

An Overview on SAP S/4HANA Deployment Options and Transition Paths

Srinivasa Rao Gunturu

Independent Researcher

Global Digital Transformation Expert

Abstract: SAP S/4HANA is the next generation SAP business suite software. It is the digital core of your organization and is designed to run an Intelligent Enterprise. Many SAP ECC customers are planning for their transition to SAP S/4HANA. SAP ECC customers are in confusion on the approach to move to SAP S/4HANA and choosing a deployment option. There are Three different approaches for moving to SAP S/4HANA.

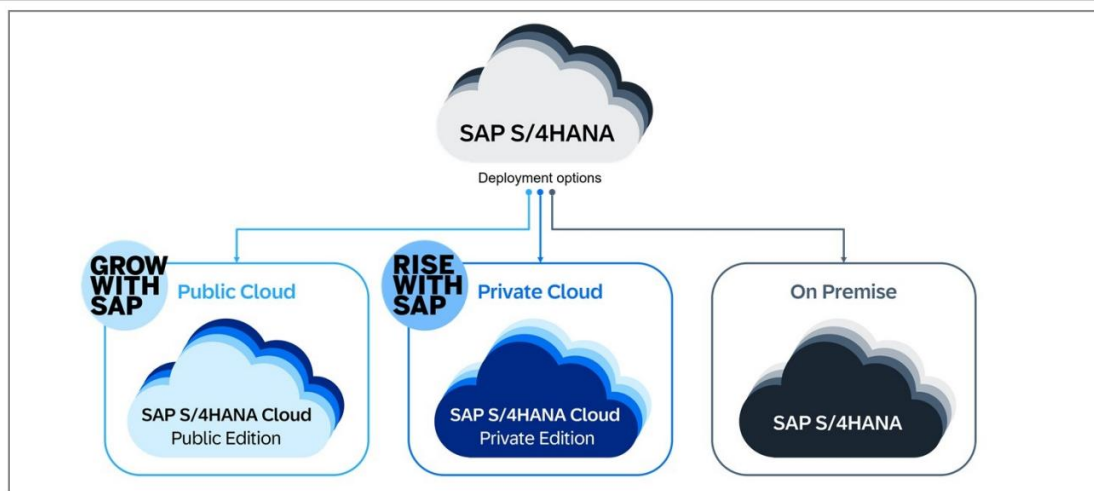
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I. INTRODUCTION

SAP S/4HANA is the next generation SAP business suite software. It is the digital core of your organization and is designed to run an Intelligent Enterprise. Many SAP ECC customers are planning for their transition to SAP S/4HANA. SAP ECC customers are in confusion on the approach to move to SAP S/4HANA and choosing a deployment option. There are Three different approaches for moving to SAP S/4HANA. When Customers are planning to move to SAP S/4HANA, they must consider the different scenarios and also see different deployment options like On-premises or Cloud or Hybrid. They can consider one among the three deployment options.

There are two broad deployment options. Cloud and on premise. These two options differ in terms of the “degree of standardization” & the “degree of flexibility”. The operating model SAP S/4HANA Any Premise offers a completely different level of flexibility than the cloud. flexibility is a lower and level of standardization is higher in the cloud version. Every customer has to decide on their own preferences as per their needs on flexibility and standardization. But SAP recommends more standardization as it reduces total cost of ownership in the long run

Consider your Options - Deployment Strategy



RISE with SAP S/4HANA Cloud (previously SAP S/4HANA Cloud, essentials edition)

This “Public Cloud” solution is highly standardized. Services are delivered to customers over a network generated from a multi-tenant server. “Multi-tenant” means that two or more tenants (customers) are sharing the bandwidth of one

server. This multi-tenant server resides in an SAP data centre. Your cloud provider (SAP) is responsible for maintaining the technical backend of the system and runs your software service in the server where your tenant resides. RISE with SAP S/4HANA Cloud has the fastest innovation, meaning regular release cycles, where new features and enhancements to existing functionality are released. SAP maintains customers' systems with bi-weekly hotfixes and installs the release upgrades to customer systems on the defined release schedule.

RISE with SAP S/4HANA Cloud has the lowest total cost of ownership (TCO), because of more standardization. The solution is delivered with the RISE with SAP business transformation services. If you have subscriptions to multiple solutions in addition to SAP S/4HANA Cloud (e.g. SAP SuccessFactors, SAP Concur, etc.), you will have an individual tenant for each software server that may or may not reside in the same data centre as your SAP S/4HANA Cloud ERP solution. An existing ECC system cannot be moved to Rise with SAP Public Cloud. This solution is suitable only for new implementations.



RISE with SAP S/4HANA Cloud

- Highly standardized
- Multi-tenant cloud
- Comprehensive ERP scope
- Select LoB & industry scenarios

& RISE WITH SAP Business Transformation as a Service

Delivered with RISE with SAP business transformation services to support your transition to the cloud

Credit: SAP, Rise with SAP Introduction Document

RISE with SAP S/4HANA Cloud, private edition

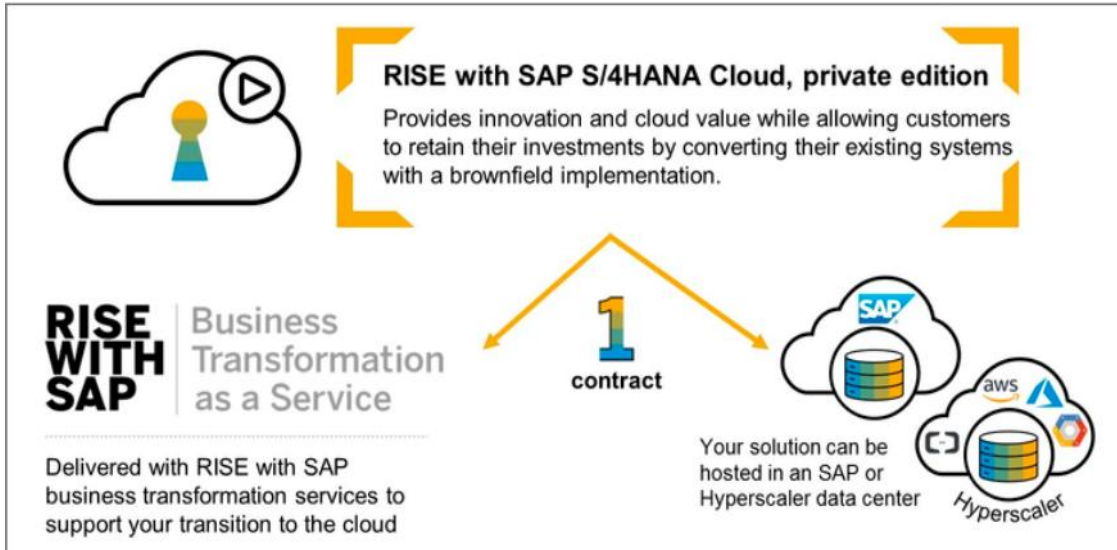
RISE with SAP S/4HANA Cloud, private edition, is a cloud solution with the full SAP S/4HANA on premise scope. It has the elasticity, resilience, and TCO of cloud infrastructure. Existing SAP ECC customers can convert their existing SAP ECC systems to aRISE with SAP S/4HANA Cloud, private edition. New customers can also choose for their new implementation. RISE with SAP S/4HANA Cloud, private edition is suitable for new implementations and system conversion.

Customers have full access to the extensibility framework and also supports in-app and side-by-side extensions in addition to code enhancement & modifications. Expert configuration is possible with full IMG access, and the operating expense model is subscription-based. The solution is inherently deployed with SAP HANA Enterprise Cloud to provide the private cloud infrastructure and technical managed services. However, customers can choose where their solution is hosted: SAP data center or hyperscaler data center. Hyperscaler data center providers include Alibaba Cloud ,Microsoft Azure, Google Cloud Platform, and Amazon Web Services. SAP S/4HANA Cloud, private edition is delivered with RISE with SAP services in addition to the core ERP scope to support a customer's business transformation to the cloud. All services, from RISE, to infrastructure management, to the core software is delivered under ONE contract with SAP. Even if your solution is in a hyperscaler data center, all services are under one contract with SAP.

Key Features of RISE with SAP S/4HANA Cloud, private edition

- Full functional S/4HANA scope
- Existing ECC system can be moved to the cloud Pvt edition.

- Safeguarding prior investments into SAP systems
- Flexibility and Extensibility - Access to S/4HANA Extensibility Framework

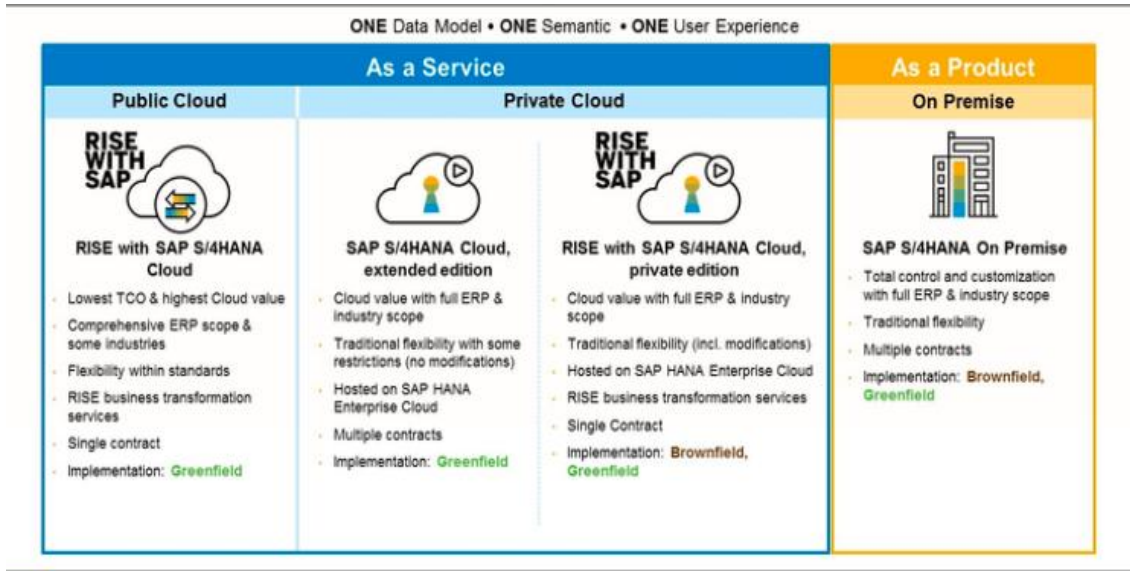


SAP S/4HANA Cloud, extended edition

SAP S/4HANA Cloud, extended edition, is a cloud solution based on standardized business processes, but also includes the extensibility and geographical reach of the SAP S/4HANA on premise solution. Services are delivered to customers over a private network protected by a firewall from a single-tenant server. "Single tenant" means that only one tenant (customer) is using the storage and bandwidth of one server. This single-tenant server can reside in your own data center, or in a data center owned by a vendor. SAP S/4HANA Cloud, extended edition has semi-annual (twice yearly) upgrades, and is hosted in SAP's private, managed cloud, SAP HANA Enterprise Cloud (HEC). SAP S/4HANA Cloud, extended edition, well-suited to customers that require specific functionality, broader extensions, and deeper configuration capabilities in a dedicated cloud environment. Additional capabilities are allowed, because a customer is the only tenant on the server. As a cloud solution, it is also easily scalable and has a low total cost of ownership (TCO).

Key Features of SAP S/4HANA Cloud, extended edition include:

- Standardization ,functional scope& extensibility
- Semi-annual upgrades
- Configurable and customizable processes
- SAP S/4HANA Extensibility Framework and extensions via SAP Cloud Platform (SCP)
- All industries supported
- Low TCO and fast time to value
- Subscription licensing



SAP S/4HANA On Premise

SAP S/4HANA On Premise suitable for customers that require maximum control of their SAP system. It can be hosted usually in their own data centre or with IaaS provider. This solution is best for customers who want full control and ownership of their application & landscape. It provides broad level of functionality with maximum degree of flexibility in customization.

Customers can configure, extend, and modify their software, with full access to the SAP HANA database & development tools. SAP S/4HANA On premise has an annual release cycle where customers can choose to adopt new innovations on their schedule. Customers can choose to deploy the SAP S/4HANA solution in their preferred infrastructure, with varying degrees of maintenance responsibilities, depending on the infrastructure selected. SAP S/4HANA has perpetual licensing when deployed on premise, in a customer's own data center. Subscription or bring your own license (BYOL) when deployed on the SAP HANA Enterprise Cloud, or a third party hyperscaler (e.g. Microsoft Azure, AWS, Google Cloud Platform).

Choosing an SAP S/4HANA On Premise deployment option.

SAP S/4HANA hosted in the customer's data centre:

The classic "on premise" deployment option, where the customer has purchased their own hardware and are responsible for maintaining the infrastructure, purchasing, installing, configuring, and managing the software.

SAP S/4HANA hosted by an IaaS provider (hyperscaler) data center:

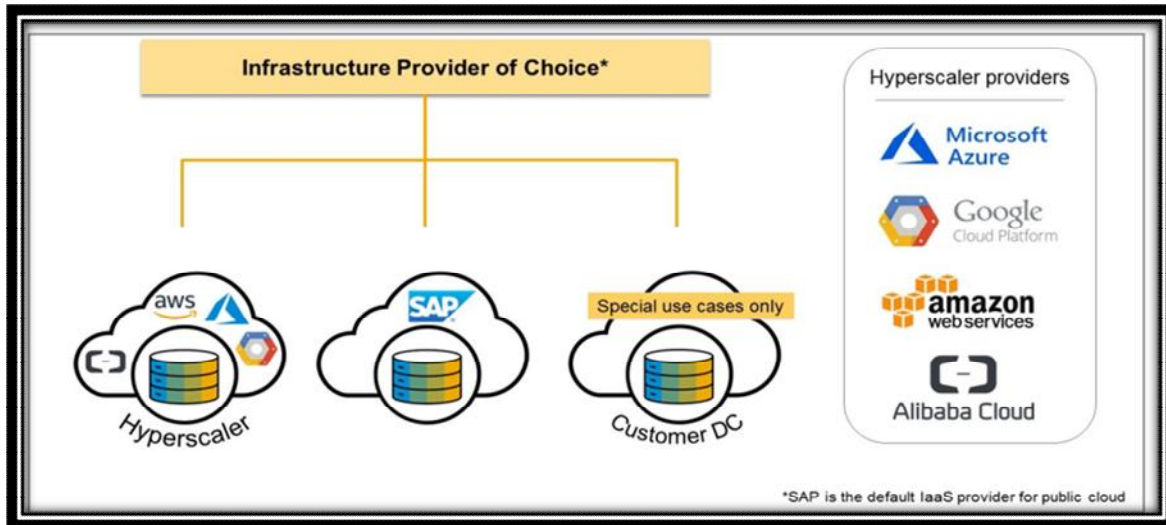
The SAP S/4HANA on premise solution hosted in a non-SAP infrastructure as a service (IaaS) provider data center (private cloud). We refer to these third-party IaaS providers as hyperscalers. They deliver a computing infrastructure, provisioned & managed thru internet. The Infrastructure as a service (IaaS) provider will be responsible for maintaining your infrastructure, and the customer is responsible for purchasing, installing, configuring, & managing the software (operating systems, middleware, & applications) hosted in the cloud.

SAP S/4HANA hosted in SAP HANA Enterprise Cloud (HEC) in an SAP data center:

The SAP S/4HANA on premise solution hosted in the private, SAP-managed HANA Enterprise Cloud, deployed on an SAP data center. SAP HEC is an IaaS platform with managed services delivered by SAP to support SAP applications and solutions. The managed services include coordination and management of your entire cloud solution landscape, including infrastructure, systems, technology, and applications

SAP S/4HANA hosted in SAP HANA Enterprise Cloud (HEC) in a hyperscaler data center:

The SAP S/4HANA on premise solution hosted in the private, SAP-managed HANA Enterprise Cloud, deployed on a hyperscaler data center. SAP provides customers who choose this option with the same comprehensive managed services for HEC in a non-SAP data center as HEC in an SAP data center. SAP operates and manages the customer's SAP systems in the HEC private, managed cloud with the IaaS provider of their choice under one contract and comprehensive responsibility



What will influence your choice of deployment option?

The path / approach we choose to move to SAP S/4HANA is one of the key factors that influences choice of deployment. There are Three Different Approaches for Moving to SAP S/4HANA

1. New Implementation
2. System Conversion
3. Selective Data Transition.

Which approach is right for you?

New Implementation

Organizations using other than SAP will consider this option to move to SAP S/4HANA. Or customers running SAP ECC Business Suite and want to move to SAP S/4HANAcould also consider this option in order to completely redesign their processes.

System Conversion should be considered when:

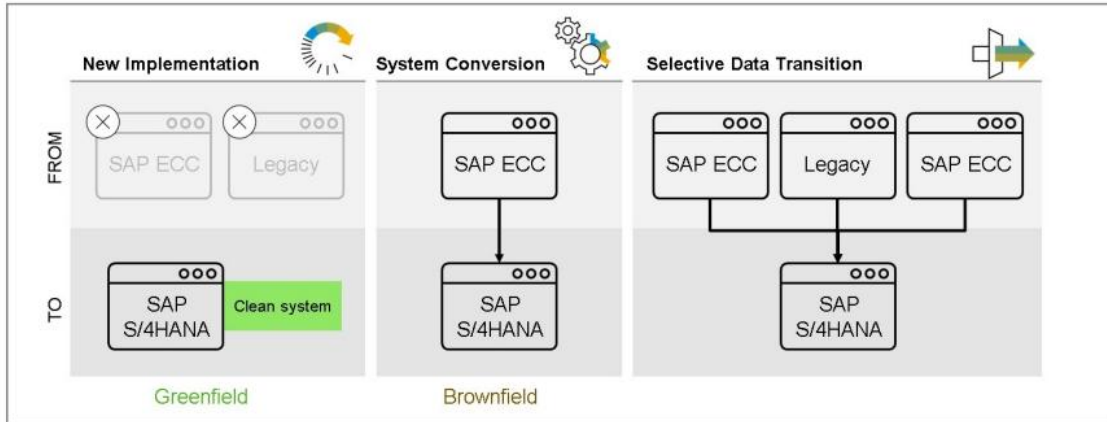
- The business is focused on incremental innovation projects
- The IT software landscape requires the retention of past customizations
- All data needs to be retained

New Implementation should be considered when:

- If existing business processes do not support long-term strategies
- The business wants to standardize on SAP Best Practices packages
- Usually, SAP ECC customers prefers new implementation if existing system does not meet the SAP S/4HANA Conversion pre-requisites. (If the system is technically and functionally does not fit for conversion)

Selective Data Transition option should be considered when

- The business needs to go live in phases.
- Existing SAP ERP instances need to be split or merged
- If you want to migrate only specific years of data or specific company codes.



Are there any SAP S/4HANA move planning tools that helps existing SAP ECC customers?

1. Yes, there are different tools that simplify your journey to SAP S/4HANA
2. SAP Readiness Check for SAP S/4HANA
3. Process Discovery Transformation (SAP Business Scenario Recommendations)
4. SAP Transformation Navigator
5. SAP Fiori app Recommendation Report

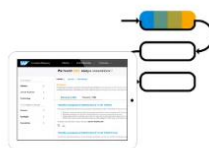
SAP S/4HANA Move Planning Tools



Readiness Check (RC)

For IT Leaders

Checks the readiness of the running SAP ERP 6.x system to migrate to SAP S/4HANA. See this [SAP Blog](#) for more information



Business Scenario Recommendations (BSR)

For Project Leaders

Drive innovation adoption. Identify business scenarios benefiting from SAP S/4HANA. See this [SAP Blog](#) with the latest updates for SAP S/4HANA 1909



Fiori Apps Recommendations (FAR)

For Business and IT Leaders

Fiori app recommendations for Finance. Based on actual usage in production system. Takes just 5 minutes to request: [link](#)

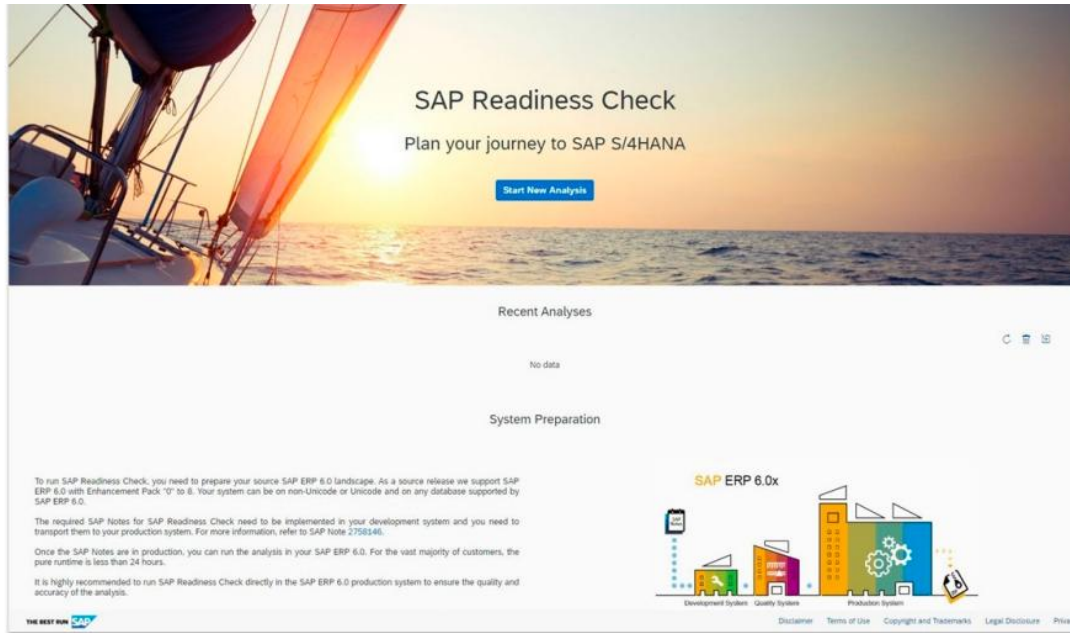
Small / Midsized Business

Large Customers

Strategic Customers

SAP Readiness Check for SAP S/4HANA

The SAP Readiness Check is one of the components of the RISE with SAP services for a system conversion to RISE with SAP S/4HANA Cloud, private edition. It assesses the functional and technical aspects of existing SAP ECC system to be able to convert to SAP S/4HANA. This assessment provides insight into mandatory application changes, and potential impacts are detailed in relevant simplification items along with conversion prerequisites, such as compatibility of existing add-ons and existing business functions. The tool assesses the many functional and technical aspects to identify system readiness for system conversion. Example: custom-code compatibility, system sizing and data volume management, inconsistencies in Financial data and so on..



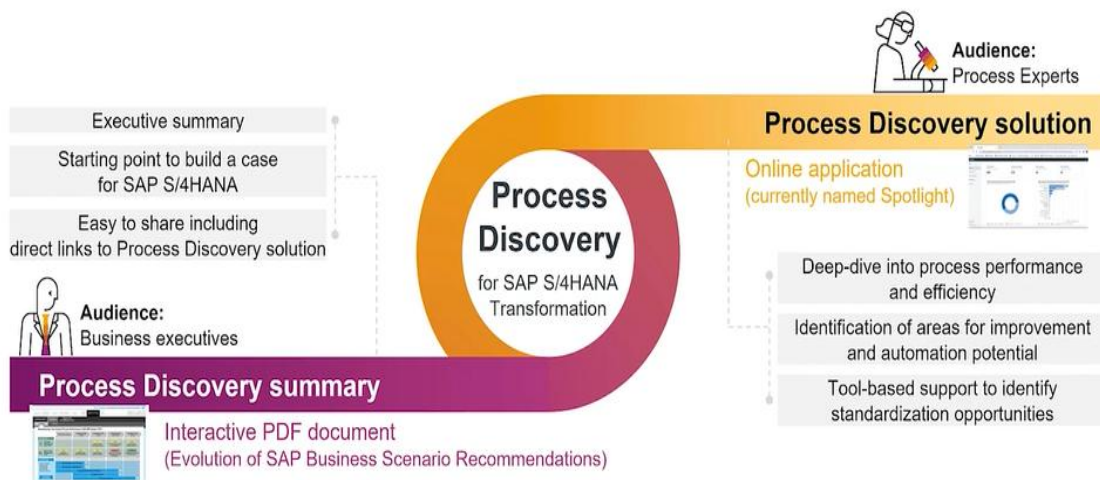
Process Discovery Tool.

Process Discovery Transformation has replaced SAP BSR (Business Scenario Recommendations). Process Discovery is a free analysis tool. This helps SAP ECC customers and partners to drive innovation adoption.

Process Discovery consists of two components

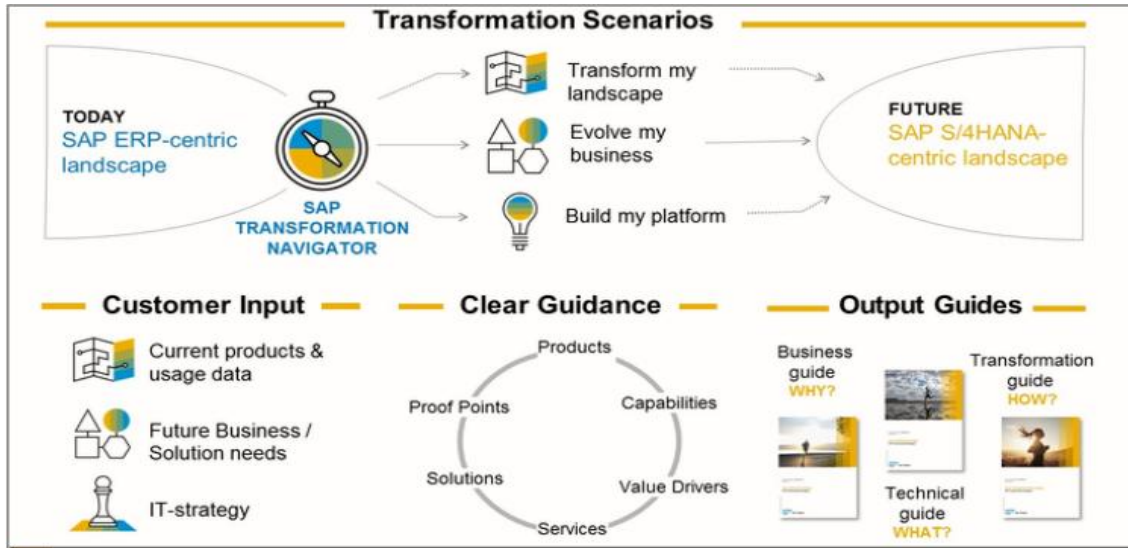
1. Process Discovery summary
2. Process Discovery solution (Spotlight).

Customers can request own Process Discovery. Refer SAP Note 2758146 and SAP Note 2745851. The analysis in the online solution will be delivered to customers along with PDF document as executive summary.



SAP Transformation Navigator

This is a self-service tool that provides guidance for your digital transformation. It assesses the existing landscape & industry trends. It delivers a report, that contains recommendations of the SAP products & solutions required to plan and realize your digital strategy.



SAP Fiori App Recommendation Report

This tool provides the SAP Fiori apps you need on SAP S/4HANA system.

II. CONCLUSION

Every customer has a unique set of goals and challenges when considering their move to SAP S/4HANA. SAP Move program is designed to support customers in moving to SAP S/4HANA in the most non-disruptive way possible. SAP Partners also offer guidance to tackle critical moments to offer customers complete control over their transition.

REFERENCES

- [1]. All Screen prints are taken from SAP’s Documentation
- [2]. Rise with SAP Introduction
- [3]. SAP Help Documentation.
- [4]. SAP Conversion Guides