

# **Evolving Business Intelligence and Analytics to Create the Intelligent Enterprise**

By Mark Vigoroso and Suparna Chawla Bhasin

**SPONSORED BY** 







## Executive Summary



"We're seeing a consolidation and rationalization of a fragmented landscape of business intelligence and analytics tools as SAP organizations move towards enterprise-wide approaches to Al-enabled data analysis, visualization and decision-making."

MARK VIGOROSO, CHIEF CONTENT OFFICER, SAPINSIDER

**COMPANIES FACE** a relentless surge of data from diverse and heterogeneous sources, needing advanced tools and practices to efficiently manage and optimize these expanding data sets. Organizations are actively reevaluating and redefining their business intelligence (BI) strategies to better adapt to dynamic business environments and shifting priorities. The business intelligence landscape has rapidly evolved, emphasizing artificial intelligence, data science, self-service applications, and cloudbased technologies. These innovations have become essential for BI professionals, enabling them to navigate and manage complex data environments with greater ease and efficiency. This evolution reflects the ongoing digital transformation of the business world, underscoring the importance of staying agile and adaptive in an ever-changing landscape.

To provide insights and understanding related to SAP customers' business intelligence practices and identify the key factors driving their organization's business intelligence strategy, SAPinsider surveyed 144 business and IT leaders overseeing business intelligence data analytics from April to June of 2024.

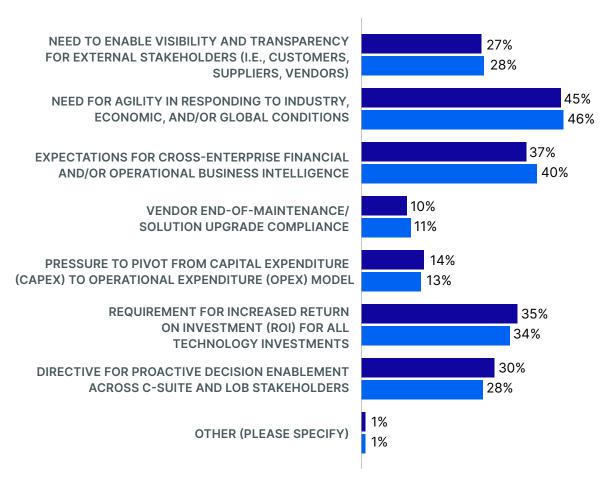
The growing emphasis on data-driven decision-making, coupled with advancements in technology and increased data availability, is driving companies to invest in BI. By leveraging BI tools, organizations can gain valuable insights, optimize operations, enhance customer experiences, and achieve better overall performance. Given the rapid and unexpected changes in the global business environment in recent years, the need for agility in responding to industry, economic, and global conditions emerged as the most impactful factor driving business intelligence strategies for 45% of the respondents (Figure 1). However, while this indicates that organizations are increasingly focused on maintaining flexibility and adaptability in a rapidly changing environment, this was

supported by the requirement for increased return on investment (ROI) for all technology investments which rose slightly from 34% in 2023 to 35% in 2024. This underscores the growing emphasis on achieving higher returns on technology investments and maximizing the efficiency and impact of technology spending.

The research also suggests a sustained demand for comprehensive data management solutions that provide integrated insights across the enterprise. While there is a slight decline in expectations for cross-enterprise financial and operational business intelligence, from 40% to 37%, there remains a strong demand for comprehensive data management solutions capable of delivering integrated insights across the enterprise.

Figure 1: Factors Driving Business Intelligence Strategy

**2024** 2023





Our findings also reveal an increase in the directive for proactive decision enablement across the C-suite and line of business stakeholders, from 28% in 2023 to 30% in 2024. This signifies a notable shift in organizational priorities towards real-time, data-driven decision-making. Organizations are emphasizing the importance of equipping leaders with timely and accurate data to drive competitive advantage through informed strategic decisions. This shift is supported by the increased integration of advanced business intelligence tools within workflows, providing real-time analytics and insights. The focus on empowering line of business stakeholders indicates a shift towards decentralized decision-making, enhancing agility and responsiveness, while the involvement of the C-suite underscores the strategic importance of data-driven decisions at the highest levels. This dual approach ensures that decision-making is both nimble at the operational level and aligned with the broader strategic goals set by senior leadership.

The research also illustrates a dynamic and adaptive BI landscape, where organizations are continually seeking innovative solutions to enhance decision-making, operational efficiency, and stakeholder engagement in a data-driven world.

The emphasis on technologies that improve decision enablement for executive and line-of-business (LOB) stakeholders has increased from 46% in 2023 to 50% in 2024, underscoring the growing importance of empowering stakeholders at all levels with advanced tools for informed, data-driven decisions (Figure 2). The adoption of solutions providing comprehensive, multi-factor situational agility remains stable at 40% for both years, indicating

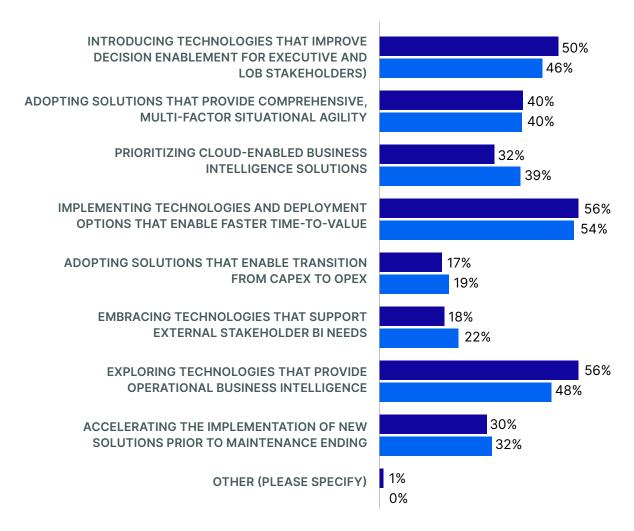
## INSIDER PERSPECTIVE

"As the business intelligence landscape continues to evolve organizations are looking for solutions that will provide them with agility in decision making. This is combined with a need to have BI technologies offering faster time to value. This is being achieved by using cloud-based analytics solutions and platforms like the SAP Business Technology Platform which is seeing an increase in use — especially in large enterprises. While these are relevant strategies, it is important to align Bl objectives with the overall strategic plan as this will provide additional resources and attention that are a requirement for capabilities as important as enterprise Bl."

ROBERT HOLLAND, VP – RESEARCH, SAPINSIDER

Figure 2: Actions/Strategies Most Important to Business Intelligence Needs

**■** 2024 **■** 2023



a sustained need for tools that enhance organizational flexibility in dynamic conditions. Prioritizing cloud-enabled business intelligence solutions has decreased notably from 39% in 2023 to 32% in 2024, possibly reflecting that many have recognized cloud technologies' scalability, accessibility, and integration capabilities. Meanwhile, the implementation of technologies that enable faster time-to-value has slightly increased from 54% in 2023 to 56% in 2024, indicating a growing recognition of the importance of rapidly realizing benefits from technological investments. This suggests that

organizations are increasingly prioritizing tools and solutions that can quickly demonstrate their value, enhancing their ability to remain competitive and adapt to market changes efficiently.

The adoption of solutions facilitating transitions from capital expenditure (CapEx) to operational expenditure (OpEx) has marginally decreased from 19% in 2023 to 17% in 2024. Embracing technologies that support external stakeholder BI needs has also reduced from 22% in 2023 to 18% in 2024, pointing to enhanced transparency and collaboration with customers, suppliers, and vendors. Exploring

technologies that provide operational business intelligence has seen a significant rise from 48% in 2023 to 56% in 2024, underscoring the need for tools that deliver real-time, actionable insights to improve operational efficiency. Operational BI refers to the use of data analysis and reporting tools to support and optimize dayto-day business operations. Unlike traditional BI, which often focuses on strategic, long-term decision-making, Operational BI is concerned with real-time or near-real-time data that is directly relevant to ongoing business activities. This approach enables organizations to monitor and manage their operations more effectively, ensuring that they can respond quickly to emerging trends and issues.

Lastly, the focus on accelerating the implementation of new solutions before maintenance ends has slightly decreased from 32% in 2023 to 30% in 2024, suggesting a shift towards more proactive and planned upgrade strategies.

The research results highlight the growing importance of integrated cloud analytics, advanced financial and operational planning tools, user-friendly self-service analytics, and sophisticated predictive capabilities. These are crucial for businesses aiming to enhance their agility, improve decision-making, and stay competitive in an increasingly complex and data-driven environment.

Cloud analytics capabilities that unite data from disparate sources are rated "very important" by 37% of the respondents underscoring the importance for businesses to invest in robust cloud analytics solutions that facilitate self-service and data integration. 35% of respondents consider solutions providing Financial Planning & Analysis (FP&A) or Extended Planning and Analysis (XP&A) capabilities as "very important," indicating a strong focus on financial and operational planning tools to support business agility. Additionally, cloud analytics capabilities that maximize business user self-service is reported to be "important" for 42% of respondents, which highlights a trend towards democratizing data access. By enabling non-technical users to perform their own analyses, organizations can foster a more data-driven culture and empower employees to



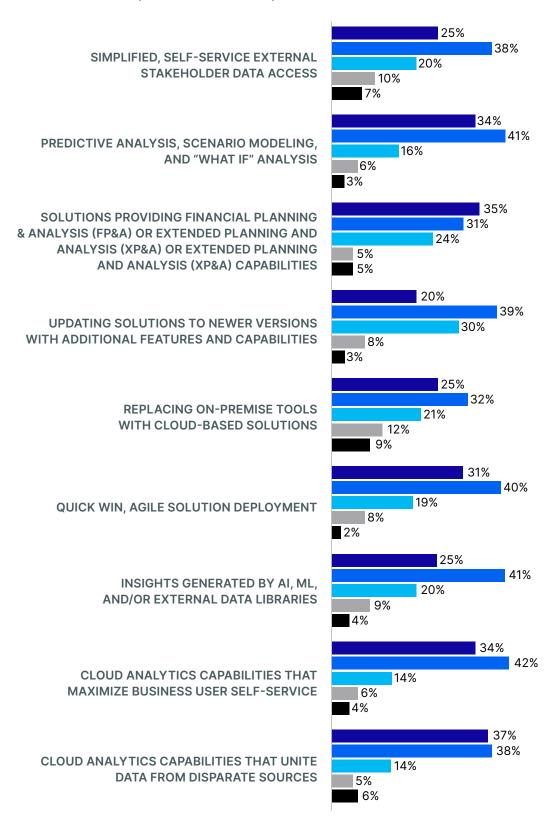
make informed decisions without heavy reliance on IT departments.

Insights generated by AI, ML and/or external data libraries and Predictive Analysis, Scenario Modeling, and "What If" Analysis, are also crucial priorities, with 41% of respondents considering it "important." This highlights the critical need for advanced predictive capabilities to inform strategic decisions. These tools are essential for informing strategic decisions, allowing organizations to anticipate future trends, assess potential scenarios, and make proactive adjustments to their strategies.

Organizations are also actively reevaluating and redefining their business intelligence strategies to better adapt to changing business environments and priorities. Data reveals a noticeable shift in how organizations are approaching and redefining their BI objectives within strategic plans. The percentage of organizations with fully defined BI objectives in their strategic plans remained consistent at 28% between 2023 and 2024 (Figure 4), while there is a slight decrease in the percentage of organizations with partially defined BI objectives, from 42% in 2023 to 39% in 2024. This could suggest a shift towards either more fully defined objectives or towards organizations recognizing the need for redefinition.

Figure 3: Business Intelligence Requirements within Organizations

- Very Important
   Important
   Moderately Important
- Somewhat Important
   Not Important

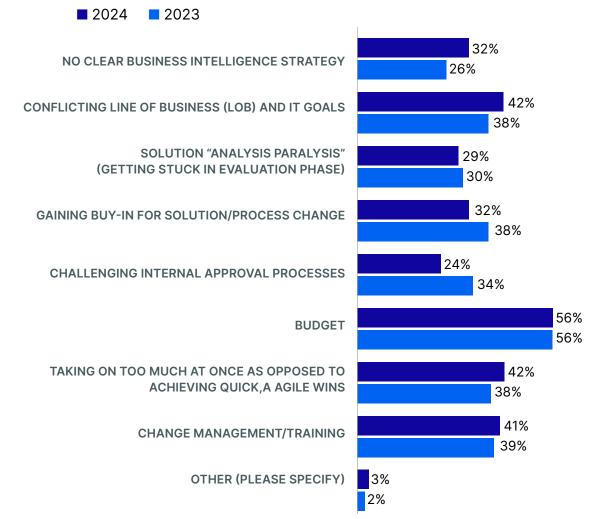


Additionally, only 39% of respondents in 2024 indicated that their objectives are partially defined in their strategic plans, a slight decrease from 42% in 2023, while fully defined BI objectives in enterprise roadmap remained consistent in 2023 and 2024. The overall data indicates positive trends in the integration of BI objectives within organizational strategic planning, with many organizations demonstrating a solid foundation and increasing awareness of BI's importance. However, there is still room for improvement, particularly in terms of communication and ensuring that all stakeholders are

informed and engaged in the BI strategy. Continuous adaptation and refinement of BI objectives will be crucial for organizations to stay competitive and responsive to the evolving business landscape.

When it comes to business intelligence technologies being used by organizations, survey data reveals that a significant proportion of respondents (38%) are using or have utilized role-based authentication technologies for selfservice data access, highlighting the importance of secure and tailored data access controls in modern BI strategies. Following this, 28% are

Figure 4: Biggest Challenges in Deploying Business **Intelligence Programs** 





leveraging cloud platforms for ETL (Extract, Transform, Load), integration, data management, and data staging, underscoring the growing reliance on cloud infrastructure for comprehensive data handling and processing tasks. 27% are implementing technologies with native Al, machine learning (ML), and external data library integration, reflecting a strong trend towards incorporating advanced analytics and external data sources for enhanced insights. Additionally, 25% of respondents are using data science or advanced statistics solutions, and an equal percentage (25%) are employing cloud platforms for any-source data ingestion, indicating a widespread adoption of sophisticated data analytics and cloud-based solutions to facilitate versatile and scalable data processing capabilities.

The survey reveals persistent and evolving challenges in implementing business intelligence strategies within organizations. Budget constraints remained the top challenge, consistent at 56%, while the tendency to take on too much at once, rather than achieving quick, agile wins, rose from 38% to 42%. Additionally, challenges related to change management and training increased from 39% to 41%, highlighting the need for effective change management practices. Overall, the findings highlight the complex and multifaceted nature of BI strategy imple-

mentation, underscoring the need for clear planning, alignment, and support mechanisms to overcome these barriers.

Supporting the challenges is the lack of a clear BI strategy that saw an increase from 26% to 32%, underscoring the ongoing struggle to define and articulate BI objectives. Conflicts between line of business (LOB) and IT goals rose from 38% to 42%, indicating persistent misalignment issues that hinder cohesive BI strategy implementation. Analysis paralysis remained relatively stable, decreasing slightly from 30% to 29%. However, difficulty in gaining stakeholder buy-in for solution or process changes increased from 32% to 38%, reflecting ongoing challenges in securing support for BI initiatives. The proportion of respondents identifying challenging internal approval processes as a barrier grew significantly from 24% to 34%, suggesting increasing bureaucratic hurdles.

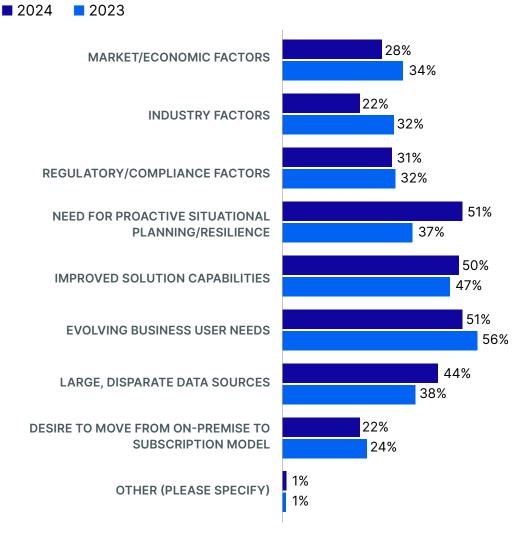
These findings illustrate the complex and multifaceted nature of BI strategy implementation. The increase in challenges such as unclear strategies, misalignment between LOB and IT, and bureaucratic hurdles suggests that many organizations still struggle with foundational elements of BI implementation. The persistent budget constraints highlight financial barriers that need addressing to enable successful BI

initiatives. Furthermore, the rising challenges in change management and the tendency to overextend initiatives indicate a need for more focused, agile approaches. Organizations must prioritize clear planning, stakeholder alignment, and robust support mechanisms to overcome these barriers and fully leverage the potential of their BI strategies.

The research data also highlights several critical trends shaping the SAP business intelligence landscape. Organizations are increasingly tailoring their BI strategies to address external pressures and competitive dynamics, as evidenced by the rising importance of market/economic and industry-specific factors. There is

a substantial increase in the emphasis on proactive situational planning and resilience, underscoring the priority of preparing for potential disruptions. A notable increase from 37% in 2023 to 51% in 2024 highlights the growing emphasis on proactive planning and resilience (Figure 5). This indicates that organizations are prioritizing the ability to anticipate and respond to potential disruptions and situational changes through robust BI capabilities. BI tools equipped with predictive analytics can forecast future trends and scenarios, helping organizations prepare for various contingencies. Scenario planning features allow organizations to simulate different situations

Figure 5: Factors Influencing Business Intelligence Needs



and evaluate the potential impact, facilitating better preparedness.

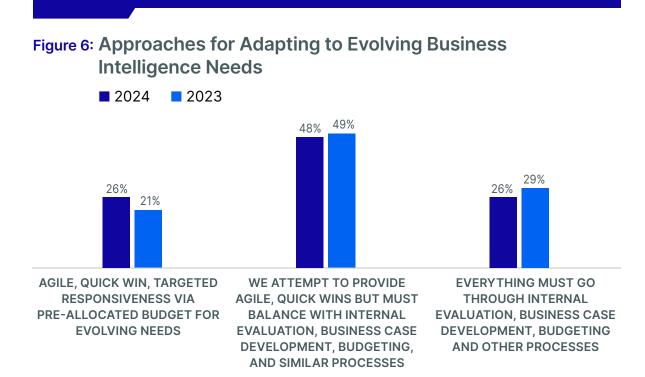
While the second most reported factors influencing BI needs were evolving business user needs (51%) and an increased focus on improved solution capabilities (surging from 47% to 50%), the former was reported as the biggest influencer in 2023 (56%). A dramatic decline is also seen in the significance of market/economic factors, declining from 34% in 2023 to 28% in 2024, and industry-specific factors from 32% to 22%.

Managing large, disparate data sources remains a critical challenge for organizations, with its importance increasing from 38% in 2023 to 44% in 2024. This rise underscores the growing complexity of data environments as businesses continue to accumulate vast amounts of data from diverse sources. Effectively integrating and analyzing this data is essential for deriving meaningful insights and maintaining a competitive edge. The increase highlights the necessity for advanced data management and integration capabilities within business intelligence (BI) strategies, emphasizing the need for robust tools and technologies that can handle the scale and diversity of

modern data landscapes. This trend also reflects the ongoing shift towards data-driven decision-making, where comprehensive and accurate data analysis is pivotal for informed strategic planning and operational efficiency.

There is also a nuanced approach to adapting BI needs (Figure 6), with a significant number of organizations striving for agility while balancing the need for thorough internal processes. Organizations want to achieve agility and quick wins while balancing internal evaluation, business case development, and budgeting processes, with 48% of respondents still adopting the approach, despite a 1% decline from 2023. The slight decrease suggests that while this balanced approach remains predominant, there may be a shift towards either more agile methods or more structured processes. This approach reflects the need to combine responsiveness with thorough planning and justification, ensuring that BI initiatives are both effective and strategically aligned.

Additionally, while 26% of respondents still want to adhere to the process involving internal evaluation, business case development, and budgeting for all initiatives, an equal percentage





of respondents favored agile, quick-win strategies utilizing pre-allocated budgets, which saw a modest increase up from 21% in 2023 to 26% in 2024.

The findings suggest that the future of BI strategy lies in balancing agility with strategic oversight. This approach will enable organizations to quickly respond to new opportunities and challenges while ensuring that their initiatives are well-founded and aligned with broader business goals.

There is also a growing commitment to BI solutions, reflecting a heightened focus on leveraging data-driven insights to enhance decision-making and strategic planning across organizations. 81% of respondents confirmed that they are considering, planning, or implementing BI solutions, a slight increase from 80% in 2023. On the other hand, the percentage of respondents not engaged in considering, planning or implementing BI initiatives decreased slightly to 19% in 2024 from 20% in 2023.

This is also a dynamic market where

organizations are actively assessing various BI solutions to determine the best fit for their needs, despite some platforms already having a strong presence. SAP Business Technology Platform (SAP BTP) (35%) and Microsoft Power Platform (27%) are widely used BI platforms indicating significant market penetration and adoption. However, a substantial number of organizations are still in the evaluation phase for several platforms, reflecting ongoing interest and potential future adoption. Specifically, 24% are evaluating AWS Analytics, Microsoft Power Platform (25%), SAP BTP (24%), and Google Cloud Analytics (22%). Choosing the right BI solution involves a comprehensive evaluation of how well it aligns with business needs, integrates with existing systems, supports advanced analytics, ensures data security, and offers a good return on investment.

The survey data also reveals that there is significant activity in key preparatory and evaluation stages, highlighting the completion of careful planning and strategic pre-requisites for successful BI implementations like software selection (39%) and evaluation (38%). 53% of respondents reported on-going requirement definition for BI initiatives and other significant activities like implementation evaluation and business case development at 47% and 46%. Also, while significant progress is being made in various phases of BI initiatives, activities like solution deployment and go-live/hypercare are often deemed not applicable, indicating a phased or selective approach to BI implementation.

#### **Required Actions**

• Integrate business intelligence objectives into organizational strategic plans and enterprise roadmaps. While most respondents have only partially defined these objectives in their strategic planning, less than one in ten respondents do not include them at all. Including business intelligence objectives in enterprise-wide goals enhances the likelihood of securing adequate funding and achieving long-term business intelligence goals. This integration ensures that business intelligence projects are developed and executed with comprehensive strategies and

- plans, providing robust support to cross-functional and operational business intelligence initiatives.
- · Invest in business intelligence technologies to enhance data-driven decision-making, streamline operations, and improve overall business efficiency. Investing in operational business intelligence (BI) technologies is essential for organizations aiming to accelerate their data-driven decision-making processes. These advanced tools offer businesses profound insights into their operations, empowering them to make more informed and strategic decisions. Operational BI technologies enhance efficiency by delivering real-time data analytics, which pinpoint inefficiencies and highlight opportunities for improvement. This capability leads to optimized workflows and a significant boost in productivity. Additionally, the rapid access and analysis of data facilitate a proactive approach to problem-solving and strategic planning, thereby enhancing overall business efficiency and securing a competitive edge in the market.
- Ensure collaboration between line of business (LoB) and IT teams on business intelligence (BI) initiatives. The increase in conflicts between line of business (LoB) and IT goals, from 38% to 42%, highlights a persistent misalignment that significantly hinders the implementation of cohesive business intelligence (BI) strategies. This trend is particularly

- concerning as effective BI strategies necessitate seamless collaboration between these critical organizational functions. Such misalignment not only impairs the efficiency of BI initiatives but also limits the ability to leverage data-driven insights for enhanced business performance. Resolving this is essential for organizations to fully capitalize on their BI investments and promote a more integrated and effective approach to data management and use. It is essential for LoB teams to be actively involved in BI planning.
- · Invest in cloud analytics capabilities that unite data from disparate sources. The finding that 37% of respondents rate cloud analytics capabilities that unify data from disparate sources as "very important" highlights a crucial need for businesses to invest in robust cloud analytics solutions. These solutions are essential for enabling self-service and seamless data integration, which are critical for extracting comprehensive insights from diverse data sets. This emphasis reflects a growing recognition of the strategic value of cloud analytics in enhancing data accessibility, fostering informed decision-making, and driving business innovation. As organizations increasingly adopt data-driven strategies, investing in advanced cloud analytics capabilities becomes imperative to maintaining a competitive edge and achieving operational excellence.



## MARKET DRIVERS, STRATEGIES AND TECHNOLOGIES FOR **BUSINESS INTELLIGENCE**



- · Need for agility in responding to industry, economic, and/or global conditions (45%)
- · Expectations for cross-enterprise financial and/or operational business intelligence (37%)
- · Requirement for increased return on investment (ROI) for all technology investments (35%)
- · Directive for proactive decision enablement across C-suite and LoB stakeholders (30%)
- · Need to enable visibility and transparency for external stakeholders (i.e., customers, suppliers, vendors) (27%)
- Pressure to pivot from capital expenditure (CapEx) to operational expenditure (OpEx) model (14%)
- Vendor end-of-maintenance/solution upgrade compliance (10%)



- · Implementing technologies and deployment options that enable faster time-to-value (56%)
- Exploring technologies that provide operational business intelligence (56%)
- Introducing technologies that improve decision enablement for executive and LoB stakeholders (50%)
- · Adopting solutions that provide comprehensive, multi-factor situational agility (40%)
- Prioritizing cloud-enabled business intelligence solutions (32%)
- · Accelerating the implementation of new solutions prior to maintenance ending (30%)
- Adopting solutions that enable transition from CapEx to OpEx (17%)
- Embracing technologies that support external stakeholder BI needs (18%)

Continues on next page



- Cloud analytics capabilities that unite data from disparate sources (37%)
- · Solutions providing financial planning & analysis (FP&A) or extended planning and analysis (xP&A) capabilities (35%)
- Predictive analysis, scenario modeling, and "what if" analysis (34%)
- Cloud analytics capabilities that maximize business user self-service (34%)
- Quick win, agile solution deployment (31%)
- Replacing on-premise tools with cloud-based solutions (25%)
- Insights generated by AI, ML, and/or external data libraries (25%)
- Simplified, self-service external stakeholder data access (25%)
- · Updating solutions to newer versions with additional features and capabilities (20%)



- Role-based authentication for self-service data access (38%)
- Cloud analytics platform (28%)
- Cloud platform for ETL, integration, data management, and data staging
- Data science and/or advanced statistics solutions/tools (25%)
- Cloud platform for any-source data ingestion (24%)
- Predictive analytics technologies (19%)
- Technologies with native AI, ML, and external data library integration (17%)
- Out-of-the-box business or industry accelerators (17%)

## **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.

## Report Sponsors

#### Google Cloud

Google Cloud is the new way to the cloud, providing Al, infrastructure, developer, data, security, and collaboration tools built for today and tomorrow. Google Cloud offers a powerful, fully integrated and optimized AI stack with its own planet-scale infrastructure, custom-built chips, generative Al models and development platform, as well as Al-powered applications, to help organizations transform. Customers in more than 200 countries and territories turn to Google Cloud as their trusted technology partner.

For more information, visit https://cloud.google.com/solutions/sap

### intel

For nearly 50 years, Intel and SAP have made a profound impact on people, business and society on a global scale. Together they are turbocharging the next wave of breakthrough innovations with the power of in-memory computing and persistent memory technologies that help unleash the potential of data. Co-innovations are helping enterprises face — and overcome — challenges by increasing business agility and flexibility with real-time analytics and reimagined performance. Customers can protect and future-proof their investments with a modern infrastructure of validated and SAP-certified solution and accelerate speed to market with an optimized, enterprise-ready platform designed for innovation. Learn how SAP HANA\* and HANA based applications with Intel® Xeon® processors are helping organizations realize the promise of a modern business technology platform.

For more information, visit intel.com.



Navisite, part of Accenture, is a trusted digital transformation partner for growing and established global brands. As an SAP Gold Partner, Navisite brings a unique combination of business process knowledge, strong credentials for SAP solutions, and deep technical and industry expertise to help customers drive business outcomes and maximize their investment in SAP technologies. Let Navisite meet you where you're at in your SAP journey with end-to-end strategic advisory, implementation, and managed services.

For more information, visit https://www.navisite.com



Red Hat helps SAP enterprises standardize on a single, open platform and build on a foundation that sets them up for a future of innovation with a rich portfolio of flexible solutions. From standards-based solutions for automation, management, and integration, to app containerization and open-hybrid cloud, Red Hat's SAP portfolio supports any on-premise or cloud environment with freedom from vendor lock in. Not just an operating system, Red Hat® solutions are driving intelligent enterprises through optimized stability, scalability, and security for SAP deployments. Red Hat is a market leader in Linux®, multicloud container development, and infrastructure automation, with a rich history in the open-source community. With more than two decades of strategic collaboration with SAP, the support of IBM, and joint solutions from our global partner ecosystem, Red Hat offers an end-to-end portfolio of open-source solutions for organizations looking to build an intelligent enterprise throughout their cloud journey. Red Hat for SAP. Open. For transformation.

For more information, visit https://www.redhat.com/sap



SAPinsider comprises the largest and fastest-growing SAP membership group worldwide. It provides SAP professionals with invaluable information, strategic guidance, and road-tested advice through events, magazine articles, blogs, podcasts, interactive Q&As, white papers, and webinars. SAPinsider is committed to delivering the latest and most useful content to help SAP users maximize their investment and leading the global discussion on optimizing technology.

For more information, visit SAPinsider.org. © Copyright 2024 SAPinsider. All rights reserved.