

# SAP Suite on HANA (SoH) Implementation

July 17, 2017

# Agenda

- Status update – Visionsoft & Hetero Healthcare (HH)
- Scope of SoH implementation
- Timeline and key activities
- Resources
- Cost of implementation
- HH Q&A
- HANA Benefits
- Next steps

# Status Update

## Development/ Sandbox

- Working with Upgrade Conflicts and HANA Incompatibilities
  - ☀ Analyzing conflicts/ exceptions reports for EhP7 upgrade
  - ☀ Removing inactive objects
  - ☀ Extracting HANA Incompatibilities report – DRAFT 1.0
  - ☀ Remediate all the upgrade exceptions via HANEYA 1.0
  - ☀ Run HANA Incompatibilities report via HANEYA 2.0
  - ☀ Remediate all the incompatibilities

# EhP7 UPGRADE CONFLICT REPORT

conflicts report - Excel

PRODUCT DEACTIVATED To keep using Excel without interruption, please reactivate now. [Reactivate](#)

	A	B	C	D	E	F	
18643	55	Y2PALVR0	PERFORM/FORM INTERFACES	Done by Manually	PROG	GPS	Form parameter DATA is untyped. This means static type checks and opt
18644	55	Y2PALVR0	PERFORM/FORM INTERFACES	Done by Manually	PROG	GPS	FORM DISPLAY_DETAIL_REPORT not called directly (Watch for dynamic
18645	55	Y2PALVR0	PERFORM/FORM INTERFACES	Done by Manually	PROG	GPS	Form parameter PROGRAM is untyped. This means static type checks ar
18646	67	Y2PALVR0	CALL FUNCTION INTERFACES	Done by Manually	PROG	GPS	THE RETURN CODE (SY-SUBRC) OF THE EXCEPTION ADDITION IS NC
18647	70	Y2PALVR0	SUPERFLUOUS STATEMENTS	Done by Manually	PROG	GPS	There are no executable statements between IF and ENDIF.
18648	74	Y2PALVR0	PERFORM/FORM INTERFACES	Done by Manually	PROG	GPS	FORM TOP not called directly (Watch for dynamic PERFORMS.)
18649	84	Y2PALVR0	CALL FUNCTION INTERFACES	Done by Manually	PROG	GPS	CALL FUNCTION 'REUSE_ALV_EVENTS_GET' IN LINE 75 DOES NOT H
18650	84	Y2PALVR0	SUPERFLUOUS STATEMENTS	Done by Manually	PROG	GPS	There are no executable statements between IF and ENDIF.
18651	98	Y2PALVR0	FIELD ATTRIBUTES	Done by Manually	PROG	GPS	Internal table RT_EXTAB[] is not addressed statically in the program
18652	98	Y2PALVR0	PERFORM/FORM INTERFACES	Done by Manually	PROG	GPS	FORM STATUS not called directly (Watch for dynamic PERFORMS.)
18653	99	Y2PALVR0	GUI STATUS AND TITLEBAR	Done by Manually	PROG	GPS	Undefined GUI status MAIN.
18654	107	Y2PALVR0	PERFORM/FORM INTERFACES	Done by Manually	PROG	GPS	FORM DOWNLOAD not called directly (Watch for dynamic PERFORMS.)
18655	111	Y2PALVR0	CHARACTER STRINGS	Done by Manually	PROG	GPS	Strings without text elements are not translated: 'Save File'
18656	124	Y2PALVR0	CHARACTER STRINGS	Done by Manually	PROG	GPS	Strings without text elements are not translated: 'File Download failed'
18657	128	Y2PALVR0	CHARACTER STRINGS	Done by Manually	PROG	GPS	Strings without text elements are not translated: 'Download Cancel'
18658	1	YRJ_ALV_TREE_CUST_ORDERS	TEST ENVIRONMENT	Done by Manually	PROG	GPS	The source code of YRJ_ALV_TREE_CUST_ORDERS cannot be read. No
18659	33	YALV_TREE_CUST_ORDERS	PROGRAMMING GUIDELINES	Done by Manually	PROG	GPS	Do not declare fields and field symbols (LT_NODE) globally.
18660	34	YALV_TREE_CUST_ORDERS	PROGRAMMING GUIDELINES	Done by Manually	PROG	GPS	Do not declare fields and field symbols (LT_VBAK) globally.
18661	35	YALV_TREE_CUST_ORDERS	PROGRAMMING GUIDELINES	Done by Manually	PROG	GPS	Do not declare fields and field symbols (LT_VBAP) globally.
18662	36	YALV_TREE_CUST_ORDERS	PROGRAMMING GUIDELINES	Done by Manually	PROG	GPS	Do not declare fields and field symbols (LT_KNA1) globally.
18663	39	YALV_TREE_CUST_ORDERS	PROGRAMMING GUIDELINES	Done by Manually	PROG	GPS	Do not declare fields and field symbols (LS_NODE) globally.
18664	40	YALV_TREE_CUST_ORDERS	PROGRAMMING GUIDELINES	Done by Manually	PROG	GPS	Do not declare fields and field symbols (LS_VBAK) globally.
18665	41	YALV_TREE_CUST_ORDERS	PROGRAMMING GUIDELINES	Done by Manually	PROG	GPS	Do not declare fields and field symbols (LS_VBAP) globally.
18666	42	YALV_TREE_CUST_ORDERS	PROGRAMMING GUIDELINES	Done by Manually	PROG	GPS	Do not declare fields and field symbols (LS_KNA1) globally.
18667	45	YALV_TREE_CUST_ORDERS	PROGRAMMING GUIDELINES	Done by Manually	PROG	GPS	Do not declare fields and field symbols (W_VALUE) globally.

GPS Porgs. non-std conflicts    No. of Programs

Ready    100%

2:32 PM 7/12/2017

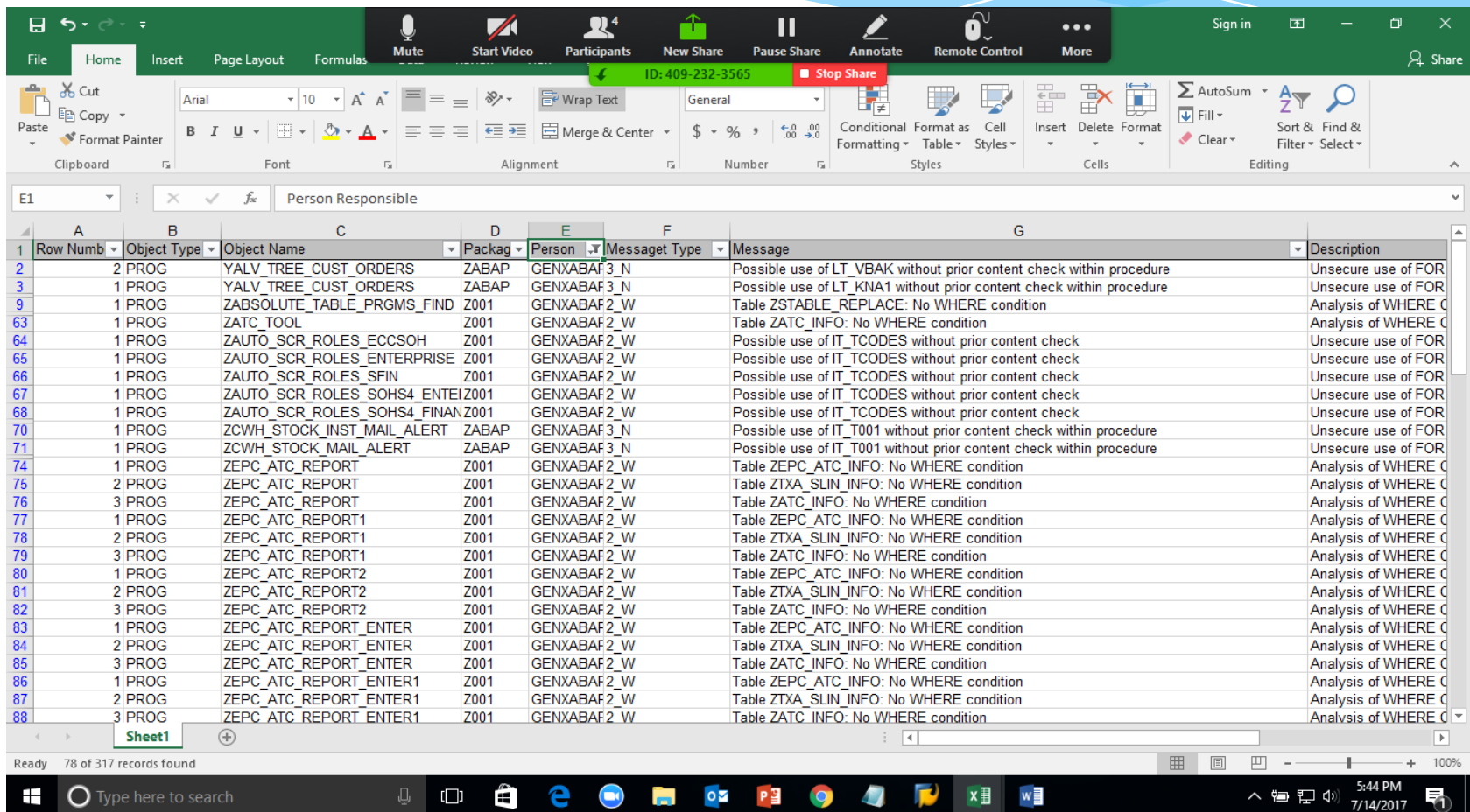
# SEGREGATED LIST

OK Codes - Microsoft Excel (Product Activation Failed)

	A	B	C	D	E	F	G	H
1637	DTEL	ZCODE_D	Data Element		OK			
1638	DTEL	ZPACK_D	Data Element		OK			
1639	DTEL	ZKBETR	Data Element		OK			
1640	DTEL	ZMTNO	Data Element		OK			
1641	DTEL	ZSIZE	Data Element		OK			
1642	DTEL	ZZONE_CODE	Data Element		OK			
1643	DTEL	ZDM_CODE	Data Element		OK			
1644	DTEL	ZDM_DESC	Data Element		OK			
1645	DTEL	ZRM_DESC	Data Element		OK			
1646	DTEL	ZAM_CODE	Data Element		OK			
1647	DTEL	ZAM_DESC	Data Element		OK			
1648	DTEL	ZREPIN	Data Element		OK			
1649	DTEL	ZDMBTR	Data Element		OK			
1650	DTEL	ZRM_CODE	Data Element		OK			
1651	DTEL	ZZONE_DESC	Data Element		OK			
1652	DTEL	ZEMAIL	Data Element		OK			
1653	DTEL	ZMHTXT	Data Element		OK			
1654	DTEL	ZITMNR	Data Element		OK			
1655	DTEL	ZPRCNT	Data Element		OK			
1656	DTEL	ZMHTYP	Data Element		OK			
1657	DTEL	ZMCODE	Data Element		OK			
1658	DTEL	ZPERCENT	Data Element		OK			
1659	DTEL	ZMRKNR	Data Element		OK			
1660	DTEL	ZZSTEX	Data Element		OK			
1661	DTEL	ZZMINS	Data Element		OK			

Sheet1 | Sheet2 | Sheet3

# HANA Incompatibilities



The screenshot shows a Microsoft Teams meeting window with a shared Excel spreadsheet. The spreadsheet contains a table with the following columns: Row Numb, Object Type, Object Name, Packag, Person, Message Type, Message, and Description. The table lists various SAP objects and their associated HANA incompatibilities.

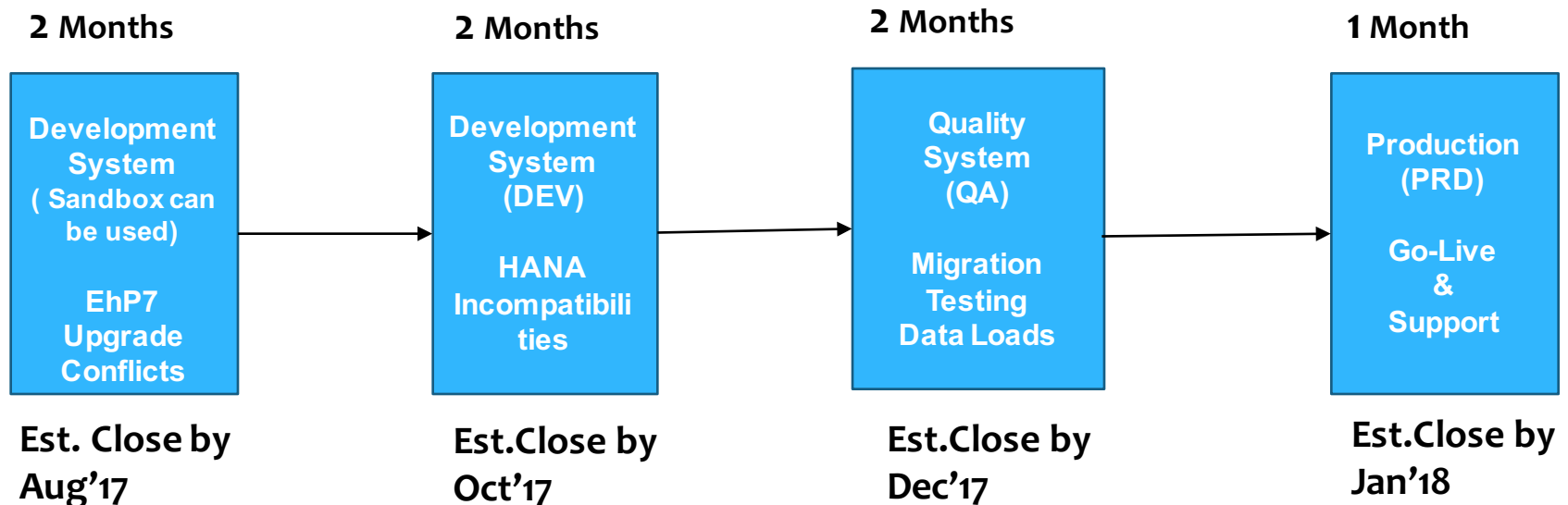
Row Numb	Object Type	Object Name	Packag	Person	Message Type	Message	Description
2	PROG	YALV_TREE_CUST_ORDERS	ZABAP	GENXABAF3_N		Possible use of LT_VBAK without prior content check within procedure	Insecure use of FOR
3	PROG	YALV_TREE_CUST_ORDERS	ZABAP	GENXABAF3_N		Possible use of LT_KNA1 without prior content check within procedure	Insecure use of FOR
9	PROG	ZABSOLUTE_TABLE_PRGMS_FIND	Z001	GENXABAF2_W		Table ZSTABLE_REPLACE: No WHERE condition	Analysis of WHERE C
63	PROG	ZATC_TOOL	Z001	GENXABAF2_W		Table ZATC_INFO: No WHERE condition	Analysis of WHERE C
64	PROG	ZAUTO_SCR_ROLES_ECCSOH	Z001	GENXABAF2_W		Possible use of IT_TCODES without prior content check	Insecure use of FOR
65	PROG	ZAUTO_SCR_ROLES_ENTERPRISE	Z001	GENXABAF2_W		Possible use of IT_TCODES without prior content check	Insecure use of FOR
66	PROG	ZAUTO_SCR_ROLES_SFIN	Z001	GENXABAF2_W		Possible use of IT_TCODES without prior content check	Insecure use of FOR
67	PROG	ZAUTO_SCR_ROLES_SOHS4_ENTEI	Z001	GENXABAF2_W		Possible use of IT_TCODES without prior content check	Insecure use of FOR
68	PROG	ZAUTO_SCR_ROLES_SOHS4_FINAN	Z001	GENXABAF2_W		Possible use of IT_TCODES without prior content check	Insecure use of FOR
70	PROG	ZCWH_STOCK_INST_MAIL_ALERT	ZABAP	GENXABAF3_N		Possible use of IT_T001 without prior content check within procedure	Insecure use of FOR
71	PROG	ZCWH_STOCK_MAIL_ALERT	ZABAP	GENXABAF3_N		Possible use of IT_T001 without prior content check within procedure	Insecure use of FOR
74	PROG	ZEPC_ATC_REPORT	Z001	GENXABAF2_W		Table ZEPC_ATC_INFO: No WHERE condition	Analysis of WHERE C
75	PROG	ZEPC_ATC_REPORT	Z001	GENXABAF2_W		Table ZTXA_SLIN_INFO: No WHERE condition	Analysis of WHERE C
76	PROG	ZEPC_ATC_REPORT	Z001	GENXABAF2_W		Table ZATC_INFO: No WHERE condition	Analysis of WHERE C
77	PROG	ZEPC_ATC_REPORT1	Z001	GENXABAF2_W		Table ZEPC_ATC_INFO: No WHERE condition	Analysis of WHERE C
78	PROG	ZEPC_ATC_REPORT1	Z001	GENXABAF2_W		Table ZTXA_SLIN_INFO: No WHERE condition	Analysis of WHERE C
79	PROG	ZEPC_ATC_REPORT1	Z001	GENXABAF2_W		Table ZATC_INFO: No WHERE condition	Analysis of WHERE C
80	PROG	ZEPC_ATC_REPORT2	Z001	GENXABAF2_W		Table ZEPC_ATC_INFO: No WHERE condition	Analysis of WHERE C
81	PROG	ZEPC_ATC_REPORT2	Z001	GENXABAF2_W		Table ZTXA_SLIN_INFO: No WHERE condition	Analysis of WHERE C
82	PROG	ZEPC_ATC_REPORT2	Z001	GENXABAF2_W		Table ZATC_INFO: No WHERE condition	Analysis of WHERE C
83	PROG	ZEPC_ATC_REPORT_ENTER	Z001	GENXABAF2_W		Table ZEPC_ATC_INFO: No WHERE condition	Analysis of WHERE C
84	PROG	ZEPC_ATC_REPORT_ENTER	Z001	GENXABAF2_W		Table ZTXA_SLIN_INFO: No WHERE condition	Analysis of WHERE C
85	PROG	ZEPC_ATC_REPORT_ENTER	Z001	GENXABAF2_W		Table ZATC_INFO: No WHERE condition	Analysis of WHERE C
86	PROG	ZEPC_ATC_REPORT_ENTER1	Z001	GENXABAF2_W		Table ZEPC_ATC_INFO: No WHERE condition	Analysis of WHERE C
87	PROG	ZEPC_ATC_REPORT_ENTER1	Z001	GENXABAF2_W		Table ZTXA_SLIN_INFO: No WHERE condition	Analysis of WHERE C
88	PROG	ZEPC_ATC_REPORT_ENTER1	Z001	GENXABAF2_W		Table ZATC_INFO: No WHERE condition	Analysis of WHERE C

# SoH Scope

- 1660 objects – Total Custom objects for remediation
- 18657 Errors – Total Errors for remediation
- 316 HANA incompatibilities – Unique HANA incompatibilities  
(Note: More volume expected in Version 2.0)
- SAP Modules: FI, SD, MM, WM, HR & BW
- Development, Quality and Production
- Delta Data Loads
- New Hardware for HANA

# Suite on HANA(SoH) Approach

- ❑ Start with SoH on Dev with the same approach as followed for Sandbox, and then replicate for Quality and PROD systems
- ❑ Alternately, you can utilize Sandbox as the DEV box by activating the transports and migrating directly into QA.





# SoH Timeline – Break Down

Break Down	Timeline	Activities
2 Months	July To August	Upgrade Conflict Report/Exceptions remediations
2 Months	Sep To Oct	HANA Incompatibilities & Remediation
2 Months	Nov To Dec	Testing & Data loads
15 Days	<b>Jan 15- Go Live*</b>	Production & Preparation
15 Days	Jan15-30: Hypercare	Production Support
Total No.of Months		7 Months

# SoH Timeline – Activities

July to August	Sep to OCT	Nov to Dec	JAN(GO-LIVE)
Set up Development (DEV)Environment	Set up Unit Testing Client in DEV	Set up Quality Environment (QA)	Set up Production Environment (PRD)
Install HANEYA 1.0 on DEE	Upgrade DEV to HANEYA 2.0	Install HANEYA 2.0 on QA	Install HANEYA 2.0 on PROD
Analyse Upgrade conflicts	HANA Remediation	Develop Test Scenarios	Production & Preparation
Check and Remediate upgrade conflicts	Providing the list	Testing in QA	Cutover
Removing inactive objects.	Working on objects	Delta Data uploads	Hypercare
Providing documentation	Providing documentation	Providing documentation	Develop HANA CoE (Centre of Excellence)
Error free programs	Custom programs Compatible with HANA Framework	User Acceptance Sign Off	Productive System and Sustainment

# Resources Cost Proposal

S.No	Role	Full/Part- Time	Working Hrs/Wk	Per Month Cost in Rs.	No.of Months	Total Cost (Rs.)
1	Project Manager/ Remediation Lead	Full time	40	Rs.1,00,000.00	7	Rs.7,00,000.00
2	HANEYA ABAP Lead Consultant - 1	Full Time	40	Rs.50,000.00	7	Rs.3,50,000.00
3	HANEYA BASIS Lead Consultant - 1	Full Time	40	Rs.50,000.00	7	Rs.3,50,000.00
		<b>Total Cost</b>		<b>Rs.2,00,000.00</b>		<b>Rs.14,00,000.00</b>

# RESOURCES

## Full Time Resources:

- Sailaja Nukala – PM / HANEYA Remediation Lead
- Venkat Kotike – HANEYA Basis
- Ramya Reddy – HANEYA ABAP

## Part Time Advisory Resources:

- Suresh Valiveti (Product Lead)
- Rani gummadi (Product Developer)
- Sandeep Reddy ( PM Support)
- Aejaaz Shaik(Basis consultant)

\* Advisory resources are not billed – It is Visionsoft Investment

# TOTAL COST OF IMPLEMENTATION

Total Cost : approx. Rs 1 Crore

- HANA Licensing – Rs 30-35 lakhs (Estimate from SAP)
- HW cost – 54 lakhs (Suse Linux) (Estimate from HP)
- Implementation cost: Rs 14 lakhs ( Visionsoft cost)

Implementation cost is only 14% of total cost

# Key Benefits SoH

- **Much faster**, real time and optimization of storage footprint
- **Real-time Analytical processing** - Analyse business operations in real-time using huge volumes of detailed information while business is happening.
- Data can be **Aggregated from many applications and data sources** without perturbing in any way the on-going business transactions.
- **Real-time Replication** Service can be used to access and replicate data from 3<sup>rd</sup> party systems – such as Retail Systems, FDA/Quality Mgt. and Others
- **Unified Information Modelling and Design** - Data Models are purely virtual, and calculate results based on the underlying detailed operational data.
- **Reduced Costs** through simplifications in hardware, maintenance and testing
- Setting the **stage for S/4 HANA** – Aligned w/ Digital Transformation and Systems (All Custom Objects are Remediated, HANA DB is aligned and ready for S/4 HANA)

# Comparison of SAP Versions


**ECC**

**SoH**

**S/4 HANA**
**Digital  
Hetero**

Functionality	SAP ECC6	Suite on HANA	S/4 HANA Finance	S/4 HANA Enterprise Management
Core SAP ECC processes	Yes	Yes	Yes	Yes
Core SAP ECC modules and Funtionality	Yes	Yes	Yes	Not fully due to principle of one
HANA Database	No	Yes	Yes	Yes
HANA live reporting	No	Yes	Yes	No
SAP Embedded reporting	No	No	No	Yes
Simplified Finance data model	No	No	Yes	Yes
Simplified Materials Management and Operations	No	No	No	Yes
SAP Fiori availability	Yes	Yes	Yes	Yes
Optimised SAP Fiori Apps	No	Some for HANA	Some for Finance	Yes
Embedded BW	No	No	Yes	Yes
Embedded BPC	No	No	Yes	Yes
Route to new Solution	Not applicable	Upgrade	System conversion or new install	System conversion or new install
System Conversion effort	Not applicable	Not applicable	Low	High
Core Component	SAP_APPL	SAP_APPL	SAP_APPL	S4CORE
Project Effort	Not applicable	Medium	High	Very High

# HH Q&A

## ☀️ **INSTALLATION:**

- HANA will be installed with SUM DMO , same for DEV,QA, &PRD.

## ☀️ **BACK UP:**

- Backup can be Easily done with the help of HANA Studio, HANA Cockpit and DBA Cockpit.

## ☀️ **Recovery** : Recovery process Includes

- 1. Complete backup
- 2. Differential backup
- 3. Incremental and snapshots



# HH Q&A

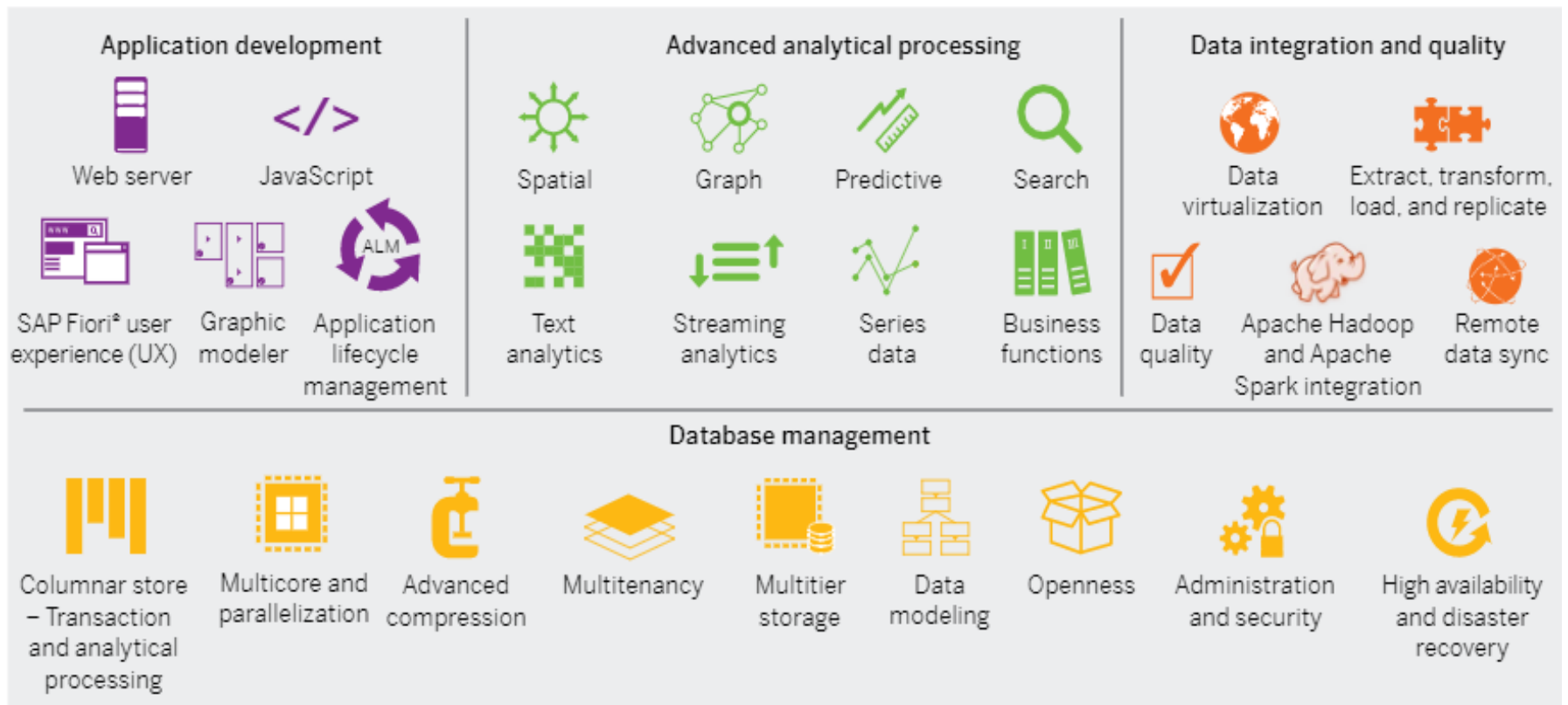
- ☀ **Type of HW-** Visionsoft has provided the Sizing. Hardware is recommended by SAP and hardware vendor is selected by client
- ☀ **Suse Linux Installation** – Visionsoft resources will install SUSE Linux
- ☀ **Compress the DB** - HANA Automatically compress the data in 1:7 ratio.
- ☀ **Performance Issue** - Very high in performance like 1:10 ratio, ten times faster performance than traditional database. There's no performance issues to be noted, the down time doesn't last more than half an hour if any issue occur.

# NEXT STEPS

- Obtain the Budget approval - HH
- Sign the contract – HH and VS
- Kick off the project (Formally) – HH and VS
- Start Remediation Work - VS

# IN MEMORY PLATFORM VISION

On premise | Cloud



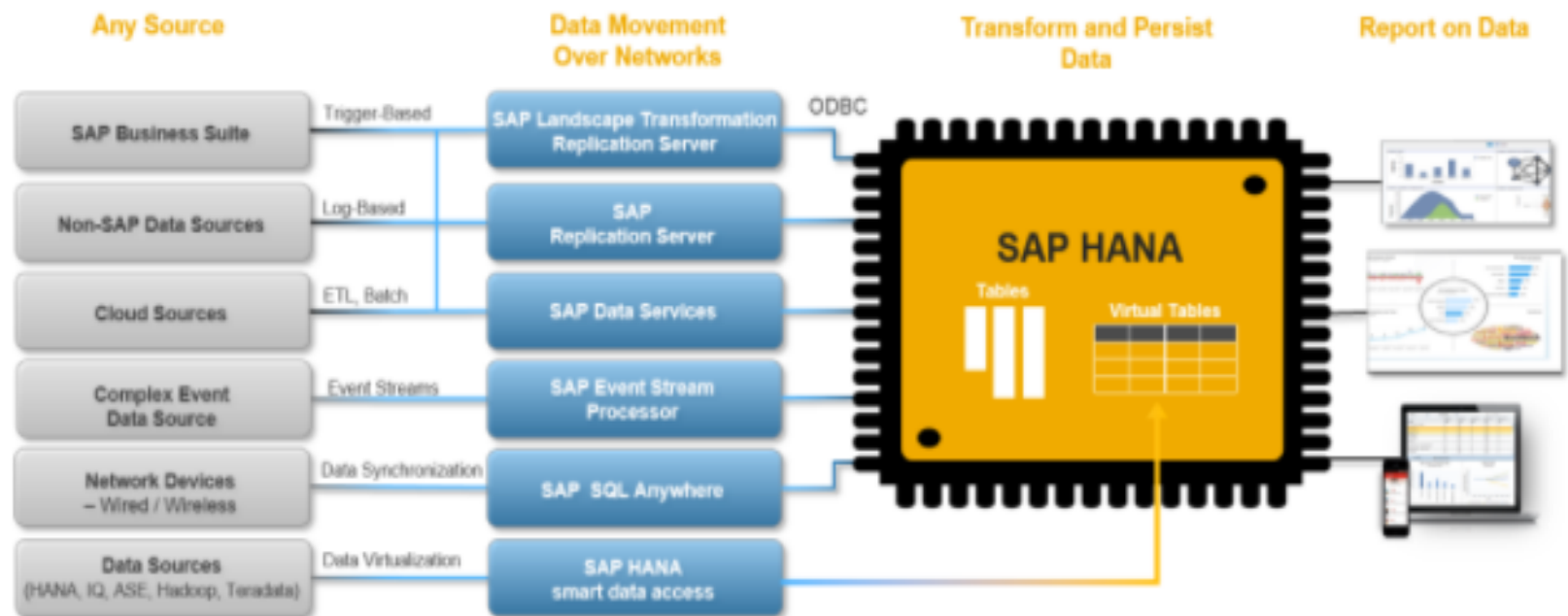
# HANA DATA INTEGRATION

- ❁ One of the biggest challenges in taking advantage of the power SAP HANA is getting data into SAP HANA seamlessly.
- ❁ Data takes different forms and shapes in different places – on premise and in the cloud.
- ❁ Traditionally, a plethora of tools are used to bring data to SAP HANA from SAP Business Suite, non-SAP Data sources, and cloud sources, with an added tier between the data sources and SAP HANA

# HANA DATA INTEGRATION

## SAP HANA Platform

### Traditional data integration solutions

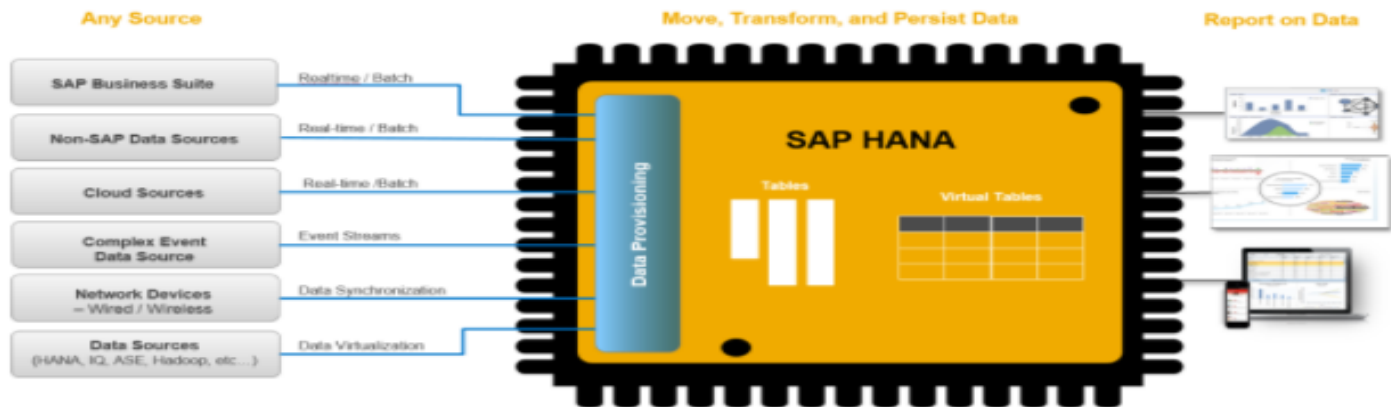


# HANA DATA INTEGRATION

- The vision of SAP HANA smart data integration and SAP HANA smart data quality is to build the data provisioning tier natively within HANA; to simplify the SAP HANA landscape by removing an entire tier previously built with heterogeneous non-native tools.

## SAP HANA Platform

Simplification through native data integration solutions



# USE CASES FOR HANA SMART DATA INTEGRATION

- SAP HANA smart data integration can be used for a wide variety of use cases. With new functionalities coming in each HANA SP release, it can support almost all your data integration requirements.
- However, we recommend you start with the following use cases.
- **Analytics:**
  - Virtualized access for non-critical data
  - Side car scenarios for OLTP based reporting
  - ETL for HANA native data marts and data warehouses
- **Data Migration**
  - Migration of data from legacy systems into SAP HANA or other external systems
- **Data Integration**
  - Batch or real time integration of external systems and SAP HANA
- SAP HANA smart data access (SDA) functionality is further enhanced in SAP HANA smart data integration to provide virtual access for non-critical data. Using the http(s) protocol, SAP HANA smart data integration enables you to access non-critical data sitting outside of the firewall. Also, replication is possible for some data source types. Moreover, processing is done in a new HANA process called DP Server which enhances the stability of core HANA processes.



**Thank You For Your  
Time And Attention**