



Whitepaper

Moving to the cloud with SNP

How to make your SAP transformation a success

As the core technology within digital transformation, the cloud ensures transparent, agile and flexible processes while increasing profitability – provided that companies get everything right from planning to implementation.



SNP DATA. TRANSFORMATION. EXPERIENCE.

The cloud as a driver of innovation

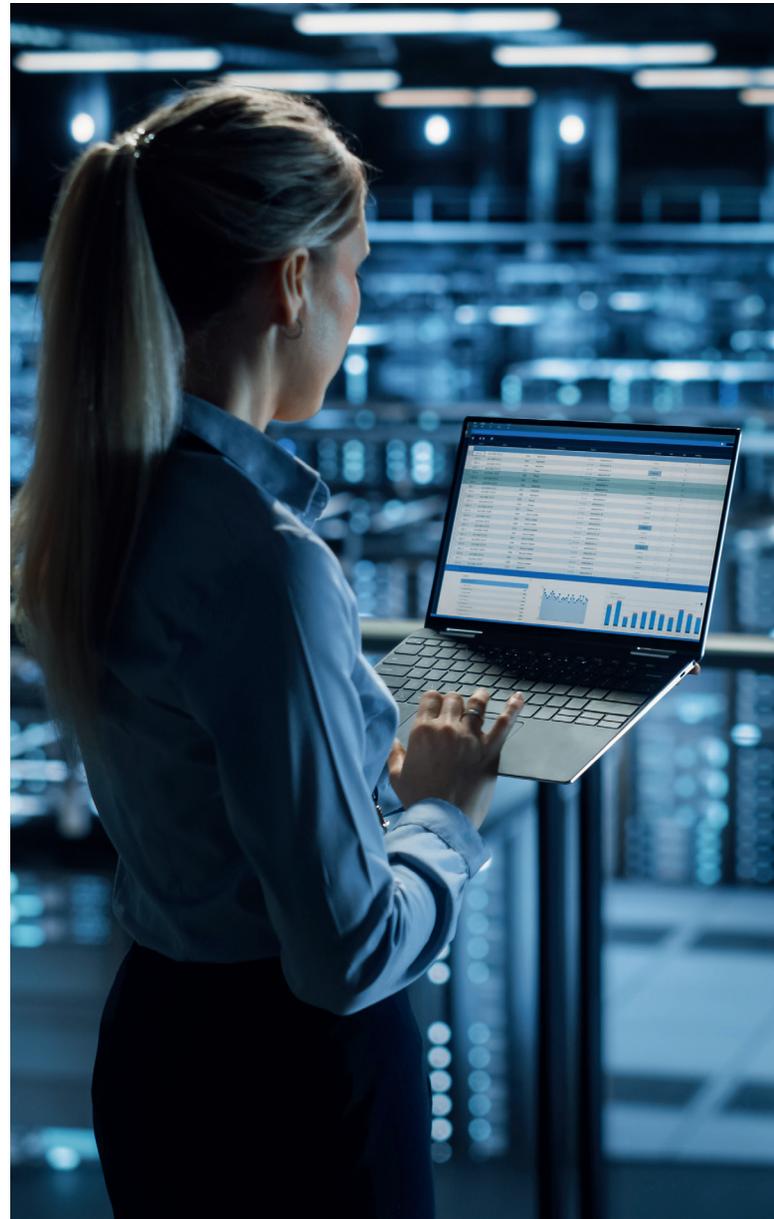
Increased speed, efficiency and profitability: The many opportunities and possibilities the cloud offers demonstrate why it has firmly established itself in the business world. As the core technology within digital transformation, it provides the necessary agility to respond appropriately to unpredictable events and offers companies enormous innovation potential for further digitalization.

The coronavirus pandemic has further accelerated the trend of outsourcing entire IT infrastructures or parts of them to private or public data networks. According to Cloud Monitor 2022, a study by the digital association Bitkom commissioned by KPMG, only few companies have not yet considered cloud computing. The vast majority of organizations are already addressing optimal cloud application scenarios and examining the topic of integration and transformation to a cloud-based company at an advanced stage. They know that the increasing IT requirements in terms of computing power, storage space and software can only be met by leveraging cloud computing – a technology that in turn paves the way for increased business intelligence.

Companies still holding on to old data centers due to costs or concerns about data security are well advised to look into the cloud in detail. Data, facts and sound know-how will soon put potential concerns into perspective. Given the enormous innovation potential, the question is no longer if, but when organizations will migrate their IT landscapes to the cloud.

In a nutshell

The cloud enables efficient, agile and transparent processes that modern companies need to be fit for the future. Therefore, moving to the cloud or optimizing processes in the cloud should be at the top of your agenda. If you plan your transformation project well and choose the right partner, you can migrate your data quickly, securely and cost-effectively: Your company will benefit from the various opportunities the cloud offers and gain a decisive edge over competitors in no time at all.



Cloud transformations are becoming increasingly popular: According to the latest Cloud Monitor study, half of companies want to run a large proportion of their productive applications in the cloud by 2025.

The key advantages for your business

Today, companies depend more than ever on agile and flexible IT infrastructures. This is the only way they can respond appropriately to the constantly changing challenges of the global markets. Cloud computing plays a key role in this development – here are the most important reasons why: Increased flexibility and scalability.

By harnessing cloud infrastructure, IT services can be flexibly accessed via data networks that do not have to be provided by the user: Computing power, storage space and software can be tailored precisely to the company's requirements. A well-chosen provider that is established in the market will adjust the scope to your actual needs at short notice. This not only allows you to better respond to peak times in e-commerce, but also rapidly adapt your capacity in the event of increased remote access due to working from home or when setting up test environments at short notice, for example. The cloud also offers flexible usage models: While a private cloud is exclusively available to one company and usually operated locally, hyperscalers rent out public cloud capacity to a large number of users. Companies that opt for a hybrid or multi-cloud approach can combine both models flexibly.

More efficient workflows and processes – both internally and externally

Data storage in the cloud and the possibility of communicating in real-time doesn't just have a positive effect on collaboration between employees from different departments and locations. Cloud technology also ensures more efficient workflows and processes with customers, service providers and business partners, because every company in the value chain can be integrated into the cloud infrastructure. If they access the same system or parts of it, they can respond much faster to changing requirements, therefore gaining a competitive advantage and achieving greater profitability – especially in challenging times. In order to integrate flexible collaboration into cloud-based platforms, it is important to think about data protection and data security right from the start: Strict access management rules are required to ensure that users only access the information that is relevant to them.

Foundation for business intelligence

Thanks to its performance, the cloud is the foundation for data-driven business and helps companies get the maximum benefit from analytics, artificial intelligence and machine learning. Large data volumes (big data) can be collected, analyzed and visualized in the cloud and then used for strategic decision-making. According to Cloud Monitor 2022, almost eight out of ten of the decision-makers in the finance sector surveyed attribute a rather large to very large proportion of their company's digitalization to the cloud. The digitalization of processes and tasks in particular is expected to generate high added value. Cloud computing also makes an important contribution to the development of digital business models.

Optimizing IT costs with the cloud

At first glance, moving to the cloud seems to be a cost-intensive project. However, software-based cloud transformations and cloud solutions deployed in the medium to long term both offer attractive opportunities for cost optimization. This becomes evident when comparing on-premises systems and cloud-based ERP solutions directly: On-premises systems are sized for the next five years, which usually involves a high "safety surcharge." In the cloud, this sizing can be adjusted quickly and easily, achieving a cost-effective solution. Cloud sizing with CrystalBridge Cloud Suite from SNP allows you to determine these costs even before moving to the cloud, therefore providing full cost transparency. In addition, the need for flexible solutions is often underestimated, for example when test systems are only required for a limited period of time. While hardware for on-premises systems must be maintained permanently, the required storage and computing power in the cloud can be leveraged for any given period of time. This means that costs are only incurred when the services are really needed. As a result, companies can use uncommitted capital and freed up IT resources in other transformation projects and drive their digital transformation forward consistently.

Opportunity for increased data security

Companies still thinking about moving to the cloud often worry about potential risks in terms of data security. Yet experts see data storage in the cloud as beneficial, especially because established providers ensure professional security management and can generally guarantee higher security standards than most companies. However, to achieve greater data security with the cloud, the principle of shared responsibility applies: Internal IT security officers must integrate the cloud into their IT security strategy and must have the necessary cloud budget to implement measures that provide complete protection – supported by close cooperation with cloud providers and IT security service providers.

According to the study “Cloud Security 2022” by Computerwoche and CIO magazine, around 68 percent of companies see the cloud as an opportunity. Yet 54 percent of the companies surveyed involve their internal security experts when initiating cloud projects.



Migrating SAP systems to the cloud – A challenge even for experts

There are plenty of good reasons for companies to promote cloud usage. To do so, however, their cloud strategy and desired goals need to be clearly defined in order to avoid unsuccessful or ineffectively implemented cloud solutions.

Goals must be in line with the overall corporate strategy and must be recorded in a cloud roadmap – just like the requirements and general framework. Since the success of cloud transformations greatly depends on the technical implementation, companies also need to clarify at an early stage which partner will migrate the data, applications and systems. Moving existing SAP systems with a long operating history is a particularly challenging task for IT experts. But with a flexible, software-based solution, even complex migration projects can be implemented with minimal risk and near-zero downtime. This also avoids long and complex preliminary projects and quickly creates the necessary transparency regarding the best cloud strategy and the associated time frame and costs.

CrystalBridge's Cloud Suite solution turns challenges into opportunities: The conversion is rapid, secure and always successful.

Nine obstacles on your cloud journey



Know-how

Lack of in-house expertise on the cloud and its possibilities



Budget

Insufficient cost estimates, unresolved licensing issues



Strategy

Difficulties in developing the cloud strategy



Time

No complete overview of goals, processes, tasks and project duration



Effort

Underestimated project complexity, too few resources available



Downtime

No time frame defined for the disruption of systems required for daily business



Data migration

No approach for integrating historical data into the new system



Support

Insufficient support before, during and after the project by external experts



Transparency

Loss of control due to a lack of project visualization tools

Three questions for our cloud migration expert



Arne Tornieporth

Product Manager CrystalBridge Cloud Suite

Arne, why is it difficult for companies today to avoid the cloud if they want to prepare themselves for the digital working environment and remain competitive?

To understand why there is no alternative to the cloud for companies, we need to understand what the cloud means – namely much more than just an alternative location to store data. The various cloud models offer enormous flexibility to operate IT infrastructures and software as needed. This enables companies to adapt individual areas of their IT landscape to changing conditions in an agile manner – and as a result adapt their business activities too. In addition, the cloud makes it easier to deal with the shortage of IT experts: If companies operate their SAP systems in-house, they need experts to ensure smooth operation, maintenance and further development. The cloud compensates for this by offering companies a range of options for managing and rapidly developing their systems. Furthermore, the flexible analysis options that you can use directly in the cloud with little to no effort are another increasingly important reason, as they help to drive your data-driven business forward.

What options does SNP offer to move SAP systems successfully to the cloud and to make the most of the associated benefits?

To successfully move SAP systems to the cloud, companies need to define the goals they want to achieve. The numerous advantages of the cloud are often clear, but companies are uncertain about how to specifically leverage this potential for their own operations. There is also widespread concern that cloud transformations can take years, prove incredibly expensive and require a lot of human resources. SNP allows companies to rise to these challenges and ensures transparency and security: Using our transformation software, we perform a fact-based analysis of the SAP systems at the beginning of every migration project. Based on this analysis, we create a blueprint, i.e. the optimal roadmap for the conversion. We also illustrate the duration, costs for the conversion and ongoing costs in the cloud in a transparent manner. This enables our customers to carry out a carefully planned conversion – the prerequisite for harnessing the innovation potential of the cloud in the best possible way.

Which features does transformation software need to have in order to migrate data to the cloud quickly and securely?

Transformation software must have a high degree of flexibility in order to consider individual migration requirements. These range from one-to-one transfers of SAP systems to intelligent, selective migrations in order to reduce data as well as combined projects such as simultaneous S/4HANA conversions. Transformation software should also reduce manual tasks: For example, if test cycles are automated, this effectively reduces the workload of the company's employees. SNP's software-based transformation approach has a positive effect on the entire migration project: By combining numerous processes, the project duration is shortened by up to 75 percent, which significantly reduces project costs. In addition, migrations are realized with near-zero downtime to minimize business disruptions. This is critical to success, especially for multinational companies, because downtimes can cost upward of one hundred thousand euros per hour.

How to make your SAP transformation a success

The move to the cloud offers the opportunity to clean up legacy issues and get ready for the digital future. As a result, companies are increasingly using transformation projects as an opportunity to simultaneously modernize their existing IT landscapes and find a simpler, scalable alternative that allows them to respond flexibly to unexpected events. Combining the cloud move with other digitalization projects such as the move to SAP S/4HANA also represents an attractive option. Kick start your journey with these practical tips:

Project start:

Identifying cloud drivers and the status quo

To develop an optimal cloud strategy, a company must first identify the motivation behind the planned cloud move, decide which cloud model best fits its requirements, and find out which provider offers the ideal solution. In addition, project managers need to gain an overview of the existing IT infrastructure: How big is the system? What data and applications are used? Is it possible to move the entire system or only certain areas? Would this even be allowed and should it take place? And last but not least: Is another IT project planned that can be combined with the cloud move? SNP will support you in this complex initial assessment and use its own automated, software-based transformation software for the analysis. The analysis provides insights into how data and systems can be migrated optimally, what the target configuration in the cloud looks like, and what groundwork is required.

Cleaning up SAP landscapes during the data migration

Many of our customer projects have shown that it is worth cleaning up the existing SAP ERP landscapes during the migration. For example, reducing the data volume from 7 TB to 5 TB allows companies to save many thousands of euros over three years – the typical term of a cloud subscription. However, cleanup tasks are fundamentally cost-intensive, because they must be carried out in a legally compliant manner. With SNP's software solution, there is no need for time-consuming and expensive groundwork, as much of the work required to prepare and

predefine the project is derived automatically from the scan of the source system. Companies can also take a step-by-step approach to cloud migration: In what is known as a wave-based approach, selected parts of the IT landscape can be streamlined and migrated one after the other. This way, the cloud storage that is currently needed is always used.

Choosing the right data migration solution

The chosen migration approach has proven to be a key success factor for the entire transformation. Therefore, you should hold detailed discussions to determine which technical solution best fits the cloud move implementation. Ideally, you will opt for an approach that enables a fast and secure data migration. Speed is critical during data migrations because technical changes make it necessary to shut down the IT system – including ongoing business processes. The associated downtime must be kept to a minimum in order to avoid costs. To minimize risks, the chosen approach should also be able to simulate the effects of the planned changes even before the actual migration. Another important selection criterion is flexibility: Your solution should allow for various move scenarios, for example a system transfer without fundamental redesign (Lift & Shift), a selective data migration or a simultaneous S/4HANA conversion, in order to meet individual requirements.

The innovative migration approach pioneered by SNP enables system conversions with near-zero downtime, offers the opportunity for selective system optimization and ensures maximum project security.

Lessons learned from migration practice

Thousands of companies around the world have already moved to the cloud, but not all of them have been successful. These are the most important lessons learned to make your project a success:

Lesson 1: Analyze fundamental aspects first, then migrate

ERP landscapes have usually been established over a period of many years, making them complex environments. A detailed analysis helps you define the transformation requirements and determine the best migration path. ERP systems that have grown over time can be outdated and need an upgrade before the conversion, so that they work properly in the cloud. In these cases, a one-to-one system transfer (Lift & Shift) is not possible. A selective migration will be more effective here: Only the data that the company really needs is transferred. The remaining data – known as cold and warm data – can either be completely deleted or instead archived or decommissioned, allowing for continuous data access for analysis purposes and enabling the company to manage the data in more cost-effective cloud storage systems. To clarify these questions rapidly and with little effort, the software CrystalBridge from SNP can be used to automatically identify and transparently display the optimization potential. In this way, the right cloud migration strategy is clarified very quickly, and the result can be adopted directly as a blueprint for the actual migration.

Lesson 2: Clarify licensing issues at an early stage

It is important to take licenses into account when making strategic decisions. Even large companies can make the mistake of only thinking about the cloud move shortly before licenses expire or data centers are returned to the operator. As a result, they run the risk of having to renew licenses for the transition, which leads to additional costs that should not be underestimated. Companies should therefore clarify whether existing licenses can continue to be used in the cloud at an early stage.

Lesson 3: Update digital interfaces

Interfaces ensure the exchange of information between internal and external stakeholders and must be identified before and updated during the data migration. Any delay here will impair the flow of information between employees as well as with business partners. Even if interfaces are adjusted afterwards, you run the risk that defined project goals cannot be met. Therefore, SNP offers the option to perform an up-to-date and complete interface analysis for every transformation project. This analysis also identifies unused or obsolete interfaces that can be decommissioned to improve IT security.

Lesson 4: Prepare the (IT) team for the cloud transformation

Cloud transformations involve many innovations in many areas, but especially for the IT team. The administration of systems works differently, and databases have new features. Therefore, cloud providers offer certifications that prepare internal IT employees for this cultural and technological shift. They provide expertise on the cloud and new technologies that can be deployed via the cloud – such as the HANA database in preparation for theSAP S/4HANA conversion. The business also benefits from this know-how: An experienced IT team can respond more quickly, assembling services from the cloud in a flexible manner. Selective training courses also help to avoid potential security issues right from the start – for example in cloud configurations.

Rapid and automated: Moving SAP systems to the cloud the SNP way

The good news is that, if planned in advance and with the right enabler, you can successfully manage even complex transformation tasks on your way to the cloud. SNP's solutions provide the necessary software and analysis technology to move quickly and securely, but also to successfully reduce the existing data volume in the cloud.

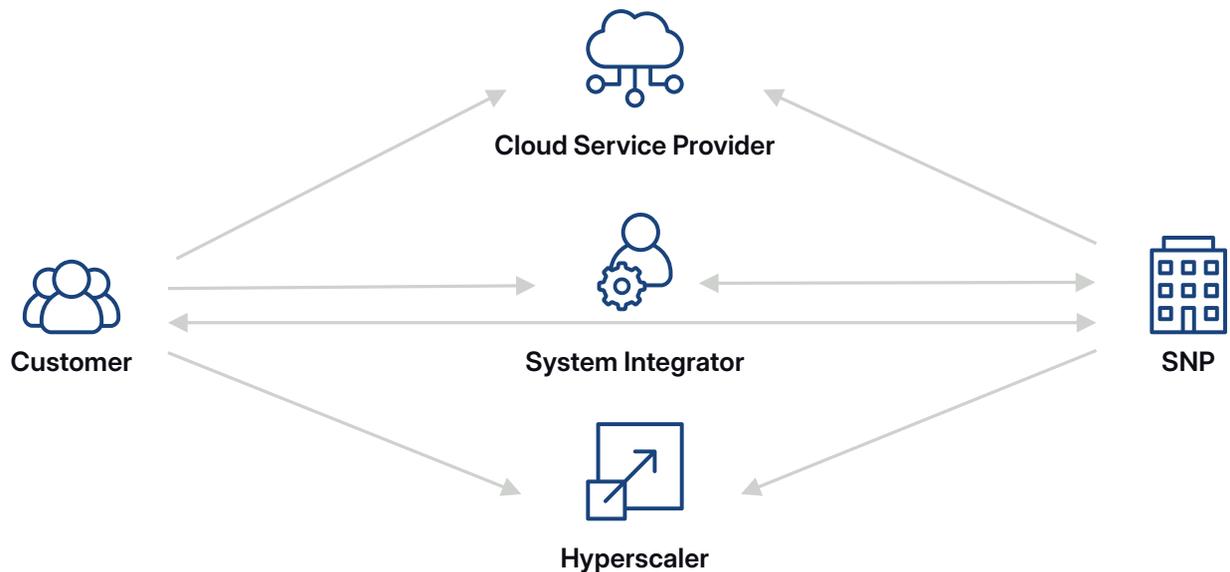
Migrate your systems in a well-defined project with minimal effort and a flexible go-live.

The software-based approach offers maximum transparency and predictability, even before the transformation project, as well as a well-founded concept for implementing the partially automated transformation quickly and securely.

The right solution for every requirement

For cloud migrations, SNP collaborates with hyperscalers such as Microsoft, AWS, Google and IBM, but also with many different system integrators and cloud service providers via its large partner network. This collaboration makes it possible to successfully meet even the most complex requirements. The result is a project without surprises. Unlike manual moves, automated moves are much less error-prone and consume fewer resources. Furthermore, the standardized process from planning to implementation has a positive effect on lead times and the project duration. It also minimizes disruption to business-critical processes, keeping your ongoing business operations largely up and running – unlike traditional migration methods that require extended system downtimes. Rapid implementation ensures the agility of your business: You will quickly leverage the benefits of your chosen cloud solution, create an organization that can adapt at any time, and secure additional business potential in an increasingly competitive market environment.

Positioning



Your Cloud Journey – Supported by SNP

SNP supports you along the entire journey to the cloud – from planning to final implementation. We rely on established processes to achieve maximum project success.



Assessment

At the beginning of every transformation project, an analysis phase of one to five days provides comprehensive insights into existing SAP systems: SNP's software-based Cloud Move solution determines the fundamental aspects of your transformation, which path is best for your company, and how the project will be completed in terms of the time frame and individual steps. SNP creates a blueprint for the cloud move and performs cloud sizing with the aim of providing maximum transparency and optimization along your journey to the cloud as well as for the operation of your IT systems in the cloud.



Migration

Once the blueprint and groundwork are complete, the actual data migration takes place. This process is straightforward because the SNP tools can be used quickly and selectively thanks to the software-based approach. As a result, the migration of SAP systems, data and applications to the new cloud environment is realized in just three to six months – way faster than with a traditional (non-software-based) approach. The procedure is flexibly adapted to individual company requirements and enables Premium Lift & Shift migrations with extensive system upgrades, selective migrations and combined S/4HANA conversions, but also individual.

Data management

Careful data management reduces costs, improves data quality, ensures compliance and slows down data growth. Therefore, when moving existing SAP landscapes to the cloud, you should also consider decommissioning obsolete subsystems and outsourcing data that is no longer or not directly needed in SAP. SNP OutBoard automates tedious, manual archiving processes to store your data and documents in a flexible and economical cloud storage environment for as long as necessary and then

deletes them consistently. SNP Glue provides faster time to value for your SAP data by automating the transfer of relevant data to data warehouses and data lakes through a variety of out-of-the-box connectors. This platform-independent approach supports cloud, multi-cloud or hybrid strategies and enables the use of innovative analytics solutions to flexibly evaluate SAP data together with data from other sources.

Cloud move and migration packages: The right package for your business



Do you want to move to the cloud? Have you already completed the migration and want to optimize cloud data? Or do you want to move to SAP S/4HANA and the cloud at the same time? SNP offers every company the ideal solution according to its size and objectives. For this purpose, we have developed three cloud migration packages for different scenarios with varying complexities. Our packages include all the necessary components to understand your project scope, create a transparent roadmap,

and ensure a fast and secure cloud move with minimal effort. Thanks to software-based forecasts, projects also become predictable in terms of costs and time – consulting expenses and licenses included. Are you planning a different project scope and want to move applications and systems from different locations to the cloud? SNP can support your company with individually combined migration packages for the best possible conversion while also ensuring maximum project security.

CrystalBridge Cloud Suite: Three predefined packages

 <p>Premium Lift & Shift Cloud Move</p> <p>One-to-one data migration including system updates</p>	 <p>Selective Cloud Migration</p> <p>Migration of strategically selected data to ensure an optimized cloud footprint</p>	 <p>S/4HANA Cloud Migration</p> <p>Cloud move and S/4HANA implementation combined into one project</p>	 <p>Individual Package</p> <p>Tailored to your requirements and goals</p>
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Best Practices: Moving to the cloud and SAP S/4HANA in a single step

The move to the cloud and the SAP S/4HANA implementation are two trending topics that are often still tackled separately. Companies usually follow the approach of migrating their existing ECC systems to the cloud first and performing the S/4HANA conversion later on. Although these two projects can be clearly separated, this separation involves higher overall costs, disruptions to ongoing operations and longer transition periods with restrictions on system usage. A combined approach offers clear advantages – as was the case for Coles, a leading Australian supermarket chain, in collaboration with SNP:

“The SNP approach seemingly does the impossible by taking the old SAP system and automating a large part of the migration of not only the data but all of the other parts and interfaces of our old system, ensuring that we could go live with S/4HANA.”

Roger Sniezek, Chief Information and Digital Officer, Coles

- Reduced project duration from 18 to only 5 months
- Data migration without business disruption
- Data reduction from 2.3 TB to 900 GB
- Project costs reduced by 50 percent

Combining customized migrations with intelligent data management

Last but not least, decision-makers are well advised to combine a tailored and automated cloud migration with intelligent data management. To do so, they should determine what data is needed and where: Those who are familiar with the company’s cold, warm and hot data can find the most suitable location for this data. While mission-critical information (hot data) must be available



in the cloud-based SAP system itself, cold and warm data can be stored in low-cost storage locations using SNP’s archiving and decommissioning solutions. An online connection guarantees the convenient analysis of SAP data together with data from other sources in flexible data warehouse solutions. This provides maximum flexibility for data with minimum storage costs.

When are you planning your cloud project?

The cloud is not just another trending technology, but the key to achieving a successful business transformation. Cloud computing enables transparent, agile and flexible processes that modern companies need in order to compete. Therefore, moving to the cloud should be a top priority. With SNP, you can complete your SAP transformation without surprises and leverage all the cloud benefits in next to no time.

Do you want to learn more about the Crystal Bridge Cloud Suite that can help your company meet even the most complex requirements? We are happy to help – arrange an appointment now.

Meet Your Expert



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About SNP

SNP helps companies worldwide to unlock the full potential of their data and shape their own tailored journey towards a digital future.

SNP's Data Excellence Platform CrystalBridge® and the BLUE-FIELD™ approach have set a comprehensive industry standard for restructuring and modernizing SAP systems faster and more securely while harnessing data-driven innovations in the cloud. The company works with around 2,600 customers of all sizes and in all industries worldwide, including 21 of the DAX 40 and 95 of the Fortune 500. The SNP Group has around 1,400 employees worldwide at over 40 locations in 15 countries. The company is headquartered in Heidelberg, Germany, and generated revenues of EUR 173.4 million in the 2022 fiscal year.