

**ERP**  
TODAY

## SPECIAL REPORT



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# Foreword



**By Julia White**

Chief marketing and solutions officer and member of the executive board at SAP SE.

When I joined SAP a little over a year ago, it was a pivotal moment personally and professionally. I

was ready to bring everything I experienced over the course of my career so far to define and shape a new chapter. I wanted to make a bigger impact on the world, and I was eager to continue to grow and learn.

In many ways, this mirrors SAP's journey as it celebrates its 50th anniversary this year. In a world where disruption is the new normal, SAP remains uniquely positioned to help organisations across industries and of all sizes move into the future with speed, agility, and resilience.

To navigate today's climate of constant change, ERP is the most important and relevant foundational capability. But what SAP has to offer goes beyond our well-established ERP legacy. Our mission to help the world run better and improve people's lives continually drives us to in-

novate solutions that will help solve the world's most pressing issues. Our strategy has brought new purpose to our efforts around enabling end-to-end business processes with ERP-integrated solutions spanning supply chain, procurement, travel and expense, human capital management, and customer experience. And we are doing this with cloud-delivered innovation, unified data, embedded AI, and industry-specific solutions.

We also help long-established companies on their journey to the cloud, and we help digital natives build out the capabilities they need to grow. With offerings like RISE with SAP, we deliver ongoing business innovation, bringing companies into a world of agility and adaptability in the cloud. With S/4HANA Cloud, we help customers adapt at scale and speed to achieve intelligent ERP without boundaries. SAP Signavio provides continual analysis, benchmarking, and optimisation of the ERP to streamline processes using AI. And, with SAP's Business Technology Plat-

form and global network of partners, companies can build tailored solutions for their unique needs.

But it isn't just about optimising the top line and bottom line for our customers. Our future rests on our ability to help customers manage their 'green line' and become more sustainable. We believe sustainability is the single most important opportunity of our time. Whether it's by facilitating a circular economy, re-using waste materials, or driving clean energy, we aim to achieve zero waste, zero emissions, and zero inequality. We are excited and optimistic about the role emerging technologies can play in helping us achieve these lofty goals.

It's our rich history of innovation and the promise for what we'll accomplish in the future that defines SAP today. 50 years into our journey, SAP is more relevant than ever, and, in some ways, it feels as though we're just getting started. In this special issue, we look back so we can innovate forward - we hope you'll join us on the journey as we write our next chapter.

# The future of ERP is here



## By Thomas Saueressig

Member of the executive board of SAP SE for SAP Product Engineering

Five founders and the vision to transform the way businesses run – that is how SAP's story began in 1972. I'm privileged to have been part of this journey for almost two decades. It has been a long way from automating financial accounting for a handful of customers to providing end-to-end solutions to companies that generate 87 percent of total global commerce. Today, SAP is the market leader in enterprise application software.

New realities require new ways of doing business. This year alone, we have seen war, mass migration, and an ongoing pandemic; all of this while we are running out of time to tackle climate change and energy transformation. There is hardly an organisation that has not been im-

pacted by these disruptions. Simply, crisis mode is becoming the new normal for businesses.

Crises challenge not only the way we live, but also the way we work. To help our customers thrive despite uncertainty, SAP enables them to transform into intelligent, networked, and sustainable enterprises. This requires much more than a technical migration. Business process innovation is what's required, no matter a customer's starting point.

### Enabling business transformation

ERP is at the centre of business process innovation – and the focus is shifting from 'enterprise' to 'network' as processes extend into an organisation's ecosystem and across industries. With SAP S/4HANA Cloud, we make innovation available right where and when it is needed.

**Modular** Today's business challenges have become too complex and fast-paced to be handled by a static, complex ERP system. That's why SAP S/4HANA Cloud has a modular architecture. Its high degree of standardisation keeps the core clean and untouched. In-app extensibility and extensions built on SAP Business Technology Platform make it possible to respond to emerging business needs, ensure fast time-to-value, and deliver quick business outcomes.

**Autonomous** The future of ERP is an autonomous ERP. With best-in-class AI and ML capabilities, users can focus on value-generating activities, while processes which have been historically manual are being automated. This includes core finance capabilities to be fully automated by delivering real-time prevention

controls and increasing meta-data coverage in values.

**Integrated** Our modular cloud ERP connects front and back-end systems and covers business processes end-to-end: hire-to-retire, lead-to-cash, source-to-pay and design-to-operate. SAP S/4HANA Cloud integrates with SAP's entire portfolio, including industry and line of business solutions. It offers pre-configured integration scenarios and several hundred standard APIs for integration with third-party data and applications. We also provide our domain model to partners, making SAP S/4HANA Cloud an open system.

**Open** The lines between customers, partners, and competitors are blurring. Ecosystems are important in bringing complementary skills together. Today, companies must team up to deliver innovation at scale and along the value chain - and so does SAP with over 23,000 partners. Together, we are developing industry-specific, modular cloud solutions that extend existing systems. This way, we help our customers focus on the specific needs of their industry. At the same time, the interoperability of industry cloud solutions enables companies to leverage cross-industry business models and process flows.

As an example, the automotive sector has gone through radical change over the past years. Traditionally, car manufacturers differentiated themselves by how they designed and built vehicles. Now, how they offer and sell their products is increasingly important. Subscription and consumption-based commercial models are gaining ground in response to changing customer demand. Automotive companies can adopt service industry business models where flexible commercial models are nothing new.

**Building resilient supply chains**  
Networked enterprises are resilient

enterprises. Agility and flexibility provide the basis for resilience - something companies seek for their IT environments as well.

Today's supply chains are complex. For example, enjoying a simple cup of coffee requires 29 companies across 18 countries to work together. That gives a rough idea of the magnitude of companies involved in products and solutions that are far more complex than a cup of coffee. With our supply chain management portfolio, we therefore create a single digital thread for products and assets, resulting in efficiency gains for all parties involved.

As the largest B2B network, SAP Business Network brings together millions of suppliers, logistics, and service providers from 190 countries. By providing real-time visibility, the network enables companies to instantly act on disruptions, thereby transforming fragmented, siloed supply chains into resilient, agile and collaborative networks.

Coming back to the automotive industry, recalls because of faulty components are a common problem associated with inconvenience for the

### Moving towards a sustainable enterprise

Greater transparency along the value chain also drives more sustainable decisions, conserves resources, and helps move towards a more circular economy. We help our customers embed sustainability in their business processes and up and down the value chain. It's our ambition to support customers in achieving zero emissions, zero waste, and zero inequality, while enabling holistic steering and reporting of their sustainability efforts.

Last year alone, we extended our sustainability portfolio with three new SAP S/4HANA cloud-native applications, all delivered in a modular way on SAP BTP. We won't stop here: we are embedding sustainability across our solution portfolio as it remains our vision to transform the way businesses run. And given today's challenges, it is about taking a transformative approach towards sustainability.

A modern ERP system is crucial for businesses to thrive despite these challenges. To realise business process innovation, it needs to be modular, autonomous, integrated

A cup of coffee requires 29 companies across 18 countries to work together. That gives an idea of the magnitude of companies involved in products and solutions that are far more complex than a cup of coffee.



buyers and costs for manufacturers. When data from production quality records is shared between suppliers and manufacturers, they can directly identify and contact affected buyers, rather than recalling entire batches. Industry networks such as **Catena-X** in the automotive sector can make an important contribution here, fostering secure and standardised data exchange across the value chain.

and open. That's the foundation for resilient supply chains and a more sustainable future.

SAP S/4HANA Cloud combines these capabilities and delivers continuous innovation so our customers can stay on top as the world around them keeps evolving. I'm excited to be part of this journey as we are shaping the next decades of enterprise software together.



# Fifty years and counting

By **Jon Simmonds**

IT director and 2 x SAP Press Author

In 2021, SAP was the third largest software company in the world, after **Microsoft** and **Oracle**, with annual revenues of €27.8bn. SAP commands a staggering 87 percent of global commerce, and accounting for \$46tn flows through the books of SAP's customers. Of the 100 largest companies in the world, 99 of them are SAP customers and 85 are currently using SAP's latest and greatest ERP offering, SAP S/4HANA.

Commanding such a dominant place in the ERP market is no cause for complacency, and SAP is now setting its sights on growth in the cloud through the RISE with SAP program and development of cutting-edge technologies in artificial intelligence (AI), machine learning and robotic process automation.

This key reinvention for SAP, as seen in the last two years, sets the company on another upward trajectory. But how did all this come about? What started SAP on such an illustrious journey, all those years ago back in 1972? Let's take a dive into history to understand.

## A really long time ago...

We have **IBM** to thank for the formation of SAP. In 1971, **Xerox** contracted IBM to migrate its business systems on

to IBM technology platforms. Five IBM engineers, all based in Monnheim, Germany, began working on the program – Hasso Plattner, Klaus Tschira, Claus Wellenreuther, Dietmar Hopp and Hans-Werner Hector.

The engineers took the approach that they should put together an enterprise-wide system based on the Scientific Data Systems (SDS) software. However, the program soon lost momentum, and the engineers were told that the work would no longer be needed. Undaunted, they became entrepreneurs and left IBM to start up their own company, **Systemanalyse und Programmentwicklung** (System Analysis and Program Development in English), or SAP for short.

The first client of the fledgling company was **Imperial Chemicals Industry**. Charged with developing programs for accounting and payroll, the team quickly moved away from the traditional mechanical storage of data on punch cards, instead opting to store the data locally on a common database. Because punch cards had to be processed overnight, whereas database storage was immediate, the first system was called a 'real-time' system. Once this system was fully developed, SAP was ready to launch it as a commercial venture to other customers under the name SAP RF – a full

financial accounting system.

This system would eventually become known as SAP R/1 – the 'R' referring to that real-time capability, which was the key selling point of the software. SAP R/1 continued to develop throughout the 1970s with the integration of new functional modules to add to the financial accounting suite. All these additional modules, such as RM for materials management and RV for sales and distribution, were fully integrated with the RF system. This tight integration gave SAP its unique selling point in the burgeoning ERP market, as well as heralding a new era for the company with the R/2 version being launched in 1980. Upgrading the supporting servers in SAP, as well as the tighter integration between the growing number of functional areas, made R/2 a popular software solution for the next ten years.

## European expansions

Revenues began to grow as the company expanded to take on new clients outside of the German market: Austria in 1977 and France in 1978. The expansion to the French market also brought with it the French language version of the software. The offices in Mannheim were, by this time, becoming a little cramped, and SAP moved its headquarters and its

**1972**

Systemanalyse Programmentwicklung is born.

**1973**

First financial accounting system is launched, RF (SAP R/1).



**1978**

SAP grows to 60 employees.

**1981**

SAP R/2 launches.

**1982**

10 year anniversary. 250 companies deploy SAP software.





From left: Hasso Plattner, Klaus Tschira, Claus Wellenreuther, Dietmar Hopp, Hans-Werner Hector

80 employees to Walldorf, Bavaria, where it remains to this day.

By this time, SAP had created a sales and support subsidiary, under the same **SAP GmbH** (Systeme Anwendungen und Produkte in der Datenverarbeitung, or Systems, Applications, and Products in Data Processing). By the early 80s, this name took over the branding and the partnership between SAP and SAP GmbH was dissolved, with SAP GmbH taking over.

Rapid growth was the hallmark of SAP in the 1980s – in revenue, software, and people. Halfway through the new decade, revenues had grown quickly to DM100m, and SAP now employed over 300 people. SAP R/2 continued to be at the forefront of the ERP market, and during these years, the software underwent some fundamental redevelopment with the creation of new functional modules – as always, fully integrated with the existing modules.

These modules included RK (controlling), RP (personnel) and RM-PPS (production planning). The early 1980s also saw the development of the R/2 programming language ABAP, which initially stood for Allgemeiner Berichts Aufbereitungs-Prozessor, German for generic report preparation processor. The ABAP acronym was eventually amended to refer to Advanced Business Application Programming.

During the latter period of the 1980s, SAP went through another of its transformations for which it has become so widely known. The initial transformation saw SAP become a public limited company, SAP AG, as well as open a whole array of new offices across Europe to support operations in those countries.

This era also saw the company move away from being just a software development factory, into the arena of consulting and training. The Walldorf site became home to a new

and modern training facility, and the launch of SAP Consulting allowed the company to assist clients in the software implementation journey.

In the software itself, SAP launched an industry-specific version, known as RIVA, tailored exclusively for the utilities sector. This became the forerunner of many industry solutions developments in the 1990s using the prefix IS-, as well as the Model Company solutions of the S/4HANA era.

### Three is the magic number

As the 1980s drew to a close, SAP began to command a dominant position in the ERP market, with revenues of DM500m – up from DM100m in 1985 – and employing a total of 1,700 people across multiple markets in Europe in addition to opening a branch in Philadelphia, USA.

In software development, a new graphical user interface for R/2 had been launched, but much of the R&D work in the company was engaged in



### 1986

SAP hits the DM100m revenue mark.

### 1988

Dow Chemicals becomes SAP's 1,000th customer.

### 1997

SAP celebrates its silver jubilee – workforce increases by 40%.

### 1999

More than 20,000 employees generate €5.1bn in revenue for SAP.



utilisation of the ABAP programming language to develop the next generation solution: SAP R/3.

1992 saw the launch of SAP R/3, again with the R standing for real time, and this time, the 3 having two dimensions to it: the third incarnation of the software as well as representing the three-tier architecture of the ABAP platform. These three tiers were the Presentation layer; the Application layer; and the Database layer.

SAP R/3 quickly established itself as the dominant software application in the ERP market, through multiple releases from Enterprise Edition 1.0A in 1992 through to Enterprise Edition 4.7X200 in September 2003. Collaborations with the likes of Microsoft and IXOS, as well as development of a Japanese version with kanji characters, served to underline the software's flexibility and adaptability. Huge clients such as **Coca-Cola** and **General Motors** deployed SAP in their operations in the 90s, lending weight to SAP's claim to be the "best in breed".

The ABAP programming language continued to be the language of choice for SAP applications, and the next generation was launched in 1999 as ABAP Objects, an object-oriented extension to ABAP.

### Twenty-first century SAP

The new millennium continued as the previous two decades had for SAP: with continual growth. The year 2001

saw SAP buck the post dot-com bubble burst in the technology industry by posting a 17 percent increase in revenue. 2001 also saw SAP flex its muscles by spending \$400m to acquire Israeli software development company **TopTier Inc.** The TopTier portal solution **Netweaver** was finally integrated into the SAP landscape with the R/3 4.6 release in 2004, and soon became integral to SAP's integration and application capabilities.

Further innovations came with the launch of mySAP.com, an attempt by SAP to link all their solutions together via the medium of the internet. The product was initially heralded as groundbreaking, but growing customer confusion about the offering led SAP to change the name from mysap.com to mySAP Business Suite in 2003. The mySAP prefix would be quietly dropped in later years.

The company itself was evolving, too. In 2003, the last of the five co-founders still on the management team, Hasso Plattner, stepped down as a member of the executive board, to be elected instead as chairman of SAP's supervisory board.

More and more, the company was spreading its wings from its German base, with nine R&D facilities across the globe – in Germany, India, USA, China, Bulgaria, Canada, Israel, Japan and France. At this point, and for the first time, more of SAP's employees were employed outside of Ger-

many than within Germany (17,000 versus 13,000).

Another momentous reinvention took place in the middle of the 2000s when, in 2004, SAP launched SAP ERP, with the R/3 banner being superseded by ERP Central Component (ECC), initially known as SAP ECC5.0, but within two years to be developed into SAP ECC6.0.

This is still the most commonly used SAP ERP application in the world today. The software has come a long way from those initial RF days, now boasting functional coverage in modules such as Financial Accounting (FI), Sales and Distribution (SD), Materials Management (MM), Production Planning (PP), Project Systems (PS), Customer Service (CS), Quality Management (QM), Warehouse Management (WM), Human Resources (HR) and Plant Maintenance (PM). Aligning to these functional areas became a huge growth market for consultants, project managers and systems integrators, a market which still exists and grows today.

New technologies continued to be at the forefront of SAP's growth strategy, and the latter part of the decade saw SAP growing in new markets – the midsize market with **SAP Business One**, and the small to medium enterprise with **SAP Business By Design**. Organic growth was matched by acquisitions, with SAP acquiring the French business intel-

**2007**

Launches SAP Business ByDesign.

**2010**

Bill McDermott and Jim Hagemann Snabe named co-CEOs.

**2011**

SAP HANA platform launch.

**2012**

SAP acquires Ariba.

**2013**

SAP Business Suite moves to SAP HANA and generates €664m in revenue.

**2014**

Bill McDermott becomes sole CEO of SAP.



## The SAP history of innovation and reinvention stands it in good stead to navigate the next fifty years.

ligence company **Business Objects** in 2008, as well as mobile applications specialist **Sybase** in 2010.

### The Age of HANA

Innovation accelerated from thereon, as SAP focussed on the new capabilities of in-memory technology. In 2011, the first incarnation appeared of its in-memory database – High Performance Analytical Application (HANA). The advances were impressive, allowing users to access vast amounts of data in seconds instead of hours or even days. It certainly impressed the market, which snapped up the technology, generating \$1.2bn in revenue over the next three years, making HANA the fastest growing product in the history of enterprise software.

The acquisitions continued to come thick and fast in this era, with the acquisition of the business collaboration network **Ariba** in 2012; commerce technology **Hybris** in 2013; contract workforce software **Fieldglass** in 2014; and travel and expenses software **Concur**, also in 2014.

2015 was a pivotal year for SAP, heralding the launch of its current flagship product, SAP S/4HANA. Built for use only with a HANA database,

and boasting a new device-agnostic user experience, known as Fiori, SAP truly entered the digital age. The on-premise version of SAP S/4HANA was very quickly followed by the cloud edition. The same year also saw the launch of the SAP Cloud Platform, built for internet of things (IoT) integrations.

The SAP conference, SAP Sapphire, is the place where SAP continues to launch its new technology capabilities. In 2017, Leonardo was launched here, a suite of products designed to deliver next generation capabilities in AI, machine learning, IoT, blockchain, big data, and analytics. This became part of what SAP terms ‘the intelligent enterprise’, a vision for how companies can use and integrate their existing technologies to understand their business better and make data-driven, informed decisions at speed.

Another SAP innovation, SAP C/4HANA, was delivered in 2018, in a bid to disrupt the customer relationship management (CRM) market. The acquisitions strategy continued apace with the purchase of **Qualtrics International**, a global leader in experience management, for \$8bn.

In 2019, long-term CEO Bill McDermott stepped down, to move to IT organisation **ServiceNow**. In his place stepped Christian Klein, and the SAP strategy shifted significantly. The aggressive acquisitions strategy was shelved in place of a preference for

organic growth in the areas of industry cloud, business networking, and business process intelligence. With this in mind, SAP rebranded the SAP Cloud Platform as the Business Technology Platform (BTP), a centralised hub where organisations can build their industry solutions and integrations to complement their existing technologies.

So now we see what the past has presented for SAP, what insights does this give us to what we can expect from this software giant in the years to come?

The major initiative for SAP now is their single RISE With SAP offering, a logical roadmap for achieving the intelligent enterprise through subscription-based licensing and cloud integration through BTP. The drive for SAP S/4HANA migration continues, with the uptake steadily increasing since its birth in 2015, from 370 customers at the end of that year to 18,000 today. This trend is set to continue, with SAP’s S/4HANA Cloud option becoming more and more popular as an ERP of choice. The customer experience is again at SAP’s heart, and the C/4HANA offering is reinvigorating SAP’s place in the CX market.

Whatever happens though, the SAP history of innovation and reinvention stands it in good stead to navigate the next fifty years in this exciting and demanding industry.

## 2015

SAP S/4 HANA, the next generation of enterprise software is launched.

## 2016

Apple and SAP announce partnership to deliver cutting-edge apps for iPhone and iPad.

## 2018

Christian Klein is appointed as COO to the executive board.

## 2019

After 10 years, Bill McDermott steps down as CEO.

## 2020

SAP transforms to a sole CEO model with Christian Klein.

## 2021

SAP launches RISE with SAP.





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**SAP**





# Five key cloud opportunities

for the next decade and beyond



**By Scott Russell**

SAP executive board member, customer success

**A**fter years of repeated shocks and disruption, there is still one constant when we talk to customers about their cloud goals - the need for business transformation. Customers are looking to the cloud to make them more agile, resilient, leaner, and to make better use of their data.

This alone is not a new concept, but like everything in business, the value in cloud services has only continued to evolve. Today there are new opportunities across a spectrum of business imperatives - and innovation in the cloud has become a constant process driven by the business instead of just IT.

So, what are some of the big trends we're seeing for companies in the cloud today? Here are five key concepts to focus on.

## **Supply chains are transforming into intelligent industry networks**

Supply chain resilience has become one of the most important discussions in business today. As we've seen from the rampant disruption and uncertainty over the past two years, resilience can be tested by uncontrollable forces at any point in time.

To make supply chains more proactive and agile for the future, companies need to first become more open and work with their traditional partners and new ones. This shift is really from the traditional concept of a supply chain toward a new era of intelligent supply and demand ecosystems.

SAP supports this today through the SAP Business Network, which enables businesses to be more proactive and resilient by becoming part of an open, powerful networked economy.

## **Bringing a B2C experience to B2B relationships is a leadership opportunity**

Everyone knows what a good customer experience looks like from a consumer perspective. You can find what you need easily. You can order and pay for it seamlessly. You can contact service and support as needed. The way we interact online and buy products as consumers is usually very efficient.

In this light, the B2B experience has been lagging behind. There's a lot of room for innovation and improvement to make it much easier and more intuitive for businesses to interact with each other.

The concept of customer experience, but in a B2B context, is becoming increasingly relevant.

As businesses think about processes to improve or ways to become



a leader in their industry, a winning strategy will consist of enabling all of their suppliers, buyers, employees and other stakeholders to interact with them through an experience that feels like a B2C experience.

Making it easier to interact with companies across the ecosystem benefits the entire value chain.

#### **Sustainability is a business imperative**

Sustainability is another reality that companies must pursue, not just because we have a responsibility for future generations, but also because market forces can shift rapidly for a host of reasons. Consumers, investors and employees are driving demand for sustainable practices.

Most companies understand this, but they don't know where to begin. This is largely because you can't manage what you can't measure.

In the cloud, sustainability can be integrated to become part of your business. Companies should view sustainability the same way they view their finances. The data can be reported in the same way. The processes involved can be automated in much the same way.

Embedding these elements as part of steering the business is an imperative that is only going to become more important in the years to come.

#### **Modular solutions can enable continuous innovation**

Another benefit of cloud services that we're seeing more customers take advantage of is the speed and availability of innovation, driven by an increasingly modular approach. As modular solutions become more plug and play, the whole perception of what a cloud initiative can be is also going to change.

This paradigm makes it much easier to update, change workflows or add new features and functionality without a lengthy deployment. It doesn't need to be a wide-scale business transformation. The organisation can focus on one line of business, one business unit, one process or even one workflow at a time.

A modular approach also greatly reduces the risk of making a change. Everybody wants to transform, but if it involves a lengthy process of discovery, request for proposals, integration and deployment, there may not be a business case to disrupt operations that are working adequately today. After all, the processes are running. The product is being delivered. Customers are satisfied.

When transformation is iterative, there's really no end to what a company can do. Spin up a new process and A/B test it against the current one. Add a new partner, new region or new business model. Add a mod-

#### **For constant business innovation, companies need a true partner in the cloud**

We're still seeing many companies approach cloud initiatives through the lens of 'table stakes' benefits. They want to reduce operating expenses by migrating processes and workloads. But this is really just one piece of the equation.

Moving to the cloud should never be solely an IT project. In today's environment, it's not enough to find a SaaS vendor and achieve annual cost savings. What's important is to lead with business value.

To do this, more and more companies are working hand-in-hand with a cloud partner across every step and every process. Having a business partner in the cloud can help ensure that immediate goals are realised, issues and opportunities are continually raised, and constant improvements to solutions and workflows are facilitated as new needs arise.

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ule that improves a current workflow. Everything is on the table, and it often doesn't require the IT department.

Looking to the future, this kind of business innovation is becoming an operational reality that never truly ends. That's why we're seeing a much more modular approach to implementing transformation in pieces as business needs and opportunities arise.

SAP has been leading on all of these new and emerging opportunities in the cloud and is there to meet customers at any step. From transformation leaders in an industry or companies that are just getting started, SAP is ready to partner with you to help you define the right path for your business and help you become a true industry leader.

# Why partnering is a main strategy area for SAP

**A**s underlined by Saphire 2022, SAP has a vision to reinvent how the world runs as a network of intelligent, sustainable enterprises, growing towards a network of businesses in a sustainable world. Fuelling this is an overarching purpose to help the world run better and improve people's lives. But even as a key player, SAP cannot meet all customer requirements by itself, and as such, partnerships are vital to be able to offer customers maximum added value and realise this grand aim.

The role of partners at SAP has changed in a way that puts customer success front and centre in everything the company and its partners do together, and which positions partners to deliver a complete solution. SAP's goal is to become an increasingly partner-led company with a dynamic partner ecosystem enabling them to build profitable businesses, and ultimately be the ecosystem of choice for partners.

By 2025 ambition, SAP hopes to develop a radically partner-centric approach in line with the wider company strategy. The organisation is committed to empowering its partners, en-

hancing the partner experience and collaborative environment to jointly create customer value.

Not that SAP hasn't already forged deep connections in its 50 years helping the world run better. **Capgemini**, for example, has four decades of experience with SAP solutions, serving 1,800 clients across the world.

"Capgemini's relationship with SAP is very mature and we know each other well. We collaborate at many levels, globally and at a country level," says David Lowson, head of the SAP CoE for Europe, Capgemini. "We hope we influence SAP in their direction and can improve their offer in a positive way."

Caspar Borggreve, senior managing director for **Accenture**, is similarly positive, noting that SAP and Accenture have a very successful partnership spanning more than 40 years with the personal support of the CEOs from both companies.

"It starts with our shared values - we consistently look to always do the best thing for our mutual clients, our teams, and the communities where we work and live."

The director points to Accenture's multiple co-innovation and co-development projects with SAP where joint solutions are created across functions

and industries. These projects ultimately help Accenture's clients transform their business and be ready for whatever is around the corner.

"Working together, we've helped thousands of clients change and grow their business. And we are each other's customers, too - we work with SAP across their organisation and we run our own business on SAP technologies in the public cloud."

Speaking of cloud, a newer - but no less notable - SAP partner is Amazon Web Services (**AWS**). As Kathleen Curry, head of worldwide strategic alliances at AWS explains, SAP and AWS have a strong partnership dating back to 2008, when SAP started using AWS to support their own innovation journey.

"Since then, we have worked together to consistently break new ground for our joint customers, including the first SAP-certified cloud infrastructure, the first joint customers running production SAP on cloud, and the first automated tooling to help customers deploy their SAP systems on the cloud," says Curry.

"Today, SAP runs many of their customer-facing offerings on AWS, including RISE with SAP, SAP Business Technology Platform, and SAP



SAP and Accenture have a very successful partnership that spans more than 40 years and has the personal support of the CEOs from both companies

**Caspar Borggreve / Accenture**





HANA Cloud. And several **Amazon** companies, such as **MGM**, **Zappos**, and **Twit**ch, run SAP to support their mission-critical workloads.”

**EY**, another significant SAP partner, demonstrates that these strong relationships ensure stronger products for customers wanting to operate with ease and tech agility.

“Together, EY and SAP aim to help organisations of varying scale to generate long-term value faster, by reframing their future and preparing them for what’s next through innovative, industry-focused, cloud-based, sustainable transformation solutions and offerings,” says Anthony Byrne, partner at EY and CEO of **EY AgilityWorks**.

### Spearheading intelligent enterprise

SAP’s leading technology platforms, enriched and extended by partners’ unique IP, delivered in the cloud and powered by its Intelligent Enterprise offering, represents the opportunity of a generation for partners and clients. Today, partners deliver around 90 percent of the implementations of SAP’s customers and they generate around 80 percent of net-new customers for SAP.

It is SAP’s goal to enable smart partnering moves to activate and accelerate intelligent enterprise in general with an ecosystem primed for delivering intelligent outcomes. This strategy frees SAP partners from being seen only as resale and implementation providers, and offers them a broader role in helping customers become intelligent enterprises.

“SAP is strongly positioned with the breadth of their portfolio offering to achieve the promise of a modern intelligent enterprise, with the agility and flex to change over time,” says Accenture’s Borggreve.

Partners leverage their expertise to create value along SAP’s Intelligent Enterprise offering, enabling SAP customers to meet their business needs, become more profitable and – just as importantly – grow sustainably.

Every company will need to find ways to reduce their impact on society for a more sustainable future. But no one company can solve the climate crisis on its own. Companies must partner to find the right sustainable solutions for the success of their businesses and the world.

As businesses re-evaluate their business models to incorporate sustainability initiatives, there will be a continued focus on building resilience through digital transformation, including shifts to cloud-based versions of applications. On this journey they will be accompanied by SAP and its partners.

“(At Accenture) we also see an increasing focus on sustainability as a key goal in transformation projects. Embedding sustainability into total enterprise reinvention is the right thing

for businesses and the planet,” says Borggreve. “Accenture has teamed up with SAP and the **United Nations Global Compact** to help businesses achieve the Sustainable Development Goals (SDG).”

As Borggreve explains, SAP and Accenture have worked with one another to jointly develop new solutions that embed sustainability into business operations across the entire value chain. Accenture also created a program with **SAP.iO** to assist and provide resources to startups that focus on sustainability solutions. Such tools not only help the planet, but also make strong business sense.

“Companies that can embed sustainable practices across the full spectrum of their business operations – from strategy to execution – will unlock new value throughout their enterprises and in their value and supply chains.”

### The evolving partner ecosystem

As SAP looks to the future, ecosystems will become increasingly important for its partners. The company believes it will be on partners to collaborate within networks to develop unique, customer-centric IP such as Accenture’s sustainability services.

SAP forecasts more organisations will adopt unified partner networks that break down siloed customer systems and allow partners to provide customers with complementary products, services, and capabilities.

The integration of different technologies and the scaling of tailored solutions across entire organisations will drastically increase the complexity IT suppliers are expected to master.

Capgemini’s relationship with SAP is very mature and we know each other well. We collaborate at many levels, globally and at a country level

**David Lowson / Capgemini**



SAP and AWS have a strong partnership that dates back to 2008. We have worked together to consistently break new ground for our joint customers

**Kathleen Curry / AWS**



Instead, future solutions will typically rely on contributions from multiple specialised parties and leverage their collective expertise to enable end-to-end integration.

Borggreve notes that SAP looks at how emerging technologies can be applied to new business challenges. As a result, Accenture has been able to collaborate on many occasions to bring new ideas and innovations to clients.

"Working alongside SAP, we are preparing our clients for total enterprise reinvention over the next decade, transforming every part of their business through technology, data and AI, and new ways of working and engaging with customers."



get more value out of their mission-critical SAP systems since 2011, both "meaningfully longer than any other cloud provider."

"SAP on AWS is a consistently growing business with customers accelerating their journey to the cloud," Curry continues. "With the launch of RISE with SAP, we observed even greater acceleration due to end-to-end accountability for system monitoring, performance, and cybersecurity offered to our customers."

With cloud, new features can be defined, built, and delivered globally within months, so customers can benefit from new capabilities far more rapidly than with on-premise technology. Customisations

EY solutions for SAP's industry cloud combine EY experience and knowledge in these industries with EY industry-specific IP and integrated tech solutions

**Anthony Byrne /EY AgilityWorks**

In the IP space, the situation can be a bit more complex, as applications may overlap in functionality. This is where a software vendor like SAP can help bring partners together by ensuring a level playing field and by bringing the partner IP together, adding SAP's own solution and then presenting a complete solution to the customer.

#### What SAP has to offer partners and customers

Cloud enables technology companies like SAP to deliver the latest and greatest innovation to companies around the world rapidly. Having AWS on-board is an advantage for SAP in this regard. As AWS' Curry says, the cloud giant has been working directly with SAP for over a decade, partnering together to help 5,000 customers

within on-premise SAP ERP systems have made updates difficult and resulted in customers' investments getting locked in a dead end.

Because business processes need to continually adapt, it's critical that customers can adapt their SAP systems without significant overhead. Moving to the modular cloud approach, rather than the monolithic on-prem architecture, unlocks this ability.

SAP's portfolio of modular solutions can help businesses get to a cloud model. With the combination of SAP S/4HANA Cloud, line-of-business-solutions (such as SAP SuccessFactors, SAP Ariba, SAP Concur, SAP Fieldglass), SAP Business Technology Platform (SAP BTP), the SAP Marketplace, and industry cloud solutions, SAP, in lockstep with its partner ecosystem, offers the business outcomes custom-

ers want.

The centrepiece is S/4HANA Cloud, which runs core business processes built on best practices. Customers and partners such as EY have found the service can then add functionality via SAP's line-of-business-solutions.

"EY solutions for SAP's industry cloud combine EY experience and knowledge in these industries with EY industry-specific IP and integrated technology solutions," says EY's Byrne.

"Built on SAP Business Technology Platform and implemented by EY teams in collaboration with SAP, organisations can leverage these industry solutions in their SAP S/4HANA Cloud implementations to address key business challenges, accelerate transformation, manage business disruption, and optimise time to value."

To further differentiate, customers and partners can leverage the industry cloud with SAP and partner-created apps, which are accessible via a digital store, and tailored to different industries. Everything is tied together with the SAP BTP, which provides the common data model and analytics.

SAP BTP allows customers to keep the core cloud solutions modification-free. Customers and partners can use SAP Integration and Extension Suites to easily add differentiating line-of-business, industry, or company-specific extensions.

Capgemini's Lowson recommends BTP for any companies looking to keep their edge in these changing times.

"To remain competitive and relevant, companies should gear up to intelligently rethink digital transformation by considering exploring industry-relevant innovation opportunities on BTP," he says.

SAP has the goal to accelerate the consumption of cloud services by achieving top marks for end-user satisfaction. By shifting its approach as a company – and delivering unique business value through its platform – SAP and its ecosystem can move to the cloud with ease.

## Deloitte and SAP galvanise new foundations at Costain Group



As an increasingly digitally connected business, recent years have surfaced the need for increased data visibility and the intelligent use of analytics for real-time decision making in UK public service markets. This drive is focussed on achieving new efficiencies across many project metrics in the British transport and related utilities sectors.

Leading the charge in this space, British construction and engineering firm **Costain Group** was awarded the project to create the UK's Intelligent Infrastructure Control Centre (IICC), a cross-industry technology platform built using SAP technology and **Microsoft Azure** cloud computing architecture.

Costain Group's UK mission has centred around delivering integrated smart infrastructure solutions across the UK's transportation, water, energy and defence markets.

Combining consultancy and digital technology services with complex project management competencies, the goal is for the IICC to be used across the construction industry to improve project delivery. The IICC will achieve this by offering greater work visibility while also making transportation projects more efficient by lowering emissions and saving public funds.

### A common digital platform

Costain Group, Deloitte and SAP jointly developed the IICC, using SAP technology. The project saw this working consortium take operational data from UK national infrastructure projects and synthesise it onto a common digital platform.

Deloitte's role as implementation partner for the IICC sees it take a

design-led approach to incorporate data integration and advanced analytics capabilities across all areas of the SAP stack. This included SAP Cloud Platform, SAP HANA Services and SAP Qualtrics, plus also Internet of Things (IoT) technologies leveraging SAP Analytics Cloud alongside a variety of complex artificial intelligence and machine learning techniques.

Stemming from the UK transportation industry's often comparatively fragmented and silo-based approach to data management, Costain Group, Deloitte and SAP realised from the start that they would have to create more alignment through this project. By bringing together previously disconnected solutions, the aim was to bring project reporting into a more unified single stream of data in order to apply analytics intelligence to it more directly.

As well as core project statistics and industry-level data relating to raw materials and their price and supply chain status, the team had to also think about infrastructure project metrics at a deeper level. This meant also examining complex asset usage levels such as the constitution of machinery and integrating this into a total analysis stack that also includes an ability to shoulder complex financial transactions such as sub-contractor invoicing.

### Meaningful data

Data is displayed across a collection of SAP Analytics Cloud dashboards combining tables, graphs and charts to present the information in a meaningful way to ensure the IICC adheres to Costain Group's requirements.

The dashboard focusses on metrics including efficiency, productivity, envi-

ronment, health and safety and commercial.

Also at work here are advanced analytics leveraging SAP Analytics Cloud, SAP HANA Cloud and SAP Data Intelligence Cloud, all of which are used to monitor progress against plans to determine if performance is on track. Simultaneously, time-series analysis correlates combined cost projections and progress models against potentially influencing external factors.

Cloud-based data and analytics using SAP Analytics Cloud and SAP Digital Boardroom will enable real-time mapping of construction sites that can be accessed using SAP Integration Suite. Deloitte and SAP will deploy machine learning using SAP Data Intelligence Cloud to enhance the IICC's productivity engine and model complex project plans using external data.

### A modern greener future


The IICC will lay the foundation to support Modern Methods of Construction, an efficiency-focussed technique that incorporates some off-site construction techniques, such as mass production and factory assembly. This approach is designed to save money and improve carbon footprint status without altering Costain Group's risk profile.

Costain Group, Deloitte and SAP jointly developed the IICC to help the UK transportation industry and its closely linked sister utilities trades to achieve increased project efficiencies across the board. From decarbonisation initiatives through to safer operations and stronger project delivery timelines, the combined teams have improved cost savings to build a better, stronger Britain.

# The CIO is becoming the innovation orchestrator at digital first enterprises



**By Bob Parker**  
SVP, IDC



IT organisations generally were the heroes of the massive pivots companies had to undertake during the pandemic

**W**e have all heard it – the pandemic has accelerated digital transformation. Great; but the need for speed required a change in approaches to technology deployment. Prior to the pandemic our research showed a strong correlation between advanced digital maturity and the use of a single platform to support transformation. In more recent surveys, the predominant approach was to make use of connected islands of innovation which stems from the urgency to adapt and signals a looming integration challenge for most companies.

The potential technical debt from the islands of innovation approach will have to be addressed and that is likely to fall to the IT organisation. The technical debt situation is exacerbated by a trend that had started prior to the pandemic – the growing influence of the line of business buyer on technology selections and deployments. The growing availability of software delivered as a service made it easy for those line of business executives to make choices without IT involvement and it doesn't stop with a single selection of a sales, marketing, or human resource application. Our research shows that those application categories with the highest SaaS

penetration rates also continue to have high growth rates as customers continue to extend functionality.

These factors add up to a projected 55 percent growth in the typical application portfolio. And 60 percent of all resources will be at the edge or in provider datacenters. 53 percent of survey participants expect high application interdependencies in two years, up from 21 percent today. There is some good news – 47 percent of applications will be built using modular development frameworks (up from 18 percent today) which should make integration easier; if you have the right skills on staff.

The traditional role of the CIO to manage and control the infrastructure technology and the corporate applications that ran on it has been permanently diminished. On a positive note, IT organisations generally were the heroes of the massive pivots companies had to undertake during the pandemic and their value was recognised.

So where does that leave the CIO going forward? At the centre of delivering faster innovation.

Success will be measured in terms of outcomes which really comes down to improving the decision efficacy of the functional lines of business by enhancing data management and automating processes.



IT will provide the innovation environment with all the attendant considerations (e.g., scale, security, etc.) that allows for the continuous delivery of outcomes within the context of harmonised investment roadmaps.

The initiative must begin with an architectural mindset that can unify the diverse set of applications and technologies within the typical landscape. This architectural approach must consider data semantics, process workflows, and decision models. Once the architecture is articulated, the company will then implement a 'control plane' that translates the architectural construct into a unifying technology platform that integrates those applications and technologies to assure that service levels are being met, costs are optimised, and, most importantly, rapid innovation is enabled.

IDC observes companies focussing on three control planes. One focusses on managing workloads across multiple clouds with an emphasis on FinOps or addressing the 10 to 35 percent companies are overspending on cloud capacity (source: IDC Metri research). Another would be an ecosystem control plane to manage the growing number of digital service initiatives being launched. But perhaps the most important is the enterprise control plane where data is organised, corporate processes are integrated, and decision models are governed.

The purpose of the enterprise control plane is to deliver better decision making by bringing data governance, process automation, and AI/ML models together. IDC's Future of Intelligence research frames the value proposition. As part of a survey initiative, we created an IQ test for enterprises based on their ability to synthesise information, increase their capacity to learn, and to scale

insights. All these capabilities are underpinned by having an appreciation for data driven decision-making – an evidence based culture.

Those organisations that scored highest – think of them as the 'Mensa' members of the enterprise population – enjoyed substantial benefits. When the study looked at outcomes such as the use of knowledge, work efficiency, and decision-making, those in the genius category saw substantial increases in perfor-



Those organisations that scored highest – think of them as the 'Mensa' members in enterprise – enjoyed substantial benefits

mance over those at the level below. These beneficial elements drive digital innovation.

There are great examples of the benefits of the enterprise control plane. An equipment rental company has gained market share and enhanced profitability through clever new offers while having a best in class technology expense profile. The financing arm of a large automotive OEM has used the approach to create over 30 'innovation factories' that provide a continuous stream of innovation across business functions. And a large defence contractor has used the approach to better align architectural standards through multiple programmes.

For those organisations which want to move down the path of this control plane-centric technology deployment, we see a movement away from a project mindset to more of

a continuous delivery of innovation through the control plane and we see a movement away from the ROI approaches associated with projects toward one based more on creating additional options for innovation. And most importantly, we see a movement away from portfolio management to a platform orientation that delivers the control plane capabilities across the estate that allows for more line of business choice.

The technology vendor should have a wide range of competitive technical capabilities including advanced data management, process automation, analytics, and artificial intelligence. The enterprise control plane will be closely coupled with the ecosystem control plane so it would be beneficial if the vendor had a well-developed approach to supporting industry clouds and business networks.

IDC recommends giving a long look at your ERP provider. It is likely that partner has a wide range of processes covered and represents a big portion of your enterprise data model. If that vendor has the requisite technology credentials, then it makes sense to make it the strategic centre of the new mission to deliver outcomes.

We would further recommend that, if you are an existing or prospective SAP customer, you should look at the Business Technology Platform as a viable choice for your enterprise control plane. The platform has the requisite technology and security model that is competitive with independent offerings. When combined with the completeness of the data model, process coverage, industry relevance, and pathway to business networks, SAP can provide unique opportunities to create the innovation environment that will be at the centre of the CIO mission in a digital-first economy.

# SAP and IBM: 50 years of collaboration, innovation and delivering the future



## History of a unique partnership

Since 1972, **IBM** and **SAP** have been co-innovators, joint stakeholders, and true partners. That's 50 years of imagining possibilities and executing on them; 50 years of helping the world run better, smarter, and more efficiently.

From the very beginning, IBM and SAP have helped deliver on the promise of transformation through computing. The ability to access data in real-time, integrated across business functions, has been one of the most important developments in the advancement of global business innovation.

But this unique relationship has never been about the past. IBM has always believed the longest-lasting partnerships, the ones that drive real innovation and deliver the greatest

value to clients, are ones that don't look back. Their vision and efforts are bent on the future, collaborating in the areas of AI, sustainability and industry-specific solutions, all powered by the promise of the hybrid cloud.

IBM believes that artificial intelligence, powered by **Watson** and infused into SAP technology, will further accelerate innovation, allowing faster decisions to be made in a hyper-competitive and ever-fluctuating world.

## Driving IBM's own transformation with RISE with SAP

The world of technology is one of perpetual, unrelenting change. Case in point: SAP's public commitment to ending support of SAP Business Suite by 2030, requiring users to migrate to S/4HANA.

As users across the globe consider migrating to S/4HANA, as facilitated by SAP's new subscription model of products and services known as RISE with SAP, they're tasked with an undertaking that will transform the way they do business for decades to come. For many, the question is not if, but when they will embark on this journey.

This is why IBM is now starting its own transition to SAP S/4HANA. It will be one of the largest ERP transformation projects in the world, designed to fuel the company's growth and better support its clients. It will drive standardisation, require less manual effort through automation, and enable actionable insights through real-time analytics.

Simply put, it will simplify and synchronise IBM's enterprise processes, enabling a pathway to real growth.



**The ultimate use case for clients  
Expanded Premium Supplier Option  
for RISE with SAP on IBM Power on  
Red Hat Enterprise Linux using IBM  
Cloud**

IBM's transformation is one of the largest and most complex implementations in the world, making it the perfect use case for clients that have similarly complex SAP application landscapes, spread across geographies.

To provide more flexibility and computing power, including those in highly regulated industries, IBM is making the same cloud-based computing power that underpins its own migration available to clients.

For clients who run RISE with SAP on IBM Cloud, IBM will provide the additional choice, in addition to the x86 infrastructure, of running work-

loads on **IBM Power on Red Hat Enterprise Linux (RHEL)**.

With **BREAKTHROUGH with IBM**, premium supplier IBM is the first provider to offer infrastructure, technical managed services, business transformation and application management services together to deliver RISE with SAP - the market's first true full stack offering.

With clients increasingly leveraging hybrid cloud strategies to modernise their workloads, IBM and SAP are giv-

ing clients running on IBM Power servers the ability to use RISE with SAP S/4HANA on Power infrastructure consistent with the architecture they run on-premise.

Underpinned exclusively by Red Hat Enterprise Linux, businesses running RISE with SAP on IBM Cloud will be able to achieve superior levels of performance in a cloud environment for their mission-critical workloads, with the unmatched flexibility, resiliency and security features provided by IBM and Red Hat.

IBM's transformation is one of the largest, most complex implementations in the world, making it the perfect use case for clients who have similarly complex SAP application landscapes spread across geographies







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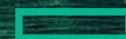
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# SAP Suite sweet spots

## How well do you know your SAP Suite?



**By Adrian Bridgwater**  
Technology editor, ERP Today

A tour around the sometimes lesser-known elements of the SAP software suite is guaranteed to provide additional insight into how the company has built a whole which has always intended to be greater than the sum of its parts. Come on a tasting menu tour around SAP Ariba, SAP Concur, SAP CX and SAP Fieldglass, with an important side order of SAP SuccessFactors.

In order for a technology vendor to be able to call its IT stack a 'platform and suite' it needs to meet a few core criteria. Platforms need to represent a technology base and substrate layer that can be built 'on and on top of', which generally necessitates the existence of a functioning set of software tools that align to the platform work surface.

Suites on the other hand need to be composed of a collection of logically related software applications and data services. Often presented with a homogenised user interface layer to breed familiarity and encourage use, the integrated nature of a software suite is designed to provide interlinked and overarching experience for the user.

Although many platform and suite offerings fall into the personal productivity 'Office' type category, **Adobe's** Creative Suite is clearly a different

type of beast, as is the total package offered by SAP.

### Post-millennial finesse

With its foundations in ERP and technologies that provide functions related to systems of record, SAP has spent a good part of the post-millennial years finessing the structure and components of its suite, often through strategic acquisitions.

Before we look into some of the key tiers of the SAP suite in more detail, let's make sure we know what some of these software solution components are and where they logically sit together on the SAP family tree.

SAP SuccessFactors is a human capital management and employee experience service. An established organisation in its own right before becoming part of SAP in 2011, SuccessFactors has always kept its core technology proposition and mission intact as an SAP brand.

As a triumvirate of organically connected services, SAP has brought three key acquisitions together into a sub-suite known as intelligent spend management. This suite-within-the-suite features SAP Ariba, a procurement and supply chain solutions package; SAP Concur, a travel and expense management service; and SAP Fieldglass, a services and external labour management solution.





## SAP Ariba

SAP Ariba does not in fact draw its brand name from any reference to a cartoon mouse; it is said to be a neologism coined by a branding specialist. Regardless, the fact that it starts with the letter A, is easy to pronounce and variously translates to words like 'go' and 'upwards' arguably hasn't hurt the brand.

Straddling its own estate of sub-services, SAP Ariba breaks down its procurement solutions into five categorised areas: SAP Ariba supplier management; SAP Ariba strategic sourcing for control over indirect spending; SAP Ariba solutions for direct spend to provide the crucial supply chain functionality in this tier; SAP Ariba procurement which perhaps obviously relates to the buying function and SAP Ariba financial supply chain for invoicing.

Managing procurement spend across a more changeable workforce base while spanning an increasingly differentiated and fragile sales marketplace is a tough challenge. Doing so while staying within the boundaries of international regulatory compliance and still reducing costs is an even bigger challenge.

The complexity of these tasks combined with the ongoing

shifts, imbalances and disruptions being felt across global supply chains in the wake of the pandemic has driven more organisations to digitalise operations. This is the focal point at which SAP Ariba is intended to be applied in order to orchestrate multi-tier supply chains while managing supplier risk and supply chain disruption.

Organisations now have to emerge from the disruption of the last two years - and indeed the positively disruptive forces created by cloud, data intelligence and mobile ubiquity of the last twenty years - to now being able to protect their brand and protect their employees, customers and partners alike.

In real world operational environments, procurement and supply chain managers are fighting hard just to keep the lights on 24/7. These same team leaders are then also required to simultaneously coordinate spending and policy compliance across different categories, inside smaller time windows and inside what are more fragmented marketplaces.

There are two buzz-phrases that resonate at this level of IT implementation. One is self-service functionality and the other is end-to-end visibility. If organisations can provide a gateway to smart self-service procurement services that offer clear and compliant end-to-end visibility, then they can reimagine their buying experiences.

Fully deployed, SAP says that SAP Ariba customers will be able to create more powerful and scalable execution and procurement processes. These are workplace systems with data-driven abilities to manage more intelligent supplier sourcing and spend analysis, all of which is dovetailed with more sophisticated contracts management.

As SAP itself puts it, SAP Ariba and its sister technologies SAP Concur and SAP Fieldglass come together to deliver modern supplier management capabilities for supplier discovery, qualification and segmentation, supplemented by the automation of the entire order-to-invoice process for touchless, intelligent document exchange with zero processing errors.

As of 2022, SAP Ariba has been reported to support procurement, sourcing and supplier management connections to over five million companies internationally. Some \$3.75 trillion's worth of commerce is reported to flow between the buyers and sellers using the SAP Ariba network.

## SAP Concur

Prolific enough to have its own television advertising campaign support in the USA, SAP Concur joined the SAP family through acquisition in 2014. Created to simplify, automate and accelerate the process of employee expenses management, SAP Concur Expense sits alongside SAP Concur Travel and SAP Concur Invoice.

By enabling organisations to automate and integrate expenses management, the core technology and business propositions behind this technology centralise around the ability to speed up manual expense reporting and submission. A core feature of SAP Concur mobile, Expenselt is a receipt scanning smartphone application that automatically turns photos of travel expense receipts into data.

By connecting to SAP Concur partner applications, employees can further accelerate the process as expenses from services like **Uber**, **Hertz**, **American Airlines** and **Marriott Bonvoy** are brought across automatically into SAP Concur Expense, complete with their own e-receipts.

With built-in audit rules to highlight exceptions, employees can use SAP Concur Expense to create thorough, complete and accurate expense reports. Managers can then use the SAP Concur mobile app to approve expenses while they are on the move. Desktop-based dashboards offer a way to track expenses against key performance indicators and understand what's being spent where. SAP Concur also offers direct native integration with SAP solutions across the organisation's complete stack and suite.

SAP Concur Travel enables employees to work with an automated, integrated corporate travel system that captures travel data wherever it is booked. This solution enables users to make air, rail, hotel and car bookings using one online tool. It then presents consolidated travel data

on a single dashboard.

SAP Concur Invoice enables organisations to automate invoice management and gain visibility into spending. A key function within this element of the suite is its ability to control costs by getting ahead of vendor spending. It also gives employees mobile tools so they can work anywhere, while increasing compliance and reducing fraud.

## SAP Fieldglass

Like SAP Concur, **SAP Fieldglass** joined the family in 2014. This element of the suite is designed to simplify how projects with external services providers - from consulting firms to marketing agencies to security companies - are initiated, engaged, managed and offboarded.

The SAP Fieldglass Services Procurement application provides real-time statement of work monitoring and management in a project management office dashboard with an AI-enabled chatbot. This provides the ability to quickly establish and maintain a clear chain of custody for every worker and the tracking of services budget and SOW spends.

SAP Fieldglass solutions have helped customers improve their services procurement processes for engagement with consulting firms, marketing agencies, field services, maintenance and business process outsourcing.

## Suites, sub-suites and subcomponents

If there is any validation for the usefulness of the software suite model in this analysis, it may come down to the logical tiering structure that appears to provide the architectural foundation for these software solutions.

We know that SAP is the suite. Further, we know that intelligent spend management is the sub-suite parent of SAP Ariba, SAP Concur and SAP Fieldglass. Squaring the circle of logic then, we also know that each member of this trio has its own set of tributary functions for specific use cases.

Being able to coalesce and integrate all these software assets and artefacts into one higher-level product, service and commercial brand is no mean feat. In that regard, SAP has sometimes been called out for the less agile elements of its total estate, some of which may exist as 'hangover' legacy customer deployments connected to acquisition technologies that have now been more centrally evolved into the SAP DNA structure. But that being said, legacy software is software that still works, so let's not necessarily offer any disrespect there either.

Staying sweet throughout a total software suite is a tough job, but if any organisation gets it right, the end result can be a toothsome delight.



## Getting personal with SAP SuccessFactors

There's an old pre-millennial joke in people management that goes something like: what's the difference between personnel and human resources (HR)? The answer is: about 10,000 pounds or dollars per year. The joke being that the salary scale in HR is somehow artificially hiked due to its newfangled systems of aptitude and performance management.

That joke no longer works for a number of important reasons. Firstly, we now talk about human capital management (HCM) beyond HR (or HRM) as a wider definition of skills and resources value expressed over time, over an employee's work lifecycle and over wider enterprise business cycles.

Aside from the fact that the joke no longer works due to inflation, it also falls flat because we now talk about HRM and HCM in the context of not just employee skills, but also workplace experiences and human well-being. This is the operational fulcrum where we find SAP SuccessFactors, an organisation that offers what we now need to call human experience management (HXM).

### X for experience

SAP SuccessFactors HXM suite is HR or HRM in the traditional sense in that it includes software solutions for core HR, payroll, time tracking, benefits admin and HRM service delivery. But SAP SuccessFactors HXM is HRM in the new sense because it embodies inclusivity so that everyone in an organisation feels supported and empowered.

The new philosophy of work hinges around a core understanding that, even in this digital age, people are everything. SAP SuccessFactors software and tools are built with this fundamental precept at the core; this is a DNA structure designed to drive enterprises to give their employees experiences that set each person up for success based upon who they are as individuals, with their own unique combination of needs, desire and ambitions.

The SAP SuccessFactors HXM Suite provides individualised experiences that keep employees happy, productive and engaged. It includes: employee experience management, with a wide range of employee surveys, feedback analysis and guided action; HR and payroll, with an HR information system, payroll software, self-service

HR, time and attendance; talent management, with solutions for recruiting, onboarding, learning, performance management, compensation; and HR analytics and workforce planning, with AI-powered people analytics, scenario modelling, what-if analysis and strategic workforce planning.

### The future of work

As public and private organisations now look to re-engineer their workplace mechanics in the post-pandemic shockwave that is only now just playing out, it will be more important than ever to think about how we manage human experience management in the new increasingly remote and mobile world of work.

Now that we can firmly say goodbye to the live-to-work dictum of yesteryear and look towards the work-to-live enlightenment of now and the future, we need to rethink the meaning behind one central fundamental business rule. Experience always wins, but now that's not just learned historical experience - it's also human experience for well-being, fulfilment and belonging, which ultimately always creates innovation and business success.



## SAP Customer Experience

# SAP CX: the customer is always digitally right

As we've established, people are everything. And the customer? Well, the customer is always right. This age-old aphorism still stands in the age of web-centric cloud-native mobile-ubiquity, but two core factors in this simple equation have changed. First, the path to the customer is now more diverse and multi-channel. Second, the customer journey is now more multi-textured and influenced by a wider number of buying factors.

What this means for modern organisations who want to win customers is more opportunity, but it also means more complexity.

### Beyond legacy CRM with SAP CX

Bringing a combination of in-house developed software solutions together with a strategically acquired set of new competencies in the customer relationship management (CRM) space, SAP now offers SAP Customer Experience (SAP CX) as a more holistic solution to customer management designed to go beyond 'simple' CRM.

Built to run on the SAP HANA platform and use SAP Fiori user interface technology, SAP CX starts from a foundational understanding that CRM needs to start before, engage more

closely throughout and go beyond the point of sale. Customers need to receive a positive experience at every stage of the customer journey and across every one of the preferred channels that they use to engage with an enterprise, large or small.

By bringing together customer data alongside microservices with machine learning, SAP CX sits under the SAP C/4HANA umbrella to power real-time customer engagement across sales, customer service, marketing and commerce.

### Five elemental units of SAP CX

Within the breadth SAP C/4HANA suite, we can point to five key functional spheres that come together to create SAP Customer Experience (CX).

SAP Marketing Cloud finds and targets customers with relevant promotions and campaigns; SAP Customer Data Cloud from **Gigya** helps turn unknown online visitors into known loyal customers; SAP Sales Cloud helps sales reps focus on the right deals most likely to convert into sales and also improves the customer buying experience; SAP Commerce Cloud offers flexible personalised commerce experience and order management; and SAP Service Cloud provides compre-

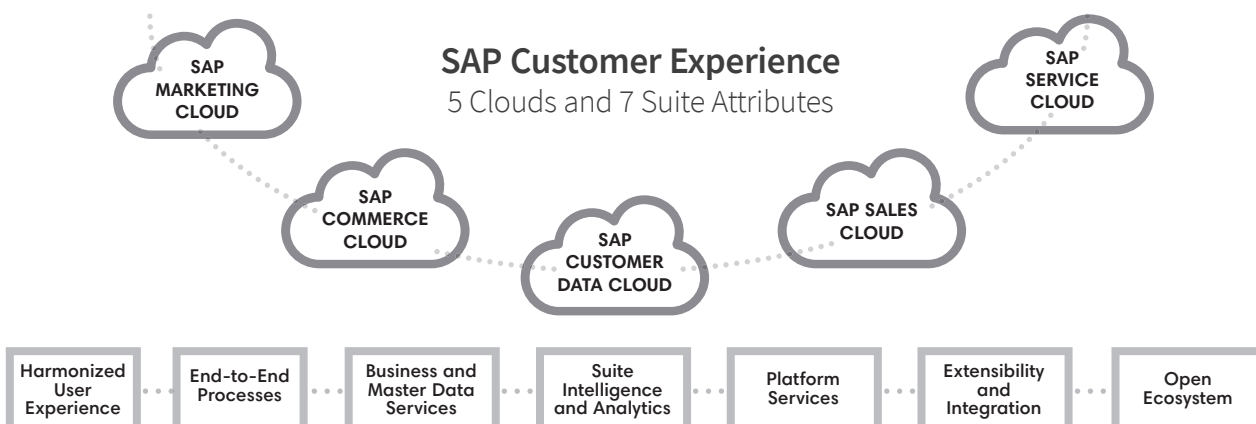
hensive control of customer support tickets and interaction experiences.

Intelligent enterprise marketing must now step up to solutions that offer data-driven customer profiles capable of delivering in-the-moment experiences with real-time insight into customer needs, behaviours and intent, all while buyers move across channels.

### Fruitful footfall: churn vs. return

What SAP CX is built to deliver is a means of managing the modern multi-faceted buying factors that influence customers in their omni-channel commerce habits. It aims to drive enterprises towards new tiers of hyper-personalisation with trusted, transparent and ethical permission-based first-party customer data exchange. All of which are designed to lead to fruitful footfall in bricks and mortar stores and, at the same time, also concurrently maximise online sales.

In the battle of customer churn vs. customer return, organisations need a way to blend the online and physical world. The customer is still always right, but now we need to make sure that means the right product at the right price, in the right place and at the right time, all with the right service.



## A watershed moment for cloud with SAP RISE & HPE GreenLake

**S**AP and **Hewlett Packard Enterprise (HPE)** forged their strategic industry relationship 30 years ago back in 1994.

As global technology partners, HPE is now the leading systems provider for SAP HANA globally. Serving 25,000 joint customers, SAP and HPE are able to leverage an expansive joint portfolio of assets to deliver customer outcomes at the highest levels of scale and performance.

While the cloud computing model of utility-centric IT services provisioning

platform designed to provide customers with an optimised and consistent hybrid cloud experience for all applications and data. In other words, bringing the cloud to you.

An on-premise cloud still has the potential to exhibit many of the core operational characteristics of the public cloud model. Just because a customer owns the physical hardware a cloud runs on, that same customer is not prevented from taking advantage of consumption-based billing for cloud services, management portal

experience, businesses can deploy faster with reference architectures provided by HPE Pointnext services.

This joint technology proposition brings together SAP-certified hardware, operating system and services for mission-critical workloads on what are some of the biggest and fastest bare metal appliances available, all in a pay-per-use model with the HPE GreenLake edge-to-cloud platform.

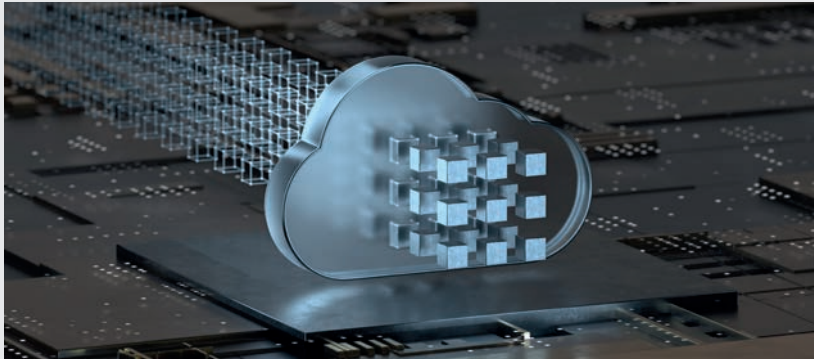
### Tiers of operational responsibility

Some cloud customers will want to be able to choose the hypervisor, database, management tools and applications that their staff already know, which may often be tightly woven with other pre-existing parts of their stack. In other use cases, it may be the opposite. The point is, the freedom now exists for customers to separate their cloud infrastructure vendor from their cloud architecture functionality layer.

It all comes down to where each customer needs to place the various tiers of operational responsibility that come together to make up its total technology proposition for cloud. It also comes down to how the customer perceives the direction and precise application point for cloud computing to be implemented.

With SAP RISE and HPE GreenLake combined, customers can now adopt hybrid cloud with the traditional advantages of public cloud, but now with a more progressive approach to the on-premise element of their stack.

This is an opportunity to leverage the full scope of cloud capabilities while keeping a customer's core SAP landscape on-premise. The innovation here facilitates the move to SAP S/4 HANA with the SAP RISE Private Edition Customer Datacenter option (PE CDC) delivered on the HPE GreenLake edge-to-cloud platform.



has become widely adopted on many levels, an all-encompassing move to public cloud-native technologies is still some way off for many organisations.

What this means is a practical and pragmatic approach to real world cloud deployments; SAP and HPE customers who want to bring applications to the public cloud can do so, but those who want to locate a defined set of computing resources in their own datacentre can still work on their own terms.

This reality sits at the confluence point between SAP's RISE strategy for cloud adoption and acceleration and HPE GreenLake, the company's distributed IT services edge-to-cloud

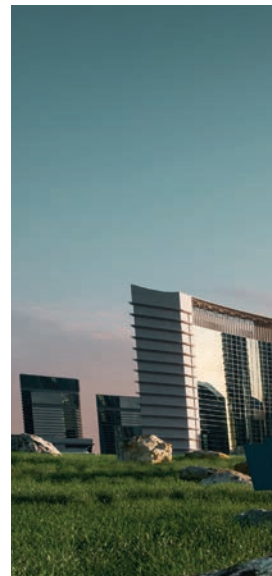
functionalities and the cover that comes with an enterprise-grade service level agreement (SLA).

### SAP HANA, supported by HPE

To get the most out of any customer's use of the SAP HANA platform, HPE explains that the technology infrastructure supporting it must address rigorous availability, security and reliability standards, which often span on-premise, hybrid architectures and even multiple clouds.

Organisations now have the ability to get faster time to value with enterprise software solutions optimised for SAP HANA by leveraging certified SAP hardware from HPE. Under the HPE GreenLake edge-to-cloud platform

# Sustainability: the next frontier of digital transformation



## By Vivek Bapat

SVP, purpose and sustainability marketing and solutions



To achieve these outcomes, businesses must find ways to address the central challenges of data transparency and business process activation

Sustainability impacts the lives of ordinary citizens -from food and water shortages, to health and pollution, to skills and wage gaps. We find ourselves on the brink of a crisis, driven by human activity, that has dramatically impacted life as we know it today and continues to threaten the future of our planet. Amid this volatility, businesses are called to play a more direct role in social, environmental, and ethical issues. Today, most consumers and citizens trust businesses more than any other institution to solve global problems. With trust, comes responsibility and accountability. Together, as a global business community, we have a once-in-a-lifetime opportunity to redefine the meaning of economics and accelerate progress towards a more sustainable world: one with zero emissions, zero waste, and zero inequality.

Business leaders increasingly recognise sustainability as the next frontier of digital transformation. In 2011, only 20 percent of **S&P 500** companies reported their ESG scores. Today, a whopping 92 percent do. This critical issue has clearly made its way to the forefront of C-suite conversations, and as a result, we see CEOs stepping up to share their ambitions. However, significant gaps

remain between frothy ambitions and consequential actions as businesses find themselves at the forefront of this problem solving.

One of the challenges of that responsibility is finding where to start. While we know that sustainability is unique to each industry, all organisations aim to drive the same three principal business outcomes. First, organisations recognise the urgent need to comply with global and local regulations. Deep transparency into financial and non-financial data helps address regulations, taxation, and sanctions proactively and ensures integrated, auditable, and real-time reporting. Second, businesses seek ways to decarbonise, reduce waste, and advance social equality and equity across supply chains and industry-wide networks. This requires embedding sustainability into core business processes. Third, sustainability leaders see the opportunity to create new business models, solutions, and products.

To achieve these outcomes, businesses must find ways to address the central challenges of data transparency and business process activation. 79 percent of organisations are dissatisfied with the quality of data at their disposal to drive sustainability transformation, which is reinforced by the fact that 86 percent of compa-





nies still use spreadsheets to measure emissions data. Furthermore, one third do not know how to integrate sustainability into their core business strategy, systems, or processes, and according to **BCG**, only 20 percent of sustainability initiatives embrace business model change.

Only technology can solve these challenges at the scope and scale required to meet the urgent demands. The majority of data sits in or can be accessed by an SAP system, showing the potential of SAP to address the full scope of sustainability transformation. SAP can also execute business process changes at scale to make sustainability core to your business with 88 percent of global supply chains running on SAP. With the ability to overcome scope and scale, technology helps organisations gain the deep, industry-specific insights and intelligence they need, combining operational, financial, and experiential data, across value chains. With these insights, organisations can embed sustainability into business processes across their enterprises and larger business networks, embedding sustainability metrics into every function of the business and ultimately undergoing the digital transformation required to become intelligent, sustainable enterprises.

No one can solve these challenges

alone. SAP's ecosystem approach to sustainability combines the best of our solutions, partnerships, start-ups, and collaboration with global organisations to enable us all to deliver on our sustainability ambitions. See some examples of this below:

- **SAP solutions:** SAP Cloud for Sustainable Enterprises offers a comprehensive portfolio of services that empower businesses to build sustainable products, services, and business models with holistic view into data, processes, and regulations.

- **Partnerships:** SAP has joined forces with **BCG**, **Accenture**, and others to co-innovate and combine industry expertise. For example, SAP's strength as the leading enterprise software company, and **BCG**, with its sustainability consulting and analytics expertise, work together to deliver end-to-end sustainability transformation. Similarly, SAP and Accenture shape digital transformation through solutions such as the co-development of SAP Responsible Design and Production, which helps companies gain greater visibility into the lifecycle costs and planetary impact of their design choices.

- **Start-ups:** SAP also supports the growth of new value networks through SAPiO, which accelerates the growth of start-ups and connects them to SAP customers. More than 90 SAPiO

companies focus on solving sustainability problems, including Feather by SAP, which helps brands and retailers take back, manage, and resell pre-owned inventory.

- **Global collaboration:** SAP customers can go beyond traditional 1-on-1 business partnerships by unlocking extensive data networks linked between a consortium of companies. SAP and **WBCSD** recently announced their first exchange of emissions data across different tech solutions with **The Partnership for Carbon Transparency (PACT)**. Automotive companies can also join **Catena-X Automotive Network**, a sustainable, intelligent, and robust ecosystem for the secure exchange of data.

If we want to meaningfully impact the current environmental and social trajectory of the planet, businesses must step up and close the gap between ambition and action by embracing sustainability as the next frontier of digital transformation. With SAP's solutions, co-innovation, and a global ecosystem of partners, companies are better positioned than ever before to make everyday business decisions that deliver on their net-zero emissions goals with agility and accuracy, reduce and reclaim waste throughout the value chain, and advance social responsibility. Let's build a future we can be proud of.

# The hidden gem in SAP RISE's crown

## The SAP Business Network

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**By Joshua Greenbaum**  
principal, Enterprise Applications  
Consulting


SAP's RISE initiative has a lot of moving parts that together offer customers and prospects important incentives to move to the cloud. These include new ways to engage with SAP and its partners, new ways to implement SAP's products and technology, and new ways to think about business processes and innovation.

Hiding in plain sight is perhaps the most important component of all, one that until this past Sapphire event was more of a wisp of an idea than a fully formed offering: the SAP Business Network. This increasingly important combination of product, services, and platform has been in the making for years. But it wasn't until Sapphire 2022 that the moving parts coalesced into what is probably the most important offering from SAP since its inception, and equally one of the most significant contributions by SAP to the global economy in the 50 years since its founding. Assuming, of course, that SAP can execute on its admittedly ambitious plans.


In a nutshell, the Business Network is a network-as-a-platform for transacting, managing, analysing, and optimising the panoply of processes needed to do business in today's complex global economy. While the full realisation of the Busi-

ness Network is still a few years out, as of Sapphire 2022 it's already well-positioned to begin supporting the underlying mechanisms of global trade: buying, selling, procuring, supplying, planning, servicing, transporting, operating, partnering, financing, and certifying, to mention just a few. All within a single, many-to-many business platform.

How does this array of processes come together in the SAP Business Network? If you're familiar with SAP Ariba, you already know the basics: a buyer can do business directly with thousands of qualified suppliers that have published their profiles and offerings – and certifications – on the Ariba Network. Likewise, a supplier can reach thousands of potential buyers by creating a single profile visible to all. For most members of the Ariba Network, merely automating the basics of supply and demand in procurement has led to enormous efficiencies and access to new business opportunities.



SAP Business Network is an increasingly important combination of product, services and platform that has been in the making for years



Data underlying B2B and B2C transactions can be captured and analysed within the confines of law, regulation and permission

What Ariba does for procurement is multiplied significantly in the Business Network, which also includes SAP's existing Business Network for Logistics and Asset Intelligence Network, as well as the Ariba network. In addition to managing its procurement processes, a company can dynamically manage the movement of the goods it buys, as well as track the operations, service and maintenance of its critical assets.

SAP has also included its most recent acquisition, **Taulia**, in the Business Network, adding trade finance and capital management processes to the Business Network. SAP Fieldglass can be used in the SAP Business Network to manage the deployment of contingent labour, SAP Integrated Business Planning and S/4HANA can be used for network-wide supply chain planning and execution, and on and on. If there's an important business process that SAP or a partner supports, it's pretty much a guarantee that the process will find a home in the SAP Business Network.

The analytics and insights that can be gleaned from the Business Network also impart significant value. Data underlying the B2B and B2C transactions in the network can be captured and analysed within the confines of law, regulation, and permission, and be used to provide an incalculably valuable set of metadata. That data can in turn be used to optimise the operations and relationships in the Business

Network. The role of Taulia is a great example: a financial institution looking to weigh the risk of extending credit to a heretofore unknown supplier can access an unprecedented amount of information about that supplier's on-time delivery rates and performance, and use that to make a calculated risk assessment.

Similarly, a company looking to rapidly shift suppliers in response to a supply chain disruption can access information about which suppliers have the right supplies to meet spot demand (including actual inventory levels), are compliant with the appropriate regulations, and have a track record handling such real-time requests. And then the company can execute the change from within the Network.

Suppliers can also find huge value in the Business Network. By publishing a comprehensive profile – including regulatory certifications, complete product offerings, supplier ratings, and other key information – even smaller, regional suppliers can tap into the global economy in ways that were never before possible.


Just to be clear though, there are a lot of hurdles to overcome before the Business Network dream becomes a fully formed reality. Enticing smaller, and potentially more vulnerable, suppliers is one such hurdle: previous attempts at building large business networks skewed the value too far in favour of buyers, and suppliers resisted for fear of seeing their margins eroded.

SAP also has to support buyers and suppliers that might not be only using its software. The Business Network can't be a closed shop: too many companies run heterogeneous infrastructures and won't want to run wall-to-wall SAP in order to participate.

SAP also works to fully integrate its own products into the Business Net-

work, change how it charges for Business Network services, and find a way to sell something new and complex in the absence of a buying centre run by a so far non-existent 'vice president of Business Networks'. There's clearly still a lot of work to do.

But the odds of success are in SAP's favour, for the simple reason that the Business Network is truly an initiative for our times. The context for conducting business has never been more complex and more time-sensitive: pandemics, climate disruptions, and geopolitical crises



SAP has to support buyers and suppliers that might not be only using its software. The Business Network can't be a closed shop

have all conspired to change how the global economy operates. The need for resilient supply and logistics chains, rapid time to market, increased levels of service to customers and partners, improved productivity and financial controls, and better regulatory compliance has never been greater.

In the context of this continuous disruption, the challenge for every company in every industry is the same: how to move faster and be more productive, while navigating an increasingly demanding world of consumers, supply chains, financial networks, and regulators. The Business Network promises to be a solution that meets those challenges. Sure, sign up for RISE to take advantage of simplicity and ease of deployment, but be sure to take a look at the SAP Business Network. It's hiding in plain sight no longer.



# Microsoft and SAP

continue  
25 year innovation  
partnership

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**M**icrosoft and SAP continue to advance our partnership by deepening our commitment to each other's platform. Microsoft will be the first public cloud provider to adopt the RISE with SAP solution internally to transform some of its large SAP ERP deployments. This move deepens an already strong partnership and will allow Microsoft to accelerate our own SAP S/4HANA modernisation while enabling us to develop greater expertise and best practices to better serve our customers.

As part of its transformative journey and to gain operational efficiencies, SAP will optimise its IT operations for some critical internal business systems using the RISE with SAP operations model on Microsoft Azure. Customers and partners have experienced early success in accelerating their business transformation and simplifying their path to the intelligent enterprise, including the **NBA**, **Fresnapf**, **Wolverine Worldwide**, and **Atos**.

## **SAP and Microsoft: integrate and co-innovate**

We constantly strive to improve the user experience, simplify the automation and integration of SAP S/4HANA on the Microsoft Cloud, and accelerate customers' business transformation. This partnership puts both SAP and Microsoft in a strong position to continue driving the best outcomes for customers with solutions from SAP in the public cloud.

We're achieving this by focussing on addressing the needs of various SAP users:

**SAP Business User** Microsoft Teams has become one of the most used applications on desktops and mobile apps for collaboration and communication. We have come a long way since we announced the expanded partnership between SAP and Microsoft to integrate Microsoft Teams across SAP solutions. This has enabled more scenarios, including SAP Business ByDesign, SAP Sales

Cloud, and SAP SuccessFactors solutions, among others. Check out how **Doosan** created the Delightful Digital Workplace for its employees and how you can benefit from the integration of SAP SuccessFactors solutions and Microsoft Viva.

**Developers** The innovation for SAP developers includes improvements in SAP Business Technology Platform (SAP BTP) to increase availability and accelerate the development of SAP extensions. As part of our global expansion plan, we launched support in the Australia East region last year, making SAP BTP on Azure available in six regions, with more to be added in the coming months. We continue to add access to new security features in the cloud. SAP BTP now supports Azure Private Link, offering excellent private network connectivity between applications running on SAP BTP, Azure native services, and resources running in our customers' subscription.



To architect for scalable and robust enterprise applications in the cloud, event-driven architectures are the strategic path forward. We are happy to announce the upcoming integration between the SAP Event Mesh capability and Azure Event Grid. This collaboration will greatly facilitate the integration of event-based architectures between Microsoft's and SAP's technology stacks. This bidirectional integration will enable scenarios such as Azure Logic App to be triggered by an event in SAP S/4HANA or an SAP software workflow triggered by an event in the Azure platform. This is further enhanced by improved integration of SAP Cloud Identity Services and Azure Active Directory, allowing for easier identity flows.

We will continue to build and share joint SAP and Microsoft reference architectures so customers can access best practices and guidance on how to deploy our new capabilities.

**Administrators** The SAP Cloud Ap-

pliance Library tool has been a way to accelerate the creation of test and development systems for customers starting their journey to the cloud with SAP S/4HANA. Setting up production quality installations of SAP S/4HANA and implementing best practices to achieve performance, security, and cost optimisation may still be challenging. Thanks to the partnership between SAP and Microsoft, it is now possible for customers to deploy production systems with SAP Cloud Appliance Library on Microsoft Azure. This functionality for production systems is currently only available in Azure and is a major productivity gain. With SAP Cloud Appliance Library, administrators can use a wizard with a simple UI flow to deploy an SAP and Microsoft approved SAP S/4HANA landscape, that is based on customer individual software stack definitions (via Maintenance Planner), SAP instance sizing, and high-availability options. Moreover, it benefits not only greenfield implementations, but in combination

with the new 'DMO to Azure' tool, it supports the conversion from on-premise SAP ERP to SAP S/4HANA Cloud on Microsoft Azure.

Lastly, customers can further enhance productivity by integrating SAP applications with Azure native services. The recently launched Azure Blob Storage Connector for the SAP Information Lifecycle Management service is a great example of how we facilitate lifecycle management using Azure's scalability, security, and cost benefits.

#### **Respecting the customer's choice**

Microsoft understands that every customer is different. Each one has their own set of requirements and priorities, and when it comes to their SAP systems, there is no one-size-fits-all solution. The RISE with SAP solution offers the choice of Azure infrastructure, allowing customers to take the best path for their business. We are thankful for our deep, 25-year-long relationship with SAP and look forward to delivering more joint innovation to our customers.

## Discovering the unicorn

**D**e Nora is an Italian multinational company and the world's largest supplier of high-performing electrode technologies for major industrial electrochemical processes. It is also a leading supplier of proprietary technologies for water disinfection and filtration. De Nora is committed to developing innovative solutions enabling the energy transition and the green hydrogen economy and ensuring sustainable clean water for everyone. The De Nora group consists of 25 companies in 10 countries and operates 5 R&D centers in Italy, the United States, and Japan.

respond better to changing market conditions and maximise the benefit of the group's investment in the most recent SAP technology.

During the last few years, De Nora and Capgemini completed the brownfield conversion from ECC to SAP S/4HANA 1809 (managed in SAP Cloud - HEC), C/4HANA (now 'SAP Customer Experience' suite), the greenfield implementation of SAC (SAP Analytics Cloud) reporting on SAP Cloud, and the relevant end-user training to ease change management. In addition, De Nora moved to BW4 and BPC11, also implementing Analysis for Office (AFO).

- 12+ SAP rollouts performed since 2014

- 900+ active De Nora SAP users.

De Nora and Capgemini demonstrated the power of their partnership in April 2020 as they reached the handover stage of the SAP S/4HANA transformation. Despite the COVID-19 pandemic striking at the planned handover time, the two organizations continued to go live with this strategically important objective as initially planned.

During the conversion, Capgemini offered its expertise in SAP technology by encouraging S/4 Data Migration Cockpit as an accelerator and main migration tool for all subsequent rollouts.

### Lessons learned

"The technical complexity of the S/4HANA transformation cannot be underestimated. Even though the ECC system was clean, stable, and updated to EHP8, we faced several technical and functional issues. To overcome them, we proposed new customisations and involved SAP AG, who recognised the value of including some of these changes in the standard version." Giuseppe Vitolo, SAP S/4 HANA Project Manager, Capgemini Italy.

"The success of the project testifies the partnership between De Nora, Capgemini and SAP. It also shows De Nora and Capgemini's appreciation for proper planning SAP rollout and application projects within a sustainable framework that satisfies the business, end-users, and the ICT Department." Gerardo Ciccone, Head of "Automotive, Manufacturing and Life Sciences, Capgemini Italy.

"If our migration were an animal, it would be a horse. Elegant, confident, fast, and agile. In the future, our horse will grow wings and transform into a unicorn!" Bianca Madotta, head of applications, De Nora.



In 2013 De Nora sought to standardise the standard business process across its entities, implementing SAP technology as the main lever and a means to create a harmonised business framework to facilitate growth.

De Nora's SAP Global Template solution was initially built on SAP ECC. In its journey towards continuous improvement, De Nora launched with Capgemini the 'DNA program - Movement to X/4HANA Suite', planning the updating of all SAP systems used in De Nora group to the latest releases so that all De Nora companies could

De Nora and Capgemini's relationship is based on the principle of learning from each other: Capgemini understands and embraces the De Nora way, while, at the same time, De Nora allows to be guided in the setup of SAP features. Their long-standing, trust-based relationship includes:

- 20+ companies already live on the De Nora SAP system,
- 25+ Capgemini consultants actively supporting De Nora in new SAP rollout projects, SAP solution enhancements, and Application Maintenance





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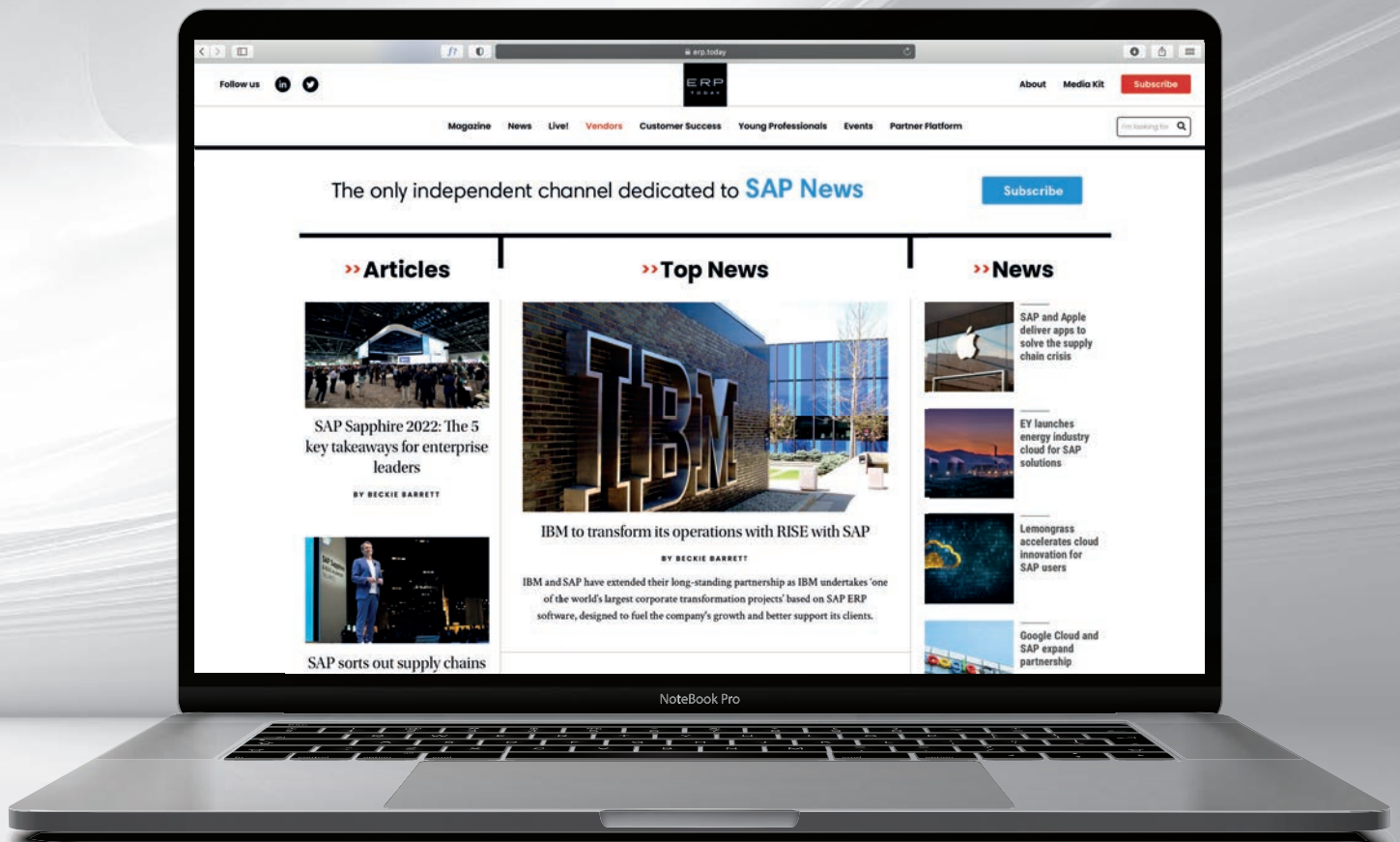
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## Why process leader Signavio is flourishing inside SAP

When SAP acquired process transformation company **Signavio** in March 2021, SAP chief financial officer Luka Mucic said it was impossible to “overstress the importance for companies to be able to design, benchmark, improve and transform business processes across the enterprise to support new capabilities and business models.”

As co-founder and former CEO of Signavio, I had spent the last 12 years building a business on this exact argument. As the number of operational systems grew, so did interconnectivity and complexity. Having a background in process design and management, I could see that organisations could only pivot towards new digital business models if they were built on a set of carefully designed and rigorously tested processes.



**Gero Decker**  
general manager,  
SAP Signavio

Process management is not new. For more than 100 years, manufacturers like **Ford Motor Company** and **Toyota** focussed obsessively on mapping, designing and optimising processes, gaining huge operational efficiencies as a result. However, the rest of the business world – financial services, telecoms, utilities, retailers – paid little to no attention to the fundamental processes underpinning their organisations.

As companies move to the cloud and look to digitally transform, a majority of transformation projects take longer than expected. These projects stall when there is confusion created by a lack of transparency. Pilots drag on because no one has the confidence to make a positive decision; ineffective legacy processes are built on, not jettisoned. It is perhaps little wonder that 70 percent of these projects are doomed to failure, according to consultancy **McKinsey**.

Signavio's rapid growth since its inception is proof of the critical role that process mining, designing, optimising and sharing plays in enabling IT, digital, and business transformation. Our Process Transformation Suite enables companies of all sizes to understand, improve and transform their business processes – fast and at scale – with a cloud-based process management platform, delivering customer and operational excellence.

Prior to the SAP acquisition, Signavio was supporting over one million users in more than 2,000 organisations and had helped to optimise over two million processes across the globe, bringing together a vibrant community of process professionals who value the power of BPM as deeply as we do.

SAP's CEO Christian Klein called us in 2020, delivering a number of compelling reasons for Signavio to join SAP.

The company's 50-year track record of building and delivering business

software and services means it has a loyal base of over 450,000 enterprise customers and access to a vast data set and deep industry and process intelligence. SAP customers generate 87 percent of global commerce and 85 of the largest 100 companies in the world are S4/HANA customers. We knew that this wealth of intelligence would amplify our ability to analyse, evaluate, optimise and reinvent business processes, and was a major factor in our decision.

SAP has long been a part of my life. While studying for his PhD at the **Technical University of Braunschweig**, my father shared an office with Henning Kagermann, a talented German physicist who would go on to become chief executive officer of SAP between 1998 and 2003. While I was at the technology institute founded by former SAP co-founder and board chair Hasso Plattner, I met Signavio's co-founders with whom I started the business back in 2009. Finally, back in 2014, SAP became one of Signavio's biggest customers.

In the eighteen months since the deal was first announced, just as Christian envisaged, Signavio has become SAP Signavio, and is an integral part of our transformation as a service offering, RISE with SAP, and fundamental to its future strategy.

As we look ahead to the next 50 years of SAP, we expect SAP Signavio's portfolio and products to help our customers unlock the promise and potential of a modern digital architecture, yielding the IT agility necessary to support business strategy and provide seamless experiences for customers and employees. Helping our customers take a data-driven, process-centric mindset allows them to cut through the confusion of unlimited responses to an unknowable future, and to manage change with confidence.

# PwC unlocks the value of cloud to solve tomorrow's challenges **today**



## Sights set on the cloud



PwC is a network of professional services firms, offering assurance (including audit), advisory, as well as tax and legal services. It employs 295,000 people across 156 countries. In line with its strategy, termed 'The New Equation', it focuses on delivering sustained outcomes for clients, building trust, and offering solutions that are human-led and tech-powered.

To strengthen its competitive advantage and make it easier for staff to work with clients everywhere in the world, PwC's firms in four territories (Germany, Austria, the Netherlands and Switzerland) decided to move to SAP S/4HANA Cloud as part of a multi-national digital transformation. The cloud migration's aim was to boost business agility, reduce costs, and foster better sharing of knowledge and experiences both internally and with clients.

The project reflects the importance that PwC puts on both creating positive relationships and ensuring consistency. Stefan Frühauf, Partner PwC Germany and Head of Project and Change Leadership at PwC, said: 'Standardising how our firms work everywhere they operate, will make it easier for our professionals and clients to collaborate across the PwC network. Consistency means clients get the excellence they expect from us time and time again.'



## Embracing process

To achieve its goals, PwC transformed its business and finance operations by working with SAP to create industry-specific technology for professional services. Its new business processes are built on SAP S/4HANA applications running on the public cloud.

PwC used the SAP Signavio process management solution to design, simulate and document the new business processes. This resulted in streamlined processes, greater transparency, and improved information-sharing.

To maximise the benefits from the transformation, PwC has integrated the new SAP solutions with multiple existing systems – including its HR, procurement, travel and expenses, customer relationship management (CRM), resource rate management and timesheet applications. As a result, PwC employees have access to real-time, accurate information without having to transfer data manually between different systems.



## Delivering immense value



Following a successful go-live, almost 30,000 PwC employees from four countries are using the new cloud-based SAP S/4HANA applications. They're benefitting from improved transparency and seamless information-sharing that improve their working experience. Furthermore, moving to the cloud has empowered PwC to introduce standardised, highly efficient business processes that streamline collaboration within local teams as well as internationally. This transformation empowers people to deliver value both within PwC and for clients more efficiently.

That's not all. Embracing public cloud has cut the cost of implementing and managing the new SAP applications by a staggering 23%. It also reduced the solutions' environmental impacts, helping PwC progress towards meeting its net-zero commitment. It's great news all round.



## Transforming the transformers

PwC took several key steps that helped to make this project a success. Here are three actions that PwC kept in mind to make this cross-country and cross-competency programme succeed:

1

### Focusing on change management

It's vital that employees understand how the new technology will empower them to work more productively and deliver even greater value to clients. Thorough training and communication are essential.

2

### Taking the leap to cloud

Cloud can deliver significant improvements to operational efficiency, carbon emissions, standardisation, the bottom line, and more.

3

### Addressing local requirements

This is key to ensuring that the new solution will deliver maximum value right across the business.



## PwC and SAP solving together for next-generation innovation

As a Platinum Partner, we are committed to our alliance with SAP. We have 14,000 dedicated SAP resources around the globe that specialise in SAP technology and solutions.

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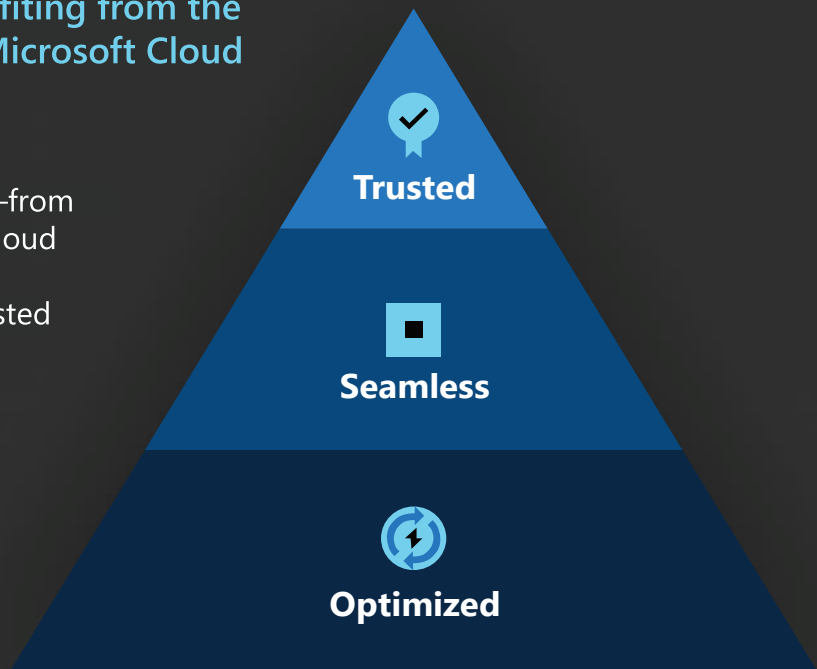
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# Continuing to **collaborate** and **benefit customers** for the next **50 years**.


For more than 25 years, SAP and Microsoft have teamed up to help enterprise customers grow. Thousands of customers are running their SAP solutions on Microsoft Azure and achieving 112% ROI\* on average.

**SAP customers prefer Azure and are benefiting from the breadth of extended services across the Microsoft Cloud including:**

- ✓ Accessing best-in-class hybrid cloud solutions—from the edge to the local datacenter to the public cloud
- ✓ Benefiting from its enterprise readiness and trusted security and compliance offerings
- ✓ Unlocking intelligent insights from SAP and non-SAP data
- ✓ Empowering employees with Microsoft Teams integration
- ✓ Improving decision making



*\*According to the 2021 Total Economic Impact Study by Forrester Consulting*



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