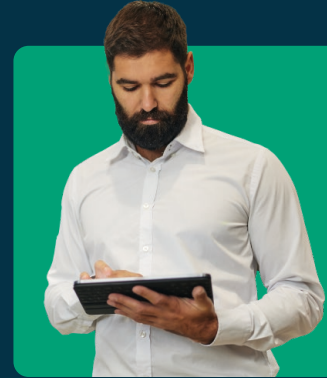


Changing Conversations

Driving a Brownfield SAP S/4HANA transformation with confidence

A best practice guide to making the critical migration journey fast, affordable and safe.



www.basistechnologies.com



01

Foreword by David Lees, CTO

02

The Brownfield Estate

03

Why undertake a SAP S/4HANA transformation

04

The challenges slowing progress

05

Components of Brownfield transformation to SAP S/4HANA

06

The successes from past transformations

07

Supporting your SAP S/4HANA journey at all stages

08

Unlock your full potential with SAP

01

Foreword

The transition from SAP® ECC (ERP Central Component) to SAP S/4HANA® marks a pivotal moment for organizations seeking to unlock greater potential and stay ahead of the curve. Businesses have been conditioned to accept the status quo when it comes to SAP, and in doing so, they miss the opportunity to significantly improve performance, management, and information flows. Now, with businesses being actively pushed towards SAP S/4HANA, there is a better way to manage this change.

For forward-thinking businesses, the journey towards SAP S/4HANA transformation, particularly for those with Brownfield estates, presents unique challenges that demand thoughtful consideration. Throughout this eBook, we will delve into the intricacies of the SAP S/4HANA transformation process to highlight the common pitfalls and best practices, paying particular attention to the challenges faced by organizations when choosing the Brownfield approach.

SAP change management should not be feared by organizations, but harnessed to take the benefits of real-time business processes and business agility to new heights. Success lies not in rushing through the process but ensuring teams are armed with the tools and support to continuously align with business objectives.



David Lees, CTO
Basis Technologies

02

The Brownfield Estate

Brownfield: Technically convert existing systems like ECC to the SAP S/4HANA platform, preserving pre-existing data, processes and customization.

The move to SAP S/4HANA is a major transformation initiative, which for many organizations — particularly those with large and complex SAP landscapes — could take years to complete.



Every organization's SAP landscape is different, with a combination of hardware, software, customization, and processes that have been built over time to meet specific business needs. The transformation journey from ECC to SAP S/4HANA can therefore be a complicated journey for enterprises with Brownfield environments.

Unlike enterprises opting for the Greenfield (first time implementation, or a clean slate) or Hybrid (a combination of Greenfield and Brownfield) approaches, those with Brownfield estates have several unique considerations at play:

- ▶ The technical conversion of existing systems
- ▶ The review, clean-up and refactoring of retained custom code
- ▶ A review and clean-up of all historical data
- ▶ The 'Big Bang' cutover
- ▶ Significant time allowance for system conversation and validation

03 Why undertake an SAP S/4HANA transformation?

Nearly all (94%) of the world's largest organizations use SAP to power their businesses. Given that SAP contains the crown jewels of enterprises' infrastructure, the transformation to SAP S/4HANA should be considered business critical.

The change has a huge impact on the way enterprises run their core systems. SAP is the plumbing underpinning IT infrastructure, and therefore failure in one area will have a significant knock-on effect that can devastate business operations from a single change. The risk is very real. However, getting it right the first time will translate to faster implementation, simplified business processes, landscape architecture and operational costs, and superior competitive advantage.

Top 3 expected benefits from an SAP S/4HANA transformation for senior leaders and SAP managers*

- 1 Improved compliance (45%)
- 2 Simple user interface (42%)
- 3 Greater process quality (41%)

*Full audience research will be published in October 2023

THE BASIS VIEW



Aside from avoiding the encroaching technical obsolescence dilemma, the focus on compliance may stem from enterprises using SAP S/4HANA as a catalyst for change.

Once a successful SAP S/4HANA transformation has taken place, the business can focus on becoming more agile. In essence, teams can use the project or investment vehicle to facilitate greater agility. Improved compliance would then naturally align with wider business objectives, as one of the goals of operational transformation.



David Lees, CTO
Basis Technologies



04

The challenges slowing progress

A transformation of this complexity requires extensive preparation; improper handling has far-reaching consequences for enterprises. Throughout the project, dual maintenance needs to be governed with precision to avoid any nasty surprises at the point of cut-over which could trigger a roll-back. Starting with the end in mind and automating much of this process is a key challenge that is often overlooked.

Businesses opting for the Brownfield approach typically have a 'big bang' switchover, whereby new SAP S/4HANA systems go live simultaneously and legacy systems are deactivated. Though clearly decisive, this approach carries a considerable amount of business risk and requires significant up-front resources. If the transformation goes wrong, the company could suffer a complete operations collapse, requiring huge levels of cost and resources to undo.

Basis Technologies research reveals the top three reasons behind delayed SAP S/4HANA transformation are*

1

75% of enterprises have not yet carried out the necessary preparations for transformation

2

50% do not have the right internal skills or resources

3

50% have ignored the problem due to the length of time until the SAP S/4HANA deadline

*Full audience research will be published in October 2023

www.basistechnologies.com

Deep Dive: The top three SAP S/4HANA transformation technical change related challenges



1. Landscape buildout and cutover maintenance

Manually managing changes during SAP S/4HANA transformations is time consuming and error-prone; companies need visibility and a way to automatically sequence changes to eliminate overwrites, overtakes and dependency issues to enable fast and effective delivery.

2. Manual dual maintenance

Enterprises need to ensure SAP S/4HANA landscapes are kept up to date with any changes made in ECC. Dual maintenance is a must, and many organizations will need to continue maintaining both platforms simultaneously for years.

3. Managing different technologies

Alongside the traditional ABAP development and customizing changes, you need to consider changes to SAP HANA, Fiori and BW. Typically changes will span these different technologies and it becomes critical to understand the dependencies between them, and deploy them in sync.

05 Components of Brownfield transformation to SAP S/4HANA

Upgrading existing systems (if required)

The journey to SAP S/4HANA isn't just about the process of building and migrating to new systems. The action you take to prepare for the transformation will be critical to a smooth transition and to the long-term business value of the new platform. For organizations taking a Brownfield approach, one of the toughest tasks in this first stage may be the upgrade of their current SAP systems.

The problem for firms looking at the Brownfield approach is that some are not yet on ECC, and those that are might not be on an EhP which is supported beyond 2025, so getting ready for the move to SAP S/4HANA could mean upgrading or applying years' worth of previously ignored enhancement packs in a short time. That's a huge amount of change to deploy across a large number of systems and therefore poses significant risk. Not to mention that the systems still need to be supported during the upgrades, which most likely means running multi-track development.

It's time to automate...

Automation acts as the 'single source of truth' needed to gain a holistic view of all changes happening across the entire system, and how they might impact one another.

For an N+1 landscape set-up during an upgrade, it's critical to manage business as usual (BAU) in parallel to the changes required for the upgrade. Teams should ensure the plans for the merge that will make their way into all BAU systems at the appropriate times, and vice versa.

Deep Dive: Understanding maintenance deadlines



Whether an enterprise needs to upgrade their existing systems is dependent on their current Enhancement Pack.

- EhP 0-5 goes out of maintenance at the end of 2025
- EhP 6-8 goes out of mainstream maintenance at the end of 2027, with an option for extended maintenance until 2030

All older versions of SAP must be upgraded to ECC prior to a brownfield conversion attempt. Any customer who is running ECC EhP5 or below, who does not expect to complete before end 2025, and wants to remain on a maintained version, would need to upgrade to a more recent EhP.

Any enterprise running a DB version which is going out of maintenance, needs to either secure customer specific maintenance or consider a DB conversion to HANA prior to their SAP S/4HANA brownfield conversion.

Migrate to the cloud (optional)

Hyperscale cloud hosting and service providers like Amazon Web Services, Microsoft Azure and even SAP's HANA Enterprise Cloud offer far greater elasticity, scalability and responsiveness than traditional on-premise data centers. This translates into tangible business benefits like cost reduction and faster disaster recovery, which is why migrating SAP to the cloud is already on the technology roadmap for most enterprises. SAP RISE, the managed service only available in the cloud, is also an added consideration for those considering migrating their brownfield estate to the cloud.

Some firms will migrate to the cloud first on ECC then transform to SAP S/4HANA, while others stay fully on-premise or might merge cloud migration in the SAP S/4HANA transformation as the systems and hardware will need to undergo change anyway. On top of this, customers need to assess and determine whether SAP's RISE offering is right for them.

It's time to automate...

Automation tools make the job of building SAP systems in the cloud and managing them alongside on-premise systems much easier, which means a faster, cheaper transition and less disruption after the go-live date. There are many SAP S/4HANA transition scenarios in which flexible, versatile automation solutions deliver genuine value:

- ▶ Ensuring continuous delivery
- ▶ Controlling dynamic landscapes
- ▶ Simplifying complex landscapes
- ▶ Managing extreme BAU volumes



Plan, prepare, execute


Transforming legacy systems from where they are today into a new SAP S/4HANA implementation is not an overnight process. Most businesses we work with at Basis Technologies assume it will take months, at the very least. Those with more complex landscapes may even have a multi-year transition plan.

There is an extensive check list of actions to complete to optimize the transformation, including performing readiness checks, reviewing all 'simplification items, refactoring custom code, conducting a data clean-up or adjustment, and downtime minimization. In all scenarios, dual maintenance is also a critical element to consider as the challenge of keeping ECC and SAP S/4HANA in sync as you build and run the new landscape will be significant.

It's time to automate...


Automated dual maintenance combines with automated multi-track management to enable effective change management across two technology platforms. It eliminates manual effort and error by analyzing what should be delivered where, and allows selective application of changes to each landscape, automated synchronization of deployments across landscapes, and control of where changes can originate.

Deep Dive: The four pillars of dual maintenance (execute)



1. Identifying what **changes** in ECC can be deployed automatically to SAP S/4HANA and which need to be executed manually.
2. Continually **remediate code** between systems; as changes are made in ECC, they need to be remediated again before moving to SAP S/4HANA.
3. **Synchronize deployments** across both landscapes.
4. Maintain & protect **SAP S/4HANA templates** so they aren't impacted by changes made in ECC.

Deep Dive: The three stages of work to clean-up and remediate SAP custom code on SAP S/4HANA (plan)



Functional

Ensure the custom code works with the core system and has not been affected by changes to the solution. Functional changes cannot be automated and must be adjusted based on original intention and how the new system functions in that process.

Technical

HANA itself is one of the more obvious technical changes required. If native SQL has been used or if ordering is assumed in the response from the DB, then changes may be necessary.

Performance

To take advantage of running on an In-Memory database, code can be re-written or adjusted to allow some of the functions to be performed at the DB level (code pushdown) so that the new platform can be fully leveraged.

Run the new environment

Once you're up and running on SAP S/4HANA you might feel like the project is over, but in fact that's far from the case. Now, you've got to keep those systems operational, and make sure they're optimized for your future business needs.

That means there's a final stage in the journey: running your new SAP S/4HANA environments. Maintenance and change work will continue on an ongoing basis, with activities including bug fixes, BAU changes and the implementation of new upgrade packages. You might even still be working through your phased transition plan while it's all happening.

It's time to automate...

Automation allows changes to be tracked, checked, approved, tested and deployed automatically, and provides the means for SAP to be integrated into cross-application delivery pipelines. Management of multi-track projects become far simpler and safer, even across different technology platforms, while support for dual maintenance minimizes the chance of negative business impact after the SAP S/4HANA go-live during a phased transition plan.

All in all, the use of automation helps you to run your new SAP S/4HANA systems more safely, more efficiently, and with far less risk.

Deep Dive: The road to greater agility



Enterprises can use their SAP S/4HANA transformation as a catalyst to change the way they approach SAP change management. Selecting the right tools facilitates a shift towards agility, enables integration with other enterprise solutions like ServiceNow or Jira, as well as being able to orchestrate change between SAP and non-SAP landscapes.

Organizations also need to be aware of their Solution Manager's end of life to help them plan their application development and operations lifecycle in the future. This will likely be a combination of SAP's CloudALM and best of breed SAP and non-SAP tools.

06

The successes from past transformations

Senior leaders and SAP managers report a vast array of business benefits post transformation.

Basis Technologies research reveals the benefits realized by moving to SAP S/4HANA*

Improved compliance (62%)

Simplified business processes (60%)

New functionality offering competitive advantage (49%)

Simplified landscape architecture and operational costs (49%)

Real-time reporting and analytics powering business decisions (49%)

Avoidance of tech obsolescence (38%)

THE BASIS VIEW



The modern enterprise is on a continual journey to achieve three core goals: power innovation, drive growth and eliminate business risk. The improved functionalities delivered by a smooth SAP S/4HANA transformation set businesses on a path towards a more agile way of working; one where they can achieve greater efficiency through automation and eliminate the need for re-work along the way, to truly embrace their transformation with confidence.

The true sign of successful transformation is when the technical outcomes perfectly align with wider business objectives. The two functions do not sit in isolation, so while simplified landscape architecture and real-time reporting clearly benefit the teams on the ground, the entire company will ultimately profit.”



David Lees, CTO
Basis Technologies

*Full audience research will be published in October 2023

07 Supporting your SAP S/4HANA journey at all stages

Not started

Nearing completion

Migrating to SAP S/4HANA will allow companies to finally take advantage of the wealth of opportunities afforded by the latest SAP technology, to keep pace with their competitors and to introduce new best practice approaches to development and delivery.

But changing any foundational part of your technology stack is a massive undertaking. The process of preparing for the move, executing the transition, and running the new SAP environment in tandem with the old one, is fraught with risk and complexity. A manual, spreadsheet-based approach – currently used by 59% of enterprises - is likely to slow an already years-long transition to a crawl, as well as introducing potentially unacceptable levels of business risk.

Automation technology for SAP is key to a smooth SAP S/4HANA transition. Organizations embarking on the move can greatly accelerate and de-risk the journey by introducing automation tools and processes, which will them to run without interruption during development and after go-live.

Basis Technologies can support teams regardless of where they are on the SAP S/4HANA transformation.

Organizations using Basis Technologies' automation in their SAP systems have reported:

50% reduction in the cost of delivering changes

95% reduction in error-prone manual effort

50x faster delivery of new features

70% reduction in production system downtime

08 Unlock your full potential with SAP

In today's rapidly evolving business landscape, change is the only constant. You need to innovate faster, stay agile, and seize opportunities, all while managing risks and overcoming threats.

However, navigating the complex processes of SAP systems can be daunting, leading to inefficiencies and even business downtime, costing considerable time and money. It's time to embrace change with insight and confidence. Change is important. In fact, it's business critical.

We help you take control of change from discovery to delivery.



Further reading

If you'd like to take a deeper dive into the world of SAP S/4HANA transformation, take a look through our blog series below:

www.basistechnologies.com/blog/considerations-when-moving-to-s4hana-part-1/

www.basistechnologies.com/blog/considerations-when-moving-to-s4hana-part-2/

www.basistechnologies.com/blog/considerations-when-moving-to-s4hana-part-3/

www.basistechnologies.com/blog/overcoming-the-top-4-sap-s4hana-migration-challenges-with-automation/



About Basis Technologies

Basis Technologies is trusted by the world's best-performing organizations to unlock their full potential with SAP. Our industry-leading solutions help businesses drive transformation with confidence, achieving the freedom to outpace competitors while safeguarding critical systems that maintain business continuity.

We help the likes of P&G, Honda, Boeing, and Booking.com lead the way by bringing actionable insights and automation to SAP change.

Find out how Basis Technologies can help you, wherever you are on your SAP S/4HANA transformation journey.

Talk to an expert consultant

LONDON

Spencer House
23 Sheen Road
Richmond TW9 1BN
UK
+44 20 7958 9025

DALLAS

16301 Quorum Dr #100B
Addison, TX 75001
USA
+1 888-623-0220

AUSTRALIA

161 Castlereagh Street
Sydney NSW 2000
Australia
+61 412 986 091

HUNGARY

1065 Budapest
Révay u. 10
Hungary
+36 30 5087891

GERMANY

Potsdamer Platz 10
Haus 2
10785 Berlin
Deutschland
+49 30 300 11 4606

www.basistechnologies.com