Approaching S/4HANA

The business back in the lead

We've identified six key success factors for S/4HANA transformations

PwC and Strategy& have been involved in the planning and execution of multiple S/4HANA transformation programmes. This paper is about the learnings we have derived from these projects. It provides recommendations for companies that are planning such a transformation and looking for industry best practices.

01

'One size fits all' doesn't apply – approach must be tailored to industry-specific business needs, which demands business engagement and leadership

02

Business-led transformations enable companies to drive from their strategic 'way to play', or differentiating way of approaching the market

03

IT architecture should reflect a company's way to play in the balance between 'Core' and 'Edge' functionality

04

Migration strategy decisions – 'Brownfield' vs 'Greenfield' – should reflect both the readiness to invest and innovate within the company and the willingness or need to safeguard past investment and develop competitive advantages

05

S/4HANA transformation is increasingly seen as much more than a technical conversion; the true value of transformation comes from the opportunities to enable advanced, digital business models

06

An SAP S/4HANA roadmap should be supported by best practice models, proven methodology and agreed design principles based on strategic 'ways to play'

Business and IT transformation should not be 'one size fits all'

The competitive landscape for companies around the world is changing rapidly, especially in industries such as industrial manufacturing where constant innovation drives the business. These changes demand a new strategic approach – one that enables companies to understand market trends and build the internal capabilities needed to execute.

This means organisations have to decide on a coherent positioning or 'way to play' which captures the product portfolio and underlying capabilities that differentiate them from their competitors.

An effective way to play defines how a company will face the market and create value for customers. In general, we identify three types:

- Commercial Value Optimiser: creates value by generating commercial and operational efficiencies leading to global cost advantages
- Disciplined Portfolio Manager: creates value through commercial and financial discipline and by leveraging capabilities across a broad portfolio of products in multiple global markets
- Science Developer & Innovator: creates value by focusing on new technologies and platforms that produce clearly differentiated products.

The way to play significantly influences the capabilities that help a company execute its chosen strategy, and the underlying elements of these capabilities, such as technology and business processes.

Over the last few decades, companies have relied on IT to provide IT architectures that fit their specific needs and business strategies. Following a period of business reengineering where businesses looked to optimise and harmonise processes built on SAP R/3, over the years SAP-related activities have been increasingly driven by IT, with less interaction and engagement of the business; as a result, current IT architectures often lack the flexibility to meet the needs of the latest digital business models and modern ways to play adopted by companies.

At the same time, new technologies such as advanced analytical, cloud and digital capabilities have been introduced in the market. They are able to create valuable opportunities for businesses to grow, increase profits and excel in operations and administration. In addition, they provide an opportunity to transform the current 'one-size-fits-all' ERP into platforms of innovation and automation.

To ensure that business benefits are realised and the future IT architecture is tailored to business needs, the transformation towards the future platform (such as SAP S/4HANA) needs to be led by the business.

PwC and Strategy&'s SAP transformation approach puts the business at its centre and advocates a transition towards a modular and agile architecture, comprised of a lean and standardised core at the heart of differentiated and best of breed solutions.
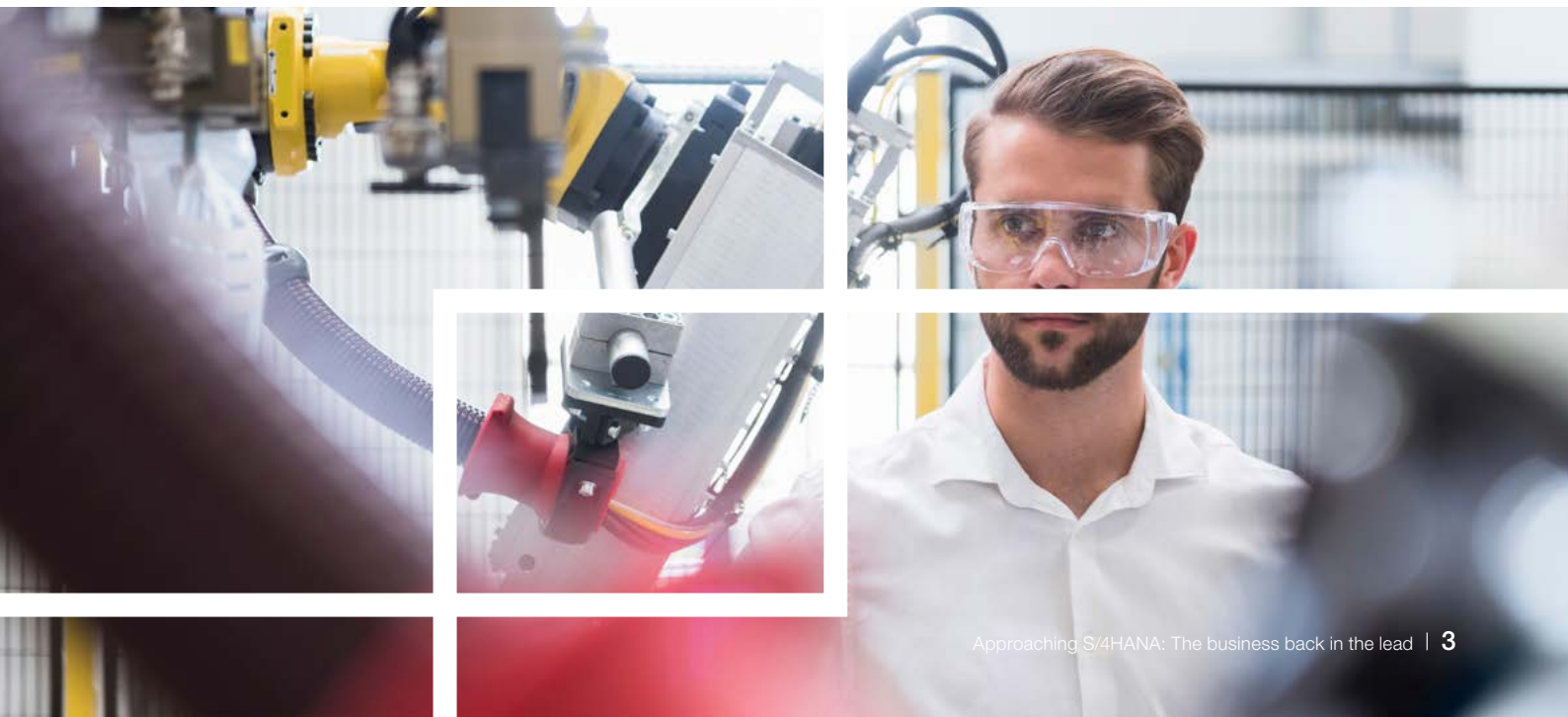
The chosen way to play sets the agenda of business-led SAP transformation projects

Develop best-practice IT architectures

Best-practice IT architectures have developed over the years according to different industry needs:

- Consumer products and life sciences have implemented highly centralised and standardised architectures to achieve revenue and cost synergy on a global scale.
- Industrial manufacturing has favoured decentralised, independently run ERP implementations to differentiate by product need.
- Automotive OEMs have centralised cross functions but have specialised in manufacturing according to site and competitive needs, aiming at cost-cutting to deliver competitive advantage.

Despite these different specific approaches, differentiation has been encouraged across all industries in terms of what is termed the 'Edge' of their ERP architecture, by creating customized or adopting best of breed plug & play solutions for differentiating processes. Such differentiation is designed to be tightly integrated with a set of essential 'Core' corporate capabilities where business standardisation and operating efficiency are key and where common practices have been established within the industry. When it comes to differentiating capabilities, which provide essential competitive advantage and require flexibility and speed, companies can achieve industry leadership only by means of superior, proprietary best practices.

Changes to the past: transformation to S/4

Prior to S/4HANA, after a period of business reengineering, SAP activities often focused on consolidation and optimisation, implementing monolithic 'one-size-fits-all' ERP core systems to cut costs and leverage global synergies.

In the rapidly changing, highly competitive environment of today's business, each company's chosen 'way to play' should guide the way forward in terms of how to build the future IT architecture. Commercial Value Optimizers will still want to run a large ERP core and a relatively small, differentiating edge to continue leveraging global cost advantages. On the other hand, Science Developer & Innovators will look to transform their IT architecture towards a small, lean ERP core system and a large, innovative edge. Lastly, Disciplined Portfolio Managers, with their clear focus on creating efficiencies across products and markets, may increase their portion of edge during a transition but will typically still run a relatively large S/4HANA core system.

Agile transformation approach

When involved, the business usually wants to see quick results. Traditional 'waterfall' approaches taking years of design and development before business value can be expected to be achieved do not meet these expectations. To realise business benefits quickly, projects need to leverage best practice business models (e.g. SAP Model Company) and lean, use-case-oriented agile methodologies such as PwC SAP Activate. In this five-phase framework, a company starts by first selecting best practices, rapid deployment solutions and other prebuilt solutions (the 'Prepare' phase). Next, fit/gap analyses are conducted to create the agile backlog for developing the template ('Explore'). In the remaining ('Realise', 'Deploy' and 'Run'), the iterative build of capabilities, prototyping and frequent validation of the results with business users will ease adoption and release solutions to business faster.

Reflecting the 'way to play' in the future IT architecture

Today's cross-industry best practice IT architectures focus on a transformation of the monolithic ERP core towards a lean ERP core and an extensive, differentiating edge, supported by a flexible data integration layer. The 'way to play' determines the ratio of core to edge.
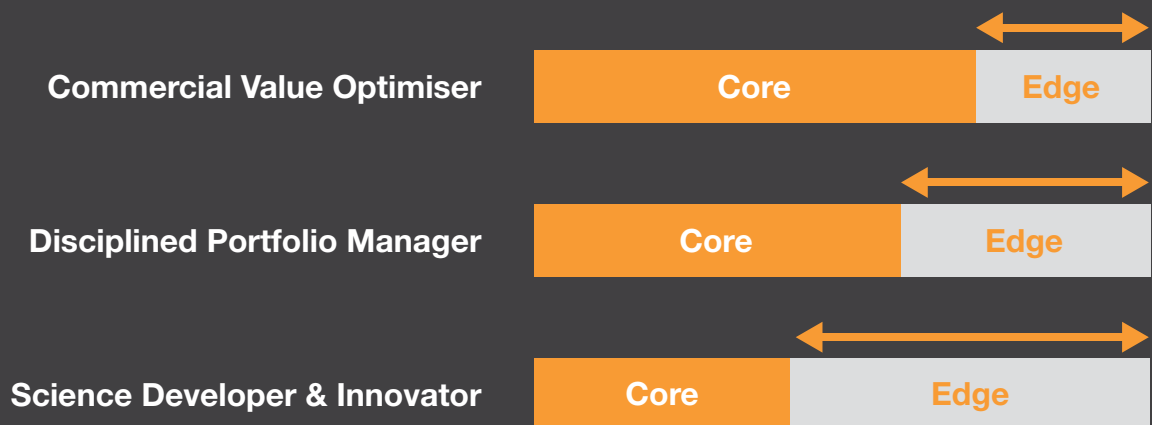
Differentiated & 'best of breed' solutions
Cloud based plug & play solutions and customised solutions highly adjusted to business requirements levering cloud technologies

Lean core
Lean S/4HANA Enterprise Core with focus on speed and efficiency running one or more instances

Data integration layer
Data integration layer linking data across all layers

Commercial Value Optimiser	Core	Edge

Disciplined Portfolio Manager	Core	Edge

Science Developer & Innovator	Core	Edge
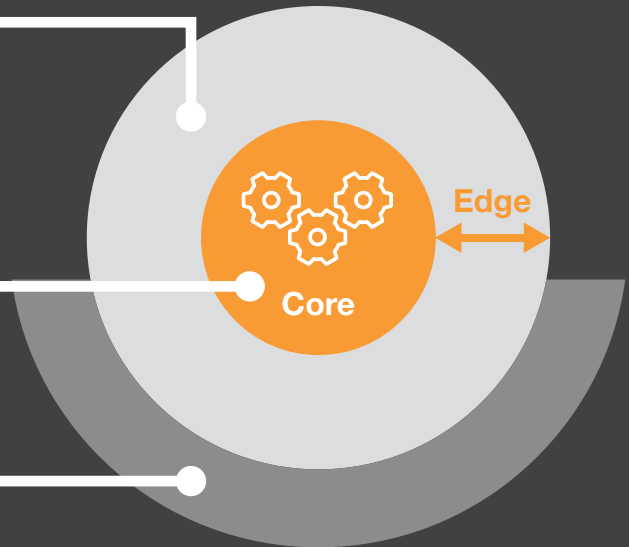
Selecting the right migration strategy to fit the company

At the start of the journey to transform the SAP landscape towards S/4HANA, it's critical to select the appropriate migration approach.

Greenfield vs brownfield

SAP customers undergoing major disruption and change often take the opportunity to redesign business models and enabling platforms ('Greenfield' approach). As a starting point, companies typically take industry best practice standards, including SAP Model Company templates where available. This approach is also a good fit for SAP customers not running SAP on a broad scale so far. The key advantage of a greenfield migration is that the transformation starts with a new system and therefore provides the flexibility to drive topics such standardisation and simplification in addition to the migration itself.

Alternatively, SAP customers in successful and stable operational models typically safeguard their past investments and perceived competitive advantages using a 'Brownfield' approach.

The main advantage of brownfield is generally a shorter project runtime, and thus less disruption of business activities, as companies stay closer to their current way of working.
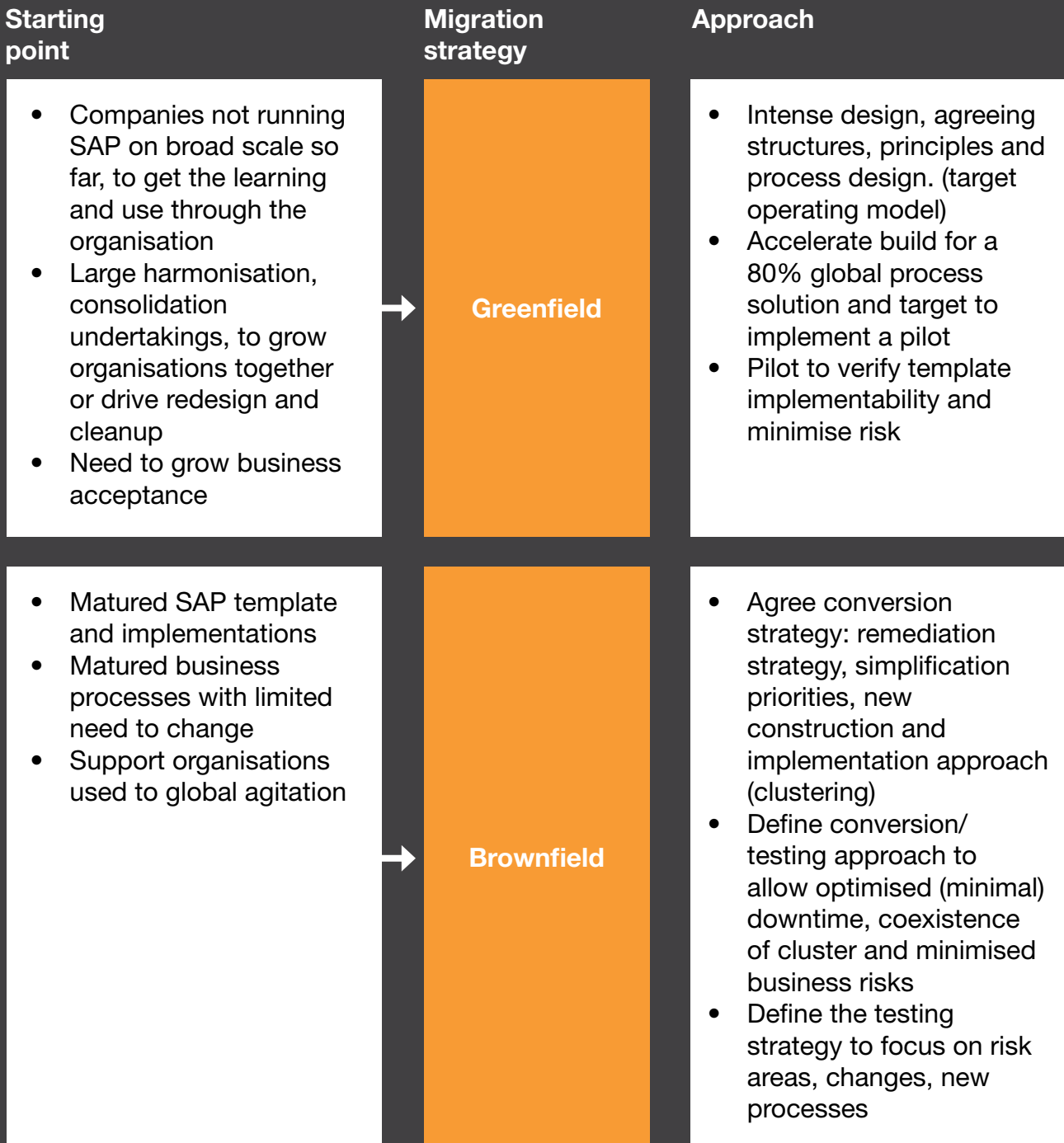
According to the PwC research 'The Journey to SAP S/4HANA', only 27 percent of those who've gone live have chosen a more traditional brownfield upgrade path. While it might seem intuitive that existing SAP users would choose to upgrade their existing solutions, in reality, a majority are instead choosing greenfield implementations, wherein the old system solutions, data models, and overly complex processes is retired and completely replaced with the new ones. As migration tools and approaches become robust, we anticipate hybrid approaches will be explored more and more by companies looking to transform while maintaining differentiated capabilities.

The envisioned target state and associated migration strategy should reflect both the readiness to invest and innovate within the company and the willingness or need to safeguard past investment and develop competitive advantages. By doing so, companies are able to execute according to their strategic ways to play in the market.

Migration strategy evaluation

The transition of existing SAP solutions using the opportunity to review processes will result in (partially) new implementation of S/4HANA

Starting point	Migration strategy	Approach
• Companies not running SAP on broad scale so far, to get the learning and use through the organisation • Large harmonisation, consolidation undertakings, to grow organisations together or drive redesign and cleanup • Need to grow business acceptance	**Greenfield**	• Intense design, agreeing structures, principles and process design. (target operating model) • Accelerate build for a 80% global process solution and target to implement a pilot • Pilot to verify template implementability and minimise risk
• Matured SAP template and implementations • Matured business processes with limited need to change • Support organisations used to global agitation	**Brownfield**	• Agree conversion strategy: remediation strategy, simplification priorities, new construction and implementation approach (clustering) • Define conversion/ testing approach to allow optimised (minimal) downtime, coexistence of cluster and minimised business risks • Define the testing strategy to focus on risk areas, changes, new processes

Greenfield clearly involves greater effort and a high impact on business, but offers opportunities to redesign and clean up; brownfield helps safeguard past investments and perceived competitive advantages.

The true value of transformation lies in the opportunities for digitalisation

Business case

The business case for an S/4HANA transformation isn't just about comparing the benefits and costs of the transformation project from the standpoint of a technical conversion. Rather, it must reflect the business opportunities provided by new technologies, including the enablement of digital business models, business process innovation and closer interaction and integration with external partners, customers and suppliers. Only when these opportunities are considered can the real potential of the S/4 transformation be made visible.

Costs versus benefits

Transforming the business always involves large investments in resources and new IT, and thus also enables a variety of fundamental benefits to be achieved. As well as realising cost reductions in all areas of the business thanks to process improvement and asset effectiveness, an optimised IT landscape will also lead to reduced costs for operation and maintenance compared with legacy systems.

Furthermore, while transforming their architecture, companies are also able to grow their market share, increase the level of automation and make decisions more effectively. If planned wisely, S/4HANA transformations help the business realise a variety of improvements, raising the company to a completely new level of excellence.

Outdated critical systems are replaced with standard software, best practices and leading-edge technology, resulting in a simplified IT landscape. Product costs are calculated more easily, and profitability analyses are created at the touch of a button. Managers can use detailed real-time analytics and a new financial 'universal journal' to know exactly what is happening in their company – whenever and wherever they want. All this is underpinned by the consistency and integrity of the key data provided by the new system as the business's backbone.

These improvements will deliver significant business value across all domains of the company. In finance, efficiency in controlling, accounting and planning is increased and data consistency improved. Thanks to improved data availability, the sales department can make advanced pricing decisions and get better understanding of customer needs.

Consistent data enables production processes to be better understood and weak points more readily optimised, leading to higher cost transparency and lower product costs.

Beyond being a critical technical upgrade, the S/4HANA transformation represents the foundation stone for the digital future, enabling companies to adopt advanced new technologies and become the digital leader in their competitive environment.
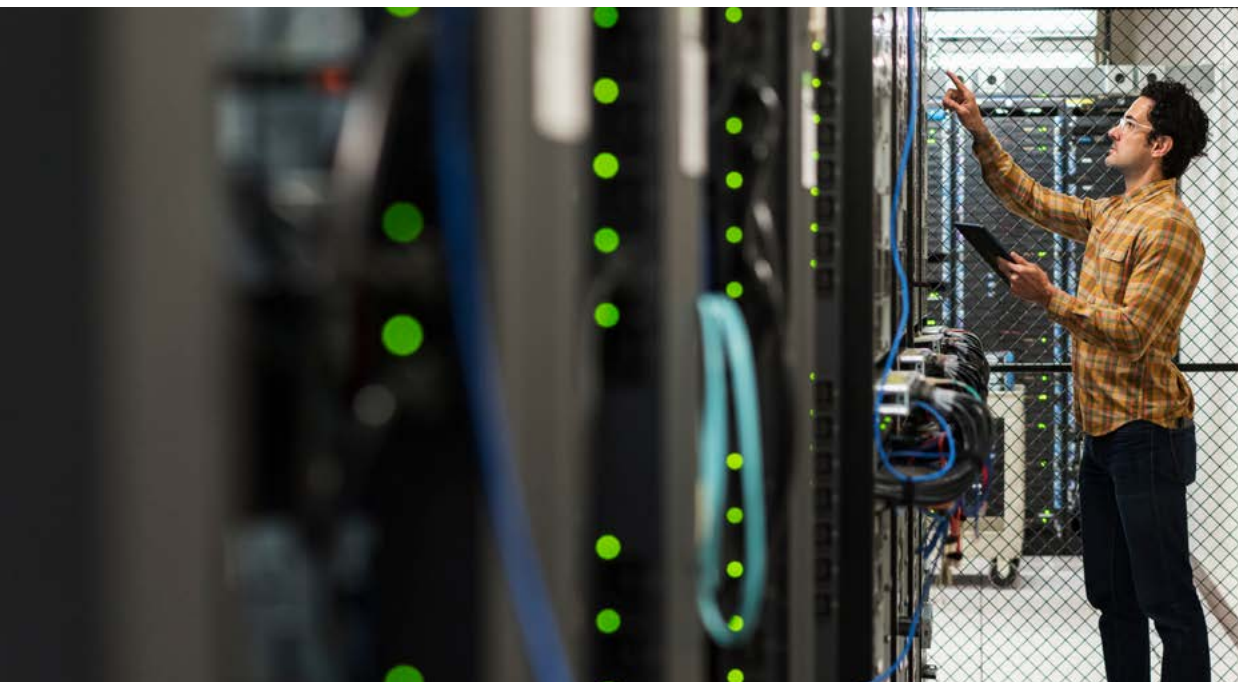
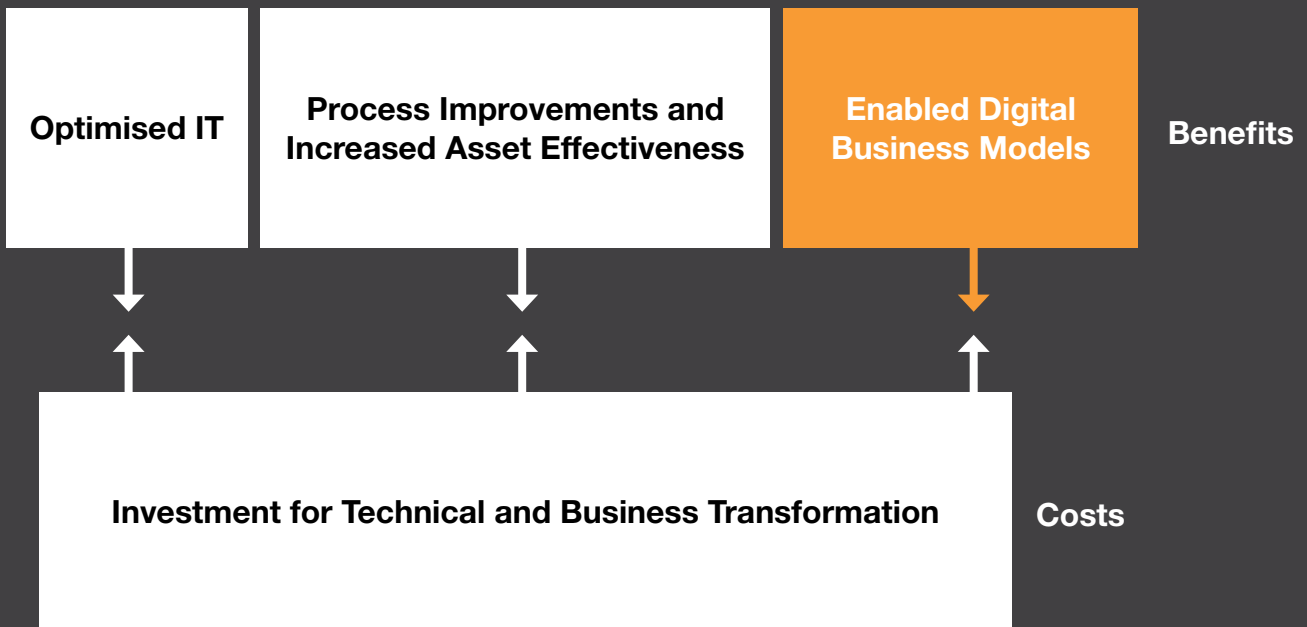**Reduced IT costs** through optimisation:
- Legacy system decommissioning
- Simplified and reduced customisation
- Reduced Maintenance and support costs

Reduced operational costs resulting from process improvements and asset effectiveness:
- Finance: closing, reporting, integration
- Procurement: transparency, operations
- Production: efficiency, product costs
- Supply Chain: plan accuracy, stock/assets

Extended benefits from enabled digital business models:
- **Growth of market share and profit** with new advanced customer offerings
- **reduced administrative costs** based on real time information decision making
- **Reduced operational costs** through increased automation

| Optimised IT | Process Improvements and Increased Asset Effectiveness | Enabled Digital Business Models | Benefits |

Investment for Technical and Business Transformation — Costs

Internal resource costs for:
- Global and local process owners
- Project Team Members
- Key users and users
- Subject Matter Experts
- IT Experts

External resource costs for:
- SAP experts
- Consulting and QA
- Project Management Expertise

Hardware/Software
- License costs
- Database costs
- Infrastructure costs
- Other IT costs

Our approach puts the business at the centre of the transformation

Involving the business in the Prepare phase to ensure engagement and motivation

To engage the business and make sure the solution meets business needs, business representatives must be involved right from the beginning in the Prepare phase, prior to any design activity.
The first step has to be for the joint team to clarify the future business model as the baseline for the strategic business blueprint, and establish the mode of collaboration within the team. Setting up regular alignment interviews with business counterparts early on, in addition to the joint workshops, fosters a high level of motivation and engagement. To map business needs to target solutions, ownership of business capabilities and processes must be clear and agreed. Furthermore, use cases and showcases, which help demonstrate the business value from an early stage, have to be prioritised jointly by business and IT. Finally, all involved parties should agree on a set of common design principles to guide the design of the target solution.

Creating design principles

During the Prepare phase, the programme will agree on design principles and the direction taken by the solution.

Leveraging best practice models as a starting point, design principles usually cover aspects such as the master data concept, the relation of core to edge, the target modularity of the solution, governance of the core, the balance of standard solutions and customisation, and the differentiation factors. Later on the design principles will facilitate the choice of business process on which change will focus.

They also serve as a guide classifying business processes into four categories:

- Must dos: technical and business activities which are prerequisites for transformation
- Clean-up: getting rid of unused data, settings and programs
- Back-to-standard: bringing the platform back to standard SAP, where possible
- Innovation: areas identified by business needs, process adaptations and new technologies and agreed via a common process

### The scope of business change determines the S/4 implementation approach

As part of the Prepare phase, the appropriate transformation approach (greenfield vs brownfield vs mixed approach) is evaluated, using the opportunity to review processes and existing SAP solutions. Depending on the state of the current SAP landscape and the changes foreseen, a system conversion approach or a new implementation of S/4HANA will be selected. If a conversion is chosen, discussions around the focus areas will drive the way the required changes are classified as 'must-dos', 'clean-up', 'back-to-standard' or 'innovation'.

Draw up a roadmap

A transformation roadmap will eventually reflect all relevant topics and put them into a realistic and actionable timeline. With the business fully engaged and at the centre of the transformation, the programme can confidently engage in the design and innovation of the solution during the Explore, Realize and Deploy phases to ensure that the company executes according to its strategic way to play.

SAP S/4HANA transformation roadmap with core conversion

As the illustrative example below shows, besides the technical conversion an S/4HANA roadmap needs to include considerations of how to transform critical business aspects such as master data, CRM and planning.

Year 1	Year 2	Year 3	Year 4
Prepare	Explore	Realise	Deploy

Innovation

Design

Transformation

MDG

CRM

Planning

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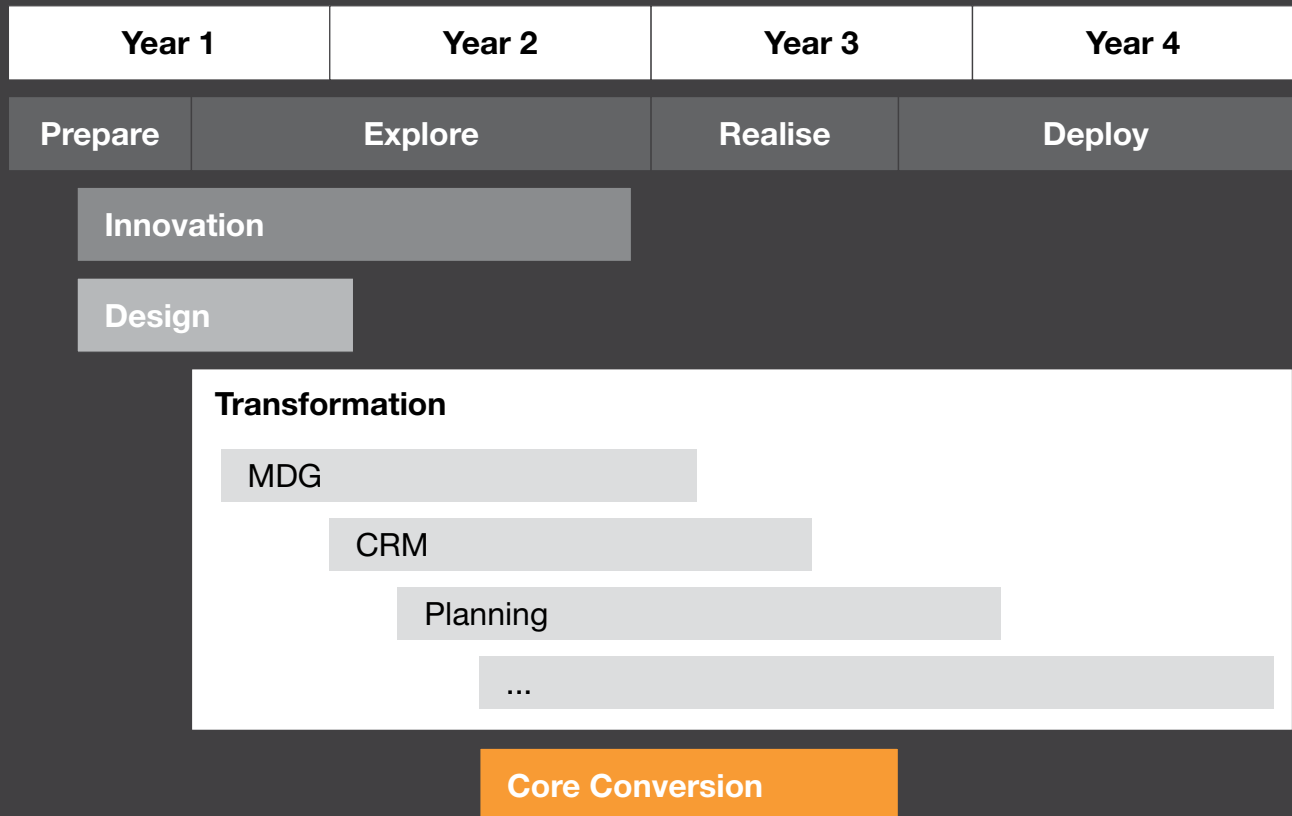
Core Conversion

- **Innovation** incorporates deep dive workshops, e.g. design thinking and use cases, as well as rapid prototyping
- **Design** is primarily focused on priority topics for the core conversion, e.g. enterprise structures
- Multiple **transformation** workstreams are staggered throughout the implementation
- **Conversion** of core functions is supported by tools and specific methodology mitigating risks, enabling business continuity and reducing downtime

Contacts

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