

Deep Dive into **Universal Journal** – A Universe of data at your fingertips

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Agenda

- ▶ **Why Universal Journal ?**
- ▶ **What's it all about ?**
- ▶ **How do we get there?**



Agenda

▶ Why Universal Journal ?

▶ What's it all about ?

▶ How do we get there?



Evolution of **Manual World** of Accounting



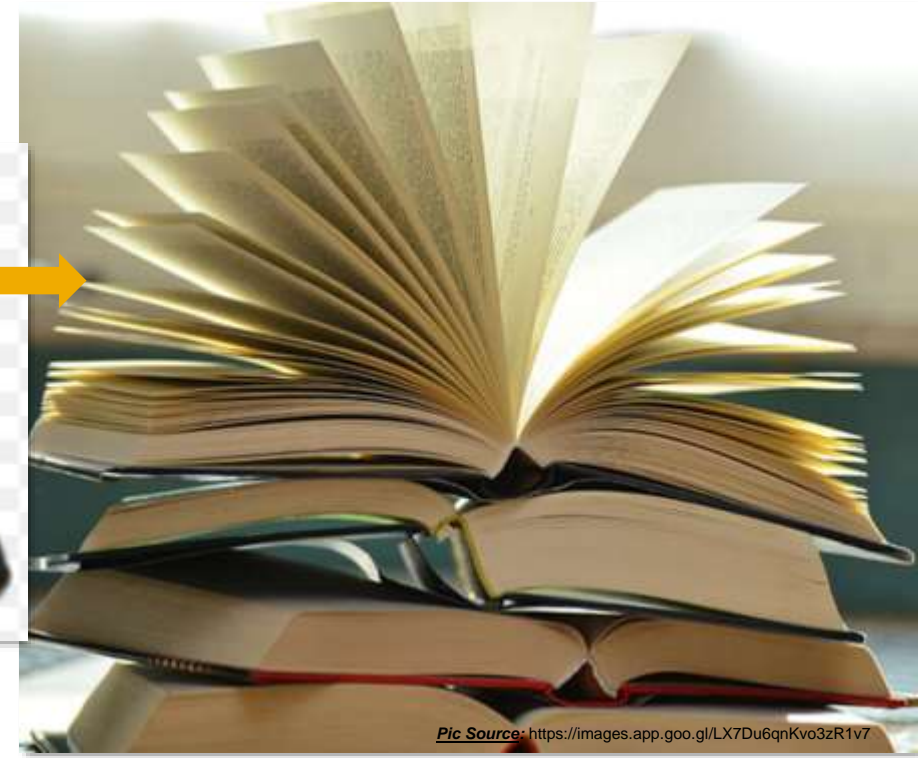
Globular envelope (known as a *Bulla*) with a cluster of accountancy tokens, Uruk period, 4000-3100 B.C.E., from Susa. Louvre Museum

[Pic Source: https://en.wikipedia.org/wiki/History_of_accounting](https://en.wikipedia.org/wiki/History_of_accounting)



[Pic Source: https://www.stickpng.com/img/objects/ledgers/general-ledger](https://www.stickpng.com/img/objects/ledgers/general-ledger)

***One Large Journal –
Have it all !***



[Pic Source: https://images.app.goo.gl/LX7Du6qnKvo3zR1v7](https://images.app.goo.gl/LX7Du6qnKvo3zR1v7)

***Split to Sub-ledgers–
Capture it all !***

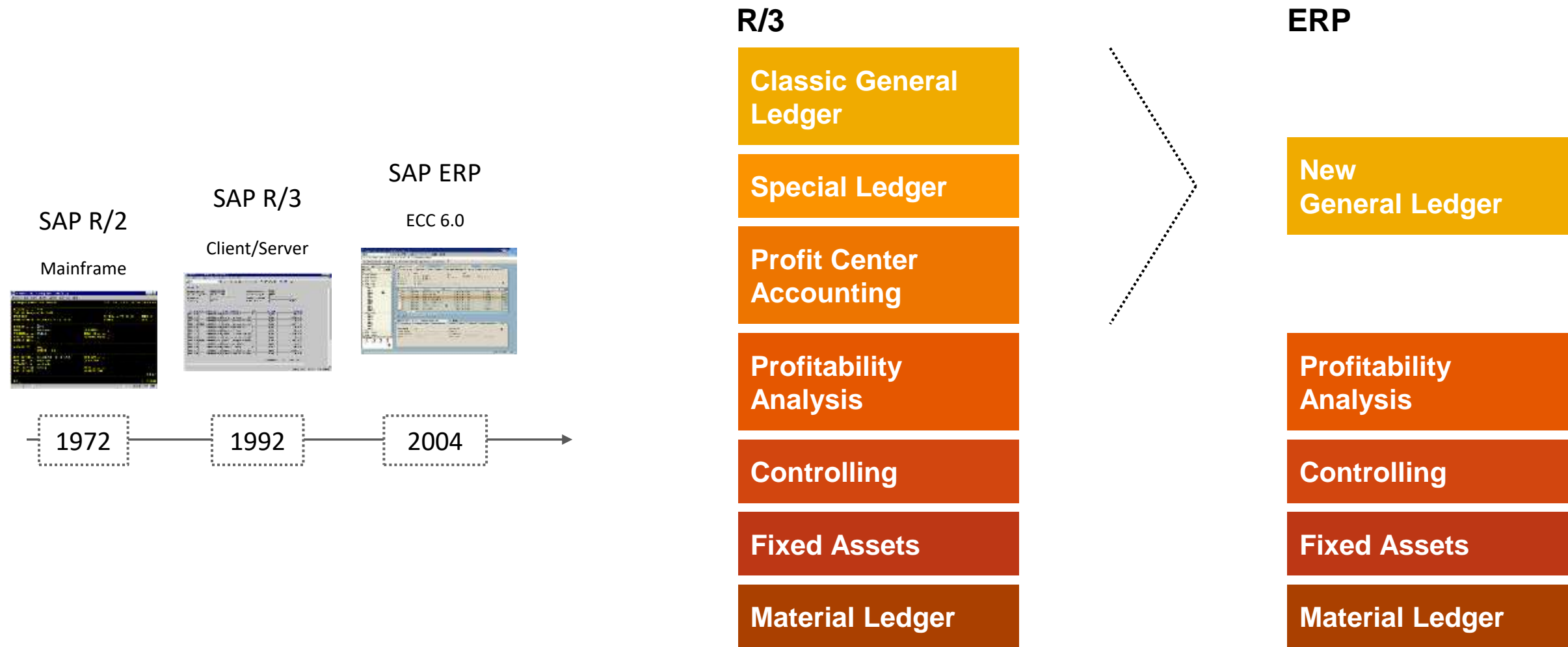
Evolution of Manual World of Accounting (Contd..)



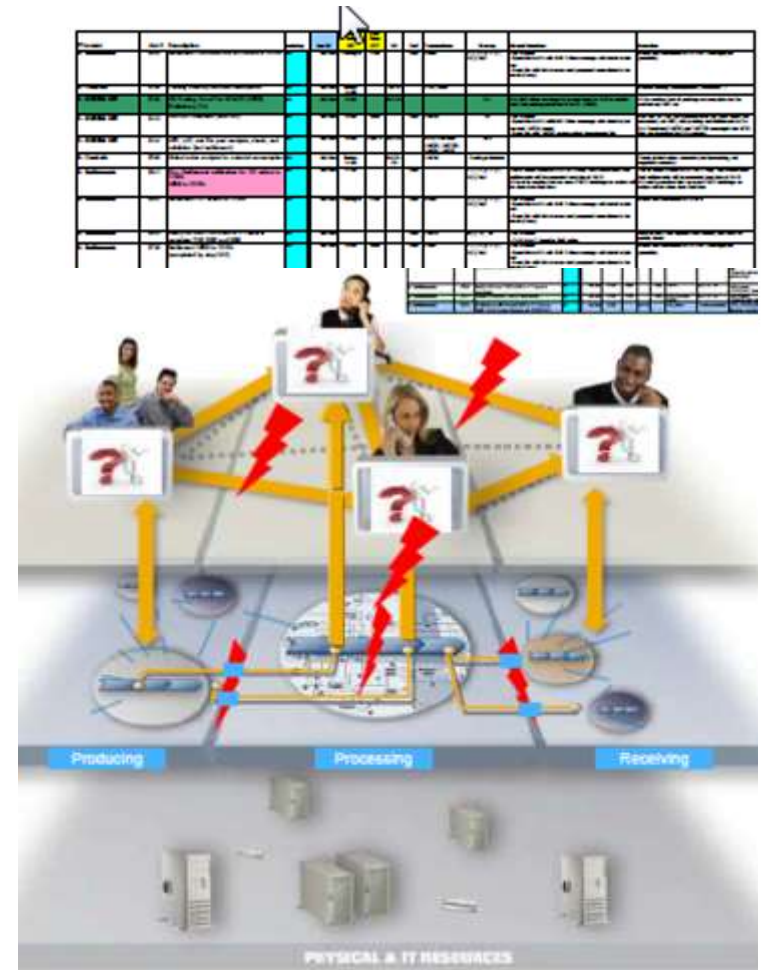
Pic Source: <https://blog.hubspot.com/sales/general-ledger>



Evolution of SAP Accounting



Evolution of SAP Accounting (Contd..)

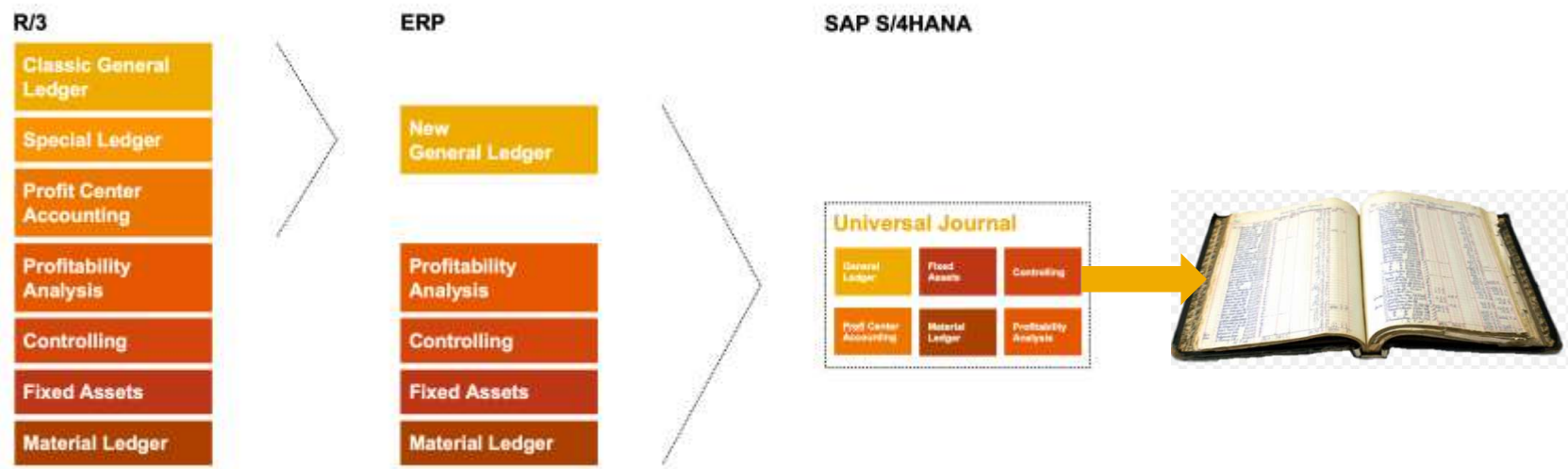
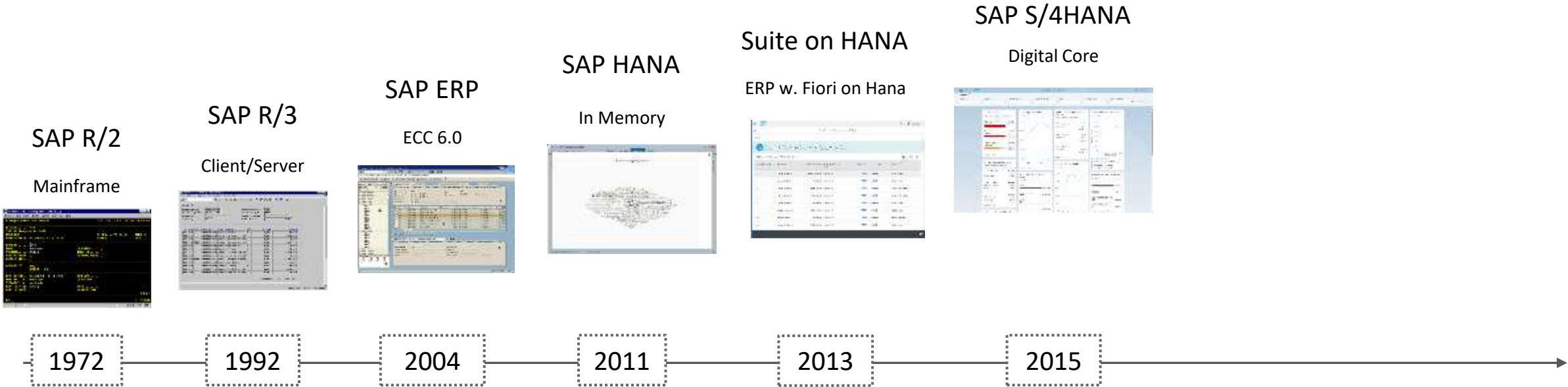


Challenge to have Single Source of truth !

The **Change** was Necessary !



Evolution of SAP Accounting (Contd..)



Simplifying Database & Table Structures to Prepare for Scale

SALES						
	Document			Item		
	Header					
Sales Order	VBAK		VBAP	>	VAKPA	VAPMA
Delivery	LIKP		LIPS	>	VLKPA	LKPMA
Billing Document	VBRK		VBPR	>	VRKPA	VRPMA
Status Info	VBUK		VBUP			
Conditions		KONV			VBOX	
Document Flow		VBFA				

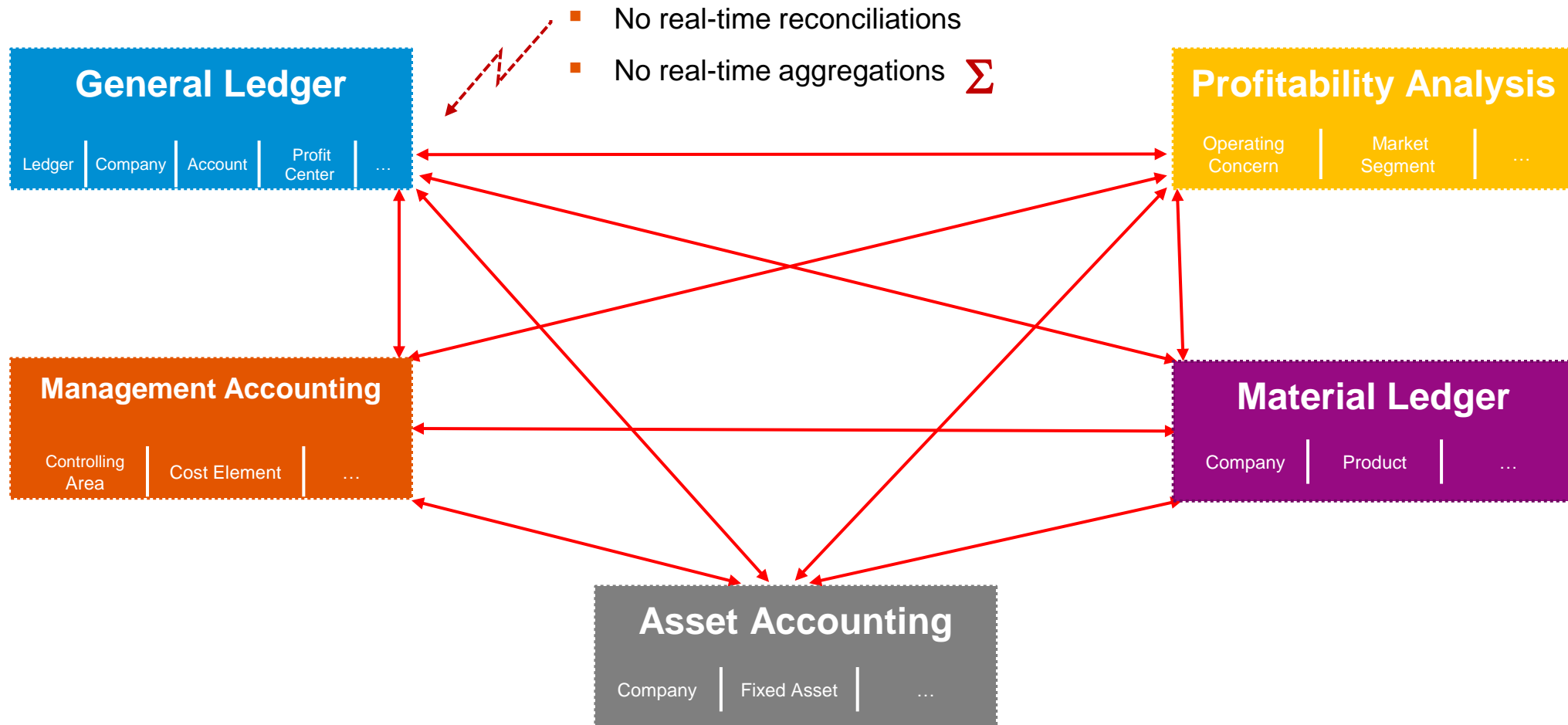
	Document			Totals			Indices		
	Header	Item							
GL, AR, AP	BKPF	BSEG	>	GLT0	KNC1	KNC3	BSIS	BSAS	BSIK
			>	LFC1	LFC3		BSID	BSAD	BSAK
New GL		FAGLF LEXA	>	FAGLF LEXT			FAGL BSIS	FAGL BSAS	
CO	COBK	COEP		COSS	COSP				
AA	ANEK	ANEP	ANEA	ANLC	ANLP				
ML	MLHD...	MLIT...		MLCD...	MCLR...		BSIM	CKMI1	



MATERIAL VALUES						
Valuation in MM or Valuation ML						
Aggregates		History			ML Valuation	
Hybrid: Master Data with Valuated Stock						
MBEW	>	MBEWH	CKMLCR	MLPP	CKMLPP	CKMLPPWIP
EBEW	>	EBEWH	CKMLPP	MLCR	CKMLCR	CKMLKEPH
QBEW	>	QBEWH	MLHD	MLCRF	MLCD	CKMLMV004
OBEW	>	OBEWH	MLIT	MLKEPH	CKLMMV004	

MATERIAL QUANTITIES								
Aggregates								
Stock Aggregates			History					
Material Document	>	MSSA	MSSL	MSSQ	>	MSSAH	MSTBH	MSSQH
MKPF	MSEG	>	MSTE	MSTQ	MSTB	>	MSTEH	MSTQH
Inventory Movements	Hybrid: Master Data with Stock Aggregates					>	MARCH	MARDH
		MCHB	MARC	MARD	MSKU	>	MSLBH	MCHBH
		MSKA	MKOL	MSPR	MSLB	>	MSKAH	MSKAH

Business Suite - Modular Data Platform



SAP S/4HANA Finance **Universal Journal**

Benefits of the single Source of Truth

General Ledger

Ledger | Company | Account | Profit Center | ...

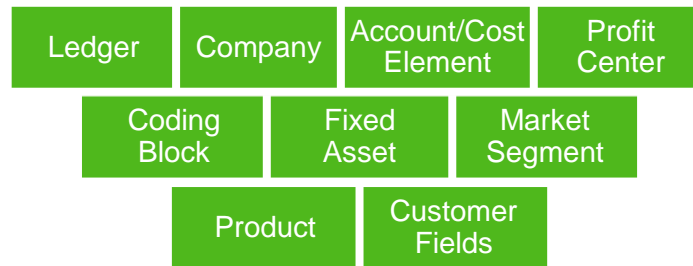
Management Accounting

Controlling Area | Cost Element | ...

- No Stored Aggregations
- Drill to Detail

- No Reconciliation needed
- No Replication needed

Universal Journal



Powered by SAP HANA

Profitability Analysis

Operating Concern | Market Segment | ...

Material Ledger

Company | Product | ...

- Instant Insight
- Flexible Real Time Analytics

Asset Accounting

Company | Fixed Asset | ...

Happy Soul of an Accountant!



The Perfect Financial and Management Accounting System

Don't you dream of a reporting solution, that ...

- comprises **actual** data, **plan** data, **simulated** data, and **prediction** data
- presents data in a **common structure** making comparison easier
- provides all required **currencies**
- contains all **details**
- presents a **360° view** on objects of interest (P&L + Balance Sheet KPI's)
- shows the unconsolidated and consolidated views in **real time** (ad hoc group reporting)



- is **up to date** at every point in time
- gives a full **audit trail**
- is based on a single source of truth: **fully reconciled** by architecture
- is set up **without data redundancy**
- fulfills **legal requirements** from a local and a group perspective
- is the basis for **management reporting** at every needed granularity
- can be **enhanced / extended** easily

Agenda

▶ **Why Universal Journal ?**

▶ **What's it all about ?**

▶ **How do we get there?**



Key Characteristics of the Universal Journal

Single Source of Truth 

 Multiple Currencies

SAP HANA & Big Data 

 Transfer Price Valuations

360° View 

 Consolidation

Extensibility 

 Plan Data

Extension Ledger 

 Prediction

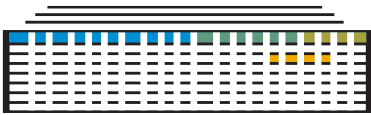
Parallel Accounting 

 Simulation



Key Characteristics of the Universal Journal

Single Source of Truth



Evolution of SAP Accounting

R/3

Classic General Ledger

Special Ledger

Profit Center Accounting

Profitability Analysis

Controlling

Fixed Assets

Material Ledger

ERP

New General Ledger

Profitability Analysis

Controlling

Fixed Assets

Material Ledger

SAP S/4HANA

Universal Journal

General Ledger

Fixed Assets

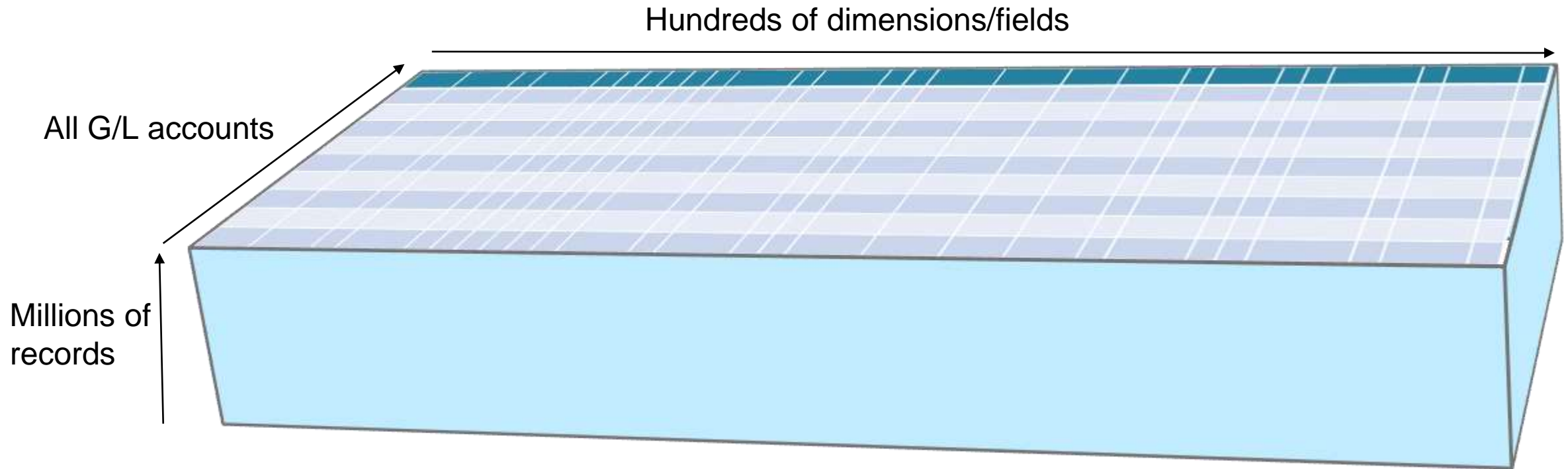
Controlling

Profi Center Accounting

Material Ledger

Profitability Analysis

The Single Source of Truth is Reality: Table ACDOCA



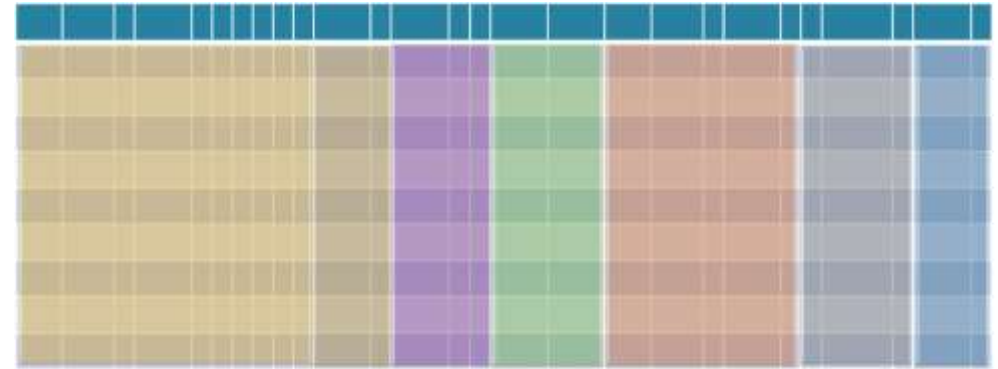
The Universal Journal is *the* Single Source of Truth in SAP S/4HANA

ACDOCA is *the* common line item persistence

- General Ledger
- Profit Center Accounting
- Fixed Asset Accounting
- Material Ledger
- Controlling
- Profitability Analysis

Common Posting Logic

- Currency conversion
- Derived attributes
- Splitting logic
- Posting logic for account assignments



Universal Journal

General
Ledger

Fixed
Assets

Controlling

Profi Center
Accounting

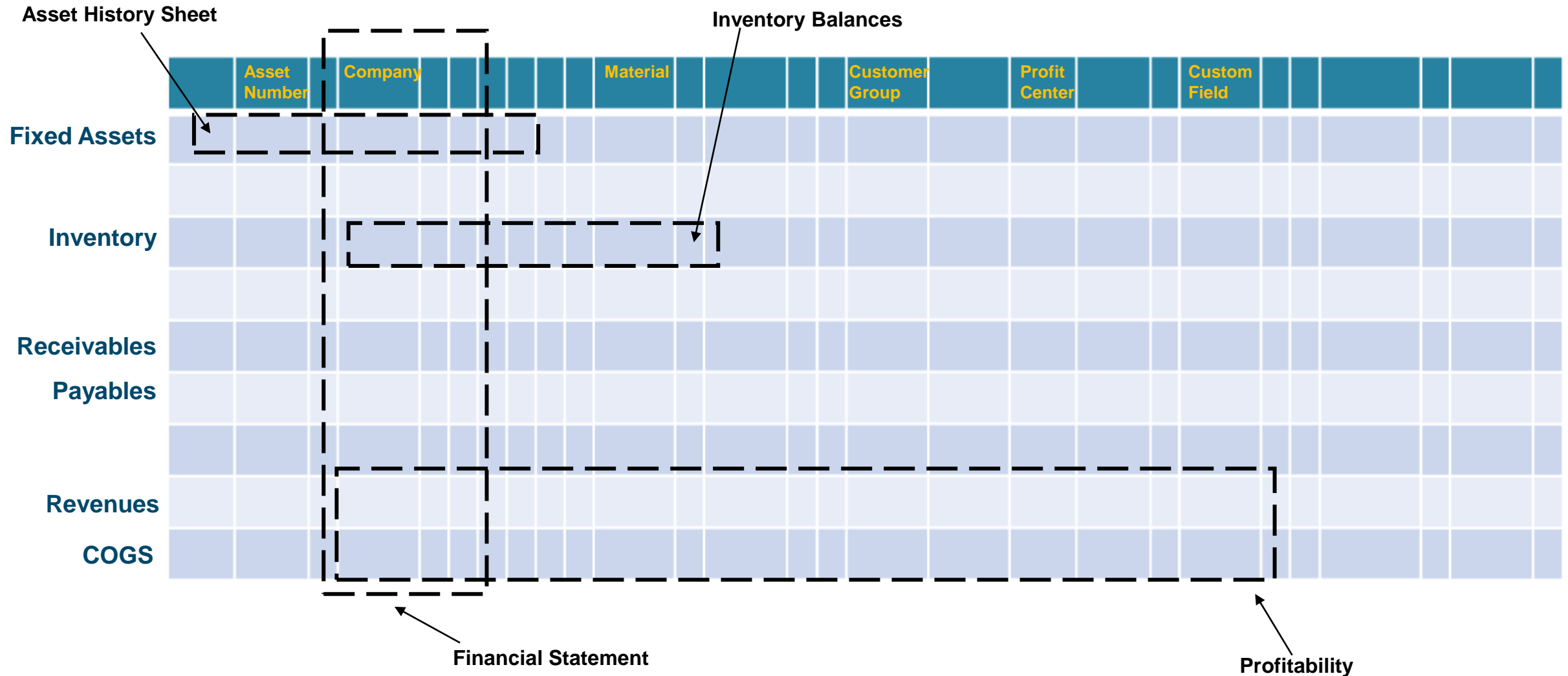
Material
Ledger

Profitability
Analysis

ACDOCA

"Accounting Document Actuals"

The Single Source of Truth: Reconciled Analytics by Architecture



Data Model for Journal Entries in the Universal Journal

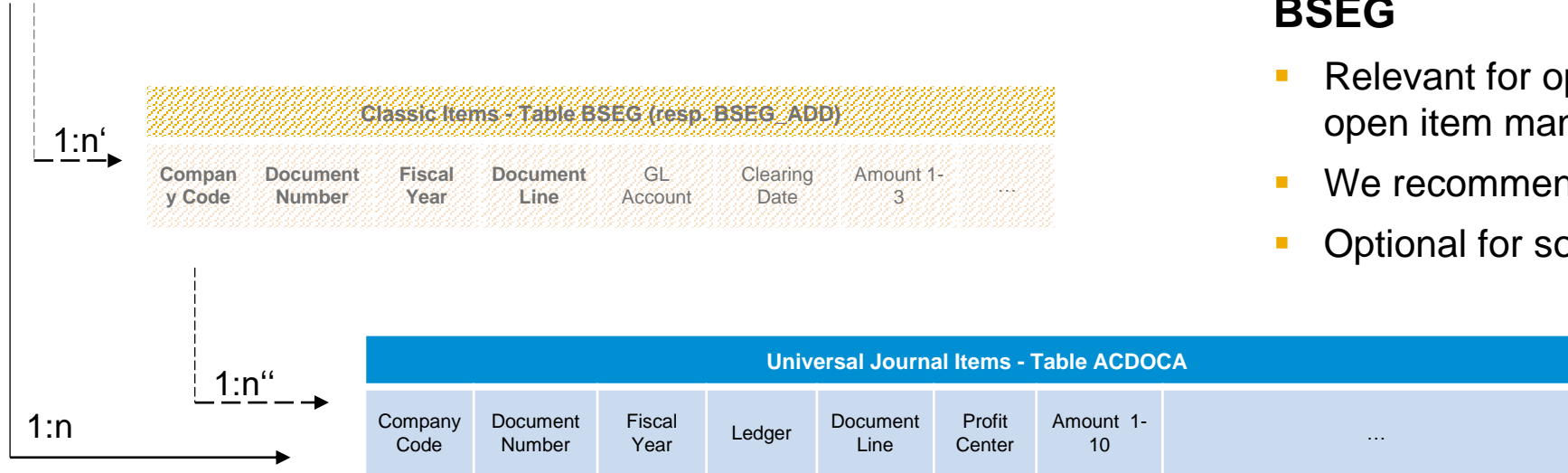
Document Header - Table BKPF							
Company Code	Document Number	Fiscal Year	Posting Date	User	Transaction Currency	Ledger Group	...

BKPF

- Journal Entry Header

BSEG

- Relevant for operational processes like open item management
- We recommend to summarize BSEG
- Optional for some processes



ACDOCA

- Journal Entry Items – single source for reporting
- Amounts and quantities per **ledger** and per **balancing account assignment** (Online Splitter)
- Contains full details - all fields relevant for **accounting** processes and reporting

Accounts Payable - Processes & Reporting

Generic Operations

Maintain Business Partner

Create Supplier Invoice

Import Supplier Invoices

Preparation for Payment

Manage Supplier Line Items

Manage Payment Blocks

Display Supplier Balances

Manage Automatic Payments

Reporting

Cash Discount Forecast
Available Amount

320_K

30 min. ago EUR

Cash Discount Utilization
Today

14.3%

30 min. ago

Days Payable Outstanding
Indirect Method

106

30 min. ago

Aging Analysis
Payable Amount

584_M

30 min. ago EUR

Days Payable Outstanding
Last 12 Months

02/2022	86,53
01/2022	91,87
12/2021	91,85

30 min. ago

Future Payables
Today

82,1_M

30 min. ago EUR

Overdue Payables
Today

Critical O... 497,80M EUR
Uncritical O... 4,17M EUR

20 min. ago

Accounts Payable Overview

Aging Report for Accounts Payable

Invoice Processing Time
Today

2,51_B

30 min. ago EUR

Automatic and Manual Payments
Payments for Last Year

2,38_B

30 min. ago EUR

Accounts Payable - Processes & Reporting

Generic Operations

Maintain Business Partner

Create Supplier Invoice

Import Supplier Invoices



Preparation for Payment

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Future Payables
Today

82,1_M

40 min. ago EUR

Overdue Payables
Today

Critical O...	497,80M EUR
Uncritical O...	4,17M EUR

30 min. ago

Accounts Payable
Overview



Aging Report for
Accounts Payable



Invoice Processing Time
Today

2,51_B

40 min. ago EUR

Automatic and Manual Payments
Payments for Last Year

2,38_B

40 min. ago EUR

Key Characteristics of the Universal Journal

Single Source of Truth

SAP HANA & Big Data



Trial Balance: High Speed Standard Reporting is Reality

A huge list of fields is available for drilldown !

[illegible]

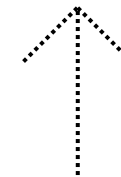
Leveraging the Power of the SAP HANA Database

Select specific data with arbitrary filter criteria

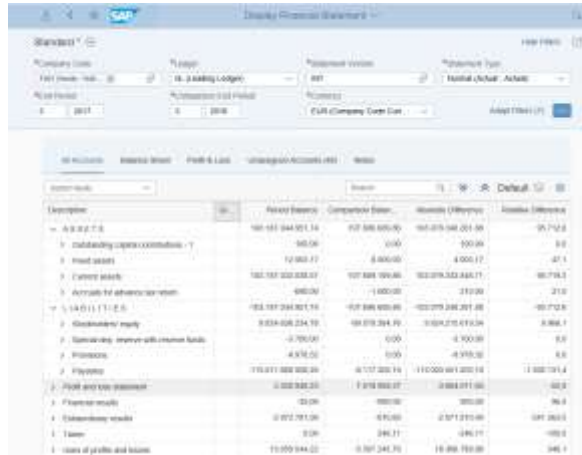
- With our new FIORI GL Line Item UI you can select a specific line item from billions of records in ACDOCA in less than 1 second
- You can use any combination of filter criteria to narrow down the result. It is not necessary to define and hit a database index, as it used to be in ERP

Aggregated reporting with use of multiple dimensions of ACDOCA

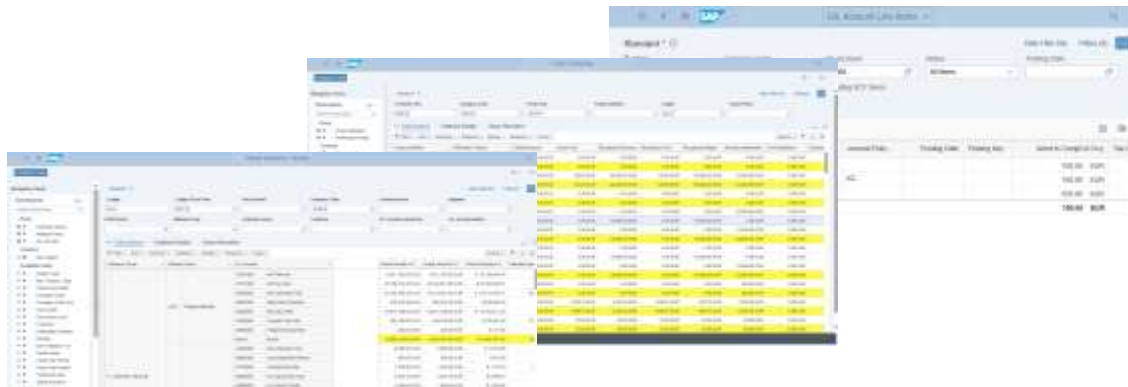
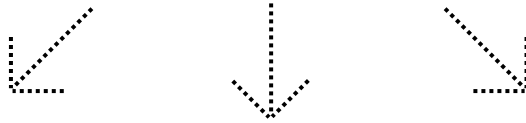
- SAP HANA can aggregate millions of lines very efficiently on the fly
- No need for a predefined fixed totals anymore
- Reporting can use all dimensions of ACDOCA, as long as the result aggregates to a reasonable output data volume
- Universal Journal line items contain full details including customer extension fields
- Real time reporting – no need to replicate data asynchronously to a data warehouse



Multidimensional General Ledger



Description	Account Balance	Comparison Balance	Absolute Difference	Relative Difference
Assets	100,000,000.00	100,000,000.00	0.00	0.00
Liabilities	100,000,000.00	100,000,000.00	0.00	0.00
Equity	100,000,000.00	100,000,000.00	0.00	0.00
Total	300,000,000.00	300,000,000.00	0.00	0.00



Description	Account Balance	Comparison Balance	Absolute Difference	Relative Difference
Assets	100,000,000.00	100,000,000.00	0.00	0.00
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Equity	100,000,000.00	100,000,000.00	0.00	0.00
Total	300,000,000.00	300,000,000.00	0.00	0.00

Multidimensional Reporting

- All dimensions of ACDOCA are exposed in VDM views, which is the basis for reporting and processes
- There is **no limit** to 16 key fields, as it used to be for totals tables of ERP
- Drilldown to **details of all subledgers** is possible within one report or with seamless navigation to detailed subledger reports
- All reports based on the Universal Journal are reconciled by design

Analytical FIORI Apps Leverage the New Capabilities

Many of your reporting requirements can now be fulfilled with a few flexible reports of SAP S/4HANA

- Powerful reporting apps can provide detailed answers to specific request on the fly
- No more need to predefine hundreds of specific reports on various data sources, just use variants of the flexible reports

General Ledger Line Items

G/L Account Line Items														
Standard *														
*Ledger	Company Code	G/L Account	Status	Posting Date	Ledger Fiscal Year									
DL (Leading Ledger)	0001 SAP 1 More	10005558	All Items		<2017									
Including BCF Items														
Line Items (97) - Standard														
Status	Assignment Reference	Journal Entry	Journal Entry ...	Posting Date	Posting Key	Amount in CompCo Crpy	Tax Code	Clearing Entry						
Company Code: 0001 - SAP DEMO Company														
✓		10005558	CO	20.02.2017	40	40.00	EUR							
✓		10005558	CO	20.02.2017	50	-40.00	EUR							
✓		A000556011	AB			1.516.00	EUR							
✓		A000556011	AB			-04.00	EUR							
✓		A000556011	SA			-100.00	EUR							
✓		A000556011	DR			-30.211.87	EUR							
✓		A000556011	SA			-624.01	EUR							
✓		A000556011	KZ			-33.00	EUR							
✓		A000556011	SA			-3.994.34	EUR							
✓		A000556011	CO			-100.00	EUR							
✓		A000556011	SA			-1.016.999.856.00	EUR							
✓		A000556011	DZ			6.580.00	EUR							

Trial Balance

Navigation Panel

- Available Fields
 - Linkage
 - GL Account
 - Posting Date
 - Fiscal Year
 - Linkage Fiscal Year
 - Per Transaction Type
 - Ref. Transac. Type
 - Ref. Document Type
 - Logical System
 - Acc. Doc. Web Desc.
 - Is Inventory
 - Is Investment
 - Is Selling
 - Is Selling
 - Period As/Through
 - Profit Center
 - Functional Area
 - Business Area
 - Controlling Area
 - Segment
 - Fixed Cost Center
 - Fixed Cost Object
 - Fixed Cost Type - Kind
 - Fixed Business Area
 - Trading Partner
 - Partner Segment
 - Delivery/Order Code
 - Price Type Variant
 - Price Type Period
 - Journal Entry Type
 - Assignment Reference

Standard - G

* Ledger * Company Code * Posting Date From * Posting Date To GL Account (Hierarchy)

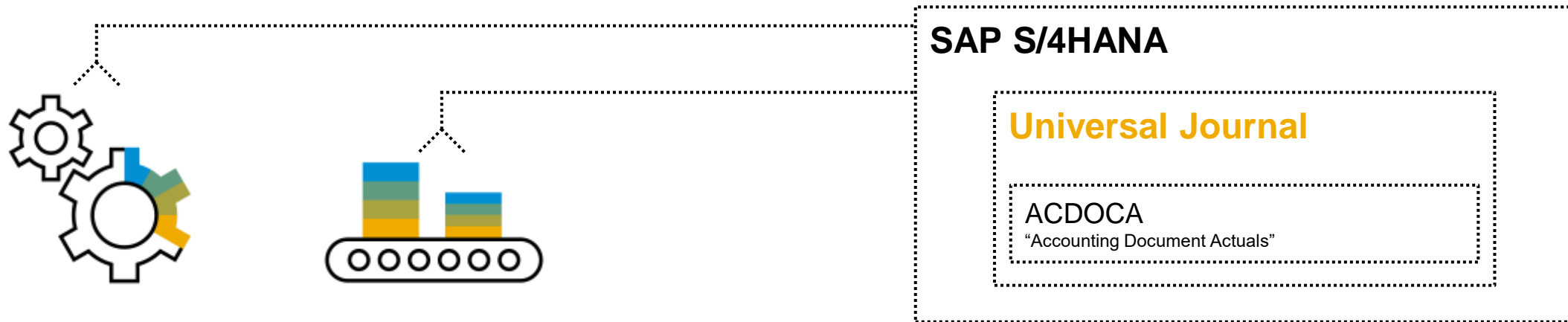
GL S 10000 1/1/2010 12/31/2017 0

[Data Analysis](#) [Graphical Display](#) [Query Information](#)

Environment Filter Sort Hierarchy Definition Display Measures Tools

GL Account	Starting Balance in	Detail Balance in Company Code Cc	Credit Balance in Company Co.	Ending Balance in	
100000000	Acc Balance Sheet 0	0.00 EUR	100.135.866.252.56 EUR	-100.135.866.252.56 EUR	0.00 EUR
100000000C	A B B E T 0	46.732.169.58 EUR	100.016.316.267.38 EUR	-100.068.590.170.79 EUR	461.852.353.71 EUR
100001010	A Subscriptions to	16.167.273.10 EUR	100.022.388.63 EUR	-86.717.116.99 EUR	51.500.563.63 EUR
100001020	B Current assets	20.557.995.58 EUR	119.967.308.527.94 EUR	-119.946.733.705.87 EUR	420.824.58.58 EUR
100001030	C Stocks	434.376.413.00 EUR	116.795.741.768.64 EUR	-119.476.924.299.30 EUR	309.266.071.73 EUR
100001040	Raw materials and up	549.18 EUR	73.953.969.33 EUR	-1.904.087.70 EUR	72.994.127.63 EUR
100001050	Wares in process	8.255.32 EUR	14.646.623.44 EUR	-12.795.690.81 EUR	1.917.246.75 EUR
100001060	Finished products an	406.303.33 EUR	119.097.156.163.17 EUR	-119.402.258.986.59 EUR	254.452.680.29 EUR
100001070	R Revisions and	30.846.751.00 EUR	150.072.967.31 EUR	-1.674.236.64 EUR	126.244.240.23 EUR
100001080	R Objects nation	146.344.10 EUR	63.216.106.57 EUR	-13.855.275.33 EUR	3.307.252.14 EUR
100001090	C Prepayments and s	7.103.10 EUR	58.321.73 EUR	-57.370.93 EUR	64.941.48 EUR
100001100	L A B I L I T Y	624.829.18 EUR	8.822.337.01 EUR	-11.868.337.27 EUR	-21.706.039.36 EUR
100001110	Liabilities and liab	41.808.628.18 EUR	91.465.399.57 EUR	-135.729.959.61 EUR	106.374.270.12 EUR
100001120	Debt liability exoner	0.00 EUR	91.465.399.57 EUR	-106.729.959.61 EUR	41.264.368.63 EUR
100001130	Liabilities	0.00 EUR	91.465.399.57 EUR	-106.729.959.61 EUR	41.264.368.63 EUR
100001140	Liabilities	0.00 EUR	14.006.385.14 EUR	-25.311.076.93 EUR	-6.211.691.79 EUR
100001150	2 Changes in ay	0.00 EUR	53.878.04 EUR	34.280.31 EUR	28.785.73 EUR
100001160	Other operating s	0.00 EUR	3.347.58 EUR	-88.119.360.53 EUR	-36.115.420.93 EUR

Big Data and the Universal Journal



The Universal Journal is optimized for huge data volumes

- Industry trends like IOT with lots of sensor data will increase data volumes significantly in the future
- Overall this trend will lead to more accounting data as well
- Our purely line item-based architecture is optimized for high throughput with parallel processing of documents
- Pre-defined aggregates, which used to be a bottleneck for parallel processing, are no longer needed
- No expensive joins to other huge tables are necessary for standard analytics

Universal Journal dimensions available for slice and dice in Trial Balance

Support multiple companies view, multi-dimensional, and single day Trial Balance directly from transaction, and do not need to sent to another data warehouse

Navigation Panel

Dimensions

Search Dimensions

Rows

- G/L Account

Columns

- Company Code
- Measures

Available Fields

- Account Assignment
- Account Assignment Number
- Account Assignment Type
- Account Type
- Activity Type
- Altern. G/L Account
- Alternative Chart of Accounts
- Asset Subnumber
- Asset Value Date
- Assignment Reference
- Asst Transaction Type
- Balance Transaction Currency
- Balance sheet acct
- Billing Type
- Budget Period
- Business Area
- Business Process
- Business Transaction Type
- Calendar Month
- Calendar Quarter
- Calendar Week
- Calendar Year
- Chart of Accounts
- Clearing Date
- Clearing Journal Entry
- Company Code Currency
- Controlling Area
- Controlling Object Debit Type

Company Code: 17

Posting Date From: 07/01/20... Posting Date To: 07/12/20...

Hierarchy ID

Adapt Filters (4) Go

Data Analysis Graphical Display Query Information

<Standard Query View> Filter Sort Hierarchy Drilldown Display Measures Totals

Company Code: 1710 BestRun US

G/L Account	Company Code	Starting Balance in	Debit Balance in Co...	Credit Balance in C...	Ending Balance in	Overall Result Starting Balance in	Overall Result Debit Balance in Co...	Overall Result Credit Balance in C...	Overall Result Ending Balance in
YCDA/10010000 Petty Cash		\$ -778,111.99	\$ 0.00	\$ -500.00	\$ -778,611.99	\$ -778,111.99	\$ 0.00	\$ -500.00	\$ -778,611.99
YCDA/10020000 Petty Cash Journal		\$ 1,000.00	\$ 0.00	\$ 0.00	\$ 1,000.00	\$ 1,000.00	\$ 0.00	\$ 0.00	\$ 1,000.00
YCDA/11001000 Bank1 Main Account		\$ 172,197,812.89	\$ 42,800,210.69	\$ -16,906.82	\$ 214,781,116.76	\$ 172,197,812.89	\$ 42,800,210.69	\$ -16,906.82	\$ 214,781,116.76
YCDA/11001010 Bank1 Cash Payment		\$ -10,000.00	\$ 0.00	\$ 0.00	\$ -10,000.00	\$ -10,000.00	\$ 0.00	\$ 0.00	\$ -10,000.00
YCDA/11001020 Bank1 Bank Transfer		\$ -249,498,045.41	\$ 15,000.00	\$ -10,743,626.50	\$ -260,226,671.91	\$ -249,498,045.41	\$ 15,000.00	\$ -10,743,626.50	\$ -260,226,671.91
YCDA/11001030 CBCP Clearing		\$ -30,000,000.00	\$ 0.00	\$ 0.00	\$ -30,000,000.00	\$ -30,000,000.00	\$ 0.00	\$ 0.00	\$ -30,000,000.00
YCDA/11001040 Bank1 Direct Debit		\$ 149,179,186.84	\$ 0.00	\$ 0.00	\$ 149,179,186.84	\$ 149,179,186.84	\$ 0.00	\$ 0.00	\$ 149,179,186.84
YCDA/11001050 Bank1 Check Out		\$ -1,269,434.04	\$ 750.00	\$ -2,080.00	\$ -1,270,764.04	\$ -1,269,434.04	\$ 750.00	\$ -2,080.00	\$ -1,270,764.04
YCDA/11001056 Bank 1 Supp.Fin. Out		\$ -600.00	\$ 0.00	\$ 0.00	\$ -600.00	\$ -600.00	\$ 0.00	\$ 0.00	\$ -600.00
YCDA/11001060 Bank1 Check In		\$ 776,786.41	\$ 0.00	\$ 0.00	\$ 776,786.41	\$ 776,786.41	\$ 0.00	\$ 0.00	\$ 776,786.41
YCDA/11001070 IBCP Clearing		\$ -248,709.75	\$ 0.00	\$ 0.00	\$ -248,709.75	\$ -248,709.75	\$ 0.00	\$ 0.00	\$ -248,709.75
YCDA/11001080 Bank1 Cash Receipt		\$ 35,870,792.25	\$ 120,663.00	\$ -25,000.00	\$ 35,966,455.25	\$ 35,870,792.25	\$ 120,663.00	\$ -25,000.00	\$ 35,966,455.25
YCDA/11001090 Bank1 Techn. Account		\$ -269,036.06	\$ 17,113.89	\$ -16,860.00	\$ -268,782.17	\$ -269,036.06	\$ 17,113.89	\$ -16,860.00	\$ -268,782.17
YCDA/11001100 TO BE TRANSLATED		\$ 4,545.45	\$ 0.00	\$ 0.00	\$ 4,545.45	\$ 4,545.45	\$ 0.00	\$ 0.00	\$ 4,545.45
YCDA/11001200 Bank1 Lockbox		\$ 779,764.00	\$ 0.00	\$ 0.00	\$ 779,764.00	\$ 779,764.00	\$ 0.00	\$ 0.00	\$ 779,764.00
YCDA/11001201 Accrued Expenses		\$ -1,113,497.83	\$ 0.00	\$ 0.00	\$ -1,113,497.83	\$ -1,113,497.83	\$ 0.00	\$ 0.00	\$ -1,113,497.83
YCDA/11001202 Accrued Pension		\$ 301,382.62	\$ 0.00	\$ 0.00	\$ 301,382.62	\$ 301,382.62	\$ 0.00	\$ 0.00	\$ 301,382.62
YCDA/11001203 Deferred Tax		\$ -2,833,377.61	\$ 0.00	\$ 0.00	\$ -2,833,377.61	\$ -2,833,377.61	\$ 0.00	\$ 0.00	\$ -2,833,377.61
YCDA/11001204 IC Payables		\$ -1,066,231.90	\$ 0.00	\$ 0.00	\$ -1,066,231.90	\$ -1,066,231.90	\$ 0.00	\$ 0.00	\$ -1,066,231.90
YCDA/11001205 IC Receivables		\$ 33,692.88	\$ 0.00	\$ 0.00	\$ 33,692.88	\$ 33,692.88	\$ 0.00	\$ 0.00	\$ 33,692.88
YCDA/11001206 Income Tax		\$ -1,009,752.42	\$ 0.00	\$ 0.00	\$ -1,009,752.42	\$ -1,009,752.42	\$ 0.00	\$ 0.00	\$ -1,009,752.42
YCDA/11001207 Prepaid Expenses		\$ 2,153,070.12	\$ 0.00	\$ 0.00	\$ 2,153,070.12	\$ 2,153,070.12	\$ 0.00	\$ 0.00	\$ 2,153,070.12
YCDA/11001208 VAT Payable		\$ -6,990,336.28	\$ 0.00	\$ 0.00	\$ -6,990,336.28	\$ -6,990,336.28	\$ 0.00	\$ 0.00	\$ -6,990,336.28
YCDA/11001209 VAT Receivable		\$ 440,625.68	\$ 0.00	\$ 0.00	\$ 440,625.68	\$ 440,625.68	\$ 0.00	\$ 0.00	\$ 440,625.68
YCDA/11001300 Wells Fargo Main USD		\$ 522,862.00	\$ 0.00	\$ 0.00	\$ 522,862.00	\$ 522,862.00	\$ 0.00	\$ 0.00	\$ 522,862.00
YCDA/11001302 Outgoing Transfer		\$ -4,543,853,775.95	\$ 0.00	\$ -70,650.00	\$ -4,543,924,425.95	\$ -4,543,853,775.95	\$ 0.00	\$ -70,650.00	\$ -4,543,924,425.95
YCDA/11001310 Wells Fargo Main CAD		\$ 3,057.79	\$ 0.00	\$ 0.00	\$ 3,057.79	\$ 3,057.79	\$ 0.00	\$ 0.00	\$ 3,057.79
YCDA/11001312 Outgoing Transfer		\$ -112.45	\$ 0.00	\$ 0.00	\$ -112.45	\$ -112.45	\$ 0.00	\$ 0.00	\$ -112.45
YCDA/11001319 Incoming Transfer		\$ 224,037.45	\$ 0.00	\$ 0.00	\$ 224,037.45	\$ 224,037.45	\$ 0.00	\$ 0.00	\$ 224,037.45
YCDA/11001320 Wells Fargo Main GBP		\$ -6,292.43	\$ 0.00	\$ -224.03	\$ -6,516.46	\$ -6,292.43	\$ 0.00	\$ -224.03	\$ -6,516.46
YCDA/11001322 Outgoing Transfer		\$ -195.06	\$ 0.00	\$ -224.94	\$ -420.00	\$ -195.06	\$ 0.00	\$ -224.94	\$ -420.00
YCDA/11001329 Incoming Transfer		\$ 83,093.78	\$ 0.00	\$ 0.00	\$ 83,093.78	\$ 83,093.78	\$ 0.00	\$ 0.00	\$ 83,093.78
YCDA/11001330 Wells Fargo Main EUR		\$ -7,440.93	\$ 0.00	\$ -433.04	\$ -7,882.97	\$ -7,440.93	\$ 0.00	\$ -433.04	\$ -7,882.97

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Universal Journal dimensions available for slice and dice in Trial Balance

SAP Trial Balance

Navigation Panel

Standard

Ledger: 0... Company Code: 17... Posting Date From: 07/01/20... Posting Date To: 07/12/20... Hierarchy ID: Adapt Filters (4) Go

Data Analysis Graphical Display Query Information

<Standard Query View> Filter Sort Hierarchy Drilldown Display Measures Totals

Cost Center		G/L Account	Company Code	1710	Overall		
				BestRun US			
				Starting Balance in ...	Debit Balance in Co... Credit Balance in C... Ending Balance in ... Starting		
A000/17101902	Catlg Unit A-(US)	YCOA/94308... Consulting		\$ -26,876.25	\$ 0.00	\$ -2,335.00	\$ -29,211.25
		YCOA/94308... TO BE TRANSLATED		\$ -1,500.00	\$ 0.00	\$ 0.00	\$ -1,500.00
		YCOA/97777... ICO Margin		\$ 0.00	\$ 0.00	\$ -13.75	\$ -13.75
		Result		\$ -28,376.25	\$ 0.00	\$ -2,348.75	\$ -30,725.00
A000/17101903	Catlg Unit B-(US)	YCOA/94308... Consulting		\$ -2,516.25	\$ 0.00	\$ 0.00	\$ -2,516.25
		Result		\$ -2,516.25	\$ 0.00	\$ 0.00	\$ -2,516.25
A000/CC_61540	Financials (US)	YCOA/61004... Trav.Expense Meals		\$ 20.00	\$ 0.00	\$ 0.00	\$ 20.00
		Result		\$ 20.00	\$ 0.00	\$ 0.00	\$ 20.00
A000/US10_ADM1	Finance Oper -Cycles	YCOA/61003... Trav.Expense Hotel		\$ 22.66	\$ 0.00	\$ 0.00	\$ 22.66
		YCOA/61004... Trav.Expense Meals		\$ 8.36	\$ 0.00	\$ 0.00	\$ 8.36
		YCOA/61005... Travel Exp Grd Trimp		\$ 5.95	\$ 0.00	\$ 0.00	\$ 5.95
		YCOA/61006... Trav.Exp Entertainment		\$ 2.04	\$ 0.00	\$ 0.00	\$ 2.04
		YCOA/61007... Trav.Exp Air,RL,Mile		\$ 18.94	\$ 0.00	\$ 0.00	\$ 18.94
		YCOA/61023... payr medical insuran		\$ 516.21	\$ 0.00	\$ 0.00	\$ 516.21
		YCOA/61060... Payroll Exp.Pension		\$ 90.32	\$ 0.00	\$ 0.00	\$ 90.32
		YCOA/61100... Payroll Exp Salaries		\$ 4,825.89	\$ 0.00	\$ 0.00	\$ 4,825.89
		YCOA/61400... Training Education		\$ 92.15	\$ 0.00	\$ 0.00	\$ 92.15
		YCOA/63001... Electricity&Utility		\$ 1,256,704.53	\$ 74,159.86	\$ 0.00	\$ 1,330,864.39
		YCOA/63004... Insurance		\$ 1,473,545.43	\$ 174,357.03	\$ 0.00	\$ 1,647,902.46
		YCOA/64001... Dep.Exp. Buildings		\$ 209,401.00	\$ 0.00	\$ 0.00	\$ 209,401.00
		YCOA/64006... Dep.Exp. Furniture		\$ 11,315.00	\$ 0.00	\$ 0.00	\$ 11,315.00
		YCOA/65100... Office Supplies		\$ 203,322.92	\$ 6,974.28	\$ 0.00	\$ 210,297.20
		YCOA/65150... Computer Supplies		\$ 969,214.19	\$ 50,214.82	\$ 0.00	\$ 1,019,429.01
		YCOA/94220... COPA Assessment		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
YCOA/94233... Admin		\$ -123,720.99	\$ 0.00	\$ 0.00	\$ -123,720.99		
Result		\$ 4,089,364.60	\$ 305,705.99	\$ 0.00	\$ 4,311,070.59		
A000/US10_ADM2	Finance Oper-Accesso	YCOA/61003... Trav.Expense Hotel		\$ 22.66	\$ 0.00	\$ 0.00	\$ 22.66
		YCOA/61004... Trav.Expense Meals		\$ 8.36	\$ 0.00	\$ 0.00	\$ 8.36
		YCOA/61005... Travel Exp Grd Trimp		\$ 5.95	\$ 0.00	\$ 0.00	\$ 5.95
		YCOA/61006... Trav.Exp Entertainment		\$ 2.04	\$ 0.00	\$ 0.00	\$ 2.04
		YCOA/61007... Trav.Exp Air,RL,Mile		\$ 18.94	\$ 0.00	\$ 0.00	\$ 18.94
		YCOA/61023... payr medical insuran		\$ 516.21	\$ 0.00	\$ 0.00	\$ 516.21
YCOA/61060... Payroll Exp.Pension		\$ 90.32	\$ 0.00	\$ 0.00	\$ 90.32		

Product

Profit Center

Segment

Navigate to

- Display G/L Account Balances
- Display Journal Entries - Cross-Company Code
- Display Journal Entries - In T-Account View
- Display Line Item Entry
- Display Line Items - Margin Analysis
- Display Line Items in General Ledger
- Display Material
- Display Predictive Accounting Document
- Display Process Flow - Accounts Receivable
- Display Process Flow - Accounts Receivable
- Doubtful Accounts Valuation
- G/L Account Changes
- G/L Account Changes - Central View
- G/L Account Changes - Chart of Accounts View
- G/L Account Changes - Company Code View
- Get Material
- Gross Margin - Presumed/Actual
- Incoming Sales Orders
- Journal Entry Analyzer
- Manage Customer Line Items
- Manage G/L Account Master Data
- Manage Journal Entries
- Manage Payment Blocks

High Speed, High Volume Multi-Dimensional Reporting

<

SAP

Trial Balance ▾

Standard * ▾

Show Filter Bar

Filters (1)

Go

?

🔍

👤

🔔

👤

To show filters here, add them to the filter bar in Filters

Search 🔍

Pause

DIMENSIONS

> Measures

Account Assgmt ...

Account Assignm...

Account Type

Activity Type

Altern. G/L Account

Asset Subnumber

Asset Value Date

Assignment Refer...

Ast Transaction T...

Balance Trans Crcy

Balance sheet acct

Billing Type

Budget Period

Bus. Transac. Type

Business Area

Business Process

Calendar Month

Calendar Quarter

Calendar Week

Calendar Year

Chart of Accounts

Clearing Date

Clearing Entry

COLUMNS

Measures

ROWS

Company Code

G/L Account

Sort >

Display >

Attributes >

Hierarchy >

Totals >

Suppress Zeros in Rows

Compact Display in Rows

Jump To >

Select Hierarchy...

Lower Level Node Alignment >

Company Code	Company Code	G/L Account	G/L Account	Starting Balance in Company Code Crcy	Debit Balance in Company Code Currency	Credit Balance in Company Code C
		1000001	Petty Cash	\$ 157.265.400,96	\$ 14.960,00	
		10010000	Petty Cash	\$ -92.777,59	\$ 37.150,40	
		11001000	Bank1 Main Account	\$ 61.112.847.712,84	\$ 100.149.583,84	\$ -44
		11001005	Bank1 Main Account	\$ 0,00	\$ 49.500,00	
		11001010	Bank1 - Payment Req	\$ -8.433.198,34	\$ 0,00	
		11001019	Bank1 Other Transfer	\$ -790.789,00	\$ 0,00	
		11001020	Bank1 Bank Transfer	\$ -9.485.035,41	\$ 557.448,00	\$ -2
		11001030	Bank1 Other Transfer	\$ -810.360,00	\$ 158,31	
		11001040	Bank1 Direct Debit	\$ -34.984.679,00	\$ 0,00	
		11001050	Bank1 Check Out	\$ -45.018,39	\$ 0,00	
		11001060	Bank1 Check In	\$ -12.991,57	\$ 0,00	
		11001070	Bank1 Check Clearing	\$ -7.488,00	\$ 163,35	
		11001080	Bank1 Cash Receipt	\$ 13.010.198,00	\$ 0,00	
		11001099	Bank1 Corr.Acc.	\$ 1.000,00	\$ 0,00	
		11001100	Bank1 Foreign Curry	\$ 0,00	\$ 500.000,00	
1710	BestRun US	11002000	Bank2 Main Account	\$ -586.455,00	\$ 0,00	
		11002020	Bank2 Bank Transfer	\$ 3.203,55	\$ 0,00	
		11002030	Bank2 Oth	\$ -14.550.069,00	\$ 0,00	
		11002040	Bank2 Dir	\$ -55.704.700,00	\$ 0,00	
		11002050	Bank2 Ch	\$ -106.531,90	\$ 0,00	
		11002070	Bank2 Ch	\$ -864,00	\$ 0,00	
		11002080	Bank2 Cash Receipt	\$ -577.908,00	\$ 1.000.000,00	
		21000000	Rcvbls Domestic	\$ 1.398.319.677,72	\$ 87.085.265,73	\$ -88
		21000001	TF Receivables	\$ 12.010.000,00	\$ 0,00	
		21000099	Receivables Adj acc	\$ 0,00	\$ 0,00	
		12100100	Rcvbls Domestic OTA	\$ 104.952.700,00	\$ 530.250,00	
		12101000	Rcvbls Domestic > 1Y	\$ -108.000,00	\$ 0,00	
		12102000	Rcvbls Domestic Adj	\$ -211.332,41	\$ 0,00	
		12110000	Other Down Payments	\$ 71.000,00	\$ 0,00	

Overdue
Receivables
Today USD USCU_L...

43,38 %

1 hr. ago

P&L
Plan/Actual YTD

Create Customer Invoice
ECW

Display Accounting
Document
ECW

Manage Journal
EntriesDays Sales
Outstanding
Days

Market Segments
Actuals

Trial Balance

General Ledger Overview

Key Characteristics of the Universal Journal

Single Source of Truth

SAP HANA & Big Data

360° View 



The Single Source of Truth: Towards Additional KPIs

	Ledger	Company	G/L Acct						Profit Center		Asset Number			Material		Cost Center			Project			Customer Group		Custom Field	
Fixed Assets																									
Inventory/WIP																									
Receivables																									
Payables																									
Revenues																									
COGS																									

Interesting Information?

Example for New KPIs: WIP by Market Segment for Professional Services

Based on the new “attribute” concept of the Universal Journal



Time confirmation

	G/L Account	Business Transaction	Reference Bus.Trans.	B/S or P/L	value	ACCASTY	Project	Cost Center	Profit Center	Sales Order	Product	Customer
1	Senior Cons	RKL	CATS	P/L	-100€	CC		CC1	PC1			
2	Senior Cons	RKL	CATS	P/L	100€	PR	WBS1		Solution1	SO1	Product1	Customer1

Revenue Recognition Document (directly triggered via the time confirmation event)

	G/L Account	Business Transaction	Reference Bus.Trans.	B/S or P/L	value	ACCASTY	Project	Cost Center	Profit Center	Sales Order	Product	Customer
1	Revenue adjustment	TBRR	CATS	P/L	-120€	PR	WBS1		Solution1	SO1	Product1	Customer1
2	WIP/ Unbilled revenue	TBRR	CATS	B/S	120€	PR	WBS1		Solution1	SO1	Product1	Customer1

new business transaction type TBRR for event-based RevRec

both documents refer to the CATS prima nota

ACCASTY defines the real account assignment

Document Splitting

Receivables	\$ 900	
Tax	\$ 100	
Revenues	\$ 200	Profit Center 1
Revenues	\$ 200	Profit Center 2
Revenues	\$ 400	Profit Center 3



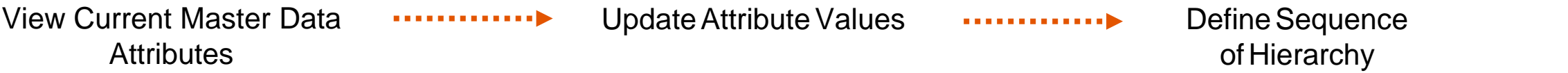
Document split transfers account assignments to offsetting items according to their proportions online during posting.

[illegible]

Receivables	\$ 225	Profit Center 1
Receivables	\$ 225	Profit Center 2
Receivables	\$ 450	Profit Center 3
Tax	\$ 25	Profit Center 1
Tax	\$ 25	Profit Center 2
Tax	\$ 50	Profit Center 3
Revenues	\$ 200	Profit Center 1
Revenues	\$ 200	Profit Center 2
Revenues	\$ 400	Profit Center 3

Flexible Hierarchies: Building hierarchies using attributes on the associated master data

Flexible Hierarchies: Process



Profit Center	Valid From	Valid To	Country	Segment	Lob	Product
1001	2013.01.01	9999.12.31	DE	SEG_01	FUEL	GASOLINE
1002	2016.01.01	9999.12.31	DE	SEG_01	FUEL	DIESEL
1003	2016.01.01	9999.12.31	DE	SEG_02	FUEL	DIESEL
1004	2016.01.01	9999.12.31	DE	SEG_02	LUBES	INDUSTRY
1005	2016.01.01	9999.12.31	CN	SEG_01	LUBES	MOTOR
1006	2016.01.01	9999.12.31	CN	SEG_01	LUBES	INDUSTRY
1007	2016.01.01	9999.12.31	US	SEG_01	FUEL	GASOLINE
1008	2016.01.01	9999.12.31	US	SEG_01	FUEL	DIESEL
1009	2016.01.01	9999.12.31	US	SEG_02	LUBES	MOTOR
1010	2016.01.01	9999.12.31	US	SEG_02	LUBES	INDUSTRY

Profit Center	Valid From	Valid To	Country	Segment	Lob	Product
1001	2013.01.01	9999.12.31	DE	SEG_01	FUEL	GASOLINE
1002	2016.01.01	9999.12.31	DE	SEG_01	FUEL	DIESEL
1003	2016.01.01	9999.12.31	DE	SEG_02	FUEL	DIESEL
1004	2016.01.01	9999.12.31	DE	SEG_02	FUEL	DIESEL
1005	2016.01.01	9999.12.31	CN	SEG_01	LUBES	MOTOR
1006	2016.01.01	9999.12.31	CN	SEG_01	LUBES	INDUSTRY
1007	2016.01.01	9999.12.31	US	SEG_01	FUEL	GASOLINE
1008	2016.01.01	9999.12.31	US	SEG_01	FUEL	DIESEL
1009	2016.01.01	9999.12.31	US	SEG_02	LUBES	MOTOR
1010	2016.01.01	9999.12.31	US	SEG_02	LUBES	INDUSTRY

Profit Center	Valid From	Valid To	Country	Segment	Lob	Product
1001	2013.01.01	9999.12.31	DE	SEG_01	FUEL	GASOLINE
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1003	2016.01.01	9999.12.31	DE	SEG_02	FUEL	DIESEL
1004	2016.01.01	9999.12.31	DE	SEG_02	LUBES	INDUSTRY
1005	2016.01.01	9999.12.31	CN	SEG_01	LUBES	MOTOR
1006	2016.01.01	9999.12.31	CN	SEG_01	LUBES	INDUSTRY
1007	2016.01.01	9999.12.31	US	SEG_01	FUEL	GASOLINE
1008	2016.01.01	9999.12.31	US	SEG_01	FUEL	DIESEL
1009	2016.01.01	9999.12.31	US	SEG_02	LUBES	MOTOR
1010	2016.01.01	9999.12.31	US	SEG_02	LUBES	INDUSTRY

Maintain Profit Center attributes

Profit Center	Country	LoB	Product Line	Reporting Group	Continent
1001	US	FUEL	GASOLINE	Americas	North America
1002	DE	FUEL	DIESEL	EMEA	Europe
1003	DE	FUEL	DIESEL	EMEA	Europe
1004	DE	LUBES	INDUSTRY	EMEA	Europe
1005	FR	LUBES	MOTOR	EMEA	Europe
1006	AT	LUBES	INDUSTRY	EMEA	Africa
1007	CN	FUEL	GASOLINE	APJ	Great China
1008	HK	FUEL	DIESEL	APJ	Great China
1009	CN	LUBES	MOTOR	APJ	Great China
1010	JP	LUBES	INDUSTRY	APJ	Japan
1011	US	GAS	LPG	Americas	North America
1012	DE	GAS	LPG	EMEA	Europe
1013	DE	GAS	CNG	EMEA	Europe
1014	CN	GAS	LPG	APJ	Great China

Hierarchy Report Based on Geo Level

Hierarchy Report Based on Line of Business

Generate Hierarchy

1

2

3

4

CN

SEG_01

LUBES

INDUSTRY

1006

MOTOR

1005

DE

SEG_01

FUEL

DIESEL

1002

GASOLINE

1001

SEG_02

FUEL

DIESEL

1003

1004

US

SEG_01

FUEL

DIESEL

1008

GASOLINE

1007

SEG_02

LUBES

INDUSTRY

1010

MOTOR

1009

Key Characteristics of the Universal Journal

Single Source of Truth

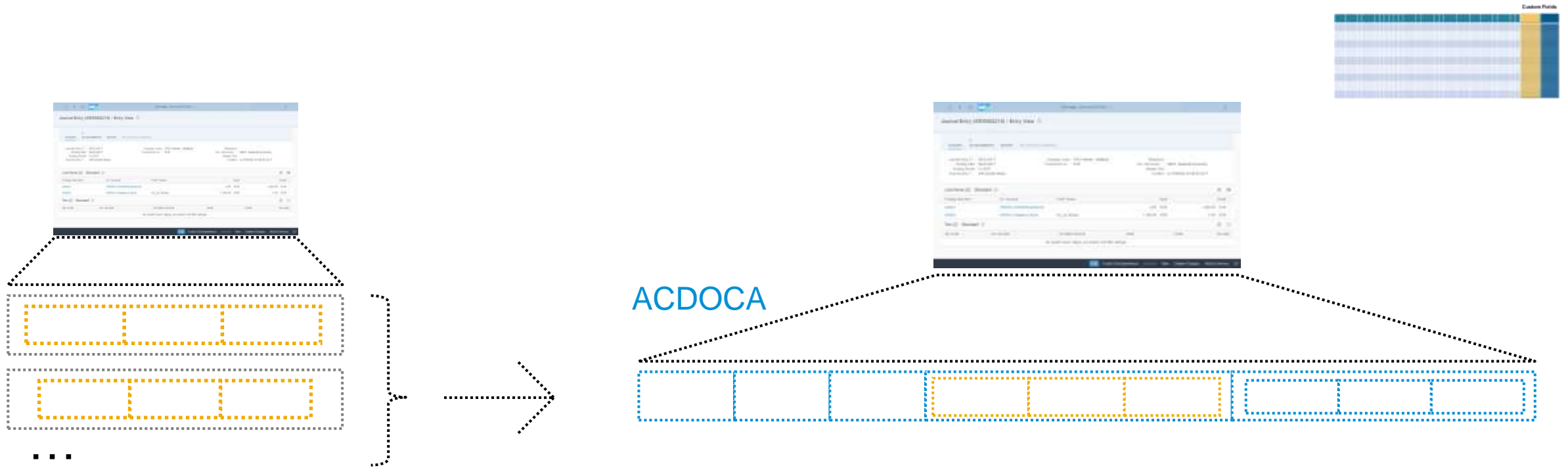
SAP HANA & Big Data

360° View

Extensibility 



Extensibility of the Universal Journal: 2 Flavors



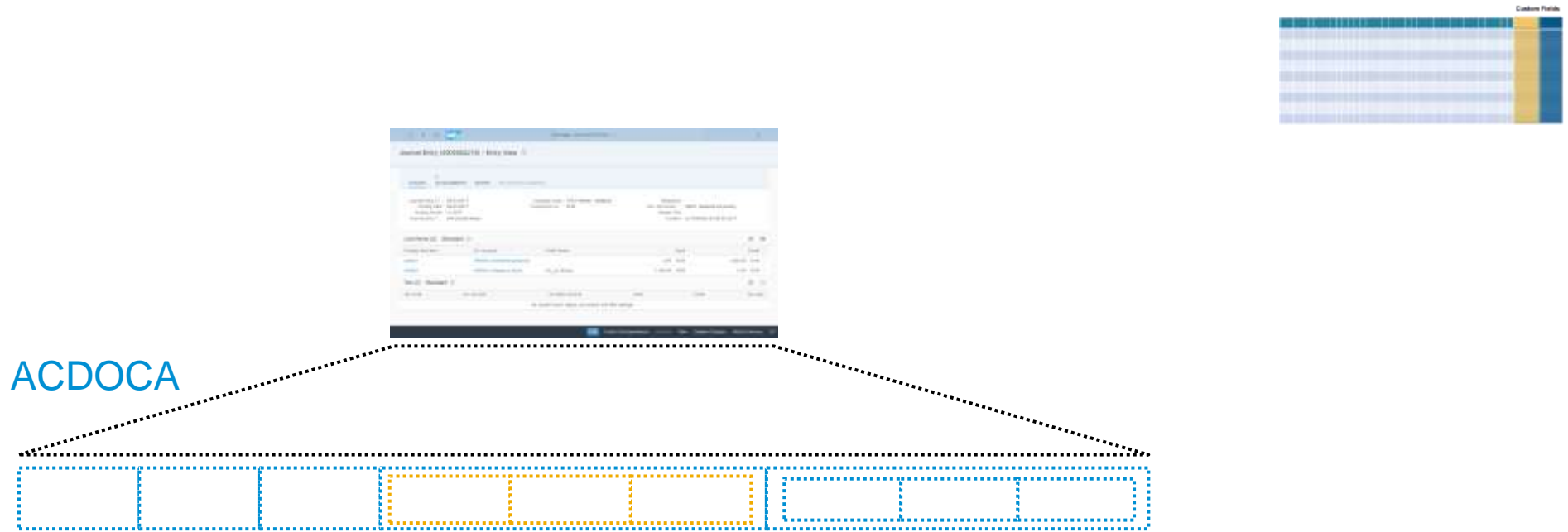
Coding Block Extension

- Used for fields, which are filled by users during document entry (e.g. supplier invoice, FB01, ...)
- Process integration transports the field to the Universal Journal

Inside ACDOCA Extension

- Ideal for fields derived from other fields of ACDOCA or from master data
- Large number of ACDOCA extension fields is possible

Extensibility of the Universal Journal



Benefit of line item-based SAP S/4HANA architecture without totals tables

- In SAP Business Suite/ERP reporting and functionality was based on totals tables with the limitation to 16 key fields
- Often several FI-SL ledger were installed, containing different sets of extension fields
- With the line item-based architecture in SAP S/4HANA **all extension fields** can be put to the central line item table ACDOCA
- Our new reporting and many processes can use arbitrary combination of standard and extension fields

Key Characteristics of the Universal Journal

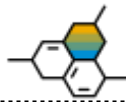
Single Source of Truth

SAP HANA & Big Data

360° View

Extensibility

Extension Ledger



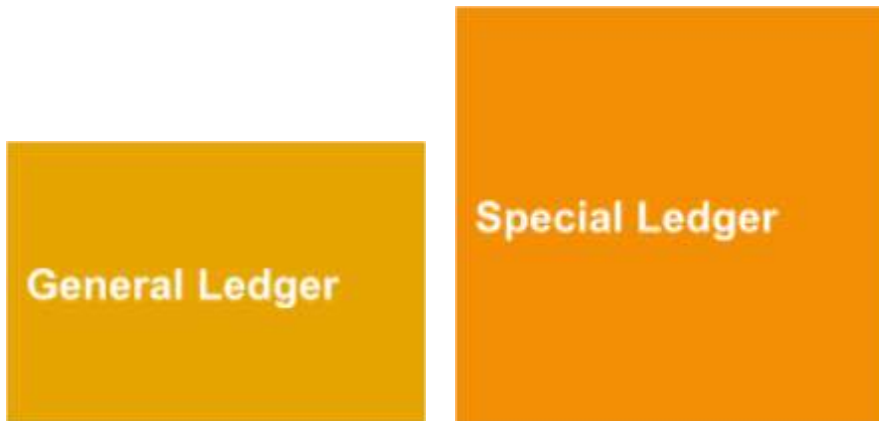
Extension Ledger: Use Case Management View

ERP

Legal Ledger

Management Ledger

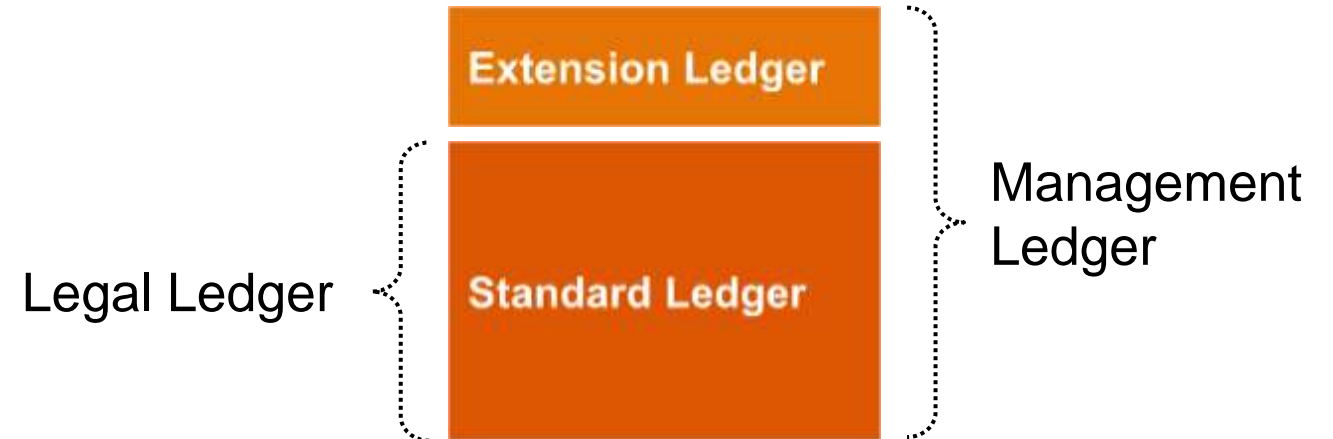
- Same legal data (95 %)
- Few adjustments (5%)
- High data redundancy



SAP S/4HANA

Standard & Extension Ledger on top

- Separation of management data from legal data
- No data redundancy



Extension Ledger: Basic Principle

Write Access

Posting valid for
Extension ledger only



Posting valid for both
Standard and Extension Ledger



Read Access

from Standard Ledger

from Extension Ledger



Select
Standard
Ledger



Select both
Standard &
Extension
Ledger

Extension Ledger

Characteristics

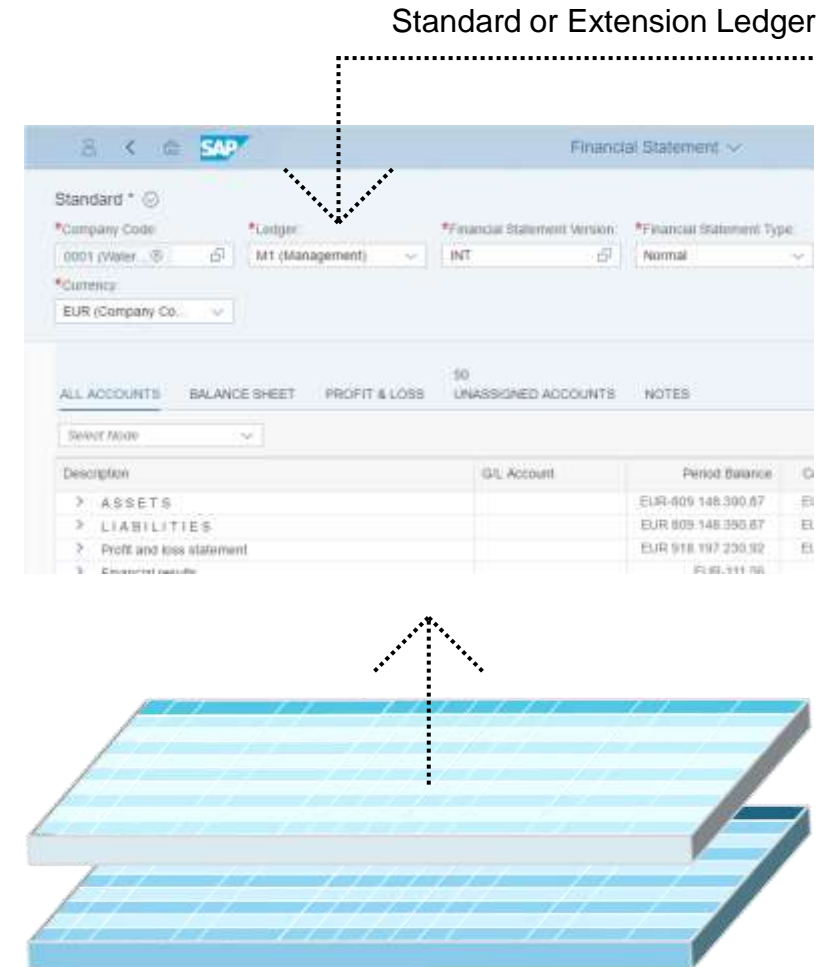
- Inherits currency settings and fiscal year variant of underlying ledger.
- Separate company code assignment (subset of underlying ledger)
- Separate open period variant
- Authorization on ledger level

Transaction supported in extension ledgers in SAP S/4HANA 1610:

- Manual postings (FIORI Apps or tx FB01L, FBB1, KB11, KB41)
- Foreign currency valuation
- GL allocations

Reporting

- **All** reports with parameter “ledger” support also extension ledgers
- VDM Model provides views supporting the inheritance logic of extension ledgers



Combining Extension Ledgers



- You can use several extension ledgers for various purposes
- Each extension ledger knows its underlying ledger
- Setting up a new extension ledger is simple (one configuration entry!), it inherits the data of the underlying ledger
- Stacking of extension ledgers is available with a pilot note
- Ledger groups must not contain an extension ledger and one of its underlying ledgers

Key Characteristics of the Universal Journal

Single Source of Truth

SAP HANA & Big Data

360° View

Extensibility

Extension Ledger

Parallel Accounting



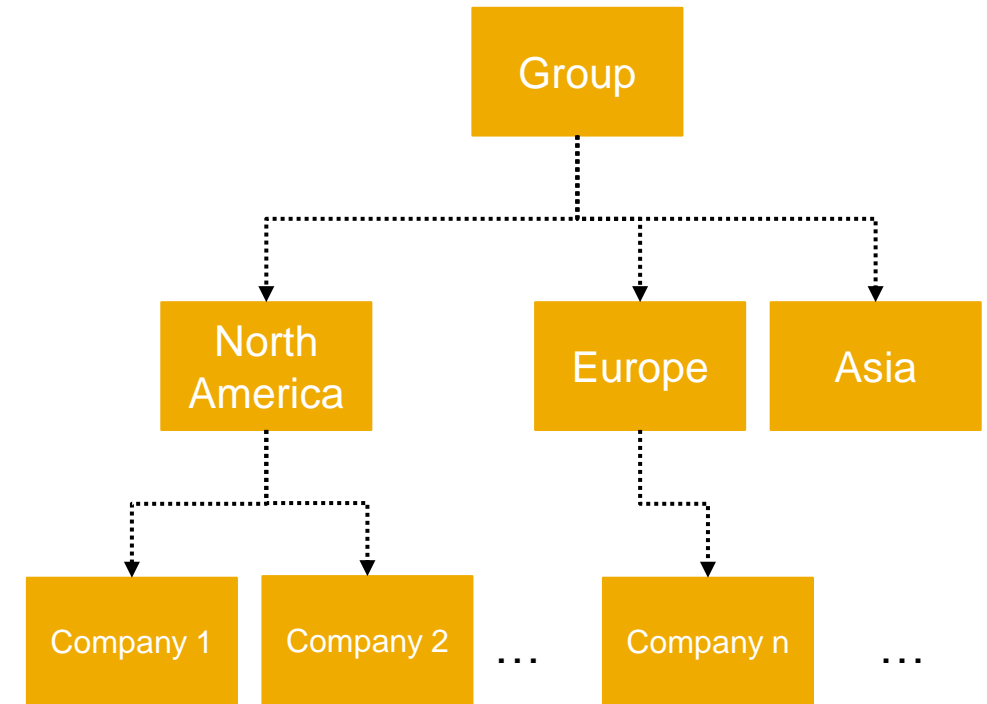
Parallel Accounting

Use Cases

- Group reporting (e.g. IFRS)
- Local close (e.g. US-GAAP, French GAAP, HGB, ...)
- Separate ledger for tax
- Deviation fiscal year, ...

Approach for Parallel Accounting in ERP

- Parallel GL Accounts
- Parallel NewGL Ledgers



Recommended Approach in SAP S/4HANA for Parallel Accounting

Group

Local GAAP

Ledger 1

Ledger 2

Recommendation:

Use Ledger Approach for Parallel Accounting

- Ledger in GL and Fixed Asset Accounting

- CO / ML:

update parallel ledgers with identical values

or

with COGM solution you can make parallel cost of goods manufactured postings to separate ledgers

Key Characteristics of the Universal Journal

Single Source of Truth



Multiple Currencies

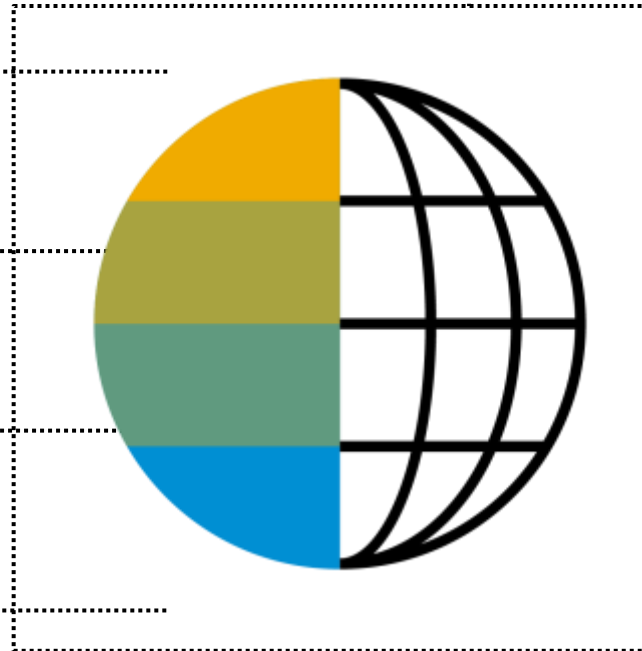
SAP HANA & Big Data

360° View

Extensibility

Extension Ledger

Parallel Accounting



Available Currencies in ERP

In ERP we used to have

- 3 local currencies in FI (including NewGL)
- 2 currencies in CO
- 3 currencies in Material Ledger

Challenges

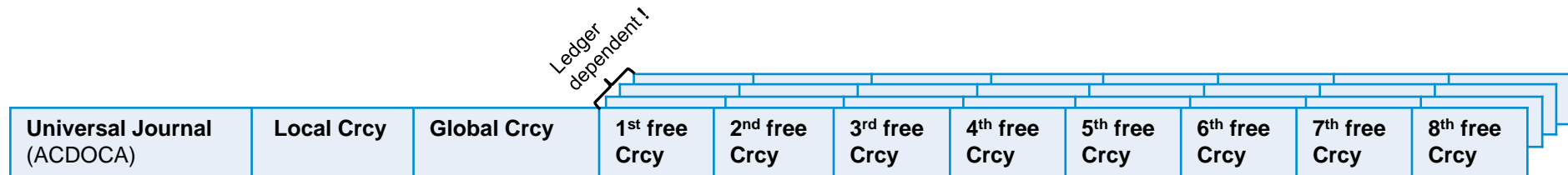
- Currency conversion not consistent for FI / CO
- Limited number of currencies available in ERP Reporting not fulfilling all requirements in parallel:
 - Local close in local currency, group reporting, regional subgroup reporting, hard currency, specific functional currency in some industries, reporting with alternative exchange rates, ...
- Using several controlling areas with different currencies leads to loss of a group view in a common currency
- Especially in transfer price scenarios lack of parallel currencies
- Flexible currency handling often implemented separately in SAP BW (high effort, inaccurate, reconciliation,...) or in FI-SL (different conversion settings,...)

FI (BSEG)	local Crcy	2 nd local Crcy	3 rd local Crcy
CO (COEP)	local (Obj) Crcy	CO Area Crcy	
ML	local Crcy	2 nd ML Crcy	3 rd ML Crcy

More Currency Flexibility: The Universal Journal with SAP S/4HANA

The Universal Journal supports additional new parallel currencies

- Per company code and ledger you can configure up to 8 freely defined currencies in addition to local and global currencies.
- Freely defined currencies for parallel G/L ledgers do not depend on leading ledger, you can configure the freely defined currencies in each ledger independently.



***New currencies are available as of SAP S/4HANA Finance 1605 and SAP S/4HANA 1610*

- Real-time currency conversion **with actual exchange rate** and balance zero per document for all currencies and processes!
 - Some business processes require currency conversion **with historic exchange rates**:
 - This is available for Open Item Management, Reversals, CO and GL Allocations, Foreign Currency Valuation, Regrouping
 - Planned for future releases for CO Settlement Reposting, Fixed Assets and Material Ledger
- Real-time currency conversion with actual exchange rate is a fallback for those cases and will be sufficient in many cases!

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SAP HANA & Big Data

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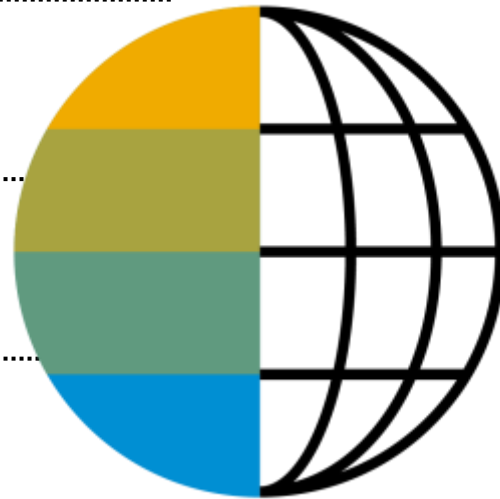
Extensibility

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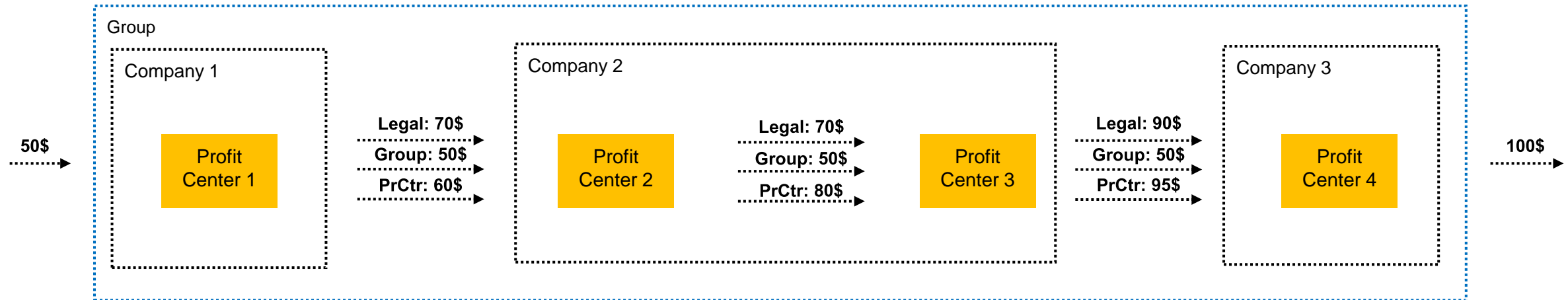
Transfer Price Valuations



Parallel Transfer Price Valuation Views & Elimination of Intercompany Markups

Management decisions in large companies are based on group profitability figures and not on figures of the individual entity. Intercompany effects along the operative value chain need to be eliminated and the respective data needs to be stored for analytical purposes.

As a consequence, we enhance the local (legal) transfer price view with views of alternative prices for a product value chain:



- **Legal valuation** looks at the business transactions from the point of view of the affiliated companies including legal markups
- **Group valuation** looks at the whole group eliminating intercompany markups
- **Profit center valuation** treats profit centers as if they were independent companies using e.g. negotiated prices

Parallel Transfer Price Valuation Views in ERP

Parallel Transfer Price Valuations were available in ERP since Release 4.0, but with quite some shortcomings:

- High complexity due to heterogeneous treatment of parallel valuations
 - GL uses currency fields (2nd and 3rd currency) to store parallel valuations.
 - CO uses parallel versions for actual date where the version 0 contains a full value and the parallel actual versions contain the delta compared to version 0
 - Material Ledger uses currency types
 - Fixed Asset Accounting uses different depreciation areas
 - FI-SL uses Ledgers
- Delta logic in CO was hard to understand
- Insufficient currency flexibility, i.e. activating transfer pricing eliminated the possibility to have parallel currencies in FI (needed for legal reasons).

The complexity of the given ERP solution forced many customers to implement their own solution, e.g. with SAP BI

Parallel Transfer Price Valuation Views in SAP S/4HANA

Unified architecture for parallel valuations in the Universal Journal

We provide 2 general options, which you also can combine:

Parallel valuations updated in ***parallel single-valuation ledgers***

- Use separate ledger for each valuation
- transparent separation of postings and reporting of financial results based on the various regulations

Ledger	BUKRS	CURTP (local)	CURTP (global)	CURTP1
DL	1000	10	30	
GR	1000	11	31	
PC	1000	12	32	

} Legal View
} Group View
} Profit Center View

Parallel valuations updated in a ***multi-valuation ledger***

- use separate amount columns in the same ledger
- reduces memory footprint
- reduces effort and time for closing activities
- default for migration from Business Suite with parallel transfer price valuations

Ledger	BUKRS	CURTP (local)	CURTP (global)	CURTP1	CURTP2	CURTP3	CURTP4	CURTP5
DL	1000	10	30	11	31	12	32	

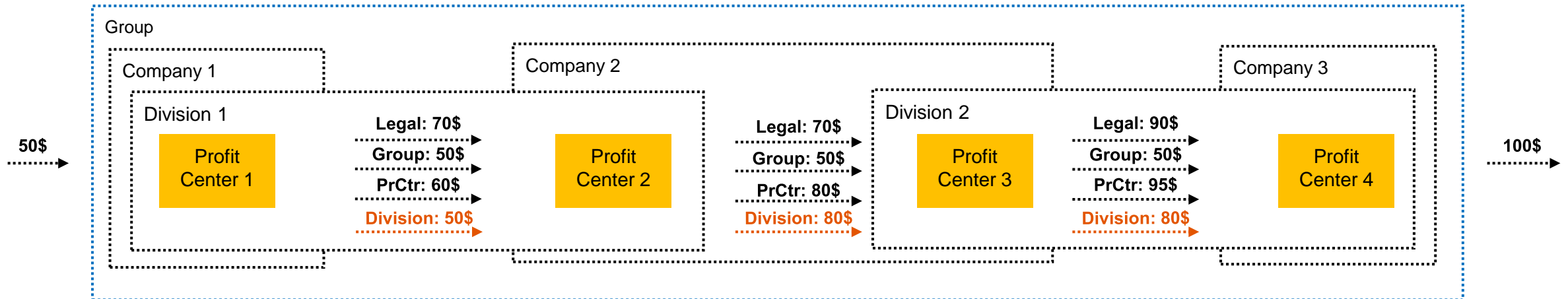
Legal View Group View Profit Center View

Parallel Transfer Price Valuation Views - Outlook

Lab Preview

We are currently discussing possible enhancements to the concept of parallel valuations

- Real time elimination of markups in material movements as basis for legal consolidation
- More flexible definition of valuation views, e.g. for additional levels below group, such as divisions, ...
- Transparent controlling of parts of the group with consolidated profitability for that level



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SAP HANA & Big Data

Transfer Price Valuations

360° View



Consolidation

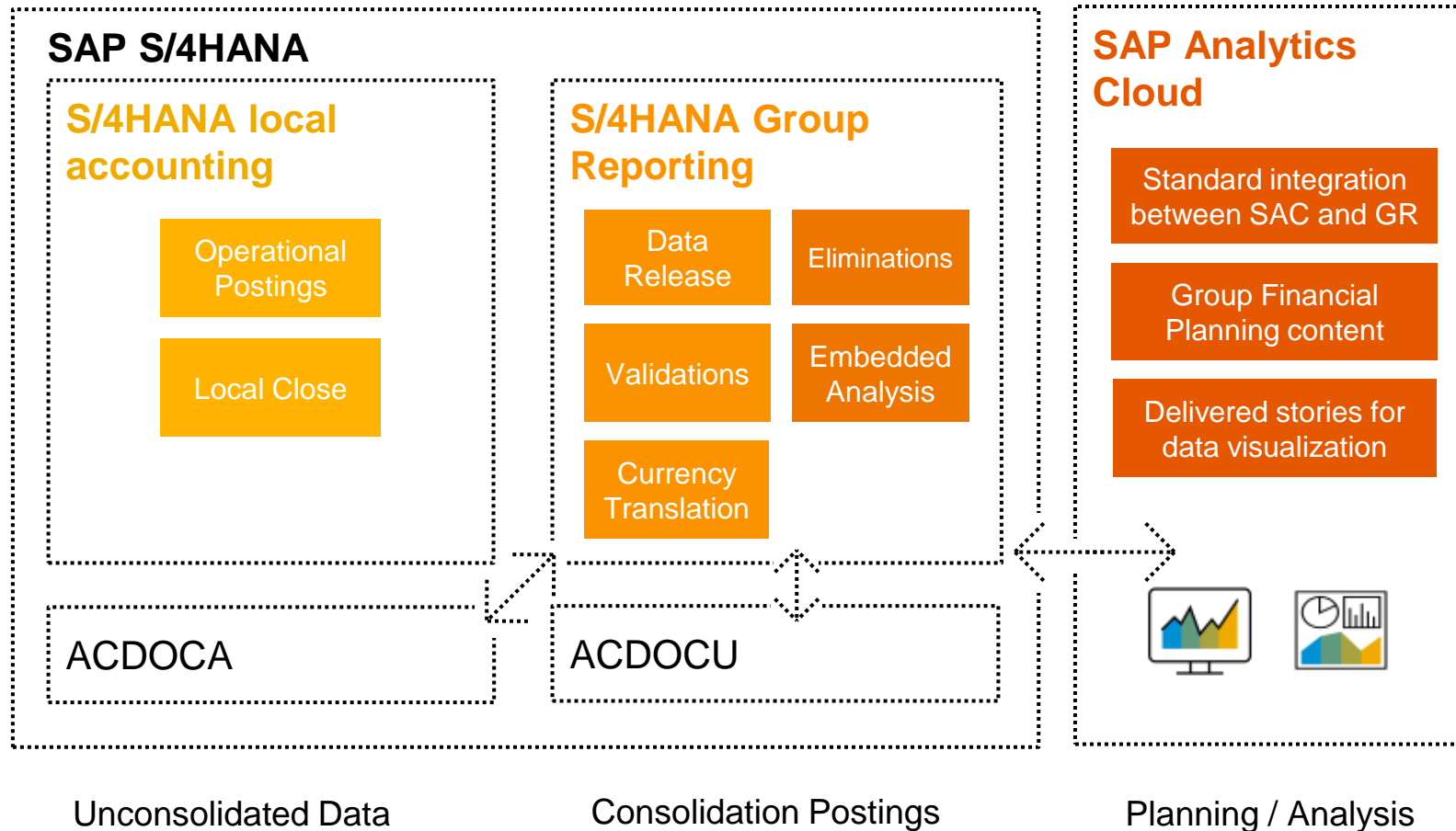
Extensibility

Extension Ledger

Parallel Accounting



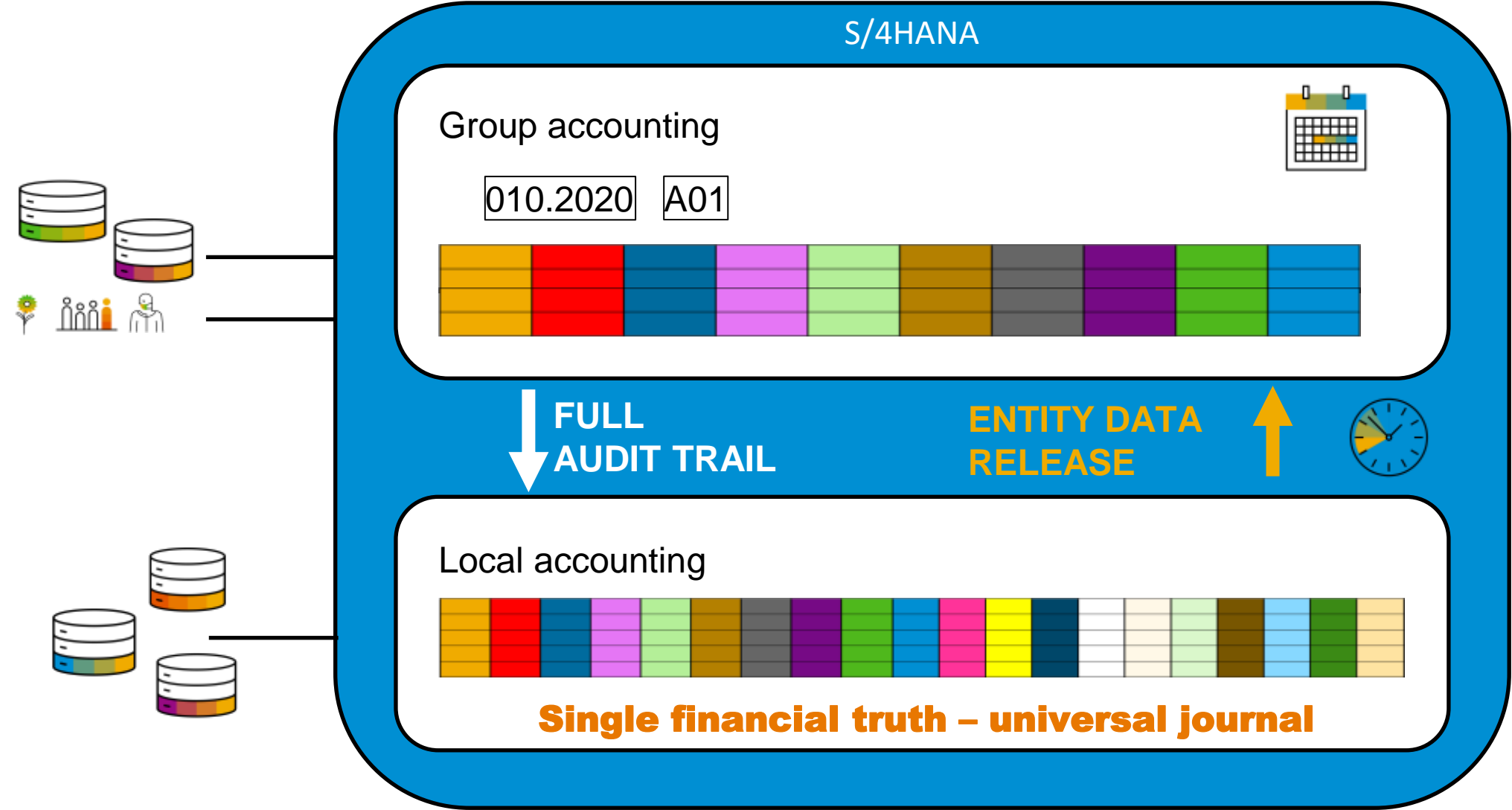
Universal Journal and Consolidation



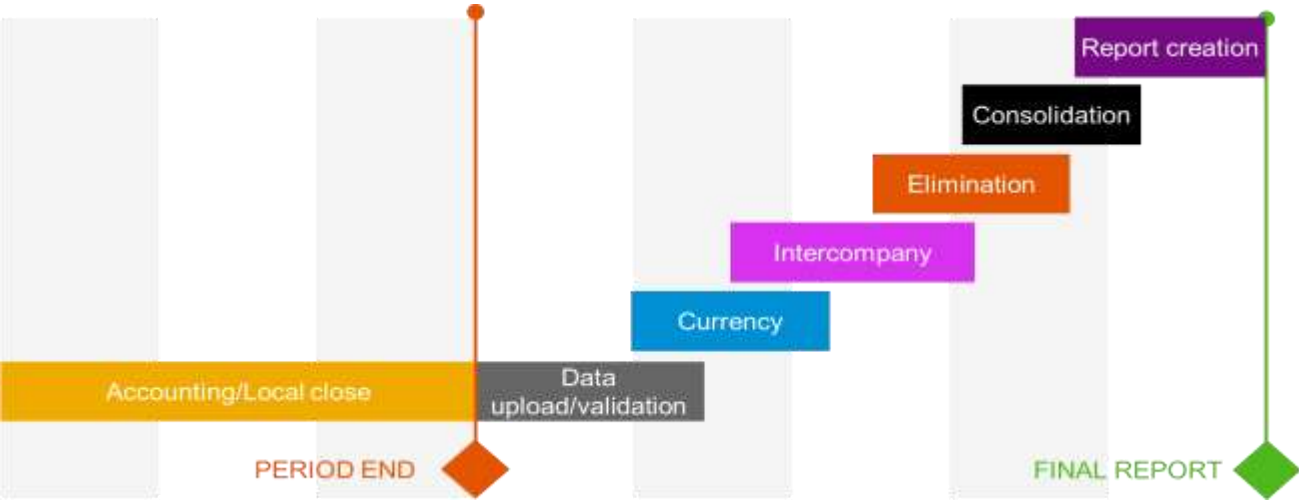
Consolidation

- One data model across local and group close
- No ETL importing data into consolidation
- Audit trail from consolidated statement to underlying operational transactions
- End-to-end Best Practice content
- IC reconciliation to elimination across local and group close
- Full integration with SAC planning and analysis

Integrated harmonized data



Redefining financial close



Close timeline – past



Close timeline – proposed

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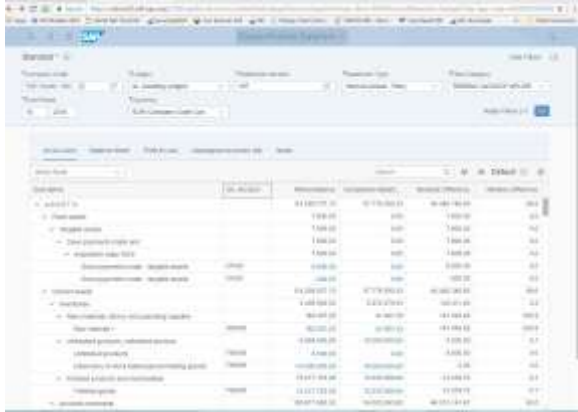
Plan Data

Extension Ledger

Parallel Accounting



Plan Data in the Universal Journal



The screenshot displays the SAP S/4HANA Universal Journal interface. The table shown is ACDOCP, which is used for plan data. The interface includes a navigation pane on the left with various filters and a main table area with columns for account, date, and various financial fields. The data is organized into a hierarchical structure, with sub-totals and grand totals visible.

Universal Journal

ACDOCA

ACDOCP

Strategic direction

- One single persistence for plan data in the Universal Journal as well.
- Table ACDOCP - fitting perfectly to ACDOCA: Easy plan/actual comparison based on same fields and structure.

Status

- BPC as planning application for periodical planning in SAP S/4HANA (on premise). With release 1610, availability of ACDOCP as plan persistence (alternative to cube).
- SAP Analytics Cloud (SAC) for planning as planning application for periodical planning in SAP S/4HANA Cloud with ACDOCP as sole persistence. First version in 1702 (customer extensibility scenario).
- On the roadmap we plan to enhance other native planning capabilities directly on ACDOCP (e.g. plan allocations).

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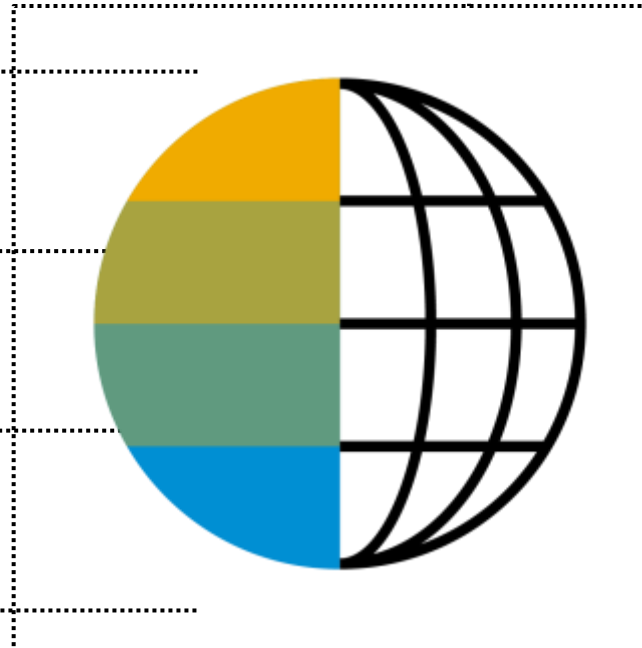
Plan Data

Extension Ledger



Prediction

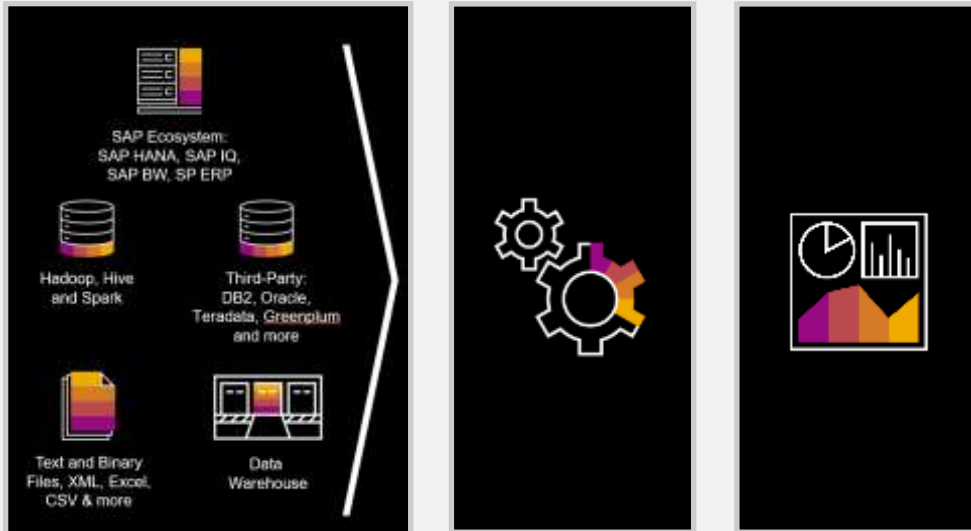
Parallel Accounting



Predictive Analytics vs. Predictive Accounting

TOP-DOWN Prediction

Predictive Analytics data mining (time series, classification, regression, clustering) on aggregated historic data



BOTTOM-UP Prediction

Predictive Accounting based on predicted financial documents resulting from a simulation of individual business processes and their document flow



Selected characteristics of Predictive Analytics and Predictive Accounting

TOP-DOWN Prediction

Predictive Analytics

- ❑ Short-, mid-, long-term forecast
- ❑ Complete prediction scope
- ❑ Case-by-case prediction of KPIs
- ❑ No explanation of prediction results
- ❑ Results with targeted but limited business semantics
- ❑ Limited re-use of prediction results in follow-on processes of Financials

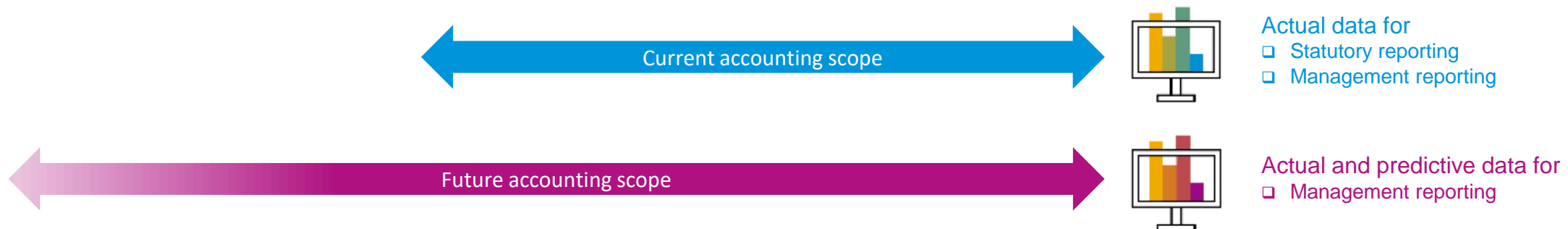
BOTTOM-UP Prediction

Predictive Accounting

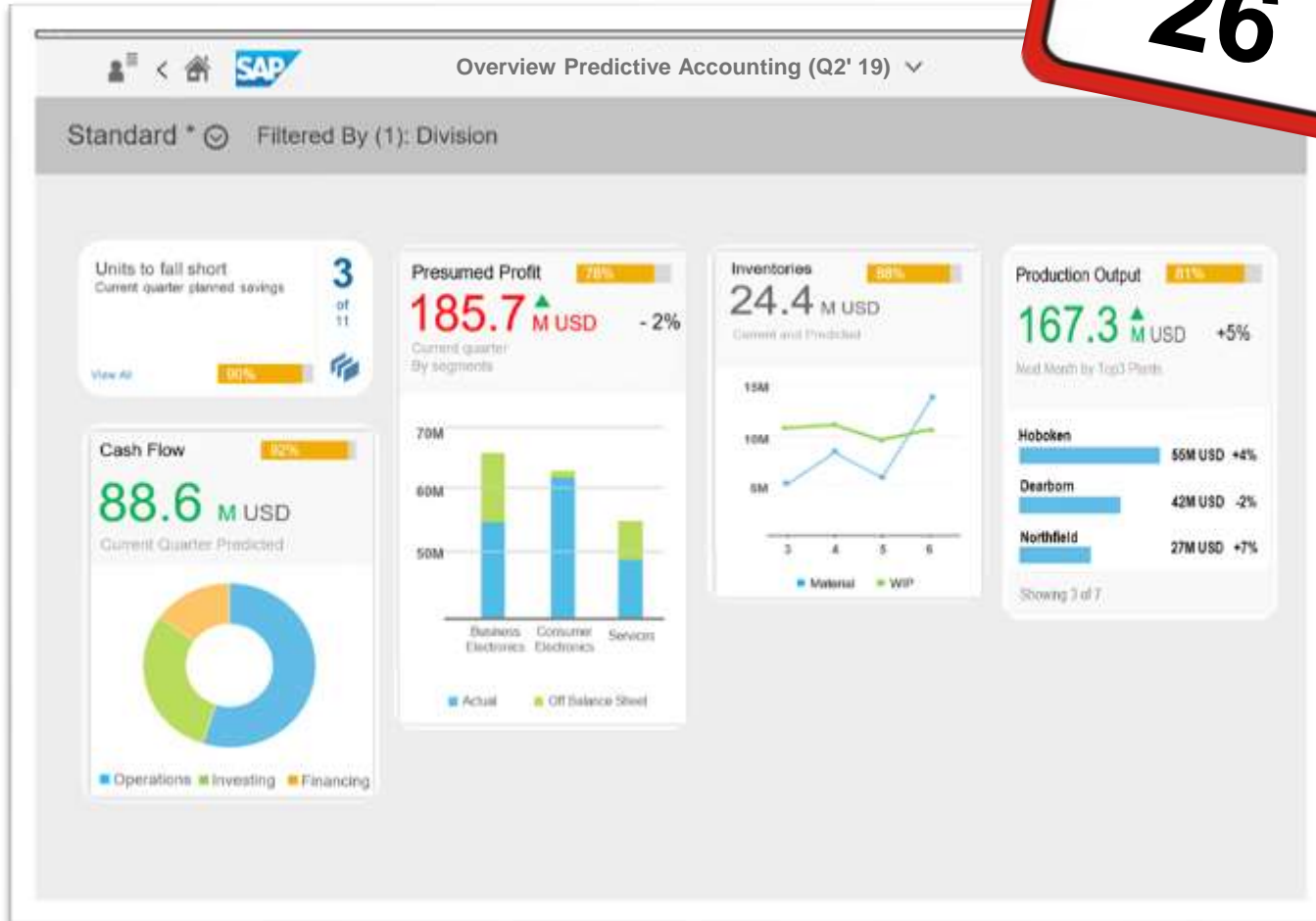
- ❑ Short-term forecast
- ❑ Prediction scope based on available process anchors
- ❑ Generic prediction of any financial KPI
- ❑ Prediction results with audit trail details
- ❑ Results with full business semantics of Financial Accounting
- ❑ Full re-use of prediction results in follow-on processes of Financials

Predictive Accounting

Extending the reach of Accounting



Predictive Accounting vision



- ❑ All KPIs based on journal entries as single source
- ❑ Fully consistent set of key figures
- ❑ Actuals and prediction data in joint KPIs
- ❑ Reuse of data processing and analytics from actuals
- ❑ Audit proof explanation of reported results
- ❑ Extend the traditional reach of accounting beyond GAAPs

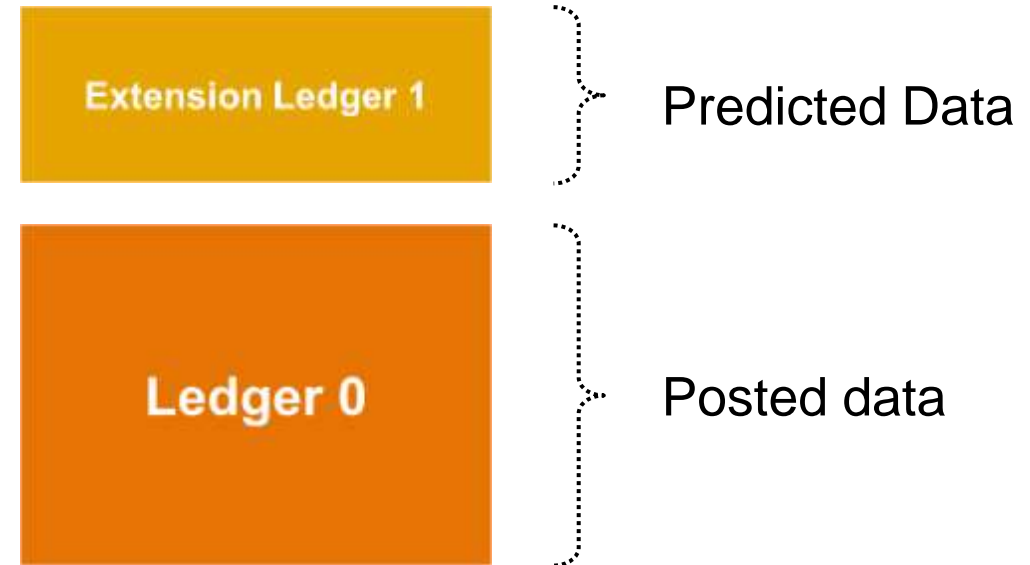
Extension Ledger for Prediction

Other Use Case for Extension Ledgers:

- Predicted data
 - Enrich actual data by forecasts

Reporting

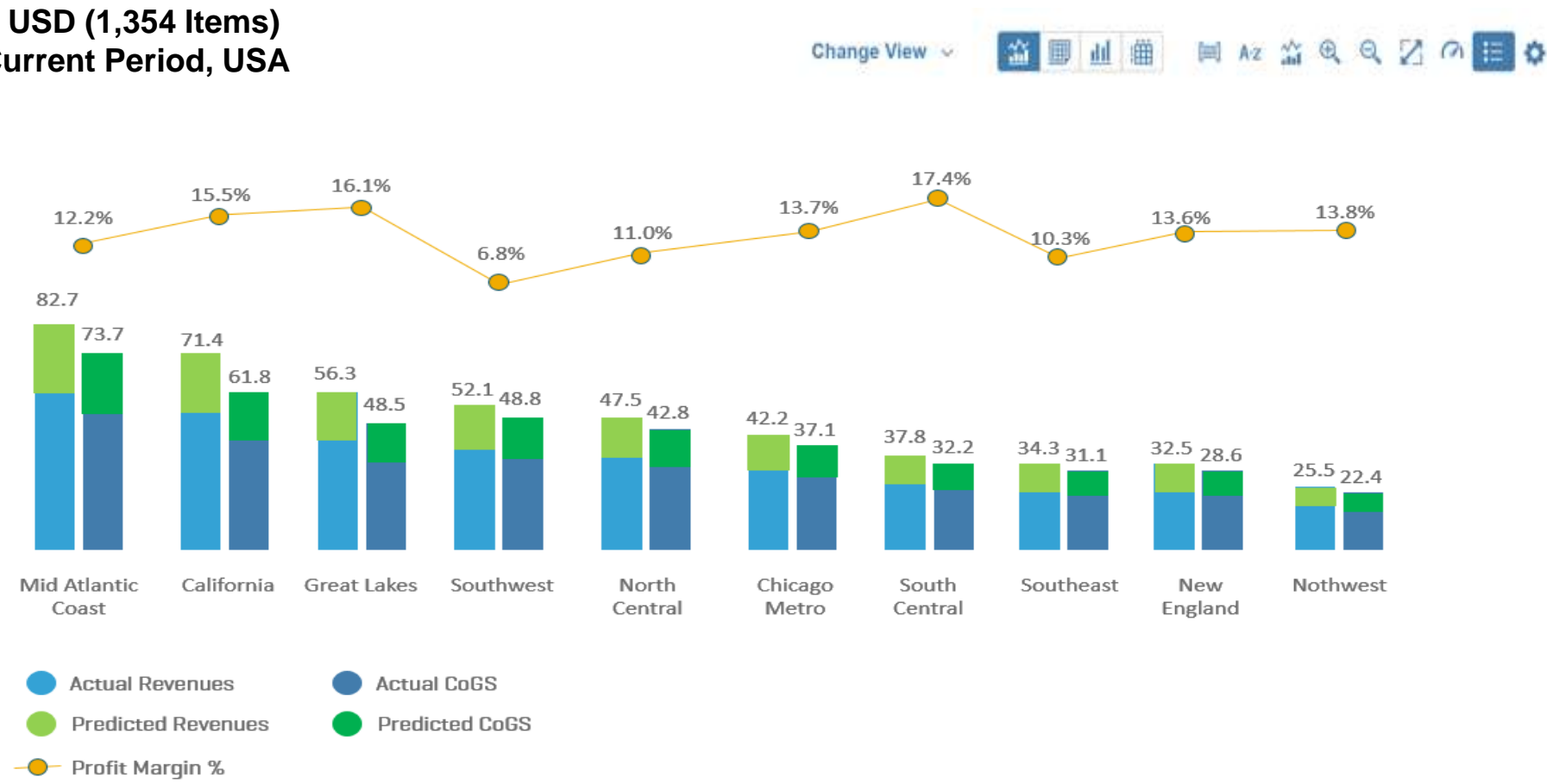
- Use extension ledger principle to mix actual data with predicted and/or simulated data
- All reports with ledger as parameter are enabled to show mixed data



Analytical List Page - Content Visualization Section

Lab Preview
Prototype

Incoming Orders in M USD (1,354 Items)
All Journal Entries / Current Period, USA



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Transfer Price Valuations

360° View

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Extensibility

Plan Data

Extension Ledger

Prediction

Parallel Accounting



Simulation

Simulation & Prediction

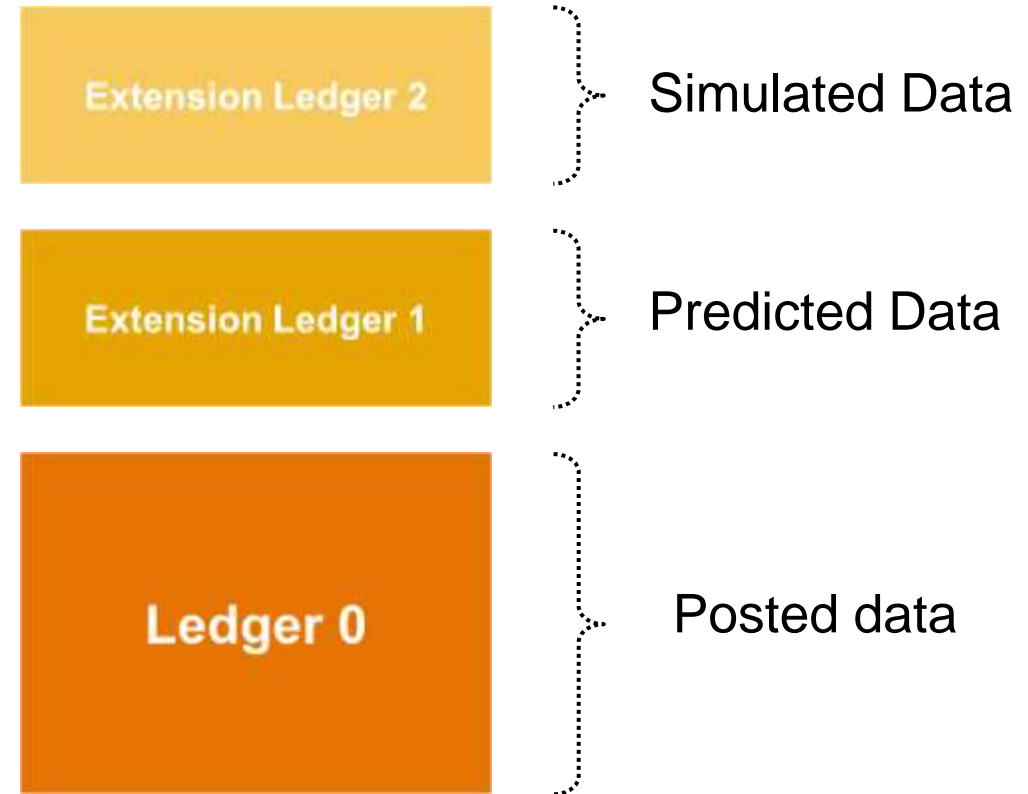
Lab Preview

Other Use Case for Extension Ledgers:

- Simulated data
 - See result of test runs of period end close activities
 - Delete and redo simulations
- Predicted data
 - Enrich actual data by forecasts

Reporting

- Use extension ledger principle to mix actual data with predicted and/or simulated data
- All reports with ledger as parameter are enabled to show mixed data



Foreign Currency Simulation

New features – Simulation mode

- You can run the Foreign Currency valuation either in test run, simulation run or update run
- The simulation run generates valuation posting documents into the simulation ledger.
- Reporting on simulation ledger combines simulation data with actual data of underlying ledger. You can see the simulated data on all reports for which you can specify a ledger.
- You can delete simulation data, if you want to rerun the simulation.
- Update run will also delete simulation data, in order to avoid duplication of data in reporting for the simulation ledger.

The screenshot displays the 'Foreign Currency Valuation' SAP interface. At the top, the title bar reads 'Foreign Currency Valuation'. Below it, the 'General Selections' section contains fields for 'Company Code' (set to '1001'), 'Valuation Key Date' (set to '31.07.2016'), and 'Valuation Area' (set to '22'). A 'to' field is also present. The interface features several tabs: 'Postings', 'Open Items: Subledger', 'Open Items: G/L Accounts', 'G/L Account Balances', and 'Output / Technical Settings'. The 'Postings' tab is active, showing the 'Posting Mode' section with three radio buttons: 'Test Run', 'Simulation Run' (which is selected and highlighted in yellow), and 'Update Run'. Under 'Simulation Run', there is a 'Simulation Settings' section with a 'Simulation Ledger' field set to '22' and a 'Delete Existing Simul. Data' checkbox. Below this is a 'Valuation Reset' section with a 'Reset Valuation' checkbox and a 'Reason for Reset (Balances)' field. The 'Posting Parameters' section at the bottom includes a checked 'Determine Automatically' checkbox, and fields for 'Document Date' (31.07.2016), 'Posting Date' (31.07.2016), and 'Posting Period' (0).

Ongoing Innovation of the Universal Journal

Single Source of Truth 

 Multiple Currencies

SAP HANA & Big Data 

 Transfer Price Valuations

360° View 

 Consolidation

Extensibility 

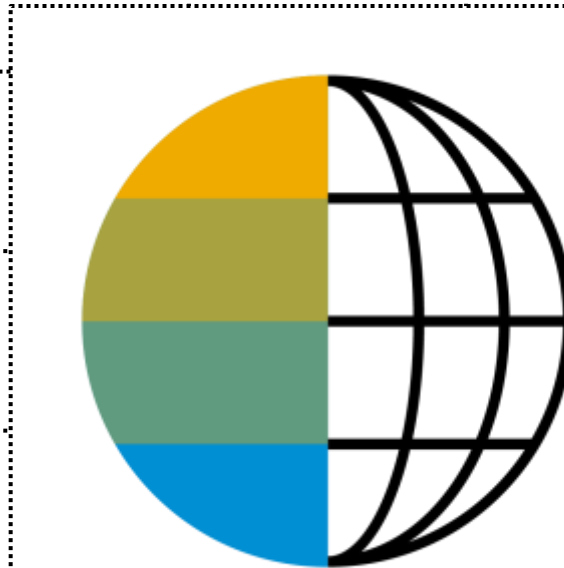
 Plan Data

Extension Ledger 

 Prediction

Parallel Accounting 

 Simulation



The Perfect Financial and Management Accounting System

Don't you dream of a reporting solution, that ...

- comprises actual data, plan data, simulated data, and prediction data ✓
- presents data in a common structure making comparison easier ✓
- provides all required currencies ✓
- contains all details ✓
- presents a 360° view on objects of interest (P&L + Balance Sheet KPI's) ✓
- shows the unconsolidated and consolidated views in real time (ad hoc group reporting) ✓



- is up to date at every point in time ✓
- gives a full audit trail ✓
- is based on a single source of truth: fully reconciled by architecture ✓
- is set up without data redundancy ✓
- fulfills legal requirements from a local and a group perspective ✓
- is the basis for management reporting at every needed granularity ✓
- can be enhanced / extended easily ✓

Happy Soul of an Accountant!



Agenda

▶ **Why Universal Journal ?**

▶ **What's it all about ?**

▶ **How do we get there?**



Move to SAP S/4HANA Cloud which enables Office of CFO



Business steering by any dimension



Instant ad hoc analytics



New business models with holistic revenue management

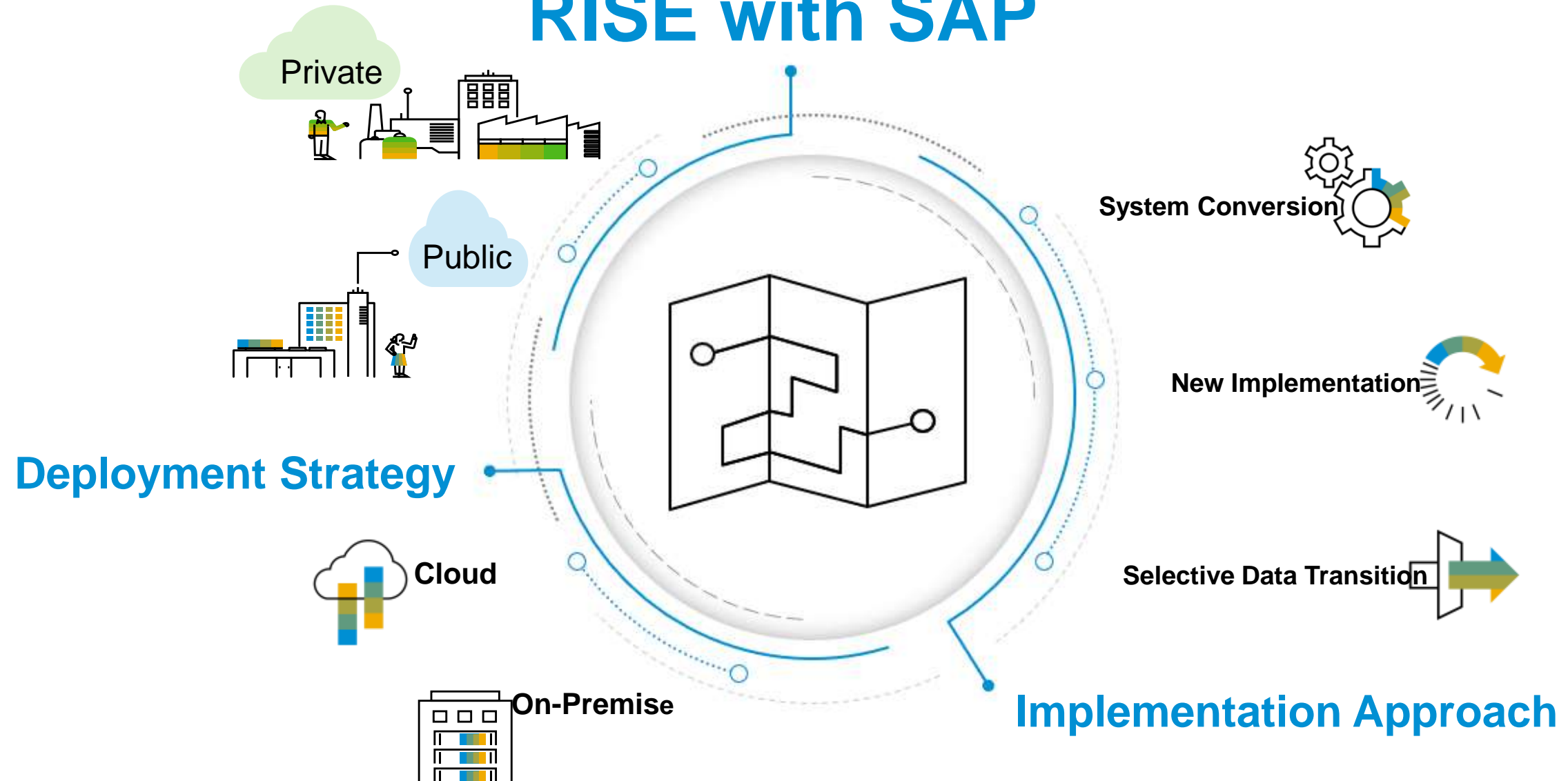


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Non-disruptive approach for your Cloud Finance transformation

RISE with SAP



Proudly helping companies run at their best for 50 years

77%

of the world's
transaction
revenue touches
an SAP system in
over 180 countries

94%

of the world's 500
largest companies
are SAP
customers

85 of the **100**

largest companies
in the world are
SAP S/4HANA
customers

~80%

of SAP's
customers
are mid-size
enterprises

22,500+

partner in SAP
ecosystem across
140 countries

Thank you.

April 2022



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