<The road to S/4HANA>

‘Critical steps you can’t afford to miss’



expertum
Whitepaper

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Getting ready for S/4HANA: What you need to know

If you're reading this, chances are you're running SAP ECC and wondering how to move to S/4HANA. Maybe you're feeling the pressure of the 2027 deadline or simply tired of running your business on an aging system that's becoming harder to maintain. Either way, the transition to S/4HANA is not just another IT project—it's a fundamental shift in how your business operates.

We get it. At Expertum, we've helped companies just like yours navigate this journey. Some worry about losing their heavily customised processes. Others struggle to justify the investment or don't know where to start. And let's be honest—this isn't just about moving to a new system. It's about ensuring your business is ready for the future, making the most of real-time insights, automation, and cloud innovation.

So, what's the catch? Moving to S/4HANA comes with challenges, but these are challenges you can prepare for. That's exactly what this whitepaper is here to help with.

What makes a S/4HANA project challenging?

Moving to S/4HANA isn't a simple upgrade. It's a transformation that requires careful planning and a solid understanding of the hurdles ahead:

- **Process & Change Management** – Adapting to standardized processes and training employees.
- **Data Migration & Cleanup** – Aligning with S/4HANA's new data model and transforming historical data.
- **Technology investments** – Choosing between Greenfield or Brownfield and investing in cloud infrastructure.
- **Reporting & Analytics** – Defining the strategy for operational and enterprise-wide reporting in an S/4HANA landscape.
- **System integrations –** Ensuring third-party tools and custom extensions are S/4HANA-ready.

How this Whitepaper will help you

The goal of this whitepaper is simple: to help you prepare for your S/4HANA project in a way that sets your business up for long-term success. This isn't just about moving to a new system—it's about making informed decisions that minimise risk, maximise value, and ensure a smooth transition. And please remember, if you have any questions while reading this whitepaper, we are here to help!

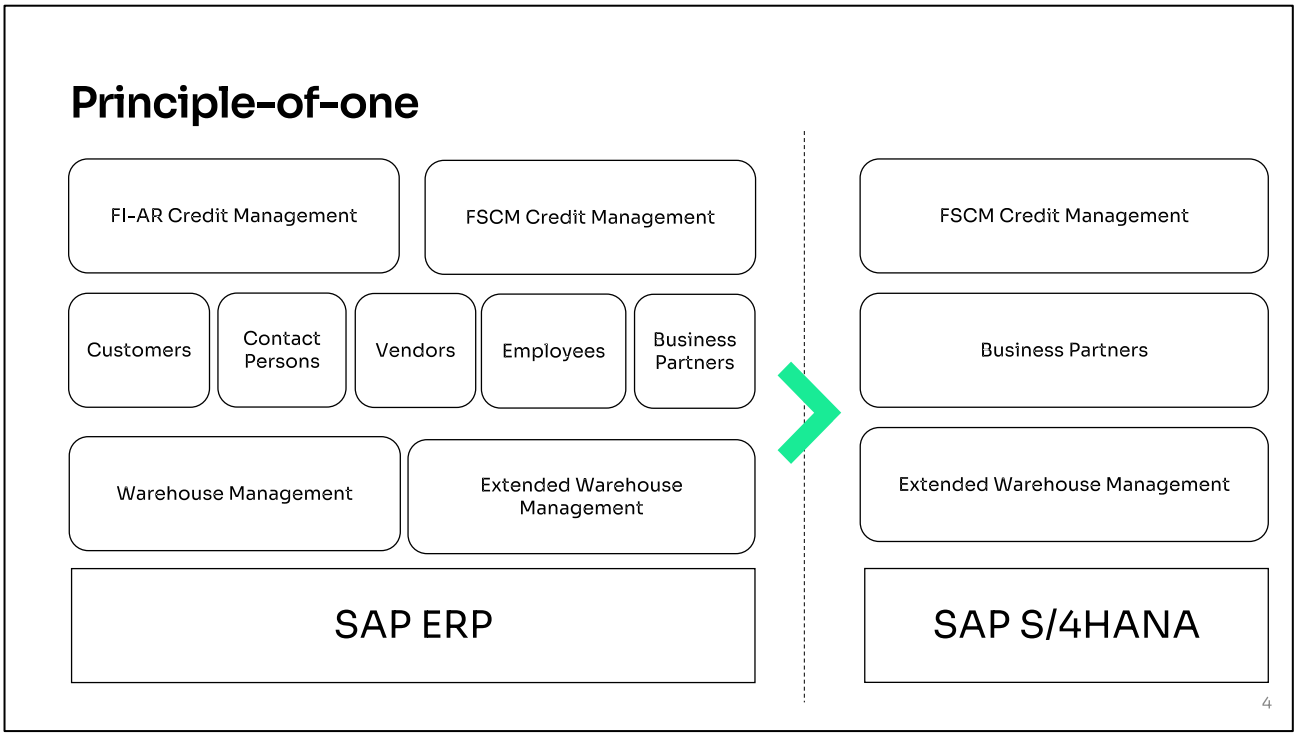
1. What's driving SAP's shift to S/4HANA, and how should you respond?

SAP's transition from ECC to S/4HANA is more than just a technical upgrade—it's a fundamental shift in how businesses use SAP. Instead of being a direct successor to SAP ERP, S/4HANA is a completely new product built on SAP HANA. The goal? More simplicity, less complexity, and greater flexibility for businesses looking to innovate in a digital-first world.

A new foundation: Performance & Simplicity

One of the biggest changes in S/4HANA is the simplified data model. Over the years, SAP ERP grew in complexity, with added functionality leading to redundant tables and multiple transactions for the same business processes.

With S/4HANA, SAP redesigned the system from the ground up, eliminating unnecessary data structures and introducing the "principle of one"—providing a single, optimised solution per business process.



This was made possible by SAP HANA, a powerful in-memory database that stores data in columns instead of rows, compressing information and drastically improving processing speed. As a result, S/4HANA can handle massive amounts of data with minimal performance impact while enabling real-time insights and reporting.

A clear example of this simplification is in financial management:

- In SAP ERP, companies had to choose between the classical and new general ledgers.
- With S/4HANA, SAP retired the classical general ledger, ensuring that all businesses use the more flexible, advanced new general ledger.

Another key example of this simplification is in business partner management:

- In SAP ERP, customers, vendors, employees, and contact persons were maintained separately in different master data tables.
- With S/4HANA, SAP introduced the Business Partner model, unifying all these entities under a single framework to improve consistency, eliminate redundancy, and enhance integration across business processes.

Less customisation, More flexibility

One of the most significant shifts with S/4HANA is moving away from deep customisation.

- In the ECC era, businesses often heavily modified SAP to match their exact processes, creating complex, difficult-to-maintain systems.
- While this offered flexibility, it also led to longer upgrade cycles, higher costs, and a lack of agility when adapting to new business needs.

With S/4HANA, SAP promotes a clean core strategy: standardising core processes and moving customisations outside the ERP system.

This is where SAP Business Technology Platform (BTP) plays a crucial role. Instead of modifying SAP itself, BTP allows businesses to integrate, extend, and innovate using cloud-based tools, AI, and automation—all without disrupting the core system. Although adopting this platform can definitely be challenging for customers, SAP has a clear vision for it:

- Easier upgrades – No more complicated rework when moving to new SAP versions.
- Lower maintenance costs – Less custom code means fewer compatibility issues.
- More agility – Businesses can adopt new SAP innovations faster.

What this means for your business

Moving to S/4HANA is not just about adopting a new technology but redefining how your business operates. While the transition requires planning, investment, and change management, businesses that embrace S/4HANA and BTP will gain the agility, performance, and innovation needed to stay competitive in a digital world.

Instead of seeing this shift as a challenge, think of it as an opportunity to future-proof your business and unlock new potential.

2. Why should you move to S/4HANA?

Let's be real—SAP is ending mainstream support for SAP ERP in 2027. While this marks a significant milestone, extended support will still be available for those who need more time to transition. But if that's the only reason you're considering upgrading, you're looking at it incorrectly. The real question isn't when to move but why and how to make the most of it.

This isn't just an IT upgrade—it's a business decision—a chance to modernise, streamline, and set your company up for the future. The companies making the switch aren't just doing it because they have to; they're doing it because they see the value.

What's driving the move?

Think business, not just IT
You're missing the bigger picture if you only upgrade to stay compliant. What will S/4HANA do for your business? Will it simplify processes, make decision-making smarter, or help you scale faster? If the answer is yes, it's not just an upgrade—it's an opportunity and an invitation to look beyond the familiar and explore the value that tomorrow's technologies — like Business AI — can bring to your business.

Old tech, High costs
Sticking with outdated systems doesn't just slow you down; it gets expensive. The longer you wait, the more patches, workarounds, and maintenance costs will pile up. You're not maintaining an ERP at some point—you're holding on to a sinking ship.

It's all about the cloud
With S/4HANA, SAP has fully embraced the cloud. For most organisations, the question is no longer should you move to the cloud but how you do it. S/4HANA comes in two cloud flavors: public and private. The public cloud is a standardised SaaS solution where updates happen automatically two times a year, bringing the latest innovations in AI, automation, and analytics without the hassle of manual upgrades. It's the most cost-effective option and ensures your business stays ahead of the curve.

On the other hand, the private cloud offers more flexibility and customisation, giving businesses control over when updates happen. It allows for a more tailored approach but requires a bit more management. While some functionalities are exclusive to the private edition, SAP is rapidly closing that gap in the public edition.

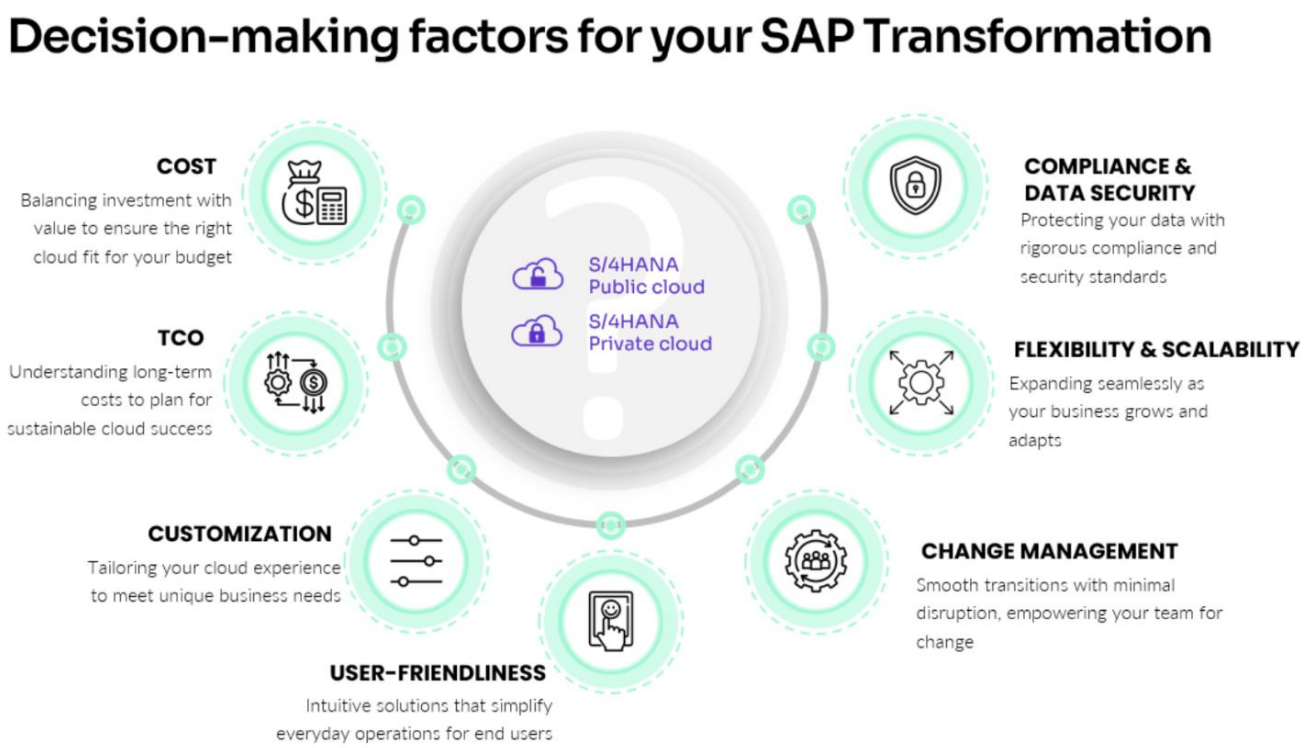
The bottom line

This isn't just an upgrade. It's a chance to rethink how your business runs. Don't move just because you have to—move because you want to get ahead. Define your strategy, embrace the possibilities, and make S/4HANA work for you. In the end, the real question isn't whether you should switch. It's how you'll make it count.

3. What key decisions should you make before moving to S/4HANA?

At Expertum, we know that moving to S/4HANA isn't just about upgrading software—it's about making the right choices for your business. How you transform and where you host your system will define your success. Should you go for a brownfield migration (lifting and shifting your existing setup), a greenfield approach (starting fresh for maximum flexibility), or something in between, like a selective transformation? And should you choose public cloud, private cloud, or an on-premise solution? SAP is prioritising the cloud, but you still have the flexibility to choose the solution that best suits your organisation.

These aren't just technical decisions—they shape your organisation's future. That's why a thorough preparation assessment is crucial. It helps you evaluate key decision-making factors upfront, ensuring your journey is smooth, cost-effective, and future-proof. At Expertum, we guide businesses through this process daily, helping them find the right fit for their needs.



1. Cost: Balancing investment with Business value

Every transformation comes with a price tag, but it's not just about what you spend—it's about what you gain. A cloud-based setup might save on infrastructure costs but involves ongoing subscription fees. An on-premise solution could feel like a safer investment but would require higher maintenance costs.

Your budget will also shape your transformation strategy. Brownfield migrations tend to be more cost-effective, preserving existing processes, while greenfield transformations may require a more significant upfront investment but unlock long-term business improvements.

2. Total cost of ownership (TCO): Thinking beyond the upfront price

The costs don't stop after your transformation project. Maintaining, upgrading, and running S/4HANA all come with ongoing expenses. Cloud options offer predictable costs and automatic updates, while on-premise solutions might seem like a one-time investment but demand more long-term upkeep.

If sustainability and cost predictability are key, a public cloud solution might be the best fit. A private cloud or on-premise could be a better choice if you need more control over long-term expenses. Understanding TCO helps ensure your transformation strategy supports your financial goals in the long run.

3. Customization: How much flexibility do you need?

No two businesses are the same, and neither are their SAP needs. The public cloud provides a streamlined, best-practice-based approach with automatic updates, but customisation is limited. The private cloud and on-premise options allow for deeper customisation, ensuring legacy processes and industry-specific needs are met.

Your transformation path matters here, too. Greenfield projects allow you to rethink processes entirely and align with best practices in a public cloud environment. Brownfield migrations preserve your custom developments but might require a private cloud or on-premise setup for full flexibility. At Expertum, we help businesses navigate this balance—finding the right mix of standardisation and customisation.

4. User-friendliness: Will your team actually use it?

Technology is only valuable if people actually use it. S/4HANA brings a more intuitive, modern experience, but change isn't always easy. A smart preparation phase includes user testing, training, and feedback loops to ensure employees feel comfortable with the new system and get the most out of it from day one.

Public cloud solutions are more user-friendly, with SAP's latest UX enhancements built in, while customised on-premise solutions may require additional adjustments and training.

5. Change management: Getting everyone on board

Let's be honest—change is hard. A system like S/4HANA doesn't just affect IT; it impacts how teams work daily. Resistance and confusion can slow adoption without a clear change management strategy. Communication, training, and early stakeholder involvement are critical for a smooth transition.

The more disruptive the S/4 journey (e.g., a greenfield approach with major process redesigns), the more structured your change management approach needs to be.

6. Flexibility & Scalability: Will your ERP grow with your business?

Your business isn't static, so your ERP shouldn't be, either. Whether it's expansion, acquisitions, or new market demands, S/4HANA should be able to scale with you.

A public or private cloud solution offers built-in scalability, making it easy to adapt without major infrastructure investments. On-premise solutions provide control but may require significant reinvestments as business needs evolve. Choosing the proper setup now will determine how easily you can scale in the future.

7. Data compliance & Security: Keeping your business safe

Data protection and compliance aren't just checkboxes—they're business-critical. Whether you operate under GDPR, industry-specific regulations, or internal security policies, your transformation strategy must address where data is stored, how it's secured, and who has access.

Highly regulated industries often opt for private cloud or on-premise deployments for tighter control, while public cloud solutions are rapidly advancing to meet strict compliance standards with robust security features.

4. Which transformation path to S/4HANA is right for your business?

In the previous chapter, we covered the key decisions you need to make, from cost and customisation to change management and security. Now, it's time to turn those insights into action. The big question is: Which journey fits your company best?

- **Greenfield** (New implementation) – A fresh start with a new system, redefined processes, and selected data migration.
- **Brownfield** (System conversion) – A technical upgrade that keeps your current setup while unlocking S/4HANA's benefits.
- **Landscape Transformation** – A phased approach consolidating multiple SAP or non-SAP systems into a single S/4HANA environment.

Each option has pros and cons; the right choice depends on where you are today and where you want to go tomorrow. Let's break them down.

1. Greenfield (New implementation) – A fresh start

Greenfield is like moving into a brand-new house. Instead of carrying over old processes and customisations, you start fresh—rebuilding your ERP from the ground up using SAP's Best Practices and modern capabilities.

Is Greenfield Right for You?

- Your current system is outdated, heavily customised, or challenging to maintain.
- You want to completely rethink and optimise business processes instead of carrying over legacy setups.
- You're moving to S/4HANA Public Cloud, which requires a fresh implementation.

Pros & Cons of Greenfield

✓ Full flexibility to design streamlined processes.
✓ Eliminates technical debt from old customisations.
✓ Pre-configured best practices speed up implementation.
✗ Requires more effort in process reengineering.
✗ Can be disruptive for teams adjusting to new ways of working.

Tip: Greenfield is ideal for companies looking for a fresh start—but be prepared for significant change management.

2. Brownfield (System conversion) – Keeping what works

Brownfield is like renovating your current house. Instead of rebuilding from scratch, you upgrade your existing SAP ERP system to S/4HANA, keeping your business processes and data intact while taking advantage of S/4HANA's new capabilities.

Is Brownfield right for you?

- Your existing business processes work well and don't need major changes.
- You want a faster and less disruptive transition to S/4HANA.
- Your customisations are manageable and can be adjusted for S/4HANA compatibility.

Pros & Cons of Brownfield:

✓ Faster transition than Greenfield.
✓ Retains existing configurations and historical data.
✓ Less business disruption compared to a complete reimplementation.
✗ Custom developments need adjustments due to SAP's simplifications.
✗ Limits flexibility in redesigning outdated processes.

Tip: Brownfield is the preferred option for businesses that already run SAP ERP smoothly and want to upgrade without disrupting operations.

3. Landscape transformation – Unifying multiple systems

Many companies have multiple ERP systems due to mergers, acquisitions, or regional differences. Landscape Transformation is about consolidating those systems into a single S/4HANA instance, while selectively migrating the most relevant data and processes.

Is Landscape transformation right for you?

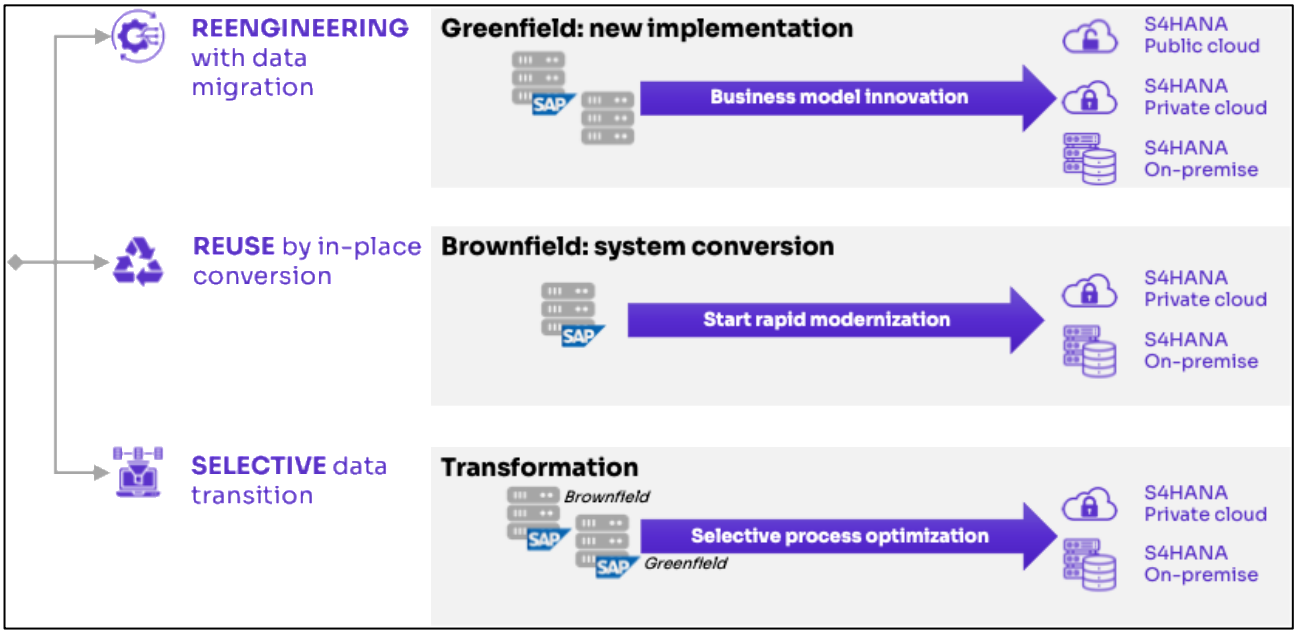
- You have multiple SAP or non-SAP ERP systems that must be merged.
- Your business needs harmonised processes across different regions or divisions.
- You want a phased transition instead of a complete migration at once.

Pros & Cons of landscape transformation:

✓ Reduces complexity by consolidating systems.
✓ Allows for a step-by-step migration instead of a big bang approach.
✓ Standardises processes across the company.
✗ Requires careful data mapping and process alignment.
✗ It can be a longer and more complex project depending on the number of systems involved.

Tip: If you're dealing with multiple ERP systems, this is your chance to clean house and unify your operations under one streamlined S/4HANA system.

How to choose the right approach?



1. What do your business processes look like?

- If your current processes work well and align with S/4HANA → **Brownfield** is the way to go.
- If you need a **complete process redesign** → **Greenfield** is your best bet.
- If you have multiple ERP systems that need to be unified → **Landscape transformation** is the answer.

2. How much custom development do you have?

The more customisations you have, the more effort it takes to transform.

- **Brownfield:** Requires adapting custom developments to S/4HANA's new standards.
- **Greenfield:** Eliminates legacy customisations but means rebuilding processes from scratch.
- **Landscape Transformation:** Selectively carries over necessary customisations while cleaning up unnecessary ones.

3. What's your timeline and budget?

How fast do you need to move, and what's your budget?

- **Brownfield is the fastest** option, requiring less time and investment.
- **Greenfield takes longer** but offers a clean slate for innovation.
- **The complexity of Landscape Transformation varies depending on the number of systems that** need consolidation.

4. Are you moving to Public Cloud or Private Cloud?

- **Public Cloud requires Greenfield**, as it doesn't support system conversions.
- **Private Cloud and On-Premise support all transformation approaches**, giving you flexibility.

5. Which tools can help you prepare for your S/4HANA transformation?

Moving to S/4HANA comes with a lot of moving parts. How do you avoid surprises, minimise risks, and make the transition smooth?

Luckily, SAP provides powerful tools to help you assess your current system, spot potential roadblocks, and optimise your transformation strategy before making any big moves. Whether you're deciding between Greenfield or Brownfield or figuring out what needs fixing before you go live, these tools give you the insights to make informed decisions and avoid unnecessary complications. Here's a brief overview of the key tools that can support your preparation and transformation process.

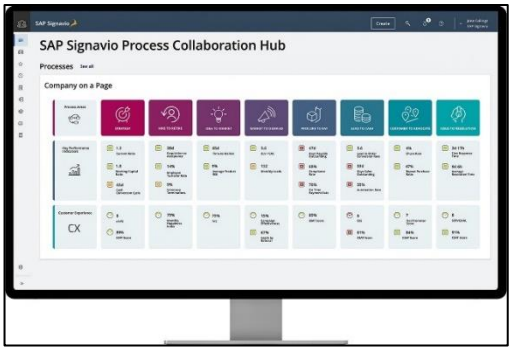
SAP Signavio – Understand and optimise your business processes

Moving to S/4HANA isn't just about moving to a new system—it's an opportunity to improve how your business runs. That's where SAP Signavio comes in. It's a cloud-based process analysis tool that gives you a clear end-to-end view of your workflows. It helps you:

- Analyze how your business processes perform today.
- Compare them to industry benchmarks.
- Identify inefficiencies and areas for improvement.
- Collaborate with teams to redesign and optimise processes.

With deep integration into SAP and non-SAP systems, SAP Signavio provides data-driven insights to help you map out necessary changes before you start your S/4HANA journey.

Tip: Use SAP Signavio to visualise your processes, identify gaps, and facilitate business-led workshops to define your ideal S/4HANA setup.



SAP Readiness check – Are you technically ready for S/4HANA?

Before making the move, you need to know whether your current SAP ERP system is compatible with S/4HANA. The SAP Readiness Check is your first step for those organisations considering a Brownfield conversion.

This tool analyses your system and highlights potential technical and functional blockers that must be addressed before the transformation. It helps you:

- Identify incompatible add-ons that won't work in S/4HANA.
- Check for missing business functions that may require process adjustments.
- Assess your custom code and how it needs to be adapted.
- Evaluate data volume and system sizing for performance optimisation.

Running this check early in the process helps you plan ahead and avoid unexpected delays during your transformation project.

Tip: The Readiness Check — along with with the ATC Report — should be carried out as early as possible, ideally when you first start considering your S/4HANA journey. A broader time frame provides more accurate and valuable insights.

S/4HANA Trusted Authorization Review (STAR) – Aligning your licensing model

Moving to S/4HANA also means transitioning to a new licensing model. Instead of the traditional Named User License (NUL) system, SAP now uses the Full Use Equivalent (FUE) metric, which means that your user access rights and costs could change.

The S/4HANA Trusted Authorization Review (STAR) helps you:

- Analyze how existing users and roles translate into S/4HANA's new licensing structure.
- Simulate different license usage scenarios to optimise costs.
- Review and refine role assignments to ensure compliance and efficiency.

Using the Authorization Object Analyzer, you can review existing user roles, engine usage, and system authorisations, ensuring you're not overpaying for unnecessary licenses.

Tip: Before finalising your transformation or migration, run the STAR analysis to right-size your licenses and avoid unexpected costs in your new S/4HANA environment.

6. Reasons S/4HANA projects go wrong—And how to get it right

Good preparation makes any S/4HANA journey smoother—no surprises there. But knowing the most common mistakes upfront helps you avoid costly delays and headaches. Here's what to watch out for!

Thinking it's just another upgrade
S/4HANA is not a simple version update; it is a fundamental shift in how your ERP operates. If you treat it as a routine compliance upgrade, you will miss out on real business value.

Tip: Start with a business-first mindset by defining business goals and process improvements from the outset, not just technical migration tasks.

Picking the wrong transformation path because it feels safe
Brownfield, or in-place conversion, might feel like the safer option, while Greenfield, or a fresh start, might sound ideal. However, no path is a shortcut if it does not align with your business reality.

Tip: Be strategic in your evaluation. Determine if your organisation needs a full reset, a targeted update, or a hybrid approach. Choose the path that aligns with your long-term business strategy rather than the easiest one.

Dragging decades of custom code into the future
Custom ABAP developments that were essential in the past may no longer be relevant today. Migrating everything into S/4HANA is like packing a moving truck with broken furniture—it adds unnecessary cost and complexity.

Tip: Review and optimise custom code. Only migrate what truly adds value, and replace outdated custom solutions with standard S/4HANA features where possible.

Forgetting that bad data stays bad in a new system
If you migrate inconsistent, duplicate, or obsolete data to S/4HANA, it will continue to create problems—except now in real-time analytics rather than overnight batch jobs.

Tip: Archive outdated data, cleanse and deduplicate what remains, and standardise data formats before migration. High-quality data is critical for S/4HANA's real-time processing capabilities.

Assuming your users will adapt
S/4HANA introduces a new interface, new processes, and new workflows. Without proper preparation, users will struggle to adjust, leading to confusion and resistance at go-live.

Tip: Introduce SAP Fiori early so users become familiar with it. Establish a team of power users or champions and prioritise structured training sessions well in advance.

Overlooking SAP's new licensing model
S/4HANA introduces a new licensing metric called Full User Equivalent (FUE). Sticking with old ECC licensing assumptions can lead to unexpected costs or unnecessary spending.

Tip: Use SAP's STAR licensing analysis to assess actual usage and adjust license types and counts before migration to avoid overspending.

Forgetting that your ERP does not exist in isolation
Your ERP connects to multiple systems, such as warehouse management, reporting tools, and third-party applications. Not all of these are automatically compatible with S/4HANA. Discovering this too late can lead to costly delays and broken integrations.

Tip*:* Map all system integrations and test each one for S/4HANA compatibility. Identify and resolve potential issues before go-live to ensure a smooth transition.

Going too fast or too Slow
Moving too quickly increases the risk of errors at go-live, while delaying too long can result in a last-minute, high-risk migration when SAP ends ECC support in the near future.

Tip*:* Set a realistic timeline that includes pilot projects, phased rollouts, and sufficient testing. Avoid getting caught unprepared as the deadline approaches.

Ignoring the full potential of S/4HANA
If you treat S/4HANA as just a technical upgrade, you may end up using it like ECC with a more modern interface, missing out on key advantages. The real value lies in best practices, embedded AI, automation, and real-time analytics.

Tip: Plan how to take advantage of S/4HANA's advanced features from the beginning. Your roadmap should include intelligent automation, improved reporting, and business process optimisation to maximise return on investment.

Thinking Go-live is the Finish Line
A project does not end at go-live. Without ongoing optimisation, you will never fully unlock S/4HANA's potential.

Tip: Treat go-live as the starting point for continuous improvement. Plan for regular optimisations, user feedback loops, and additional S/4HANA feature rollouts to drive long-term business value.

Let’s talk about your S/4HANA journey!

You’ve explored the key insights, challenges, and opportunities of transforming to **S/4HANA**—but what does this mean for your organization? Every business has unique processes, priorities, and roadblocks, and a successful transition requires the right strategy.

At Expertum, we don’t just implement technology—we partner with organizations to make S/4HANA work for their business. With years of experience guiding companies through their journey, we understand what it takes to make your transition seamless, efficient, and future-proof. Whether you need strategic advice, a clear roadmap, or hands-on support, our team is ready to help you turn insights into action.

Let’s talk about your S/4HANA journey. Connect with our experts today and discover how we can help you maximize the value of your transformation.

Get in touch now and take the next step with confidence!



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About Expertum

Expertum is one of Europe's leading SAP consulting partners, with offices in Belgium, the Netherlands, Slovenia, and Croatia. **We help organisations to unlock the full potential of SAP.** With deep expertise across industries and SAP solutions, we guide companies through complex challenges and help them build a strong digital foundation for the future. Our clients value us for our practical approach, reliable delivery, and ability to turn SAP into a true business enabler.

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