

The Transformation to SAP S/4HANA

How service providers can help you on your transformation journey

Illustrated by the example of Eviden

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Overview: The "perfect storm" for enterprise IT

Expectations of corporate IT departments have increased significantly in complexity in recent years. Not least, the COVID pandemic has also contributed to this development, particularly because of the required acceleration of pending transformation projects. In this paper, we discuss a key area of these challenges: the transformation to SAP S/4HANA for those companies that rely heavily on the enterprise-wide use of applications by the Walldorf-based provider. The time frame for this transformation has been set based on SAP's decision to continue standard maintenance for the predecessor products until the end of 2027, in response to the demands of clients who consider the initially planned migration by 2025 to be unrealistic in view of the rather slow transformation progress made to date.

Obviously, this transformation must be viewed within the context of the overall challenges faced by enterprise IT. In many discussions with client companies as well as providers, ISG has observed that, often, the expected complexity of the upcoming transformation leads to notable uncertainty regarding the best possible transformation path, especially in large enterprises. In addition, SAP's high pace of innovation around the S/4HANA suite means that the planning and migration conditions are constantly changing; as a result, preparatory strategy identification and program planning projects are being extended in many companies to account for these uncertainties appropriately.

Within this context, CIOs are typically facing the following questions:

- What does the application design based on SAP S/4HANA look like?
- What is the appropriate infrastructure (cloud vs. on premise) and, in case of a cloud infrastructure, should the Public Cloud Edition (SaaS) or the Private Cloud Edition (PaaS) be used?
- What licensing and transformation model should be pursued?
- How should cooperation between the different providers involved be organized?

Somewhat boldly, we could describe this complex combination of challenges as a "perfect storm," even more so when the continued development of companies, for example, through M&A activities, is also factored in.

The following sections discuss these aspects in more detail and outline the important role of service providers as strategic partners in this transformation process, illustrated with the portfolio provided by Eviden – an atos business. Eviden comprises the digital, cloud, big data and security business lines within the Atos Group. It will be a global leader in data-driven, trusted, and sustainable digital transformation with worldwide leading positions in digital, cloud, data, advanced computing and security. It brings deep expertise for all industries in more than 53 countries. Eviden combines high-end technologies across the full digital continuum with more than 57,000 talents. Eviden is an Atos Group business with an annual revenue of c. € 5B.

The explanations are mostly based on ISG's regular market studies covering the provider landscape regarding SAP HANA.

1. The transformation to S/4HANA as a key challenge for companies with SAP ERP applications

The market for ERP applications has been dominated by SAP for quite some time. With the launch of S/4HANA in 2015, a product based on in-memory technology and designed as a replacement for the ECC 6.0 version that has been in use for many years, SAP has taken a step far beyond the usual scope of a new release. Companies that use ECC 6.0 and have often made considerable investments into this solution are now facing the need to perform a comprehensive transformation of their current application landscape, rather than performing a conventional release upgrade. The following list shows potential components of such transformation:

- Functional modernization of the ERP application through significantly changed processes, for instance, in financial accounting.
- **Replacement of previously used in-house developments** with numerous new standard functionalities, for instance, the standardized partner concept for customers and suppliers.
- Consolidation of various previously used instances into a new central database (which SAP refers to as the "digital core").
- Outsourcing of previous in-house developments from the core system to the cloud-based SAP Business Technology Platform (BTP) to replace today's often heavily customized ERP systems with an implementation oriented on standard processes. This strategy is usually described as "keep the core clean".
- Use of numerous new and innovative functionalities, such as AI components.
- **Use of embedded analytics,** i.e., analytics functionalities based on the operational system, rather than a business warehouse.

Because of the diverse and complex issues associated with this transformation, migration to S/4HANA has been rather slow so far. Despite several SAP initiatives to provide better support for their clients during the migration and to speed up the migration (for example, the S/4 MOVE program), a significant proportion of clients continues to use version ECC 6.0 and has not planned to migrate to S/4HANA short-term, which is evidenced, for instance, in the corresponding surveys conducted by DSAG among its member companies (details on the DSAG surveys can be found under https://www.dsag.de/presse/dsag-investment-report-2022). A key question when planning such migration concerns the most suitable migration method for the respective use case. Options include the following:

- Should only existing systems be upgraded (brownfield transformation) to tightly limit related transformation efforts?
- Should HANA potentials be better leveraged through comprehensive system rearchitecting and the resulting new implementation (greenfield transformation)? For SAP, the key point within this context is to realize the "digital core" mentioned above through S/4HANA implementation.
- Or is there a suitable way to migrate to a new system and reengineer selected processes without the need of a complete re-implementation (selective data transition)?



The lack of talent over the course of the next few years is another issue to be addressed. Considering the rather moderate pace of migrations and the targeted completion of migrations by end of 2027, the number of projects conducted in several companies simultaneously will increase significantly.

All the above factors provide an opportunity for highly proficient service providers to position themselves as strategic partners for the respective client companies and to support transformation planning and implementation initiatives long-term, which requires broad coverage of the various aspects within their portfolio.

Using Eviden as an example, this section shows how this support can be set up and provides examples of productivity-enhancing tools. The essential basis is a comprehensive concept for analyzing the initial situation and selecting the appropriate transformation option.

Eviden has many years of transformation planning experience, and the provider's portfolio covers all phases, from the as-is analysis to actual implementation. Eviden offers a wide range of accelerators, which were developed as best practices, based on previous transformation projects. They include the following:

Eviden's "Roadmap/Discovery Consulting" package supports clients who want to perform an S/4HANA transformation and are searching for advice to identify the right mix, consisting of software version (public/private), transformation path (green/brown/selective), licensing (on premise/RISE/PMC), appropriate business case, and business value.

To conduct such as-is analysis, Eviden also relies on tools and experience from partner companies with whom the provider has developed a three-step package for an as-is analysis. The following graphic illustrates this approach:

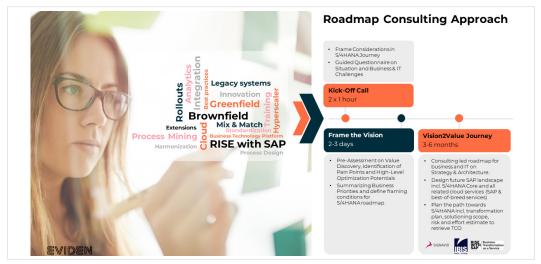


Figure 1: Roadmap Consulting by Eviden

Source: Eviden

^{*} ISG

To accelerate the subsequent implementation, Eviden has developed other powerful tools, including the APS (Advanced Preconfigured Solutions), the Smart Guide and the Miles framework, which will be described briefly in the following:

APS (Advanced Preconfigured Solutions) – The preconfigured solution is used in both greenfield and brownfield implementations. It is based on SAP and Eviden best practices and supports project work with demo scenarios and preconfigured and documented building blocks, which can also be delivered as modules. Business process maps serve as reference for different industries and business types, support the selection of relevant content and enable an efficient preparation and support of the fit-to-standard workshops.

While APS can only be used as a reference system in brownfield projects, a preconfigured solution tailored to the client's scope requirements can be delivered as a starting base for greenfield projects.

Also, the APS can be made available to clients from day 1 as a "show'n tell" system to provide a tangible experience of the scenarios described above to employees, which can provide considerable benefits both in the design and the change process.

• Smart Guide 2.0 is Eviden's approach to comply with SAP's proposed implementation guides and procedures for S/4HANA projects and to make Eviden's extensive experience as a partner in delivering SAP solutions available to its clients.

Smart Guide 2.0

- Combines various SAP Activate roadmaps for S/4HANA transition or implementation projects.
- Contains APS (Advanced Preconfigured Solutions) as a basic solution and starting point for SAP best-practice processes and Eviden's solutions for various industries.
- Incorporates best practices based on Eviden's extensive SAP experience and leverages templates and reference documents to speed up implementation tasks.
- Is based on Eviden's KI Nxt methodology framework, which includes tools from various projects conducted by Eviden and follows proven and acknowledged standards, such as PMI, Prince2, IPMA, ISO rules, etc.
- Defines a standardized approach that can be tailored to customer- and project-specific requirements regarding work packages and deliverables within the project.

Smart Guide 2.0 supports an end-to-end perspective encompassing strategic and technical issues in all phases, from discovery and design to implementation and operational use of the application.

• With the **Miles framework**, Eviden provides an approach for S/4 projects that covers requirements for the following topics in conversion projects:



- Modernize, i.e., plan and implement a hybrid landscape with minimal effort to create a high level of user acceptance and the ability to exploit and leverage respective digitization potentials.
- Integrate with API and other cloud solutions with minimal programming and create custom adapters with guided templates.
- Leverage new technologies, such as IoT/machine learning and artificial intelligence, in the system landscape.
- Extend the S/4HANA core by leaving it intact and enhancing it with proprietary extensions on BTP.

Key Takeaways

SAP has promised to continue standard maintenance for the predecessor products of SAP S/4HANA until 2027, which is the crucial target date for any required migrations.

The transformation of SAP ERP applications to SAP S/4HANA is much more than a traditional release upgrade and requires extensive concepts as well as long-term decisions.

Based on many years of experience, Eviden supports clients in all relevant phases with a comprehensive process model, powerful tools and a range of preconfigured solutions, such as the Smart Guide project methodology, Advanced Preconfigured Solutions and the Miles framework.

2. The platform question

Another key aspect is that the rapid extension of the range of cloud-based infrastructure for SAP HANA has significantly changed the basic conditions. The move to the cloud has become a key trend for SAP applications, specifically for S/4HANA transformations. In many upcoming transformation projects, the migration to a cloud-based operating model is at least evaluated as an option. Strategy identification is not only about the application conversion but must also include the platform question into the respective program.

Using the platform of a hyperscaler always requires a higher degree of standardization than was previously the case in many organizations. While migration to such infrastructure offerings has already made good progress for development systems, test systems, and sandboxes, many clients are still rather reluctant when it comes to migrating the respective productive systems.

Also, SAP is increasingly promoting a migration to the SaaS (software-as-a-service) version S/4HANA Cloud, rather than using the on-premise or private cloud version. The reluctance of many clients, specifically in Germany, to perform this step is even stronger than their reluctance against the migration topic in general, which is also reflected in the surveys among member companies published annually by DSAG (Deutsche SAP-Anwendergruppe e.V. – German SAP User Group),



where many companies using SAP software are organized. In brief, these surveys show that while the willingness to switch to S/4HANA in the next few years is growing steadily, the willingness to migrate to cloud-based versions is lagging somewhat behind. While the use of on-premise platforms will remain a valid model for a significant proportion of client companies in the near future, the availability of qualified personnel is a critical aspect for the feasibility of this model. A useful alternative is a managed service by a highly proficient service provider.

Details about the DSAG surveys can be found under https://www.dsag.de/presse/dsaginvestment-report-2022.

For service providers, this means that the management of hybrid environments, consisting of different deployment models for different applications, will remain a standard requirement to be met in the foreseeable future.

Service providers who can support the transformation play an important role in defining the most suitable transformation path for the respective company. Results can vary greatly, depending on the initial situation, and there is certainly no universal recommendation for all client organizations. A provider's existing capabilities and experience are also key for a successful transformation.

Eviden's respective offering includes the following key components:

- Strategy consulting for sustainable infrastructure landscape design with a focus on leveraging the benefits of cloud-based models.
- Design of landing zones (preconfigured environments for system operations) as well as the future mode of operation (FMO) for cloud-based approaches and hybrid approaches, where appropriate and required.
- Design of the future SAP application landscape and the associated transformation path and implementation of new interfaces.
- Comprehensive range of managed application services for all deployment options (cloud and hybrid approaches).

Key Takeaways

While there is a clear trend towards cloud-based infrastructure for S/4HANA, hybrid structures with partial use of on-premise platforms will remain relevant for the foreseeable future.

Atos' portfolio as an end-to-end service provider covers both aspects comprehensively, including competent consulting regarding the appropriate platform, the actual transformation, and powerful managed services to support ongoing operations.

3. Bundling of licenses and transformation services using SAP RISE – who could benefit?

In early 2021, SAP has launched the "RISE with SAP" program (in the following, "RISE") to support future transformations to cloud-based infrastructures long-term, probably due to clients' rather slow migration to S/4HANA and based on the assumption that an easier migration to cloud-based infrastructures will help accelerate this process.

Put simply, RISE comprises a bundled license and service offering for cloud transformation and subsequent cloud-based operations. For this purpose, SAP maintains partnerships with all global public cloud service providers (or hyperscalers) to eliminate any restrictions regarding the platform to be selected. As of to date, it is also possible to use SAP's own infrastructure; RISE is therefore a direct successor of the previous SAP HANA Enterprise Cloud (HEC). Several service providers, including Eviden, have already qualified as SAP partners for RISE-based transformations.

This offering has been on the market for less than two years, and so respective experiences are obviously preliminary. During this time, SAP has worked continuously on the package composition, and respective assessments will therefore also be subject to changes. Based on ISG's discussions with service providers, we have observed the following:

- While RISE is sometimes regarded as an addition that complements the service providers' offerings, some of the global system integrators see a significant overlap with their own offerings and therefore perceive SAP as a potential competitor. On the other hand, several providers have further developed their portfolios to combine RISE with their own offerings to strengthen their position as the primary point of contact for clients during their transformation journey.
- On the customer side, RISE is of higher interest to midsized businesses, specifically those that have worked with less complex SAP system landscapes in the past. Most large enterprise clients that usually have a long-standing relationship with SAP, with comprehensive and detailed license agreements for many products, are still reluctant to use RISE; instead, they are seeking to engage in separate agreements with cloud providers.
- Hyperscalers perceive RISE as an additional opportunity to further drive the use of their respective platforms for SAP installations, which is the clear goal of respective partnerships with SAP.
- While SAP has already declared RISE to be a great economic success, the market, both client organizations and service providers, takes a wait-and-see attitude, which is also reflected in the annual surveys conducted by DSAG (see the report already mentioned under https://www.dsag.de/presse/dsag-investment-report-2022).

Obviously, client companies with a high proportion of SAP software in use often need to rely on competent and independent advice and support from proficient service providers to correctly assess the potential of RISE for their individual situation and to reap potential benefits. This also



applies to issues that require more comprehensive coordination between the parties involved – SAP, the client, and the service provider – for instance, cybersecurity.

Eviden prepared for the new RISE offering at an early point in time and is among those service providers that combine RISE with their own offerings and create added value for clients through additional solutions. Notably, Eviden was also one of the first SAP customers that went live with RISE itself in 2022, thus providing clients an ideal opportunity to benefit from Eviden's real-world experience in their respective projects. Examples of such combination of RISE and Eviden portfolio elements include the "Eviden OneCloud" for orchestrating a multi-cloud system landscape and the "Conversion Factory" for accelerated conversion to the new system landscape. Eviden also offers a range of proprietary developments and function packages for areas such as Ariba, asset management, smart manufacturing, decarbonization, cloud AI and machine learning. The offering also comprises a dedicated cybersecurity unit that ensures protection of complete system landscapes, including cloud-based SAP systems.

Atos' pending organizational split into two different units, one for infrastructure and one for system integration, will increase the provider's consulting objectivity regarding the license model as well as the deployment model to be selected – the prerequisite for selecting the transformation path best suited for the client long-term.

Key Takeaways

With "RISE with SAP", SAP offers the option to bundle the required licenses for the S/4HANA transformation with a range of project-related and operational services.

Eviden is among those service providers that complement this basic SAP offering with their own solutions to create a powerful overall transformation package. Examples include the Conversion Factory and the Eviden OneCloud for orchestrating multi-cloud system landscapes to provide optimum support if a client decides to implement RISE.

4. Consolidation of the provider landscape as an additional factor

As has been shown in the previous sections, proficient service providers play an essential role for a successful transformation to S/4HANA. In recent years, we have also observed a significant trend in many companies towards provider consolidation, on the one hand, due to the considerable coordination effort involved in a heterogeneous and fragmented selection of service providers; on the other hand, companies want their providers to assume joint responsibility for the project results, which is also reflected in the growing number of service agreements that are outcomebased, at least to a significant extent. Also, there is a great lack of the required highly qualified resources for IT service assessments within user organizations.



This development represents a significant opportunity for those providers who offer a broad portfolio of services related to S/4HANA transformations. They are in a great position to act as strategic partners of their clients to structure, plan, and share responsibility for implementing the respective projects. In some cases, this may also include responsibility for managing other service providers involved. For instance, the strategic partner may take over the task of managing the integration of connected applications such as CRM or MES. Such cases are normally based on long-standing supplier relationships.

Eviden recognized these opportunities at an early point in time; as a diversified and global service provider, Eviden is very capable of serving as a trusted advisor to help clients navigate the "perfect storm" mentioned above. This includes the design, transformation, and subsequent permanent operations, regardless of the selected deployment model (on premise, cloud, hybrid) and RISE usage.

Eviden's respective offering includes the following:

- A partnership approach to balance continuity and flexibility within agile approaches.
- Thinking outside the box, to complement the SAP solution portfolio specifically in view of the increasing use of cloud-based models – with the followin
 - Comprehensive architecture and interface consulting regarding SAP products and hyperscaler solutions (Amazon Web Services, Microsoft Azure, and Google Cloud Platform).
 - A combination of hyperscaler services with SAP tools.
 - Consideration of low-code/no-code platforms as well as container-based software development for customer-specific extensions to the SAP core.
- Bringing together key business and technical trends, such as sustainability and cybersecurity, with SAP consulting through market-leading offerings such as Sec Consult and Ecoact by offering packaged solution approaches that comprehensively cover these business and technical challenges, from business consulting to implementation in the respective SAP application.

Key Takeaways

In addition to the business and technical aspects related to SAP S/4HANA transformations, supplier consolidation is emerging as a key trend among clients.

Based on its rich portfolio as well as its many years of SAP experience, Eviden is in an optimal position to act as the provider in charge of managing the transformation, including coordination with other service providers involved.

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