

Integration is technology risk number one in SAP S/4HANA implementation projects

The Hour Of Specialists

The number of S/4HANA migration projects continues to rise. While the integration of S/4 with other SAP solutions and third-party applications usually starts out at the top of a company's project priority list, it can easily slip without proper planning. Integration experts should be involved early on.

By Dr. Martin Kuntz and Thomas Kamper, Seeburger

A key factor for the success of both SAP R/3 and later ERP ECC is and has always been that SAP created mechanisms for integration of systems, data, or business partners early on. For example: Consider the connection of external partners via third-party systems that use tRFC and IDocs as interfaces. For decades, SAP users have been leveraging this connection to build a plethora of process integrations – which unfortunately have become a hard-to-shoulder burden in migration projects. S/4 has to be able to integrate all systems and processes that have been connected to ERP ECC from the start. Projects with S/4 migrations and greenfield implementations have shown that not involving integration specialists early on can lead to go-live delay. System specialists, such as SAP partner Seeburger, focus on SAP integration and offer partner solutions as well as consultancy services for SAP customers. Integration specialists are key to success because they significantly reduce the severity of the main technology risk in S/4 projects – the application integration challenge.

SAP is required to offer customers integrated business processes based on its products and cloud services. The integration of applications from different providers is obviously not SAP's focus. SAP cannot be expected to deliver the best Salesforce, Workday, or Coupa integration, for example. A dilemma which SAP itself has admitted, is that a majority of integrations concern external system requirements.

Customer needs come first

The success of cloud-based business applications has led to a higher number of non-SAP systems in today's IT landscapes. To stay technologically independent and maintain freedom of choice, many SAP customers choose to go with integration platform providers. Specialists in this area usually offer decades of experience, deep knowledge, and partnerships with non-SAP system providers. Furthermore, some platform providers also offer configurable application and system connectors as well as ready-to-use interface mappings in their product portfolio. This ensures quick project implementati-

SAP S/4HANA Integration Issues

-  Data
-  Integration technology
-  Integration service
-  Consulting
-  Multi-cloud

Only an integration specialist is able to really focus on the challenge as they offer every possibility to solve individual customer problems without limitations.

on success and reduces risks that stem from inexperience. Integration providers enable their customers to quickly complete complex integration projects with a high number of business partners and third-party sys-

SEEBURGER Readiness Assessment Brings Transparency

1 Integration capability analysis

- Existing interfaces
- Existing solutions/technologies
- Enterprise-wide for A2A, B2B, B2C scenarios

2 Application landscape

Existing and planned landscape including:

- SAP & non-SAP applications
- Cloud/hybrid/on-premises

3 Business initiatives

Projects within the landscape:

- New products/markets/technology
- Supply chain initiatives
- M&A or other restructuring

4 Review & preparation

- Documentation of results
- Summary of risks

5 Report & recommendations

1

2

3

4

5

Analysis

Documentation & presentation

tems, without forcing them to build internal expertise or engage scarce developer resources.

By providing sophisticated interfaces for S/4HANA, SAP has managed to keep one of SAPECC's greatest benefits alive: The fundamental openness of the system. Consequently, there are no technological risks associated with the use of non-SAP integration on platforms.

Solution offers and content

In light of the multi-cloud phenomenon, market research firms such as Gartner have recommended use of a hybrid integration platform (HIP), which can be deployed on premises, as cloud-based solutions, or in a hybrid environment depending on individual customer specifications. Seeburger's business integration platform, Business Integration Suite (BIS), meets these functional and non-functional requirements. The company's approach goes even further than that, though: Instead of only providing "technology" for A2A, B2B, API, IoT, secure file transfer, and other integration requirements, Seeburger offers content, services, and integration as a service. Whether they are international conglomerates or mid-sized com-

panies from different industries like automotive, retail, or the energy sector, Seeburger customers can leverage a variety of ready-to-use interfaces of a mapping repository. Seeburger provides over 15,000 such plug-and-play partner mappings, and even more if variants are included. A double conversion with a canonical master format makes it possible. No need to reinvent the wheel every time – instead, companies can use existing mechanisms with significantly reduced effort. This content, combined with customer-specific services, offered on premise, hybrid or in the cloud, minimizes time and costs involved in implementing integration projects. Seeburger Cloud Integration enables unlimited connectivity while also providing a choice of services to suit your needs.

Let's say you are craving pizza and order your favorite through a delivery service. You probably couldn't care less about which kind of pizza oven the restaurant uses, how long it takes to preheat, or how many pizzas it can cook in an hour. The only thing you want out of this transaction is pizza. The same principle applies to Seeburger Cloud Integration services. The solution (the pizza oven) is not the focus, but the service orientation, based on a service catalogue of suitable SLAs (the

pizza), is. This includes factors like availability, response capability, employee engagement and competence, communication or empathy to understand individual requirements. Seeburger offers cloud services as a one-stop shopping experience in the areas of consulting, support, operations, and security. Seeburger services can be considered essential accelerators for S/4HANA projects. In addition, outsourcing integration requirements enables companies to focus their own resources on strategic project tasks.



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Don't let integration become a roadblock in your S/4HANA project

- ✓ **Integration specialist** with more than 35 years of experience in the SAP environment
- ✓ **Comprehensive expertise** for all S/4HANA integration capabilities
- ✓ **Implementation support** for your selected S/4HANA implementation partner

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Experiences and challenges of SAP S/4HANA migrations with integration topics

The Proven and the New

Which integration topics are prevalent in SAP S/4HANA implementation and migration projects?

What challenges are companies facing? What knowledge do they need?

Here is a collection of experiences, findings, and disillusionments from projects with proven and new SAP integration technology.

By Thomas Kamper, Seeburger

Whether SAP ECC companies are still planning or are already in the process of switching to S/4HANA, integration has to be taken into account for migrations as well as greenfield implementations and are usually tied to additional effort and costs. They can usually be split into two categories: SAP-to-SAP and SAP-to-non-SAP integration tasks.

From our experience on S/4HANA projects, Seeburger has gathered the following data:

- 70 percent of integration tasks concern SAP-to-non-SAP integrations.
- 20 to 40 percent of the budget is used for system and application integration.
- 60 percent of SAP users view integrations as costly and time-consuming.
- 40 percent of SAP users think that underestimating integration is a risk which

could delay their S/4HANA project goals beyond 2025.

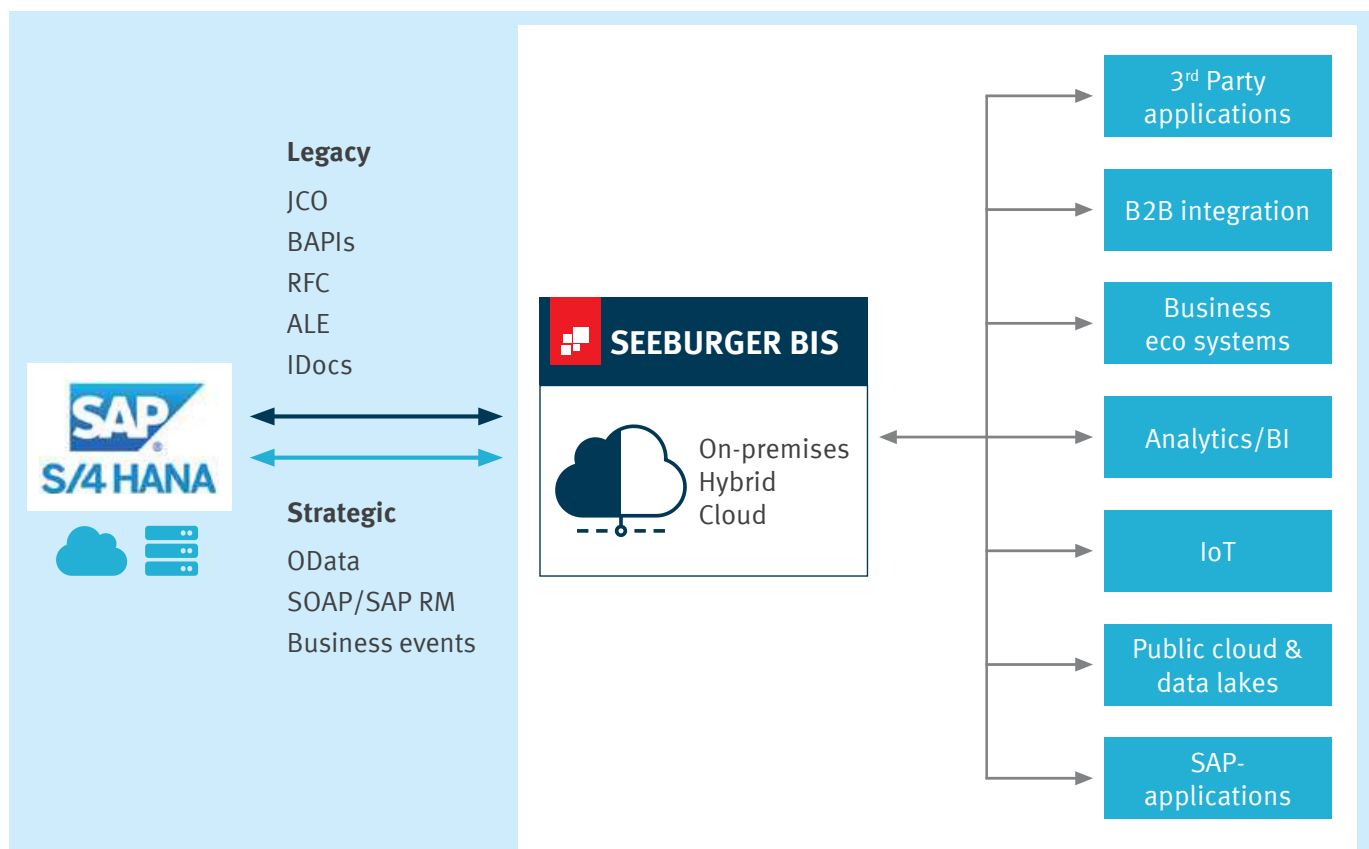
The true scope of integration challenges can be illustrated by a simple SAP-to-SAP example: The SAP community rejoiced when SAP announced that it would provide four business processes as out-of-the-box integrations for “SAP ERP to SAP Cloud Applications” scenarios. SAP currently combines more than 300 products and roughly 200 cloud services in its portfolio, which could lead some to say that four core integrations isn’t nothing, but it’s not exactly much. Furthermore, using the offered integration content and SAP technology is only free of charge if integration scenarios do not deviate from the standard in any way. Ongoing operating costs could, therefore, also be affected.

S/4 migrations bring a number of inno-

ventions, as well as surprises. For example, integrations in existing SAP ERP ECC environments cannot be transferred to S/4 systems unchanged. This becomes clear when looking at robust, widely available ALE/IDoc interfaces: The available IDoc types in S/4 have changed compared to ERP ECC.

The devil is in the details

The number of IDoc types has been reduced. Consequently, all existing IDoc interfaces have to be analyzed and, most likely, adapted. SAP S/4HANA Cloud Essentials (multitenant) no longer offers IDocs or ALE technology. Some SAP integration architects have become hesitant in S/4 projects, understandably wondering: Does the IDoc and ALE technology have a



SAP S/4HANA implementation requires a high number of integrations.

Granular, synchronous processing	JCO RFC BAPI	OData
Granular, event-based		Business events
Batch & Bulk, asynchronous processing	ALE IDoc/trfc	SOAP/SAP RM
	Legacy	Strategic

Decision-making tool for the selection of suitable integration technology for S/4HANA.

future? Tried-and-tested approaches like JCO, BAPI, or RFC are also under scrutiny. Everything ERP ECC users had accepted as standard when it comes to integration is now up in the air in S/4. However, through experience of many completed S/4HANA projects, Seeburger can attest that robust IDoc interfaces continue to be used efficiently and successfully, especially when it comes to S/4HANA on-premises projects which only need the reduced set to meet project requirements. All of this poses a different question, though: If all existing interfaces have to be analyzed, adapted, and tested regardless, wouldn't it be easier to just opt for future-proof, efficient integration options in S/4HANA?

Possible alternatives

What possible alternatives are there? OData interfaces as synchronized API interfaces seem to offer a modern, future-proof alternative for all integration requirements. Risking a glance at SAP API Business Hub leads to a certain disillusionment: The technology's availability for a broad palate of integration tasks still needs some work, but the good news is it is actually being done. Furthermore, these synchronized interfaces are not suitable for every integration scenario. Even if the technology's availability will be expanded, it unfortunately cannot serve as a universal solution for all scenarios.

The proprietary SOAP SAP Reliable Messaging (RM) offers asynchrony and coverage of more possible interface requirements. SAP RM could therefore be an interesting alternative to ALE/IDoc technology in S/4HANA, for example, where document-based integration for EDI or B2B scenarios is concerned. Like OData, SAP RM is available for all S/4 options.

For event-based integration scenarios like master-data synchronization, Business Events is the obvious choice. Because Business Events have been available in SAP ECC since 2020, they also are perfectly suited for brownfield projects to guarantee data consistency between SAP ECC and S/4HANA. Integration specialists are waiting for further development and availability of the SAP One Domain model as well as the implementation of SAP Graph as essential key factors for integration scenarios.

These are all integrations of the SAP-to-SAP variety. What about the SAP-to-non-SAP integrations, though?

Integrating non-SAP systems is the biggest challenge

For SAP customers, integrating non-SAP systems is still the biggest challenge they face in S/4HANA projects. The scope of necessary integration technology is dictated by existing legacy systems, analytics solutions (for example of public cloud pro-

viders), shop floor systems, IoT platforms, cloud-based applications of third-party providers like Salesforce, Workday, and Coupa, shop systems, industry platforms, and many more. Necessary integration scenarios range from push-and-pull projects and events to real-time or batch processing.

Besides supporting different technology (SAP and non-SAP) as well as integration scenarios, central integration platforms have to tackle the task of simultaneously processing bulk and streaming data without impacting synchronized processing of granular information objects in real-time processes. This is where the wheat will separate from the chaff – which many SAP user companies have yet to realize.

Pathways to success

From previous experiences with integration in S/4 migrations and Greenfield implementations, Seeburger feels there are two critical elements for project success. First, the involvement of experienced integration experts with profound, perennial SAP know-how; and second, the utilization of an efficient integration platform that takes all integration requirements into account. Seeburger Integration is the combination of our technology, which includes our integration platform Seeburger Business Integration Suite (BIS), our services, which includes our cloud services, consulting and support, and our people. Together, Seeburger Integration helps companies connect with clouds, applications and people so they can utilize and share information across their ecosystems.



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