

Choosing the Right Path: Exploring SAP S/4HANA Migration Options – Public Cloud, Private Cloud, or On- Premise

Kiran Musunuru, Senior Vice President
Lemongrass

Las Vegas

2024

SAPinsider

In This Session

- Understanding of transition paths to S/4HANA
- In depth details of various deployment options
- S/4HANA readiness assessment and various topics



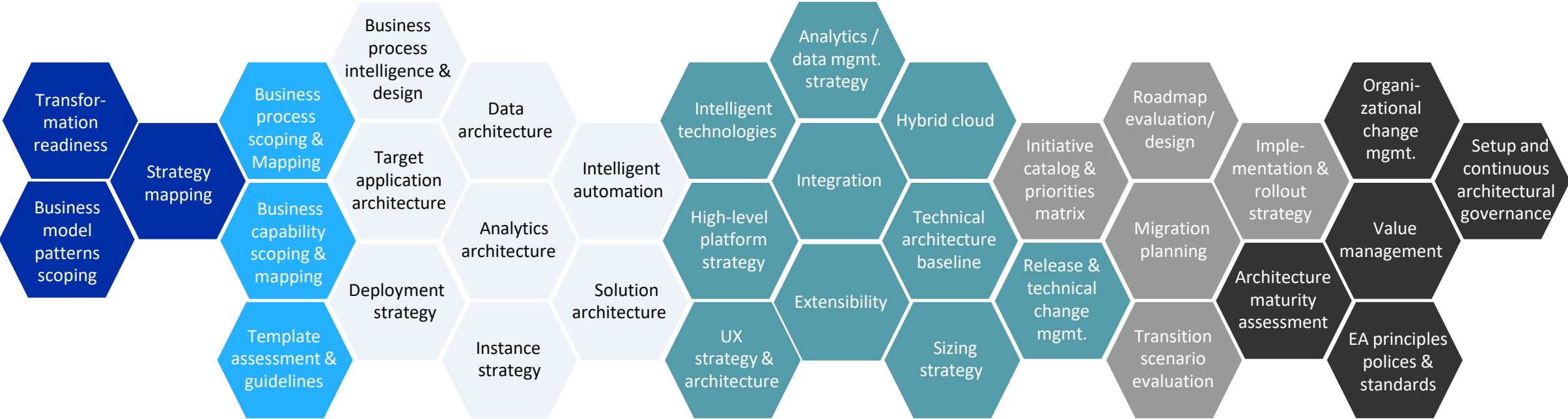
Agenda

- S/4HANA Transition Paths
- Enterprise Building Blocks
- S/4HANA Discovery / Assessment
- Implementation Best practices
- Implementation Best practices

Implementation Option Summary

Strategy	System Conversion	New Implementation	Selective Data Transition*
Benefits	<ul style="list-style-type: none"> Keep your investments in data, processes & custom code Rapid conversion to a modern, cloud-based architecture Flexibility to adopt innovations in incremental steps 	<ul style="list-style-type: none"> Re-engineer business processes based on best practices Quickly capture full value of S/4HANA features Start fresh deployment with a “clean core” which eliminates modifications that block upgrades 	<ul style="list-style-type: none"> Consolidate capabilities from multiple ERP systems Mix of business process reuse and optimization Retain historic data from all legacy systems
Technical Methodology	<ul style="list-style-type: none"> Guided 1:1 migration & upgrade (re-use) Database migration to new database Data conversion to new data model Software conversion using Software Update Manager (SUM) or SUM with DMO 	Brand new installation (re-design) <ul style="list-style-type: none"> New software installation Data migration using SAP S/4HANA migration cockpit 	Custom blend of new implementation & system conversion <ul style="list-style-type: none"> Create shell of legacy ERP and & reconfigure simplification items Standard system conversion Customize & configure S/4HANA system for new innovations Load data (standard or standard plus historic)
Desired Outcomes	<ul style="list-style-type: none"> Rapidly modernize by reusing existing processes Full historical data & process conversion Big bang rollout: one step with single downtime 	<ul style="list-style-type: none"> Innovate by creating new processes from scratch Move off obsolete technology & functionality Consolidate several legacy systems 	<ul style="list-style-type: none"> Optimize processes with a mix of old and new Eliminate outdated technology Full historical data & process conversion Phase in by country or business unit, reducing risk of big bang go live
Considerations	<ul style="list-style-type: none"> Must be on recent release 1:1 transition only, not applicable for system consolidation 	<ul style="list-style-type: none"> Data migration limited to master data, open items and balances (no historical data) Supports either a big bang or phased rollout 	<ul style="list-style-type: none"> SAP does not certify 3rd parties' services Issues which arise from the use of non-SAP tools are not covered by SAP Support

Modular E2E Enterprise Architecture Planning/Building Blocks



S/4 HANA Readiness Assessment

- Business / Functional Assessment
- Technical Assessment
 - Custom Code Analysis
 - Simplification impact
- Platform Strategy
- Business Case
- Organization Change Management

Understanding Must-Do's In SAP S/4HANA

Master Data

- Business Partner
- MRP Areas
- Production version



Finance

- Universal Journal
- New Asset Accounting
- Credit management
- Simple Cash management
- Material Ledger
- Advanced Compliance Reporting



Sourcing & Procurement

- International Trade
- Obsolete transactions



Manufacturing

- MRP Live*
- Global ATP APO (until 2025) vs. Advanced ATP*
- PP/DS [APO] vs. embedded PP/DS*
- Industry solution for planning & manufacturing (until 2025)
- Subst. Computer aided planning CAPP



Sales

- Credit management
- Settlement management
- Global ATP [APO] (until 2025) vs. Advanced ATP*
- Revenue Accounting
- Decision ext. TM vs. embedded TM
- International Trade



Cross Functions



S/4HANA techn. Readiness analyses | UI Strategy & Governance | Mobile Strategy & Governance | Output Management Strategy & Governance
Review of Development Guidelines | Custom Code Conversion | Migration Cockpit



Service & PM

- Decision CS (until 2025) vs. Service Core vs. CRM (Cloud)*



Warehousing & Transport

- Warehouse strategy → Embedded EWM (Basic vs Extended)*
- Target picture of TRM/ Yard Mgmt / Valuated Service*



PLM & PS

- ECTR (Engineering Control Center) replacement for CDESK
- PPM + CPM part of S/4Core
- Replacements for: Easy DMS, cFolders, Access Control Management (ACM)
- Variant Configuration (LO-VC; technical conversion)*



Controlling

- Account based COPA
- Master Data changes
- COGS* & variant split*
- Attributed COPA
- New closing Cockpit



Embedded Analytics

- New S/4 structures
- Adopt old BW extraction & data model to new S/4 structures
- LIS Substitution through embedded analytics
- Real time KPIs*



Finance

S/4 project execution

Preparation

Execution

Exploitation

Stress level
of organization

Must Dos – Preparation Phase

- Business Partner
- New Asset Accounting
- Credit Management FSCM
- Master Data → Chart of accounts clean-up
- Material Ledger* (for additional business benefit, e.g. actual costing [multiple currencies/ multiple valuation]...)

Must Dos – S/4 project phase

- Simple **Material Ledger** (reduced scope)
- Simple Cash Management → New House Banks
- **Universal Journal** → ACDOCA
- Basic FIORI-Setup
- Migration Cockpit

Optional

- Central Finance
- New Cash Management
- New Closing Cockpit
- IBP-F
- Material Ledger (other scenarios)
- Predictive Accounting
- S/4HANA Group Reporting
- Extended FIORI with first-sight KPI's

Game changers: Digital finance transformation

- New General Ledger & Profit Center Scenario/ Enhanced month end transactions/ Cloud services/ Predictive Ledger/ Machine Learning / Blockchain

Transition to SAP S/4HANA – System Conversion

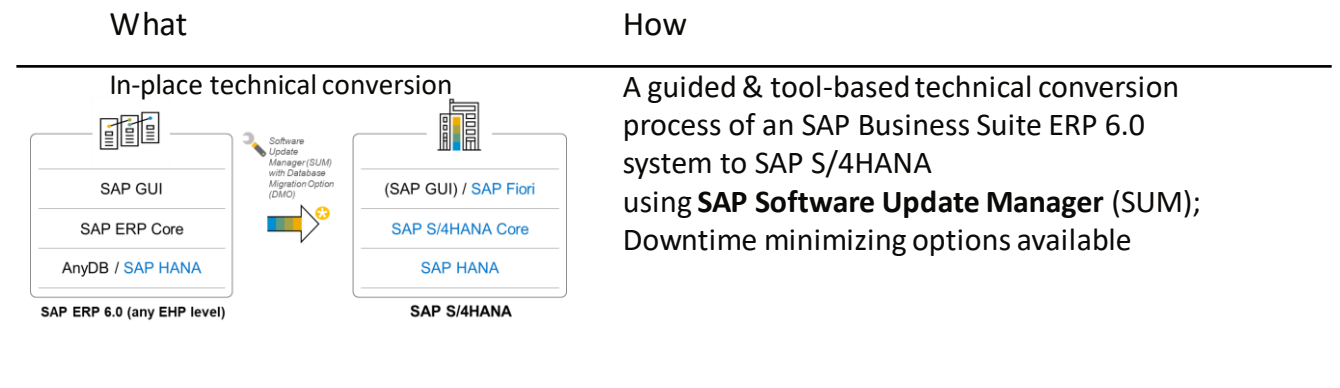
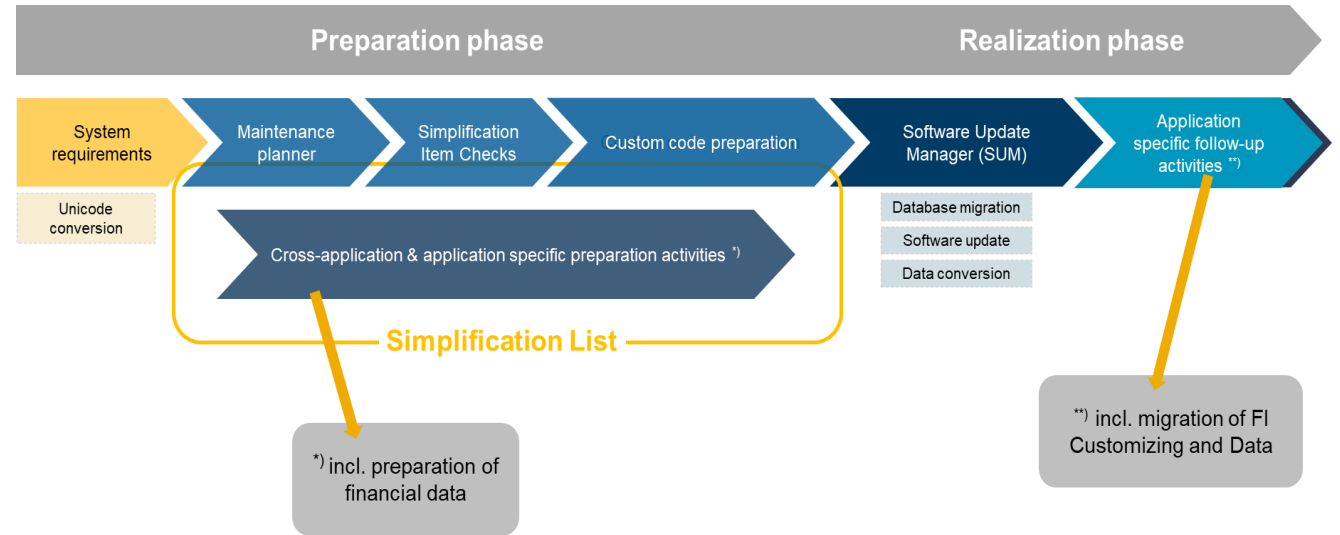
Scenario description

A complete technical in-place conversion of an existing SAP Business Suite ERP 6.0 system to SAP S/4HANA

- Comprehensive analysis and check tools ensure data consistency and system readiness
- SAP Readiness Check and the conversion tools ensure appropriate project planning and smooth execution

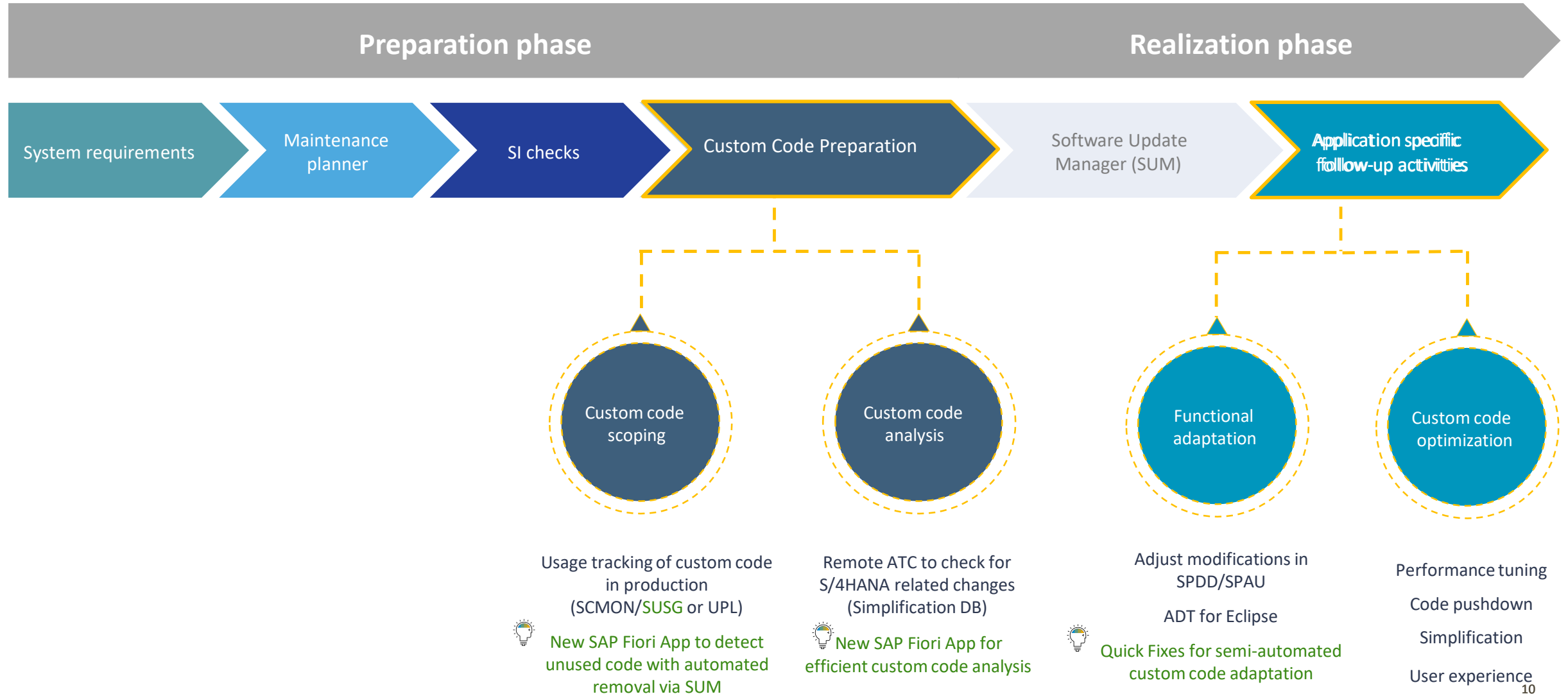
Why you chose this option

- Bring your existing business processes to the new platform.
- Keep your investment in custom code
- Mitigate the risk and investment of a big bang conversion project by running a technical conversion project with some focused, selected innovation,
- Adopt more new innovations at your speed at a later point of time and in a phased approach.



SAP S/4HANA system conversion

Custom code related process



SAP Readiness Check for SAP S/4HANA vs. Simplification Item Check

	Type	User Interface	Types of checks included	Called by Software Update Manager (SUM)	Mandatory	Granularity	Use cases
SAP Readiness Check for SAP S/4HANA	Customer self service in the SAP Support Portal	Cloud based web interface	<ul style="list-style-type: none"> • Simplification Item Relevance *) • Custom Code (high level) • Recommended Fiori Apps • SAP S/4HANA Sizing • Add-on Compatibility • Business Functions 	No	No	high/mid level	• Conversion to SAP S/4HANA
Simplification Item Check	ABAP Report in Customer System	SAPGUI	<ul style="list-style-type: none"> • Simplification Item Relevance • Check System Consistency*) before the conversion or upgrade 	Yes	Yes	detailed	<ul style="list-style-type: none"> • Conversion to SAP S/4HANA • Upgrade to a higher SAP S/4HANA release

What you can do today in your SAP Business Suite landscape

YOU SHOULD

- Collect productive usage and SQL execution data
- Switch on SCMON/SUSG (recommended) or UPL Switch on SQL Monitor

Create new code “SAP S/4HANA ready”

- Setup remote ATC
- Use SAP S/4HANA ATC checks in your dev system

Make your developers “SAP S/4HANA ready”

- Gain practical skills in ADT in Eclipse
- Get familiar with SAP S/4HANA must-have technologies (e.g. CDS, BOPF, OData)

YOU COULD

Start to adapt your code in your dev system

Convert to Unicode

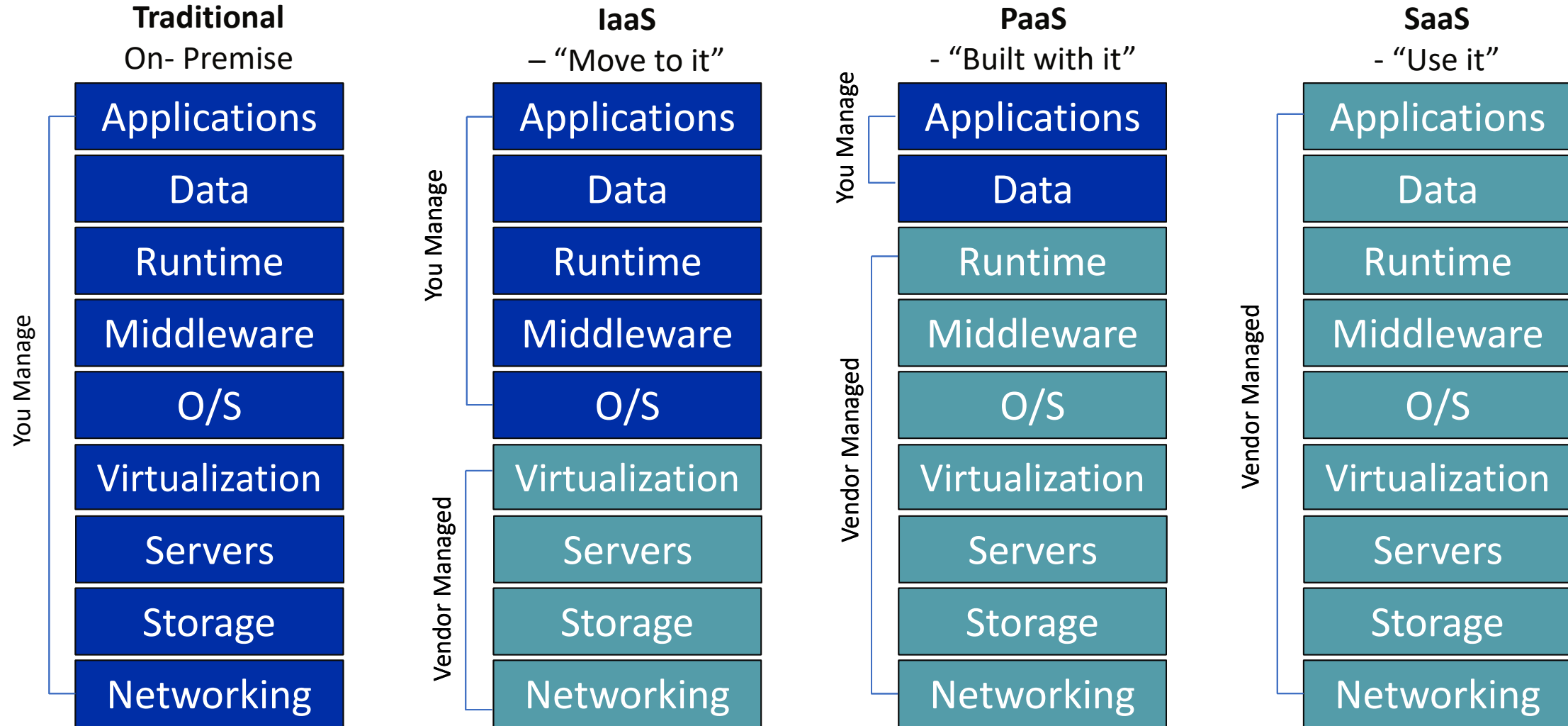
Fix SAP HANA ATC findings (e.g. NO ORDER)

Optimize performance critical SQLs found in SQL Monitor

Estimate custom code adaptation efforts

Run SAP S/4HANA ATC checks for all custom code

Cloud Service Models

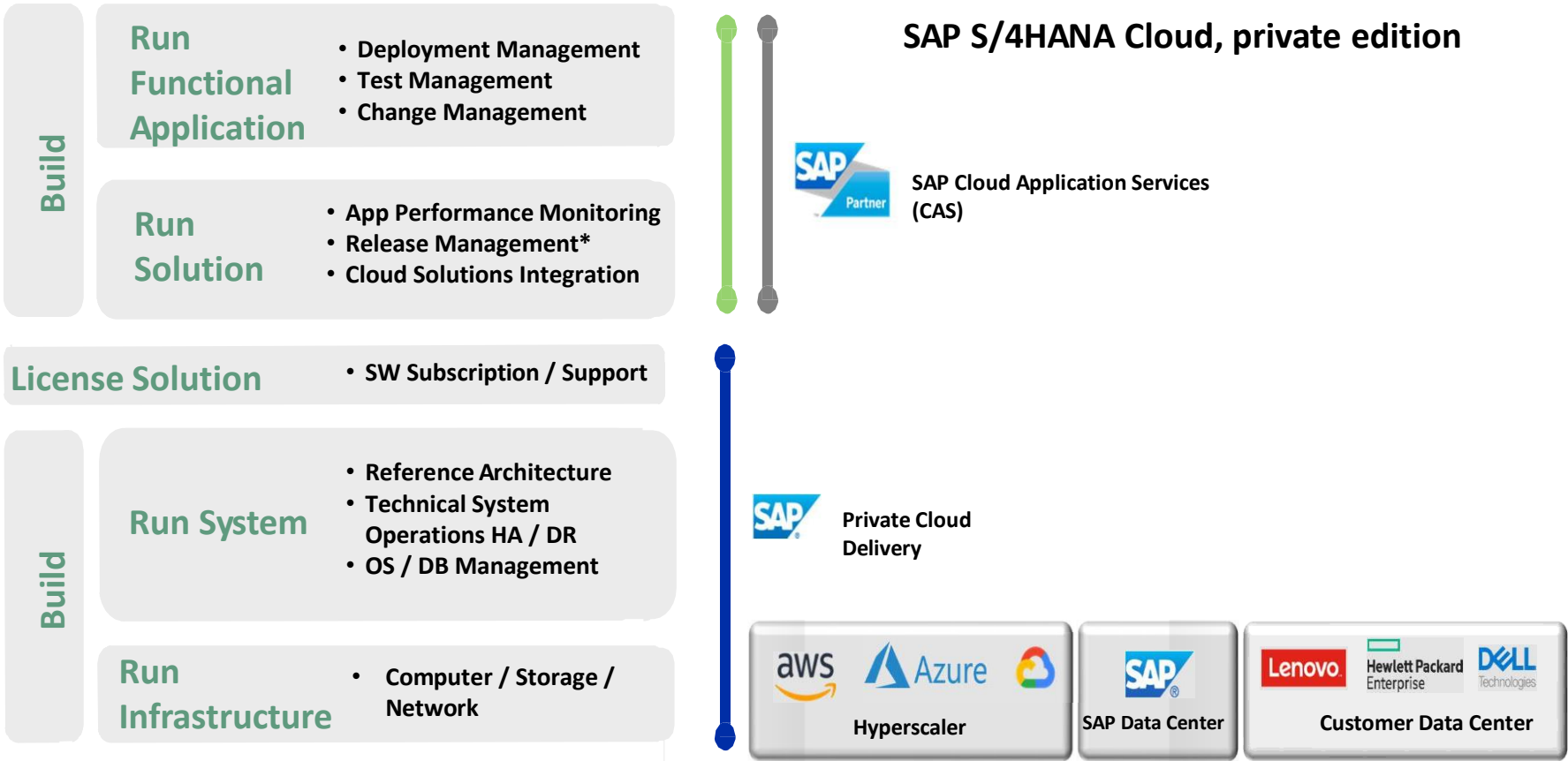


Deployment Options

	SAP S/4HANA Cloud	SAP S/4HANA Single tenant	SAP S/4HANA on Public cloud	SAP S/4HANA on RISE
Business Process	Standardized , Core ERP	Flexible , Extension ERP	Customized , Extension ERP	Customized , Extension ERP
Innovation Lifecycle	Quarterly updates	Semi Annual	Annual – Customer led	Annual – Customer led
TCO	Lowest	Lower	Higher	Higher
System Governance	Sap Led	Customer Influenced	Customer Led	
IT Infrastructure	SAP Public	SAP Dedicated	Customer Managed	SAP Managed
Customization	Within Standards	Within Standards	Open to modifications	Open to modifications
Extension	SAAS,SCP	SAAS	IAAS (Customer/Partner)	Open, SAP Driven
System Delivery	New Implementation	New Implementation	New Or Conversion	New Or Conversion

SAP S/4HANA Cloud, Private Edition: Deployment Models

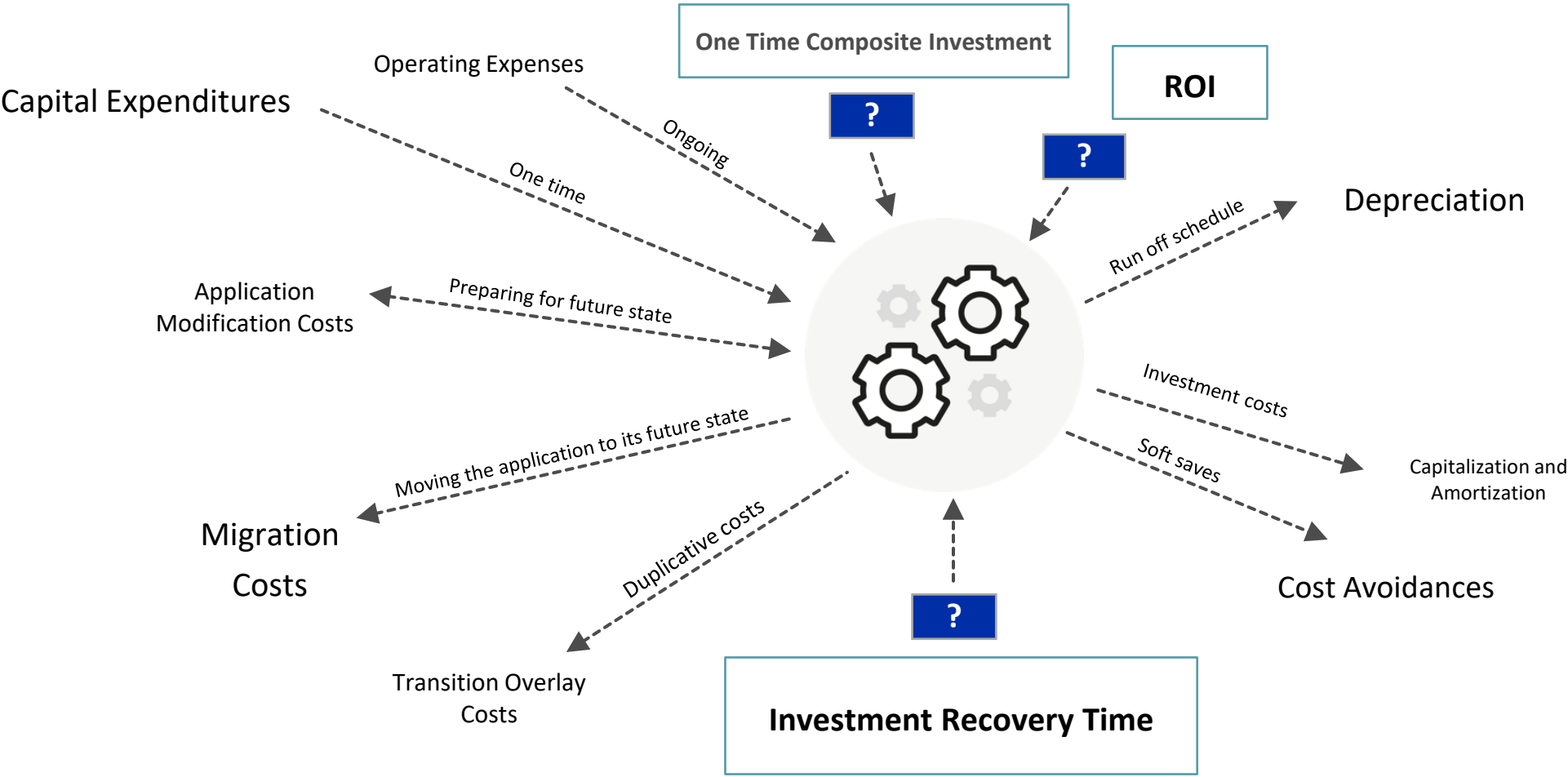
- Managed by Customer
- Managed by SAP
- Optional: Managed by SAP



SAP S/4HANA Cloud, Private Edition: Operational SLAs

Category	Computing Environment	Service Level
Service Request Management	PROD	24 x 7 subject to excluded downtime
	Non-PROD	24 x 5 subject to excluded downtime
Incident Management (Reaction Time)	Very High	20 minutes (24 x 7) and (i) resolution or (ii) workaround or (iii) action plan within 4hrs for PRD
	High	2 hours (24 x 7) for PROD 4 hours [Local Time on Business Days] for Non-PROD
	Medium	4 hours [Local Time on Business Days] for PROD and Non-PROD
	Low	1 Business Day for PRD and Non-PRD
Backup	PROD	<p>Database: Daily full backup and log file backup. 30 days retention time. Backup will be replicated to an alternate data center or location.</p> <p>Filesystem: Monthly full backup and daily incremental. Two Months retention time. Backup will be replicated to an alternate data center or location</p>
	Non-PROD	<p>Database: Weekly full backup and log file backup. 14 days retention time. Backup will be replicated to an alternate data center or location.</p> <p>Filesystem: Monthly full backup and daily incremental. Two Months retention time. Backup will be replicated to an alternate data center or location</p>

Business Case Inputs



Tunable Parameters

- Conduct thorough scenario analysis
- Modify inputs and generate revised forecasts
- User definable parameters

Overview of Database Migration

What

A database migration converts an existing SAP system running on any database type 'as is' into a new SAP HANA database.

How

The primary steps of an in-place database migration are as follows:

- 1. Dual-stack Split:** If the current system is on an dual stack it must be split into two individual stacks
- 2. Unicode Conversion:** If the current system uses multiple code pages (MDMP) it must be converted to Unicode which defines each character only once.
- 3. Database Upgrade:** The current system must be upgraded to a supported release.
- 4. Software Upgrade:** The current system software must be upgraded to a supported release.
- 5. Database Migration:** Technical migration of current database to SAP HANA.

The **Software Update Manager (SUM)** includes an option that combines the upgrade with the database migration. This option is called DMO.

Recommendations for System Conversion

- Check if (consistent) **archiving** can be done to reduce data volume to be converted
- Check the **compatibility of the 3rd party products** as soon as possible and allocate time for more extensive testing
- Both **SAP Fiori** and **Embedded Analytics** should be considered to leverage the full potential of SAP S/4HANA
- Plan a dedicated **SAP Fiori Expert Role** as part of the project team to work with business, functional and basis
- Plan **sufficient time** for **testing of roles and changes in authorizations**
- Use the **opportunity to replace Custom Code** with standard functionality where possible
- BW Extractors? Simplification Item [2500202](#) - S4TWL - BW Extractors in SAP S/4HANA
- Consider to migrate from SAPscript forms to **Adobe Document Services**
- Deletion of obsolete data after successful validation of the completed Conversion:

SAP obsolete data handling tool and application specific SAP notes:

Component	SAP Note	SAP Note Title
CA-EPT-ODH, CA-EPT-TAS	2661837	How to enable and use the obsolete data handling tool in SAP S/4HANA
MM-IM-GF	2569435	Remove content from obsolete tables in MM-IM: Save DB memory and remove data that is not covered by Information Lifecycle Management
FIN-MIG	2190137	S/4HANA Finance: Reduce memory footprint of obsolete tables

Wrap Up

- Start your project planning by running the [SAP Readiness Check for SAP S/4HANA](#) to get an overview and planning baseline about important topics you need to take care about and the related efforts and required skills.
- Run the [Maintenance Planner](#) early to confirm that your SAP ERP system (incl. SAP and partner add-ons) can technically be converted to SAP S/4HANA.
- Run the [Simplification Items checks](#) as soon as possible, as some business process adaptations may be complex and require more time than expected.
- Start early with those preparation and cleanup activities which can already be done in your current SAP ERP system – as indicated by the Simplification Items. I.e. clean up of your customer and vendor data in preparation for the Customer/Vendor Integration (CVI) in SAP S/4HANA.
- Check your custom code with ABAP Test Cockpit and optimize it for SAP S/4HANA. Further info on <https://blogs.sap.com/2017/02/15/sap-s4hana-system-conversion-custom-code-adaptation-process/>

Where to Find More Information

SAPinsider.org

[SAP S/4HANA | SAP Community](#)

[Custom code for SAP S/4HANA conversions | SAP Blogs](#)

[SAP Digital Discovery Assessment | SAP Blogs](#)

Key Points to Take Home

Perform a S/4HANA Readiness Assessment

Understand the various transition paths with their pros and cons

Chose right deployment option based on your business needs

Business buy in for this transformation

Change management for any new business processes

Thank You! Questions?

Kiran Musunuru

kmusunuru@lemongrasscloud.com

Please remember to complete your session evaluation.



SAPinsider



SAPinsider.org

PO Box 982Hampstead, NH 03841
Copyright © 2024 Wellesley Information Services.
All rights reserved.

SAP and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE (or an SAP affiliate company) in Germany and other countries. All other product and service names mentioned are the trademarks of their respective companies. Wellesley Information Services is neither owned nor controlled by SAP SE.

**SAPinsider
comprises the
largest and fastest
growing SAP
membership group
with more than
800,000 members
worldwide.**
