



Technology Vision for SAP Solutions 2021

Driving change, leading with the SAP[®] ecosystem

The technology trends that will define
new growth opportunities for SAP customers

Foreword

In this extraordinary, unprecedented time, all of us—businesses, communities, governments, and individuals—have reacted, responded, adapted and managed challenges with fortitude. Now, as the world looks forward with hope, our focus turns to what happens next.

What does the future hold for business? While much remains uncertain, we do know that the pandemic has reset business priorities and rapidly accelerated digital adoption. And the technological and behavioral changes we've seen are not going away.

This is a turning point. There's simply no option for companies to retreat into their familiar comfort zones. The pressing business imperative is to accept that change is inevitable and continuous. This is why this year's Technology Vision calls on leaders to become Experts at Change.

The good news is that organizations that use SAP® technologies and solutions have a huge opportunity to capitalize on this moment of truth by leading with technology. The five trends we set out in this Technology Vision explore how key aspects of the consumer, business, and technology landscape are changing in the post-pandemic world—and how SAP solutions can support the greater flexibility, agility, and organizational speed now required.

We hope you find the trends identified a valuable guide to what's coming over the next year. And we look forward to supporting your business as you adapt to the challenges and opportunities of our ever-changing post-COVID world.



Caspar Borggreve
Global Lead – SAP Business Group, Accenture



Stéphanie Guimbellot
Global Lead – SAP Innovation & Sustainability, Accenture



Stéphane Martin
Global Lead – SAP Technology Domain, Accenture

Don't wait for the new normal, build it with SAP technologies

The maxim that 'every business is a technology business' has never been more relevant. Rapid digital acceleration has cemented technology leadership as the cornerstone of business leadership. The lines between technology strategy and business strategy are blurring while the gap between digital leaders and the rest grows by the day.

In this radically different post-pandemic world, change is a constant and organizational inertia has become an existential threat to the business. It demands that enterprises become Experts at Change who prioritize technological excellence and innovation, not simply as part of a future roadmap, but as part of the core business strategy in the here and now.

SAP technologies and solutions can provide a foundation for the business agility, connectivity, sustainability and innovation that's now essential. That includes the pivotal role SAP solutions play in flexible API-driven architecture, multi-cloud technology stacks and multiparty systems, as well as support for key business capabilities such as

real-time finance insights, end-to-end supply chain visibility via massive networks of digital twins, and digital continuity throughout the enterprise.

It also includes the way SAP solutions integrate with no-code/low-code platforms to enable all business users to innovate with technology—plus integrations with collaboration platforms like Microsoft Teams to support flexible remote working environments.

During the pandemic, business leaders have already confronted deep-seated assumptions about how fast their organizations can pivot, where or how work gets done, what they sell and to whom. Those that managed the crisis best were able to shatter the orthodoxies and bureaucracies that were holding them back.

Now, as we look ahead to the future, the central question leaders must answer is this—is yours a reactive organization to which change simply happens? Or are you an Expert at Change, able to dictate your own future, lead with technology, and chart a path to future growth?



Five technology trends for SAP environments in 2021

Stack Strategically

Architecting a better future with SAP technologies

What's happening?

The sheer number of different technology options and customizations across the technology stack means businesses are making choices today that determine what they can and cannot do tomorrow. The technology stack is now a key opportunity for competitive advantage.

How should SAP customers respond?

Use interoperable, platform-independent containers, microservices, and APIs to enable a flexible “plug and play” multi-cloud architecture enabled by SAP Business Technology Platform (BTP). Adopt DevOps and get real-time insights from SAP S/4HANA® embedded analytics, SAP BW/4HANA® data warehousing, and SAP Analytics Cloud.

Mirrored World

Unlocking the power of digital twins

What's happening?

As businesses thread digital technology throughout their operations, huge new sources of data are being unlocked which are fueling massive networks of intelligent digital twins. This mirrored world enables businesses to simulate, predict, and automate what they do like never before—enabling them to refocus on end-to-end supply chain resilience.

How should SAP customers respond?

Create a “digital thread” with real-time connectivity across the supply chain and create digital twins that provide digital continuity throughout the organization. Mirror the flow of materials and information with SAP's integrated demand-driven material requirements planning (DDMRP).

I, Technologist

Capitalizing on the democratization of technology

What's happening?

Today's advanced digital technologies are far more accessible than in the past—so much so that it's now possible to spark “grassroots innovation” across the business by enabling people to build technology solutions at the point of need.

How should SAP customers respond?

Break down barriers between business users and IT—whether through “no code” real-time work management with SAP Ruam, drag-and-drop application building with SAP AppGyver, self-service insights with SAP Analytics Cloud, or intelligent decision making with SAP Conversational AI.

Anywhere, everywhere

Adapting to the new world of virtualized work

What's happening?

The COVID-19 pandemic forced the world into perhaps the biggest shift in ways of working in living memory. Companies can now choose how best to capitalize on the newly equipped virtualized workforce, enabling their people to drive change from anywhere and everywhere.

How should SAP customers respond?

Scale up flexible work environments to let people work wherever they want, while making human-machine interfaces consistent, simple, and user-centered (such as by using immersive collaboration platforms and Microsoft Teams' integration with SAP's solution suite).

From me to we

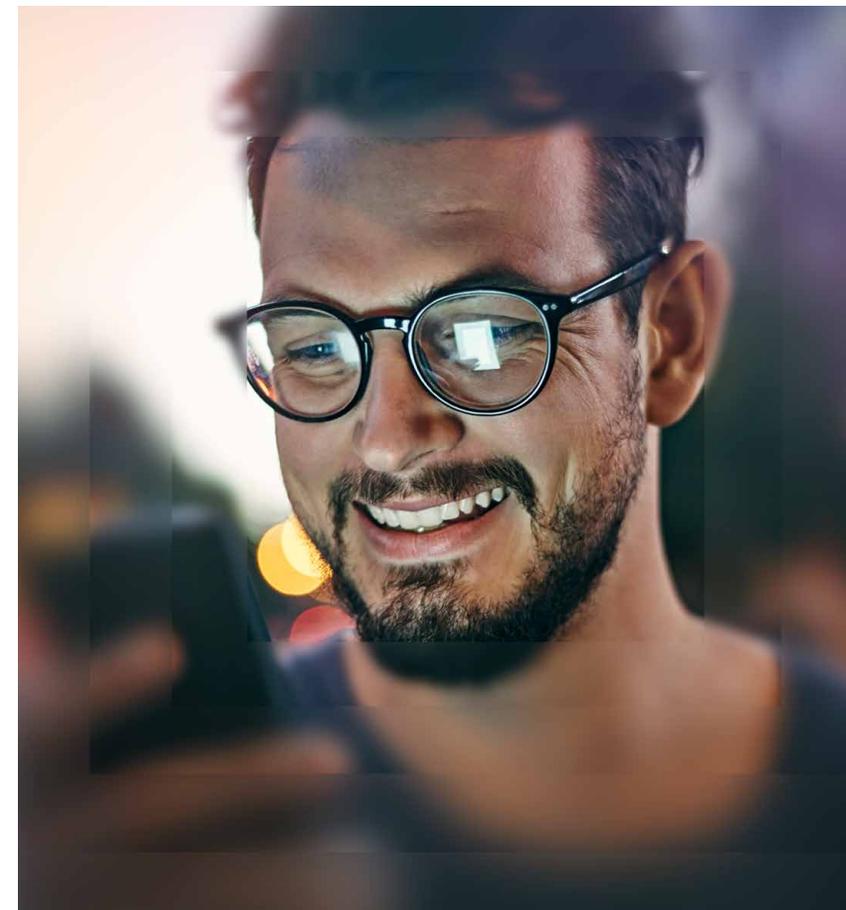
Coordinating through chaos with multiparty systems

What's happening?

The business environment is now more demanding than ever, and the opportunities are complex. Few businesses can hope to tackle them alone. From supply chains to digital ecosystems, connecting via multiparty systems will be essential in rebuilding and renewing for the future.

How should SAP customers respond?

Consider new solutions like GreenToken by SAP to get visibility of complex raw materials supply chains, ensuring compliance with sustainability regulations and policies, building trust with consumers, and driving up collaboration and efficiency across the supply chain.



LET THERE BE CHANGE

Stack Strategically

Architect for change and use SAP technology as a source of competitive advantage

For years, companies have recognized that business strategies and technology strategies were becoming increasingly indistinguishable—and that every business was becoming a technology business. In practice, however, few companies took that line of thinking through to its ultimate conclusion and actually approached their technology and business strategies as one.

Then everything changed. The COVID-19 pandemic accelerated digital adoption across the world, forcing companies to rethink and speed up their use of digital technology. This happened as businesses were still adapting to the fact that cloud had changed the enterprise IT landscape forever. In particular, that the cloud hyperscalers—Alibaba Cloud, Amazon Web Services, Google Cloud Platform, Microsoft Azure, for example—now own significant portions of the technology stack.

This rapidly changing, multi-cloud landscape has created a new competitive reality. Competition between enterprises is now as much a battle between their technology stacks as anything else.



77%

of executives say their technology architecture is becoming very critical or critical to the overall success of their organization.

Architecting a better future with SAP technologies

What?	How?
<p>Create API-driven architecture to increase business flexibility and future-proof the organization.</p>	<ul style="list-style-type: none"> • Recognize the days of tying the business to a single monolithic platform are over. • Decide when and where to use SAP, hyperscaler, or open-source solutions across a multi-cloud stack. • Use interoperable, platform-independent containers, microservices, and APIs to create a flexible “plug and play” architecture.
<p>Accelerate speed to market with an agile approach that is more responsive to constantly evolving customer and business needs.</p>	<ul style="list-style-type: none"> • Switch from a waterfall to an agile approach for SAP system release cycles. • Adopt DevOps across both SAP and non-SAP environments. • Support this with an agile stack comprising APIs and microservices enabled by SAP BTP. • Utilize SAP BTP’s Intelligent Suite qualities and services like SAP Intelligent Process Automation to automate repetitive manual processes, optimize process models and achieve speed to market with maximum efficiency.
<p>Fast-track insight to action with organization-wide unified data governance and analytics at the core.</p>	<ul style="list-style-type: none"> • Get real-time insights from SAP S/4HANA embedded analytics, SAP BW/4HANA data warehousing, and SAP Analytics Cloud. • Complement this with a unified data governance solution taking advantage of data lake and metadata management approaches to enable an enterprise-wide version of the truth.

API-driven architecture

To be truly future-proof, a strategic technology stack must be platform independent. In a multi-cloud environment, this is vital given the inevitable need to change technologies as business requirements evolve. But there's no doubt that deciding between today's massive range of cloud options and stack customizations is a huge and complex process.

SAP customers have a unique opportunity to create an agile architecture that can adapt to continuous change. First, by carefully assessing when and where to use SAP software, hyperscaler and the growing number of open-source options across the stack, the enterprise can ensure it's making "best fit" technology choices for its unique needs. Of course, the relationships between these different options create their own complexities and will need to be carefully managed.

Second, by ensuring those solutions are "plug and play"—with the use of APIs, microservices, and platform-independent containers as appropriate—

the enterprise can ensure it's able to switch solutions in and out, or scale or repurpose them, with minimal disruption, as its needs change. Capitalizing on SAP BTP, which runs on any hyperscaler, can be a valuable way of creating that flexibility and ensuring platform independence.

Another critical aspect of this is the switch to a business-event-driven architecture. Business events represent changes to the SAP system's data model that are captured in real time to trigger data replication between applications, or as a required step in a business process. This represents a dramatic shift away from traditional batch-driven interfaces.

This is an area in which external expertise can make a real difference. Accenture can provide recommendations across all technology aspects of the stack, helping the enterprise decide what to use, and when, as well as best-practice reference architectures for combining technologies.

Accenture's myWizard® platform supports cross-stack application and component monitoring creating predictive and self-healing operations.

Accenture's global Master Technology Architect (MTA) program provides specialized certified technology architects to help design and shape a robust hybrid enterprise architecture that supports innovation at scale.

Faster speed to market

In a constantly changing world, enterprises need to be able to develop and release one-of-a-kind offerings with unprecedented speed. However, many still lack the tooling and processes they need to get new functionality in front of users quickly enough. One reason is the continued use of rigid “waterfall” methodologies for SAP system updates.

This is a problem for organizations that want to increase their speed to market. Business users, partner organizations, and customers have to wait longer to see new or updated services in production—typically between three and six months—putting the organization at a competitive disadvantage.

In addition, increasing technology awareness among non-IT employees now means the wider business can be more involved and more responsible for technology transformation than ever—enabling a more collaborative partnership between business and IT capabilities.

SAP customers should prioritize speed to market by pivoting to an agile DevOps mode of developing and running all their IT services. That approach should look to unify SAP and non-SAP environments across an agile architecture, integrating development and operations more closely. The use of APIs, microservices, automated testing and automated stub testing for ecosystem connection, enabled by SAP BTP and hyperscaler services, form a key part of these evolving architectures.

Accenture’s DevOps cartridge integrates SAP backend system developments with SAP BTP and hyperscaler-native developments into a single DevOps pipeline with automated testing and promote-to-production.

80%

of executives report their organization is facing technological changes at an unprecedented speed and scale.



Insight to action

As the data available to enterprises proliferates, so does the number and variety of data warehouses and analytics and reporting solutions. At worst, this complexity not only creates extra costs but also requires extensive data reconciliation or transformation to get to a version of the truth that the whole business can agree on.

SAP customers should therefore be looking to leverage their existing SAP software investments to unify data governance and enable comprehensive real-time analytics across both SAP and non-SAP systems. That includes leveraging solutions like SAP S/4HANA embedded analytics, SAP BW/4HANA data warehousing, SAP Analytics Cloud, and SAP Data Intelligence.

A data lake can be another important part of the strategic stack, although it comes with its own data governance challenges. Consider that a large organization might have hundreds of distinct applications, each pumping data into the lake,

requiring potentially hundreds of thousands of data transformations, every day, to achieve a unified view. That's why SAP customers are strongly recommended to consider a metadata management approach. This entails allowing each application to manage its own data, but using harvested metadata to reconcile and create mappings between different data elements.

Accenture's SAP data lake accelerator automates data extraction, data lake deployment, and the integration of SAP data into data pipelines. Accenture's myConcerto® Intelligent Data Quality tool will also help manage SAP data quality across the enterprise landscape, supported by machine learning.

What to do first?

Respond to the new competitive landscape by evaluating current and future platform independence across the stack.

Prioritize options for accelerating speed to market and insight to action with SAP solutions and technologies.

Mirrored World

Bridge the digital and physical worlds with massive networks of digital twins

So far, digital twins have given us the ability to mirror, monitor, and simulate discrete devices. Now, as the number of digital twins grows, and as more and more artificial intelligence is layered in, organizations are creating massive networks of intelligent twins capable of modeling entire systems—everything from single products to whole factories to complex supply chains.

This mirrored world will let businesses gather, interpret, and dynamically respond to data across the lifecycle of physical assets, asking “what-if” questions about future scenarios, and designing and testing new or enhanced products before even starting to construct them physically. It’s an exciting prospect. Soon, these digital twins will be the foundation on which businesses manage their operations, form and test new strategies, collaborate with partners, and control their organizations.



90%

of executives believe their organization requires a “mission control,” or central intelligence hub, to gain insights into complexities and model their organizations’ processes, people and assets.

Unlocking the power of digital twins with SAP technologies

What?	How?
Acquire end-to-end visibility across the supply chain in near real time.	<ul style="list-style-type: none"> • Create a “digital thread” with real-time connectivity across the supply chain. • Leverage the SAP Logistics Business Network’s native integration with third-party add-ons. • Integrate processes with SAP Manufacturing Integration and Intelligence and SAP BTP.
Achieve digital continuity to tear down organizational silos and gain cross-function visibility.	<ul style="list-style-type: none"> • Use the digital thread to break down operational siloes and give the business a shared view of data. • Create digital continuity by connecting engineering, manufacturing, operations, and partner organizations via the integrated SAP Product Lifecycle Management and/or SAP Production Engineering and Operations embedded solutions.
Run “what if” simulations and anticipate challenges with enhanced forecasting and predictive capabilities .	<ul style="list-style-type: none"> • Mirror the flow of materials and information with SAP’s integrated demand-driven material requirements planning. • Leverage SAP Integrated Business Planning (IBP) to simulate and analyze supply chain actions and their related logistics and financial impacts. • Use SAP Manufacturing Integration and Intelligence to accurately forecast the impact of production changes.

End-to-end visibility of supply chains

With the COVID-19 pandemic exposing the brittleness of many existing supply chains, enterprises are refocusing on supply chain resilience. And the leaders are connecting with supply chain partners to create networks of digital twins that model entire supply chains from end to end. This is giving them a “digital thread” which they can use to get visibility of where any product is in the supply chain, and what’s happening to it, at any moment.

SAP customers are well-placed to achieve this end-to-end visibility. For example, they can leverage solutions for freight collaboration, global track and trace, and material traceability to get real-time information from the SAP Logistics Business Network. They’re also able to efficiently integrate multiple manufacturing processes using IoT capabilities with SAP Manufacturing Integration and Intelligence (MI) and SAP BTP.

Accenture and SAP are expanding their partnership to help companies embed sustainability across their supply chains. The goal is to jointly create new solutions that accelerate decarbonization by using integrated data from across operations and to help companies take steps towards the circular economy by designing and producing products with less waste, improved recyclability, and more recycled content.¹

Accenture and SAP will also be designing, developing and delivering cloud-based solutions and services that strengthen the existing SAP Intelligent Asset Management suite. By integrating traditionally fragmented asset performance management, operations and maintenance into a new single-view solution, the goal is to provide a unique user experience that provides asset and process insights for anybody, anywhere, anytime. The solutions will also integrate IoT and closed-loop prescriptive models connected with asset maintenance.³

SAP and logistics technology provider project44 are helping shippers manage and improve data-driven supply chains. Thanks to its native integration with project44’s⁴ rich data, the SAP Logistics Business Network enables accurate real-time supply chain insights and connectivity with carriers, helping customers make smarter decisions while also reducing costs.

Real-time trucking and shipping data from startups Shippeo⁵ and Wakeo⁶ can be integrated with the SAP Transportation Management solution to provide ‘as it happens’ logistics visibility, enabling companies to better anticipate issues and prevent stock outs.

Accenture’s qRoute logistics routing solution combines the power of quantum computing and SAP technologies to enable otherwise impossible levels of speed and visibility in end-to-end freight routing solutioning.

Digital continuity

With a digital thread running throughout the organization, enterprises can achieve something very powerful: digital continuity. That means having individual data elements that are consistent and traceable, wherever in the organization they're being used.

Digital continuity is important because it breaks down organizational siloes, enabling previously disparate engineering, manufacturing, and business systems to share information in real time and provide the whole business with a single agreed version of the truth.

SAP manufacturing customers can achieve digital continuity through the SAP Production Engineering and Operations suite while being seamlessly integrated with SAP Product Lifecycle Management (PLM) or other product lifecycle management systems.

The SAP Asset Intelligence Network can bring manufacturers, operators and service providers together in the cloud via a digital twin which standardizes and mirrors operational data, such as equipment performance. Similarly, production engineering data can be connected with manufacturing and operational data to mirror and visualize products in 3D.

Accenture can help SAP customers create digital continuity by creating a digital thread across product lifecycle management and enterprise resource planning. By seamlessly grouping and homogenizing data, and shifting to event-driven updating of the ERP platform, enterprises can reduce the need for manual updates and improve data accuracy and synchronization across different systems.

To support one aerospace and defense manufacturer's rapid growth, Accenture helped it implement SAP's Production Engineering and Operations solution. This successful implementation radically improved the visibility of engineering change from PLM to work orders, ensuring the shop floor is working to the latest revision of work instructions and drawings. With data now collected digitally, the solution supports paperless order execution, providing greater integration with quality controls and enhanced visibility for production supervisors.

Enhanced forecasting and predictions

With digital continuity, enterprises can start to better predict the outcomes of their decisions—something that many still struggle to do accurately, quickly, or comprehensively. This supports an overarching supply chain simulation capability that can reliably simulate, test, and forecast the effect of real-world scenarios, from the macro level (such as widespread disruption caused by a supply crunch) to the micro level (like the impact of changing a single supplier).

SAP customers can use networks of digital twins across the supply chain to create this kind of “what if” simulation capability. Specifically, they can mirror the flow of materials and information across the supply chain via SAP’s integrated demand-driven material requirements planning (DDMRP).

For example, SAP S/4HANA comes with an integrated DDMRP capability. In addition, SAP BTP includes a DDMRP module that can simulate, on demand, proposed supply chain actions, inventory positions and supply constraints as well as related logistics

and financial impacts. What’s more, SAP MII allows the enterprise to forecast and analyze the impact of potential changes to production processes.

SAP is also collaborating with connected solutions like Enterra to provide an additional cognitive layer on top of SAP solutions. Enterra⁷ automates and optimizes decision making across the value chain—including customer insights, strategic revenue optimization, and supply chain—to make enterprises more intelligent.

As massive demand uncertainty struck with COVID-19, Accenture helped a global consumer packaged goods company enable scenario planning “as-a-Service” with SAP IBP. It provided the company with new forward-looking insights into inventory exposures, shelf-life planning, bills of materials analysis, and more, across multiple sites and processes.

What to do first?

Examine opportunities for capitalizing on new digital twin capabilities with SAP Logistics Business Network, SAP Manufacturing Integration and Intelligence, and SAP BTP.

Start running “what if” simulations to improve forecasting and mirror the flow of materials and information with DDMRP.

I, Technologist

Spark a grassroots innovation revolution across the organization

Today's digital solutions are becoming so accessible, so user-friendly, they're empowering a democratization of enterprise technology. Thanks to advances in natural language processing, no-code or low-code programming, and intelligent automation, people now have the tools to develop their own digital solutions—right at the point of need.

Whether it's creating a customized reporting dashboard, or building an app to automate a repetitive process, this accessibility empowers the people who best understand a business problem to solve it themselves. That not only massively increases the responsiveness and agility of the organization, but also frees the IT department to focus on more strategic 'big ticket' implementations, where it can add the most value. Furthermore, as described in the Stack Strategically trend above, this is the key to onboarding business users as "technology actors" in a digital transformation to increase delivery agility.



Capitalize on the democratization of technology with SAP technologies

What?	How?
<p>Break down barriers between business users and technology—and make everyone a core part of digital transformation.</p>	<ul style="list-style-type: none"> • Use low-code or no-code solutions that enable grassroots “citizen developers” to solve their own technology-related problems. • Leverage tools such as SAP Ruum, SAP AppGyver, SAP Analytics Cloud, and extend business context to SAP Conversational AI.
<p>Build consistent, convenient, consumer-grade work interfaces and experiences.</p>	<ul style="list-style-type: none"> • Create consumer-like workplace interfaces with point-and-click tools for customizing user experiences. • Use SAP Fiori® In-App extensibility to enable key business users to create non-disruptive extensibility-like fields and business logic. • Leverage low-code and no-code solutions to accelerate application development.
<p>Infuse automation and intelligence in business processes.</p>	<ul style="list-style-type: none"> • Use robotic process automation (RPA) and artificial intelligence (AI) to augment and accelerate repetitive business processes. • Speed up development with SAP Intelligent RPA and AI solutions that help build applications faster and increase efficiency. • Utilize Accenture’s 180+ SAP Intelligent Technology asset-led automation solutions and accelerators to fast-track innovation.

Break down barriers between business and technology

There used to be a clear demarcation of responsibilities in a digitalization program. When the business needed a technology solution, it was up to the IT department to provide one. Recently, however, business users have been getting more actively involved in technology decisions—even as early as the initial ideation phases.

As such, the lines between IT and the business are blurring. This is a good thing: experience shows the most successful digitalization programs need the whole business to be much more intimately involved. After all, who is better informed about processes than the people who use them every day? What's more, with specialist technology skills in high demand, democratizing technology enables enterprises to bypass skills gaps and capitalize on the talent they already have across the business.

SAP customers have several options for enabling this, including a series of low-code/no-code development platforms that integrate with SAP solutions, such

as SAP AppGyver and SAP Ruum. For example, SAP AppGyver could be used in scenarios where business data is readily accessible for consumption, such as customer interactions. Without needing to “code” in the traditional sense, a business user can use a graphical interface to create adaptable web and mobile applications. Additionally, business teams can use SAP Ruum to build their own workflows, proactively manage their tasks, streamline their processes, and even create intelligent automation for repetitive tasks.

Business teams can also create their own chatbots in a single interface with SAP BTP's conversational AI layer based on multi-lingual natural language processing technologies. And last-mile decision making can be enriched with the analytical capabilities of SAP Analytics Cloud, enabling users to slice and dice complex data and create the analytical content they need on their own.

In this way, these low-code/no-code solutions abstract away much of the underlying complexity of software development, allowing business users to become grassroots “citizen developers” and take on responsibility for solving their own technology-related problems.

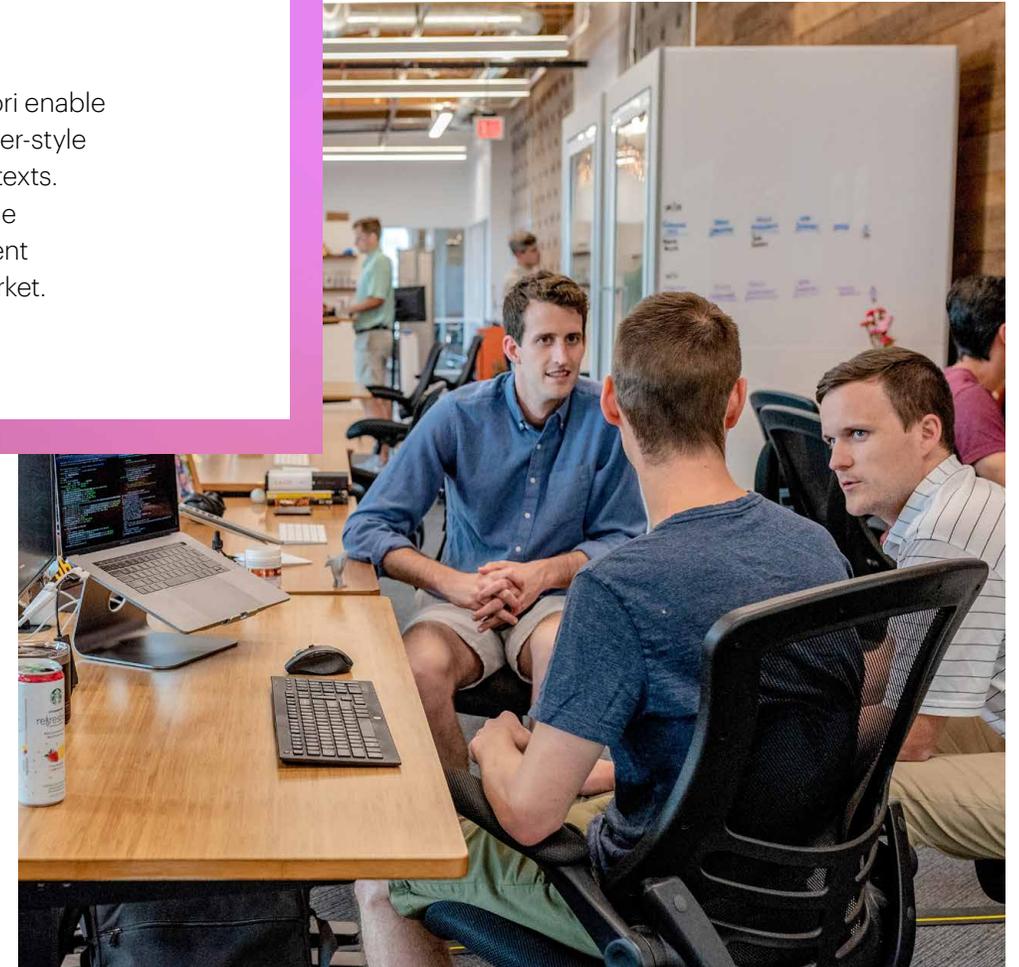


Build consumer-grade workplace experiences

Outside work, employees have come to expect convenient, well-designed, user-friendly smart interfaces with digital platforms. And now these expectations are seeping into the workplace too. The risk? Enterprises that fail to deliver strong user experiences won't only disappoint valuable talent, they can also end up with a "shadow" IT environment when business users decide to use external platforms and solutions instead.

The answer? To upgrade interfaces and work environments so they're user-centered and consistent across enterprise platforms, matching the experiences offered by consumer-facing applications. SAP customers can do this by introducing point-and-click tools for creating custom user experience.

For example, SAP applications like SAP Fiori enable modern and highly customizable consumer-style user interfaces for both B2B and B2C contexts. In addition, low-code solutions can provide connections which accelerate development processes and enable faster speed to market.



Infuse automation and intelligence in business processes

For all the technological advances of recent years, many business processes and systems are still beset by repetitive tasks and time-consuming laborious work. From basic procurement and accounts payable transactions, to managing documentation, to become an expert in data management and more, these routine manual activities constrain and slow companies, as well as prevent employees from concentrating on more valuable work.

In addition, companies must now be able to quickly draw tangible and accurate insights from growing volumes of data. For CFOs in particular, fast-changing situations require rapid-fire responses. And as the CFO role expands beyond that of economic guardian to include architecting business value, having a modern, intelligent, and automated finance system has become essential.

Fortunately, opportunities for automating and enhancing enterprise activities with intelligence are growing all the time. From robotic process

automation on the one hand to artificial intelligence on the other, SAP customers have a range of tools for augmenting and accelerating business processes, generating insights faster, and freeing employees from the burden of repetitive work.

For example, a combination of SAP S/4HANA at the core plus an ecosystem of advanced cloud applications gives CFOs a globally compliant finance system that is truly connected and truly automated, while providing real-time insights. At the same time, SAP Intelligent RPA and AI solutions can take some of the legwork out of application development, helping citizen developers build apps faster or enabling full-stack developers to make more efficient use of their time. That means new ideas can be prototyped more quickly—and more cost effectively—enabling the enterprise to apply and scale intelligent automation at pace.

A major European energy company collaborated with Accenture to increase the quality of its application management. By transforming application operations, the client experienced a 30 percent optimization of application management effort through automating manual administrative and reporting tasks. Accenture was challenged by the client to clean up a backlog of approximately 1 million tickets in two categories within six months. Using robotic process automation technology, Accenture created and tested virtual agents (bots) to perform the clean-up. The team met the original ticket reduction goal, and now only bots are used for end-to-end ticket resolution. Automated alerts have improved the response time on critical incidents and reduced the number of priority-one incidents.



What to do first?

Evaluate how to enable a new generation of citizen developers with tools like SAP Ruum, SAP AppGyver, SAP Analytics Cloud, and SAP Conversational AI.

Examine how SAP Intelligent RPA and AI solutions could help employees infuse more intelligence into their business processes.

Anywhere, everywhere

Take advantage of the greatest shift in ways of working in living memory

As much of the world shut down to contain the spread of COVID-19, companies took drastic steps to ensure their people could stay safe and productive. For billions of individuals, and millions of organizations, work changed overnight and digital adoption soared.

These were not mere short-term solutions. For years, employers and employees have been aware of the potential for remote working and virtual collaboration—the pandemic has accelerated shifts that were happening anyway. Even when offices do reopen, nobody expects the workplace to go back to exactly the way it was before.

The practical implications are that more employees will want to be able to work in a greater variety of locations—wherever they happen to be that day—and enterprise IT must be ready to support this. The leaders of the future will be those that act now to enable flexible digital environments that allow employees to be physically distributed, creatively connected, empowered by technology, and able to innovate from anywhere and everywhere.



88%

of executives think their organization is moving to truly virtualized work, in which work processes are virtual and people get together only when it adds value to do so.

Adapt to the new world of virtualized work with SAP technologies

What?	How?
<p>Scale up the flexible work environments that let people work wherever they want—the office, the home, the airport, a partner organization's offices, or anywhere else.</p>	<ul style="list-style-type: none"> • Make use of Microsoft Teams' forthcoming integration with SAP's solution suite. • Support frictionless working across locations and across platforms to enhance productivity, engagement, and learning opportunities.
<p>Cut the cognitive load and prevent the proliferation of application portals by creating consistent user interfaces and ways of interacting with the enterprise technology stack.</p>	<ul style="list-style-type: none"> • Introduce a business integration platform in conjunction with SAP solutions and platforms. • Create consistent user experiences and common data governance across locations and devices. • Use Qualtrics® solutions to understand and act on employee sentiment about enterprise user experiences.
<p>Take human-machine collaboration to the next stage of its evolution.</p>	<ul style="list-style-type: none"> • Explore the integration of SAP solutions with next-generation interfaces like extended reality. • Use SAP BTP to enhance workforce collaboration. • Consider Accenture's Immersive Collaboration Platform for immersive remote co-working, supported by real-time insights.

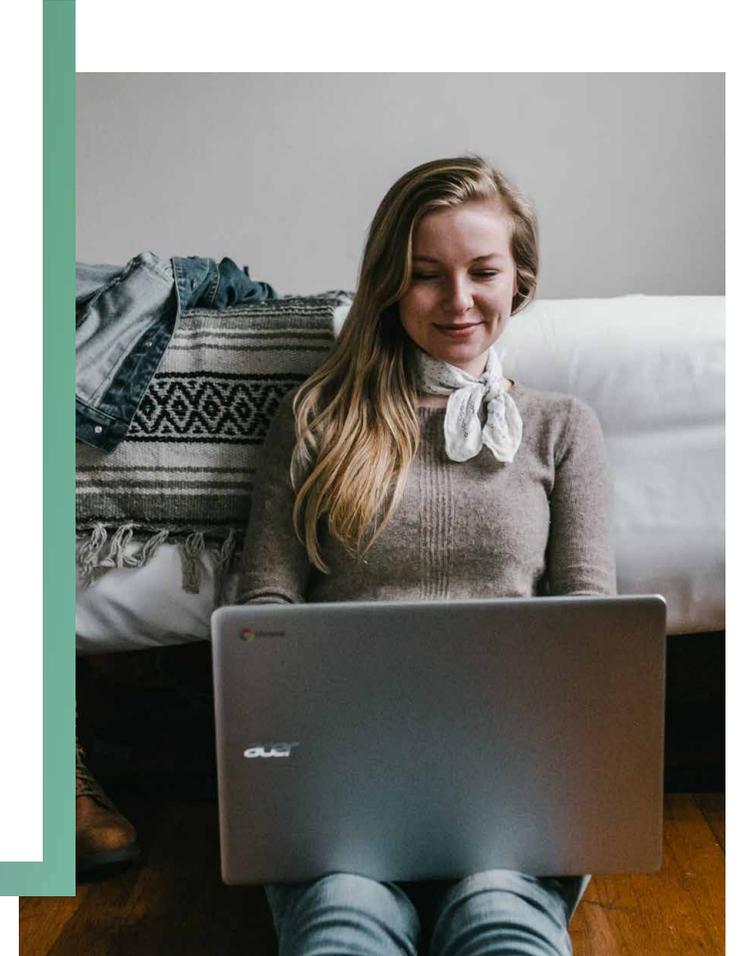
Flexible work environments

Having been forced into a huge global experiment in remote virtual working, hundreds of millions of people have experienced the benefits and downsides firsthand. They've seen it can work and they want to retain the flexibility it provides. Now the genie's out of the bottle, there's no going back. Flexible working is here to stay.

For enterprises, it means having the ability to collaborate across different platforms and environments is now essential. To achieve this, organizations that use SAP solutions can benefit from both their native flexibility and their innovative new integrations with other platforms. For example, SAP customers can now integrate SAP S/4HANA, SAP SuccessFactors®, and SAP Customer Experience solutions with Microsoft Teams.

Reflecting the increasing enterprise reliance on Teams for meetings, communication, and collaboration, this integration is designed to support frictionless distributed working and enable greater employee productivity and engagement, deliver collaborative learning, and support enhanced enterprise innovation and growth.²

The integration between SAP Sales Cloud and Teams makes it possible to schedule meetings with prospects directly from the SAP Sales Cloud dashboard. When sales associates run the Teams meeting, they can view the customer's data from the SAP system without leaving the Teams app, and save notes directly to the customer's timeline.

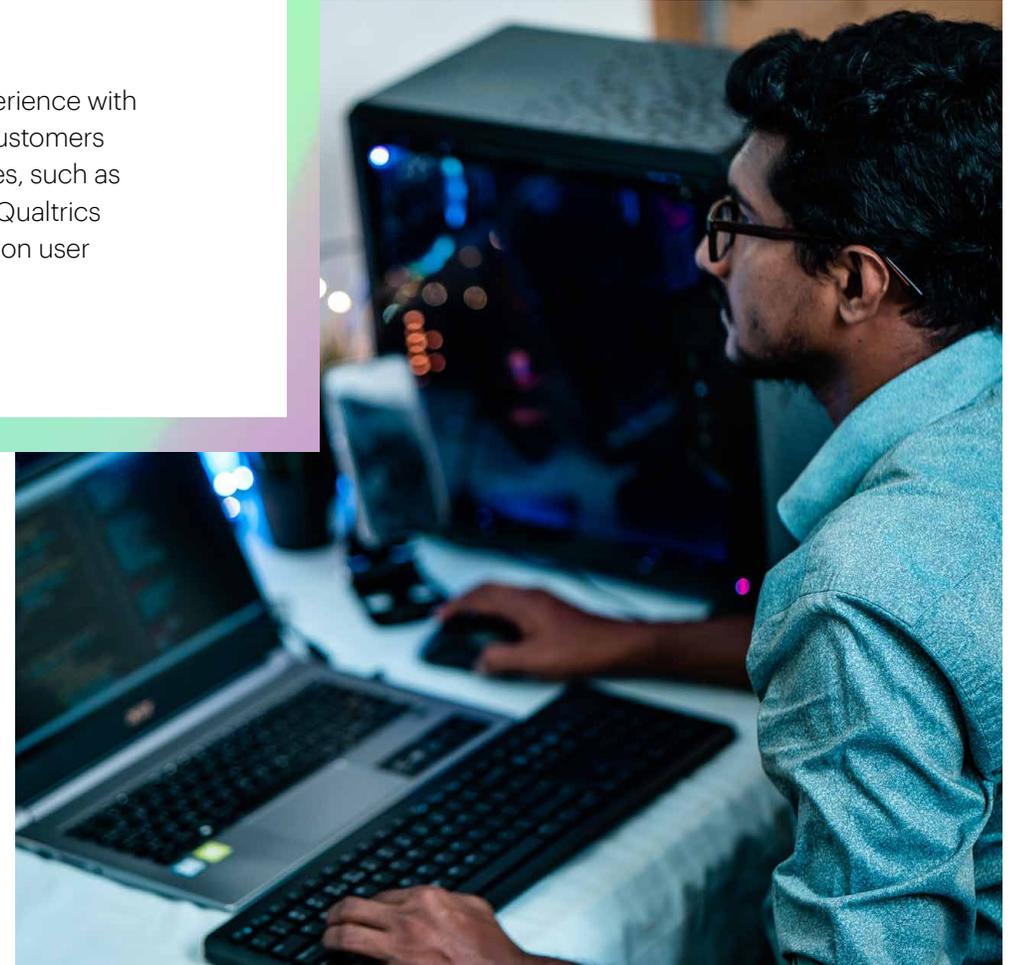


Consistent user interfaces

As the number of enterprise applications and solutions has skyrocketed, employees have had to contend with an ever-growing variety of user interfaces and experiences to get their work done. This diversity can be a critical enabler of enterprise flexibility, but it comes at a cost. When people have to switch between too many interfaces, the added cognitive load inevitably slows them down. This can be exacerbated by the need to access enterprise IT from a variety of locations and devices.

The solution is to introduce a business interaction platform to provide consistent user experience and common data governance, covering application interfaces, collaborative interaction, and access to analytics from any device. A consistent user experience can be achieved by utilizing SAP's Central Launchpad Service, SAP BTP features like One

Workflow Inbox, and a seamless user experience with SAP Fiori. To streamline this further, SAP customers can implement advanced user experiences, such as AI-powered assistants. They can also use Qualtrics solutions to measure, understand and act on user sentiment with their systems.



Human-machine collaboration

User interfaces have been transformed by new technology—including natural language interaction and immersive extended reality in particular—creating richer experiences that enable employees to make much greater use of machine capabilities, much faster.

SAP enables these kinds of agile and collaborative workplaces through the combination of SAP applications and immersive technologies such as virtual and augmented reality. For example, SAP BTP provides the flexibility to build, manage, integrate and drive workforce collaboration across SAP and non-SAP applications in a consistent environment.

Leveraging its Immersive Collaboration Platform (ICP), Accenture has developed FabLab for solving product engineering problems using real-time SAP data.

Using virtual reality, ICP allows collaboration in an immersive environment, supplemented with real-time insights, CAD models, material master specifications and product development capabilities enabled by a digital thread of data. FabLab lets engineers work together to manipulate a digital twin of a product based on real-time data such as parts, bills of materials, and inventory levels pulled directly from an SAP S/4HANA digital core.

Accenture developed a Digital Twin Cargo solution which supports efficient truck loading with the help of augmented reality. By providing warehouse workers with a visual guide for the placement of packages in each truck, it speeds up loading, while reducing errors, and helps ensure the most efficient arrangement of packages for both transportation and eventual unloading.

What to do first?

Prepare the organization for a more flexible workplace with the forthcoming integration of Microsoft Teams and SAP solutions.

Start using Qualtrics solutions to understand how employee experiences can be improved.

Explore opportunities for using extended reality in conjunction with SAP data.

From me to we

Renew the business for the post-pandemic world with multiparty systems

The pace of change and complexity of today's business landscape is so great that few companies, if any, can become experts in it entirely on their own. The reality is, if you want to transform the business in the post-pandemic world, you need to collaborate, coordinate, and coinvent with your ecosystem to drive change at an industry level.

Multiparty systems will be an ever more crucial enabler of that ecosystem collaboration. These systems—which include blockchain, distributed ledgers, distributed databases, tokenization and other technologies and capabilities—enable a shared data infrastructure between individuals and organizations that drives efficiency, enhances sustainability, and helps build new business and revenue models.



90%

of executives agree that multiparty systems will enable their ecosystems to forge a more resilient and adaptable foundation to create new value with their organization's partners.

Coordinate through chaos with multiparty systems

What?

Understand which platforms your business users and customers leaned on most in the last year—2020 saw a surge in the use of digital platforms for shopping, work, and more.

Keep abreast of the multiparty systems emerging in your industry—including the technology, the technical partners and providers, and any skills gaps in your organization.

Think beyond the walls of the enterprise—talk to strategic partners to understand their exposure to multiparty systems, and consider running strategic foresight exercises with them to evaluate the need for and impact of a multiparty system.

How?

- Take advantage of industry-focused cloud solutions and develop a strategy for using them to enhance ecosystem collaboration.
- Find partners with a shared set of customers and explore collaboration opportunities to build unique digital products.
- Identify where enhanced supply chain transparency could increase sustainability of products and build greater trust with customers.

- Evaluate the business case for participating in emerging multiparty systems—including areas where transactional data has yet to be digitized or where complex networks would benefit from a shared trusted platform.
- Explore how blockchain or distributed ledger technology can be combined with corresponding APIs on SAP BTP to design and shape an industry-specific multiparty solution.

- Consider joining industry consortiums or establishing a working group of inter-enterprise partners.
- Create a process for assessing the value of any multiparty solution strategy against the benefit to all participants, not just the enterprise in isolation.
- Review how SAP Business Network might foster better collaboration with partners.
- Leverage GreenToken by SAP to provide multiparty-enabled transparency in complex raw materials supply chains.

Think beyond the walls of the enterprise

An SAP environment provides numerous opportunities to action the above priorities and explore the use of multiparty systems across the value chain. For example, **GreenToken by SAP** is a new solution that provides transparency in complex raw materials supply chains. Using multiparty supply chain ecosystems, it tackles traceability problems by creating accountability across supply chains without relying on batches. It's a multi-commodity platform providing a "full chain" of custody using the principles of mass balance, tokenization and blockchain, enabling companies to trace commingled raw materials to their origin.

This can make a significant contribution to more sustainable and responsible supply chains. Companies often don't have visibility of where their raw materials are from, and to what extent they're sustainable, carbon neutral, free of child labor, or meet fair trade criteria.

This raises the risk, not only of non-compliance with regulations and missed sustainability targets, but also of serious negative impact on brand reputation and sales. With better raw materials traceability, companies can reduce those risks, ensuring they only source from suppliers that meet their sustainability and ethical policies. That transparency is a critical lever both in increasing trust with end consumers and in validating sustainability claims on an interorganizational level.

But there are many other potential benefits from a solution like GreenToken by SAP. Companies can explore new, more sustainable business models—including circular economy business models—which minimize reliance on virgin natural resources and increase the use of return flows (such as recycling). They can improve collaboration across the supply chain, building new industry standards around tokenized raw material transfers. And they can drive efficiency gains by eliminating the need for manual reconciliations of data.

Accenture and SAP are developing a new SAP Responsible Design and Production solution to help companies consume fewer resources and build sustainability into the design process. The solution will also help companies to apply analytics to the operational, asset, and process data collected across the value chain and so get an integrated view to help determine clear sustainability goals and metrics and reduce compliance costs.⁸

SAP's recently announced SAP Business Network is designed to help transform fragmented supply chains into unified, collaborative, and intelligent networks. Integrating SAP's leading business networks—Ariba Network, SAP Logistics Business Network, and SAP Asset Intelligence Network—the new solution will provide a single portal through which companies can get a holistic view of their supply chain ecosystems—including logistics, traceability, and equipment management and maintenance. The aim is to build a community that helps companies easily connect with each other across supply chains and create networked economies across industries.⁹



What to do first?

Look for emerging multiparty systems and inter-organizational collaboration opportunities in your industry—and start evaluating the case for participating.

Assess how SAP Business Network might enable better collaboration and greater supply chain responsiveness.

Consider solutions like GreenToken by SAP to get new transparency into raw materials sustainability.

Leaders Wanted

This is a pivotal moment for so many organizations in so many industries. Now as that world looks ahead to the post-pandemic future, companies must decide how to respond to a business environment that is more demanding than ever, but also full of renewed promise and unprecedented opportunity.

The five trends described in this Technology Vision for SAP Solutions will be key determiners of who wins and who loses in this brave new world. Winning will require bold leadership and an ability to use technology to become an expert in continuous change.

With a clear-eyed perspective on the opportunities and challenges ahead, and a willingness to reimagine how the organization operates—its people, its technology architecture, its data, and its partner ecosystems—we believe every enterprise has the opportunity to emerge as a leader.

References

- 1 SAP; 23 April 2021; "Sustainable Business Is Better Business for All;" <https://news.sap.com/2021/04/sap-and-accenture-sustainability-better-business/>
- 2 Microsoft News Release; 22 January 2021; <https://news.microsoft.com/2021/01/22/sap-and-microsoft-expand-partnership-and-integrate-microsoft-teams-across-solutions/>
<https://www.accenture.com/sap>
<https://www.accenture.com/techvision>
- 3 <https://newsroom.accenture.com/news/accenture-and-sap-co-develop-intelligent-asset-management-solutions-to-maximize-equipment-performance-and-output.htm>
- 4 <https://www.project44.com/network/sap-premiere-partnership>
- 5 <https://www.shippeo.com/press-releases/shippeo-partners-with-sap-to-bring-real-time-and-predictive-information-to-transportation-for-sap-logistics-business-network>
- 6 <https://wakeo.co/blog/reliability-and-interoperability-to-boost-existing-systems-with-real-time-visibility/>
- 7 <https://enterrasolutions.com/blog/enterra-solutions-partners-sap/>
- 8 <https://newsroom.accenture.com/news/accenture-and-sap-extend-partnership-to-help-companies-accelerate-sustainability-transformation-drive-new-sources-of-value-and-lead-in-the-circular-economy.htm>
- 9 <https://news.sap.com/2021/06/sapphire-now-sap-business-network/>

Authors



Caspar Borggreve
Global Lead – SAP Business Group, Accenture



Stéphanie Guimbellot
Global Lead – SAP Innovation & Sustainability, Accenture



Stéphane Martin
Global Lead – SAP Technology Domain, Accenture

Research Leads



Surya Mukherjee
Research Lead
Accenture Research



Piotr Pietruszyński
Research Specialist
Accenture Research

Subject Matter Experts and Contributors

This report, and the research on which it is based, would not have been possible without:

Goncalo Adriano
Deepika Bhaskar
Petra Breton
Sourav Chatterjee
Dries Cuypers
Steve Deliën
JB Delinselle
Tanmay Dey

Jean-Dominique Hoyami
Daniel Gonzalez
Anne Groeppelin
Andrea Hebel
Jan Kaps
Neetu Raina Koul
Amrish Kumar
Vibhash Kumar

Craig Mindrum
Murugan Padmanabhan
Mohanraju Venu Padmanabhan
Markus Reiterer
Michel Roger
Dmitry Svetlov
Sai S. Tulluri

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