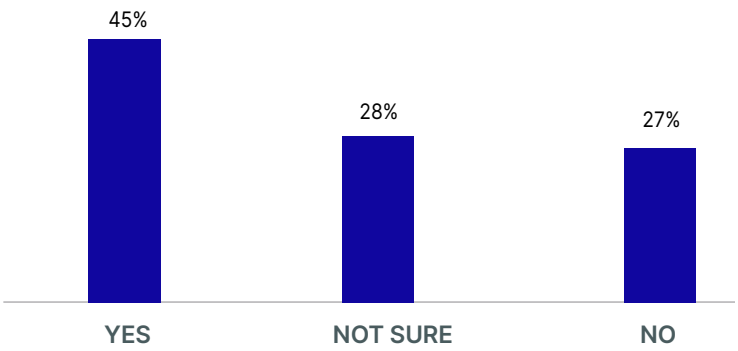
Our findings also underscore a mixed level of preparedness for future AI advancements, with nearly half of the organizations feeling ready, while the rest are either uncertain or unprepared about AI-readiness over the next five years. Nearly half (45%) of the respondents believe their organizations are adequately

Figure 1: AI Objectives Defined in Strategic Plans



prepared for future AI advancements **(Figure 2),** which shows that a substantial number of organizations are confident in their preparedness for AI advancements over the next five years, showcasing strong infrastructure and capabilities to adapt to upcoming changes and innovations in AI technology. Additionally, over a quarter (28%) of the respondents were uncertain about their preparedness for future AI advancements while 27% do not feel prepared indicating a need for attention to strategic planning, resource allocation, and continuous learning. Such measures are essential to ensure that organizations can successfully navigate and adapt to the rapidly evolving AI landscape.

Figure 2: AI-Readiness in Next 5 Years



AI readiness is also supported by a strong trend toward increased investment in AI adoption, with the majority of organizations (53%) planning to raise their budgets either moderately or significantly in the next two years. Organizations are viewing AI as crucial for driving innovation and achieving a competitive advantage, thus warranting significant investment. This underscores the growing importance of AI in driving business innovation and efficiency. Only a small fraction of organizations (16%) expects no change or a decrease in their AI budgets, indicating that AI remains a strategic priority for most.

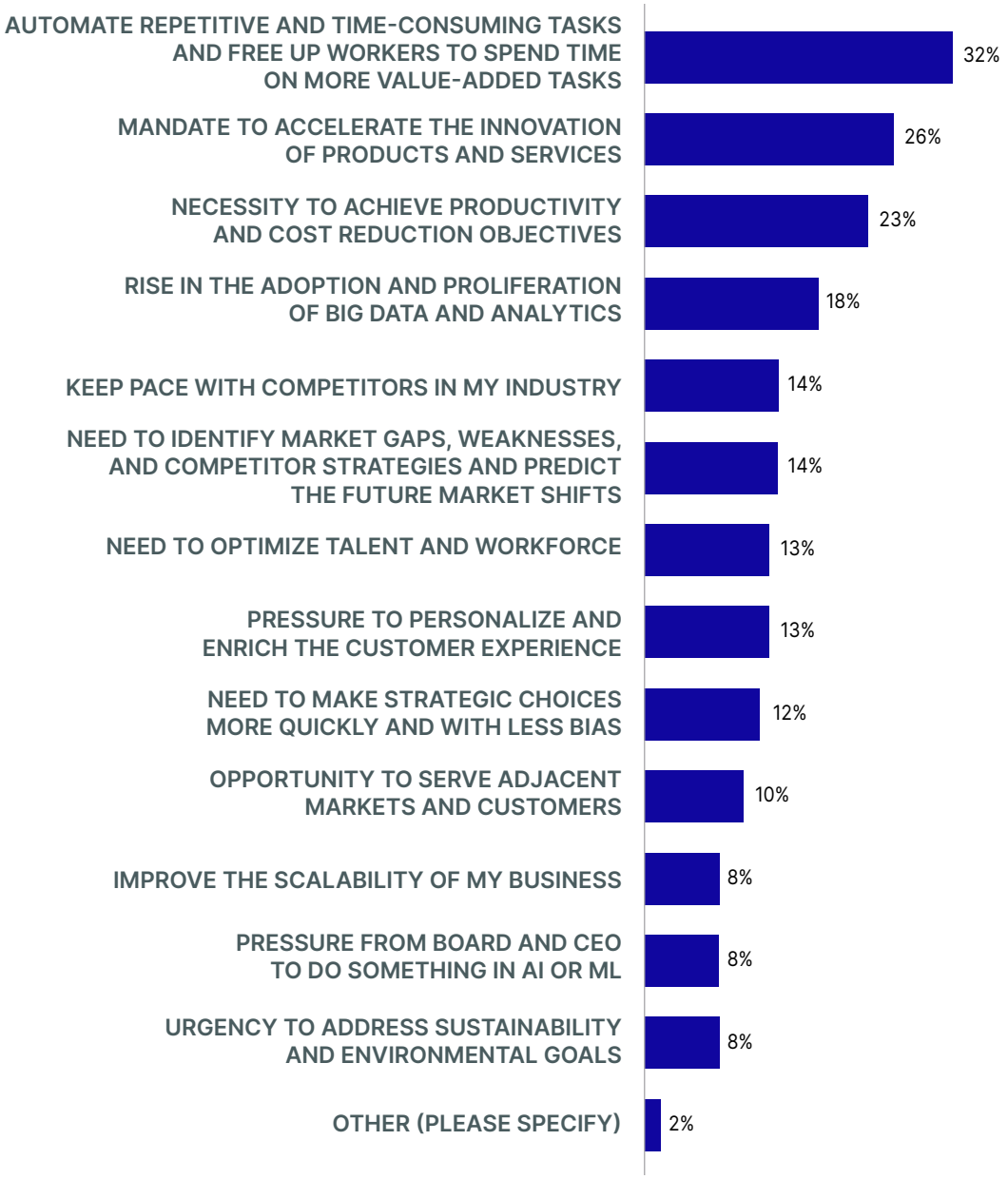
The primary driver for AI adoption, highlighted by 32% of respondents, is the imperative to automate repetitive and time-consuming tasks, which suggests a strategic shift towards enhancing operational efficiency and reallocating human resources to higher-value tasks, which can significantly improve overall productivity and competitiveness for organizations **(Figure 3).** The emphasis on innovation, with 26% of respondents prioritizing the acceleration of product and service development reflects the growing need for businesses to stay ahead in a rapidly evolving market, while productivity and cost reduction objectives (23%) underscore the ongoing efforts to streamline operations and improve financial performance.

INSIDER PERSPECTIVE

"If you expect AI to interpret all your data and derive meaning from it without guidance, you may be expecting too much. You need to provide context and specify what the data means for accurate insights."

YAMAN ACAR, IT DIRECTOR, ALLIANCE HEALTHCARE TURKEY

Figure 3: Drivers Influencing AI Adoption



However, the research data underscores a pragmatic and strategic approach to AI adoption within organizations **(Figure 4).** Initiating small-scale pilot projects, as preferred by 47% of respondents, reflects a cautious yet progressive method to explore AI technologies. This approach allows businesses to experiment and learn in a controlled setting, ensuring that AI solutions are viable and beneficial before committing to larger investments. It also provides tangible evidence of ROI, which can be critical in securing stakeholder buy-in for broader implementation. Additionally, the emphasis on forming cross-functional teams, noted by 36% of respondents, highlights the recognition that AI initiatives require diverse skills and perspectives. Collaborative efforts from different departments can lead to more comprehensive and effective AI strategies, ensuring that the technology is aligned with the organization's goals and integrates seamlessly into existing workflows.

Despite paced adoption, a notable trend is also observed in the adoption and exploration of advanced AI technologies within organizations. While 29% of organizations are actively using AI-powered chatbots, which suggests a significant level of maturity in leveraging conversational AI for customer service and operational efficiency, a larger segment, 32%, are evaluating

Figure 4: AI Adoption Strategies

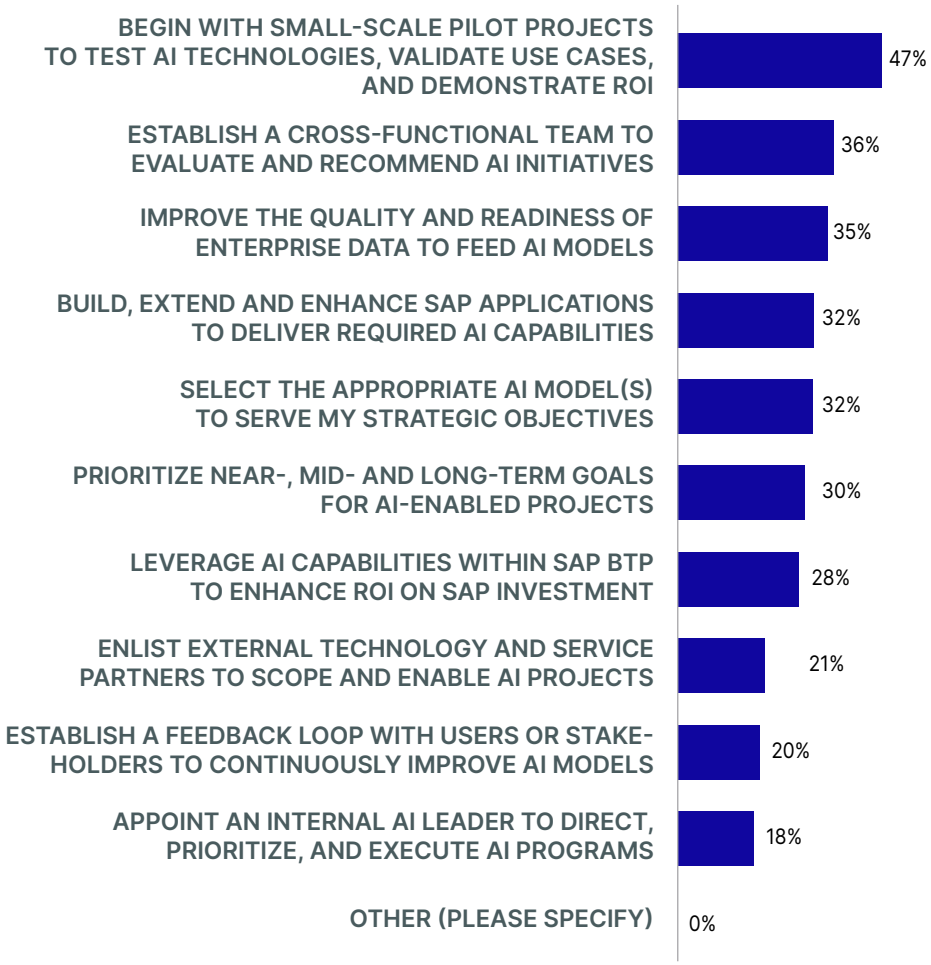
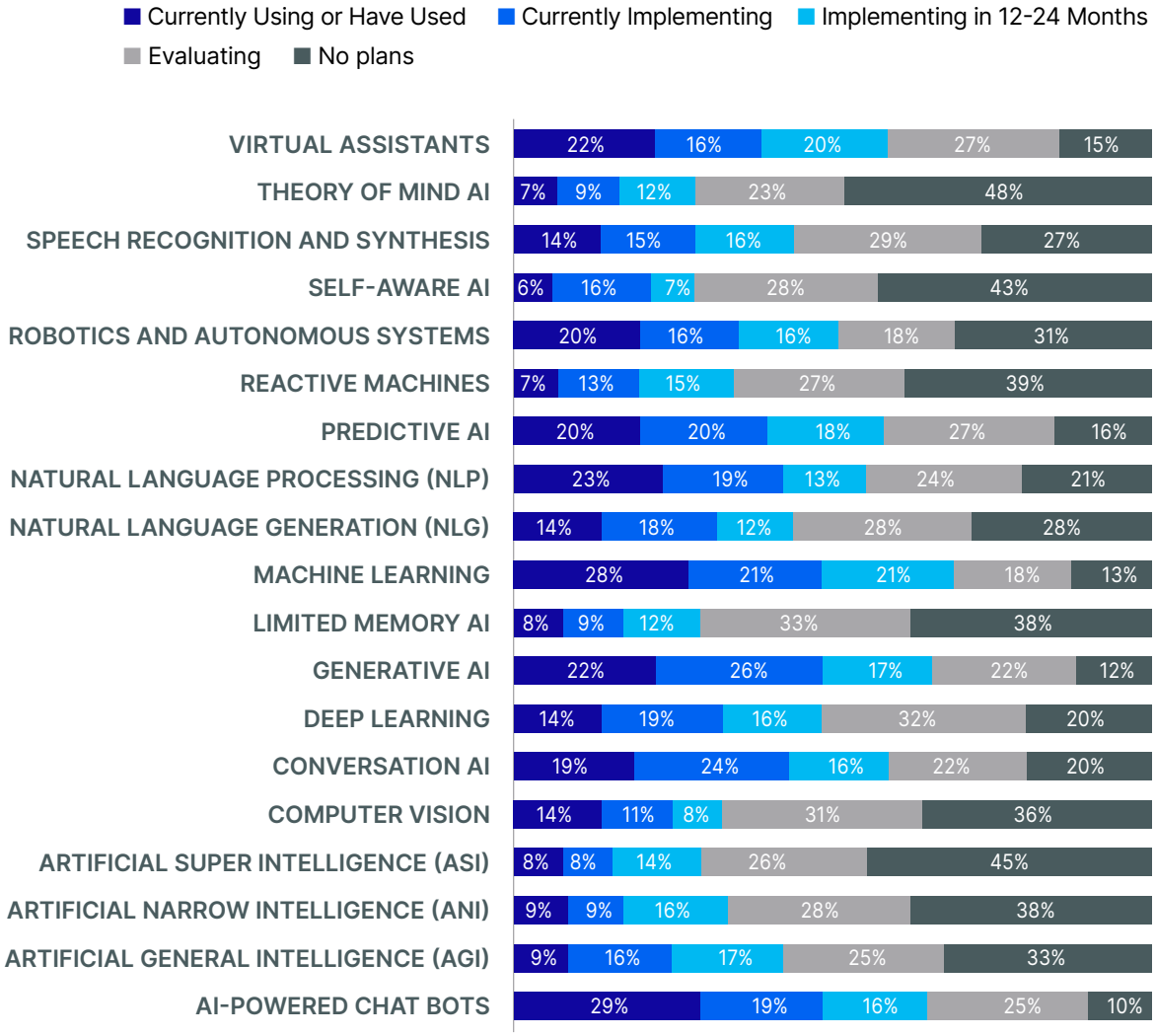


Figure 5: AI Technologies

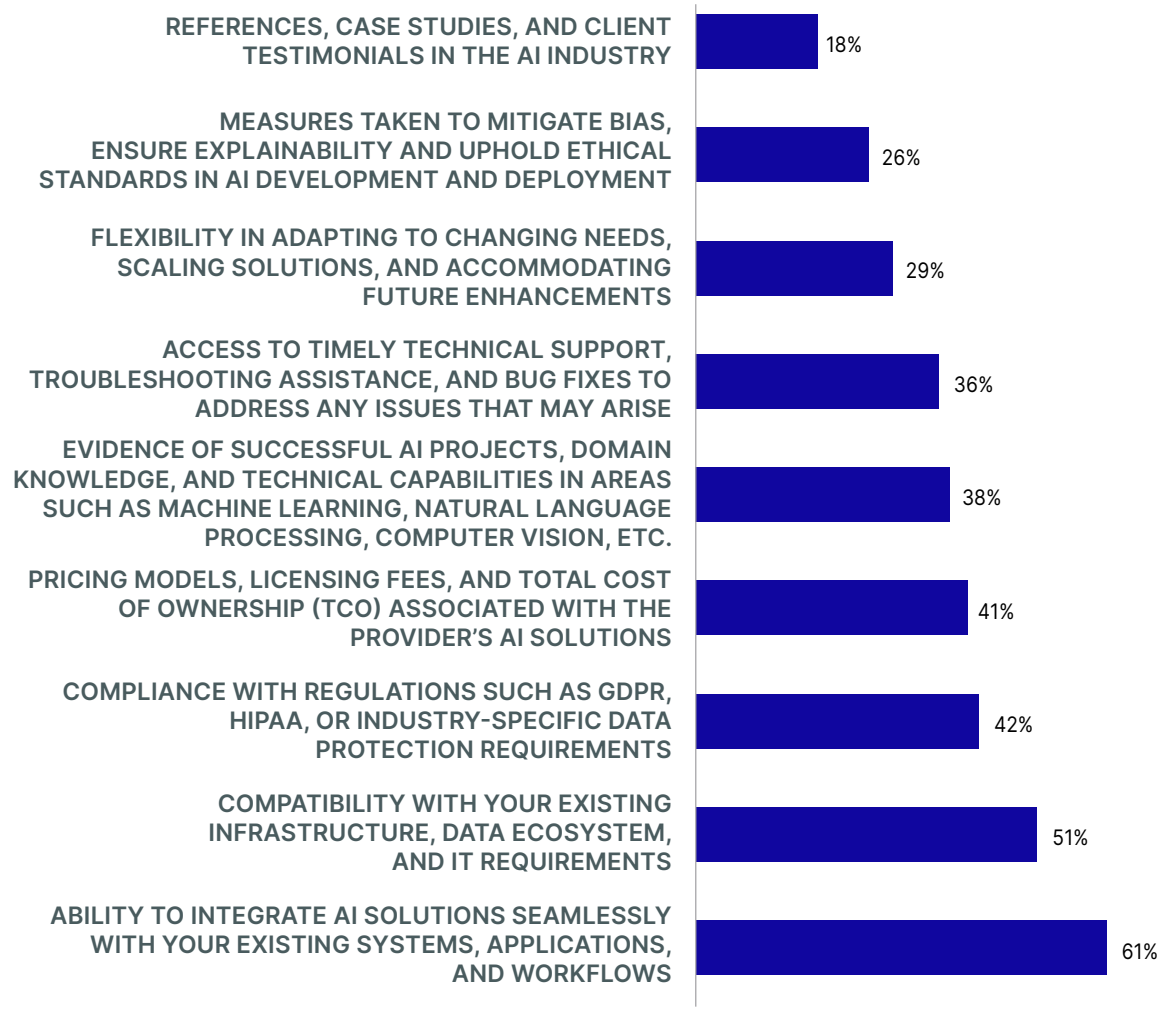


deep learning and its benefits **(Figure 5).** Deep learning is a subset of machine learning and artificial intelligence (AI) that focuses on the use of neural networks with many layers to model and understand complex patterns and relationships in data. This finding highlights the growing interest in more sophisticated AI technologies that have the potential to drive deeper insights and more complex problem-solving capabilities.

Organizations are also highly discerning when selecting AI technology or service providers, prioritizing several key factors to ensure successful integration and long-term value. The findings reflect a comprehensive set of criteria that organizations use to evaluate AI providers, aligning closely with SAP's strengths in integration, compliance, cost-efficiency, technical expertise, scalability, and ethical standards. This alignment positions SAP favorably in meeting the diverse and evolving needs of organizations embarking on their AI journey.

The leading criterion, highlighted by 61% of respondents, is the seamless integration of AI solutions with existing systems, applications, and workflows **(Figure 6).** This underscores the necessity for AI technologies to be compatible

Figure 6: Key Criteria for Selecting AI Tech or Service Providers



with SAP's robust ecosystem, ensuring minimal disruption and maximum efficiency. Compatibility with existing infrastructure, data ecosystems, and IT requirements, important to 51% of organizations, further emphasizes the need for AI solutions that can easily align with SAP's integrated environment. Compliance with regulations such as GDPR, HIPAA, or other industry-specific data protection requirements, crucial for 42%, highlights the importance of adhering to stringent data governance standards, a cornerstone of SAP's commitment to security and compliance. Cost-related considerations, including pricing models, licensing fees, and total cost of ownership (TCO), are significant for 41% of respondents. This indicates that organizations are looking for transparent and sustainable financial models, an area where SAP's flexible pricing and value-driven approach can provide a competitive edge.

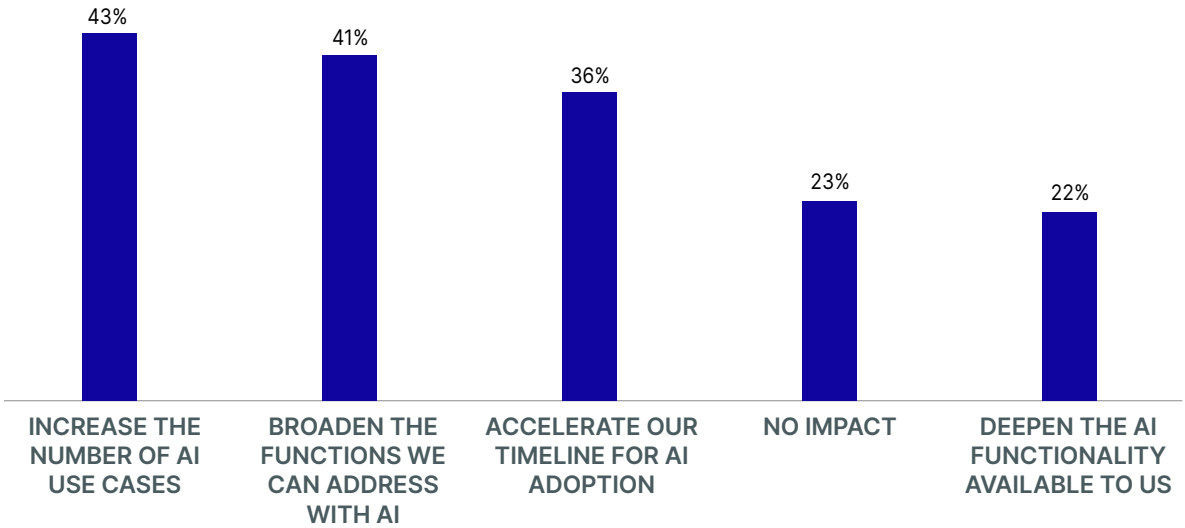
SAP leads the market when it comes to companies choosing partners for their AI initiatives. Being chosen by 49% of respondents highlights its strong market presence and perceived reliability in delivering AI solutions. Microsoft follows with 41%, highlighting its extensive ecosystem and robust AI capabilities through platforms like Azure.

SAP has observed a rising demand for cloud solutions, driven by customers viewing the cloud as essential for transformation and AI, as evidenced by continued strong earnings in 2024. SAP is making clear strides in integrating Business AI across its product portfolio and SAP S/4HANA is perceived as a significant driver for AI adoption, with the potential to expand use cases, broaden functional applications, and accelerate implementation timelines. Organizations that effectively leverage this platform are likely to see enhanced AI capabilities and improved business outcomes. 43% of survey respondents expect SAP S/4HANA to enable an increase in the number of AI use cases **(Figure 7).** This suggests that the platform provides a robust infrastructure that supports the implementation and scaling of diverse AI applications across various business functions. Additionally, 41% of respondents believe that SAP S/4HANA will broaden the range of functions they can address with AI and over a third (36%) expect SAP S/4HANA to accelerate their timeline for AI adoption. This indicates SAP S/4HANA's advanced features and capabilities can streamline the implementation process, allowing organizations to adopt AI technologies more quickly and effectively.

SAP has strategically classified AI value into Base AI and Premium AI to cater to diverse business needs. Base AI capabilities are embedded in solutions like SAP S/4HANA, while Premium AI use cases, requiring an additional license, can be activated across all business solutions included in a customer's subscription. Also, the inclusion of a fixed amount of AI in packages such as RISE with SAP Premium Plus is a noteworthy move by SAP, as it ensures immediate access to advanced AI capabilities, thereby accelerating adoption and driving quick value realization. The ability to purchase AI units across the SAP portfolio, including Human Capital Management and Intelligent Spend and Business Management, offers customers a radical approach to enhance business functions with AI. Additionally, AI services on the SAP Business Technology Platform (BTP) are priced based on consumption, offering a flexible and cost-effective approach. This comprehensive strategy by SAP not only facilitates the adoption of AI but also maximizes its impact on business efficiency and innovation.

The most significant benefit of AI, cited by 68% of respondents, is cost savings, highlighting a strong emphasis on financial efficiency and AI's potential to reduce operational expenses

Figure 7: SAP S/4HANA Impact on AI Adoption



(Figure 8). Automation decreases the reliance on manual labor for repetitive tasks, and optimized processes minimize resource wastage and improve efficiency. The findings also reveal other multifaceted benefits of AI adoption in various business areas. While improved customer experience and satisfaction, noted by 51% of respondents, underscores the importance of leveraging AI to enhance customer interactions and service quality, improved decision-making cited by 50% of respondents, highlight the value placed on AI's ability to provide actionable insights. 43% also reported increased worker productivity and optimized workforce efficiency with 36% of respondents reporting product and service innovation, which reflects the role of AI in driving creativity and developing new offerings.

While AI adoption is progressing at a continued pace, organizations are cautious toward its application in core operational areas, emphasizing the need for continued development and validation of AI technologies to meet these specialized demands. While 27% of organizations are currently using or have used AI for customer service, its adoption is extremely low for other business functions. Surprisingly, a significant number of organizations are still in the evaluation phase for integrating AI into core business functions such as Finance & Accounting, Procurement & Sourcing, Product Service Design and Development, Risk Management, and Supply Chain and Logistics. This hesitancy could be attributed to the complexity and critical nature of these functions, where the integration of AI requires robust data management, high accuracy, and compliance with stringent regulatory standards.

However, despite the benefits, there are also a multifaceted set of challenges, ranging from technical and infrastructural issues to organizational, regulatory, and ethical concerns, all of which must be addressed to successfully implement AI solutions **(Figure 9).** The most significant challenge, cited by 53% of respondents, is dealing with legacy data and applications, competing priorities are identified as a challenge by 50% of respondents, while the lack of relevant resources and skills within the organization is a concern for 46% of respondents. Legacy systems face considerable obstacles

Figure 8: AI Implementation Benefits

Figure 9: Challenges with Implementing AI

when integrating AI, mainly due to fragmented, outdated, or poorly formatted data that machine learning algorithms cannot easily use. This results in inaccurate AI outcomes and poor decision-making because of missing data annotations and quality checks. Moreover, the hardware that supports these legacy systems often lacks the computational power needed for AI's high demands.

Required Actions

- **Prepare for a cloud-based future.** SAPinsiders must be prepared for a cloud-based future if they want to continue using SAP solutions. While not all organizations have moved their SAP workloads to the cloud, SAP's ongoing improvements and functionalities are centered here, especially AI. Failing to prepare for this shift, whether it involves moving to a different ERP provider or a third-party support service, could result in significant cost and complexity.
- **Ensure data quality: Businesses must ensure high data quality to fuel their AI models.** The ability to generate and scale value from AI depends on effectively using company data. This requires targeted upgrades to data architecture and robust data foundations, including clear decision rights, processes, and taxonomies. Ensuring data accuracy, completeness, and consistency while meeting organizational needs involves meticulous data profiling, cleansing, and validation processes. Effective data management requires establishing robust procedures for data collection, storage, and retrieval, along with clearly defining data ownership and accountability. These practices are essential for maintaining data integrity and enabling informed decision-making across the organization. Link efforts to specific AI applications rather than the entire enterprise.
- **Data literacy is necessary.** Generative AI is a powerful productivity tool, but companies must train their employees to understand the

daily applications of data and its significance for the company, customers, and the marketplace. For those developing data models, it is crucial to recognize and address biases within these models. These individuals must be aware of the consequences of their decisions and actively work to minimize bias in the data models they create.

- **Adopt a phased approach to AI integration.** Organizations should adopt the "crawl, walk, run" strategy for AI implementation. This approach enables a gradual integration of AI technologies, starting with small projects, advancing to larger applications, and culminating in full-scale deployment. It helps mitigate risks, facilitates iterative learning, and ensures a smooth transition to advanced AI capabilities. For example, in finance operations, starting with smaller projects like automating invoice processing before scaling to more complex applications like predictive financial analysis.
- **Upskill the current talent.** While no-code and low-code platforms continue to grow and require no specialized skills, it is still important to upskill the current team and clearly outline the specific generative AI skills needed. By training the existing workforce in these areas, organizations can better utilize AI.
- **Focus on ethical AI utilization.** Prioritize ethical AI practices in line with SAP's commitment, ensuring adherence to data protection laws. For instance, when deploying AI for financial forecasting, ensure the algorithms are transparent and comply with financial regulations to maintain integrity and trust.

INSIDER PERSPECTIVE

"Creating a robust business case for early AI use cases is challenging. Currently, we are still in the experimentation phase, generating forecasts and predictive reports. However, quantifying the outcomes in tangible numbers remains difficult."

YAMAN ACAR, IT DIRECTOR, ALLIANCE HEALTHCARE TURKEY

DART
MODEL FRAMEWORK

AI — State of Adoption 2024

DRIVERS

- Automate repetitive and time-consuming tasks and free up workers to spend time on more value-added tasks (32%)
- Mandate to accelerate the innovation of products and services (26%)
- Necessity to achieve productivity and cost reduction objectives (23%)
- Rise in the adoption and proliferation of big data and analytics (18%)
- Keep pace with competitors in my industry (14%)
- Need to identify market gaps, weaknesses, and competitor strategies and predict future market shifts (14%)
- Need to optimize talent and workforce (13%)
- Pressure to personalize and enrich the customer experience (13%)
- Need to make strategic choices more quickly and with less bias (12%)

ACTIONS

- Begin with small-scale pilot projects to test AI technologies, validate use cases, and demonstrate ROI (47%)
- Establish a cross-functional team to evaluate and recommend AI initiatives (36%)
- Improve the quality and readiness of enterprise data to feed AI models (35%)
- Build, extend and enhance SAP applications to deliver required AI capabilities (32%)
- Select the appropriate AI model(s) to serve my strategic objectives (32%)
- Prioritize near-, mid- and long-term goals for AI-enabled projects (30%)
- Leverage AI capabilities within SAP BTP to enhance ROI on SAP investment (28%)
- Enlist external technology and service partners to scope and enable AI projects (21%)

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REQUIREMENTS

- Appropriate security and compliance measures to ensure that data exposed to AI models is sufficiently protected (53%)
- High-quality and relevant data to train AI models effectively (37%)
- Ability to integrate AI solutions with existing systems and workflows seamlessly (35%)
- Sufficient funding to cover the costs of AI implementation, including technology and talent acquisition (34%)
- Clear policies and procedures for data governance, ensuring data privacy, security and compliance (34%)
- Corporate culture of data literacy and continuous learning (28%)
- Clear understanding of ethical considerations and frameworks to ensure responsible AI development and deployment (27%)

TECHNOLOGIES

- AI-powered chatbots (29%)
- Machine learning (28%)
- Natural language processing (NLP) (23%)
- Generative AI (22%)
- Virtual assistants (22%)
- Predictive AI (20%)
- Robotics and Autonomous Systems (20%)
- Conversational AI (19%)
- Computer Vision (14%)
- Deep learning (14%)
- Natural language generation (NLG) (14%)
- Speech Recognition and Synthesis (14%)
- Artificial General Intelligence (AGI) (9%)
- Artificial Narrow Intelligence (ANI) (9%)
- Artificial Super Intelligence (ASI) (8%)
- Limited memory AI (8%)
- Reactive machines (7%)
- Theory of mind AI (7%)
- Self-aware AI (6%)

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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