



Executive's Guide to Using SAP S/4HANA to Transform ERP

SAP S/4HANA was first launched in 2015. Since then, subsequent releases have steadily increased the scope of the ERP (enterprise resource planning) solution to cover more of the enterprise. With the maturation of S/4HANA, many traditional SAP ERP users – and users of other ERP systems – are considering a move to S/4HANA.

In this white paper, we'll look at why the latest release of S/4HANA is so compelling for enterprises focused on digital transformation. Then, we'll explore how Managed SAP S/4HANA can help enterprises mitigate migration risks, whether moving from a previous version of SAP or another ERP platform.



What is SAP S/4HANA?

S/4 is shorthand for **SAP Business Suite 4**, the successor to SAP's previous ERP flagship solution: ECC (ERP Central Component). **S/4HANA** takes the latter portion of its name from the database on which it is built. SAP HANA is an in-memory database, meaning the data is stored in the system's random-access memory. Together, SAP Business Suite 4 and SAP HANA offer numerous advantages to the enterprise looking to accelerate digital transformation.

Building a Case for Migration: The Business Benefits

Adapting to change is an imperative in the twenty-first century. According to the [American Enterprise Institute \(AEI\)](#), almost 90% of Fortune 500 firms in 1955 had fallen off the list by 2017. Since 2000, 52% of these firms are no longer in business. If anything, this decline into oblivion will accelerate as technology makes organizations that are slow to adapt lose relevancy faster than ever.

Business and IT leaders recognize this, and digital transformation lies at the center of corporate business and IT strategy for many organizations. There is no doubt that migrating to a new ERP system is one of the most challenging digital transformation initiatives an enterprise can undertake. A typical SAP implementation touches so many parts of the organization that the risks can be great. Yet SAP S/4HANA holds the power to help organizations fast-track digital transformation in ways unrivaled by other types of initiatives.

Building the business case for an SAP S/4HANA migration requires the organization to look at both the business benefits of the

solution and the risks of migration. In this section, we'll focus on why SAP S/4HANA is a compelling solution for organizations looking to accelerate their digital transformation initiatives. In the next section, we'll discuss some of the risks involved before diving into how business and IT leaders can mitigate these risks.

Data Performance for Complex Business Applications

SAP HANA is an in-memory database, meaning the data is stored in the system's random-access memory. The calculation function, previously in the application layer, was also moved to the database layer. These innovations create significant performance benefits for processes that take serious computing power, e.g., material requirements planning (MRP), supply chain optimization, and data analytics.





SAP S/4HANA: The Digital Core of the Enterprise

For years, organizations have talked about leveraging big data to make smarter decisions faster. Yet, even as the data they had access to increased exponentially, many struggled to make use of it. According to Forrester, [as much as 73% of data](#) collected by enterprises sits unexploited.

The reasons for this cover a wide range of issues, but one core issue is the lack of accessibility to the data. Data can come from multiple sources, not just SAP. Without a central repository for this data, data analytics can be challenging. The reliability of any insights produced may even vary based on which enterprise data sources are tapped to produce them. Powered by HANA, S/4HANA forms the digital core of the enterprise, making large data loads and complex business processes easier to manage.

Turn Analytics into Action

For the modern enterprise, this digital core is like a vein of gold. Once tapped, the data it holds enables organizations to improve performance and seize new business opportunities in the digital economy. S/4HANA

provides the tools the enterprise needs by taking advantage of the advanced analytics and machine learning/AI algorithms built into SAP HANA.

Predictive maintenance is a prime example of turning analytics into action. Performing routine maintenance on the equipment used in manufacturing, distribution, and other asset-intensive industries is expensive and can lead to unnecessary downtime. However, most newer machines are equipped with sensors designed to collect performance and functional data. Even older equipment can often be retrofitted with IoT devices. SAP S/4HANA's advanced analytics capabilities allow the enterprise to spot potential issues and focus maintenance efforts to increase productivity, reduce downtime, and lower maintenance costs.

Empower Users with a Better Experience

Now that enterprises have access to the data and the tools needed to analyze it, the next step is to make it accessible and easy to understand for the user. SAP S/4HANA takes advantage of SAP Fiori, SAP's browser-based interface designed to be used across many of the company's solutions, including ECC. SAP has created hundreds of business-role templates in Fiori, streamlining and improving the user experience across many types of devices.

Apply Advanced Automation to Business Processes

Automation is a primary digital transformation objective for the modern enterprise. In a survey conducted by the [Association for Intelligent Information Management \(AIIM\)](#), 75% of respondents said they view process automation as "important" or "very important"

to their organization. However, it can be difficult to automate business processes if the ERP system used by the enterprise lacks automation functionality.

In 2018, SAP set a goal of [automating at least 50%](#) of all ERP business processes within the next three years. In 2021, they've surpassed that goal, empowering enterprises to [automate more than two-thirds of their business processes](#) in SAP S/4HANA Cloud. Processes that require repetitive, manual attention are ripe for automation in SAP. Fraud detection is an excellent example. When using traditional manual methods, the task is labor intensive and error prone. In SAP S/4HANA, AI can be used to identify transactions of concern based on patterns that would be difficult to identify manually. Algorithms also provide insights to help the analyst resolve potential issues faster and more effectively. With machine learning, the system learns from how the analyst responds to events to provide even better insights.

The Countdown Has Begun

SAP has extended its plans to support ECC through 2027. At higher maintenance rates, SAP has said that it will even provide support until 2030. This schedule gives users at least six years to migrate to the new system. While this may seem like a lot of time, experienced SAP administrators know the clock is ticking. Migrating to a new version of SAP can be a multi-year proposition. To go live before support ends, they will need to kick off a migration planning project soon.

Simplify System Management

IT leaders know that ERP systems can suck up a lot of time through routine maintenance alone. When IT is busy with system maintenance, they have less time and money to focus on the digital transformation initiatives that drive the enterprise forward.

One of the primary challenges with system maintenance is the redundant and outdated code found in many ERP systems. System managers can never be sure an upgrade or modification to one part of the system won't break something in another. SAP has simplified the underlying code and architecture for SAP S/4HANA, removing these redundancies and extraneous code remnants to create a solution that is easier and more cost-effective to manage and maintain.

Obstacles to Migration

For many organizations, migrating to a new ERP system or even a new version of your existing application can be a daunting prospect. Migrating to SAP's flagship ERP system, SAP S/4HANA, is no exception. Recently, the American SAP Users Group asked its members how many had migrated to SAP S/4HANA. Only [16% of its members](#) had made the move to either SAP S/4HANA in the cloud or on-premises. Here are some of the concerns that can keep the organization tethered to outdated systems and environments:

#1 Data Concerns

The modern enterprise runs on data, so numerous questions need to be answered before migration can begin: How clean is our data? Will we need to reconfigure the data in any way before migrating? Is there the potential for data loss? How will we keep our data secure during the migration? What about after go-live? Given the critical nature of data in today's business environment, it's easy to

Need help building a business case?

Whether it's the benefits of the SAP Business Suite or the advantages of a cloud environment, we can help you assess the ROI of a move to S/4HANA.

[Request a Consultation](#)

understand why some enterprises put off migrating to a new ERP solution until the very last moment.

#2 Environment

Mission-critical and highly sensitive business systems tend to be the last workloads to be migrated to the cloud. SAP offers an on-premises version of S/4HANA as well as several cloud deployments options. While a cloud deployment can help accelerate digital transformation, business and IT leaders must still address the potential security, compliance, accessibility, and performance risks associated with a cloud migration.

#3 Infrastructure and Technical Resource Constraints

Managing an on-premises infrastructure solution means real estate, equipment, and staff costs. With a managed SAP S/4HANA solution, businesses don't need to purchase hardware or manage the infrastructure. This empowers organizations to utilize IT staff for revenue-generating projects.

Many organizations also lack the technical expertise to migrate SAP workloads. Older SAP implementations may also lack complete documentation, such as interdependencies

between applications. Without full visibility and the prerequisite application and environmental skill sets, it's easy for an SAP migration to go awry.

Finally, as anyone who's ever been through a migration to a new ERP system can attest, change management is another organizational skill that can greatly impact adoption rates and your return on investment.

#4 Business Disruption

All ERP migrations carry the risk of business disruption, and downtime of mission-critical systems can cost the organization thousands of dollars a minute. But unless those planning the migration have been through a similar move, it's hard to predict the trouble spots or know what to expect.

Which Environment is Right for Your Enterprise?

Migrating workloads to the cloud is a high priority for many enterprises. For cloud deployments, SAP offers several options. However, SAP's changing naming conventions can complicate matters. To help simplify the discussion, here's a look at the several different types of deployment options available using industry-standard terms.

Hosted and Managed by SAP

In an SAP hosted/managed cloud, your SAP S/4HANA workloads are housed and managed on SAP equipment in an SAP-managed facility. Currently, SAP offers their hosted/managed cloud in both single-tenant (private) and multitenant options.

Hyperscale

SAP S/4HANA can also be deployed in a hyperscale environment, such as AWS or Azure. In this instance, SAP does not manage the environment or the application. This gives the organization more control, but also shifts more responsibility onto their in-house staff. As such, IT and business leaders should ask themselves whether their organization truly has the platform expertise to manage a mission-critical application housing sensitive data in a hyperscale environment.

Dedicated

A dedicated deployment of SAP S/4HANA can be either on-premises or in a dedicated, private cloud. The latter can help offset some of the high costs of managing and maintaining equipment and facilities, but not all hosted cloud providers have experience managing SAP environments.

The Managed SAP S/4HANA Cloud from TierPoint offers the advantages found in an SAP hosted/managed cloud in that your applications and environment are managed by our team of experts. Our solution also provides additional benefits such as:

- Greater control over where your data is housed and when releases/upgrades are applied.
- Access to TierPoint's wide range of managed services, such as DRaaS (disaster recovery as a service), managed security, and other managed application and O/S offerings.
- A collaborative environment in which our solutions and approach are tailored to the needs of the client.

A Collaborative Approach to Mitigate Migration Risks

Migrating to SAP S/4HANA requires both application and environmental expertise. Unfortunately, many organizations that provide SAP migration services focus on one or the other.

TierPoint's collaborative approach can help organizations overcome many of the risks of an SAP migration and on-going management of their production environment. We'll work closely with your internal team to help overcome bandwidth issues and skill set gaps. If you're already working with an SAP services provider you know and trust, we'd love to collaborate with them as well.

During your migration planning phase, our team of migration experts will work with you to help answer vital questions such as:

- Is this the right time to upgrade?
- Do we have the right system architecture for a smooth implementation and adoption?
- Will our data migrate as is? Or do we need to scrub/recreate some data sets?
- Should the migration be completed in phases?
- How long will it take to complete, and what are the milestones?
- How much downtime should we expect? How can we minimize the impact on business operations?
- How will we keep our data secure during the migration? How will we keep it secure once we go live?

By nature, ERP migrations are a project that involves many different individuals with unique skill sets from across the organization. Ensuring vital responsibilities are covered and assigning people to the right roles is essential to an effective, surprise-free transition.

We'll help you assess skill sets and bandwidth to make sure everyone can perform as expected. When gaps are identified, we can fill them with experts who will work with your team as though they were one of your own employees. For organizations looking to offset as much of the work as possible, TierPoint can even manage a migration to SAP S/4HANA from start to finish. We'll keep you informed at every step while freeing up your staff to focus on more value-added activities.



Ensuring High Performance/ High Availability After Go Live

As challenging as migrating to SAP S/4HANA may be, your work is not done once you go live. Many enterprises run into the same skills gaps and bandwidth issues that delayed their migration in the first place. As your SAP S/4HANA deployment enters the production phase, these concerns can get even more acute as users start accessing your business systems.

TierPoint's **Managed SAP S/4HANA** offering is an innovative and comprehensive solution for the modern enterprise that combines a best-in-class, high-availability private cloud platform with SAP Managed Cloud expertise.

World-Class Data Centers

Managed SAP S/4HANA provides the benefits of the cloud (converting CapEx to OpEx, lowering overhead, reducing IT burden, etc.) combined with greater flexibility and control over your environment as well as expert SAP and cloud services.

Each of TierPoint's data centers undergoes annual compliance audits for ISO 27001, NIST 800-53, HIPAA, PCI-DSS, GLBA, SOC 1, and SOC 2 certifications. In the latest round of audits, every TierPoint data center met SSAE 18 standards for SOC 1 Type II, SOC 2 Type II, and SOC 2 + HITRUST certification. TierPoint is also ITAR and EU-US Privacy Shield registered.

In addition to housing your SAP applications, TierPoint can house all of your other IT environments. Many of the enterprises we work with appreciate the ability to work with one managed services vendor across their entire range of business systems.

Expert Resources

When you house your applications in a TierPoint data center, you also have easy access to expert resources who will work with you to ensure your cloud environment meets your organization's requirements for compliance, security, flexibility, and scalability – now and down the road. This includes advanced services such as disaster recovery as a service (DRaaS) and managed security and compliance.

But our focus doesn't end with your infrastructure. Our partnership with SAP professional service providers allows us to offer expert application resources who will help you actively manage your mission-critical applications. We'll work with you to test patches and new releases, but you have the last word over when and how they are implemented.



Download the Fact Sheet:
Managed SAP S/4HANA



About NTT Data

NTT DATA – part of the NTT Group – is a trusted global innovator of IT and business services, headquartered in Tokyo. We help clients transform through consulting, industry solutions, IT modernization and managed services. NTT DATA enables clients to move confidently into the digital future. We are committed to our clients' long-term success and combine global reach with local expertise to operate in over 50 countries.

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About TierPoint

Meeting clients where they are on their journey to IT transformation, TierPoint (tierpoint.com) is a leading provider of secure, connected data center and cloud solutions at the edge of the internet. The company has one of the largest customer bases in the industry, with thousands of clients ranging from the public to private sectors, from small businesses to Fortune 500 enterprises. TierPoint also has one of the largest and most geographically diversified footprints in the nation, with [over 40 world-class data centers](#) in 20 U.S. markets and 8 multitenant cloud pods, connected by a coast-to-coast network. Led by a proven management team, TierPoint's highly experienced IT professionals offer a comprehensive solution portfolio of [private, multitenant, managed hyperscale, and hybrid cloud](#), plus [colocation](#), [disaster recovery](#), [security](#), and other [managed IT](#) services.

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