


# How to Move to SAP S/4HANA Successfully

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Learn about the three paths to S/4HANA, preview a conversion methodology and start your journey to becoming an intelligent enterprise.





Your enterprise resource planning (ERP) system is the foundation of your business. It plays an important role in ensuring optimized operations and peak performance across just about every department in your company—HR, finance, supply chain, manufacturing, customer service, etc. So, if you want to modernize your business to achieve innovation on-demand and competitive differentiation, then you must start your journey by modernizing your ERP system.

For many SAP customers, this means moving from SAP ECC 6.0 to SAP S/4HANA, SAP's next-generation ERP. Just how many customers is this? **A recent SAPinsider survey revealed that most respondents (61%) who have not started using S/4HANA are currently using SAP ECC.**<sup>1</sup> If you fall into this category, a new world of opportunity awaits you.

In this eBook, we'll outline the benefits of moving to S/4HANA, review the three main conversion options to choose from, and provide a preview of the most common conversion methodology for ECC users to help you understand what to expect and the steps involved in making the move to SAP's next-generation ERP.





# BUILDING AN INTELLIGENT ENTERPRISE

S/4HANA is SAP's modern ERP system designed for in-memory computing and digital technologies with cloud and mobile enablement capabilities. Most importantly, S/4HANA opens the door to becoming an intelligent enterprise by serving as an organization's "digital core"—empowering users to connect people, systems and data, and take advantage of next-generation technologies such as the internet of things (IoT) and advanced analytics, including artificial intelligence (AI), machine learning (ML) and robotic process automation (RPA).

Becoming an intelligent enterprise means different things to different companies. For some, it may mean delivering a superior customer experience. For others, it may mean developing a digital supply chain. And for others still, it may mean automating and enhancing core business processes.





# BUILDING AN INTELLIGENT ENTERPRISE

Whatever your motivation is for modernization, the time to move is now. Why? **For starters, there is the impending ECC 6.0 end-of-support deadline to consider. Standard maintenance for core applications of ECC 6.0 software will only be supported through 2027.** There are also the following factors to consider when determining your conversion timeline:

- **Investment strategy** – Should you make new investments in what is already a legacy ERP system? According to the SAPinsights survey, more than one-third (38%) of SAP users believe their current ERP doesn't provide a clear integration path for new SAP innovations.<sup>ii</sup> By acting now, you can establish a foundation for innovation on S/4HANA that will connect your data, automate key functions and continuously improve your products and services.
- **Migration expertise** – S/4HANA represents the next big shift in technology—a move to cloud-based, open technology systems. This change requires a much higher level of SAP and cloud migration expertise and resources that many organizations do not have in-house. Similar to what many organizations experienced in the Y2K shift of the late 1990s, if you wait too long to make a move, you might experience a skills shortage (and associated higher costs) when it does come time for you to start the conversion project.
- **Competitive advantage** – SAP S/4HANA will enable you to fully leverage the benefits of next-generation technologies, including embedded analytics, AI, ML, IoT, advanced SAP Fiori interfaces and more. The faster you can move to S/4HANA, the faster you can transform your enterprise with unprecedented real-time insights and IT agility.
- **User experience** – S/4HANA offers a personalized user experience with SAP Fiori and delivers the faster response times and performance needed to engage everyone in your ecosystem—employees, customers and partners.
- **Cost optimization** – Often, converting to S/4HANA goes hand-in-hand with a migration to the hyperscale cloud. This means you'll be able to take full advantage of new and evolving cloud-native tools and technologies to optimize your business, lower costs and gain the scalability and elasticity needed to quickly respond to changing demands.





# THREE PATHS TO S/4HANA

There are three ways to move from ECC 6.0 to S/4HANA, and the right approach for you depends on your current IT estate, your future goals and where you are on your cloud journey. For many companies, a move to S/4HANA serves as the catalyst to also move to managed cloud services with a hyperscale cloud provider, such as Amazon Web Services (AWS), Microsoft Azure or Google Cloud Platform.

Let's take a closer look at each conversion model.



# Path 1: Greenfield Approach

New implementation / re-implementation

**Timeline: About 6-18 months for midsize organizations**

The Greenfield approach is a full re-implementation—i.e., you start from scratch. It's a good path for companies that need a net-new implementation, one that allows them to redesign undesirable business processes based on a new configuration set. The approach guarantees the benefits of new innovations, including SAP HANA, SAP Fiori and more, and incorporates the industry's latest best practices to standardize processes on the digital core.

Because Greenfield implementations involve completely redesigning business processes, there is more effort, time and resources involved. If not carefully managed, you could face greater business disruption and higher implementation costs. One other important point to note: with Greenfield, data conversion to S/4HANA is typically limited to master data and open transactional items, leaving historical transactional data behind (i.e., you lose all history of completed transactions).

Pros	Cons
Process reengineering based on latest innovations	Possible high business and/or organizational disruption
Redesign data structures	Only keep open processes, no historical data
Big-bang or phased approaches possible	Generally higher costs
Can merge data from multiple systems	Typically, a lengthy timeline

# Path 2: Select Data Transition

Partly re-use, partly re-implement

**Timeline: About 8-18 months for midsize organizations**

With Selective Data Transition (SDT), a company can redesign business processes like they would in a Greenfield conversion, but they also have the ability to extract, transform and load master data as well as all historical data. So, rather than losing records of past transactions like you would with Greenfield, they are carried over to the new S/4HANA environment.

With this model, you can re-use the parts of your existing ERP solution that you want while redesigning the parts you don't—and you can migrate all relevant business data from ECC 6.0 to S/4HANA. We often see organizations select the SDT path to S/4HANA during divestitures, mergers and acquisitions, where business leaders want to carve out only pertinent company data to restructure S/4HANA for the new organization.

While SDT enables you to benefit from the best of both worlds (i.e., new business processes while retaining historical data), it's also the most complex and expensive conversion model because of the specialized tools required to complete the project. It also comes with the longest timeline of the three conversion options. And, like the Greenfield approach, it has a high risk of business disruption due to the complexity involved.

Pros	Cons
Highly customizable scope	Potentially higher complexity and risk
Opportunity to select only wanted data	Additional licensing for specialized SDT tools
Ability to adapt historical transactional data to fit new design	More thorough testing required
Ability to merge data from multiple systems	Typically, the longest timeline

# Path 3: Brownfield Approach

Bring your business processes to the new platform

**Timeline: About 3-5 months for midsize organizations**

The Brownfield approach is the most common one we see in the field—a complete technical in-place conversion of an existing ECC 6.0 system to S/4HANA. In other words, companies maintain their original configuration set and bring all master and transactional data to the new S/4HANA system. Brownfield is an ideal method for companies that are satisfied with and want to retain their business processes and data management, but need to enable quicker adoption and development of new innovations. Though Brownfield requires changes at the database layer (to SAP HANA), application layer (to S/4HANA) and hardware layer (to meet computing power requirements), conversion projects can still usually be completed within a few months.

With the Brownfield approach, you are specifically focused on moving existing data and business processes to S/4HANA. This means that any additional projects designed to optimize your S/4HANA environment must be done after the conversion is complete. However, it's the fastest and most cost-effective route to S/4HANA and, once you're there, you can then switch gears to focus on adopting the various elements of the intelligent enterprise.

Pros	Cons
Lower business and/or organizational change impact	Limited process reengineering opportunities
Historical data is retained	Unwanted data must be archived in ECC first
Generally lower cost	Can only convert a single source system
Typically, the shortest timeline	Additional optimization projects may be needed to realize benefits



# BROWNFIELD CONVERSION METHODOLOGY

Once you've chosen the conversion path, it's time to embark on the conversion. Though the exact methodology will vary based on the conversion path, we thought it would be helpful to give you an idea of what's involved with the most common approach for moving from ECC 6.0 to S/4HANA—the Brownfield methodology.

## Discovery

The Discovery phase kicks off by performing an S/4HANA performance-readiness check. This includes an analysis of business and technical requirements based on the current state of your IT environment, as well as consideration of your overall long-term business goals. The goal of the Discovery phase is to collect and analyze information on your existing ECC 6.0 system to build a customized S/4HANA conversion methodology, timeline and resource estimate.

### Key questions to ask:

- What IT challenges are you currently experiencing?
- What business pain points or opportunities do you see?
- What are your top priorities for moving to S/4HANA?



## PRO INSIGHT

SAP's Readiness Check tool is instrumental in the Discovery phase, analyzing various attributions of your current ECC 6.0 production environment. It performs functions such as analyzing and reporting on simplification items (i.e., the deltas between ECC 6.0 and S/4HANA), identifying add-ons and business functions that need to be upgraded, discovering inefficient business processes, providing SAP Fiori recommendations, sizing systems, and identifying obsolete code and code that needs to adapt to S/4HANA syntax. The results become the foundation of your S/4HANA conversion plan and timeline.



# BROWNFIELD CONVERSION METHODOLOGY

## Prepare

In the Prepare phase, you evaluate technical and business simplifications (i.e., deltas between ECC 6.0 and S/4HANA) to determine whether your systems and processes are in a state that can support a smooth conversion or if you have roadblocks that will result in errors or delays that will cost you time and money. If challenges are identified, you'll know exactly what prerequisite steps you need to complete to overcome them.

### Common roadblocks to a successful conversion can include:

- You don't have the right enhancement-pack level.
- You don't have the right NetWeaver version.
- The Solution Manager may need to be patched or upgraded.
- Add-ons or third-party applications may need to be patched or upgraded.



## PRO INSIGHT

SAP offers several tools to help compare your existing estate with the new requirements of S/4HANA. From the technical side, the SAP Maintenance Planner spearheads the simplification identification process. When it comes to identifying deltas between ECC 6.0 and S/4HANA, the SAP Simplification Item Check is a valuable tool to rely on.

## Explore

Once you've identified your deltas between ECC 6.0 and S/4HANA, the next step is to remediate them in the Explore phase. Here are examples of deltas you may encounter, along with the steps you'll need to take to ensure a successful S/4HANA conversion:

- **Technical Delta: Application Code** – There is a good chance that much of your ECC 6.0 code will not align with the S/4HANA structure. Tools such as SAP's Code Inspector and ABAP Test Cockpit can help you analyze existing code—both custom and SAP standard code—to identify obsolete code that needs to be removed as well as code that needs to adapt to meet S/4HANA syntax.
- **Business Delta: Customer/Vendor Integration (CVI)** – To capture your work with business partners in ECC 6.0, you need to create two independent records: one for customers and one for vendors. But, in instances where you're working with a partner in the capacity of both a customer and a vendor, you'll



# BROWNFIELD CONVERSION METHODOLOGY

most likely end up with redundant records and data (e.g., addresses). S/4HANA solves this problem by making business partner records—that contain central shared data from the company—the primary object. You can then generate sub-records for customers and vendors, which will contain only unique data respective to those objects. So, before you can convert your ECC 6.0 system to S/4HANA, you must use CVI records synchronization to ensure ECC data appropriately adapts to fit this new S/4HANA structure.



## PRO INSIGHT

- **Technical Delta: Custom Code** – The ABAP Test Cockpit can apply some code corrections through “Quick Fixes.”
- **Business Delta: Customer/Vendor Integration (CVI)** – The overlap of existing number ranges must be considered and eliminated prior to the execution of CVI processing. Make certain the partner you work with properly analyzes the need for changes and defines a proper go-forward strategy for customer and vendor number ranges.

## Realize

Once you’ve taken steps to ensure your technical and business systems and processes are suited to S/4HANA, you’re ready to begin the actual conversion process. We recommend starting out by executing at least two or three rehearsals in a sandbox environment. To do this, take a copy of your current production environment and convert it to a separate QAS box. This will allow you to practice all steps in your S/4HANA conversion project in a test environment, rather than in a production environment. If you encounter issues or errors, you can remediate them prior to production to avoid business downtime.



## PRO INSIGHT

Make sure to run the SAP Software Update Manager tool during rehearsals. The tool is primarily used by SAP users to implement a new release, enhance existing software or apply Support Packages or Support Package Stacks. In an ECC 6.0 to S/4HANA conversion, it will help you to execute a database migration (if your source system is not yet running on SAP HANA), install S/4HANA software and convert your data into the structure used by S/4HANA.



# BROWNFIELD CONVERSION METHODOLOGY

## Deploy

Following several successful rehearsals, you're ready to move to a development environment. There are multiple approaches for the conversion of your development box. It can simply be converted, or you can create it based on one of the rehearsal systems. Once your development box is complete, you can then progress to a production environment. Here, you will follow the exact same processes as you did in the rehearsal phase—you just execute them within the live production environment.



## PRO INSIGHT

Establishing detailed steps, sequencing and timing is critical to a successful conversion. The end goal should always be minimizing downtime while eliminating potential risk. A thoroughly vetted conversion plan is paramount to success.

## Run

In the Run phase, you remediate any post-conversion issues. But, if you closely followed all of the methodology phases leading up to this point, then you should experience minimal issues. Ideally, this phase will be a “non-event” for your company. However, it's best to be prepared, which is why it's a good idea to recreate your QAS box so it's an exact copy of your production environment. This will ensure continuous synchronization between the two environments, so in the event that you have to fall back on your QAS, you know it's up to date.



## PRO INSIGHT

Once the system has been released to end users, it's important to monitor system usage and performance. Common issues include security adjustments and minor changes in transactional processes that may need clarification for end users. Consider using a ticketing system to track issues. This will help you identify corrections or training requirements to ensure end-user adoption and satisfaction.



# POST- CONVERSION CONSIDERATIONS



As you build your roadmap to S/4HANA, it's not only important to consider the support you need today, but also your goals post-conversion—from management and maintenance to continuous development and integration of new technologies, such as IoT, AI and more.

When considering outside experts and managed service provider (MSP) partners, be sure to evaluate how they can help you throughout your journey to S/4HANA and beyond. Find out the extent of their SAP expertise, their experience moving customers to S/4HANA, the depth of their knowledge of cloud-native technologies and tools, and their ability to support your business with ongoing managed services.

Ultimately, you want to be in a position to hit the ground running once S/4HANA is deployed, ensure a smooth transition for end users, and have access to the expertise and support you need to drive innovation, revenue and competitive advantage.

## Partnering for Success

Whatever path you take to S/4HANA, we're here to help. As an SAP Gold Partner, Navisite's team of certified SAP experts has a proven track record of successfully migrating hundreds of organizations to HANA and S/4HANA. We will partner with you to develop and execute a strategic conversion roadmap, and serve as a trusted advisor every step of the way with end-to-end SAP and cloud migration expertise, managed services and ongoing support.

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To learn how Navisite can help you get on the road to S/4HANA, [contact us](#) today.



## About Navisite

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Navisite is a trusted digital transformation partner for growing and established global brands. Through our highly specialized teams, industry solutions, business process expertise and application services, we provide the capabilities and practical guidance customers need to modernize, build and support more agile, resilient and expanding businesses. Our strategic advisory and transformation services advance innovation with comprehensive cloud, enterprise application, data management, intelligent automation and cybersecurity solutions, empowering customers to navigate change and meet new demands at any point in their journey. To learn more, visit [navisite.com](https://navisite.com).

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[SAPinsider 2020 SAP S/4HANA Migration Benchmark Report](#), SAP  
"Ibid.



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