

A woman with a head made of crumpled newspaper sits on a couch, talking to another woman. The background is a bright window with greenery outside.

Technology Vision for SAP Solutions 2023

When Atoms Meet Bits Meet SAP Solutions

Build the foundations
of a new enterprise reality
with the SAP® ecosystem

Foreword

Companies running SAP must embrace a new, shared reality

In last year's Technology Vision for SAP solutions, we described how a continuum of cutting-edge enterprise metaverse experiences is starting to emerge, creating huge possibilities for business.

This year, we're building on those ideas to consider how the convergence of our digital and physical worlds is accelerating, and will eventually fuse seamlessly into a new kind of shared reality.

Taking inspiration from Accenture's principal Technology Vision for 2023, we're focusing on the practical implications and opportunities of this convergence — and the role of generative artificial intelligence (AI) in particular — for enterprises running SAP solutions.

There's a lot of excitement among business leaders about the potential to transform the enterprise by bringing rapidly advancing AI into the digital core.

The key challenge now is to take that enthusiasm and use it to drive real change — total enterprise reinvention — and set a new performance frontier for people and processes as well as technology.

We're delighted to share this vision for the near future of enterprise technology, and the role of SAP solutions within it. And we look forward to helping your business tap into the many opportunities that will be created in our new, shared reality.



Caspar Borggreve

Global Lead - SAP Business Group



Stephanie Guimbellot

SAP Business Group Global Innovation Program Lead



Daniel Gonzalez

SAP Business Group Americas Innovation Program Lead



Catherine Nguyen

SAP Business Group Europe Innovation Program Lead

Our thought leaders



Pietro Petretti
Enterprise & Industry
Technologies – Global Products
Industry Lead



Eli Lambert
Global IT – Finance
and SAP Platform Lead



Michel Roger
SAP Business Group
Global Supply Chain Lead



Laura Garriz
SAP Iberia Innovation Lead
and Intelligent Analytics Lead



Roberto Lombas
Accenture Global IT
Finance Platforms



David Pereles
SAP Business Group
SAP BTP Global Lead



Anil Vohra
SAP Business Group
CTIO for Accenture
Technology Centers



Deepika Bashkar
SAP Business Group
AAPAC Innovation Lead



Andrea Hebel
Technology Innovation
Accenture Labs



Britta Simms
Security Services
Platform Security Lead

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What's the
big picture?



A step change in disruptive potential

This is an important moment in the decades-long digital technology revolution. The pace of change, and the level of disruption impacting business, has accelerated dramatically.

Accenture's Global Disruption Index suggests that, across six different socioeconomic, technological, and environmental indicators, global disruption increased by a massive 200% in the five years leading up to 2022. The equivalent figure in the five years before that? Only 4%.

Leading businesses have been harnessing the disruptive forces of change — from generative AI to foundation models to metaverse experiences and beyond — to bend the innovation curve to their advantage.

They've ramped up their use of cloud services and improved the way they leverage data inside and outside the enterprise to solve business problems that once seemed unsolvable.

The implication? The time for incremental improvement is over. Business leaders must now target a step change toward total reinvention.

And their SAP solutions and data will have a central role to play in that process.

+

200%

increase in global
disruption between
2017 and 2022

+

A new business reality is being built

The next wave of transformation won't only create better businesses. It will also build the foundations of a new kind of reality.

Advancing technology is blurring the lines between our online and offline worlds, opening up the possibility of a shared reality that seamlessly combines our physical lives of atoms and our digital ones of bits.

Soon, customers and employees won't have to consciously move back and forth between their physical realities and the digital spaces they've created. Increasingly, the demarcation between those worlds will be erased.

The enterprise metaverse, which we examined in last year's Technology Vision for SAP solutions, is a watershed moment in this process.

But it's not the only one. Look at the way generative AI is sparking a creative revolution.

Millions of people around the world have signed up to services like ChatGPT and others to explore the possibilities of generating text-based content and digital images on demand.

This is only the start. As the foundation models underpinning these generative AI applications become ever more powerful and are combined with other technologies across the metaverse continuum — as well as the core business data housed in SAP solutions — they'll reshape everything from scientific discovery to business operations to design and manufacturing, and much more.



81%

of C-suite executives intend to explore generative AI technologies in 2023

98%

agree that generative AI will spark significant creativity and innovation ²



What does it mean
for companies
running SAP?



Business leaders must recognize the accelerated pace of change taking place today. A sign of things to come? Just look at the democratizing revolution being sparked by generative AI applications.

When ChatGPT launched at the end of 2022, it captured people's attention at a pace and on a scale rarely seen before.

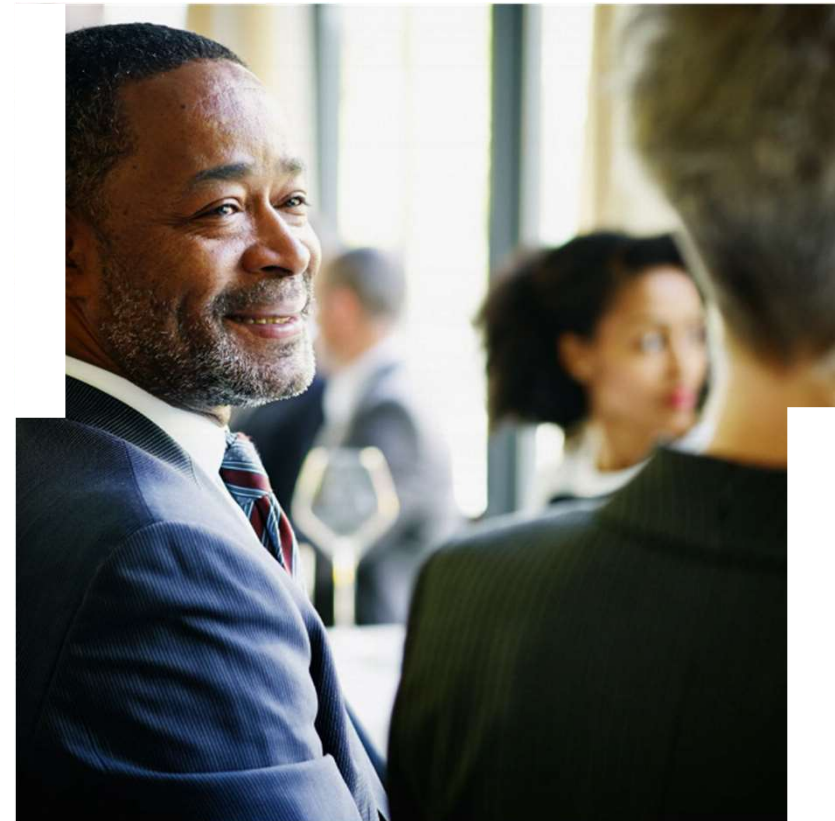
Within weeks, it seemed like the whole world had woken up to its revolutionary power and potential — and ushered in a new age of citizen developers and citizen analysts.

According to one report, ChatGPT acquired 123 million users after just three months, making it the fastest-growing app in history.³

The implication? All business leaders need to pay close attention to the potential of these emerging technologies to deliver next-level business value. They should also consider the impact on employee and customer expectations.

As we've seen throughout the digital revolution, when technologies and experiences become embedded in people's personal lives, they quickly become the baseline expectation in an enterprise context too.

Companies must therefore understand and plan for a future in which emerging technologies, such as generative AI and immersive experiences, are integrated into the digital core, both within and alongside the SAP solutions and data they're using to run the business.



Four key trends to look out for



Generalizing AI

A new wave of AI innovation — including generative AI, large language models, and foundation models — is enabling businesses to access data and create content in new ways.



Digital identity

Emerging forms of digital ID are breaking down the walls that historically divided the way people live and work across physical and digital domains.



Your data, my data, our data

Data supply and demand among all enterprise stakeholders are dramatically increasing.

Companies have an unprecedented opportunity to build trust with partners and customers by proactively becoming more transparent in their data use.



Our forever frontier

The feedback loop between scientific advances and technology is getting faster, allowing businesses and other organizations to explore new frontiers and unlock novel solutions to their greatest challenges.



96%

of executives believe generative AI capabilities like ChatGPT are ushering in a new era of enterprise intelligence. ⁴



85%

of executives agree that the ability to authenticate digital users and assets — the foundation for traversing digital and physical worlds — is now a strategic business imperative, not a technical issue. ⁵



90%

of executives believe data transparency is becoming a competitive differentiator within organizations and across industries. ⁶



96%

of global executives agree the combinatorial effect of science and technology driving each other is leading to compressed innovation in science tech. ⁷

SAP customers can...

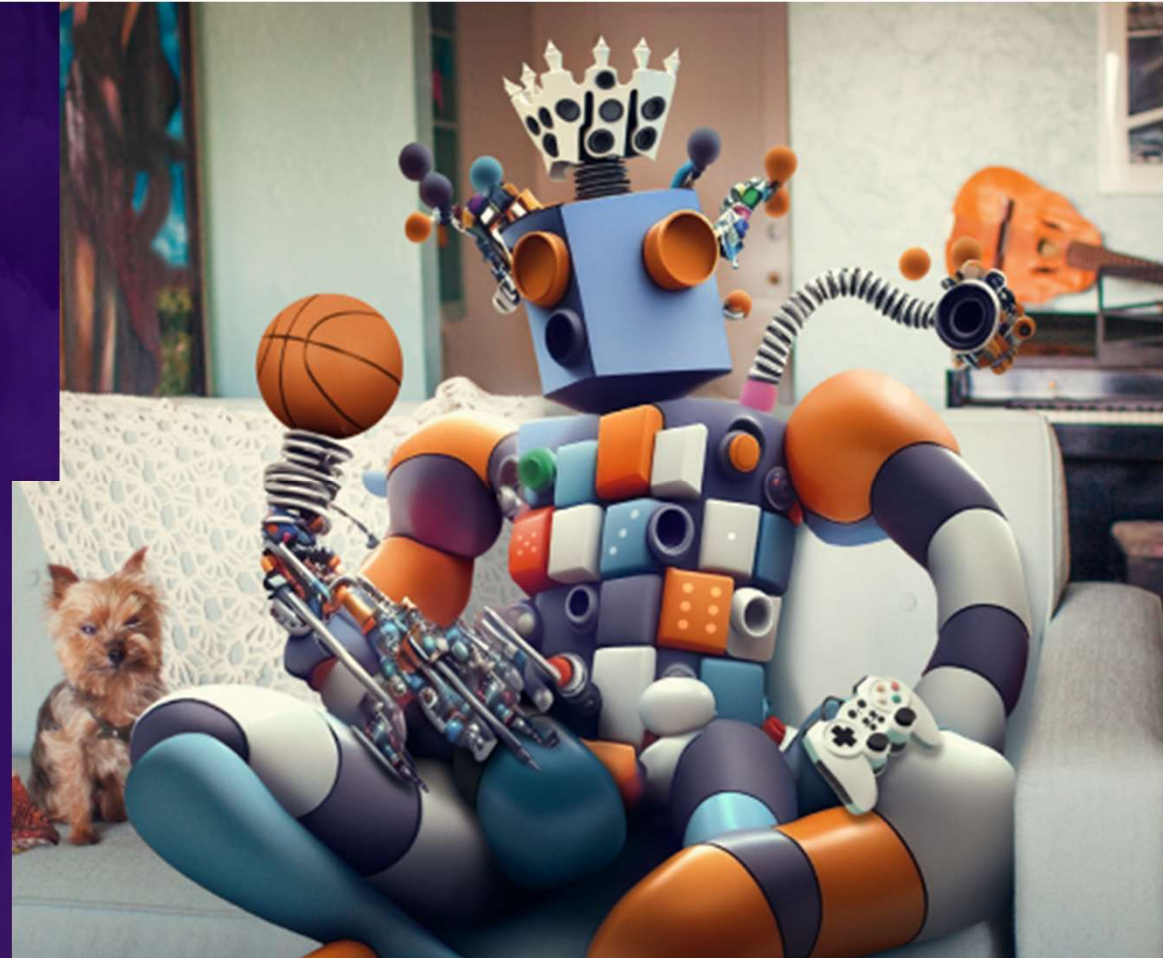
... turn core business data into insights and value at scale and reinvent software implementations with both generative and classical AI.

... transform digital identity and provide more seamless experiences across SAP solutions, and beyond.

... build a more transparent data foundation with SAP solutions.

... reinvent physical and digital spaces with SAP solutions at the core.

Generalizing AI



Turning data into business value at scale

A powerful and fast-moving wave of AI innovation — including generative AI, large language models (LLMs), and foundation models — is enabling businesses to access data and create valuable content in completely new ways.

These advances mark a significant milestone in artificial intelligence. For the first time, machines can interpret everyday language, context, and intent, respond appropriately in a variety of formats (text, speech, code) and be independently generative and creative. And because they've been pre-trained on vast quantities of data, they offer powerful capabilities out of the box — and can be adapted or finetuned for a wide range of enterprise tasks.

Ready-to-consume generative AI applications like OpenAI's ChatGPT and others are having a rapidly democratizing impact across all industries. Employees with tech and non-tech backgrounds alike can consume these applications through APIs and tailor them for their workplace needs through techniques like prompt engineering.

Increasingly, however, companies are using the underlying AI foundation models as a customizable technology to drive breakthrough innovations that power total enterprise reinvention.

When applied to the data in SAP solutions, in addition to other unstructured data, these models offer the promise of vastly improved knowledge management, automated data summarization, and an accelerated ability to embed intelligence into core business processes.

Of course, generative AI is only one of the powerful machine learning tools a company now has at its disposal.

Other kinds of classical AI — whether descriptive, predictive, or prescriptive — also give business leaders a wide array of opportunities to automate processes, augment human capabilities and elevate employee experiences as they work with SAP solutions and data.

Take, for example, the context-based AI concept, which allows a system to achieve context-aware automation.

Contextual AI doesn't focus on a specific algorithm or machine learning technique. Instead, it adopts a human-centered approach, emphasizing a set of requirements that establish a symbiotic interaction between AI and humans. This includes intelligibility, adaptability, customization, control, and context-awareness.

In practical terms, intelligibility entails AI systems that explain themselves, fostering trust by sharing knowledge and actions with users. Adaptivity empowers AI to excel in diverse situations although they were trained for just one, as seen in a smart-home assistant adapting across residences. Customization enables users to modify the AI, closely linked with intelligibility for informed decisions. Context awareness requires AI to perceive and reason about user environments, mirroring human perception, exemplified by the smart-home assistant's comprehensive input requirement.

In a corporate context, envision an AI algorithm seamlessly communicating with a human user through natural language (e.g., text). It would provide insights on optimal business procedures or swiftly identify and propose solutions for detected workflow issues. A straightforward "yes" or "no" from the user could then trigger an automation script, promptly executing the error resolution suggested by the AI algorithm.

Not long into the future, the current pace of AI advancements and adoption in large scale by corporations in their business operations will pave the way for what can be called the "autonomous enterprise" — a setup where numerous decisions will be leveraged by various forms of artificial intelligence. It's not long before we'll find it hard to conceive of work happening in any other manner.

One reason for the broader adoption of AI is that it has become much easier and more cost-effective to use at scale.

Cutting-edge AI can now be seamlessly integrated with SAP solutions at large scale, offering corporations the vital means to unlock a broad range of business-wide advantages.

A good example is Accenture's self-healing SAP application. Using AI algorithms, our solution allows an SAP S/4HANA® system to automatically identify errors (whether user mistakes or configuration issues), recommend fixes, and then take action to either amend the business process or fix the configuration by itself.

Another example is how Accenture has transformed its lead-to-cash processes with ready-to-use AI, just one of the ways we're using the technology in conjunction with SAP solutions to deliver enhanced business performance.

And SAP is building generative AI into business processes like freight verification, hiring, customer experiences, and more, adding accuracy and speed to decision-making. With SAP Analytics Cloud's new "Just Ask" feature, for example, companies will be able to unlock rich insights into their data using everyday language.⁹

Big picture: When integrated with SAP solutions, we believe both classical and generative AI can deliver significant business benefits. These include faster software implementation and elevated performance through human + machine processes.



1 Efficient and swift SAP implementation and run

Speed up SAP product implementation with AI.

Supercharge maintenance and sustain data quality with AI.

2 Human + machine business processes

Augment business user experiences with an insight-to-action approach while automating routine tasks.



1 Efficient and swift SAP implementation and run

New ways to implement enterprise software with AI

From recommending implementation strategies, to automating coding, to building self-healing systems and creating documentation, advances in AI promise radical simplification and acceleration all across the SAP software lifecycle.

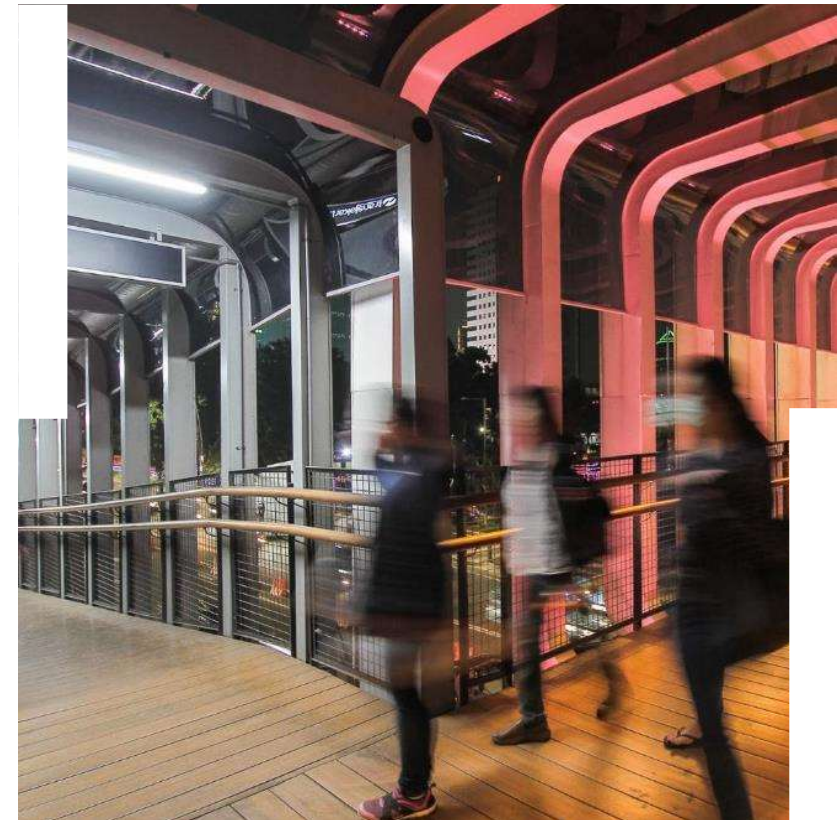
Imagine, for example, being able to ask a generative AI copilot to review an entire week's error messages and tickets and then do a complete root-cause analysis. Or turn a set of functional requirements into a technical design and configuration — and even write the implementation code itself.

Similarly, AI could summarize and explain the release notes for the latest SAP update in an accessible way.

The potential for greater productivity and accelerated time to market is massive. But it doesn't end there.

Accenture, for instance, has been developing a generative-AI based solution that allows our team members to explore and interrogate our detailed architectural and design decision trees for SAP technology — making years of institutional know-how instantly accessible.

In fact, from creating test data to defining integration strategies to supporting code-based reviews, and even guiding and accelerating an overall SAP S/4HANA® transformation initiative, the opportunities to use generative AI to automate and augment enterprise IT are almost limitless.



All phases of a project will be impacted by AI, from general design to build and maintenance activities.

An example in the design phase is the solution Accenture is developing to apply AI to generate **tailored functional designs** based on the key attributes of previously completed SAP deliverables.

These capabilities promise to significantly compress SAP program timeframes, allowing new and experienced practitioners to simplify and streamline their work.

Another example is the build phase, which will benefit from advances in generative AI. Developers will be able to focus on the program logic with tools to **generate the code** they imagine and then document it.

Accenture is also developing a solution to **automate the creation of technical design documentation** from Advanced Basic Application Programming (ABAP) code.

Bringing drastically greater agility to software development, AI will allow developers to generate documentation once a solution is approved in the sprint demo, saving hours of work.

The solution could also transform application maintenance. Instead of relying on outdated or even missing information, teams could instantly regenerate accurate documentation as and when they need it.

Looking at live systems, AI will allow for an evergreen system, supporting continuous data quality, resolving errors in the execution of processes, and even ensuring that processes evolve to follow new business needs.

SAP is integrating generative AI in its **Signavio Process Transformation Suite** to accelerate business process management and ensure that benefits are sustained over time.

The capability, planned for release late in 2023, will enable process owners and analysts to generate ready-to-use process models and KPI recommendations, allowing them to quickly identify optimal processes and metrics.

The solution also enables faster search across product documentation.¹⁰

What to do now

Prepare application code for a Gen AI future

Consider establishing a secure central repository of application code that can be used to fine-tune a generative AI model.

Reinforce guidelines around best practices and code reviews to ensure accuracy and consistency.

Consider SAP Build

SAP Build is a low-code solution that accelerates citizen development through democratized automation. Users can create apps, automate processes, and design business sites with drag-and-drop simplicity, bridging the gap between IT operators, citizen developers, and end-users across the business.

SAP Build offers solutions with prebuilt content specifically designed to extend and automate standard processes, while allowing companies to decouple customizations and keep a “clean core” ERP system as close as possible to the standard.

Get transparency into shadow IT

Generative AI and next-generation developer tools will radically democratize and accelerate coding. But their ease of use could also increase the risk of application sprawl.

So, this is a good opportunity to identify where localized “shadow IT” practices, applications, and macros already exist across the enterprise — and take steps to bring them into alignment with central guidelines. This can be accomplished thanks to globally provided generative AI-powered citizen developer tools.

2 Human + machine business processes

Tapping into the power of generative AI

Both classical and new generative AI techniques are opening up a wealth of new opportunities to reinvent work, automate tasks, and augment employee experiences with SAP solutions and data.

For example, Accenture's finance team used classical AI techniques to transform lead-to-cash with an intelligent **SAP Cash Application**.

By passing accounts receivable data from SAP S/4HANA® to a machine learning-enabled model on SAP Business Technology Platform, the application supports the complex process of matching incoming payments against corresponding invoices and client accounts.

The result? A huge increase in automation accuracy, with 67% of payments now either automatically matched, or else proposed and confirmed with a single click.¹¹

Accenture also used classical AI to build an AI-infused solution to provide **automated variance analysis and commentary** during the critical finance pre-close period.

Replacing a traditionally fragmented, highly manual process, the solution provides high-quality, standardized, transparent, and easily consumable automated variance summaries for financial controllers.

Because it is able to automate 95% of all commentary generation, the tool has saved controllers an estimated 57,000 hours in the first 12 months after deployment. The solution won an SAP Customer Success Award for 2023.



Recent advances **in generative AI and foundation models** are allowing companies to reap even greater value. As they're increasingly integrated with SAP solutions, these models will become pervasive throughout enterprise activities.

Models will be used to provide simple answers, in accessible everyday language, to a whole range of business questions that would previously have required hours, days, or even weeks of painstaking information gathering.

Capabilities include complex business questions like "How are we performing against our stated environmental targets?" "Where can we free up cash for investment?" or "How can we optimize our supply chain to drive growth?"

Accenture is actively exploring how foundation models will intersect with core SAP systems.

Our overarching approach is to focus on processes, decomposing them into individual activities, and looking for opportunities to embed intelligence through generative AI.

We believe this will be a key early step in reinventing the way employees interact with enterprise software, moving from transactional processing into strategic activities supported by AI insights and recommendations.

An example: Accenture is using generative AI to provide proactive alerts to its finance business leads on potential pre-close variances that require immediate attention.

Our **financial close early warning engine** takes data from our SAP S/4HANA® data warehouse and provides budget variance insights in easy-to-consume and immediately understandable natural language. Alerts are posted via Microsoft Teams directly to the affected controller for a faster turnaround.

SAP is enhancing **SAP Analytics Cloud** with generative AI. Its “Just Ask” feature will allow business users to get faster insights through queries written in everyday natural language.

The use of an LLM improves the accuracy and consistency of the responses provided, simplifying and democratizing analytics and enabling more data-driven decision-making across the business.¹³

SAP Transportation Management is also being augmented with generative AI to enable the automation of goods receipts and delivery note processing.

The solution promises to increase the accuracy and speed of document processing, reducing the need for manual checks at the gate and expediting the unloading of freight. The capability is scheduled for release in the latter part of 2023.¹⁴

Accenture’s **Abrakadabra** uses natural language processing techniques to enable creative users of generative AI tools to be more effective in their work. Our working voice-to-3D generative AI pipeline solution channels instructions in spoken voice in (almost) any language to models displayed on a Looking Glass display and gestures controlled by a Leap Motion controller.

These 2D/3D assets can then be leveraged as an alternative to traditional photo shoots for marketing campaigns.

96%

of executives believe generative AI capabilities like ChatGPT are ushering in a new era of enterprise intelligence

42%

indicate a desire to make a large investment in generative AI¹²

57%

say they’re planning to use ChatGPT for learning purposes this year

What to do now

Get business processes AI-ready

AI-powered reinvention is as much about the readiness of business processes as it is about the technology transformation.

Companies will need to start reinventing how their people work and deliver value to customers.

A good place to start? Rethink processes centered around data. Start with solutions that can proactively give employees insights to improve their work or highlight issues to address.

At the same time, look for opportunities to push the boundaries of automation further into transactional and routine activities.

Make sure AI remains trusted

Review guidelines and policies to ensure you're striking the right balance between democratized innovation, security, and corporate responsibility.

Ensure processes have a "human in the loop" to verify and challenge AI outputs, using critical thinking to detect and mitigate inaccuracies (including AI "hallucination") and inappropriate responses.

Remember there's more to AI than generative

There's no doubt generative AI is a highly exciting field right now.

But AI is a powerful tool across the full spectrum of capabilities, including classical predictive and prescriptive machine learning.

It is critical to match the right AI solutions with the specific outcomes the business is targeting.



Digital identity



Breaking down the walls between applications

Identity and access management (IAM) continues to be one of the catalysts of the next wave of business innovation. Why? Because digital platforms are breaking down the walls that historically divided the way people live and work across physical and digital domains, driving the need for developments in the identity area.

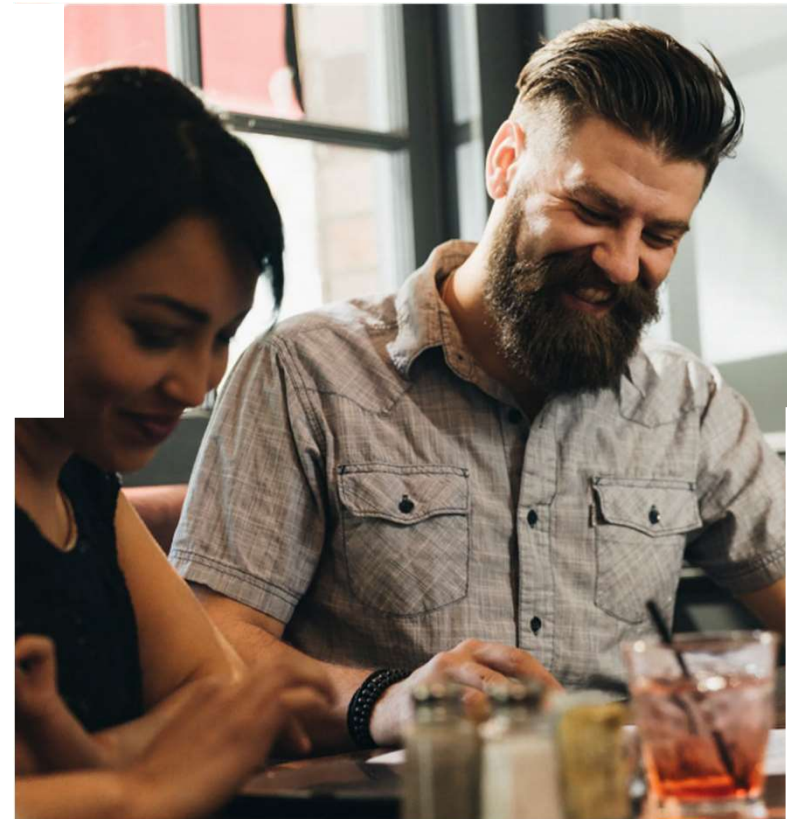
Companies will increasingly shift toward trusted, portable, future-proofed forms of digital identity that call for dramatically different approaches to data sharing and ownership.

The emerging enterprise metaverse is a good example of why new approaches are needed, with employees and partners collaborating in virtual spaces, represented only by their digital presence.

Verifying that people are who they say they are and have the right access to core enterprise systems, all while maintaining good governance, now becomes even more essential.

Maintaining consistent and compliant digital identities across different workplace systems is already a significant administrative burden — for employees as well as IT teams. Add to that the multitude of new applications due to digitalization and transformation initiatives. The complexity of hybrid cloud environments emphasizes the need for the kinds of orchestrated processes and procedures that organizations are striving for.

This challenge will only grow as physical and digital experiences continue to merge. It's why having a centralized point to manage identity across different systems, including SAP systems, will become ever more important.



The SAP ecosystem is comprised of a myriad of different applications and platforms, each with their own security concepts, connection nuances, and account administration processes. This adds to the complexity of ensuring that users have the correct access privileges and connections across the landscape.

SAP Cloud Identity Access Governance (IAG) platform provides the ability to simplify and streamline the integration between SAP systems. It also serves as central hub to connect SAP applications to non-SAP enterprise identity access management solutions.

In the case of some applications, IAG is the only way to connect them with non-SAP tools because SAP only supports some direct connectors with other IAM tools.

Adopting new deployment models like PaaS and SaaS also helps organizations shift operational complexity and reduce upfront investment.

Identity and access management at its core involves workflow, data, and integration. The solution is to use automation and optimization leveraging **advanced analytics** to reduce manual effort in detecting and correcting errors.

A good example is SAP's new **Augmented Access Control** — built by SAP Labs and currently in beta testing — which provides scalable, dynamic, and user-centric access control for SAP systems.

The solution will give business users simple and personalized role selection for faster access, while companies can benefit from more accurate, compliant, and secure access provisioning.

Augmented Access Control also uses AI to provide personalized access role recommendations based on employee data and natural language analysis of a request for access.



85%

of executives agree that the ability to authenticate digital users and assets — the foundation for traversing digital and physical worlds — is now a strategic business imperative



What to do now

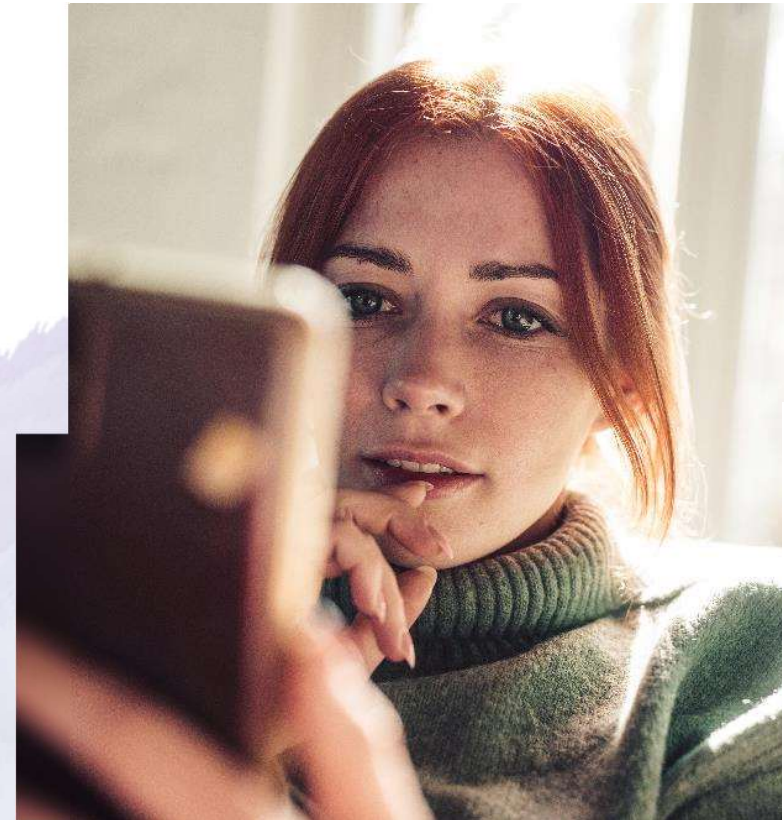
Simplify and rationalize

Most identity and access management deployments have become too complex due to the sprawl of tools over time. Strive to simplify your SAP and non-SAP landscapes and rationalize the connections between them as best as possible.

Adopt a user-centric approach

Consider how the end-to-end employee experience is impacted by the way the enterprise uses its corporate identity data across different applications.

This approach goes beyond single sign-on (SSO) or a technical-only perspective. It's about sharing digital identity and assets seamlessly across applications with user experience at the heart of the effort.



Your data, my data,
our data



Building a transparent data foundation

Demand for data among all enterprise stakeholders is dramatically increasing.

Companies have an unprecedented opportunity to build trust with partners and customers by proactively becoming more transparent in their data use. Leaders need to establish solid data management strategies to streamline and remove data architecture silos so they can responsibly share the data that matters.

However, enterprises now have hybrid multi-cloud environments with data ownership spread across multiple stakeholders. In particular, the increased use of digital factories, hub-and-spoke architectures, and the rise of data democratization and citizen analysts have increased both the demand for and the complexity of enterprise data ingestion, transformation, and provisioning to end points for consumption.

It's why companies now need unified data fabrics providing comprehensive integration, cataloging, semantics, federation, virtualization and data warehouses to achieve this transparency for their own data .

The newly launched **SAP Datasphere** enables a seamless and scalable business data fabric for trustworthy, nimble, and impactful decision making. It allows companies to access all their data, wherever it resides, across hybrid cloud environments.

Representing the next generation of SAP Data Warehouse Cloud, SAP Datasphere has a stronger functional integration with SAP Data Intelligence and an analytical central data model. It provides out-of-the-box semantic understanding of SAP data across systems and integrates with other non-SAP enterprise data platforms.

These capabilities are enhanced by an open data ecosystem including industry-leading data and AI vendors like Collibra, Confluent, Data Bricks, Data Robot, and Google. For example, SAP's recently announced partnership with Google further enriches the value companies can derive from their data.

Enterprises can bring together their SAP and non-SAP data on Google Cloud with SAP Datasphere, making all enterprise data accessible in real time through a single source.

Companies can then derive advanced insights with tools like Google BigQuery and Google Vertex AI while retaining the semantics for their SAP data and overlaying it with the enterprise semantic data model.

Consider the impact in complex business activities like financial planning and analysis. In conjunction with SAP Analytics Cloud, the business data fabric enabled by SAP Datasphere will help companies bring planned data closer to reality by leveraging AI-based predictions with better accuracy.

Transparency is also key outside of the enterprise. Building that data fabric with trusted partners will enable better resiliency across the supply chain.

SAP's **Business Network** offers enterprises a way to gain greater visibility into their partner ecosystems and share data with suppliers more seamlessly.

This is designed not only to ensure consistent and accurate information across the supply chain, but also improve communication, increase resilience, and help drive the shift toward greater circularity and sustainability. For example, a **High-tech industry client** worked with Accenture to implement a solution using SAP Supplier Network. It's given the company much greater visibility on supplier capacity in their tier-2 and tier-3 suppliers.

SAP **Asset Management Network** allows companies to leverage common and consistent asset data across the entire lifecycle. Manufacturers can share granular data and documentation about each individual product they build, including a virtual 3D model of the asset.

Buyers then get instant access to the data when they purchase that asset. They can also update its records with maintenance data across the full span of its working lifecycle.

That complete record can then be transferred to new owners if the asset is sold. And when it comes to an asset's end of life, asset owners have complete traceability of the asset's data for making decisions about refurbishment or the reuse of individual components.

SAP **Cross-Company Workflow** allows companies to take a "no code" approach to orchestrating business processes outside the four walls of their organizations. It creates workflows that help optimize fulfillment times, minimize collaboration costs, and reduce manual effort.

The solution operates across different SAP BTP tenants and uses blockchain technology to securely connect with other solutions, providing consistent and trustworthy collaboration data for all participants.



95%

of global executives believe new data architectures and strategies are required to manage the dramatic changes in today's data landscapes



What to do now

Define the governance and data fabric

Define a data governance strategy, identify owners of enterprise data, and set out the guiding principles for the enterprise data fabric.

Bring data together

Federate SAP and non-SAP data and create a business semantic model leveraging SAP Datasphere to gain trustworthy business insights.

Grow your data fabric beyond your own walls

Identify the data which will create value when shared with your business partners. Establish trusted and automated data networks with the business partner ecosystem by leveraging solutions like SAP Business Network.



Our forever frontier



Reinventing physical and digital spaces with SAP solutions at the core

Accenture's [Total Enterprise Reinvention](#) research examines how a deliberate strategy of accelerated reinvention is helping some leading companies ("Reinventors") outperform their peers by transforming faster and more fundamentally than ever before.

To be successful, this reinvention must be powered by a strong digital core. It's this core that helps organizations adopt new technologies faster, adapt the business faster, and respond to new opportunities faster.

The digital core is more than an ERP system. It's made up of multiple interoperable components spanning infrastructure and security, data and AI, and applications and platforms. By shifting from a technology landscape of static, standalone parts to integrated composable building blocks in the cloud, companies can enable a reinvention of all parts of the business simultaneously.

To enable workplace experiences to be streamlined and unified across physical and digital worlds, SAP solutions will increasingly be extended and integrated with each other, with partners along the value chain, and with emerging technologies in other solutions.

This combination of SAP solutions plus emerging technologies will be the key that unlocks new capabilities like digital twins, AI-powered automation, and immersive metaverse experiences.



Accenture is [partnering with SAP](#) to create **immersive experiences and business models**. Combining immersive services built on SAP Business Technology Platform (BTP) with Accenture's technology expertise and experience, the partnership is designed to help companies solve problems and harness value from future-ready interfaces contextualized with business data and processes.

High-value use cases to be explored include interacting with digital twin data in immersive environments, running "what if" simulations to assess the impact of business decisions before implementing them, improving supply chain resilience, and augmenting day-to-day employee experiences.

Accenture combined different types of emerging technologies and existing supply chain optimization assets to create the Accenture Supply Chain Nerve Center. The Nerve Center is able to sense, orchestrate and react based on an architecture which can be scaled in an incremental and continuous manner to deliver value at speed. It can sense four factors — customer data, supplier data, supply risks, and ESG goals — and orchestrate with SAP technologies to help clients react faster.

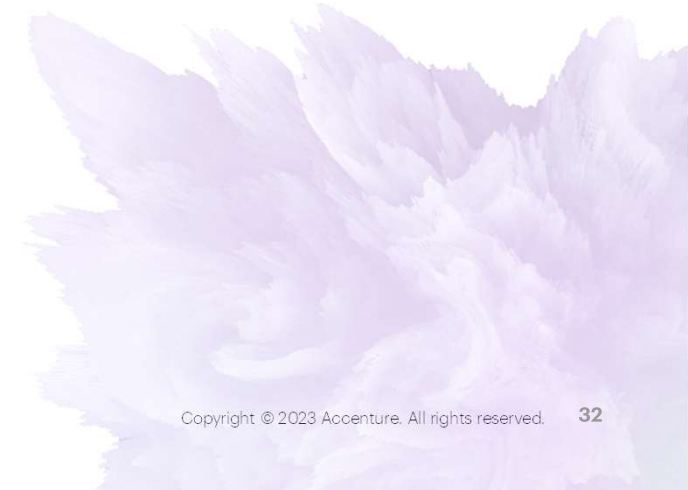
Cintoo is a startup that allows companies to digitally scan their facilities and create a detailed 3D mesh stored securely and efficiently in the cloud. Companies are then able to identify their assets within the mesh and link them to the data in their SAP Asset Management solution.

This allows enterprises to accelerate the creation of 3D digital twins that can be explored and accessed in virtual metaverse environments.

SAP is creating an "ask me anything" bot, which uses generative AI to provide a **hyper-personalized employee onboarding experience**.

The bot answers employees' HR-related questions with contextualized responses based on data in SAP SuccessFactors, selecting only the information relevant for the employee asking the question.

Accenture has developed the SAP Enterprise Metaverse 3D Command Room, an application that enables SAP solution users to simulate profitability by considering various variables in the supply network. It allows them to create "what if" scenarios for optimizing business operations.



What to do now

Modernize SAP systems in the cloud

Ensure the core SAP S/4HANA® system is as clean, flexible, and easily upgradable as possible in the cloud. Then look to integrate and extend it with solutions like SAP BTP as well as third-party generative AI applications. Aim to create an adaptable digital core that allows the organization to continuously innovate and grow.

Build a multi-technology architecture

Develop an innovation roadmap that brings together a range of emerging technologies — including metaverse and generative AI technologies — with core SAP solutions. Ensure the business can plug new services, capabilities, and AI models in and out quickly and seamlessly. That's particularly important given the pace of evolution with generative AI.

Identify immersive use cases

Consider where immersive technologies can augment and transform the employee experience and add value in each line of business. Explore and experiment with the most promising technologies by piloting solutions that integrate with SAP services.



“ With immersive services, SAP and Accenture are breaking down the barriers between physical and digital worlds. We’re empowering businesses to completely reinvent how they design, operate, connect, and interact with their assets, applications, and people.”

Martin Heinig

Head of New Ventures and
Technologies and MD SAP Labs Berlin

Conclusion

Converging technology trends are building a new shared reality

Accenture's 2023 Technology Vision explains why getting ahead of disruption now calls on companies to come together to find new solutions, forge new tools, and build the foundations of a new shared reality that brings seamless experiences to our increasingly indistinguishable digital and physical lives.

The good news for companies running SAP is that they already have the foundation in place. With SAP solutions and data as the bedrock of the enterprise and its supply chain, companies have a critical head start in building a truly digital organization that can leverage next-generation tools like digital twins, metaverse environments, and generative AI solutions based on core enterprise data.



It's time to shape our new shared reality with SAP solutions



References

1. <https://www.accenture.com/us-en/insights/consulting/total-enterprise-reinvention>
2. [Accenture Technology Vision 2023](#)
3. <https://www.ubs.com/global/en/wealth-management/our-approach/marketnews/article.1585717.html>
4. [Accenture Technology Vision 2023](#)
5. [Accenture Technology Vision 2023](#)
6. [Accenture Technology Vision 2023](#)
7. [Accenture Technology Vision 2023](#)
8. <https://www.sap.com/india/products/artificial-intelligence.html?pdf-asset=0023e3d1-497e-0010-bca6-c68f7e60039b&page=1&source=social-atw-mailto>
9. <https://www.sap.com/products/artificial-intelligence/generative-ai.html>
10. <https://www.sap.com/products/artificial-intelligence/generative-ai.html#:~:text=Generate%20ready%2Dto,Process%20Transformation%20Suite>
11. <https://www.sap.com/india/products/artificial-intelligence.html?pdf-asset=0023e3d1-497e-0010-bca6-c68f7e60039b&source=social-atw-twitter&page=1>
12. Accenture CXO Pulse Survey, Feb. 2023 (n=2,300)
13. <https://www.sap.com/products/artificial-intelligence/generative-ai.html#:~:text=Get%20insights%20faster,and%20conversational%20analytics>
14. <https://www.sap.com/products/artificial-intelligence/generative-ai.html#:~:text=Expedite%20freight%20verification,d%20any%20training>
1. [Accenture Technology Vision 2023](#)

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