OA4ERP

Operational Analytics for ERP

Consistently increase your company's success

Jens Orhanovic
Managing Director LIS.TEC GmbH

PBS software

LIS.TEC ISV Distributor

BUSINESS ANALYTICS | COMPLIANCE GUARD | HOSTING | RSM

Together we are strong

LIS.TEC
ISV Distributor

- Worldwide largest IBM OEM High Value Software Distributor

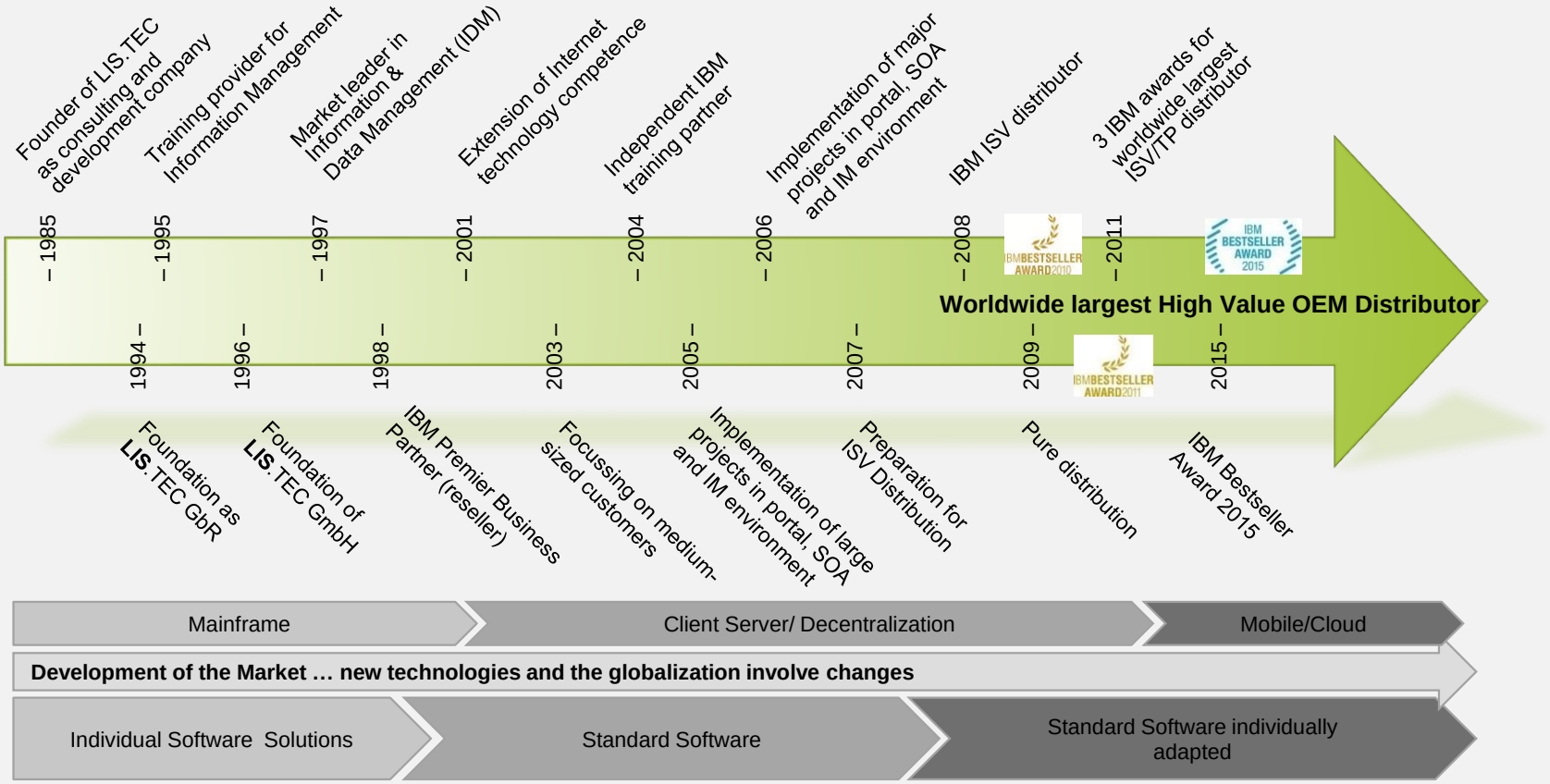
PBS software

- Worldwide more than 1,500 customers with more than 5,000 installed PBS solutions
- For more than 25 years leading provider of SAP add-on solutions

BUSINESS ANALYTICS COMPLIANCE GUARD HOSTING | RSM

- First Full Service Cloud provider of Business Analytics
- Consultancy on a par – committed, creative, solution-oriented, since 1999

History & Milestones of LIS.TEC



LIS.TEC the Specialist for Data Management

LIS.TEC
ISV Distributor

- ✓ Management/Consultancy
  - High level of business and management requirements
  - Cost/Benefit calculation
  - Business plans
- ✓ Market know-how
  - Market requirements
  - Innovative ideas
  - Customer needs
- ✓ Technical expertise
  - Databases, analytics, planning
- ✓ Solution provider
  - AHS/AHL, time recording, laboratory solution, application generator
- ✓ Training / Courses
  - Pearson View certification center
- ✓ Support
  - First & Second Level Support

SAP Market Requirements

LIS.TEC
ISV Distributor

§ Legal compliance

Optimized preparation for S/4HANA migration

€ Cost optimizing

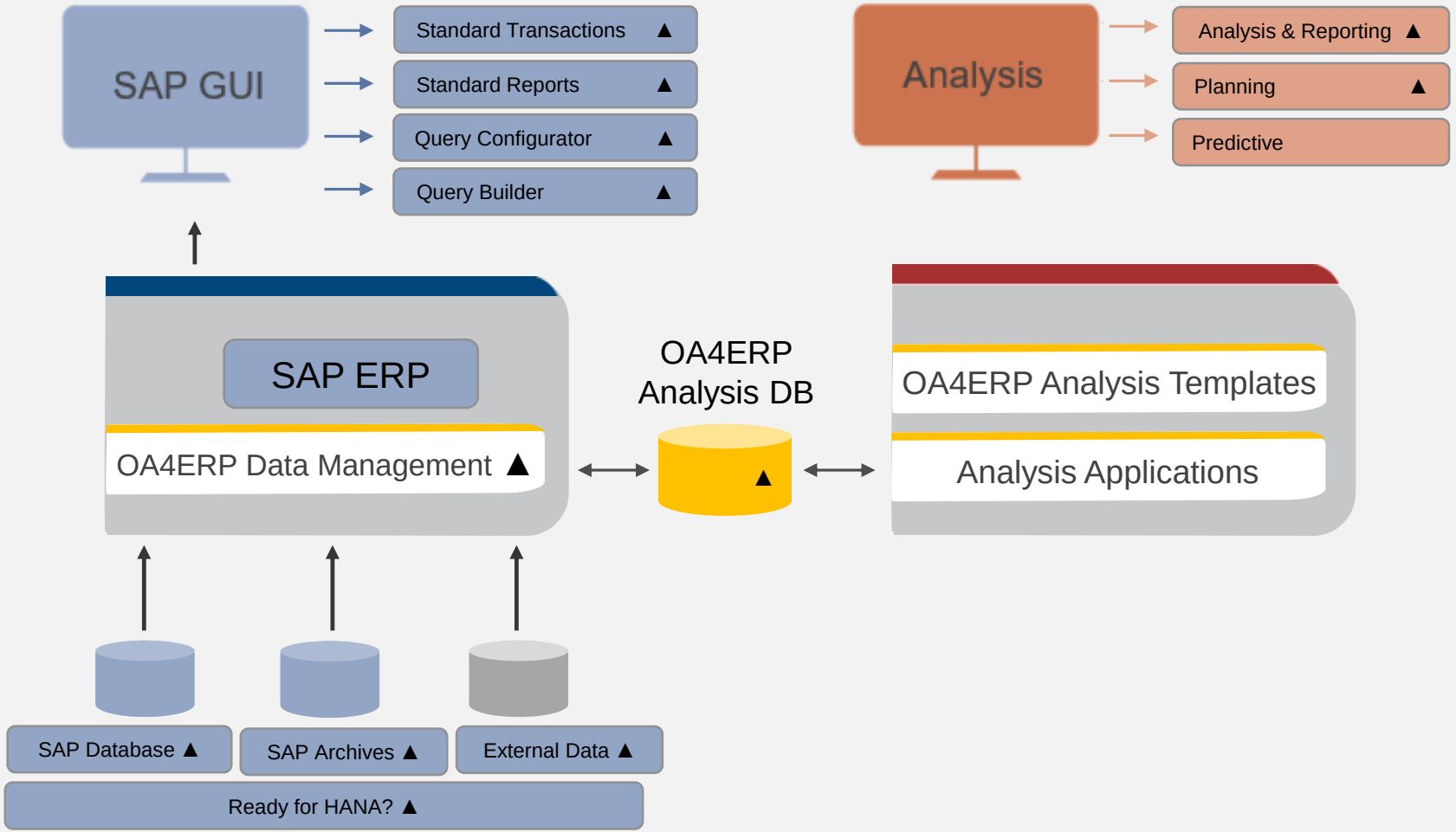
Intelligent data management

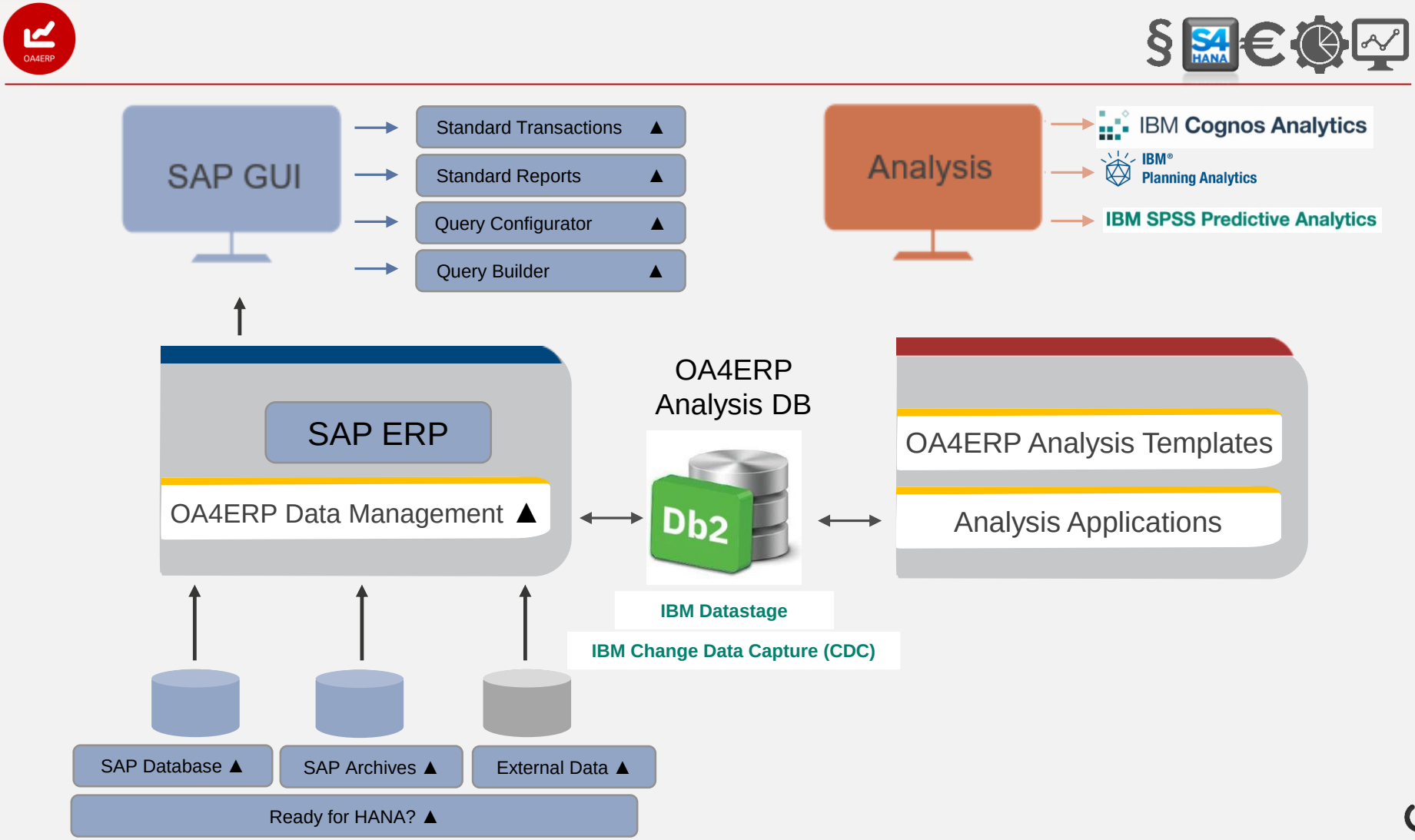
Modern up-to-date analyses

The Solution – OA4ERP

OA4ERP

Operational Analytics for ERP


SAP GUI
Standard Transactions ▲
Standard Reports ▲
Query Configurator ▲
Query Builder ▲
Analysis
Analysis & Reporting ▲
Planning ▲
Predictive
SAP ERP
OA4ERP Data Management ▲
OA4ERP
Analysis DB
▲
OA4ERP Analysis Templates
Analysis Applications
SAP Database ▲
SAP Archives ▲
External Data ▲
Ready for HANA? ▲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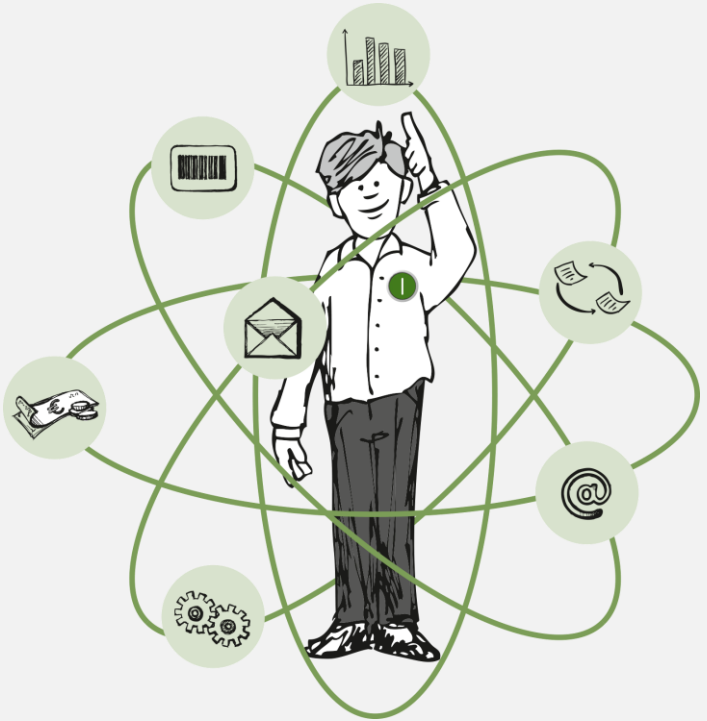
Db2
OA4ERP Analysis Templates
Analysis Applications
IBM Datastage
IBM Change Data Capture (CDC)
SAP Database ▲
SAP Archives ▲
External Data ▲
Ready for HANA? ▲

Challenges for a complex Solution

- ✓ Competent Consultation
- ✓ Skill requirements
  - technically
  - business
- ✓ Sales support
- ✓ Support
- ✓ Compliance
- ✓ Processing



Source: https://amperesoft.net/images/product/TDM/Data_Management.png

Distribution – everything from one Source

LIS.TEC ISV Distributor

PBS software

RSM

IBM

Nearline Analytics Infrastructure

BI Templates

IBM Components

LIS.TEC ISV Distributor

OA4ERP

Training

Processing

Compliance

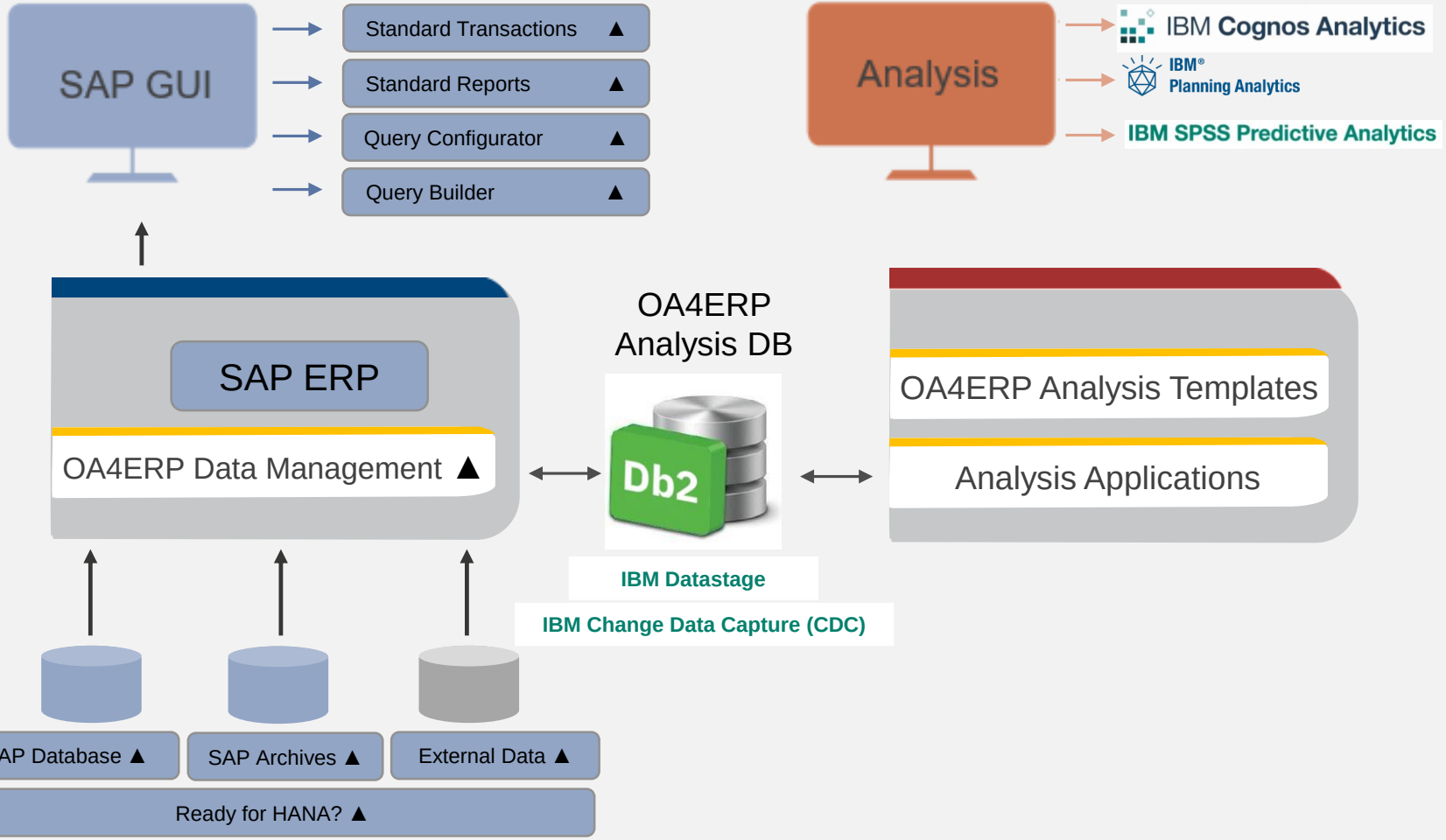
Support

Manufacturer

Distributor (Coordinator & Contact Partner)

Partner

Customer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SAP Archives ▲
External Data ▲
Ready for HANA? ▲

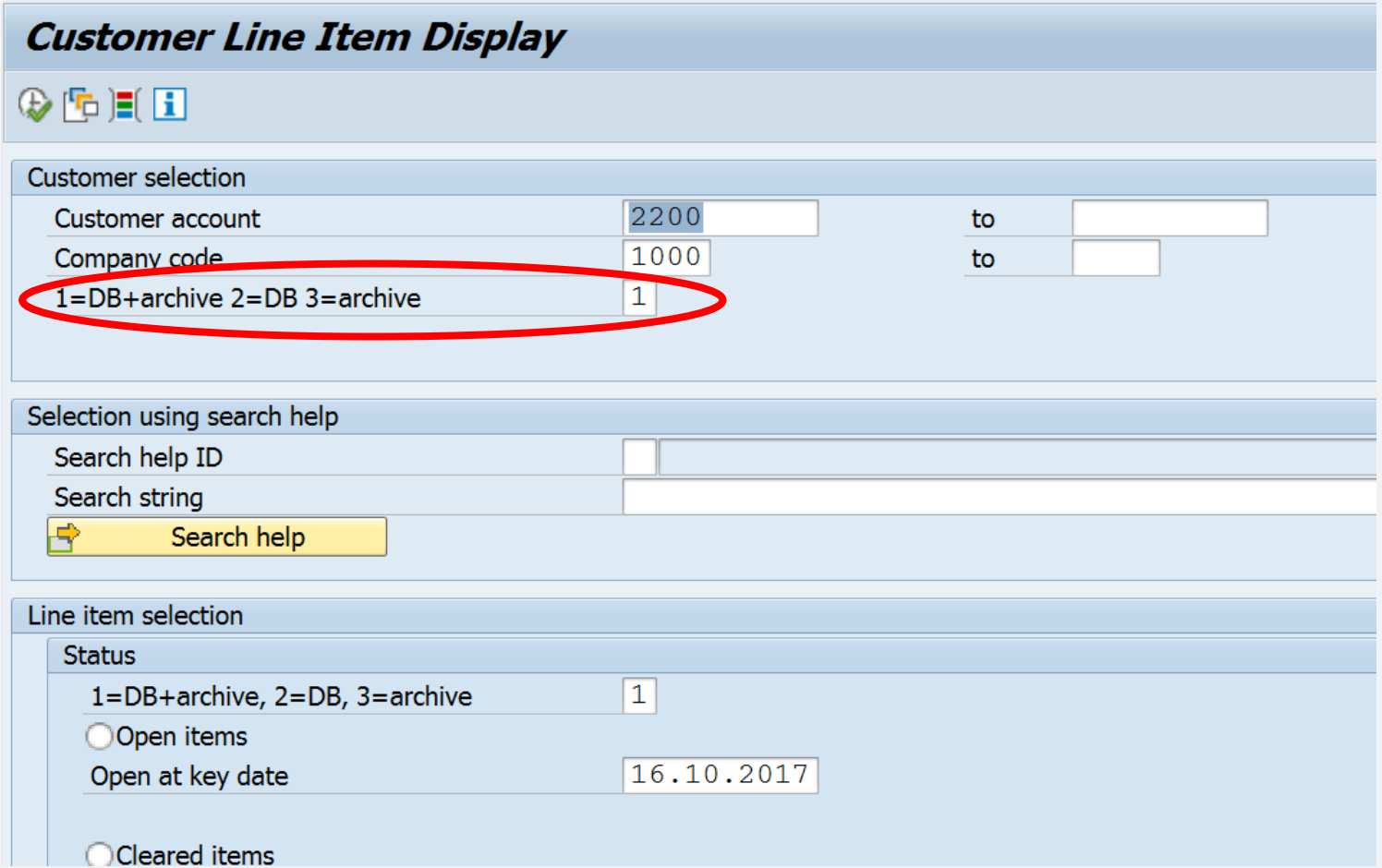
Standard Transactions

(PBS CFI Transaction, Line Items)

OA4ERP

SAP Finance
Standard Transaction
/PBS/FBL5N

Access to OA4ERP Database

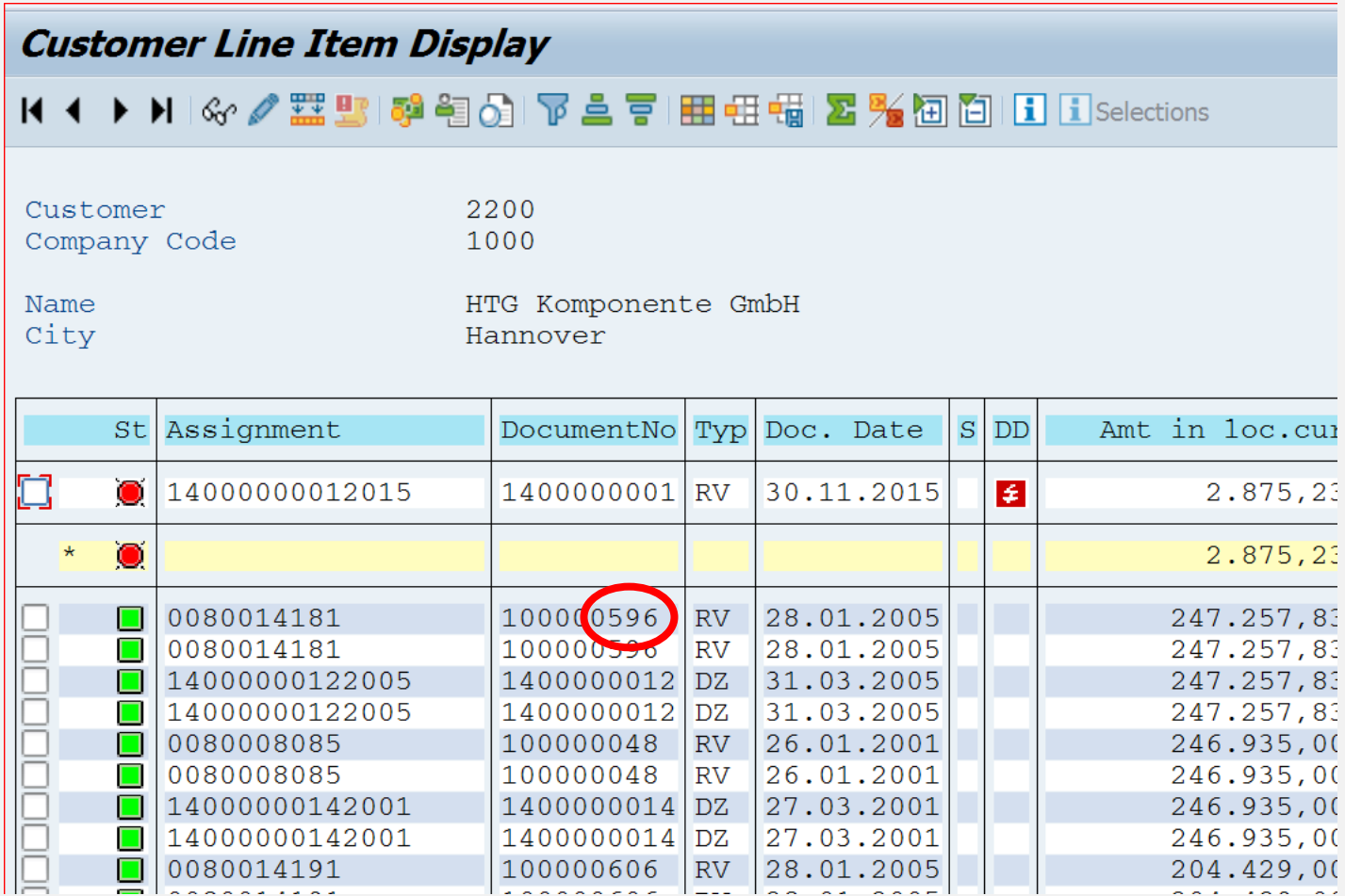


Standard Transactions

(PBS CFI Document Display)

OA4ERP

SAP Finance
Standard Transaction
/PBS/FBL5N



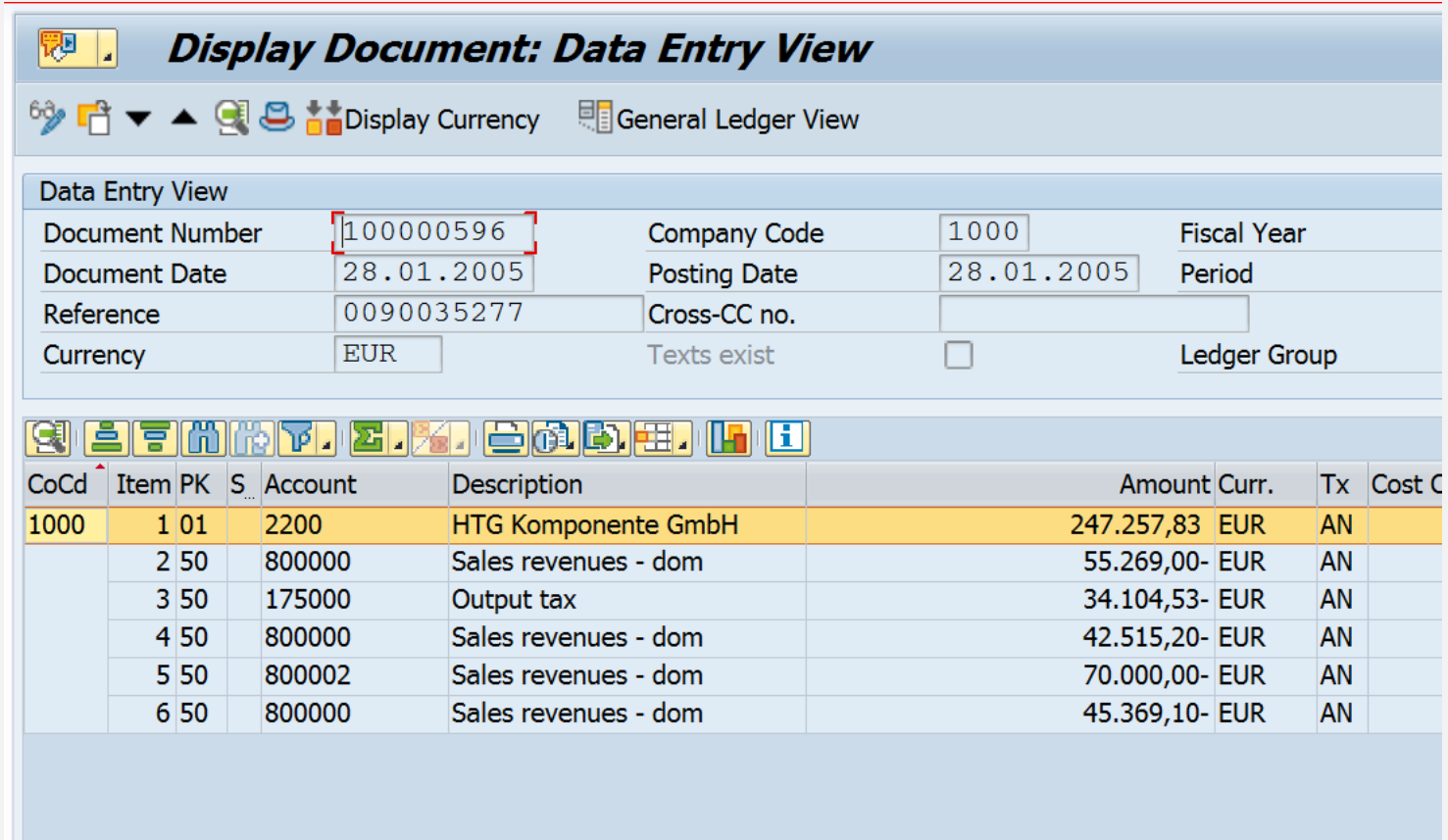
Standard Transactions

(PBS CFI Overview Customer)

OA4ERP

SAP Finance
Standard Transaction
/PBS/FBL03

Drilldown



CoCd	Item	PK	S	Account	Description	Amount	Curr.	Tx	Cost C
1000	1	01		2200	HTG Komponente GmbH	247.257,83	EUR	AN	
	2	50		800000	Sales revenues - dom	55.269,00-	EUR	AN	
	3	50		175000	Output tax	34.104,53-	EUR	AN	
	4	50		800000	Sales revenues - dom	42.515,20-	EUR	AN	
	5	50		800002	Sales revenues - dom	70.000,00-	EUR	AN	
	6	50		800000	Sales revenues - dom	45.369,10-	EUR	AN	

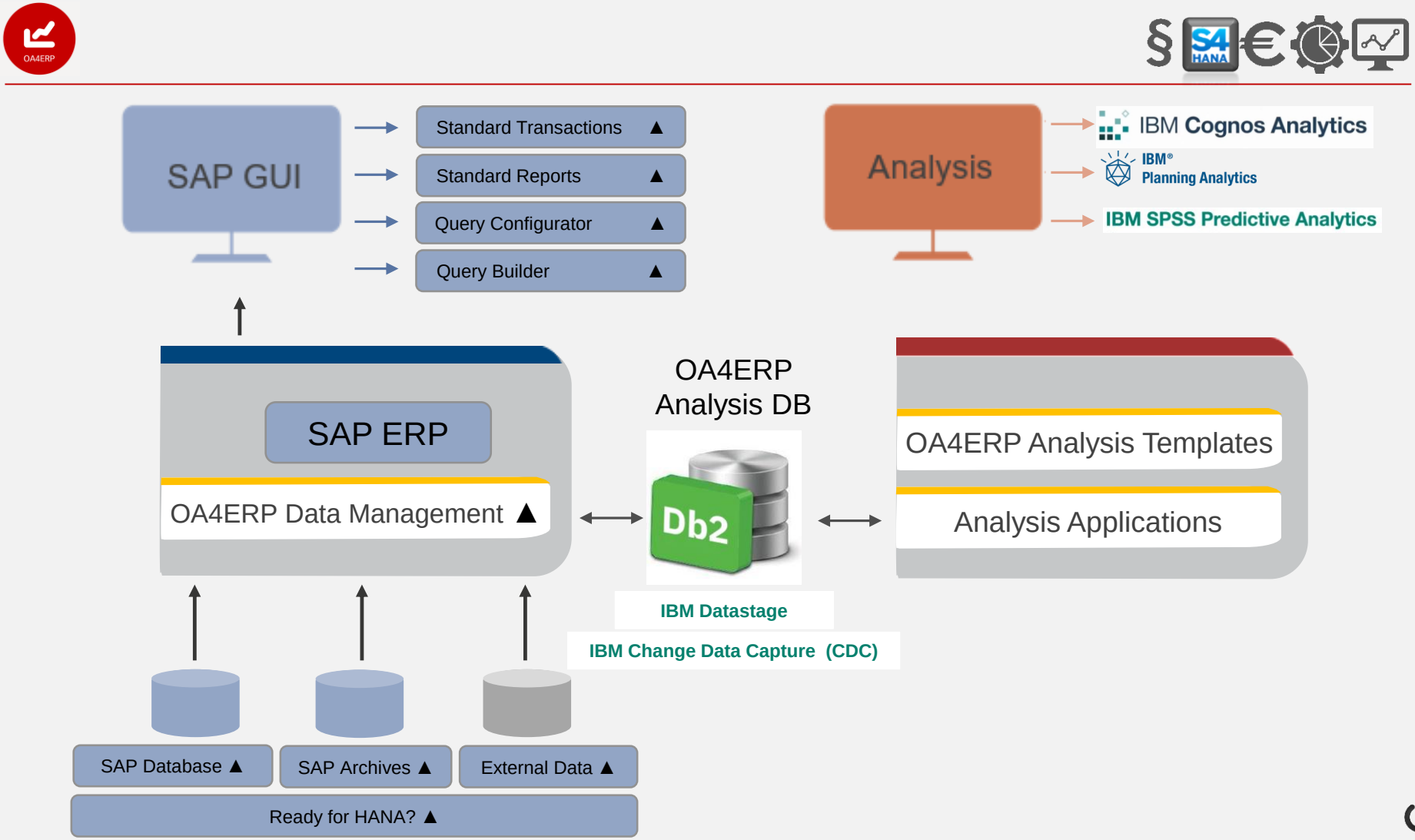
Standard Transactions Summary

§ CXX modules extend SAP Standard Transactions to include additional data sources (archives & non-SAP)

Analyses of SAP, archives and non-SAP data can be combined

Data aggregation

Drilldown to document level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IBM Change Data Capture (CDC)
SAP Database ▲
SAP Archives ▲
External Data ▲
Ready for HANA? ▲

Enhanced CFI Standard Report

(Cross-customer Sales Analysis from operative and archived data)

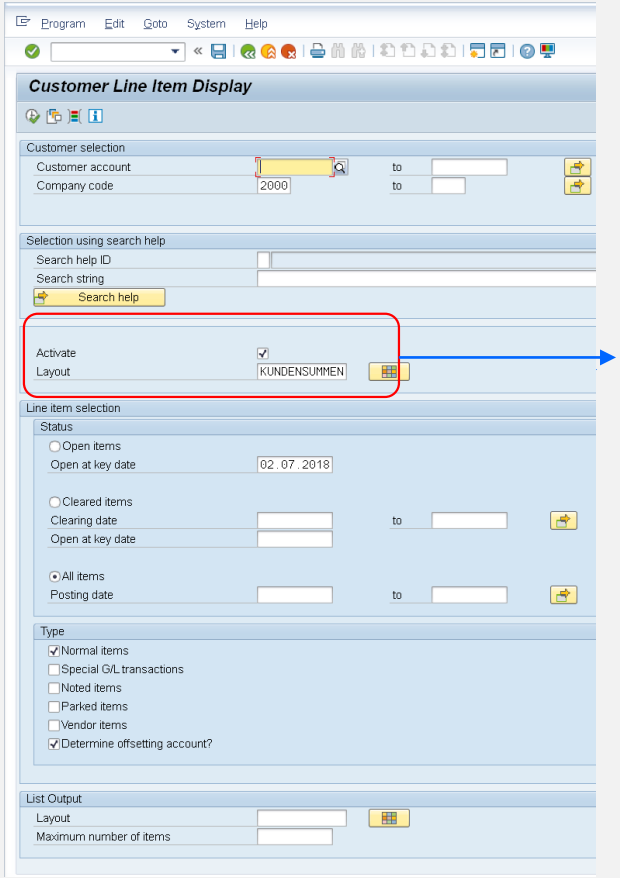
OA4ERP

Cross-customer

Sales Analysis

in a few seconds

Standard Enhancement of SAP Standard Transactions



FI customer accounts aggregation NAI

CoCd	Customer	Type	Amount LC	Count
2000	1185	DZ	342,14-	2
2000	**1185**	**DZ**	**342,14-**	**2**
2000	1185	RV	342,14	10
2000	**1185**	**RV**	**342,14**	**10**
2000	**1185**		**0,00**	**12**
2000	2001	DZ	5.104,93-	1
2000	**2001**	**DZ**	**5.104,93-**	**1**
2000	2001	RV	5.104,93	1
2000	**2001**	**RV**	**5.104,93**	**1**
2000	**2001**		**0,00**	**2**
2000	2002	DZ	52.882,20-	2
2000	**2002**	**DZ**	**52.882,20-**	**2**
2000	2002	RV	52.882,20	3
2000	**2002**	**RV**	**52.882,20**	**3**
2000	**2002**		**0,00**	**5**
2000	4999	DZ	2.637,88-	1
2000	**4999**	**DZ**	**2.637,88-**	**1**
2000	4999	RV	2.637,88	1
2000	**4999**	**RV**	**2.637,88**	**1**
2000	**4999**		**0,00**	**2**
2000	301402	RV	873,00	2
2000	**301402**	**RV**	**873,00**	**2**
2000	**301402**		**873,00**	**2**
2000	301403	RV	1.029,00	15
2000	**301403**	**RV**	**1.029,00**	**15**
2000	**301403**		**1.029,00**	**15**
2000	301404	RV	1.164,00	1
2000	**301404**	**RV**	**1.164,00**	**1**
2000	**301404**		**1.164,00**	**1**
2000			**3.066,00**	**39**

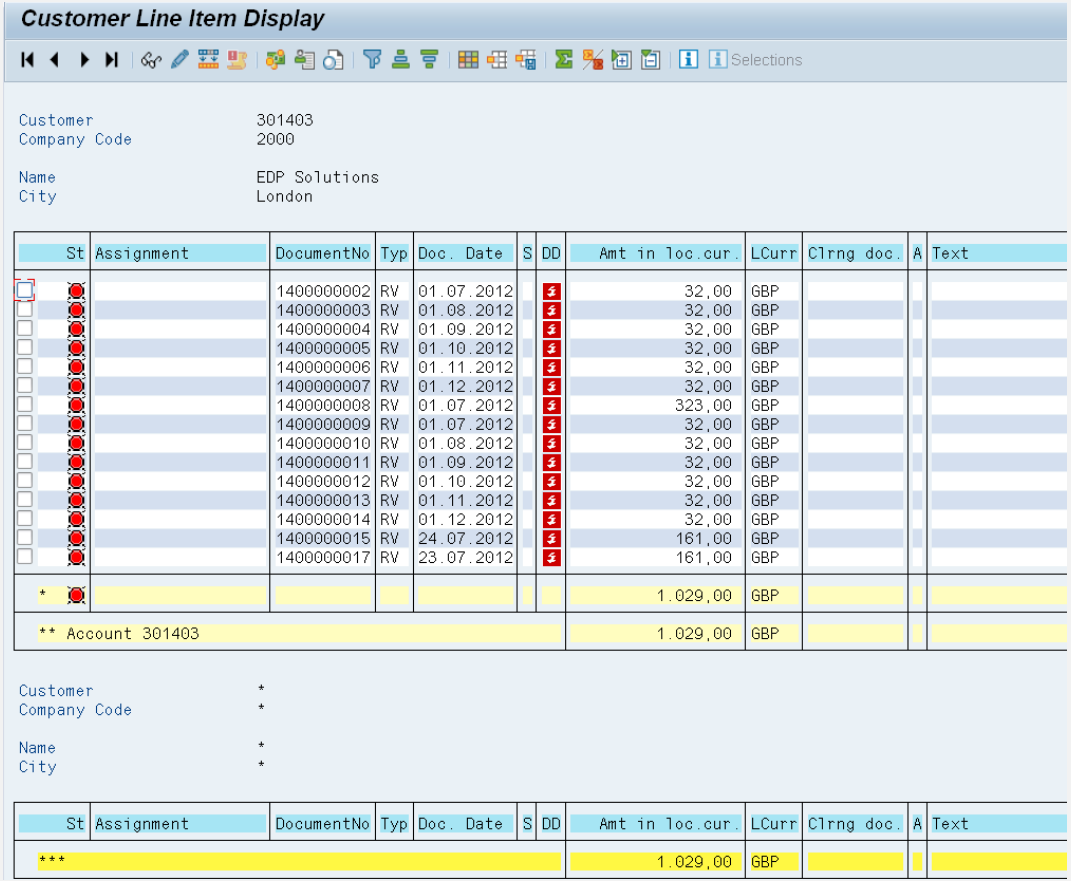
Sum of all customers is not possible in the standard SAP due to performance reasons; here in a few seconds!

Standard Reports

OA4ERP

SAP Standard Report

Listing drilldown to individual posting values



Customer Line Item Display

Selections

Customer 301403
Company Code 2000

Name EDP Solutions
City London

St	Assignment	DocumentNo	Typ	Doc. Date	S	DD	Amt in loc.cur.	LCurr	Clrng doc.	A	Text
		1400000002	RV	01.07.2012			32,00	GBP			
		1400000003	RV	01.08.2012			32,00	GBP			
		1400000004	RV	01.09.2012			32,00	GBP			
		1400000005	RV	01.10.2012			32,00	GBP			
		1400000006	RV	01.11.2012			32,00	GBP			
		1400000007	RV	01.12.2012			32,00	GBP			
		1400000008	RV	01.07.2012			323,00	GBP			
		1400000009	RV	01.07.2012			32,00	GBP			
		1400000010	RV	01.08.2012			32,00	GBP			
		1400000011	RV	01.09.2012			32,00	GBP			
		1400000012	RV	01.10.2012			32,00	GBP			
		1400000013	RV	01.11.2012			32,00	GBP			
		1400000014	RV	01.12.2012			32,00	GBP			
		1400000015	RV	24.07.2012			161,00	GBP			
		1400000017	RV	23.07.2012			161,00	GBP			
*							1.029,00	GBP			
** Account 301403							1.029,00	GBP			

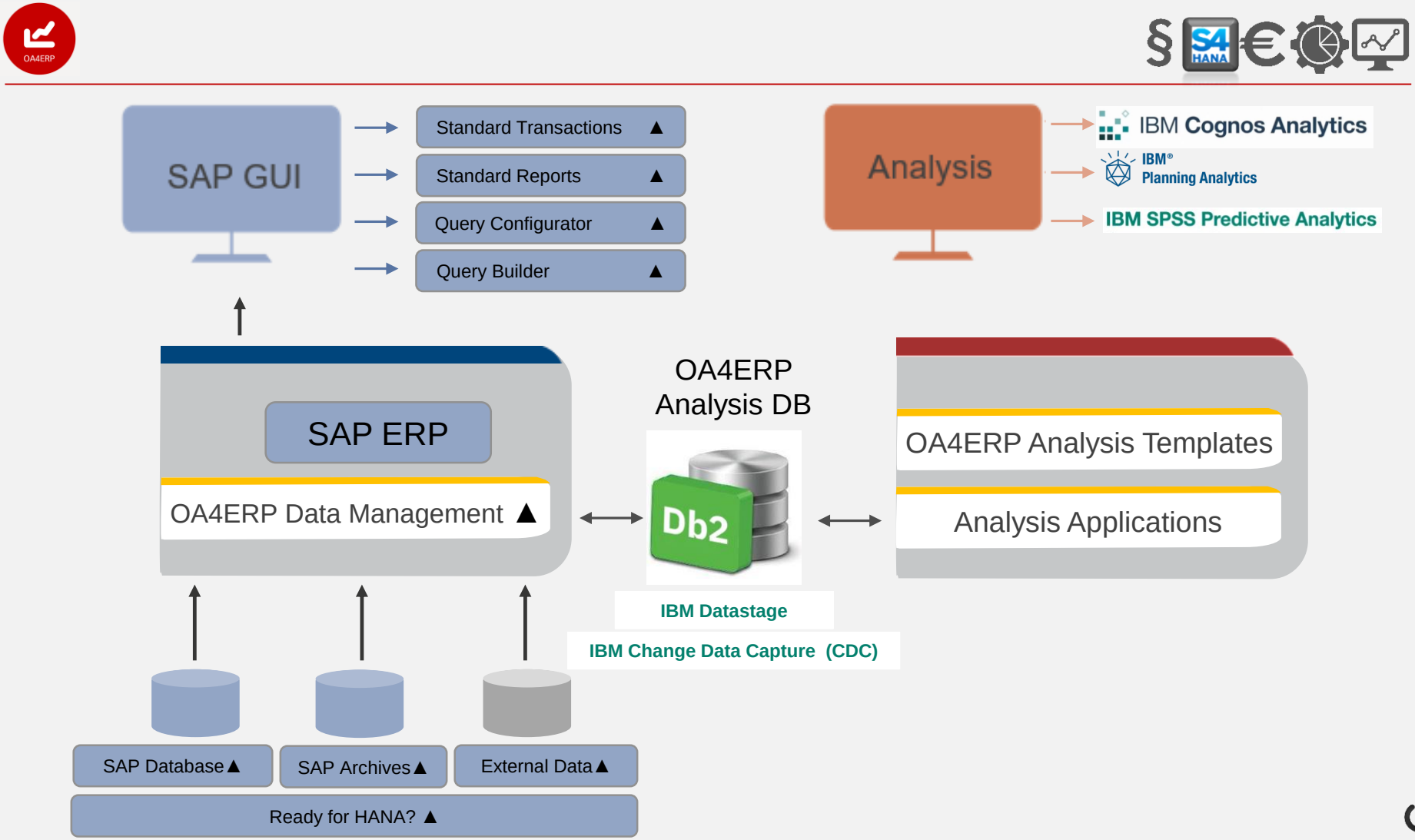
Customer *
Company Code *

Name *
City *

St	Assignment	DocumentNo	Typ	Doc. Date	S	DD	Amt in loc.cur.	LCurr	Clrng doc.	A	Text
***							1.029,00	GBP			

Standard Reports Summary

- CXX modules extend SAP Standard Transactions to include additional data sources (archives & non-SAP)
- Analyses of SAP, archives and non-SAP data can be combined
- Reporting via several company codes
- Data comparison for different years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SAP Archives ▲
External Data ▲
Ready for HANA? ▲

Query Configurator Example 1

Query Configuration
Criteria Selection

NAI Query - Execute Query (DS001FELDAUSW)

Execute | Background | Number of Entries | All Entries | NAI Join | NAI union

NAI Table: OFI /PBS/DRS_BSEG — BSEG/BKPF with date fields (YYYY-MM-DD)
Max. no. of hits: 500

Fld name	O..	Fr.Value	To value	More	Output	Group	Aggregation	More	Technical name
Client									MANDT
Company Code		1000			☑	☑			BUKRS
Document Number					☑	☐			BELNR
Line item					☑	☐			BUZEI
Fiscal Year		2006			☑	☑			GJAHR
Quarter					☑	☐			BUDAT_Q_K
G/L Account					☑	☑			HKONT
Konto-Bezeichnung					☑	☑			#SK-TEXT
Currency					☑	☑			WAERS_K
Debit amount in local curr					☑	☐	Total amo…		DMSOL
Credit amount in local curr					☑	☐	Total amo…		DMHAB
Amount in LC					☑	☐	Total amo…		DMSHB
Clearing Document					☑	☐			AUGBL
Posting Key					☑	☐			BSCHL
Account Type					☑	☐			KOART
Special G/L ind.					☐	☐			UMSKZ
Sp.G/L trans.type					☐	☐			UMSKS
Debit/Credit Ind.					☑	☐			SHKZG
Business Area					☐	☐			GSBER
Tax code					☐	☐			MWSKZ
Amount in LC					☐	☐			DMBTR
Amount					☐	☐			WRBTR
LC tax amount					☐	☐			MWSTS
Subnumber					☐	☐			ANLN2
Transact. type					☐	☐			ANBWA

Query Aggregation Example 1

OA4ERP

Query Aggregation Groups Fields

Drilldown

NAI Query - data records read (DS001FELDAUSW)

NAI Table	OFI	/PBS/DRS_BSEG	/PBS/DRS_BSEG	
Hits/Runtime	17	00:00:01	Maximum no. of hits	500

Selections | Details | Drill Down

CoCd	Year	G/L	Konto-Bezeichnung	Crcy	Sum(Debit amt in LC)	Sum(Credit amt in LC)	Sum(Deb/cred.amount)
1000	2016	100000	Petty cash	EUR	1.786,00	253.626.240.213,15	253.626.238.427,15-
1000	2016	113102	Dte Bank transfers	EUR	0,00	64.000,00	64.000,00-
1000	2016	113109	DteBk - customer p.	EUR	149.860,05	0,00	149.860,05
1000	2016	120000	Loans to staff	EUR	10,00	10,00	0,00
1000	2016	140000	Trade Receivables -	EUR	447.875,39	584.009,25	136.133,86-
1000	2016	154000	Input tax	EUR	110,83	0,00	110,83
1000	2016	160000	AP-domestic	EUR	253.759.119.909,92	253.821.984.393,15	62.864.483,23-
1000	2016	161000	AP-foreign	EUR	64.000,00	0,00	64.000,00
1000	2016	175000	Output tax	EUR	0,00	1.893,27	1.893,27-
1000	2016	176100	Fed.Incme/Church Tax	EUR	0,00	9.732,24	9.732,24-
1000	2016	230000	Foreign currency rev	EUR	0,00	0,00	0,00
1000	2016	280000	Gain-exch.rate diffs	EUR	0,00	0,00	0,00
1000	2016	400000	Consumptn, raw mat.1	EUR	253.689.109.388,81	1.776,00	253.689.107.612,81
1000	2016	420000	Direct labor costs	EUR	9.732,24	0,00	9.732,24
1000	2016	470000	Occupancy costs	EUR	186,74	5.000,00	4.813,26-
1000	2016	800000	Sales revenues - dom	EUR	0,00	281,20	281,20-
1000	2016	800200	Revenues	EUR	0,00	11.551,72	11.551,72-
					507.448.902.859,98	**507.448.902.859,98**	**0,00**

Query Drilldown Example 1

OA4ERP

Generic Query:

Drilldown
to Document Level

NAI Query - data records read (DS001FELDAUSW)

NAI Table OFI /PBS/DRS_BSEG /PBS/DRS_BSEG

Hits/Runtime 500 0 Maximum no. of hits 500

Selections | Details | Report | Object

CoCd	Year	DocumentNo	Itm	Qtr	Clrng doc.	AccTy	G/L Acc	Konto-Bezeichnung	Customer	Vendor	D/C	PK	Crcy	Debit amt in LC
1000	2016	100000125	1	1	100000126	K	160000	AP-domestic		1100	H	34	EUR	0,00
1000	2016	100000125	2	1	100000125	K	160000	AP-domestic		1100	S	27	EUR	109,27
1000	2016	100000126	1	1	100000127	K	160000	AP-domestic		1100	H	34	EUR	0,00
1000	2016	100000126	2	1	100000126	K	160000	AP-domestic		1100	S	27	EUR	327,81
1000	2016	100000127	2	1	100000127	K	160000	AP-domestic		1100	S	25	EUR	327,81
1000	2016	100000128	2	1	100000128	K	160000	AP-domestic		1100	S	25	EUR	109,27
1000	2016	100000129	2	1	100000130	K	160000	AP-domestic		1100	S	25	EUR	109,27
1000	2016	100000130	1	1	100000130	K	160000	AP-domestic		1100	H	37	EUR	0,00
1000	2016	100000130	2	1	100000130	K	160000	AP-domestic		1100	S	27	EUR	109,27
1000	2016	100000131	2	1	100000133	K	160000	AP-domestic		1100	S	27	EUR	62.878.197,23
1000	2016	100000132	2	1	100000134	K	160000	AP-domestic		1100	S	27	EUR	62.878.197,23
1000	2016	100000133	1	1	100000134	K	160000	AP-domestic		1100	S	27	EUR	125.756.394,46
1000	2016	100000133	2	1	100000133	K	160000	AP-domestic		1100	H	37	EUR	0,00
1000	2016	100000133	3	1	100000133	K	160000	AP-domestic		1100	S	27	EUR	176.760,16

Example 2:
Financial Statement Comparison: classic with generic

OA4ERP

Generic Financial Statement

NAI Table VTAB +DRS_BILGUV +DRS_BILGUV
Hits/Runtime 27 00:00:02 Maximum no. of hits 500

Selections | Details | Drill Down

Co...	Year	BalPos ...	Balance sheet item 1	BalPos 2	Balance sheet item 2	Sum(Loc.curr.balanc...	Count *
100	2005	1000000	A S S E T S	1030000	Fixed assets	61.318.786,60	1.479
100	2005	1000000	A S S E T S	1040000	Current assets	41.896.700.019,87	3.604
		1000				41.958.018.806,4	5.083
100	2005	2000000	L I A B I L I T I E S	2010000	Capital and reserves	43.883.274,01-	170
100	2005	2000000	L I A B I L I T I E S	2014000	Calculated Result	37.886.222.141,91-	1
100	2005	2000000	L I A B I L I T I E S	2020000	Special items with reserves	2.294.611,00-	153
100	2005	2000000	L I A B I L I T I E S	2030000	Provisions	11.947.693,19-	391
100	2005	2000000	L I A B I L I T I E S	2040000	Payables	4.013.657.672,78-	3.383
100	2005	2000000	L I A B I L I T I E S	2050000	Prepaid expenses and deferred	13.413,58-	34
		2000				41.958.018.806,4	4.132
100	2005	3000000	Profit and loss statement	3010000	Sales revenues	38.661.045,50-	204
100	2005	3000000	Profit and loss statement	3020000	Inventory changes	99.360.877,36-	204
100	2005	3000000	Profit and loss statement	3040000	Other operating income	714.017,90-	289
100	2005	3000000	Profit and loss statement	3050000	Raw materials and consumables	4.589.563,93-	629
100	2005	3000000	Profit and loss statement	3060000	Staff costs	10.483.386,53	1.309
100	2005	3000000	Profit and loss statement	3070000	Depreciation	1.470.674,00	238
100	2005	3000000	Profit and loss statement	3080000	Other operating charges	7.843.249,65	1.428
		3000				123.528.194,51-	4.301

Classic SAP Standard Report

Financial Statements

Commercial balance sheet

0L Ledger
10 Currency type Company code currency
EUR Amounts in Euro (EMU currency as of 01/01/1999)
2005.01 -2005.16 Reporting periods
2004.01 -2004.16 Comparison periods

Financial Statement Items

Financial Statement Item/Account	Tot.rpt.pr
A S S E T S	41.958.018.806,47
Fixed assets	61.318.786,60
Current assets	41.896.700.019,87
L I A B I L I T I E S	41.958.018.806,47-
Capital and reserves	37.930.105.415,92-
Special items with reserves	2.294.611,00-
Provisions	11.947.693,19-
Payables	4.013.657.672,78-
Prepaid expenses and deferred	13.413,58-
Profit and loss statement	123.528.194,51-
Sales revenues	38.661.045,50-
Inventory changes	99.360.877,36-
Other operating income	714.017,90-
Raw materials and consumables	4.589.563,93-
Staff costs	10.483.386,53
Depreciation	1.470.674,00
Other operating charges	7.843.249,65

123.528.194,51- = **123.528.194,51-**

Query Configurator – Summary

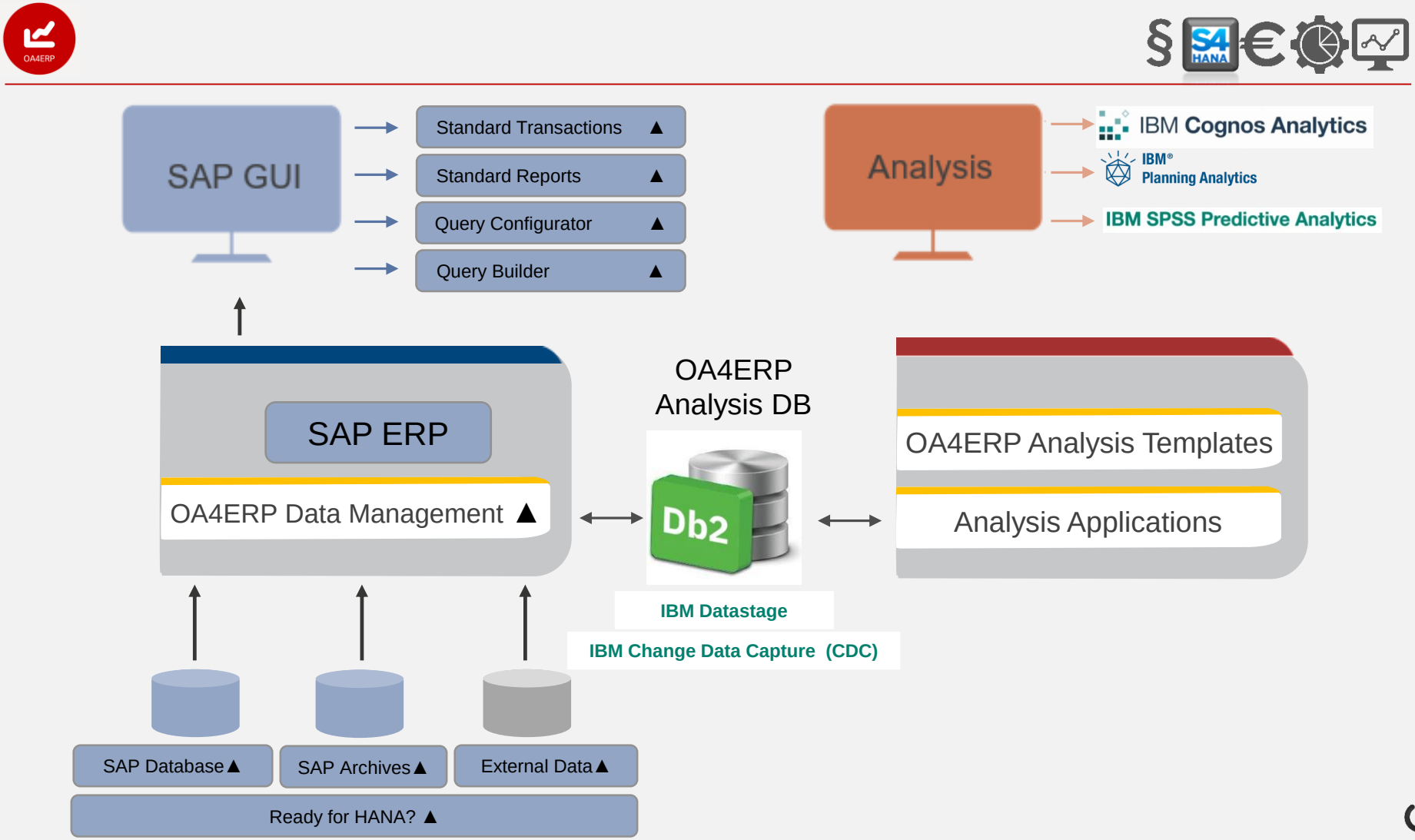
Query Configuration

§ Need for Excel is greatly reduced
GDPR

Easy report generation via Query Configurator

€ ABAP programming is only necessary for including more complex reports

About 50% less programming work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Analysis Applications
IBM Datastage
IBM Change Data Capture (CDC)
SAP Database ▲
SAP Archives ▲
External Data ▲
Ready for HANA? ▲

Query Builder

OA4ERP APIs

ABAP API supports the following SQL Operations:

- Join
- Union
- Complex WHERE Condition
- Arithmetic Functions (+-*/)
- Case Expression
- Subselect
- Aggregation
- String Functions (LEFT, RIGHT, ..)

ABAP Coding with Query Builder

ABAP Query Builder

API call

```
report /pbs/ndbc_qb_smart_join.
*
data: l_nai_query_builder_ref type ref to /pbs/cl_ndbc_query_builder.
data: l_bkpf_ref type ref to /pbs/cl_ndbc_table.
data: l_bseg_ref type ref to /pbs/cl_ndbc_table.
*
field-symbols: <result_tab> type table.
*
l_nai_query_builder_ref = /pbs/cl_ndbc_query_builder=>create_query_builder( ).
*
l_bkpf_ref = l_nai_query_builder_ref->create_table(
                                        im_conname = 'NAI_IQ_100'
                                        im_schema_name = 'PBSE67_100'
                                        im_table_name = 'ZPBSE67_100REPL_ONNLSA_BKPF__V0001' ).
l_bseg_ref = l_nai_query_builder_ref->create_table(
                                        im_conname = 'E60'
                                        im_schema_name = 'SAPE60'
                                        im_table_name = 'ZBSEG' ).
*
l_nai_query_builder_ref->add_columns( im_name = 'BUKRS' im_table_ref = l_bkpf_ref im_alias = 'BUKRS' ).
l_nai_query_builder_ref->add_columns( im_name = 'BELNR' im_table_ref = l_bkpf_ref im_alias = 'BELNR' ).
l_nai_query_builder_ref->add_columns( im_name = 'DMBTR' im_table_ref = l_bseg_ref im_alias = 'DMBTR' ).
*
l_nai_query_builder_ref->set_max_rows( 500 ).
*
l_nai_query_builder_ref->from_table( im_table_ref = l_bkpf_ref im_tabalias = 'BKPF' ).
l_nai_query_builder_ref->add_join_table( im_table_ref = l_bseg_ref im_tabalias = 'BSEG' ).
l_nai_query_builder_ref->add_join_condition( im_expression_left = 'MANDT'
                                             im_expression_right = 'MANDT' ).
l_nai_query_builder_ref->add_join_condition( im_expression_left = 'BUKRS'
                                             im_expression_right = 'BUKRS' ).
l_nai_query_builder_ref->add_join_condition( im_expression_left = 'BELNR'
                                             im_expression_right = 'BELNR' ).
l_nai_query_builder_ref->add_join_condition( im_expression_left = 'GJAHR'
                                             im_expression_right = 'GJAHR' ).
```

Generated SQL Statements

ABAP Query Builder

Generates SQL and results

```
SELECT TOP 500
    STRING(
    LEFT(INSERTSTR(0, SPACE(16), IFNULL("BKPF"."BUKRS", SPACE(16), "BKPF"."BUKRS")), 16),
    LEFT(INSERTSTR(0, SPACE(40), IFNULL("BKPF"."BELNR", SPACE(40), "BKPF"."BELNR")), 40),
    RIGHT(INSERTSTR(25, SPACE(25), LEFT(STRING(IFNULL("BSEG"."DMBTR", 0, "BSEG"."DMBTR")), 25)), 25)
    ) AS TABLE_LINE
FROM
    "PBSE67_100"."ZPBSE67_100REPL_ONNLSA_BKPF__V0001" AS "BKPF"
    INNER JOIN "PBSE67_100"."PBS_NDBC_20141016_00O2TQLGAUBOLZHG8QK2E2UZP" AS "BSEG"
    ON ("BKPF"."MANDT" = "BSEG"."MANDT")
    AND ("BKPF"."BUKRS" = "BSEG"."BUKRS")
    AND ("BKPF"."BELNR" = "BSEG"."BELNR")
    AND ("BKPF"."GJAHR" = "BSEG"."GJAHR")
WHERE
    ("BKPF"."BUKRS" = '2000') AND
    ("BKPF"."BELNR" BETWEEN '0100000052' AND '0100000065')
```

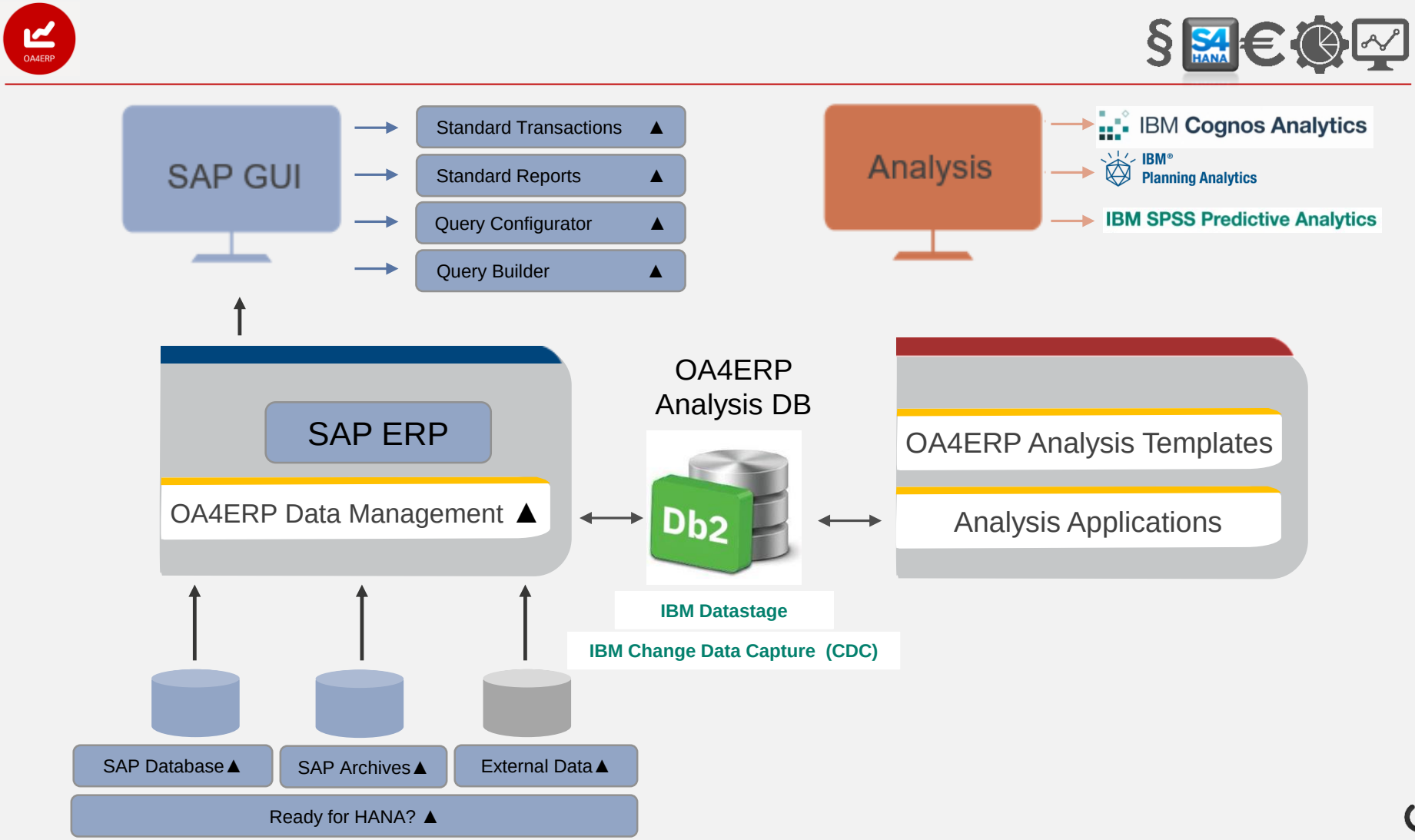
BUKRS	BELNR	DMBTR
2000	0100000052	1.620,93
2000	0100000052	1.620,93
2000	0100000053	364.913,78
2000	0100000053	364.913,78
2000	0100000054	56.868,88
2000	0100000054	56.868,88
2000	0100000055	337.805,98

Query Builder – Summary

§ ABAP programming for complex queries with integration of OA4ERP API

very fast access to SAP data and OA4ERP DB

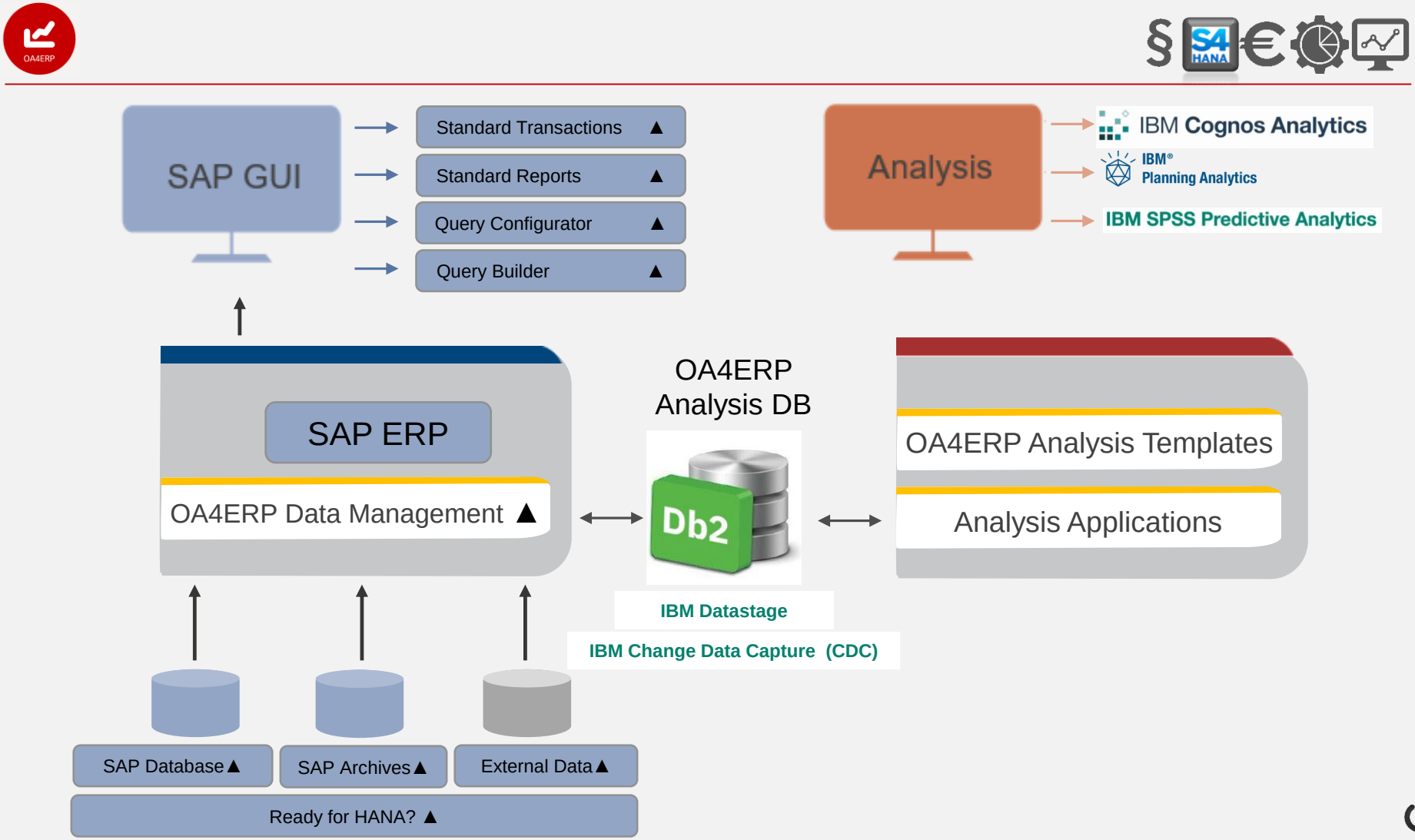
€ Access to SAP data, external sources and archives


SAP GUI
Standard Transactions ▲
Standard Reports ▲
Query Configurator ▲
Query Builder ▲
Analysis
IBM Cognos Analytics
IBM® Planning Analytics
IBM SPSS Predictive Analytics
SAP ERP
OA4ERP Data Management ▲
OA4ERP Analysis DB
Db2
OA4ERP Analysis Templates
Analysis Applications
IBM Datastage
IBM Change Data Capture (CDC)
SAP Database ▲
SAP Archives ▲
External Data ▲
Ready for HANA? ▲

Data Management

OA4ERP

- Data analysis (Analyzer)
- More aggressive archiving possible since data can still be displayed in the system
- Integration of external data and archives in operative SAP system
- Monitoring
- Data models optimized for analyses
- Relieving the load on the system → Performance
- Data Governance
- Compliant archive optimization for SAP data, external data and archives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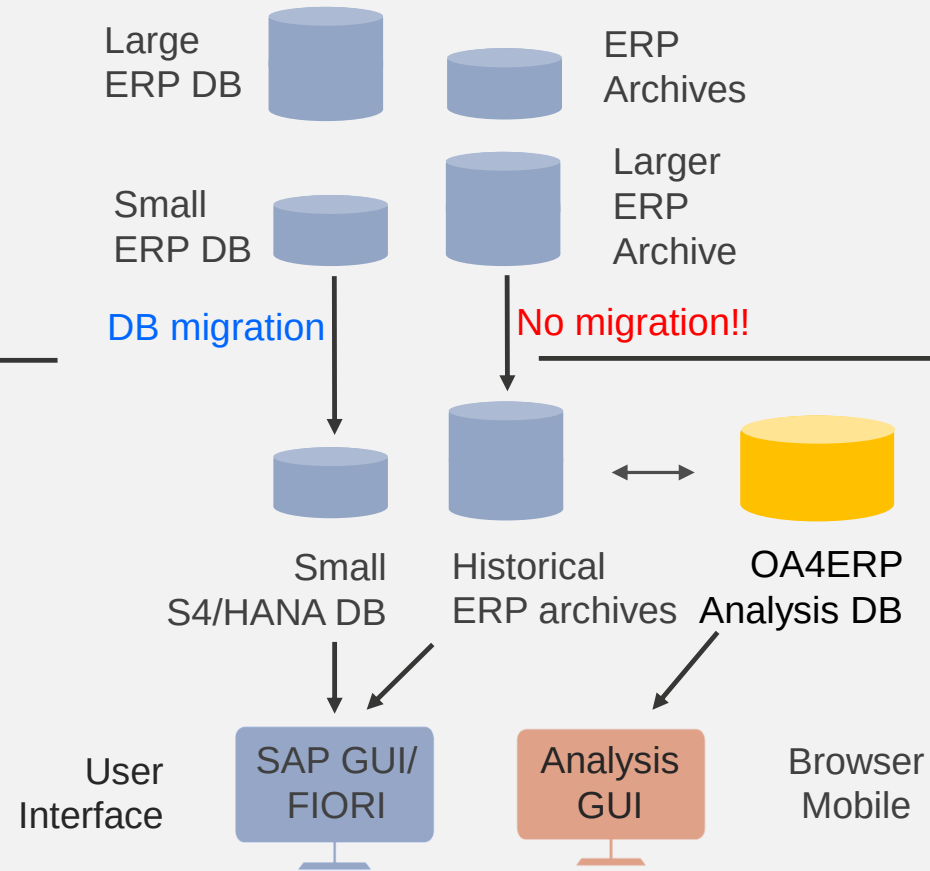
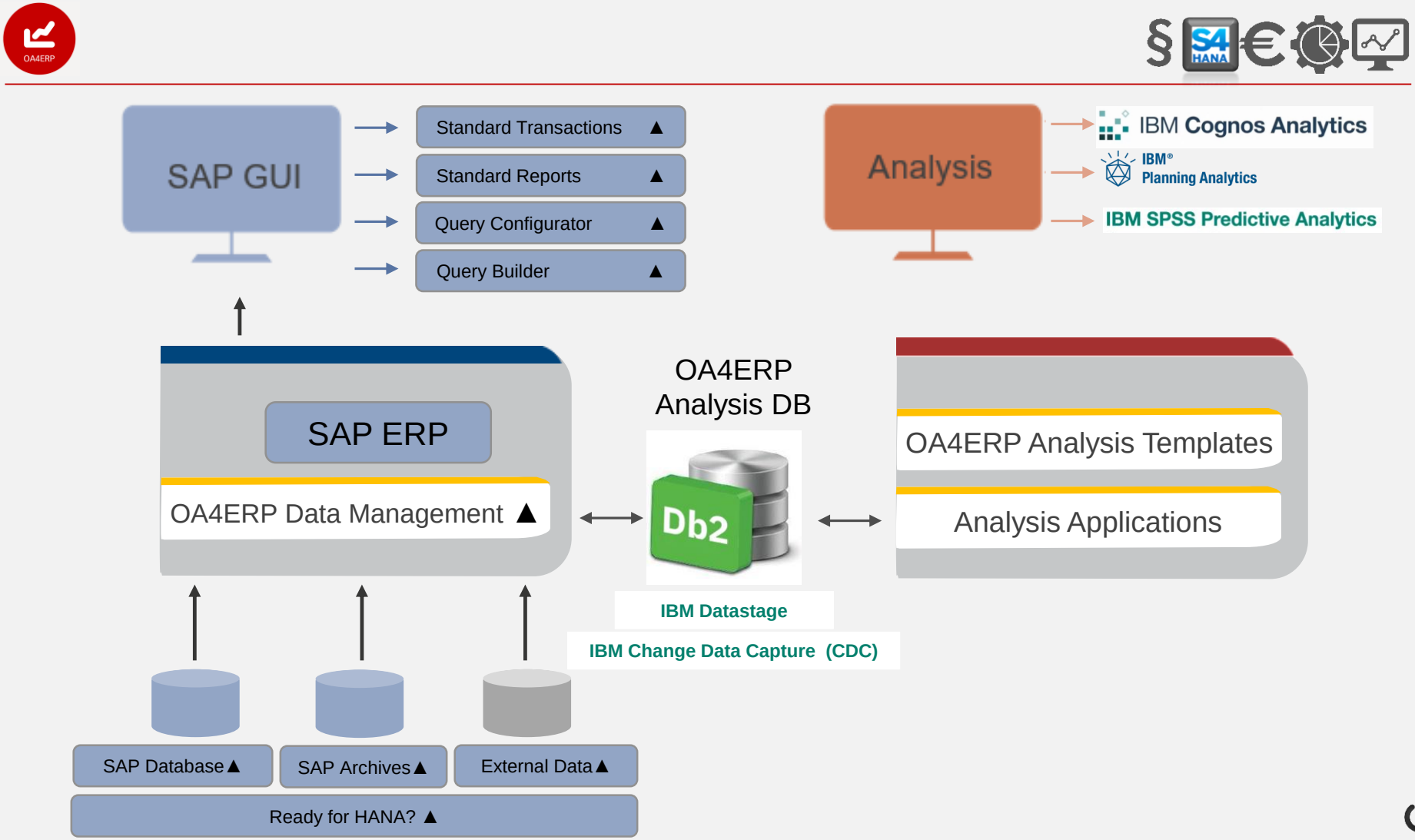
Optimal Preparation for S/4HANA Migration



Smaller dataset
during migration and in HANA

Significant cost savings

Reports from historical data
in S/4HANA with OA4ERP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Ready for HANA? ▲

Interactive Reporting

OA4ERP

Browser, Mobile

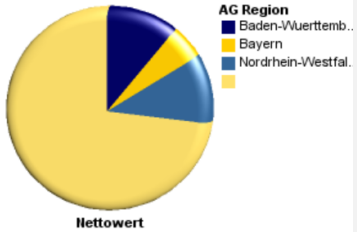
Vertriebsweg | Sparte

Vorjahresvergleich

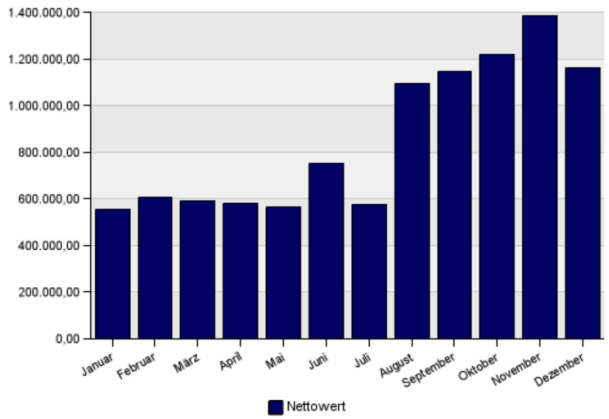
	2011	2012	Diff	%
1000 - Hamburg	3.554.022	2.762.847	-791.174	-28,6%
1200 - Dresden	1.575	0	-1.575	
2400 - Milano Distribution Center	4.575.600	4.575.600	0	0,0%
2500 - Rotterdam Distribution Center	6.184.200	2.463.050	-3.721.150	-151,1%
6000 - Mexico City	100	3.420	3.320	97,1%
	54.493.544	421.115	-54.072.429	-12.840,3%
Total	**68.809.040**	**10.226.032**	**-58.583.008**	**-572,9%**

Akt. Jahr nach Region

	2011	2012	Diff	%
Baden-Wuerttemberg	1.121.897	1.122.092	195	0,0%
Bayern	1.228.276	536.907	-691.369	-128,8%
Nordrhein-Westfalen	1.103.848	1.103.848	0	0,0%
	65.355.019	7.463.185	-57.891.834	-775,7%
Total	**68.809.040**	**10.226.032**	**-58.583.008**	**-572,9%**



Akt. Jahr nach Monaten und Werk



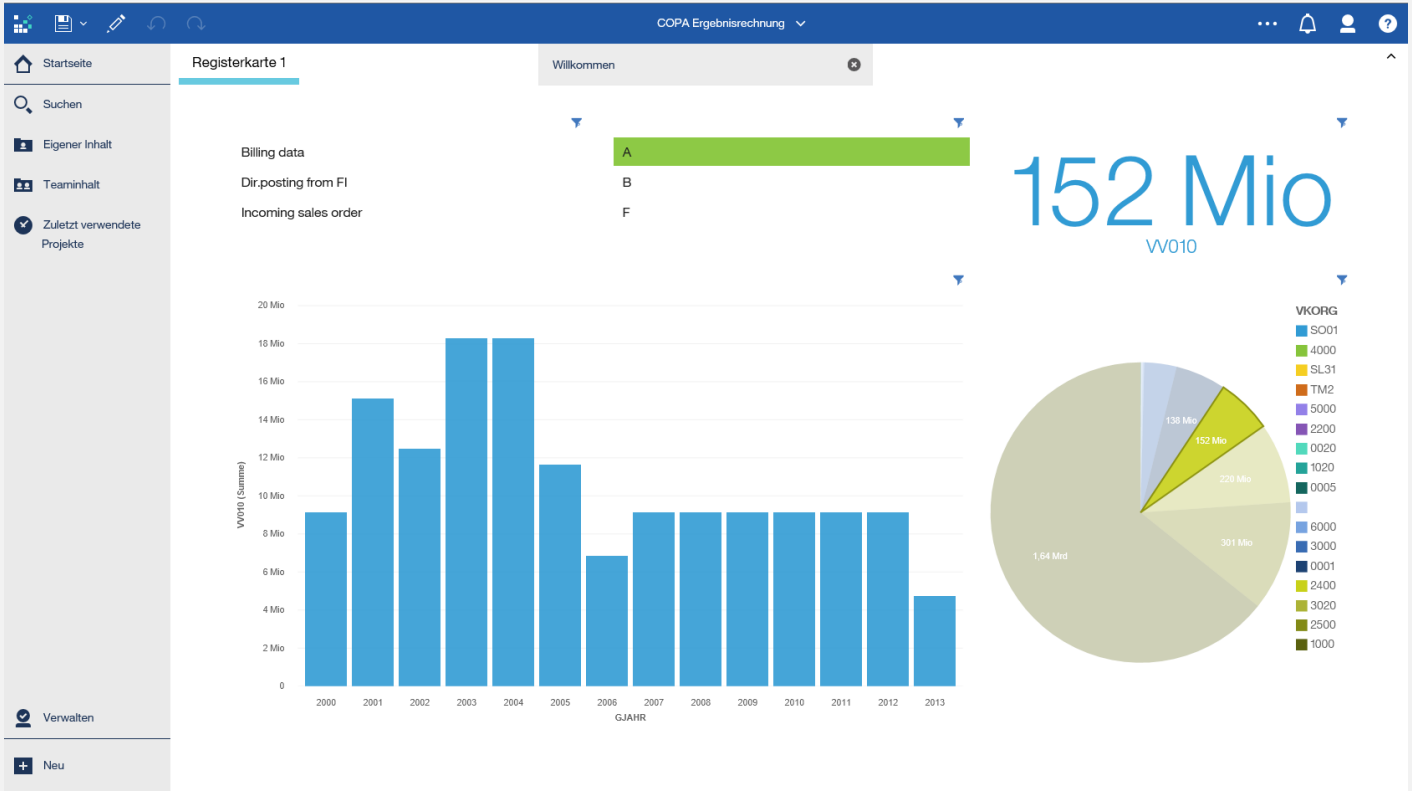
Akt. Jahr nach Warengruppe

	2011	2012	Diff	%
Chemie	60	0	-60	
Elektronik	115.066	11.551	-103.515	-896,2%
Festplatten	1	0	-1	
Glühlampen	200	0	-200	
Hardware	0	4.800	4.800	100,0%
Lebensmittel	0	27.200	27.200	100,0%
Leistungen	240	4.082	3.842	94,1%
Materialien	0	0	0	
Metallverarbeitung	68.315.102	10.178.453	-58.136.648	-571,2%
Monitore	274.242	0	-274.242	
Personal	4.100	0	-4.100	
Warengruppe 01	30	0	-30	
	100.000	-54	-100.054	186.146,5%
Total	**68.809.040**	**10.226.032**	**-58.583.008**	**-572,9%**

Interactive Reporting

OA4ERP

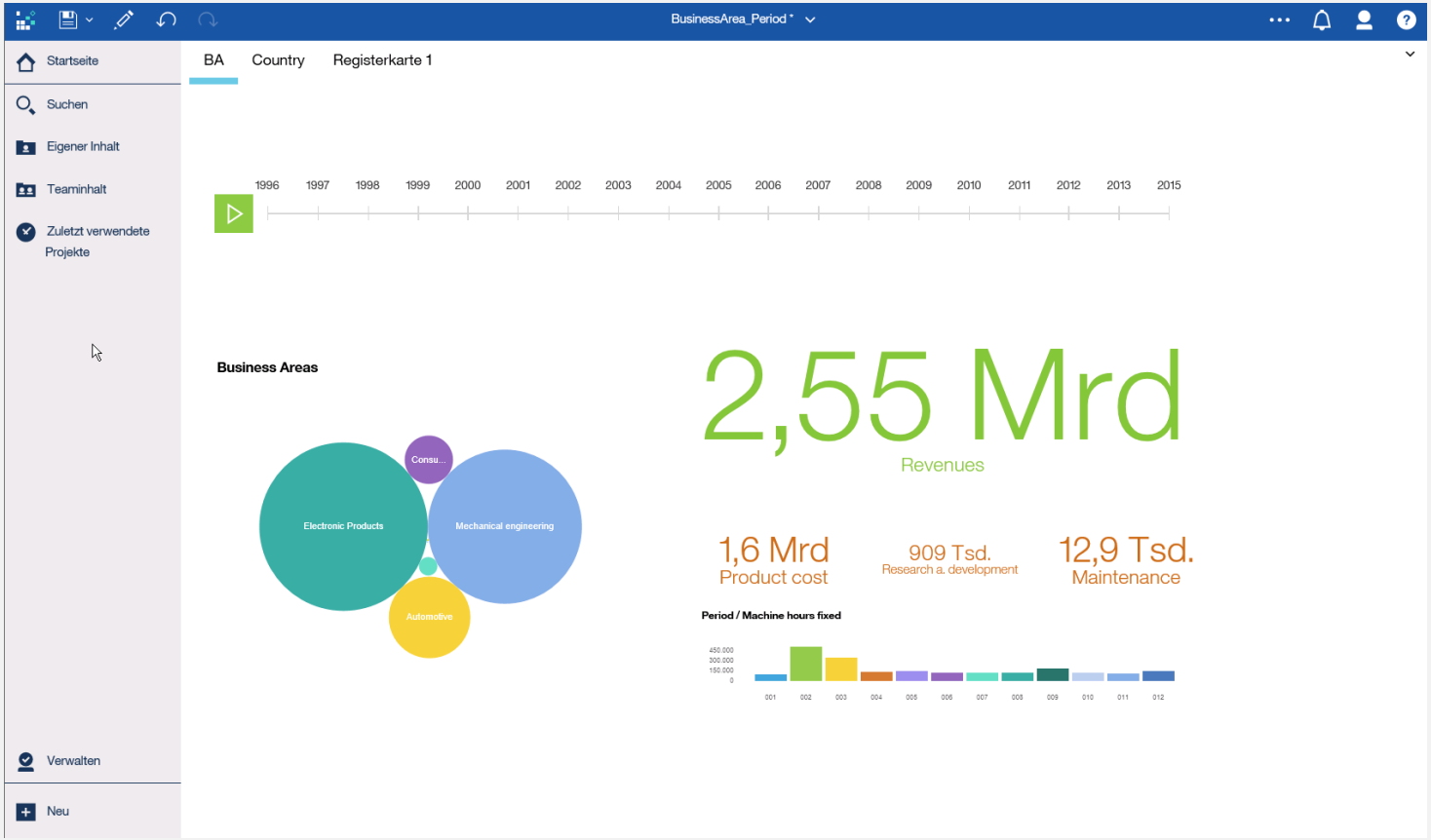
Browser, Mobile



Interactive Reporting

OA4ERP

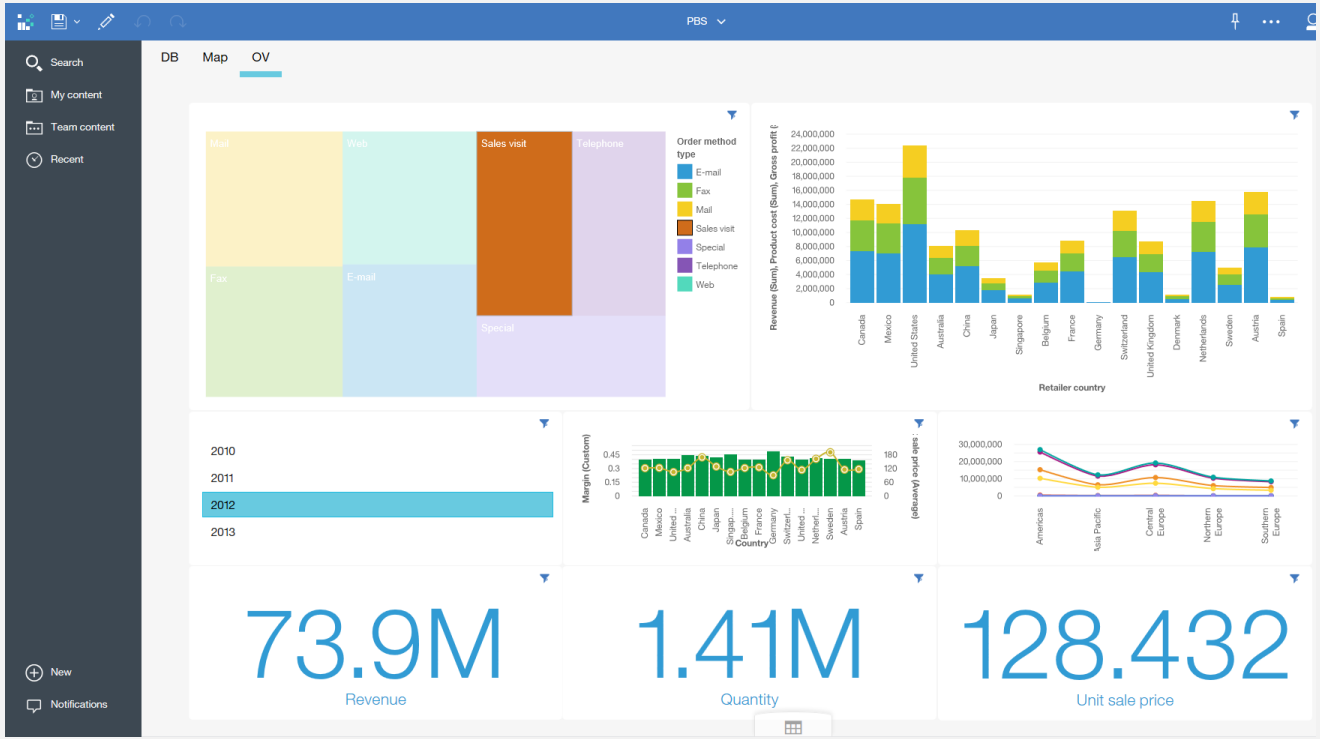
Browser, Mobile



Interactive Dashboard

OA4ERP

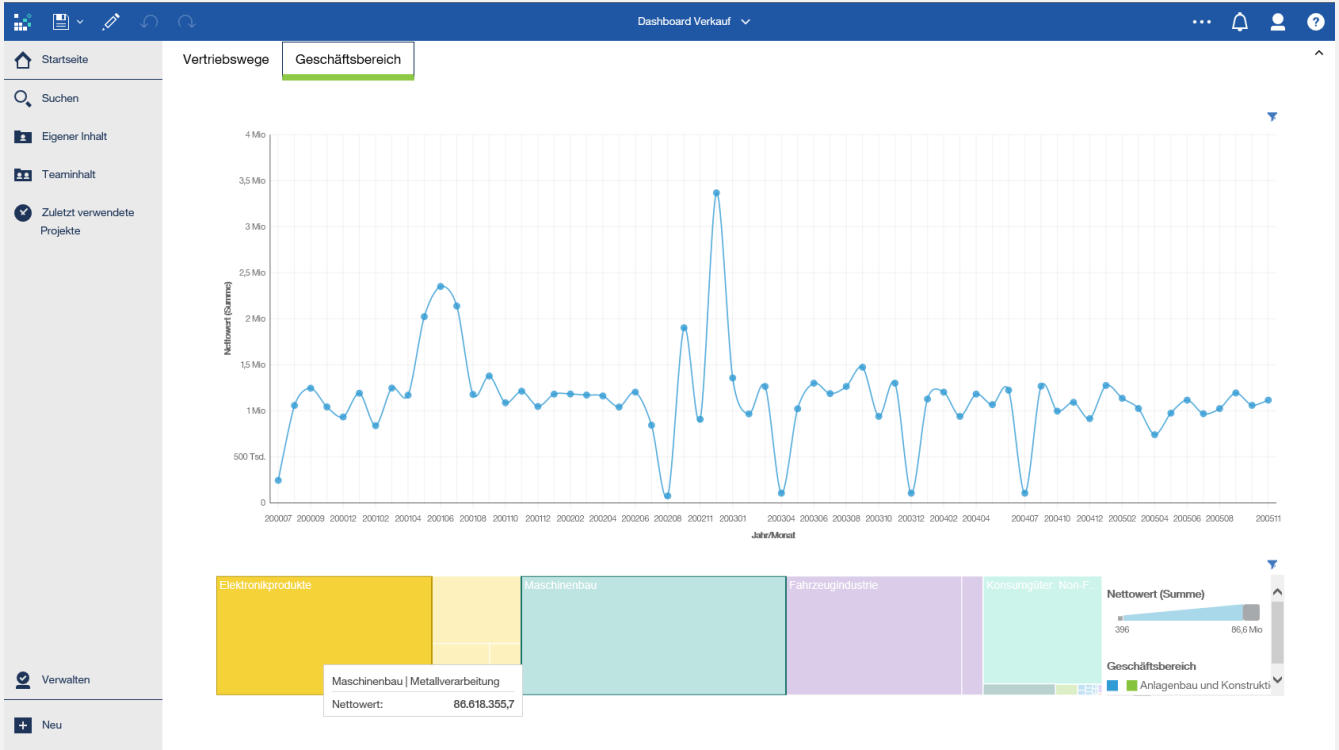
Browser, Mobile



Interactive Dashboard

OA4ERP

Browser, Mobile



Interactive Dashboard

OA4ERP

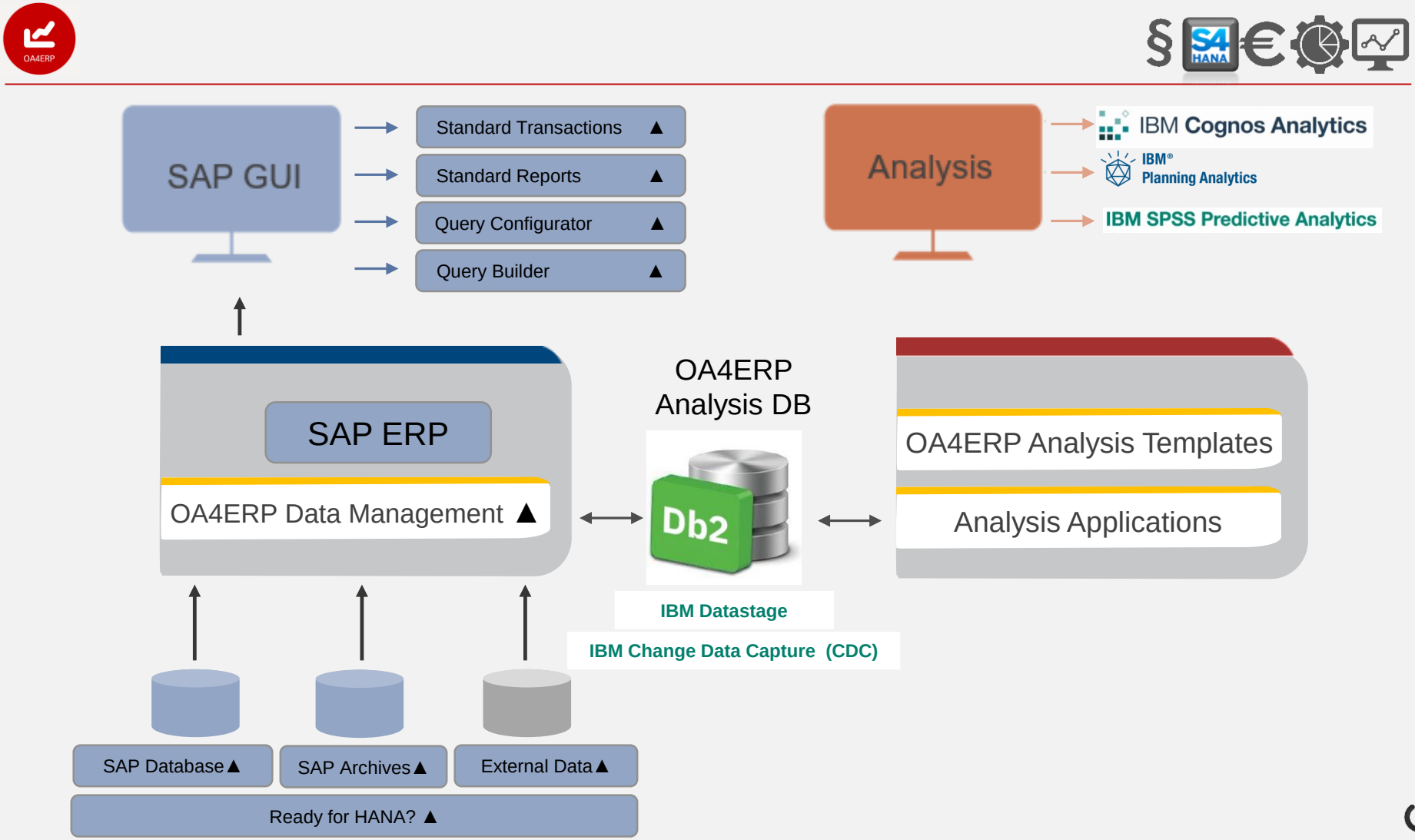
Browser, Mobile

Reporting Templates

OA4ERP

Browser, Mobile

- Financial Accounting
- Controlling
- Materials Management
- Sales & Distribution
- Human Resources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Example: Planning

Jahr: 2016
Gesellschaft: Alle Gesellschaften
Simulations-Szenario: Simulation optimistisch
Übernahme in Simulation: Ist - Vormonat
Übernehmen
Plan-Simulationsfaktor: 1,00
Aktualisieren

		Ist	Ist	Ist	Simulation	Simulation	Simulation	Simulation	Simulation	Simulation	Simulation	Simulation	Simulation	
		Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember	Summe
Fe Lager Schere/Umschlag	Menge	87.583	61.698	60.091	67.016	68.724	69.604	64.453	62.930	43.906	45.568	43.021	37.756	712.351
	Preis	167	150	156	200	200	200	199	199	211	211	212	212	191
	Marge	23	33	37	35	36	37	36	36	33	34	33	33	34
	DIO				16	14	14	14	14	21	21	21	20	
	DSO				24	22	23	23	22	33	33	34	34	
	DPO				16	15	16	16	15	23	23	23	23	
	Umsatz	14.611.549	9.276.799	9.388.036	13.386.816	13.741.297	13.920.006	12.853.040	12.534.695	9.285.062	9.634.010	9.099.212	7.993.562	135.724.083
	Material	-12.629.067	-7.244.975	-7.151.368	-11.041.574	-11.252.358	-11.372.931	-10.515.525	-10.251.641	-7.828.883	-8.099.421	-7.689.533	-6.735.913	-111.813.189
	Rohertrag	1.982.482	2.031.824	2.236.668	2.345.242	2.488.938	2.547.075	2.337.515	2.283.054	1.456.179	1.534.589	1.409.679	1.257.649	23.910.894
	Vorräte				6.052.409	5.325.349	5.423.700	5.010.248	4.756.982	5.426.848	5.571.135	5.399.763	4.591.682	
	Forderungen LuL				10.555.544	10.185.346	10.518.322	9.674.485	9.275.485	10.318.345	10.725.452	10.244.215	9.009.485	
	Verbindlichkeiten LuL				-6.029.733	-5.805.615	-6.045.933	-5.505.682	-5.278.615	-5.896.615	-6.185.189	-5.865.258	-5.130.415	
Fe Lager Shredder	Menge	18.390	22.042	25.487	21.845	22.512	22.821	22.317	22.251	8.167	8.167	8.167	8.167	210.333
	Preis	136	111	121	137	146	137	139	132	193	193	193	193	142
	Marge	35	28	32	26	21	28	25	27	46	46	46	46	30
	DIO				12	11	13	12	13	26	26	26	26	
	DSO				27	26	28	28	30	55	55	55	55	
	DPO				8	7	8	8	9	17	17	17	17	
	Umsatz	2.506.872	2.450.589	3.087.971	2.994.661	3.294.559	3.134.540	3.101.295	2.932.715	1.577.673	1.577.673	1.577.673	1.577.673	29.813.893
	Material	-1.861.273	-1.839.009	-2.279.534	-2.431.144	-2.824.447	-2.491.952	-2.548.046	-2.336.220	-1.204.645	-1.204.645	-1.204.645	-1.204.645	-23.430.204
	Rohertrag	645.600	611.580	808.436	563.516	470.112	642.588	553.249	596.495	373.028	373.028	373.028	373.028	6.383.689
	Vorräte				961.558	1.044.026	1.044.026	1.044.026	1.044.026	1.044.026	1.044.026	1.044.026	1.044.026	
	Forderungen LuL				2.674.234	2.892.401	2.892.401	2.892.401	2.892.401	2.892.401	2.892.401	2.892.401	2.892.401	
	Verbindlichkeiten LuL				-628.711	-682.632	-682.632	-682.632	-682.632	-682.632	-682.632	-682.632	-682.632	
Fe Strecke	Menge	11.638	-9.422	-28.848	30.814	37.379	33.691	35.572	21.944	8.845	9.371	8.845	8.845	168.673
	Preis	141	44	132	152	162	157	165	137	210	210	210	210	177
	Marge	23	-40	-10	13	11	12	11	16	13	13	13	13	20
	DIO				0	0	0	0	0	0	0	0	0	
	DSO				12	7	9	7	14	23	24	23	23	
	DPO				9	6	8	6	13	19	20	19	19	
	Umsatz	1.645.572	-411.372	-3.801.401	4.694.488	6.073.029	5.298.622	5.871.203	3.009.247	1.857.379	1.967.979	1.857.379	1.857.379	29.919.502
	Material	-1.377.729	785.445	4.099.126	-4.288.506	-5.644.260	-4.881.425	-5.465.957	-2.651.184	-1.741.422	-1.845.183	-1.741.422	-1.741.422	-26.493.937

Planning with Excel frontend

OA4ERP

Version: Plan 1
Buchungskreis: 1000

	Jahr 2017	Januar	Februar	März	April	Mai	Juni	Juli	August	September	Oktober	November	Dezember
3000000 - Gewinn- und Verlust-Rechnung	73.420.274,87	5.341.869,39	880.241,12	-8.341.096,32	909.702,46	1.230.360,86	1.155.852,77	958.784,83	1.010.607,96	843.506,07	875.154,32	1.314.464,18	67.240.827,23
3010000 - Umsatzerloese	36.978.180,87	-306.456,90	-334.086,32	-285.018,71	-317.039,26	-311.635,17	-316.600,39	-822.273,98	-1.134.011,84	-344.210,81	-350.202,86	-360.315,96	41.860.033,07
3011000 - Brutto-Erloese	36.951.744,22	-308.175,66	-335.990,16	-286.824,90	-318.841,76	-313.350,46	-318.391,66	-824.179,16	-1.135.928,26	-346.164,16	-352.217,76	-362.251,10	41.854.059,26
3012000 - Erloes-Schmaelerungen	26.436,65	1.718,76	1.903,84	1.806,19	1.802,50	1.715,29	1.791,27	1.905,18	1.916,42	1.953,35	2.014,90	1.935,14	5.973,81
3020000 - Bestands-Veraenderung	1.373.458,38	-30.216,66	-29.976,21	173.956,85	-29.976,21	-29.976,21	-2.069,23	547.523,79	892.423,79	-29.976,21	-29.976,21	-28.302,90	-29.976,21
0000800997 - Bestandsveränderngen Profit Center	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000800998 - Interne Lieferungen Profit Center	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000890000 - Verbrauch unfertige Produkte	222.705,43	0,00	0,00	193.798,45	0,00	0,00	27.906,98	1.000,00	0,00	0,00	0,00	0,00	0,00
0000890001 - Bestandsveränderung Verschrottung Eigen-Materia	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000890002 - Bestandsveränderung Qualitätskontrolle Eigen-Ma	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000892000 - Bestandsveränderung Fertigerzeugnisse	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000893000 - Bestandsveränderung Waren in Arbeit	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000893010 - Herstellkosten des Umsatzes (ohne Kostenart)	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000893015 - Herstellkosten des Umsatzes (mit Kostenart)	2.225.495,49	53.670,37	59.560,61	58.833,00	58.447,44	58.695,22	61.055,83	639.119,76	986.170,34	64.741,72	64.118,00	63.232,22	57.850,98
0000893020 - Bestandsveränderung Zugang Eigen-Erzeugnisse	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000893025 - Bestandsveränderung EE ohne Kostenart	-1.574.468,25	-129.316,64	-134.966,43	-78.674,60	-133.853,26	-134.101,04	-136.461,65	-138.025,58	-139.176,16	-140.147,54	-139.523,82	-136.964,73	-133.256,80
0000894010 - Bestandsv. Verkauf Fremderz. ohne Kostenart	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000894015 - Bestandsveränderung - Verkauf Handelsware	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000894020 - Bestandsver.-Herstellkost.d.Umsatzes (Einzelfer	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000894022 - Bestandsveränderung UKV- Fremderzeugnisse Einga	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000894025 - Bestandsv. Verkauf Fremderz. mit Kostenart	499.725,71	45.429,61	45.429,61	0,00	45.429,61	45.429,61	45.429,61	45.429,61	45.429,61	45.429,61	45.429,61	45.429,61	45.429,61
0000894030 - Bestandsver.-Herstellkost.d.Umsatzes (Einzelfer	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000895000 - Fabrikleistung Fertigungs-Aufträge	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000896000 - Abwertung f. drohende Wertschwankungen Fertigfa	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
3030000 - Andere aktivierte Eigenleistungen	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000810000 - Aktivierte Eigenleistungen	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000811000 - Ertrag aus Aktivierung abgerechneter Auftraege	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
3040000 - Sonstige betriebliche Ertraege	-5.443.062,37	-9.753,80	-9.753,80	-9.753,80	-9.753,80	-9.753,80	-9.753,80	-9.753,80	-9.753,80	-9.753,80	-9.753,80	-9.753,80	-5.335.770,57
3041000 - Ertrag aus der Aufloesung des Sonderpostens	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000252000 - Ertrag aus der Auflösung von Sonderposten	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000252001 - Ertrag aus Aufloesung Sonder-AfA 1 (s.Kont.Hand	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000252002 - Ertrag aus Aufloesung Sonder-AfA 2 (s.Kont.Hand	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000252003 - Ertrag aus Aufloesung Sonder-AfA 2 (s.Kont.Hand	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000252004 - Ertrag aus Aufloesung Sonder-AfA 4 (s.Kont.Hand	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000252005 - Ertrag aus Aufloesung Sonder-AfA 5 (s.Kont.Hand	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
0000252006 - Ertrag aus Aufloesg. Sonder-AfA 6 (s.Kont.Handb	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

| Aktueller Eigentümer: Kein(e) | Aktueller Besitzknoten: Kein(e

Workflow

OA4ERP

Datei Bearbeiten Ansicht Favoriten Extras ?

IBM Cognos TM1 Application

- Arbeitsablauf Planung
  - 3000000 - Gewinn- und Verlust-Rechnung
    - 3010000 - Umsatzerloese
      - 3011000 - Brutto-Erloese
      - 3012000 - Erloes-Schmaelerungen
    - 3020000 - Bestands-Veraenderung
      - 0000800997 - Bestandsveränderngen Profit Center
      - 0000800998 - Interne Lieferungen Profit Center
      - 0000890000 - Verbrauch unfertige Produkte
      - 0000890001 - Bestandsveränderung Verschrottung Eigen-
      - 0000890002 - Bestandsveränderung Qualitätskontrolle Eig
      - 0000892000 - Bestandsveränderung Fertigerzeugnisse
      - 0000893000 - Bestandsveränderung Waren in Arbeit
      - 0000893010 - Herstellkosten des Umsatzes (ohne Kosten
      - 0000893015 - Herstellkosten des Umsatzes (mit Kostenar
      - 0000893020 - Bestandsveränderung Zugang Eigen-Erzeug
      - 0000893025 - Bestandsveränderung EE ohne Kostenart
      - 0000894010 - Bestandsv. Verkauf Fremderz. ohne Kosten
      - 0000894015 - Bestandsveränderung - Verkauf Handelswa
      - 0000894020 - Bestandsver.-Herstellkost.d.Umsatzes (Einz
      - 0000894022 - Bestandsveränderung UKV- Fremderzeugni
      - 3020000 - Bestands-Veraenderung (16 - 19)
    - 3030000 - Andere aktivierte Eigenleistungen
    - 3040000 - Sonstige betriebliche Ertraege
    - 3050000 - Materialaufwand
    - 3060000 - Personalaufwand
    - 3070000 - Abschreibungen
    - 3080000 - Sonstige betriebliche Aufwendungen

Sie sind Prüfer oder Contributor für:

Name	Status	Berechtigungen	Eigentümer	Eigentümerknoten	Pr
3000000 - Gewinn- und Verlust-Rechnung	Unfertig		Kein(e)	Kein(e)	Ke

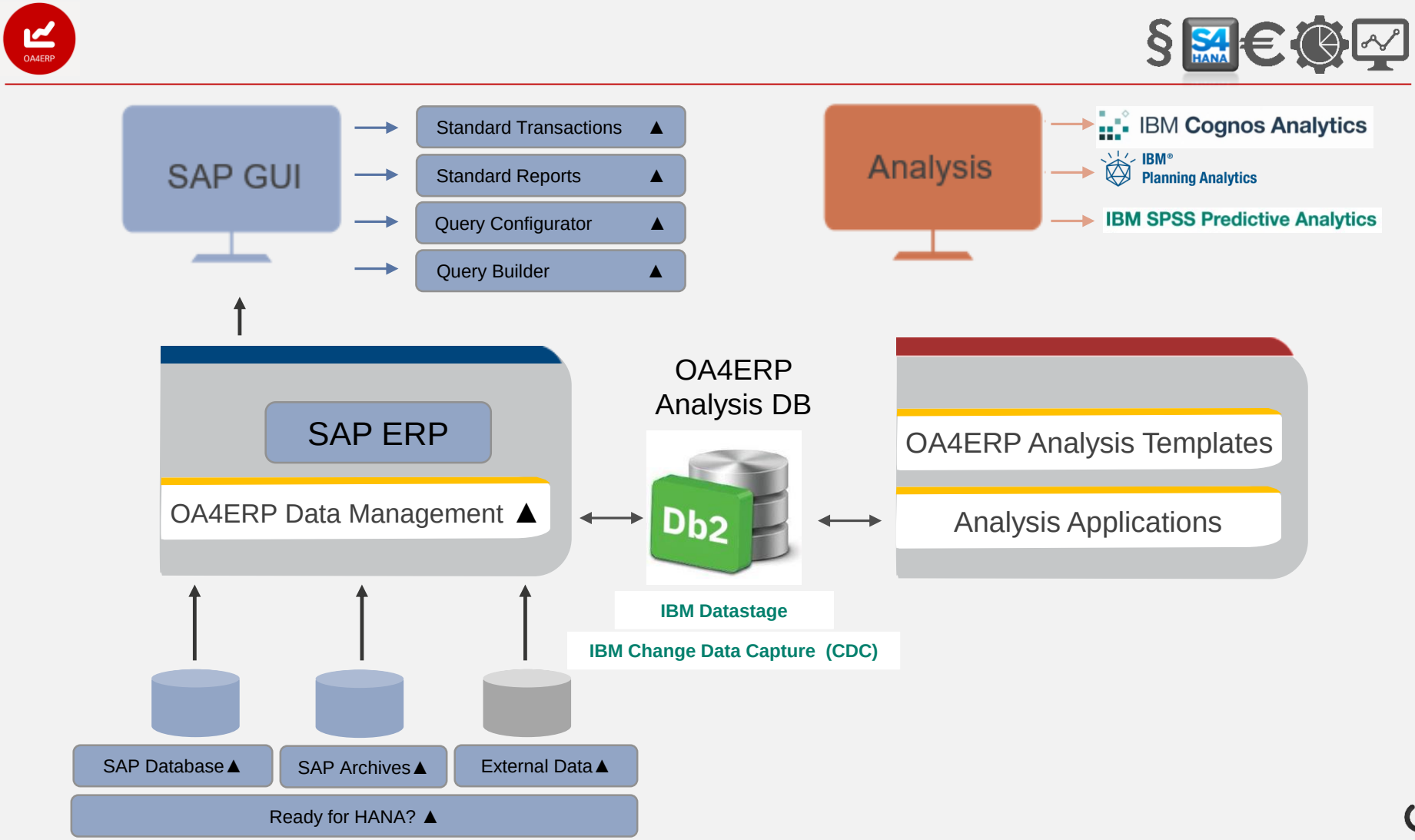
Bestehend aus:

Name	Status	Berechtigungen	Eigentümer	Eigentümerknoten	Pr
3010000 - Umsatzerloese	Verfügbar		Kein(e)	Kein(e)	Ke
3020000 - Bestands-Veraenderung	In Arbeit		Kein(e)	Kein(e)	Ke
3030000 - Andere aktivierte Eigenleistungen	Verfügbar		Kein(e)	Kein(e)	Ke
3040000 - Sonstige betriebliche Ertraege	Verfügbar		Kein(e)	Kein(e)	Ke
3050000 - Materialaufwand	Verfügbar		Kein(e)	Kein(e)	Ke
3060000 - Personalaufwand	Verfügbar		Kein(e)	Kein(e)	Ke
3070000 - Abschreibungen	Verfügbar		Kein(e)	Kein(e)	Ke
3080000 - Sonstige betriebliche Aufwendungen	Verfügbar		Kein(e)	Kein(e)	Ke

Planning Templates

OA4ERP

- Balance Sheet Planning
- P&L Planning
- Sales / Revenue Planning
- Cost Planning
- Profit Margin Planning
- Investment Planning


SAP GUI
Standard Transactions ▲
Standard Reports ▲
Query Configurator ▲
Query Builder ▲
Analysis
IBM Cognos Analytics
IBM® Planning Analytics
IBM SPSS Predictive Analytics
SAP ERP
OA4ERP Data Management ▲
OA4ERP Analysis DB
Db2
OA4ERP Analysis Templates
Analysis Applications
IBM Datastage
IBM Change Data Capture (CDC)
SAP Database ▲
SAP Archives ▲
External Data ▲
Ready for HANA? ▲

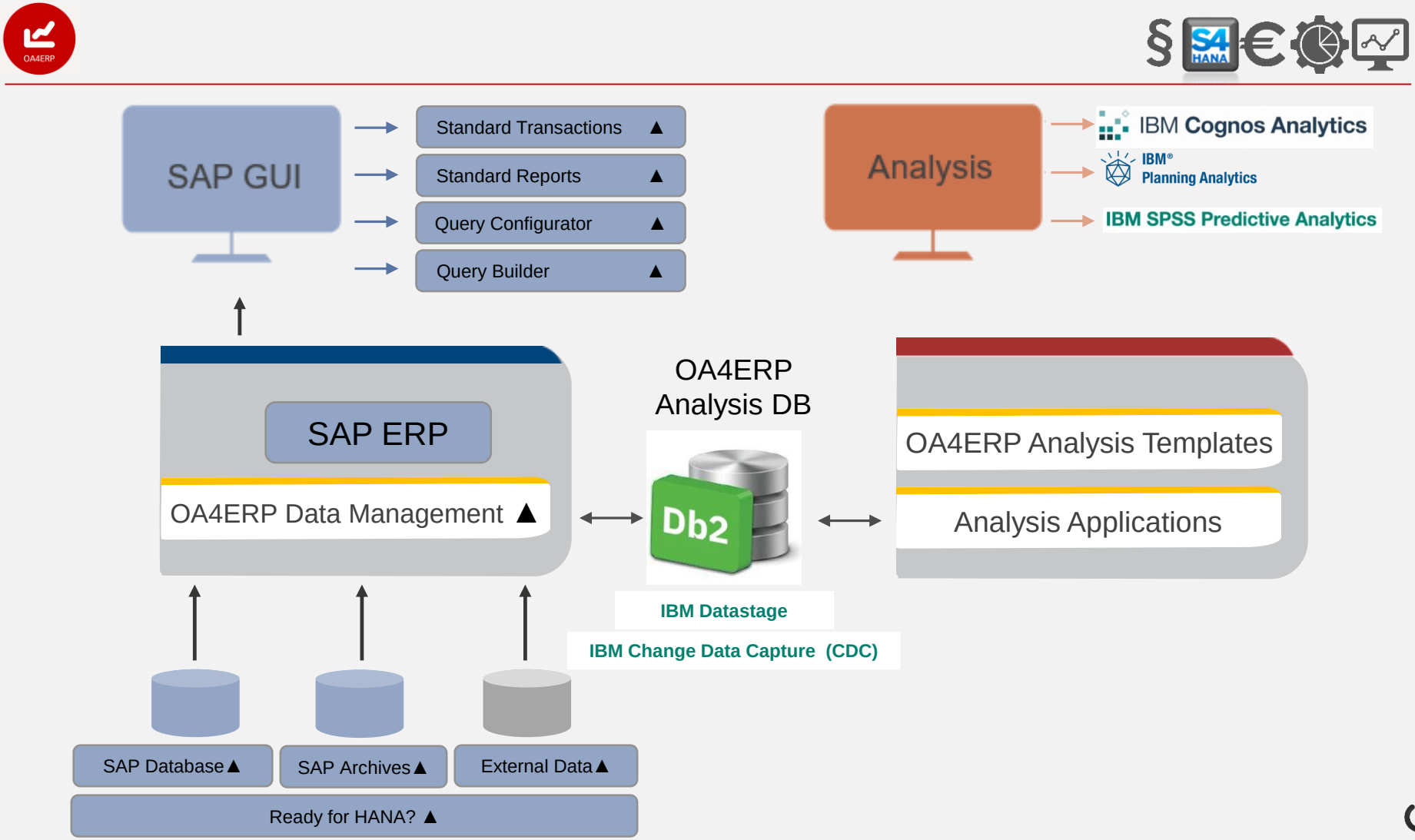
Predictive Scenario

Predictive Analyses to see trends and create forecasts

Predictive Templates

OA4ERP

- Product Analyses
- Customer Analyses
- Shopping Basket Analyses
- Personnel Analyses
- Process Analyses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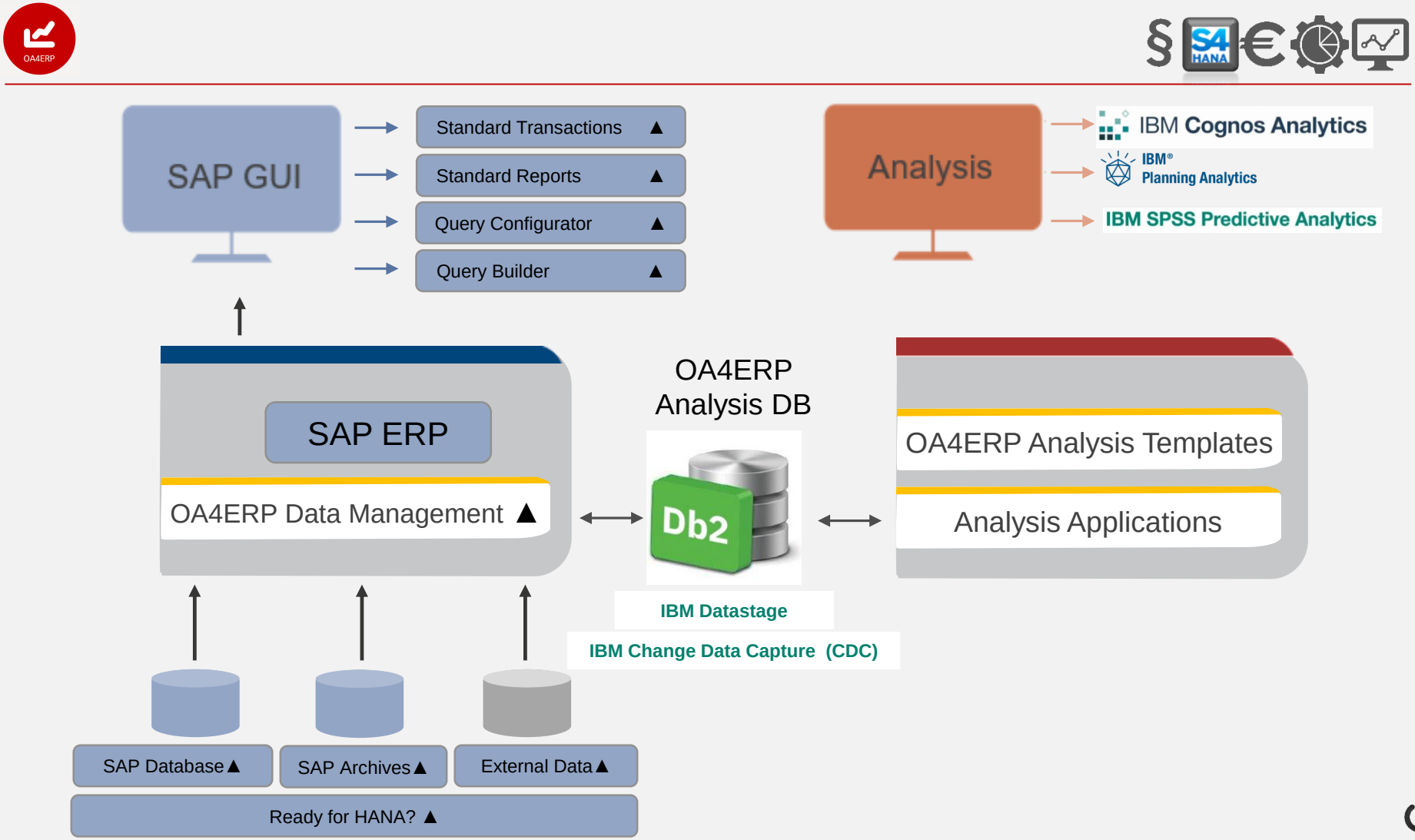
IBM Datastage
IBM Change Data Capture (CDC)
SAP Database ▲
SAP Archives ▲
External Data ▲
Ready for HANA? ▲

Integration of external Data

- Excel
- Personnel Administration
- Point-of-sale Systems
- Customer Relationship Management
- Production
- Warehouse
- Commerce
- Other ERP Systems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IBM Change Data Capture (CDC)
SAP Database ▲
SAP Archives ▲
External Data ▲
Ready for HANA? ▲

Data Management

- Database Analysis (Analyzer)
- Relieving Load on operative System → Performance Increase
- Data Governance no DART extracts, eliminating redundant data, compliant archiving
- Aggressive Archiving
- Integration of Archives and external Data in ERP System
- Monitoring
- Data Models optimized for analyses
- Contains all Licenses for Databases, ETL and Replication

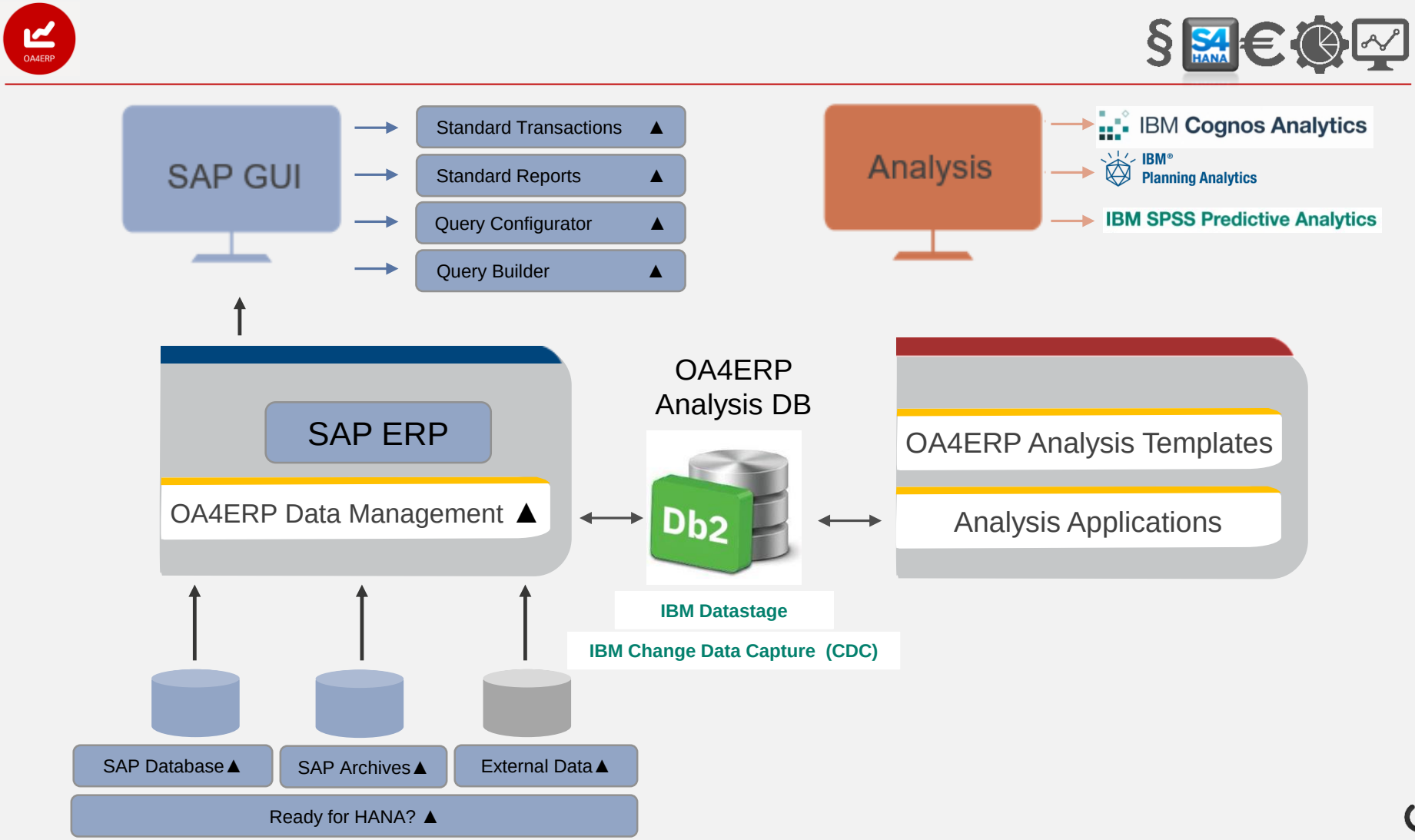
Database

Scalable analytical Database
(extremely fast response times and data compression)

OA4ERP is not developed as Data Warehouse

OA4ERP differs schematically from DWs
(no star scheme)

Enhancement of existing DWs by improved operative Reporting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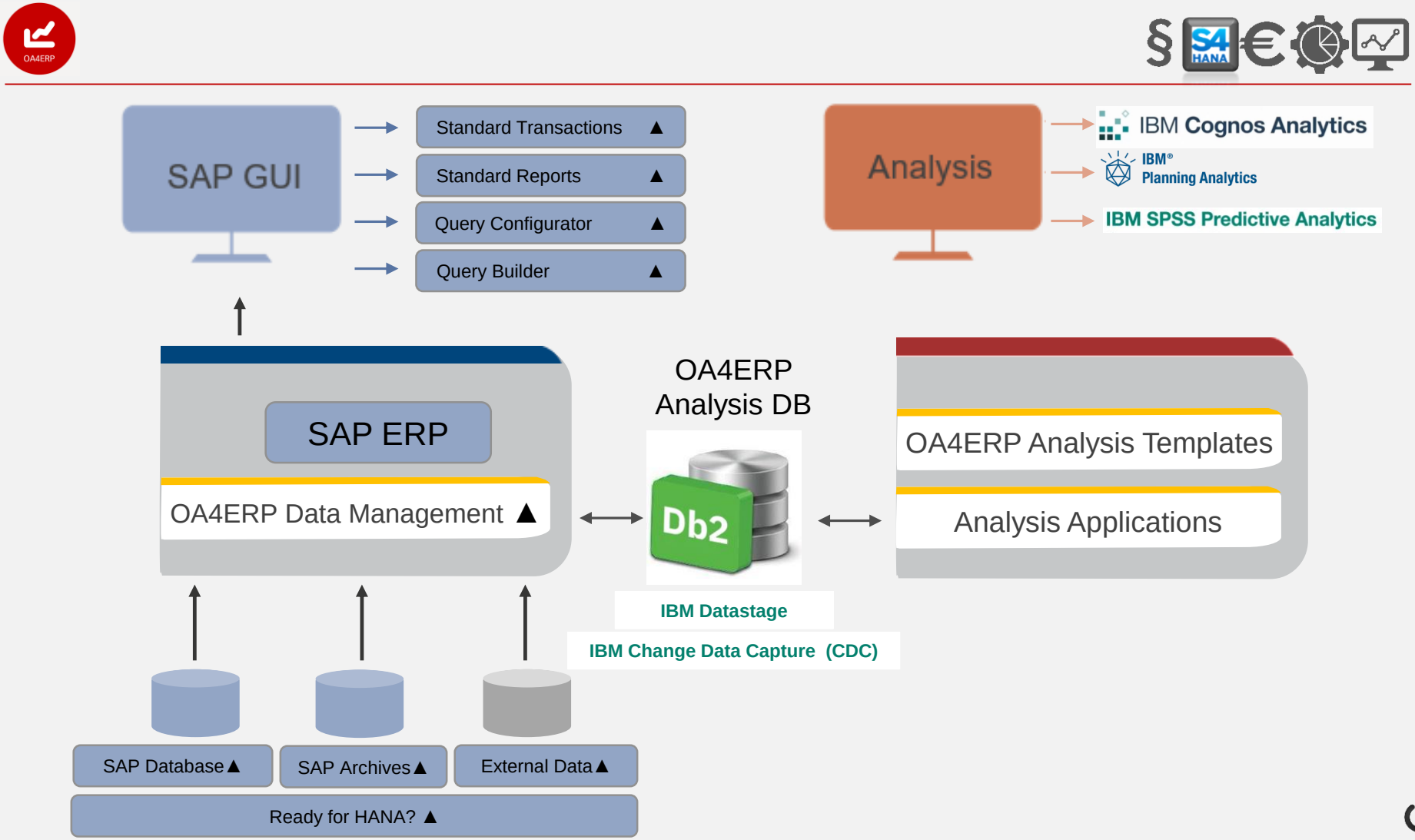
SAP Databases

Supports all SAP Database Systems
(HANA, ASE, Oracle, SQL Server, DB2)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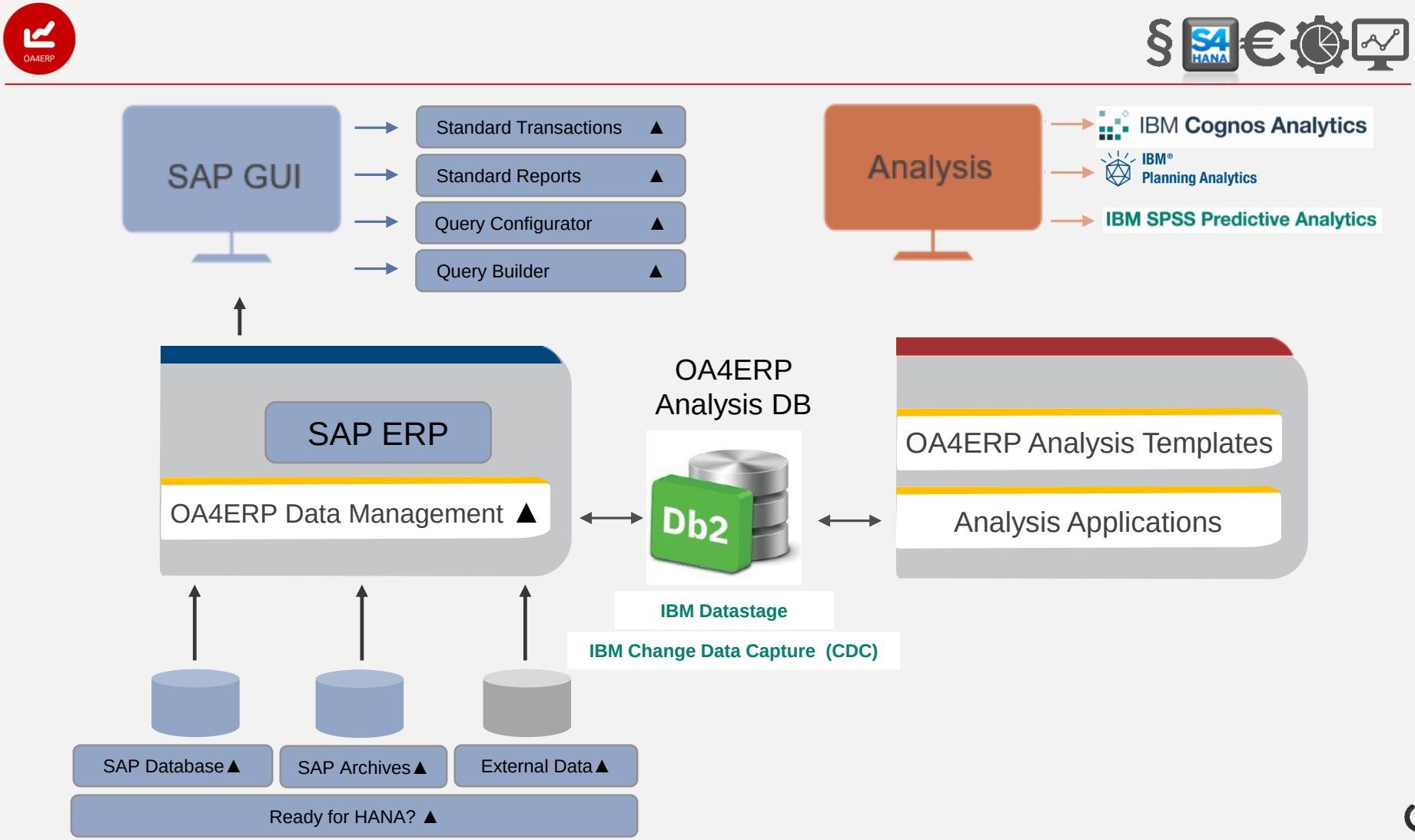
External Data ▲
Ready for HANA? ▲

SAP Archives

- Archive data is always available via SAP GUI
- All SAP certified archive systems are supported (read/write)
- Substantial relief by "aggressive archiving" in SAP ERP System
- Compliant archive optimization of SAP and external data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References

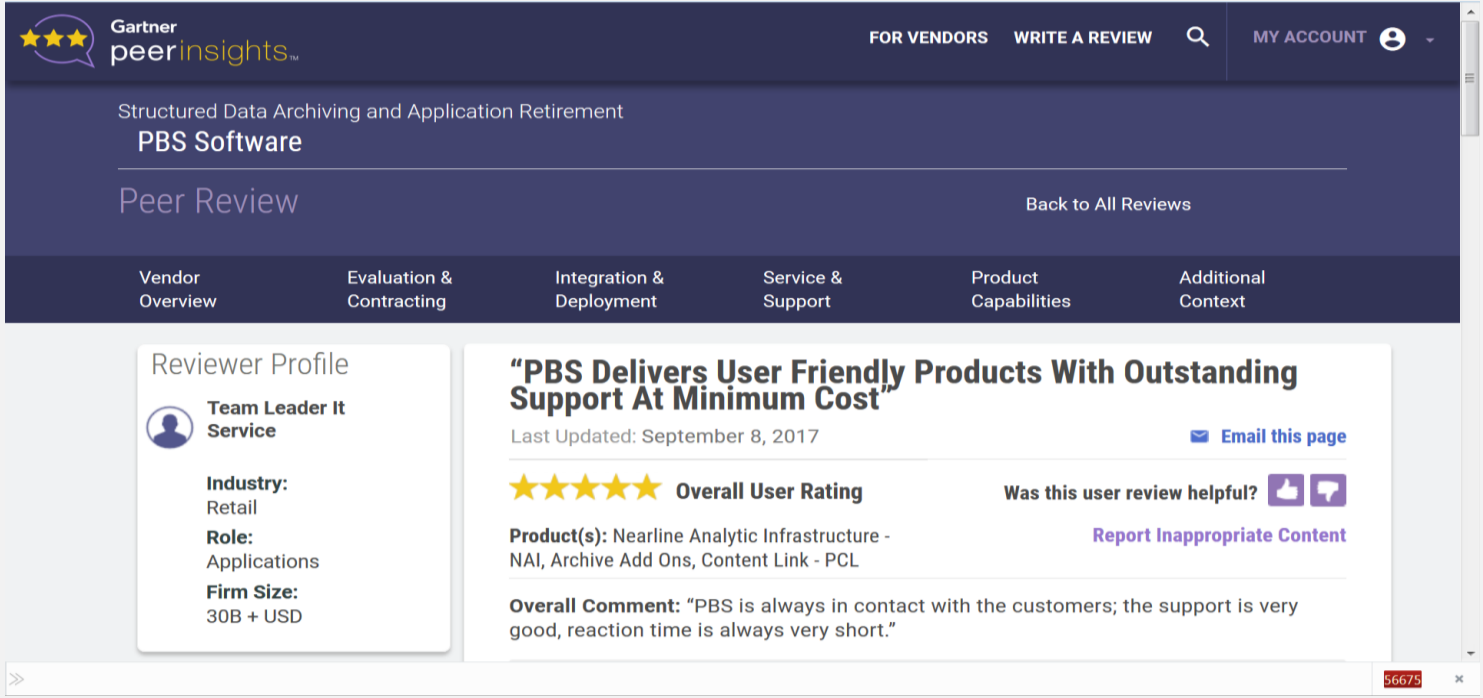
More than 1,500 customers worldwide rely on the PBS add-on solutions:

More than 50 percent
of German DAX 30 companies use
the PBS solution!

In addition, German & international global players and top-class middle-sized companies

Extract of Customer List:

Customer Feedback



For more reviews on the PBS add-on solutions see
https://www.gartner.com/reviews/home

PBS software

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