



# Transforming Life Sciences with SAP S/4HANA

Key Considerations for a Seamless Implementation

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# Navigating Disruption in the Life Sciences Sector

The life sciences sector is experiencing transformative changes driven by several disruptive trends. These shifts are compelling organizations to adapt and innovate to stay competitive and efficient. Key trends include:

## Cell and Gene Therapy and New Modalities:

The advent of cell and gene therapies, along with other innovative treatment modalities, is revolutionizing healthcare. These therapies require new capabilities in research, development, and manufacturing, demanding robust systems to manage complex processes and ensure compliance with stringent regulatory standards. Companies must invest in advanced technologies and infrastructure to support these new modalities, which can significantly impact their operational strategies and resource allocation. Advancements in artificial intelligence are accelerating research in precision medicine, enabling personalized treatment based on the unique characteristics of each patient.

## Low Margins and Patent End of Life Events:

The industry faces significant cost pressures due to low margins and the expiration of patents for blockbuster drugs. As patents expire, generic competition increases, leading to reduced revenue and margins for original manufacturers. Companies must optimize operations and reduce costs to maintain profitability. This necessitates a focus on efficiency, cost management, and strategic planning to navigate these financial challenges and sustain growth.

## Supply Chain Disruption:

Global supply chain disruptions, exacerbated by events like the COVID-19 pandemic, have highlighted the need for resilient and agile supply chain management. Companies must develop strategies to anticipate and respond to supply chain challenges, ensuring continuity and minimizing risks. This includes diversifying suppliers, enhancing logistics capabilities, and leveraging real-time data to make informed decisions.

## Socio-political Factors:

The life sciences sector is also influenced by socio-political factors, including regulatory changes, trade policies, and geopolitical tensions. These factors can impact market access, pricing, and operational stability. Organizations must stay abreast of regulatory developments, swiftly adapt to changing policies, and implement robust compliance frameworks to navigate these dynamic conditions and maintain market presence.

In response to these trends, life sciences companies must embrace innovation and strategic planning to thrive in a rapidly evolving landscape. SAP's enterprise system is not just a strategic choice but a necessity for life sciences companies aiming to thrive in a rapidly evolving landscape. SAP provides the technological foundation to manage complexity, drive innovation, and achieve sustainable growth.



# The imperative for change in Life Sciences

Life Sciences companies operate in a highly regulated and dynamic environment. The sector faces unique opportunities and challenges, including breakthrough innovation in R&D, stringent regulatory compliance, complex supply chains, and the need for real-time data analysis and AI. Data and customizations accumulated over the years create risks for building new innovations on top. The imperative for change is clear: Life Sciences companies must adopt a more agile and integrated approach to manage their operations effectively.

## Key challenges:



### Regulatory compliance

Navigating a complex web of global regulations is a significant challenge. Noncompliance can result in severe penalties and damage to reputation.



### Complex supply chains

Managing global supply chains with multiple stakeholders and regions adds layers of complexity. Efficient supply chain management is crucial for timely product delivery.



### Real time data analysis

The ability to analyze data in real time is essential for making informed decisions, optimizing operations, and improving patient outcomes.



## Opportunities with SAP S/4HANA:

SAP S/4HANA addresses these challenges by providing a unified platform that enhances operational efficiency, compliance, and data-driven decision-making. With SAP S/4HANA, Life Sciences companies can:



### Streamline operations

Integrate and automate processes across the organization, reducing manual effort and errors and providing wide-ranging integrated operations.



### Enhance compliance

Implement robust compliance frameworks and real-time monitoring to help ensure adherence to regulations.



### Improve analytics

Leverage advanced analytics and real-time data insights to drive better decision-making and innovation.



### Introduce AI

SAP S/4HANA introduces business AI across the enterprise, which is embedded within the process steps and unlocks new business values. Using SAP's GenAI agent "Joule," Life Sciences companies can interact with the data more intelligently to drive business decisions.

The imperative for change in the Life Sciences sector is undeniable. By adopting SAP S/4HANA, companies can overcome their unique challenges and position themselves for sustainable growth and innovation. The platform's capabilities in streamlining operations, enhancing compliance, and improving data analytics make it an essential tool for Life Sciences companies aiming to thrive in a competitive landscape.

# Client success stories

Real-world examples of successful SAP S/4HANA implementations provide valuable insights into the transformative potential of the platform. This section highlights the experiences of leading Life Sciences companies that have leveraged SAP S/4HANA to achieve significant operational improvements and strategic advantages.

## Success stories:

### Fortune 500 pharma corp

This company faced challenges with dispersed global operations and a highly customized legacy IT landscape. By implementing SAP S/4HANA, they achieved scalable enterprise resource planning (ERP) solutions, enhanced reporting, and streamlined global operations. The transformation enabled them to support aggressive growth and improve compliance across 30 countries.

### Fortune 1000 biotech solutions company

This company's transformation journey involved integrating diverse business processes and improving global compliance. SAP S/4HANA helped them streamline operations, enhance data analytics, and achieve sustainable reporting practices.

### Fortune 500 pharmaceutical innovators

This company leveraged SAP S/4HANA to address complex supply chain and manufacturing processes. The implementation resulted in improved efficiency, better inventory management, and enhanced decision-making capabilities.

### Fortune 1000 healthcare group

This company's migration to SAP S/4HANA focused on optimizing financial reporting and operational insights. The new platform enabled them to achieve real-time data analysis, streamline tax processes, and enhance compliance with global regulations.

These success stories demonstrate the transformative impact of SAP S/4HANA on Life Sciences companies. These organizations have realized significant benefits, including streamlined operations, enhanced reporting capabilities, and improved decision-making processes. Their experiences underscore the value of SAP S/4HANA as a strategic enabler for digital transformation in the Life Sciences sector.






# Strategic paths from migration to implementation

Choosing the right implementation path is crucial for a successful SAP S/4HANA transformation. The three primary paths—Greenfield, Brownfield, and Bluefield—each offer distinct advantages and considerations. This section provides a detailed comparison of these approaches, helping Life Sciences companies select the most appropriate path based on their specific needs and goals.

## Principal options:

Greenfield 	Brownfield 	Bluefield 
This approach involves a complete reimplementation of the ERP system. It is ideal for organizations seeking a fresh start, allowing them to redesign processes and adopt leading practices. However, it requires significant time and resources.	The Brownfield approach focuses on technical conversion, retaining existing processes and customizations. It is suitable for organizations looking to minimize disruption and leverage their current investments. This approach is faster and less costly than Greenfield but may not fully capitalize on SAP S/4HANA's capabilities.	Bluefield combines elements of both Greenfield and Brownfield, allowing selective data migration and process redesign. It offers a balanced approach, enabling organizations to retain valuable customizations while adopting new features and leading practices.

## Considerations:

Time 	Cost 	Business disruption 
The duration of the migration project varies depending on the chosen path. Greenfield projects typically take longer due to the extensive redesign involved.	Costs also vary, with Greenfield being the most expensive due to the comprehensive nature of the reimplementation.	Minimizing disruption to business operations is critical. Brownfield and Bluefield approaches generally result in less disruption compared to Greenfield.

Selecting the right path is a critical decision that impacts the success of an SAP S/4HANA implementation. Life Sciences companies must carefully evaluate their specific needs, resources, and goals to choose the most suitable approach. Whether opting for Greenfield, Brownfield, or Bluefield, the key is to ensure a strategic alignment with the organization's long-term vision and objectives.



# Planning, consolidations, and analytics in the future

The role of planning, consolidations, and analytics is evolving within the SAP S/4HANA ecosystem. Life Sciences companies can leverage these capabilities to help enhance financial reporting, operational insights, and strategic planning. This section explores how SAP S/4HANA's advanced tools can drive better business outcomes in these critical areas.

## Key areas:



### Financial planning and analysis

SAP S/4HANA provides advanced tools for financial planning, budgeting, and forecasting. These tools enable Life Sciences companies to align financial plans with strategic goals, improve accuracy, and enhance decision-making.



### Consolidations

The SAP S/4HANA Group Reporting platform supports seamless financial consolidations, allowing organizations to integrate data from multiple sources and generate comprehensive financial statements. This capability is crucial for global Life Sciences companies with complex organizational structures.



### Advanced analytics

SAP S/4HANA's analytics capabilities enable real-time data analysis, predictive modeling, and scenario planning. With the use of SAP's AI agent Joule, Life Sciences companies can derive insights more easily to optimize operations, identify trends, and drive innovation.

The future of planning, consolidations, and analytics in the Life Sciences sector is bright with SAP S/4HANA. By leveraging the platform's advanced capabilities, companies can achieve greater financial accuracy, streamline consolidations, and harness the power of data analytics to drive strategic decisions. SAP S/4HANA empowers Life Sciences organizations to stay ahead of the curve and continuously improve their operations.





# Enhancing security and compliance

Robust security measures and regulatory compliance are paramount in the Life Sciences sector. With the increasing complexity of global regulations and the growing threat of cyberattacks, Life Sciences companies must prioritize security and compliance. SAP S/4HANA provides advanced security features and controls to protect sensitive data and help ensure compliance with global regulations.

## Strategies:



### Implementing robust security measures

SAP S/4HANA offers comprehensive security features, including data encryption, access controls, and threat detection. These measures help protect sensitive information and prevent unauthorized access.



### Ensuring regulatory compliance

The platform supports compliance with various global regulations, such as GDPR, FDA, and EMA. Real-time monitoring and reporting capabilities enable organizations to stay compliant and avoid penalties.



### Leveraging SAP S/4HANA's security features

Life Sciences companies can take advantage of SAP S/4HANA's built-in security features to enhance their overall security posture. This includes automated compliance checks, audit trails, and secure data storage.

Enhancing security and compliance is a critical priority for Life Sciences companies. SAP S/4HANA provides the necessary tools and features to help safeguard sensitive data and ensure adherence to global regulations. By leveraging these capabilities, Life Sciences organizations can mitigate risks, protect their reputation, and maintain the trust of stakeholders.



# Addressing tax considerations

Tax processes in Life Sciences companies are complex and require careful management. With operations spanning multiple jurisdictions, Life Sciences companies face significant challenges in tax calculations, reporting, and compliance. SAP S/4HANA can streamline these processes, reducing the risk of errors and helping ensure timely submissions.



## Streamlined tax calculations

SAP S/4HANA automates tax calculations, reducing manual effort and minimizing errors. This is particularly important for Life Sciences companies operating in multiple jurisdictions with varying tax regulations.



## Enhanced reporting

The platform provides comprehensive tax reporting capabilities, enabling organizations to generate accurate and timely tax reports. This helps ensure compliance with local and international tax laws.



## Compliance across jurisdictions

SAP S/4HANA supports compliance with global tax regulations, including VAT, GST, and transfer pricing.



## Efficient transaction processing

SAP S/4HANA capabilities such as Advanced Intercompany Sales allow for seamless transactions across multiple legal entities supporting tax optimized supply chains and financial reporting requirements.



# Critical success factors for SAP S/4HANA implementation

Successful SAP S/4HANA implementation depends on several critical factors, including executive sponsorship, change management, and user training. Leading practices for planning and executing a seamless migration are essential.

## Success factors:



### Executive Sponsorship

Strong executive sponsorship is essential for major transformation initiatives.

- Provides leadership and commitment.
- Allocates necessary resources.
- Ensures alignment with strategic goals.
- Overcomes resistance to change.
- Fosters a culture of collaboration.
- Ensures project receives attention and support at all organizational levels.
- Maintains momentum and focus throughout the project lifecycle



### Global Process Ownership

By designating global process owners, companies ensure processes are standardized, optimized, and aligned with best practices. These owners act as ultimate process stewards and change agents, overseeing implementation and continuous improvement to meet the organization's strategic objectives. Global process ownership helps eliminate silos, reduce duplication of efforts, and promote a unified approach to managing business operations, ultimately leading to better performance and outcomes.



### Streamlining and Optimizing the CSV/GxP Footprint and Impact on the Program

Streamlining and optimizing the CSV (Computer System Validation) and GxP (Good Practice) footprint enables compliance and efficiency. These frameworks require rigorous validation and documentation to ensure product quality and patient safety. Optimization reduces complexity and costs, improves operational efficiency, and enhances the transformation program. This involves leveraging automation, standardizing validation processes, and implementing best practices.



### Process and Solution Governance

Effective process and solution governance is vital for managing large-scale transformation projects. Governance frameworks ensure:

- Correct implementation of processes and solutions.
- Compliance with regulatory requirements.
- Alignment with business goals.
- Clear roles and responsibilities.
- Performance metrics.
- Prompt issue identification and resolution.
- Risk mitigation.
- Enhanced accountability.
- Delivery of intended benefits.



### Management of Interim Deployment States

During the transition from legacy systems to new solutions, organizations often operate both old and new systems simultaneously. For global transformation projects spanning multiple years and phases, effective interim processes are crucial to execute end-to-end supply chain operations worldwide, integrating both old and new SAP systems. This requires careful planning, coordination, and communication to minimize disruption and ensure continuity. Key strategies include:

- Data migration
- User training
- Addressing technical or operational challenges.
- Proper management of these interim states helps to smooth the transition and reduce operational risks.

# Finding the value post SAP S/4HANA implementation

Large transformation initiatives involve substantial investments. Organizations often explore various functional domains—such as logistics, finance, procurement, tax, automation, and AI to identify the value that justifies these investments. Furthermore, they often anticipate resolving their current challenges through new functionalities in S/4 HANA. It is imperative to develop business cases that outline these potential value areas, allowing for precise and insightful guidance throughout the transformation journey.

Most life sciences companies who are on legacy ECC will benefit with additional value from S/4HANA's new capabilities.

## Key areas of value generation:



Back-office savings (finance and procurement) through process standardizations and SAP's AI capabilities



Enhanced traceability and reduced error risk with automatic track and trace for medical device serial numbers



Customer service efficiencies with SAP's AI and Joule



Improved production control and agile production using SAP's Digital Manufacturing Cloud



Supply chain operational savings, including 3PL automation



Integrated sales and operation planning using SAP's IBP (Integrated Business Planning)



Additional savings using SAP's Transportation Management module



Advanced planning and budgeting using SAC-Planning



Automated vendor invoice processing with workflow and controls



Financial consolidation using SAP Group Reporting



Improved supplier collaboration to reduce direct spend



Improved Intercompany processes including automated Match and Reconciliation



Enhanced compliance and improved efficiency through electronic batch recordings, release, and traceability



## Case study:

A global Life Sciences leader with a mission to discover and deliver innovative medicines and solutions that address complex health issues appointed KPMG to establish a foundation to transform and drive growth.

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### Client challenge

The client was facing challenges with integrating two complex organizations:

- **Disparate systems and processes** across regions and lines of business (LOBs)
  - No consistency in policies and procedures
  - **Over 250 global/local applications** with many “systems of record” for master data
  - **No ownership** of global processes, distributed “decision rights”
  - Significant **manual processes** and lack of data governance
- 

### Client journey and outcomes

KPMG helped the client in the following areas:

- Implemented a transformed service delivery model leveraging a mix of Finance Shared Services, Business Process Outsourcing of transaction-heavy processes’ and establishment of key centers of excellence
- Helped to create Global Process Leads (GPLs) along with a global process template of more than 200 wide-ranging processes with an associated Risk and Controls Matrix (RCM)
- Established effective “Process and Systems Governance board” representing different LOBs and workstreams to enable accelerated decision-making
- Evaluated Brownfield versus Greenfield options to implement S/4HANA
- Executed a detailed Phase 0 assessment, including fit/gap and detailed program planning
- Completed a detailed Total Cost of Ownership (TCO) comparing Cloud versus On-Prem and AWS versus Azure hosting
- Led a multiyear global S/4 implementation program across more than 50 countries
- Implemented **Master Data Governance** processes for Finance and Operational master data.

The transformation journey established an operating model to set the foundation to drive inorganic growth and digital enablement. The transformation included more than 200 processes and 300 applications across more than 150 countries.



## About KPMG

KPMG has extensive experience in guiding Life Sciences companies through their SAP S/4HANA journeys. Our team of SAP-trained professionals leverages leading practices and industry knowledge to help ensure successful implementations. We are committed to helping Life Sciences companies achieve their strategic goals and drive long-term success.

**For more information, please contact our team of SAP professionals and visit our website.**



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