



**UNIVERSITY OF RIJEKA**

**FACULTY OF ECONOMICS**



# Accounting & Controlling powered by SAP HANA

**New General Ledger Accounting  
New Simple Finance**



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## Summarize

# SAP – The Company



# ERP – Historical Development

## ERP? No definition

*SAP invents and establishes an ERP system*

## ERP = The business software

*ERP becomes standard software. The first competitors appear in the marketplace*

## Dotcom hype: ERP = old

## E-business = New

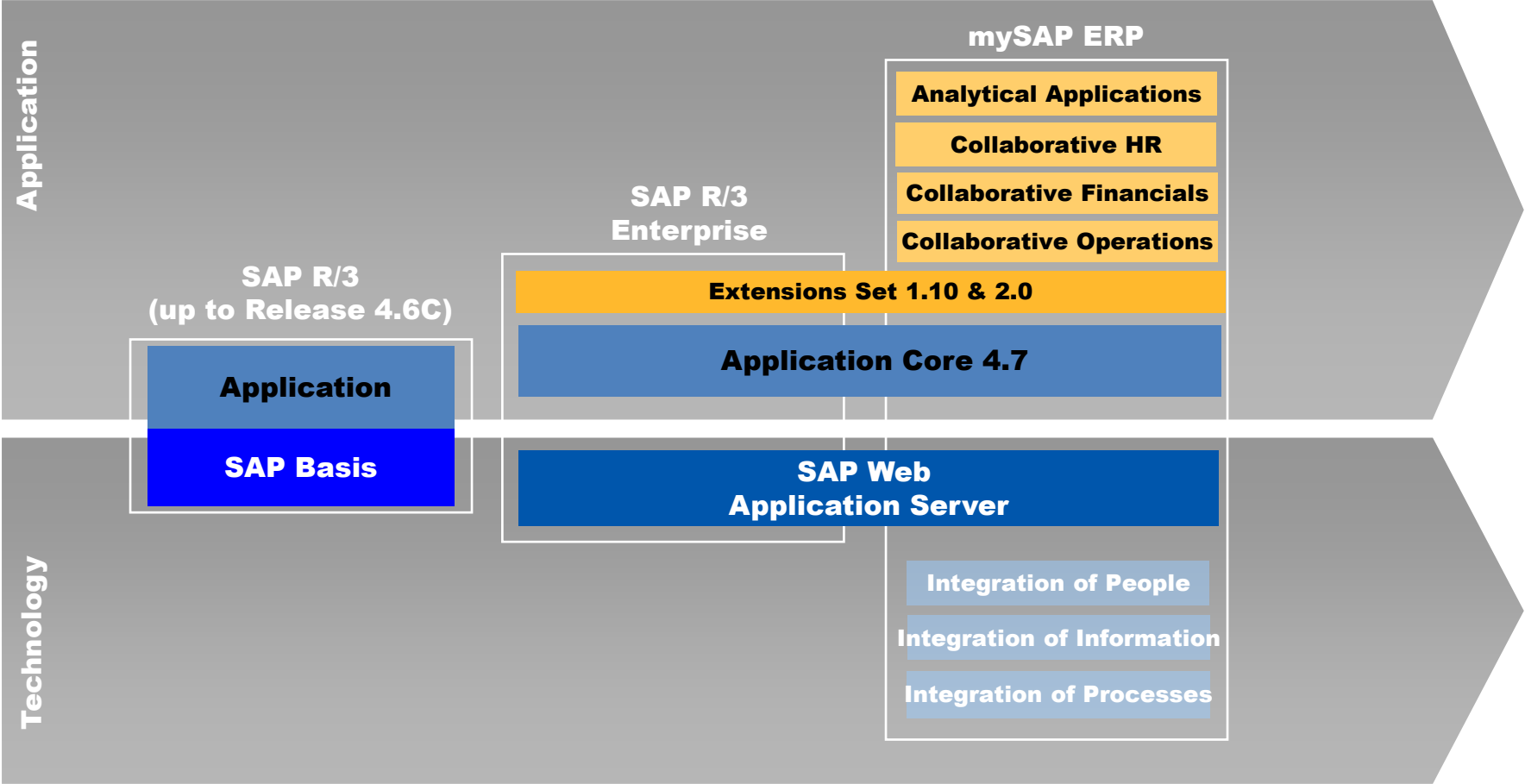
*ERP software is regarded as obsolete. The first "New Dimension" products conquer the market*

## Integrated Business Suite & xApps

*E-business is defined as an extension of ERP software.*

*SAP sets a new standard*

# Progression from SAP R/3 to SAP ERP



# SAP ERP Financials



## Financials

- **Financial Accounting**
- **Management Accounting**
- **Corporate Governance**
- **Financial Supply Chain Management**

## Analytics

- **Strategic Enterprise Management**
- **Financial Analytics**

## Corporate Services

- **Travel Management**
- **Incentive & Commission Management**
- **Corporate Real Estate**

# Financial Accounting vs. Management Accounting

Goal:

Legal reporting

Level:

Defined by law for compliance

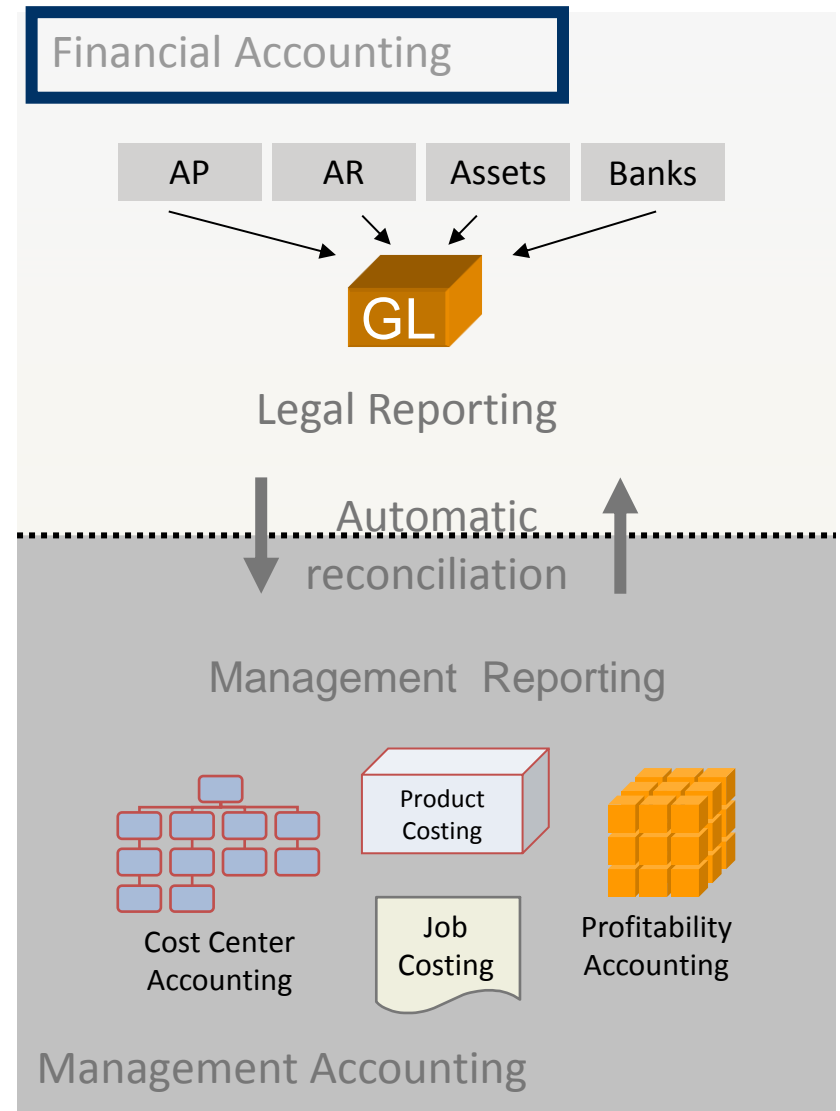
↓ One reconciled, consistent version of the truth ↑

Goal:

Management Support, even across legal entities

Levels:

Cost and revenues including their internal transfers



# New General Ledger

The new general ledger in *mySAP ERP* has the following **advantages** compared to the conventional general ledger in *R/3 Enterprise*:

- The new general ledger has an **extended data structure** by default. Customer fields can also be added to the general ledger.
- The (real-time) **document split (online split)** makes balance sheets for entities possible, such as "Segment".
- Reconciliation between Management Accounting (-> CO) and Financial Accounting (-> FI) can occur in real time – thanks to "**Real-Time Integration CO -> FI**" – Time-consuming reconciliation activities are omitted.
- The "new GL" makes it possible to manage **multiple "books" (-> ledgers)** within the general ledger. This is a possible display option to model **parallel accounting** in the SAP System.



# New General Ledger – Online Document Split

Display Document: General Ledger View

Entry View:

Doc. Number: 19000001538

Company Code: 1000

Fiscal Year: YYYY

Doc. Date: MM/DD/YYYY

Posting Date: MM/DD/YYYY

Period: M

Ledger 0L:

Document: 19000001538

Fiscal Year: YYYY

Period: M

CCd	Itm	PK	Account	Name	Amount	Curr.	FncArea	CCtr	Segment		
1000	1	31	160000	Accts Payable	4640-	EUR			SEG A		
1000	2	40	417000	Service	4000	EUR	0400	1000			
1000	4	40	154000	Input Tax	640	EUR					
					0.00	EUR				SEG A	
1000	1	31	160000	Accts Payable	6960-	EUR			SEG B		
1000	3	40	417000	Service	6000	EUR	0100	4140			
1000	4	40	154000	Input Tax	960	EUR					
					0.00	EUR				SEG B	

FB03

# New General Ledger – Real Time Integration

1.

A posting for wages/salaries (-> account 420000) is entered in FI  
 An assignment is also made to cost center 1000 and functional area 0400 is derived.

FI

420000	Payables
500	500
Functional Area 0400: 500	

CO

<u>Cost Center 1000</u>	
420000	+ 500

2.

The value on cost center 1000 is now reposted (for example, by a manual reposting in CO) to cost center 4140. However, functional area 0100 is assigned to cost center 4140.

The following occurs in real time:

CO

<u>Cost Center 1000</u>		<u>Cost Center 4140</u>	
420000	+ 500	420000	+ 500
420000	- 500		
	Σ		0

2a.

FI

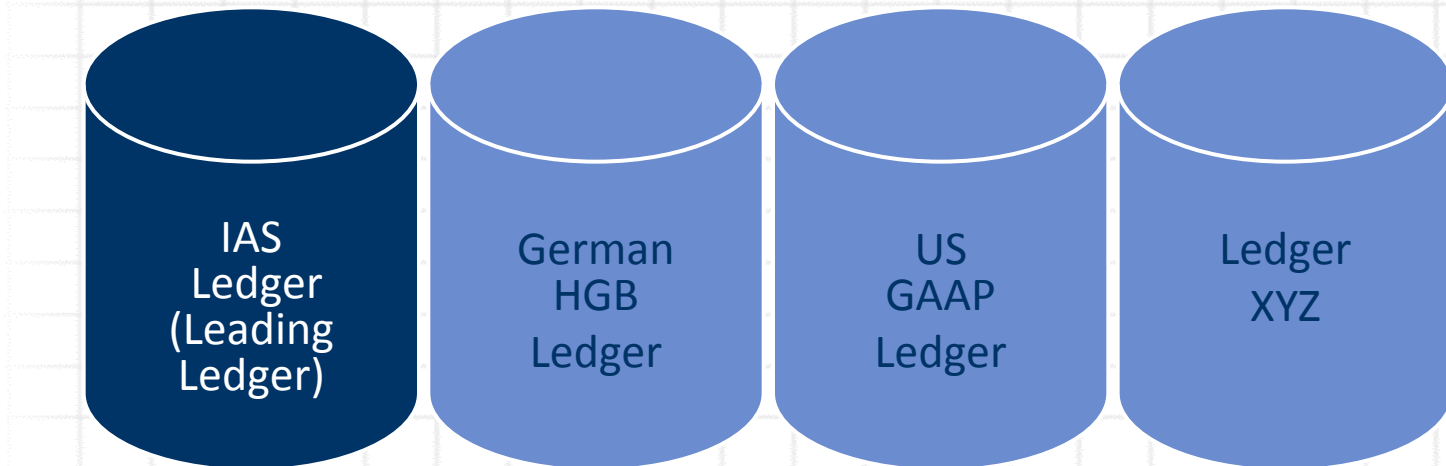
2b.

420000	420000
500	500
Functional Area 0400: 500	
	500
	- 500
	Σ
	0
Functional Area 0100: 500	

# New General Ledger – Parallel Accounting

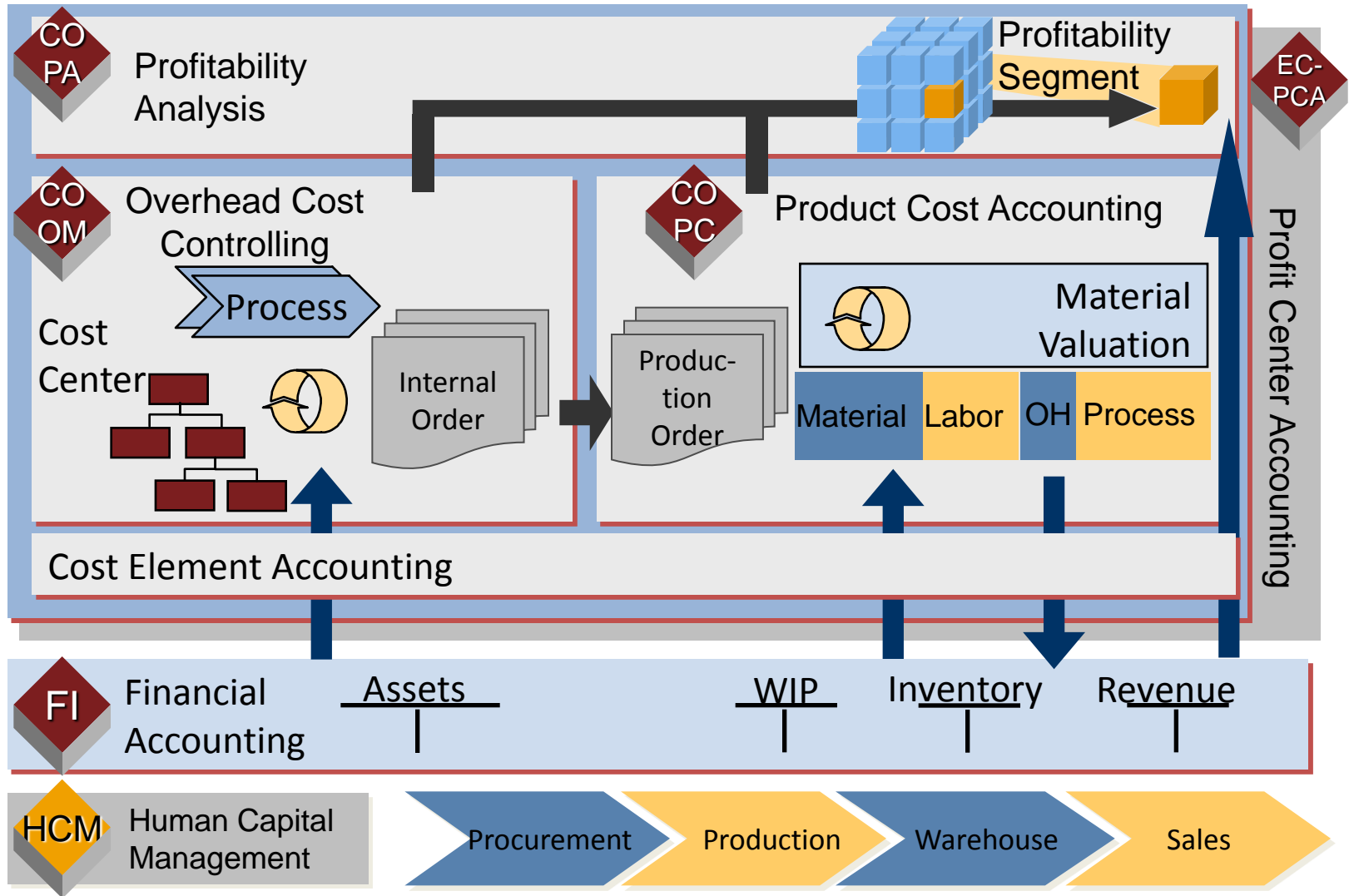
- In each client, there is only one leading ledger.
- However, you can also have non-leading ledgers (within General Ledger Accounting) alongside the leading ledger!
- The leading ledger generally reflects the set of accounting principles used to create group financial statements (leading valuation)

Example:

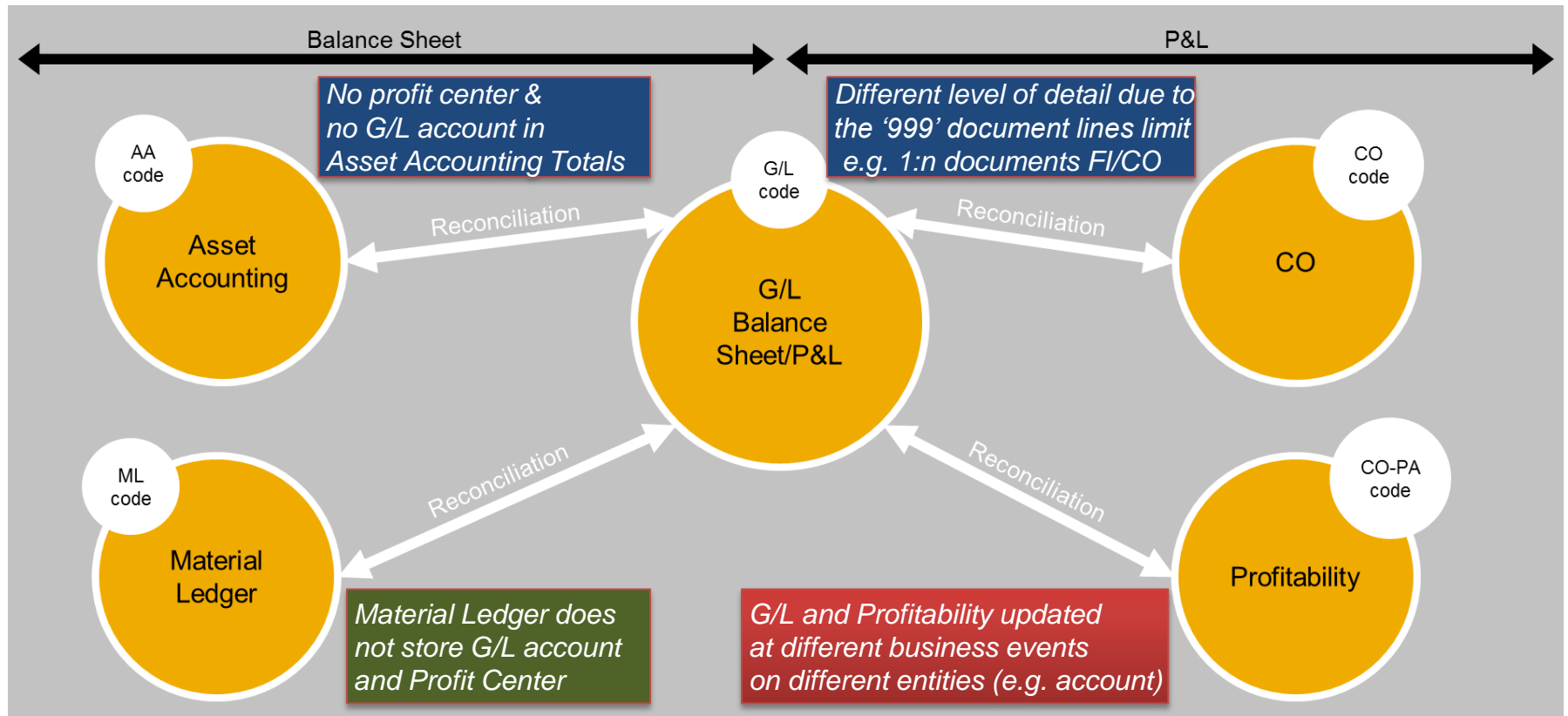




# Management Accounting Architecture



# Different Sources of Truth



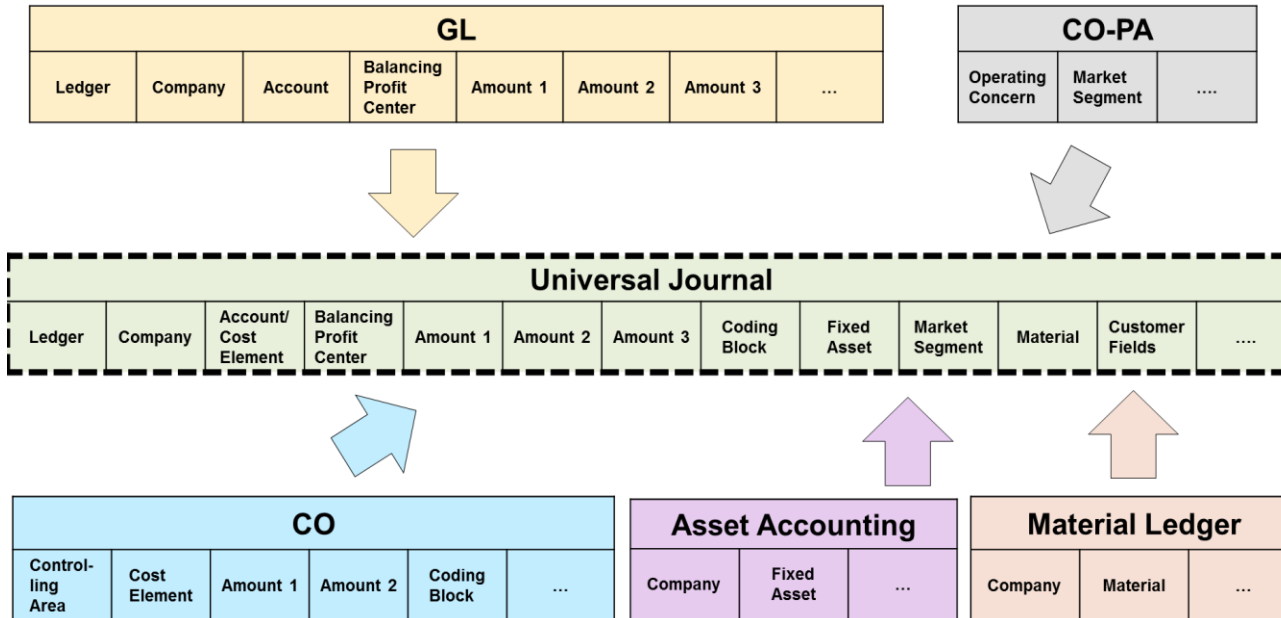
AA – Asset Accounting  
P&L – Profit & Loss Statement

G/L – General Ledger

CO – Controlling  
PA – Profitability Analysis

ML – Material Ledger  
FI - Financials

# New Architecture – Universal Journal as the Single Source



- One line item table with full detail for all components. Data stored only once, so no reconciliation needed by architecture.
- Fast multi-dimensional reporting on the Universal Journal possible without replicating data to BI. If BI is in place, one single BI extractor is needed.
- Reduction of memory footprint through elimination of redundancy.
- Technical preparation done to enhance important structural capabilities of the Financials solution (e.g. multi-GAAP, additional currencies)

# COGS in Sales Order Processing Classic ACCT & CTRL

**Display Material Document 4900000001 : Details 0001 / 0001**

Messages WM Details... Material

Movement Type: 601 SD goods issue:delv  
 Material: R-F100 Pump

Quantity in  
 Unit of Entry: 1 PC Plant: 1000 Stor. Loc.: 0002

Account Assignment  
 G/L Account: 893015  
 Unloading Point: Tor A23 Goods recipient: 0000001000  
 Customer: 1000

Goods Issue to  
Sales Order Delivery

**Display Document: Data Entry View**

Display Currency General Ledger View

Data Entry View

Document Number: 4900000001 Company Code: 1000 Fiscal Year: 2015  
 Document Date: 27.09.2015 Posting Date: 27.09.2015 Period: 9  
 Reference: 0080120199 Cross-Comp.No.:  
 Currency: EUR Texts exist:  Ledger Group:

CoCd	Item	PK	S.	Account	Description	Amount	Curr.	Tx
1000	1	99		792000	Finished goods inven	534,47	EUR	
	2	81		893015	Cost of goods sold	534,47	EUR	

Financial Accounting and Profitability Analysis Accounting Based:

**Cost of Goods Sold: Standard-Price \* Delivered Quantity**



# COGS in Sales Order Processing New Simple Finance

**Display Material Document 4900000030 : Details 0001 / 0001**

Messages WM Details... Material

Movement Type: 601 [GD goods issue:delvy]  
 Material: R-F100 Pump

Quantity in  
 Unit of Entry: 1 PC Plant: 1000 Stor. Loc.: 0002

Account Assignment  
 G/L Account: 893015  
 Unloading Point: Tor A23 Goods recipient: 0000001000  
 Customer: 1000

Goods Issue to  
Sales Order Delivery

**Display Document: Data Entry View**

Display Currency General Ledger View

Data Entry View

Document Number	4900000016	Company Code	1000	Fiscal Year	2015
Document Date	27.09.2015	Posting Date	27.09.2015	Period	9
Reference	0080120202	Cross-Comp.No.			
Currency	EUR	Texts exist	<input type="checkbox"/>	Ledger Group	

CoCd	Item	PK	S	Account	Description	Amount	Curr.	Tx
1000	1	99		792000	Finished goods inven	534,47-	EUR	
	2	81		893015	Cost of goods sold	534,47	EUR	
	3	50		893015	Cost of goods sold	534,47-	EUR	
	4	40		893100	CC Raw Materials	175,83	EUR	
	5	40		893115	CC Production Labor	212,72	EUR	
	6	40		893120	CC Production Setup	3,57	EUR	
	7	40		893125	nC Production Maschi	123,09	EUR	
	8	40		893145	CC Material Overhead	17,58	EUR	
	9	40		893180	CC Process Productio	1,68	EUR	

Financial Accounting and Profitability Analysis Accounting Based:

**Cost of Goods Sold: Standard-Price \* Delivered Quantity AND COST COMPONENT SPLIT**

# Material Cost Estimate as Basis for COGS

**Display Material Cost Estimate with Quantity Structure**

Costing Structure Off Detail List Off Hold

Material: R-F100 Pump  
Plant: 1000

Costing Structure: Pump  
 - Casing  
 - Fly wheel  
 - Hollow shaft  
 - Electronic TURBODRIVE

Costing Data Dates Qty Struct. Valuation History Costs

Costs Based On: Price Unit 1 PC

Cost Component View	Total Costs	Fixed Costs	Variable Costs	Currency
Cost of goods manufactured	534,47	333,15	201,32	EUR

Type of Cost Component Split:  
 Main Cost Component Split  
 Auxiliary Cost Component Split

Cost Components for Material R-F100 Plant 1000

CC...	Name of Cost Comp.	Overall	Fixed	Variable	Crcy
10	Raw Materials	175,83		175,83	EUR
20	Purchased Parts				EUR
25	Freight Costs				EUR
30	Production Labor	212,72	210,72	2,00	EUR
40	Production Setup	3,57	3,57		EUR
50	Production Machine	123,09	110,07	13,02	EUR
60	Production Burn-In				EUR
70	External Processing				EUR
75	Work Scheduling				EUR
80	Material Overhead	17,58	8,79	8,79	EUR
90	Equipment Internal				EUR
95	Equipment External				EUR
120	Other Costs				EUR
200	Process "Production"	1,68		1,68	EUR
210	Process "Procurement"				EUR
		534,47	333,15	201,32	EUR

SAP

The Cost Component Split can be take over to all modules in Accounting & Controlling

# Customizing in Financial Accounting COGS

Structure

- Financial Accounting (New)
  - Financial Accounting Global Settings (New)
  - General Ledger Accounting (New)
    - Master Data
    - Business Transactions
    - Statistical Key Figures
    - Periodic Processing
  - Check/Count
  - Closing Cockpit (Manage Templates and Task Lists)
  - Valuate
  - Reclassify
  - Allocation
  - Document
  - Report
  - Carry Forward
  - Closing/Opening Postings (Specific Countries Only)
  - Integration
- Asset Accounting
- Materials Management
  - Define Accounts for Materials Management
  - Perform Document Summarization for Materials Management
  - Carry Out Enhanced Document Summarization for Materials Management
  - Define Accounts for Splitting the Cost of Goods Sold
  - Define Accounts for Splitting Price Differences

## Change View "Detailed COGS Accounts": Overview

New Entries

Splitting of Cost of Goods Sold

- Splitting Scheme
- Detailed COGS Accounts**
- Company Code Assignment

COGS Split Scheme: COGS\_SPLIT

Chart of Accts: INT

Cost Comp. Str.: 01

Detailed COGS Accounts						
COGS Acct	CComp	Name of Cost Component	Target Acc	Short Text	Default	
893015	10	Raw Materials	893100	CC Raw Materials	<input type="checkbox"/>	
893015	20	Purchased Parts	893105	CC Purchased Parts	<input type="checkbox"/>	
893015	25	Freight Costs	893110	CC Freight Costs	<input type="checkbox"/>	
893015	30	Production Labor	893115	CC Production Labor	<input type="checkbox"/>	
893015	40	Production Setup	893120	CC Production Setup	<input type="checkbox"/>	
893015	50	Production Machine	893125	nC Production Maschi	<input type="checkbox"/>	
893015	60	Production Burn-In	893130	CC Production Burn-i	<input type="checkbox"/>	
893015	70	External Processing	893135	CC External Processi	<input type="checkbox"/>	
893015	75	Work Scheduling	893140	CC Work Scheduling	<input type="checkbox"/>	
893015	80	Material Overhead	893145	CC Material Overhead	<input type="checkbox"/>	
893015	90	Equipment Internal	893150	CC Equipment interna	<input type="checkbox"/>	
893015	95	Equipment External	893155	CC Equipment extern	<input type="checkbox"/>	
893015	100	Admin. Overhead	893160	CC Administration Ov	<input type="checkbox"/>	
893015	105	Sales Order Process.	893165	CC Sales Order Proce	<input type="checkbox"/>	
893015	110	Sales Overhead	893170	CC Sales Overhead	<input type="checkbox"/>	
893015	120	Other Costs	893175	CC Other Costs	<input checked="" type="checkbox"/>	
893015	200	Process "Production"	893180	CC Process Productio	<input type="checkbox"/>	
893015	210	Process"Procurement"	893185	CC Process Procureme	<input type="checkbox"/>	
895000	10	Raw Materials	893100	CC Raw Materials	<input type="checkbox"/>	

Assign the Elements of the Cost Component Split to therefore defined Accounts.  
Assign Split Scheme to Company Code

# Example Report in Accounting Based CO-PA

**Set Operating Concern**

Operating concern: **IDEA** Op. Concern IDES Worldwide

Status:

Type of Profit. Analysis:

- costing-based
- account-based

**Execute Profitability Report**

*IDES Services Inc.*

Navigation	P. N.	Country+region	--	--	--
• Country+region		• DE 11 Berlin	3.600,00	175,83	2,00
• Industry		• Result	3.600,00	175,83	2,00
• Division					
• Product					
• Customer					

Sales Revenue	3.600,00
Raw Materials	175,83
Production Labor var	2,00
Production Setup var	0,00
Production Masch var	13,02
Overhead var	8,79
Process Cost var	1,68
CM I	3.409,15
Production Labor	210,72
Production Setup	3,57
Production Maschine	110,07
Material Overhead	8,79
Production Process	0,00
CM II	3.084,79
Comp. Material	0,00

Reporting with  
Contribution Margin  
In Accounting Based  
Profitability Analysis

# Price Difference Manufacturing Classic Acct. & Ctrl.

**Actual Settlement: Order Detail list**

Basic list | Sender | Receiver | Accounting documents | Settlement rule

Detail list - Settled values

Senders	Text send.	Receivers	ValCOArCur	Inform.
ORD 60002861	Pump	MAT 1000/R-F100	1.138,98	
		PSG 0000128224	1.138,98	Variances

List of Documents in Accounting

**Documents in Accounting**

Doc. Numb.	Object type text
0100000123	Accounting document
0000339524	Profit center doc.
1000330514	Spec. purpose ledger
0200155335	Controlling Document
0700018700	Profitab. Analysis

**Display Document: General Ledger View**

Display Currency | Entry View | Other Ledger

Data Entry View

Document Number	100000123	Company Code	1000	Fiscal Year	2015
Document Date	27.09.2015	Posting Date	30.09.2015	Period	9
Reference		Cross-Comp.No.			
Currency	EUR	Texts exist	<input type="checkbox"/>	Ledger Group	

Ledger OL

Doc.	100000123	FiscalYear	2015	Period	9
------	-----------	------------	------	--------	---

CoCd	Item	L.item	PK	S...	Account	Description	Amount	Curr.	Tx
1000	1	000001	91		895000	Factory output of pr	1.138,98	EUR	
	2	000002	83		231500	Expense from price d	1.138,98	EUR	

**Display Line Items**

Integration

Document number: 700018700 | Item number: | Posting date: 30.09.2015 | Period: 9

Characteristics | Value fields | Origin data | Administrat.data

Foreign currency

Currency key: EUR | Euro | Exchange rate: 1,00000

Legal view (operating concern currency)

Value field	Amount	Un.
Production costs		EUR
Quant. Variance Mat.	129,86	EUR
Quant. Variance Prod	263,35	EUR
Quantity discount		EUR
Remaining Variances	0,02	EUR
Rent Costs SEM215		EUR
Research & Develop.		EUR

Settlement of price differences to Financial Accounting aggregated to one amount.

Settlement to Profitability Analysis Costing Based with different variance categories on different value fields.

# Price Difference Manufacturing New Simple Finance

**Actual Settlement: Order Detail list**

Basic list Sender Receiver Accounting documents

Detail list - Settled values

Senders	Text send.	Receiver	ValCOArCur	Inform.
ORD 60002861	Pump	MAT 1000/R-F100	1.138,98	
		PSG 0000128832	1.138,98	Variances

Settlement of different variance categories to Financial Accounting to therefore defined accounts additional to total amount to the account: Loss-Own-Production Price Difference.

**Display Document: Data Entry View**

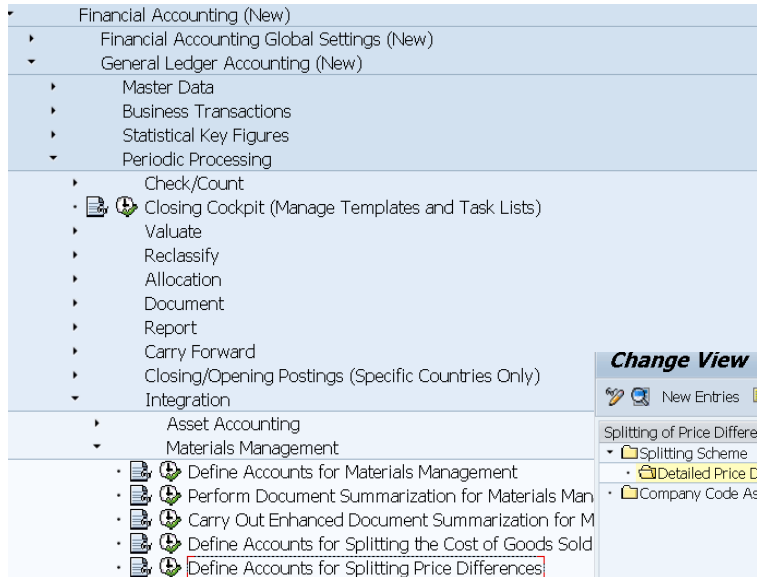
Display Currency General Ledger View

Data Entry View

Document Number	100000133	Company Code	1000	Fiscal Year
Document Date	27.09.2015	Posting Date	30.09.2015	Period
Reference		Cross-Comp.No.		
Currency	EUR	Texts exist	<input type="checkbox"/>	Ledger Group

CoCd	Item	PK	S...	Account	Description	Amount	Curr.
1000	1	91		895000	Factory output of pr	1.138,98-	EUR
	2	83		231500	Expense from price d	1.138,98	EUR
	3	50		231500	Expense from price d	1.138,98-	EUR
	4	40		893500	CC Scrap	525,05	EUR
	5	40		893505	CC Price Variance	182,33	EUR
	6	40		893515	CC Quantity Variance	129,86	EUR
	7	40		893520	CC Quantity Variance	263,35	EUR
	8	40		893535	CC Lot Size Variance	38,37	EUR
	9	40		893540	Output Price Varianc	0,03	EUR
	10	50		893545	Remaining Output Var	0,01-	EUR

# Customizing in Financial Accounting PRD



Assign the variance category to therefore defined account.

**Change View "Detailed Price Difference Accounts": Overview**

Splitting of Price Differences  
 Splitting Scheme: **DIFF\_SPLIT** Splitting price differences  
 CO Area: **1000** CO Europe  
 Chart of Accts: **INT** Chart of accounts - international

Line	Description	Cost Elem. From	Cost Elem. To	CElem Group	VCat	G/L Account	Default
0010	Scrap	Q	Q	CO-PC-TOT	SCRFP	893500	<input checked="" type="checkbox"/>
0020	Price Variance	Q	Q	CO-PC	PRIV	893505	<input type="checkbox"/>
0025	Mixed Price Variance	Q	Q	CO-PC-TOT	MXFPV	893510	<input type="checkbox"/>
0030	Quantity Variance Material	Q	Q	CO-PC-MAT	QTYV	893515	<input type="checkbox"/>
0035	Quantity Variances Production	Q	Q	CO-PC-PROD	QTYV	893520	<input type="checkbox"/>
0040	Resource Usage Variance	Q	Q	CO-PC-TOT	RSUV	893525	<input type="checkbox"/>
0050	Remaining Input Variance	Q	Q	CO-PC-TOT	INPV	893530	<input type="checkbox"/>
0060	Lot Size Variance	Q	Q	CO-PC	LSFV	893535	<input type="checkbox"/>
0065	Output Price Variance	Q	Q	CO-PC	OPPV	893540	<input type="checkbox"/>
0070	Remaining Output Variance	Q	Q	CO-PC	REMV	893545	<input type="checkbox"/>

Assign Spit Scheme to Company Code

# Summarize

## Aligned

### Single Source of Truth

Provide **one-stop** access to all financial and non-financial data

Ensure **harmonized** data without manual reconciliation

Enable **flexible** data drill-down to actionable information





# Related SAP Links

Where	What	Link
SAP.COM	SAP HANA	<a href="http://hana.sap.com/">http://hana.sap.com/</a>
Help Portal	SAP HANA Innovations for SAP Business Suite	<a href="http://help.sap.com/hibs">http://help.sap.com/hibs</a>
SAP.com	Discover SAP S/4HANA	<a href="http://discover.sap.com/S4HANA">http://discover.sap.com/S4HANA</a>
SAP Service Marketplace	Hybrid Scenarios	<a href="http://service.sap.com/public/hybrid">http://service.sap.com/public/hybrid</a>
SAP.COM	Help Page for SAP Simple Finance	<a href="http://www.sap.com/solution/lob/finance/software/cloud-erp-finance-management/index.html">http://www.sap.com/solution/lob/finance/software/cloud-erp-finance-management/index.html</a>

**University of Rijeka**

**New General Ledger  
Simple Finance  
in SAP System S4HANA**

**Thank you for participation**