![cbs Corporate Business Solutions logo]

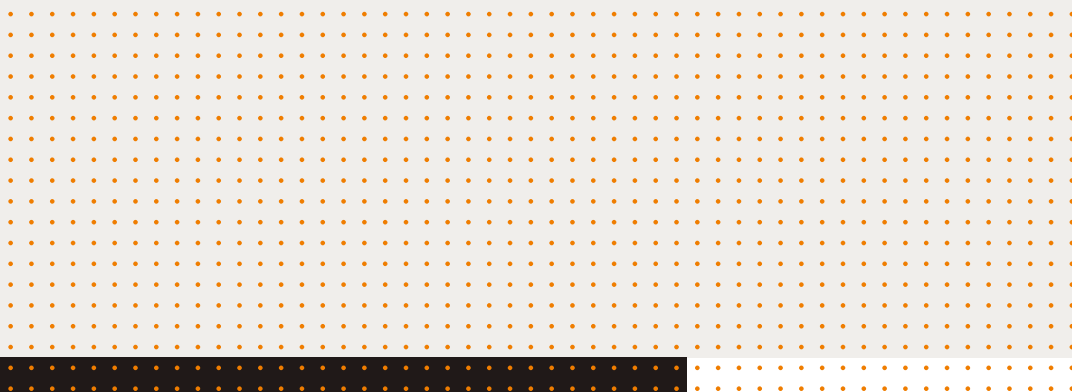**Strategic database migration**

Get Ready for S/4HANA by Moving to SAP Business Suite on HANA

SAP S/4HANA, the software that will soon take the place of SAP Business Suite, is the talk of the industry. Though it's still a very new product, companies should factor the innovations S/4HANA presents into their planning, plot out a long-term SAP road map, and start taking the first steps. Here, they face one question in particular: Does it make sense to move to SAP Business Suite on HANA as part of a transition to S/4HANA?

SAP S/4HANA – the SAP Business Suite of the future

In November 2015, SAP released the next generation of its Business Suite as S/4HANA. The company plans to support the previous suite until 2025, at which point customers will need to have moved to SAP S/4HANA. The complexity involved in switching to S/4HANA, however, puts it in the same league as a migration from R/2 to R/3. This is why SAP describes the transition not as an upgrade, but a conversion.

In the context of S/4HANA, one often comes across references to a philosophy known as the "principle of one." This means that in the future, only one implementation option will be available for a particular requirement. By contrast, SAP Business Suite has grown over a number of years and frequently presents various ways to meet a given specification. Consider the business partner concept included in S/4HANA, for example, which replaces customer and vendor master data. Each customer can figure out how SAP's effort to clean up its code base will affect their own custom programming. In any case, SAP S/4HANA will be the SAP platform of the future; the company itself refers to the suite as its "digital core." The changes S/4HANA represents in comparison to SAP Business Suite also include not just purely technical aspects, but functional and process-related modifications, as well.

SAP Business Suite, on the other hand, is a product that provides proven stability. The version designed to run on HANA has established itself on the market since its release in 2013. However, many companies that use SAP still run Business Suite on a non-HANA database. This poses the question: Should these organizations to switch to SAP Business Suite on HANA as part of their long-term transition to S/4HANA?

A smart transitional step: migrating to SAP Business Suite on HANA

A large number of companies have already succeeded in migrating their instances of Business Suite to SAP HANA. The product and the procedures involved are now well established and sophisticated. With SAP Business Suite on HANA, companies that run SAP can already start reaping the functional benefits HANA offers as a database. Here are a few examples:

- MRP Live – the new material requirements planning component SAP has developed and optimized for HANA – provides all the business-related advantages and dramatic performance improvements of a corresponding S/4HANA implementation.
- SAP Business Suite on HANA makes it possible to profit from real-time operational reporting through HANA Live.
- Working in concert with Business Suite on HANA, SAP Business Warehouse on HANA offers new possibilities thanks to SAP's smart data access technology.
- SAP Business Suite on HANA also opens the door to significant performance improvements; a corresponding SAP Note summarizes all of the optimizations HANA provides in connection with Business Suite.

Code and data cleansing

The integral technical aspects of a Business Suite on HANA migration relate to code and data cleansing, as well as to the SAP basis and infrastructure. With regard to code cleansing, customers may need to adjust the code they have developed themselves to HANA in terms of functional integrity and performance optimization. They would also be well advised to use logs to monitor their use of this programming over an extended period of time (at least a year) in order to identify and isolate dead code. When it comes to data cleansing, the run-up to a HANA migration presents a good opportunity to conduct data housekeeping and archiving as a targeted means of reducing database volume. This makes it possible to avoid a tremendous amount of costs. These code and data cleansing activities may be fairly tedious at times, but they would eventually be required anyway as part of a future S/4HANA conversion.

High availability, possible reduction in license costs

In addition, Business Suite on HANA gives data center personnel the chance to gain experience in running a transactional application on a HANA database in a production environment without dealing with the increased workload that comes with major process changes. HANA presents a number of innovations related to its unique concepts for ensuring high availability, particularly with regard to infrastructure.

On the subject of license costs, each company will need to examine their contracts to determine how running SAP Business Suite on HANA will affect them. In many cases, however, the combined license costs of Business Suite and HANA turn out to be less than those required to run Business Suite and a third-party database (such as Oracle).

S/4 innovations at the heart of SAP Business Suite on HANA

One important thing to remember is that Business Suite on HANA (which entails the use of SAP NetWeaver 7.40) already includes all of the key technological innovations of S/4HANA. These include SAPUI5 (Fiori) and ABAP CDS Views – two technologies that see a great deal of use in S/4HANA and play a central role in every corresponding implementation. A Business Suite on HANA system thus gives IT departments the opportunity to gather valuable practical experience in implementing and dealing with these new components. Seizing it will enable you to start building up your expertise early on, which helps avoid having to spend time familiarizing yourself with these topics and making typical beginner mistakes. You can then focus entirely on meeting customer requirements during a future S/4HANA implementation.

Strategic database migration

In summary, making the transition to SAP Business Suite on HANA already takes care of an array of technical tasks that would ultimately be required during an S/4HANA conversion. It also postpones the need to modify your processes, which will be an inevitable part of your conversion to S/4HANA due to the functional innovations involved.

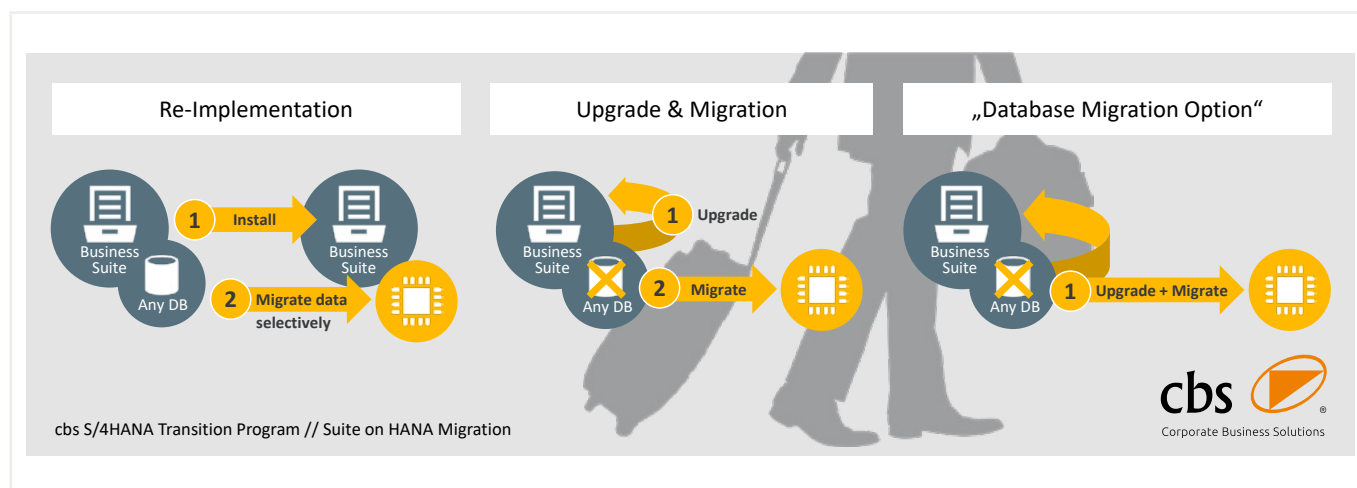Instead of making the leap from using SAP Business Suite with Any-DB to running S/4HANA and handling all of the technical and functional adjustments at once, it's often a good idea to split the process into two steps by first moving to Business Suite on HANA. This initial migration will enable you to concentrate on the technical aspects at hand before focusing squarely on functional elements during your eventual conversion to S/4HANA, which will significantly reduce both the effort required and the risks involved.

Established migration methods

The specific manner in which you design your migration to SAP Business Suite on HANA will depend on the status of your existing systems at the outset. There are three different approaches (please refer to the graphic, as well):

- Implementing a new Business Suite on HANA system and migrating your data (greenfield approach)
- Upgrading your SAP components and then migrating your database (classic two-step approach)
- Upgrading and migrating your database in a single step (database migration option, or DMO)

While all three of these variants are market-tested and offer proven stability, each comes with its pros and cons. The greenfield approach involving simultaneous data migration is particularly suited to split-and-merge scenarios – those in which the migration to HANA is to be combined with the carve-out of a subsidiary from an instance of Business Suite, for example. The data migration does, however, require a certain amount of effort. The traditional two-step method offers the advantage of supporting a great many potential starting scenarios. On the other hand, the overall migration process involves two periods of downtime. Finally, the DMO approach is convenient in that completes the migration to Business Suite on HANA in one step while also minimizing downtime.

Re-Implementation — 1 Install — 2 Migrate data selectively
Business Suite / Any DB → Business Suite

Upgrade & Migration — 1 Upgrade — 2 Migrate
Business Suite / Any DB

„Database Migration Option" — 1 Upgrade + Migrate
Business Suite / Any DB

cbs S/4HANA Transition Program // Suite on HANA Migration

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In addition, a migration to HANA typically requires custom-coding activities that can be divided into three categories:

- Obligatory HANA code adjustments
- Database-agnostic performance optimizations
- HANA-specific performance optimizations

By properly planning your HANA custom-code management and following a pragmatic approach, you can achieve solid optimizations with a relatively modest amount of effort.

Combine your transition with enhancement package upgrades

The decision between moving to SAP Business Suite on HANA or proceeding straight to S/4HANA (as well as your choice of migration approach) should be based on your company's specific situation. The experts at cbs Corporate Business Solutions GmbH are well versed in efficient methods of combining management consulting on development planning and system architecture with various technology services. The cbs S/4HANA Transition Program, for instance, is designed to prepare companies for SAP's next-generation suite and help them devise tailored strategies for their digital transformation.

Meanwhile, experience has shown that migrations to SAP Business Suite on HANA dovetail very well with upgrades to EHP 7 or 8. The Business Suite test cycles that are already conducted as part of these upgrades implicitly cover the HANA adjustments involved.

Key takeaways: less effort, lower risk

S/4HANA is sure to see widespread use, but remains in its infancy at present. SAP Business Suite on HANA is stable and well established. Migrating to Business Suite on HANA already offers an array of benefits while minimizing both the work and the risks involved in an eventual move to S/4HANA. And best of all, the process of implementing it is fast and efficient thanks to a number of proven methods.

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