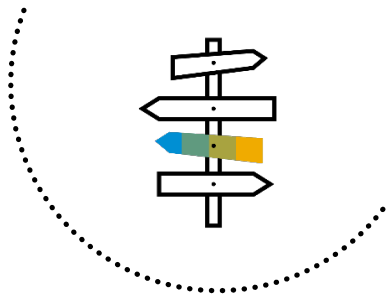


# SAP S/4HANA® Roadmap to the Intelligent Enterprise

## Savantis SAP S/4HANA® Advisory Conversion + Implementation Services

Michael DiGiandomenico, CEO and President  
William Sherry, VP Managed Services + Cloud  
Mark Dooling, Global Director S/4HANA

# Agenda & Introductions



SAP S/4HANA System Transition Overview	10 mins.
Building a Transition Roadmap	10 mins.
SAP S/4HANA Transition Case Study	10 mins.
Questions and Answers	10 mins.



**Michael DiGiandomenico**  
Chief Executive Officer & President

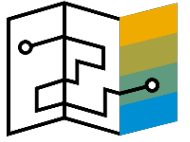


**William Sherry**  
VP Global Managed Services + Cloud

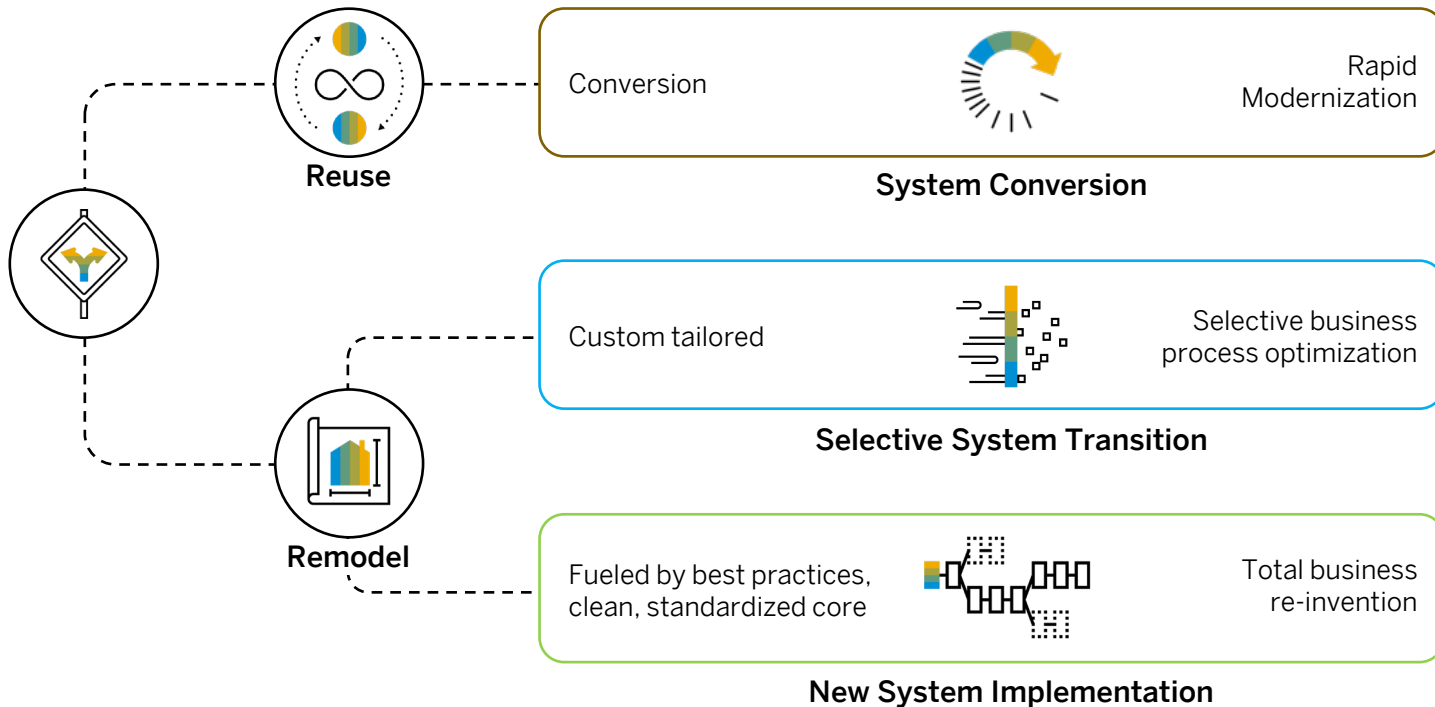


**Mark Dooling**  
Global Director SAP S/4HANA

# Plotting your course to the Intelligent Enterprise



## Three Typical Paths to S/4HANA® Adoption

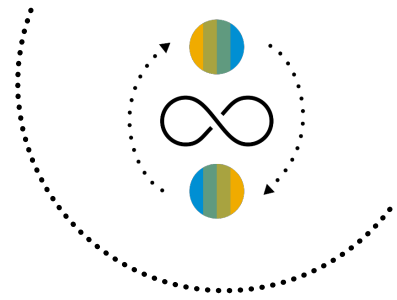


**System Conversion.** Update your enterprise core by converting your existing configured and customized deployment of SAP ERP ECC 6.x to SAP S/4HANA. This path can be accomplished on premise, or with a cloud hyperscaler such as Google Cloud, Amazon Web Services, or Microsoft Azure.

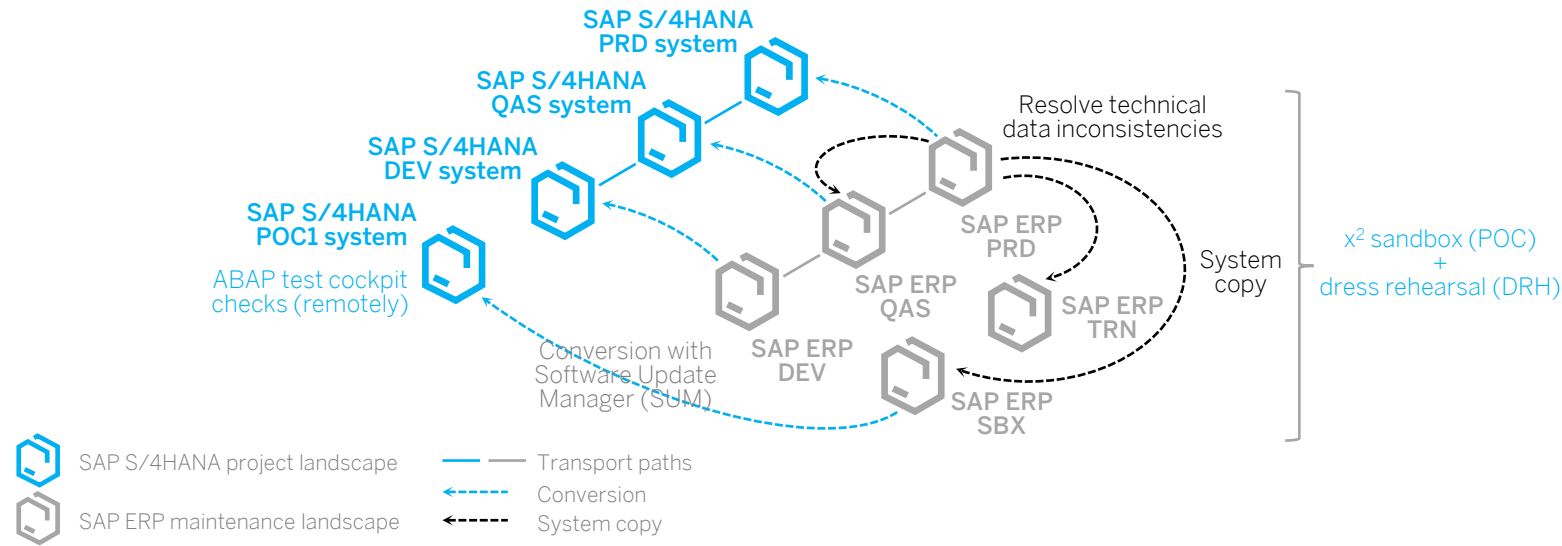
**Selective Data Transition.** This hybrid approach refers to more complex scenarios that go beyond the two standard options of system conversion and new implementation. It comprises options that increase the project's risk, effort, and complexity.

**New Implementation.** Choose this approach for getting a clean start along with an enterprise transformation. A new implementation can be performed on premise, in the cloud, or as a hybrid.

# Reusing your configuration with a conversion



## Conversion Cycles in a Three-System Landscape




- System conversion is a well-developed process supported by tools and utilities provided by SAP for analysis and execution.
- A system conversion preserves your configuration, historical data, business processes, and custom code.
- SAP S/4HANA and the in-memory database operates very differently than past versions of SAP ERP.
- A conversion is significantly more than an 'upgrade'.
- Simplifications items are changes to core functionality in S/4HANA from that of older versions of SAP ERP 6.x that have optimized and simplified the vast solution code base that has proliferated in the last two decades.
- The SAP Fiori® user experience (UX) is another significant step forward in providing the business user communities access to SAP S/4HANA.

x<sup>2</sup> sandbox (POC)  
+  
dress rehearsal (DRH)

# Remodeling based on a new implementation




Using SAP Best Practices industry templates as a foundation for the future state solution means applying a fit-to-standard approach instead of starting from scratch or trying to reengineer an older design that was based on limitations rather than innovation.



**Adopt**  
>50%

SAP industry best practices template

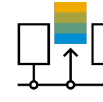
Adopt new S/4HANA business processes to renovate



**Adjust**  
25%

SAP industry best practices template


Adjust new S/4HANA business process to localize



**Add**  
15%

SAP industry best practices template

Add new S/4HANA business process to personalize



**Innovate**  
10%

SAP industry best practices template

Innovate S/4HANA business process to differentiate

There are three business-driven criteria for when customers prefer new implementations over system conversions.

1. When the underlying SAP solution no longer supports the current or future business models of the organization. This requires renovating the SAP solution to align with the new business models of the organization.
2. When intense business process re-engineering is required, e.g., consolidating the core business functions or processes that support the business.
3. When customers have over-engineered and over customized. In this case moving to a new clean-core is the better choice that will drive cost-savings and new agility across the enterprise.

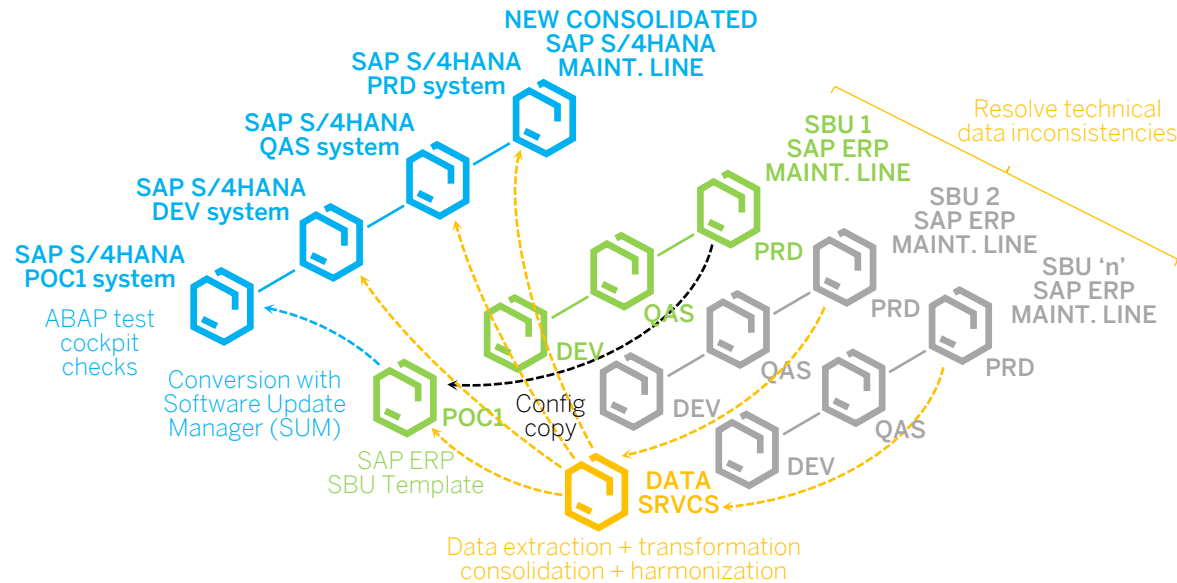
In either case, a new implementation provides the ability to:

- Build the new system with a clean-core based on SAP Best Practices
- Roll out the new solution using a legal entity, country or brand-based deployment strategy rather than a more risky "big-bang" approach
- More easily leverage SAP cloud solutions
- Improve business agility based on a new standardized core
- Reduce costs associated with running highly engineered and complex SAP custom code

# Consolidating SAP landscapes

The primary business driver for a selective data transition approach is consolidating instances of SAP into a single platform that drives business process centralization and standardization most commonly found in MA&D.

## Existing Source System Template Conversion + Data Harmonization



- Implementing a new SAP S/4HANA system based on an industry best practice solution followed by loading harmonized master data and open items from all source systems or,
- Converting one of the source systems that is a best-fit template for the enterprise and loading harmonized master data and open items from the other source system into the new consolidated instance (depicted above).

If you require historical data from numerous SAP ERP source systems, the selective data transition approach is your best fit option.

## BUSINESS DRIVERS OF HISTORICAL DATA

In selective data transition programs, three guiding questions help to determine historic data conversion:

**1. What data is absolutely required to start your business operations?** You need to have absolute clarity about what business objects you need and why.

**2. How well do you understand the mechanics of data migration?** SAP S/4HANA migration cockpit uses standard application logic to provision the data. The Software Update Manager (SUM) tool applies software vendor logic to convert the data in place during a system conversion.

**3. Would you rather spend project budget on innovations or data migration?** When migrating historic data, the extra cost comes not only from the specialized services you need, but also from extensive testing that is required for complex selective data transition scenarios.

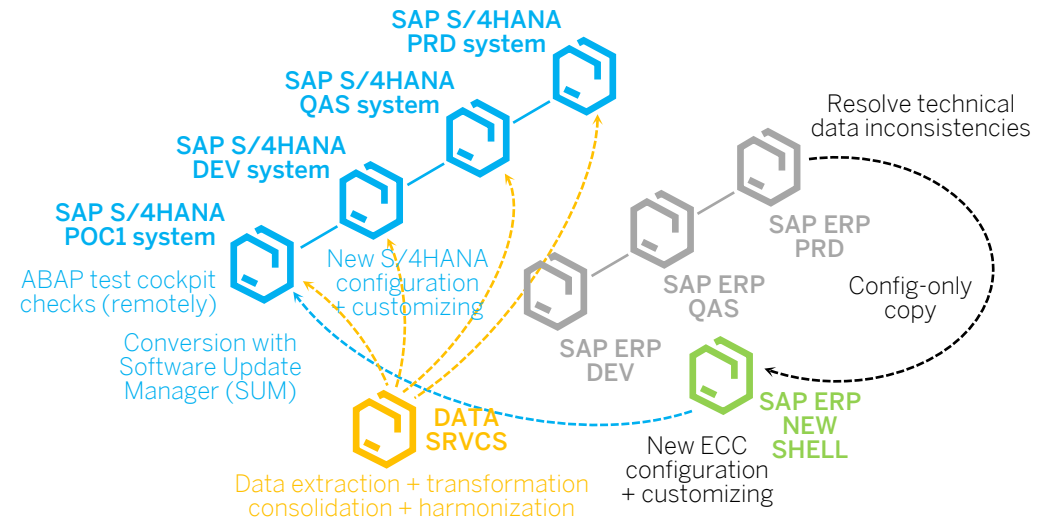
# Reuse + Renovate = New S/4HANA Shell



If your existing SAP ERP 6.x system is relatively standard, still fits your company's business models and contains controllable custom code, you may choose to investigate an alternative approach to transition, called the Shell Approach.

In this scenario, you are seeking more immediate business value from the transition by reusing your assets in the source system and simultaneously renovating selective core business functionality by implementing from scratch in areas where you need immediate innovation to support differentiating capabilities.

1. Perform a new shell creation from your source SAP ERP 6.x system
2. Execute base customizing and configuration in the shell system
3. Execute a standard system conversion of the source shell system
4. Perform additional S/4HANA customizing and configuration changes to implement the differentiating capabilities.
5. Load harmonized master data, open items and historic data from the S/4HANA Migration Cockpit.

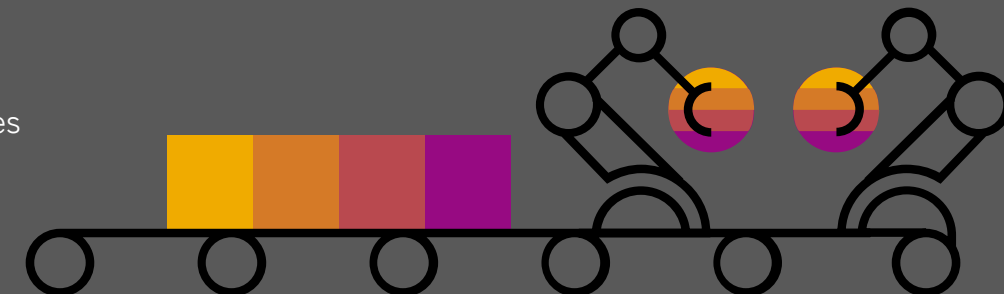


## OPEN ITEMS

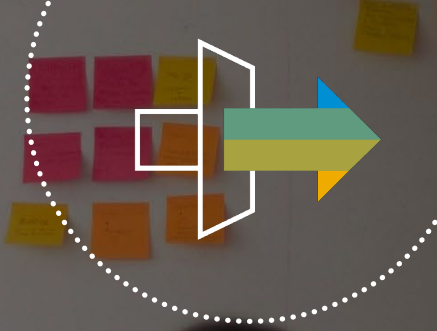
The term open items stands for financial open items, but it also includes balances, stock, open sales and purchase orders and other business objects. More generally, it refers to the initial dataset required to start business operations.

## HISTORIC DATA

Historic data means completed and closed transactional data, e.g., fulfilled and fully billed sales orders, purchase orders and plant maintenance orders, as well as partially closed documents, for example, partially delivered sales orders.



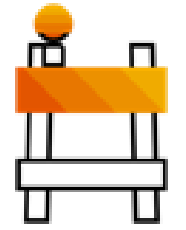
# Building a transition roadmap to SAP S/4HANA



- 1** Explore your transition options
- 2** Develop a high-level discovery phase strategy and plan
- 3** Conduct SAP technical and business process solution assessment
- 4** Enable Solution Manager ALM processes and disciplines
- 5** Run and playback SAP Readiness Check including detailed simplification items and custom code assessment
- 6** Explore SAP industry best practice templates for a new start option
- 7** Conduct master and transactional data analyses
- 8** Assess data archiving potential to ready your company for in-memory
- 9** Analyze financial process and data change readiness
- 10** Assess key partner system integrations and system add-ons
- 11** Understand transition deployment options and impacts
- 12** Perform detailed business and IT discovery sessions
- 13** Curate all analyses and quantify the pros and cons of each transition strategy
- 14** Select the best-fit approach for your company
- 15** Build a conversion proof-of-concept or stand-up an SAP Model Company
- 16** Develop your business case and program charter for your selected option
- 17** Compile realistic estimates to complete your chosen transition strategy
- 18** Seek the right partner that will help you along the journey



# Avoiding common detours of adopting S/4HANA



## Business Issues



**Unique roadmaps**—Each SAP migration is unique due to customizations applied over time. There's no one single upgrade method that can be applied to all SAP migrations.



**Business continuity** — Business and system downtime with any transition option is unavoidable. Assess your company's tolerance to either extended cut-over outages or global deployment support early.



**Data quality and security** — Errors in data can quickly propagate across the SAP landscape. At the same time, data must be secure and comply with corporate and regulatory requirements.



**Limited resources** — SAP experts versed in migrations are hard to find, and people with experience leading SAP transformations are even harder to find.

## Technical Difficulties



**Traceability and governance** — Many businesses that run SAP are heavily regulated and must maintain end-to-end auditability, traceability and governance.



**SAP technologies** — SAP incorporates many proprietary technologies that require extensive technical knowledge to design, build, test and deploy.



**Complex dependencies** — The SAP landscape involves multiple applications, each with dependencies that can slow the software development process.



**Diverse platforms** — SAP modernizations must run on a variety of platforms, such as cloud and mobile devices.

## Top 5 S/4HANA Conversion Challenges. Approximately one third of live clients underestimated the time, training, costs and customization involved in the S/4HANA transformation.

 **39%**

It took more time than expected

 **33%**

It required more training than expected

**32%** 

It costed more than expected

**31%** 

It required more customization

**27%** 

Difficulties integrating legacy systems

# Asking the right questions is a good start

Depending on your adoption scenario, you may choose to deploy SAP S/4HANA by either reusing your existing system configuration or remodeling it with a selective transition or new implementation.



**Do current business process configuration support your long-term strategy?** Strategic redesign of the business processes suggests a new implementation.



**Can you adopt SAP Industry Best Practices or will you reuse past customizations?** A move to standardization brings agility, suggesting a new implementation.



**Is your move to SAP S/4HANA driven by the business or IT?** IT-sponsored projects are typically conversions which lay the foundation for incremental innovation projects driven by the business.



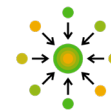
**What is your preferred deployment approach, e.g., global big bang v. regional phased deployments?** Understanding your organization's tolerance for another multi-year global deployment is a deciding factor on your ability to garner stakeholder support and the financial budget to deploy.



**Can you convert from SAP ERP to SAP S/4HANA in a single step?** Single-step conversion is possible for SAP ERP 6.x (any enhancement package) single-stack, unicode system. However, systems that don't fulfill this criteria have likely had little maintenance. If the system can't be converted in a single step, a new implementation is likely a better choice.



**Do you require previous transactional data in the new system?** The requirement to retain all data in the system is a very strong indication for conversion. Alternatively, consider a new implementation while re platforming your current SAP ERP data on commodity hardware or leveraging data retention solutions.



**Are landscape consolidation and process harmonization key value drivers?** Consider a new implementation and consolidate the required configuration and data into that new system.



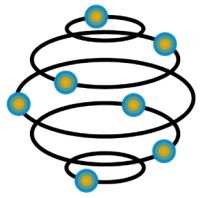
**Do you have a high or low number of interfaces to other systems (SAP and third-party)?** The higher the number of interfaces, the stronger the case is for conversion.



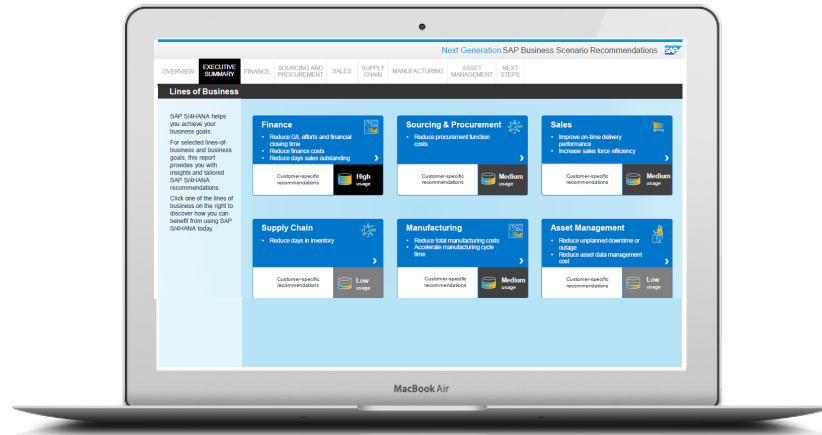
**Can your company sustain a multiyear innovation plan with incremental innovations?** If incremental innovation is part of your company's philosophy, a system conversion followed by innovative projects will lead to the desired outcome. If you are uncertain whether a multiyear innovation plan can be sustained, a new installation is the only chance to harvest the full value.

Source: SAP and ASUG, Mapping Your Journey to SAP S/4HANA, March 2020

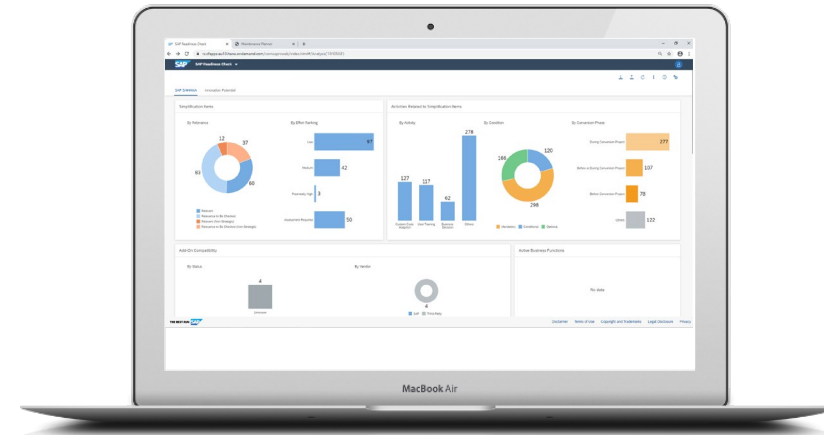
# Modernizing your ERP to the intelligent core



You no longer need to wonder how SAP S/4HANA can benefit your company. By assessing the configuration and usage of your existing SAP software investment, these free, personalized tools increase the confidence you need to deliver a business case and technical deployment plan for SAP S/4HANA.



First, build your business case with SAP Business Scenario Recommendations. The service uses your SAP software usage data to identify business processes that can be transformed with SAP S/4HANA.



Then, you can plan your move with the SAP Readiness Check tool for SAP S/4HANA. Based on your usage and configuration data, the tool guides you through topics such as custom code adaption, add-on compatibility, sizing of SAP HANA, and recommended SAP Fiori® apps. You can plan your move to SAP S/4HANA with the immediate, personalized insights delivered through this tool.

# Understanding new implementation options

SAP Model Company for Consumer Products offers a comprehensive reference solution to support the processes of a consumer products company. It is delivered with relevant business content, accelerators, and enablement services, helping you reduce costs, decrease risks, and accelerate adoption during discovery, exploration, and realization activities.

## Business Processes and Capabilities

### Materials Management & Manufacturing

- Stock transfer order with outbound delivery
- Manufacturing for planning and scheduling using embedded production planning and detailed scheduling (PP/DS) and process manufacturing (PP-PI)
- Selected best practices processes

### Sales & Distribution

- Fast (sales) order entry
- Condition contract on invoice
- Condition contract management and settlement of rebate agreements
- Product allocation (advanced available to promise (aATP))
- Selected best practices processes

### Logistics Execution & Supply Chain

- Direct store delivery
  - ✓ Pre-seller
  - ✓ Delivery driver
  - ✓ Van seller
  - ✓ Mixed driver
- Selected best practices processes

### Finance & Controlling

- Cost estimation
- Selected best practices processes

### Reporting & Analytics

- Empties management
  - ✓ Empties in purchasing
  - ✓ Empties in sales
- Recycling administration
- Selected best practices
- SAP Fiori® reports

### Best-practice approaches on US1909 baseline

- Advanced returns management (accelerated returns)
- Batch traceability (food and product safety)
- Consignment
- Credit and debit notes
- Third party

## Applications

- SAP S/4HANA® Enterprise Management 1909
- SAP S/4HANA Manufacturing for planning and scheduling (embedded PP/DS)
- SAP S/4HANA for advanced ATP (product allocation)



## Delivery Approach

### Preconfigured solution

- Ready-to-run appliance with applications, configuration, and sample data
- System provisioning over the SAP Cloud portfolio, your preferred cloud provider, or on premise

### Business Content & Accelerators

- Business-process documentation
- Configuration guides
- Test Scripts
- Templates for SAP S/4HANA migration cockpit

### Service Scope Options

- Model Company Activation
- E2E Scenario Group Consumer Products

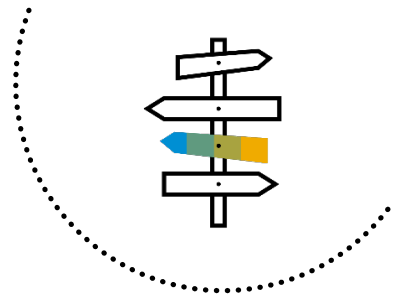
### When to Consider

- Discover the capabilities and innovations of a comprehensive SAP solution for your specific use case
- Prepare and explore using a ready-to-run system for enablement, fit-gap analysis, and solution design
- Support an agile and lean implementation approach with hands-on experience from day one
- Address resource bottlenecks in IT and business, and reduce time and effort during realization

## Business Benefits

- Reduced costs and resource effort thanks to a preconfigured, ready-to-run solution
- Elimination of risk through proven reference-solution architecture and comprehensive process support
- Increased innovation adoption and decreased time-to-value through agile and lean principles
- Accelerated enablement and increased engagement

# Analyzing the pros and cons

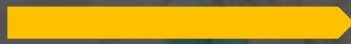


	TASKS IN SAP S/4HANA TRANSITION PROJECT	...IN A SYSTEM CONVERSION	...IN A NEW IMPLEMENTATION
<b>CLEAN UP IN SAP ERP</b>	Data volume management (old data, old org units)	RECOMMENDED	NO
	Data inconsistency clean-up for customer/vendor business partners and finance data	YES	YES, FOR MIGRATION SCOPE
	Clean-up of unused custom code	RECOMMENDED	RECOMMENDED
<b>MANDATORY SOLUTION ADJUSTMENTS</b>	Custom code adjustments/remediation for used custom code	YES	YES
	Functional changes, e.g., AA in G/L, Use of business partner, credit management, foreign trade	YES	YES
<b>DATA MIGRATION</b>	Taking over data from SAP ERP	AUTOMATIC	Custom project with tools/content support Effort increases level of process reengineering and need for historical data
<b>OPTIONAL ACTIVITIES: INNOVATION, OPTIMIZATION &amp; REENGINEERING OF EXISTING SOLUTION</b>	Implementation of new SAP S/4HANA functionality, e.g., Fiori operational reporting, new MRP, or advanced ATP	POSSIBLE	POSSIBLE
	Implementation of new process variants/solutions and back-to-standard approach, with decommissioning of phasing out of old business processes	POSSIBLE	POSSIBLE
	Changes to organization models, e.g., controlling area	POSSIBLE, SEPARATE PROJECT	POSSIBLE
	More disruptive changes to Financials, e.g., COA, Ledgers, Document Splitting, PCA Replacement	POSSIBLE, SEPARATE PROJECT	POSSIBLE

The more radical changes are required, the more attractive a new greenfield implementation becomes, with or without reusing the existing template (shell copy). Data migration efforts increase with the level of process reengineering and the need for historical data.

# SAP S/4HANA transition case study

Global Discrete Manufacturer selects Savantis to prime an SAP ECC 6.0 EhPO cloud-to-cloud system migration and S/4HANA 2020 system conversion program. The program charter is to migrate to an AWS Cloud platform and reinvent their business processes by adopting the SAP S/4HANA Intelligent Enterprise core. This multi-year global program spans 23 world-wide production sites and includes three progressive go lives.



## MIGRATE

Migrate SAP ECC 6.0 EhPO system on out-dated hardware from hosted environment to a new Amazon Web Services Cloud platform.

## PATCH

Given the SAP system age and lack of maintenance, certain components must be patched to a minimum technical level in order to convert in one step to S/4HANA 2020.

## CONVERT

The selected transition strategy of a conversion will transform the core to SAP S/4HANA 2020, including Finance and other key simplification items, and remediate all custom code.

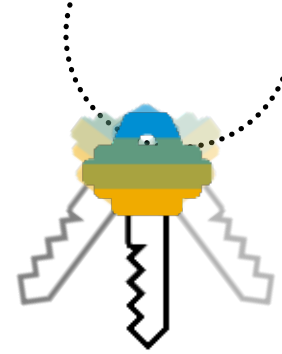
## RE-INVENT

The final phase will be to re-invent differentiating business capabilities through the implementation of SAP intelligent technologies, such as IoT and machine learning.



**savantis**  
Intelligent Enterprise

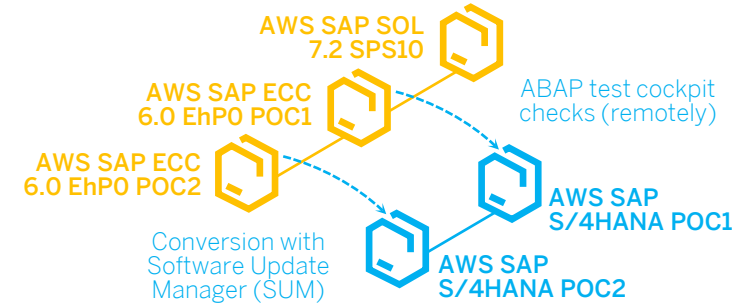
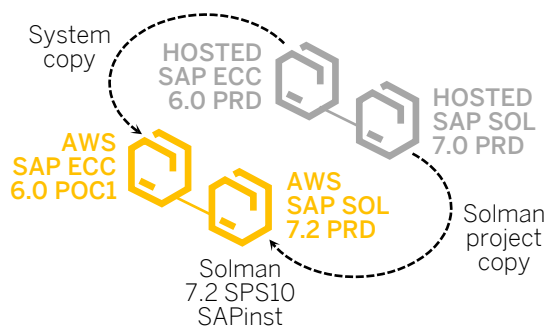
# Keys to our **successful start**



- 1 Ample time to perform the Discovery Phase.** It's incredibly important to spend time in the Discovery phase to work through all the analyses to reduce 'unknowns' prior to formal project kickoff.
- 2 Enable your ALM solution early.** SAP Solution Manager 7.2 supports countless transition steps offering tools to support project tasks, such as business process documentation, test management and collaboration.
- 3 Audit your system assets early to support the new solution.** Assess existing SAP system documentation, such as technical specs and test scripts early to backfill gaps in key assets before the S/4HANA conversion begins.
- 4 Stand-up Proof-of-Concept solutions early.** Proof-of-Concept (POC) systems are a great risk mitigation strategy to uncover issues early in the lifecycle. Consider multiple POCs to further accelerate the conversion process.
- 5 Cleanse your system.** Many customers have historical data that is in open status that will sometimes prevent conversion, and always prevent data archiving.
- 6 Archive your historical data.** The technical sizing of your new SAP HANA database is based on in-memory DB size in terabytes. And when moving to the cloud or converting, business and system downtimes are based on the active DB size. Thus, it's paramount you reduce the system size anyway possible to save time and money.
- 7 Get ahead start on simplification items.** The simplification items provide the understanding of changes between your SAP ERP 6.x and S/4HANA end state. Analyze and develop strategies early to address larger simplification impacts.
- 8 Carefully inspect custom code.** Analyzing your custom RICEFWs for business use is a great start. Often RICEFWs built years ago are not relevant and thus not required for remediation.
- 9 Don't overlook SAP add-ons and partner system integration readiness.** SAP add-ons that are active in your SAP ERP 6.x solution need to be updated to the latest S/4HANA version. Many times older 3<sup>rd</sup> party extensions will not be certified for the latest S/4HANA version.
- 10 Assessing business and system downtime.** One of the most important activities to perform is mocking your conversion as soon as possible in the transition project lifecycle. You must know ASAP how long your business outage will be in cutover.
- 11 Build realistic estimates for the project.** The more you maximize the Discovery Phase and practice active remediation and planning, the better your estimates will be. Be careful selecting the low bidder, chances are, it is too good to be true.

“For many customers, SAP S/4HANA transition programs start with a debate on how to approach the project and what options to consider. Most of them swiftly come to the conclusion that the company's vision, readiness to change, and ability to manage these changes play a much bigger role than any technology aspects. We couldn't agree more.”

# Preparing for the transition using the discovery phase



## WAVE 1

### OBJECTIVES

- Prove portability and architecture
- Prove technical capabilities and accessibility of AWS Cloud
- Initiate strategic use of Solution Manager for application maintenance

## WAVE 2

### OBJECTIVES

- Ready ECC PoC1 for service check points
- Run S/4HANA Readiness Check
- Evolve technical architecture build plan

## WAVE 3

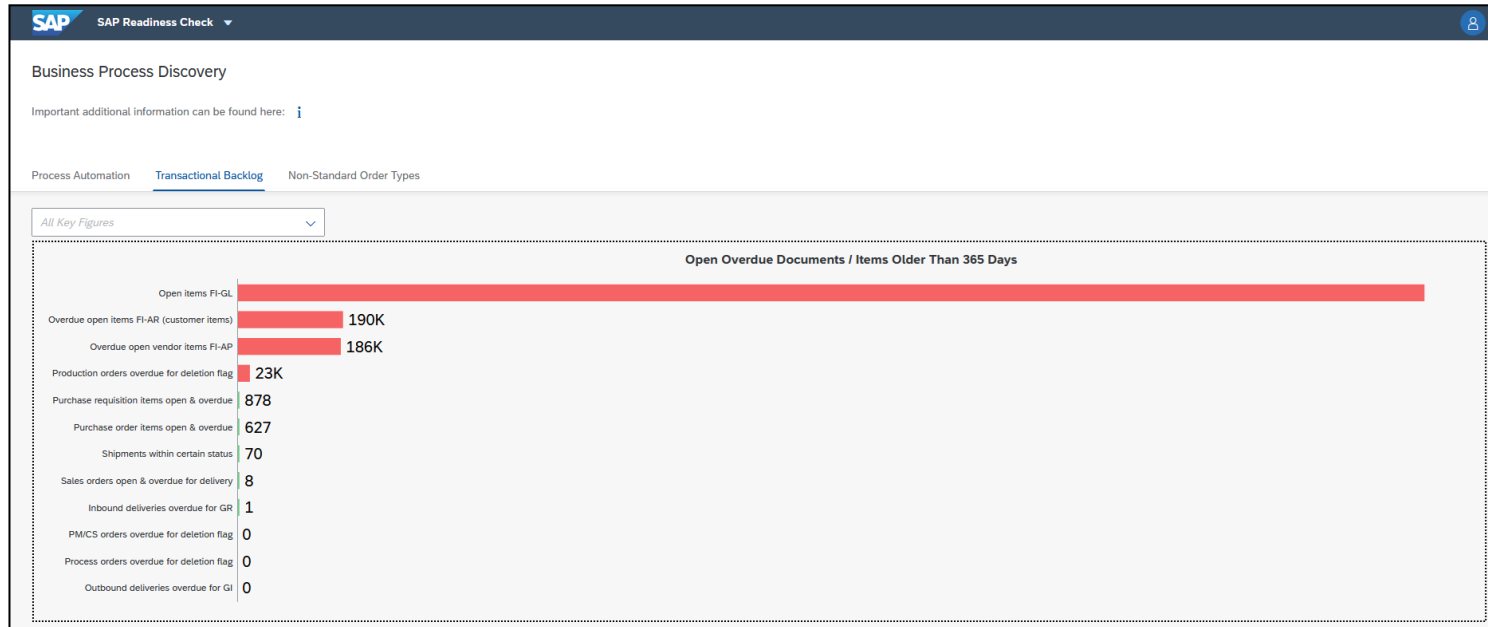
### OBJECTIVES

- Mirror ECC PoC1 to create ECC PoC2
- Upgrade new mirror copy of ECC PoC2 to create S/4HANA PoC and document technical S/4HANA buildout and remediation steps
- Execute functional confirmation of ECC PoC1 across workstreams
- Perform Fit/Gap Analysis across workstreams using S/4HANA Readiness Check inputs and S/4HANA PoC and document digital improvements and new business functionality 'wish lists'
- Assess Solution Manager use strategy for ongoing system conversions



# Actioning data inconsistencies

The SAP S/4HANA Readiness Check 2.0 report provides analysis of your SAP ECC 6.x system readiness for S/4HANA conversion. The report contains data inconsistencies per functional area that must be remediated prior to S/4HANA conversion.



It is common for many SAP customers to have open items in their SAP ERP systems that span fiscal years in finance, sales and distribution, materials management and production planning. In addition to providing new features and functionality as well as technological advances, S/4HANA conversions also provide the opportunity to cleanse historic data and archive past fiscal year data to reduce large SAP ERP tables that have not been maintained. Additionally, data cleanup is the required prerequisite to data archiving, as open items cannot be archived and is critically important to new S/4HANA conversions. The new in-memory platform is sized by SAP HANA database size and places data in-memory for rapid retrieval and presentation to business users. When you embark on a long journey, you usually don't pack heavy!

## DATA INCONSISTENCIES

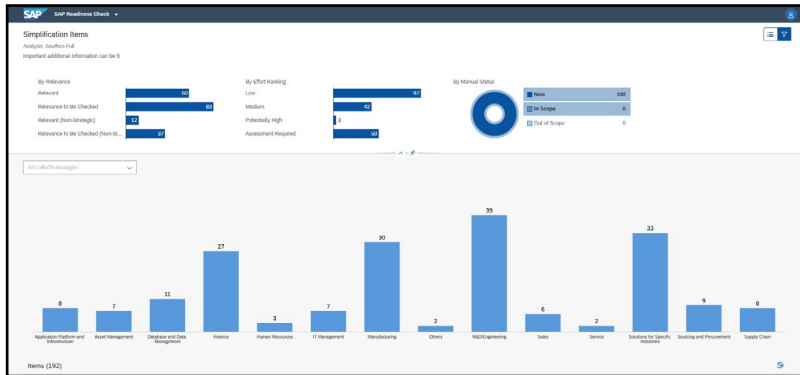
Get a list of key figures for a selection of business process improvements of SAP solutions, for example, the number of overdue documents that can be closed and archived. Reducing unnecessary data and cleaning up potential issues smoothen the conversion to SAP S/4HANA. However, issues displayed here usually don't block the technical system conversion process. The following features are available:

- **Process automation:** Evaluates your process efficiency of back-office processes by making the degree of automation transparent when creating business documents.
- **Transactional backlog:** Provides an overview of old open and overdue business documents that must be worked on before they're archived and migrated to SAP S/4HANA. Additionally, if they are unnecessarily migrated, these key figures can also have an impact on SAP S/4HANA topics such as fast closing, MRP planning, and inventory optimization.
- **Nonstandard order types:** Enables you to understand your potential to reduce complexity and further harmonize or even standardize business processes. See how many different document types have been customized and whether they're used in the current business solution.

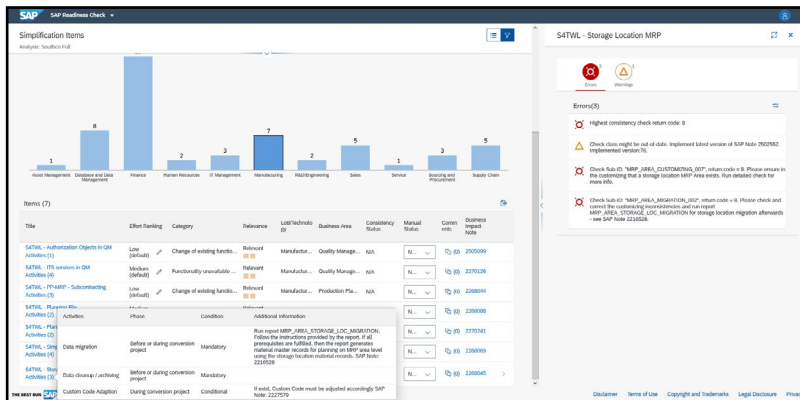


# Addressing simplification items

Simplification items per functional area provide the details for step-by-step remediation based on your system's specific configuration.



Title	Phase	Condition	Additional Information
Business Decision	Before or during conversion project	Mandatory	Decide about future ledger approach for asset accounting
Customizing / Configuration	During conversion project	Mandatory	Create blueprint for required Asset Accounting configuration in SAP S/4HANA
Custom Code Adaptation	During conversion project	Mandatory	Review customizing and configuration required for preparing the data migration and for the future asset accounting steps in SAP S/4HANA
Interface Adaptation	During conversion project	Mandatory	For required custom code adaptation refer to simplification item SIZ_791_0A and SAP note 2227087
Data cleanup / archiving	Before or during conversion project	Optional	Adapt or replace obsolete or changed legacy data transfer methods
Business Operations	During conversion project	Mandatory	Reduce number of asset accounting documents to avoid unnecessary data error corrections and to enhance conversion efficiency
Data migration	Before or during conversion project	Mandatory	Execute year-end and month-end closing activities
Data migration	During conversion project	Mandatory	Check and correct inconsistent data which is relevant for the conversion
User Training	During conversion project	Mandatory	Perform data migration to new SAP S/4HANA data model
Conversion to S/4HANA	Low (Default)	Change of existing func.	Inform users about changes in Asset Accounting



Source Release	Target Release	Check	Application Component	Phase List	Target Software Component	Additional Notes
SAP ERP 6.0	Initial Shipment Stack					
SAP SFINANZ15 1503	Initial Shipment Stack					
SAP S/4HANA 1810	Initial Shipment Stack				SAP S/4HANA 1810	02.05.2017.FP

## SIMPLIFICATION ITEMS

To enable SAP customers to better plan and estimate a conversion to SAP S/4HANA, SAP has created a "simplification list" where they have described the detailed functional changes from past versions of ERP to the new S/4HANA solution capabilities.

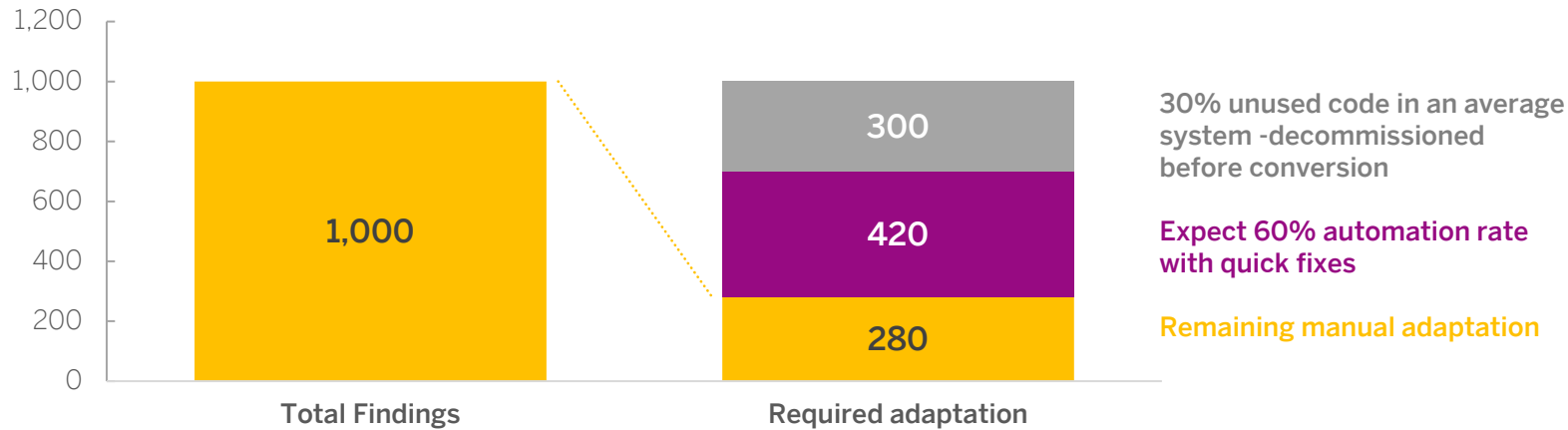
The simplification list is a collection of items that focus on what needs to be considered during a conversion project. The SAP Readiness Check for SAP S/4HANA displays the items that are relevant for your specific SAP ERP 6.x system configuration to SAP S/4HANA. The simplification items are identified according to factors such as transactions used, customizing, and tables. The simplification items are one of the most important means of preparing your move to SAP S/4HANA, and enable you to do the following:

- Display the S/4HANA simplification items that are relevant for your SAP ERP and reference related project activities to organize project efforts.
- Focus on the most important activities first, e.g., which business decisions are to be made and which tasks can be performed now on SAP ERP 6.0.
- Filter for mandatory and conditional activities to ease project planning and organize work by setting statuses.
- View an effort ranking of simplification items that is based on previous project experiences.



# Guiding principles to custom code remediation

Exemplary Calculation for 1,000 Findings in Customer Code



## Custom Code: Rethink and Clean Up, Not Just Rework

Over the past years, many long-term SAP customers have heavily extended and modified their SAP solutions. There are SAP ERP systems with a few million lines of custom code.

Take the transition as an opportunity to clean up your system. Put "clean core" and "zero modifications" on the list of your project's goals and ensure that all impacted custom code objects are either adapted or deleted during system conversion.

The custom code workstream should have these three major work packages:

- Remove unused code, and automate manual code
- Review modifications, clones, and implicit enhancements

Source: SAP and ASUG, Mapping Your Journey to SAP S/4HANA, March 2020

## Removing Unused Code

In an average SAP ERP system, 30% to 60% of custom code is never executed in the production system. Use ABAP Call Monitor statistics and the "Custom Code Migration" SAP Fiori app to remove unused code upon conversion. This step is now technically integrated into the conversion process and makes the execution very easy. Keep collecting the data with usage procedural logging (UPL) if you already have it active. Alternatively, activate the ABAP Call Monitor and enable aggregation of statistics in the production system as soon as possible to have a reliable data set by the time of system conversion.

## HIGHLIGHTS OF THE ABAP® PROGRAMMING LANGUAGE

- Simplified and enhanced ABAP® syntax with in-line declarations, advanced table operations, and JSON support
- Broader coverage of the SQL standard, code push-down support, and flexible consumption of core data services (CDS) modeling entities and roles
- SAP HANA® centric development with CDS views and code breakouts with ABAP-managed database procedures
- ABAP channels and daemons for real-time events, support for industrial IoT scenarios and machine-to-machine (M2M) communication

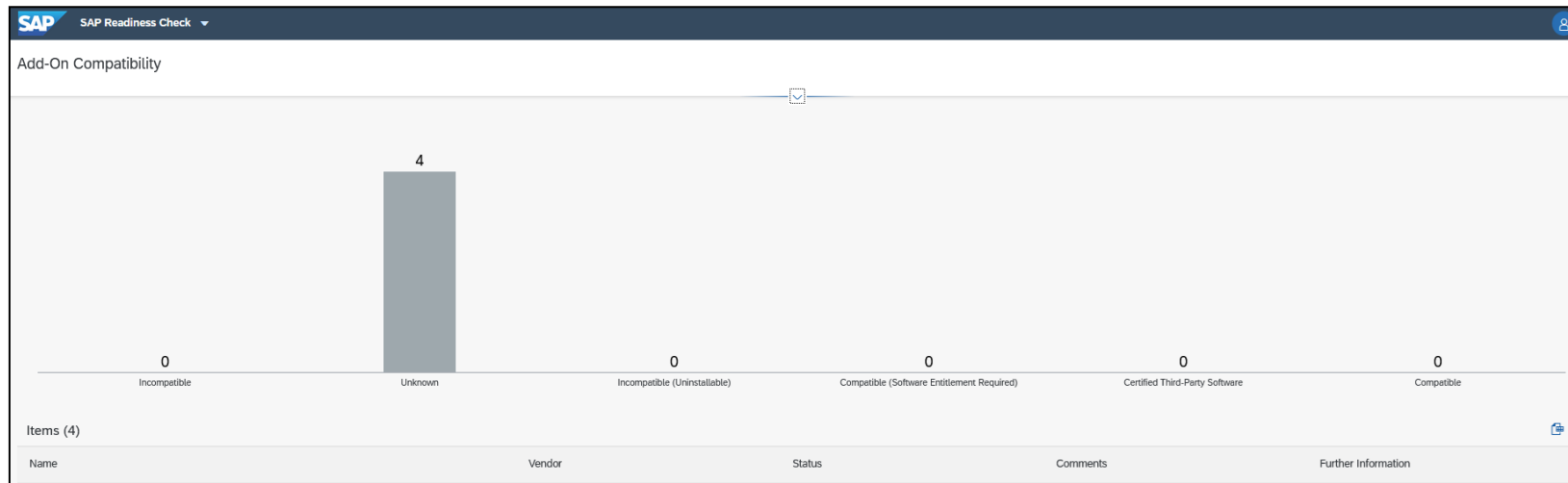
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JSON



# SAP add-ons and partner system integration

Using the SAP Readiness Check 2.0 well in advance of the project start helps teams plan for remediating installed add-ons. The technical architecture team has access to the installed catalog of add-ons that will require additional answers to the following questions:

- Who is the add-on's vendor? Is it SAP or an independent third-party software vendor?
- Is the add-on's compatibility with SAP S/4HANA confirmed by the vendor (or certified by SAP), and if so, for which SAP S/4HANA releases?
- Is the add-on functionality still required?
- Is a corresponding functionality available in SAP S/4HANA?
- Is there an upgrade or uninstallation package available for this add-on?



## SAP ADD-ONS

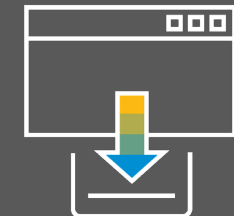
### Compatibility of Add-Ons and Business Functions

Add-ons must be validated for compatibility with SAP S/4HANA before you can start a system conversion of your SAP ERP. The same applies for business functions. You can do the following:

- View the number and compatibility of existing add-ons and business functions.
- Manually select a compatibility category for third-party add-ons and add comments to listed items.

For the add-ons provided by SAP or sold through SAP's price list, you can request the current status and the compatible versions directly from SAP. For add-ons provided by other software vendors, you should establish contact with these providers and inform them about your plans to convert to SAP S/4HANA and ask for a compatible version. The sooner you do so, the more time the vendors will have to respond accordingly.

You can check the current certification status of your add-on in the Certified Solutions Directory. And depending on the answers to the questions above, formulate a plan about how to deal with each of the installed third-party add-ons.



# Transforming finance and data quality migration

Finance is one of the larger simplification improvements delivered by SAP S/4HANA that requires significant preparation, planning and execution in the conversion process. The expansive finance and controlling tables in SAP ERP 6.x have been significantly reduced and simplified to deliver business processing and run-time optimization. The below areas and activities are paramount to S/4HANA-enabled transformation.

## New Configuration

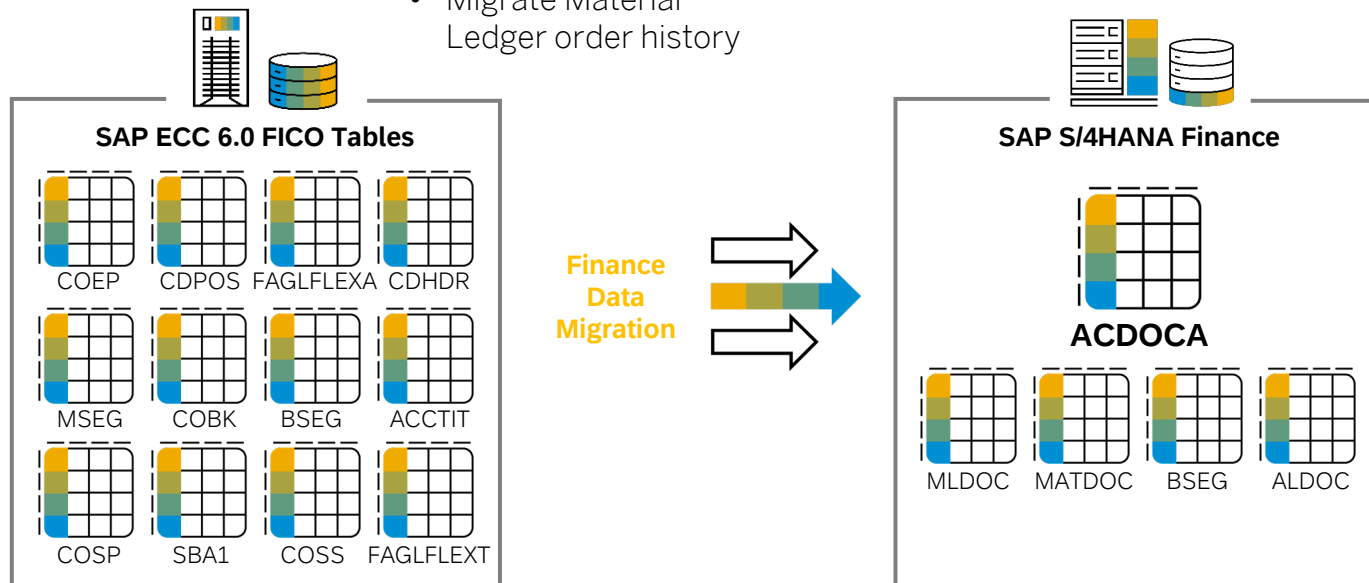
- General Ledger
- Accruals
- New Asset Accounting
- Controlling-COPA
- Material Ledger
- House Banks
- Credit Management-FSCM

## Data Migration

- Merge GL accounts and cost elements
- Enrich transactional data
- Migrate data into Unified Journal
- Migrate Material Ledger data
- Migrate Material Ledger order history
- Migrate aggregate deltas
- Run initial depreciation calculation
- Migrate General Ledger allocations
- Migrate House Banks
- Migrate Credit Management FSCM

## Data Reconciliation

- Final Reconciliation, Consistency Check and Activation



## FINANCE

The SAP S/4HANA for central finance foundation solution has been explicitly designed for the needs of enterprises that have multiple ERP systems in their landscape, as well as a central finance and controlling department serving all business divisions. The capabilities of the solution make it a perfect fit for a divisional setup with operational finance on the divisional level, and central financial reporting and consolidation on the corporate level.

Architecturally, SAP S/4HANA for central finance foundation comes into the landscape as a new, additional SAP S/4HANA system that receives financial transactions replicated from other SAP and third-party systems. In a typical setup, multiple source systems are connected to an SAP Landscape Transformation Replication Server, which is connected to one SAP S/4HANA for central finance foundation system.

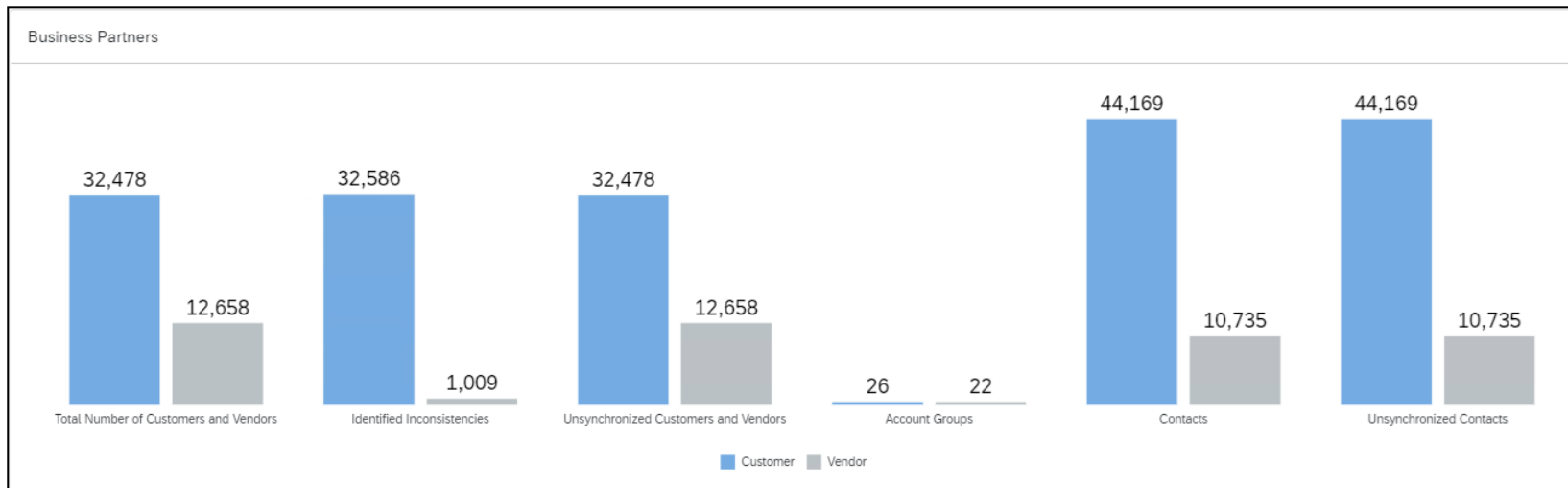
However, the perception of SAP S/4HANA for central finance foundation as a "first step" in a transition to SAP S/4HANA in just any landscape is misleading. In particular, companies with a single SAP ERP instance should retain their landscape design and focus on the standard options.



# Converting to business partner CVI

**Get an overview of the master data for your customers, vendors, and contacts that needs to be synchronized before your conversion to SAP S/4HANA. This topic indicates the expected efforts to activate and execute the Customer/Vendor Integration (CVI) in your SAP ERP system in order to convert your master data to SAP Business Partner in SAP S/4HANA. This topic enables you to see the following:**

- The total number of your customers, vendors, and related contacts with the identified data quality issues (inconsistencies) in your master data
- The number of unsynchronized customers and vendors in the backlog for CVI in your SAP ERP system
- The number of unsynchronized contacts that need to be synchronized, together with the customers and vendors that are linked to the contacts
- The number of “Account Groups”, which indicates the degree of data complexity
- The number of customer-specific enhancements for the most important tables



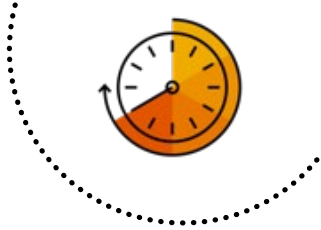
## BUSINESS PARTNER CVI

Get an overview of the master data for your customers, vendors, and contacts that needs to be synchronized before your conversion to SAP S/4HANA. This topic indicates the expected efforts to activate and execute the Customer/ Vendor Integration (CVI) in your SAP ERP system in order to convert your master data to “Business Partner” in SAP S/4HANA. This enables you to see the following:

- The total number of your customers, vendors, and related contacts with the identified data quality issues (inconsistencies) in your master data
- The number of unsynchronized customers and vendors in backlog for CVI in your SAP ERP system
- The number of unsynchronized contacts that need to be synchronized, together with the customers and vendors that are linked to the contacts
- The number of “Account Groups” that indicate the degree of data complexity
- The number of customer-specific enhancements linked to your most important tables



# Assessing business and system downtime early in the transition lifecycle



Phase	Work Packages	Timing
Technical AWS Cloud Migration Project	Preparation	XX hours
	EXPORT	
	Movement	
	IMPORT	
	Post processing step	
	Functional check	
	Client functional check	
SAP ECC Patching Project	Extraction	XX hours
	Configuration	
	Check	
	Pre-processing	
	Execution	
	Post-processing	
S/4HANA Conversion Functional Pre-Conversion	Run Readiness Checks	XX hours
	Apply SAP Notes/Man Config	
	Manual CVI Intervention	
	Run FI Reports for Validation	
	Validate 'Green' Readiness Checks	
S/4HANA Conversion	Extraction	XX hours
	Configuration	
	Check	
	Pre-processing	
	Execution	
	Post-processing	
ATC / Func. Config Transport Loading	ATC Custom Code Transports	XX hours
	Functional Team Config Transports	

Total Elapsed Time X days

Sequential Activities

Phase	Work Packages	Timing
3 <sup>rd</sup> Party Partner Systems Enablement & Integration	B2B eCommerce	XX hours
	Partner System 1	
	Partner System 2	
	Partner System 3	
	Partner System 4	
	Partner System 5	
	Partner System 6	
Solution Manager 7.2 Enablement	Managed System Config System & Job Monitoring	XX hours
	Central User Administration	
Record-To-Report	Data Quality Review	XX hours
	Transaction & Balance Migration	
	Post Migration Validation	
Forecast-To-Produce	Data Quality Review	XX hours
	Transaction Validation	
	Key Development Validation	
Source-To-Pay	Data Quality Review	XX hours
	Transaction Validation	
	Key Development Validation	
Order-To-Cash	Data Quality Review	XX hours
	Transaction Validation	
	Key Development Validation	
CVI Setup	Set No. Ranges Intervals	XX hours
	Data Quality Review	
	Key Development Validation	

Total Elapsed Time XX hours

Concurrent Activities

## Key Contacts



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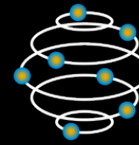
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## Savantis Solutions SAP Services



### SAP S/4HANA INTELLIGENT ENTERPRISE

S/4HANA Digital Transformation  
S/4HANA Roadmapping + Advisory  
S/4HANA Greenfield Implementations  
S/4HANA Brownfield Conversions



### SAP SUPPLY CHAIN OPTIMIZATION

SCM Roadmapping + Advisory  
SAP Advanced ATP & Extended Warehouse Management  
SAP IBP & SNC  
SAP IoT and Robotics Integration



### SAP OMNICHANNEL CUSTOMER EXPERIENCE

SAP Marketing Cloud  
SAP Commerce Cloud  
SAP Sales & Service Cloud  
SAP Customer Data Cloud



### SAP PREDICTIVE & AUGMENTED ANALYTICS

SAP Analytics Roadmapping + Advisory  
SAP Analytics Cloud  
SAP Data Warehouse Cloud  
BW/4HANA



# References & Acknowledgements

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