



# Central Finance: Looking at Transactional Data from a Business Analytics and Reporting Point of View

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## In This Session

- We will look at the Central Finance solution from the point of view of reporting and business analytics benefits
- We will discuss how the flexibility that Central Finance brings can improve financial reporting processes

## What We'll Cover

- A quick look at SAP S/4HANA Finance and Central Finance
- How financial information can be enriched in a Central Finance solution
- Wrap-up

## Central Finance Experience



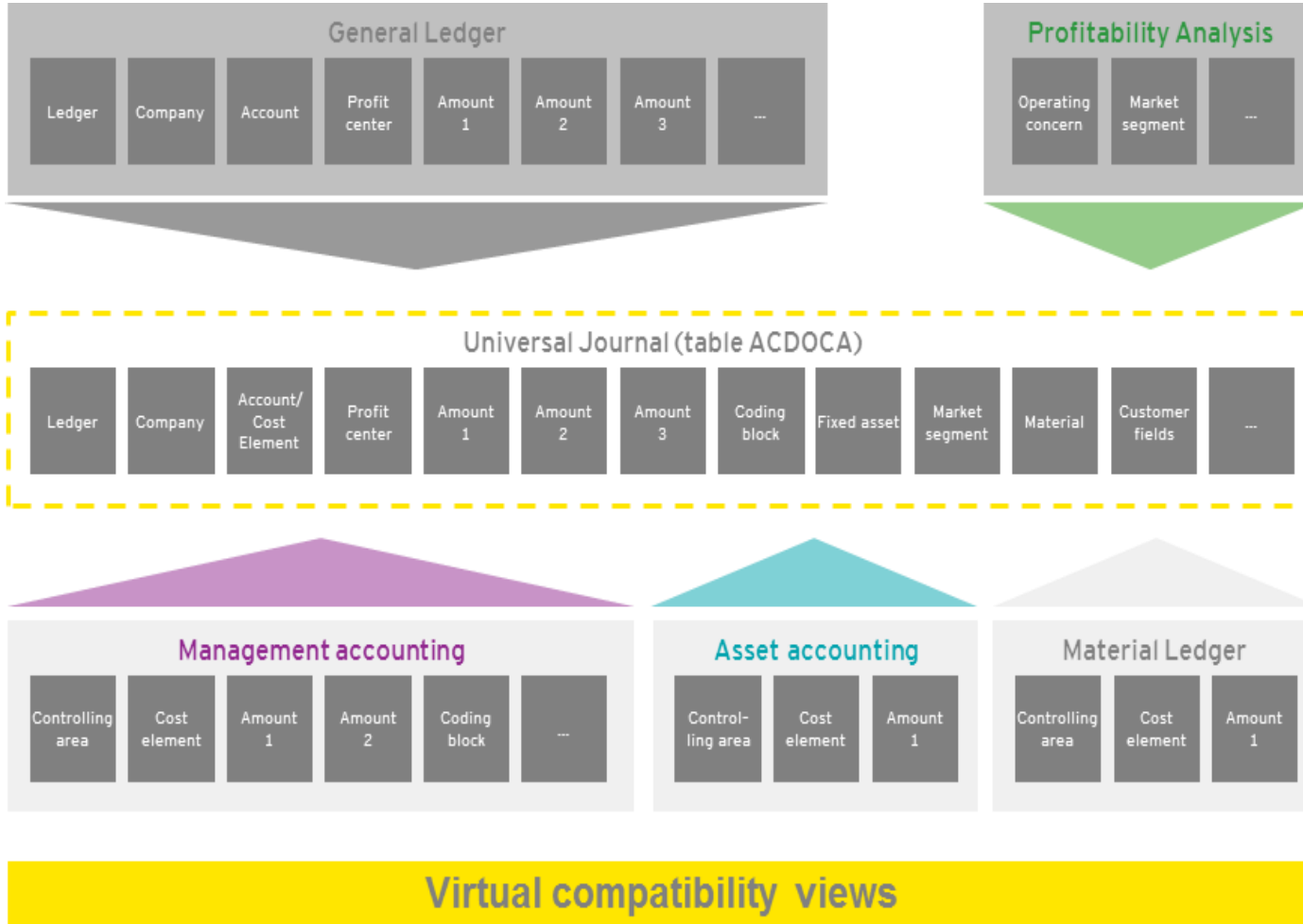
Poll

What is your level of experience with Central Finance?

- **None. What is Central Finance?**
- **Done some research, saw some presentations. (You are not going to show just those same slides, are you?)**
- **Quite a bit of experience; implementing, starting to implement**
- **I am an expert! I should be presenting to you.**

# A Quick Look at SAP S/4HANA Finance and Central Finance

## SAP S/4HANA Finance



Key Feature

## Key Characteristics

- Motto: “Take the best of all worlds” (e.g., ledger, market segment, coding block, etc.)
- Secondary cost elements are G/L accounts
- One line item table with full detail for all components
- Data stored only once; no reconciliation needed by architecture
- Reduction of memory footprint through elimination of redundancy
- Fast multi-dimensional reporting on the Universal Journal possible without replicating data to BI

## A Quick Look at SAP S/4HANA Finance and Central Finance (cont.)

Great, but how do we get there?

**Current state:**

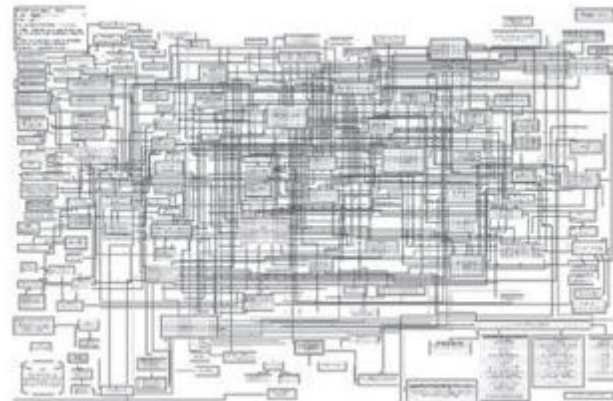
**Complex architecture**

- **Multiple ERP financial systems**
- **Multiple data warehouses**
- **Complex interfaces**
- **Non-harmonized master data management**
- **Lag time to synchronize all systems**
- **Need to reconcile across instances**
- **Various copies of data in multiple systems**

**Concern:**

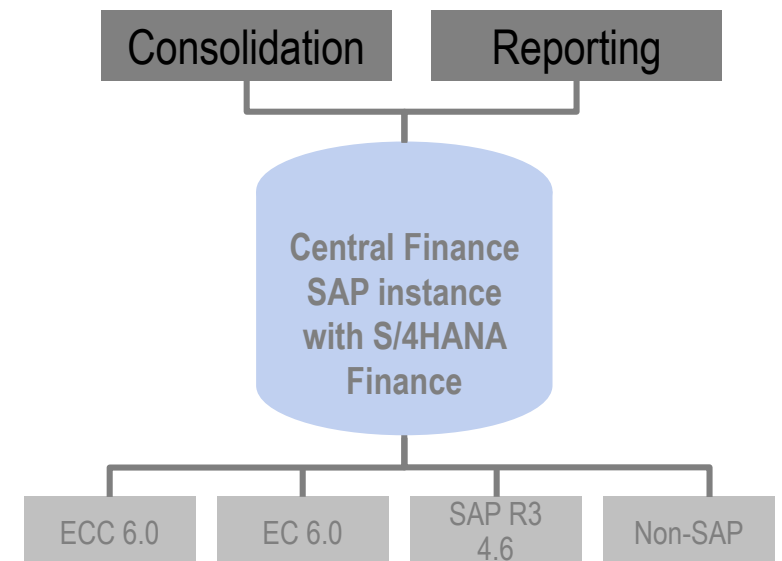
**High risk of implementing SAP S/4HANA Finance**

- **Too many dependencies to implement gradually**
- **Disruption to live systems**
- **High cost and long duration**



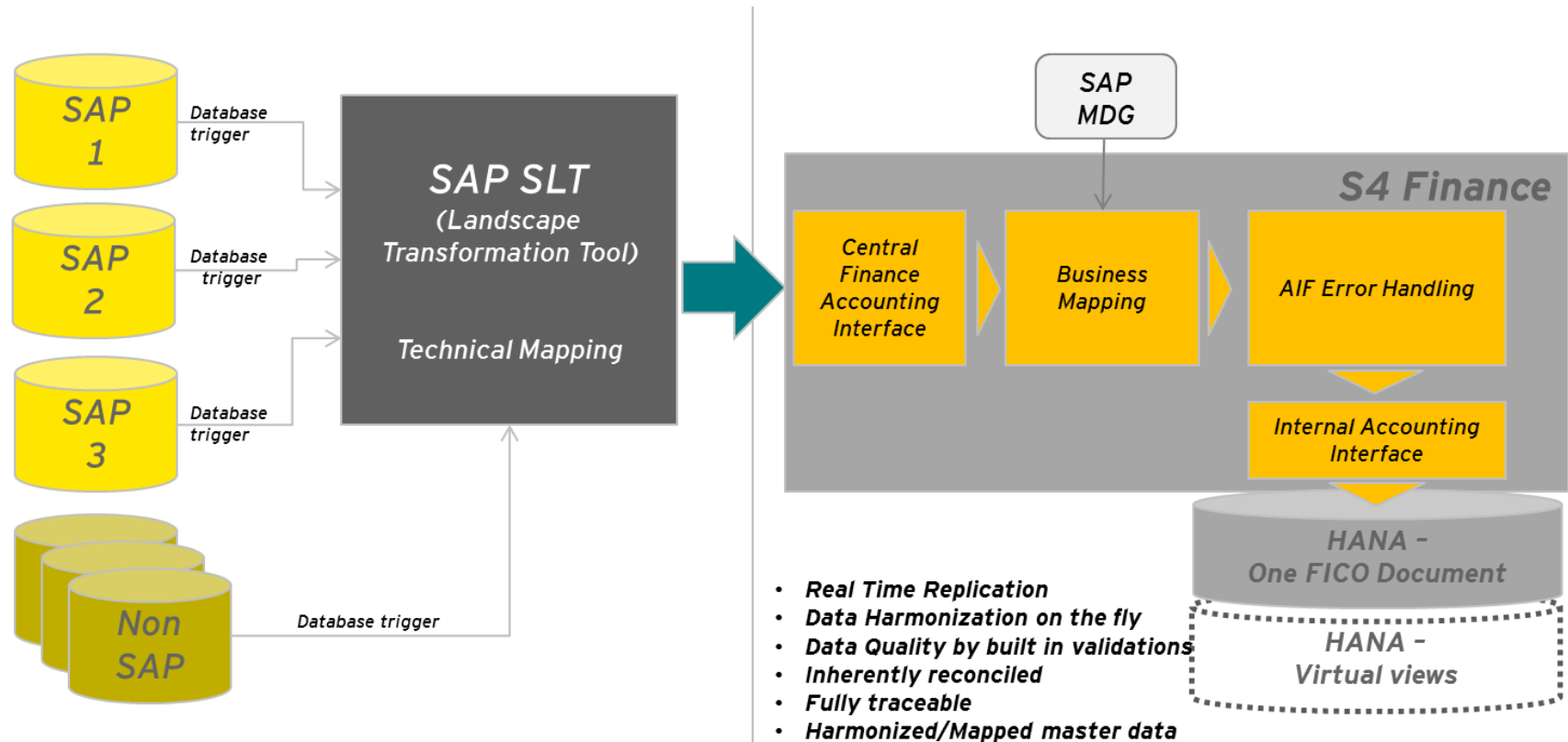
## A Quick Look at SAP S/4HANA Finance and Central Finance (cont.)

- What is Central Finance?
  - ♦ Central Finance is an adoption scenario that enables implementing SAP S/4HANA Finance with minimum risk or disruption to existing systems
  - ♦ It is beneficial for companies with diverse and distributed systems, as it enables a real-time replication of financial information from multiple instances that is harmonized into a Central Instance
    - ▶ Low implementation risk and disruption to existing systems; allows gradual move of SAP instances/processes into the single transactional system (SAP S/4HANA Finance)
    - ▶ Real-time harmonized global financial information on an SAP HANA platform with atomic detail, allowing flexible reporting using robust reporting tools
    - ▶ Universal Journal data model for external (FI), internal (CO), and profitability/market segment (COPA) accounting
    - ▶ No reconciliation across instances



# A Quick Look at SAP S/4HANA Finance and Central Finance (cont.)

- How does Central Finance work?



## Key

## Characteristics Key Feature

- SLT receives database triggers in source systems
- All data related to the transaction is collected from the source before it is committed to the source system accounting tables
- SAP S/4HANA Finance does the mapping/harmonization of master data and the error handling, before the transaction is re-posted to the Universal Journal in Central Finance, based on the Central Finance FICO configuration
- This allows postings and master data to be modified into a globally designed data model from a master data or configuration perspective

## What We'll Cover

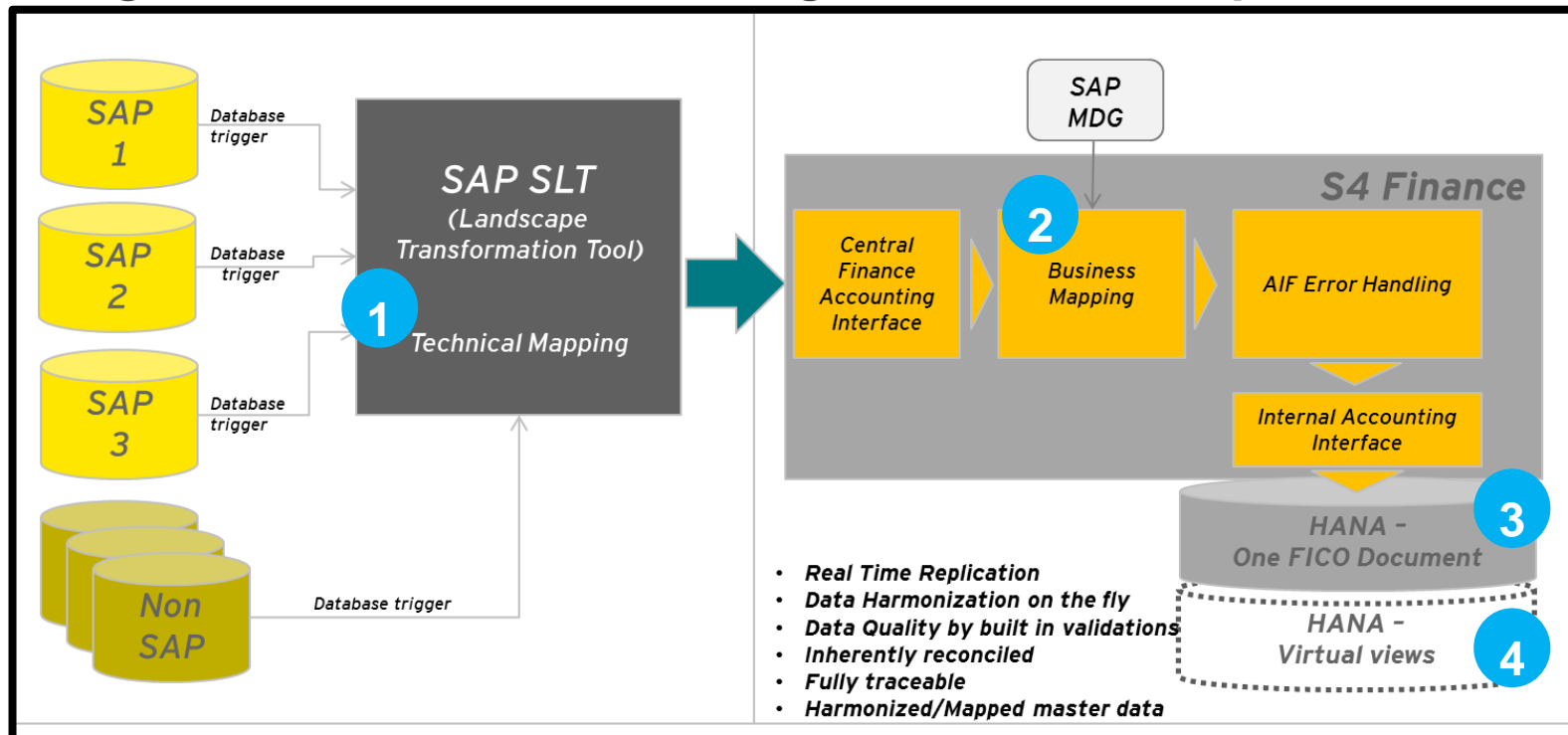
- A quick look at SAP S/4HANA Finance and Central Finance
- How financial information can be enriched in a Central Finance solution
- Wrap-up

# How Financial Information Can Be Enriched in a Central Finance Solution

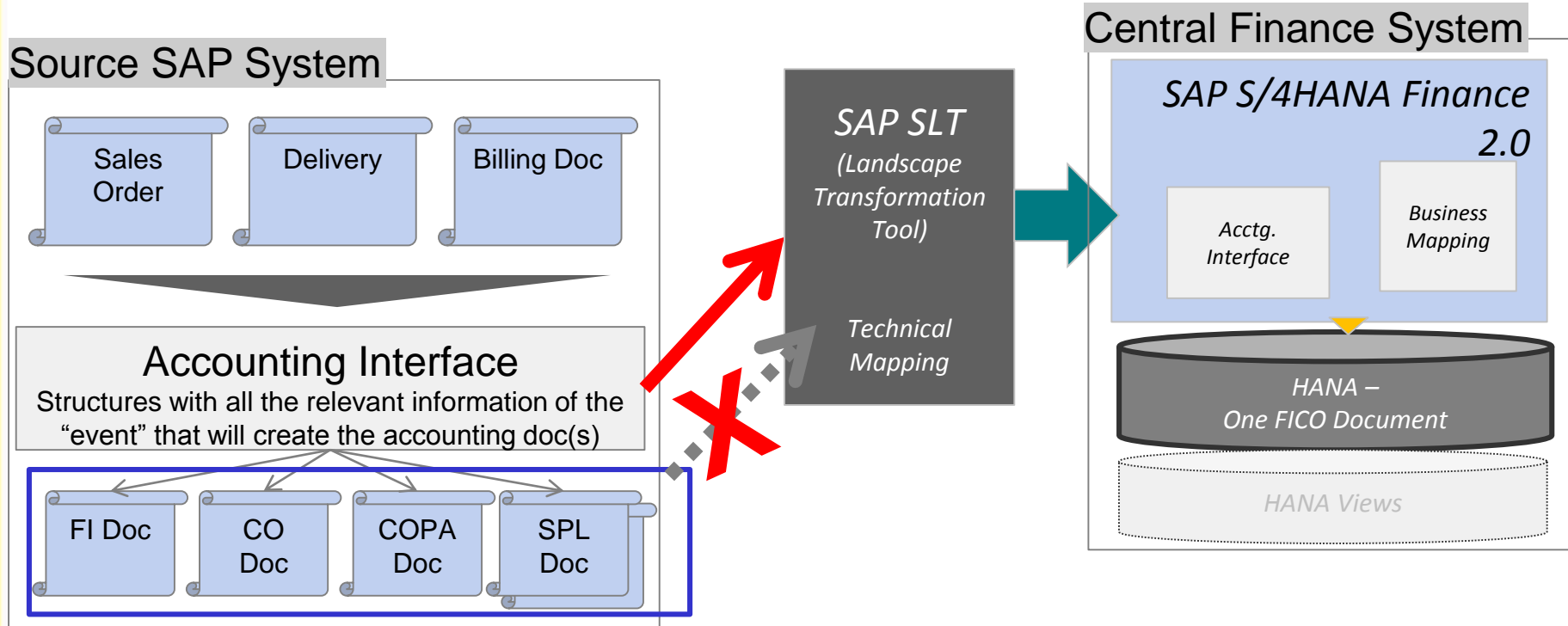
- In this section:
  - ◆ Using the data transfer logic in Central Finance
  - ◆ Using Business Mapping
  - ◆ Using SAP S/4HANA Finance Configuration
  - ◆ Using SAP HANA's capabilities

# How Financial Information Can Be Enriched in a Central Finance Solution (cont.)

- 1 Enriching financial information using the data transfer logic in Central Finance
- 2 Enriching financial information using business mapping
- 3 Enriching financial information using SAP S/4HANA Finance configuration
- 4 Enriching financial information using SAP HANA's capabilities



# 1 Enriching Financial Information Using the Data Transfer Logic in Central Finance



**Tip: Central Finance solution does not replicate the accounting document(s). It replicates the event that created the accounting document(s).**

## Key Characteristics

- The SLT hands over the information in the accounting interface structures, not the final accounting document(s)
- The accounting interface structure has much more information in it; in fact, it has all the Information that is used by SAP to construct the accounting documents according to the configuration in the system



Key Feature

# 1 Enriching Financial Information Using the Data Transfer Logic in Central Finance (cont.)

## Sample scenarios

- Condition types from a sales document are not part of the accounting document but are delivered to Central Finance by SLT as part of the accounting interface structure
- We can enhance the Central Finance document (or post a separate document, for example, to a parallel ledger) with this detail that is normally “lost” in the source system accounting docs

- Let's assume that multiple types of customer discount (different condition types) are posted to the same Sales discount account in Finance and in account-based COPA. We can:
  - Enhance the Universal Journal with a custom “Customer Discount type” field and capture this detail in separate line items
  - Or post a separate entry that details out the split in a parallel, or even an appendix ledger

- Let's assume that we have a bundle scenario. A cumulative condition type, in parallel, records bundle revenue. We can:
  - Capture the revenues for bundled products separately in a separate management reporting ledger

# 1 Enriching Financial Information Using the Data Transfer Logic in Central Finance (cont.)

- There is information that is only available in the source system and is not handed over to Central Finance (certain master data attributes, information on logistics documents, etc.)
- It is possible to enhance the accounting interface data that is captured in the source system to include these fields and enrich the Central Finance accounting documents (enhance the Universal Journal)

## Sample scenarios

- There can be master data items that are not replicated exactly the same way or even one-to-one into Central Finance
- We can include master data attributes that are relevant to reporting in Central Finance

- Much information in logistics documents that are not replicated into accounting documents can be included into the accounting interface and captured in the Universal Journal in Central Finance (material movement details, shipments, order details, even attributes from other modules, HR, etc.)

- Some fields that are derived or customized for a specific need (for example, specific to Special Purpose ledgers) may not be captured
- We can enhance the accounting interface data model with these fields and include them in the Universal Journal in Central Finance

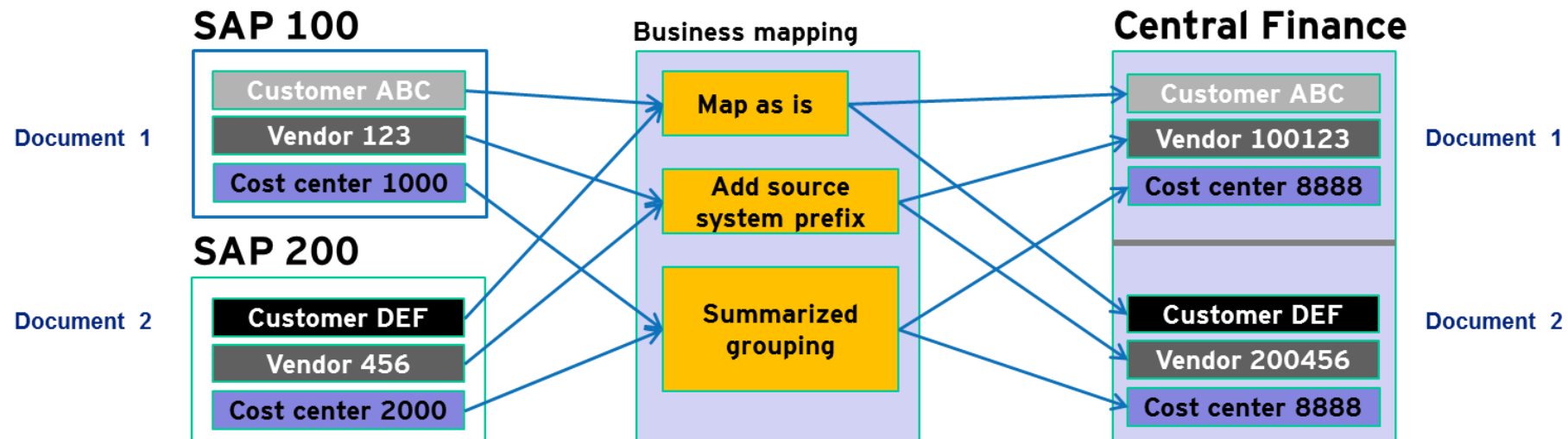
## 2 Enriching Financial Information Using Business Mapping

The business mapping logic can be designed with a more global mindset to enhance the usability and flexibility of the financial information of the Central Finance client

### Sample scenarios

- There can be master data items that are not necessarily mapped one-to-one in Central Finance
- For example, we may not need individual local cost center detail in Central Finance and point multiple cost centers into one cost center to facilitate better reporting (same can be done for individual customers, vendors, etc.)

- We can employ a more robust naming convention for some master data items, like adding source system prefix



### 3 Enriching Financial Information Using SAP S/4HANA Finance Configuration

- The financial documents in Central Finance are created based on the “event” that is brought over from the source system and also the configuration in the Central Finance client
- The event will be re-posted based on the rules configured in Central Finance

#### Sample scenarios

• Substitution/validation rules can be applied in Central Finance based on relevant needs

• Custom field extensions to the ledger can be applied using new GL functionality in Central Finance

Data in Source system	Rule	Data in Central Finance
Profit center 10000	Map as is	<b>Profit center 10000</b>
Company Code ABCD	Map as is	<b>Company Code ABCD</b>
Customer group AB	Map as is	<b>Customer group AB</b>
Business Area X1	Substitution rule based on customer group	<b>Business Area <u>Y1</u></b>
	Custom ledger field derivation based on Profit Center, Company Code, and Business Area (custom mapping table)	<b><u>Responsibility Area XYZ</u></b> <b>(Custom field)</b>

### 3 Enriching Financial Information Using SAP S/4HANA Finance Configuration (cont.)

- The financial documents in Central Finance are created based on the “event” that is brought over from the source system and also the configuration in the Central Finance client
- The event will be re-posted based on the rules configured in Central Finance

#### Sample scenario

- There can be COPA derivations in Central Finance that are not configured in the source system
- The derivation routines will be executed separately in Central Finance
- This means the COPA operating concern can be re-thought with many extra relevant characteristics, as long as they can be derived from the available information in the accounting interface

Data in Source system	Rule	Data in Central Finance
Brand 101	Map as is	Brand 101
Region NE	Map as is	Region NE
Dist. Channel EX	Map as is	Dist. Channel EX
	Custom COPA derivation based on Brand, Region, and Distribution Channel	<u>Market Segment 3000</u> ( <u>Custom COPA field</u> )



### 3 Enriching Financial Information Using SAP S/4HANA Finance Configuration (cont.)

- The financial documents in Central Finance are created based on the “event” that is brought over from the source system and also the configuration in the Central Finance client
- The event will be re-posted based on the rules configured in Central Finance

#### Sample scenario

• Document splitting can be applied in Central Finance even when it is not configured in the source system

Document in Source system

Dr/Cr	Dr/Cr	Vendor	Cost center	Profit Center	Account	Amount
Cr	Cr	JACK			Vendor	5000
Dr	Dr		123	ABC	Office expense	3000
Dr	Dr		789	XYZ	Office expense	2000

Document in CF system, Entry View

Dr/Cr	Dr/Cr	Vendor	Cost center	Profit Center	Account	Amount
Cr	Cr	JACK			Vendor	5000
Dr	Dr		123	ABC	Office expense	3000
Dr	Dr		789	XYZ	Office expense	2000

Document in CF system, Ledger View

Dr/Cr	Dr/Cr	Vendor	Cost center	Profit Center	Account	Amount
<b>Cr</b>	<b>Cr</b>			<b>ABC</b>	<b>Payables</b>	<b>3000</b>
<b>Cr</b>	<b>Cr</b>			<b>XYZ</b>	<b>Payables</b>	<b>2000</b>
Dr	Dr		123	ABC	Office expense	3000
Dr	Dr		789	XYZ	Office expense	2000

## 3 Enriching Financial Information Using SAP S/4HANA Finance Configuration (cont.)

- The financial documents in Central Finance are created based on the “event” that is brought over from the source system and also the configuration in the Central Finance client
- The event will be re-posted based on the rules configured in Central Finance

### Sample scenarios

- Some clients use the Account or Company Code method to deal with different accounting principles in their GL
- In Central Finance, parallel ledgers (new GL functionality) can be employed
- Based on the specific account, Company code, or document type, etc., such postings can be directed to post to a parallel ledger in Central Finance

- We can design and execute specific CO allocations that do not exist in the source systems
- These allocations, for example, can satisfy the need for a more global view of allocated costs

- An object can have different attributes in the Central Finance master data tables than in the source system
- For example, the profit center in the source system transaction will be overwritten if the cost center in the transaction is assigned to a different profit center in the Central Finance system

## Virtual Views in SAP HANA



Poll

Have you worked with virtual views in SAP HANA?

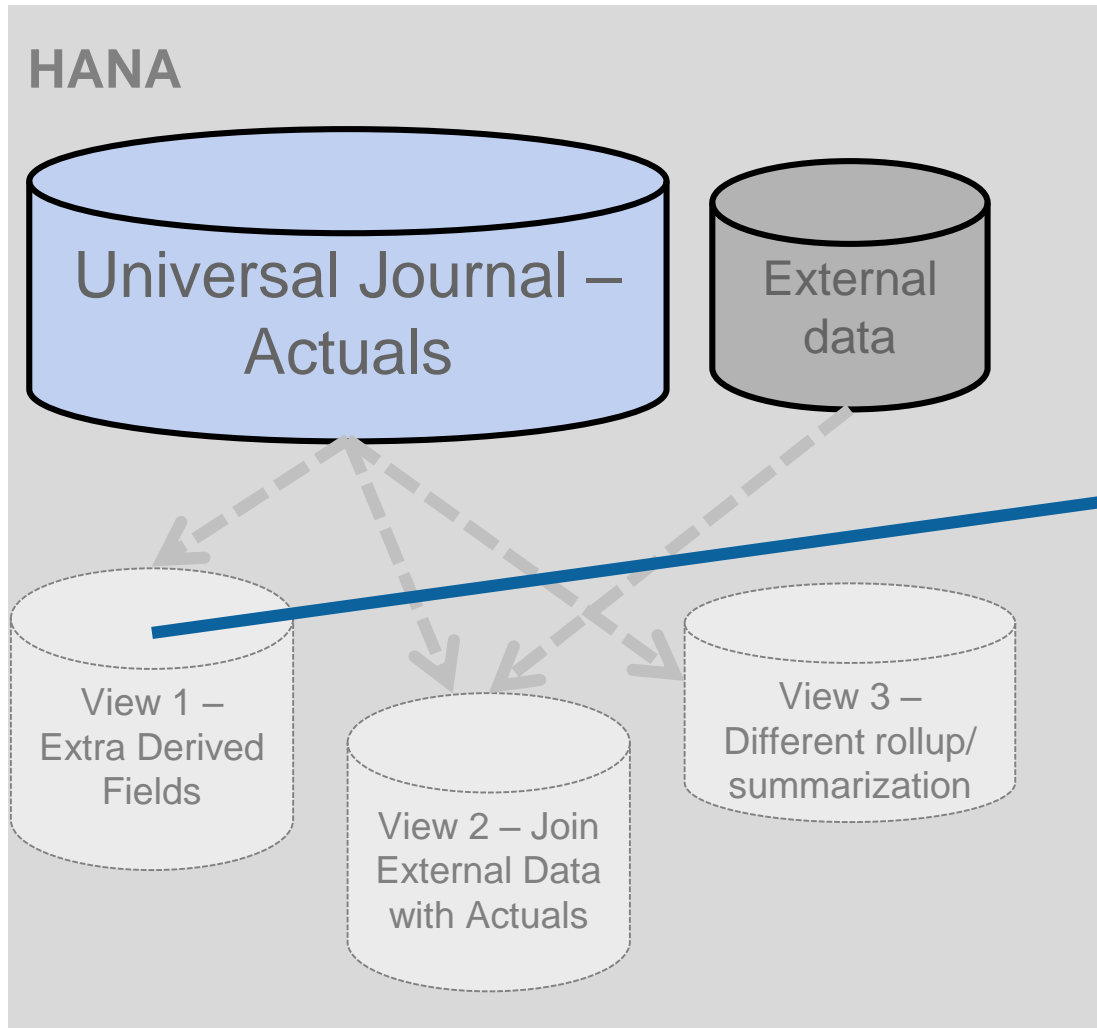
- Yes
- No

## 4 Enriching Financial Information Using SAP HANA's Capabilities

- Many more enhancements to the core financial information in Central Finance are made possible by SAP HANA's specific capabilities:
  - ◆ External or non-financial (non-actual) information housed in SAP HANA tables
    - ▶ External data can be captured in the Central Finance client's SAP HANA database for enriched reporting. External data can be:
      - *Non-financial data that enriches financial reporting (market research data, human resources information, industry information, product details, customer information, statistical key figures, etc.)*
      - *Financial data from SAP or non-SAP source systems that are not connected to Central Finance through SLT*
      - *Non-actual financial data that enriches financial information (plans, forecasts, budgets)*
  - ◆ Virtual views in SAP HANA
    - ▶ Virtual views are powerful enablers that can be used very effectively to realize the benefit of SAP HANA's capabilities
    - ▶ Virtual views are created in SAP HANA on the fly, based on predefined rules and are made available to reporting tools without physically being persisted in the database
- Many reporting needs can be met by utilizing a combination of these capabilities in a Central Finance scenario, with global financial data in one place

# 4 Enriching Financial Information Using SAP HANA's Capabilities (cont.)

## Sample scenarios

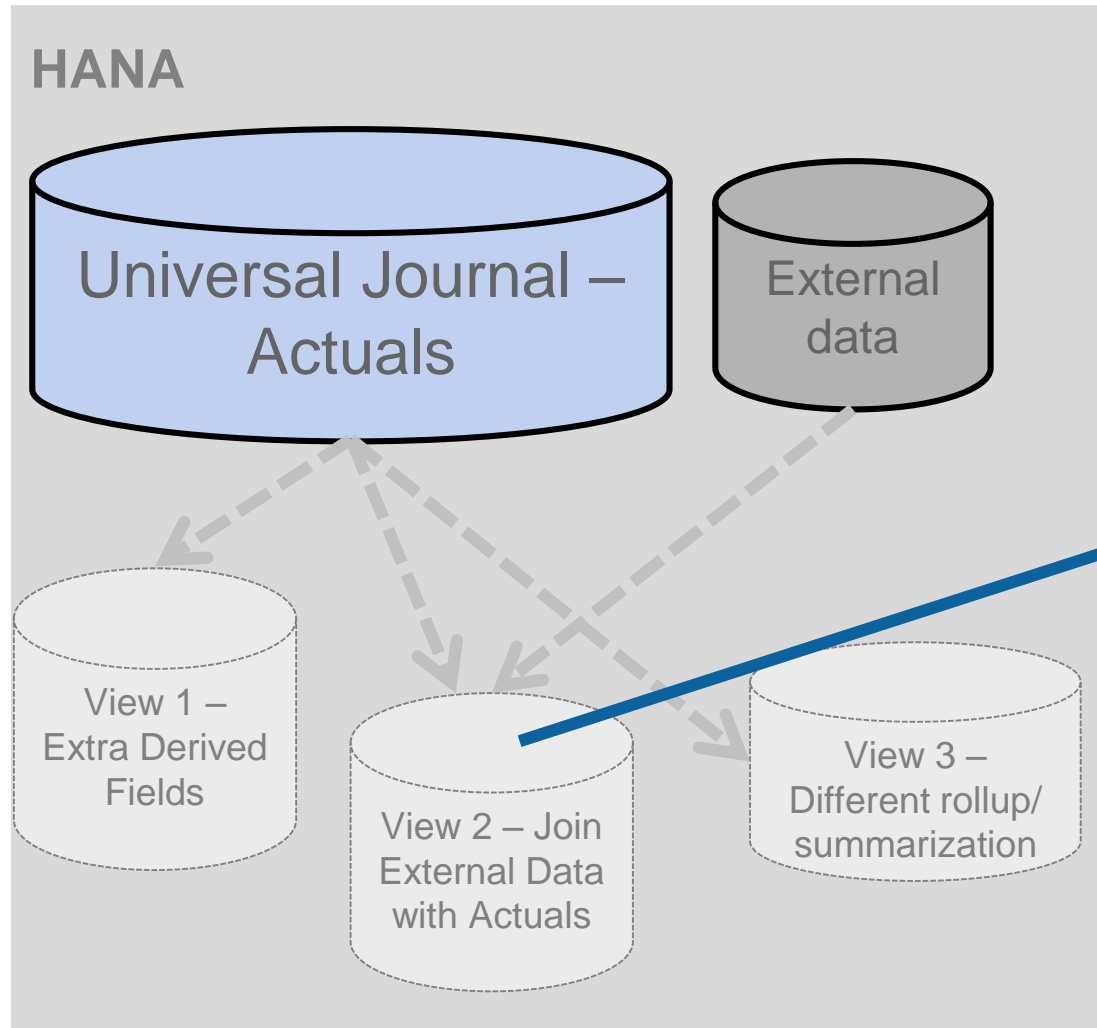


- For very specific (typically local/departmental) reporting needs, derivation of extra fields in a virtual view can be used
- A section of the Universal Journal table can be replicated into a virtual view with some extra fields virtually “derived” at runtime
- This will help avoid the over-complication of the persistent Universal Journal data model and reduce data footprint
- For example, the market segment field example from the previous slides can be in a virtual view, if it is not a global requirement for the Universal Journal data model

Data in CF	Rule	Data in virtual view ZACDOCA-MS1
Brand 101	Map as is	Brand 101
Region NE	Map as is	Region NE
Dist. Channel EX	Map as is	Dist. Channel EX
	Custom virtual derivation based on Brand, Region, and Distribution Channel	<u>Market Segment 3000</u>

## 4 Enriching Financial Information Using SAP HANA's Capabilities (cont.)

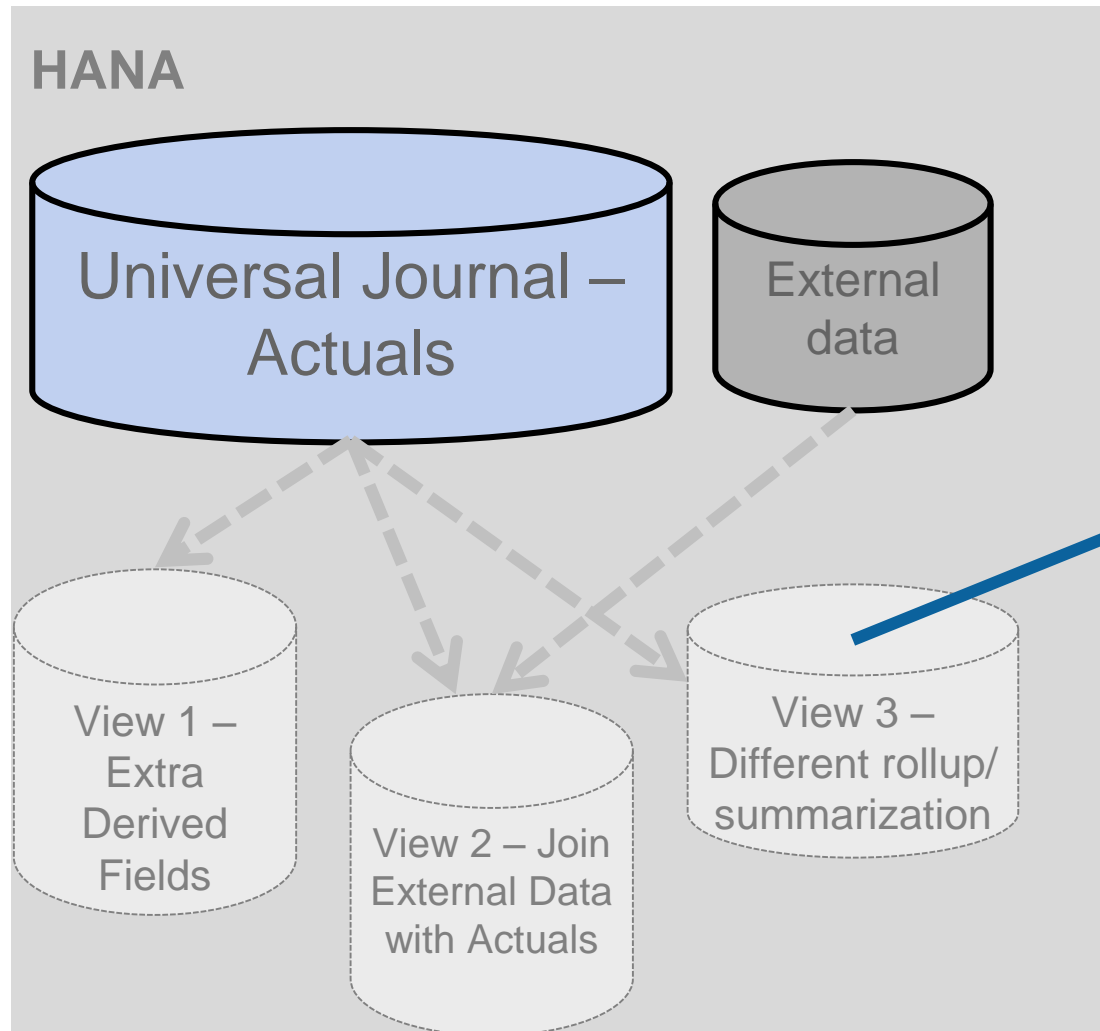
### Sample scenarios



- There are countless use cases for external data being used to enrich financial reporting. This can be anything from non-financial information to financial plan or forecast data.
  - Example 1: Financial plan and budget data at Profit center/cost center level from a separate non-HANA SAP BPC system is copied into a HANA table. A virtual view is created to join this table to a summarized version of the Universal Journal table for Plan vs. Actual and Budget vs. actual reporting.
  - Example 2: Headcount information by cost center and sales office with role detail is joined with a section of the Universal Journal table in a virtual view to facilitate reporting on Revenue per sales employee, expense per employee, etc.
  - Example 3: Geographical subscription details by media product (Title/Series) are matched to regional advertising costs for analysis

## 4 Enriching Financial Information Using SAP HANA's Capabilities (cont.)

### Sample scenarios



- There are often reporting needs involving a specific rollup or summarization of actual financial data
  - Example 1: Assignment of certain product groups to profit centers changed in 2016. Reporting of historical financial data based on the new assignments is required. A virtual view with an alternative rollup logic can facilitate this.
  - Example 2: Marketing department wants to see profitability of product lines with certain allocated costs excluded, depending on sender cost center category (cost center category not available in the Universal Journal). A virtual view that combines cost center master data and Universal Journal and excludes line items based on cost center category can be created.
  - Example 3: Market research shows an estimated percentage of increased sales for each region and product type combination if sales force headcount and expenses are increased by a certain number. A virtual view can be created to calculate revenue impact, based on actual sales figures in the Universal Journal.

## What We'll Cover

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- Wrap-up

## Where to Find More Information

- <http://help.sap.com/sfin300>
  - ◆ SAP S/4HANA Finance on the SAP Help Portal
- Jens Kruger, *SAP S/4HANA Finance: An Introduction* (SAP PRESS, 2016).
- Janet Salmon, *SAP Simple Finance: How Do I Get Started Without Migrating?* (SAP PRESS, 2015).
- <https://support.sap.com/notes>
  - ◆ SAP Note & Knowledge Base Article Search
    - ▶ SAP Note 2184567 – Central Finance: Frequently Asked Questions (FAQ) \*

\* Requires login credentials to the SAP Service Marketplace

## 7 Key Points to Take Home

- **Central Finance is an adoption scenario that enables implementing SAP S/4HANA Finance with minimum risk or disruption to existing systems**
- **Financial information from multiple SAP and non-SAP systems can be collected at a granular level into a single SAP S/4HANA Finance instance called Central Finance**
- **Central Finance solution does not simply replicate the accounting document(s) from source systems**
  - ♦ **It replicates the “event” that will trigger the accounting document(s), with all its relevant information used to construct the accounting documents, including non-financial fields**
- **This large amount of information collected in the source system can be enhanced with data that is only available in the source system to facilitate better reporting in Central Finance**

## 7 Key Points to Take Home (cont.)

- **The “event” is re-posted into Central Finance, potentially differently, according to the configuration in Central Finance**
  - ♦ **Therefore, Central Finance configuration can help facilitate enriched global reporting**
- **Business mapping logic in a Central Finance scenario can facilitate master data enrichment, summarization, or rationalization**
- **SAP HANA’s capabilities, such as external data capture and virtual views, can enrich global and local reporting in Central Finance**

## Your Turn!



**Questions?**

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**Please remember to complete your session evaluation.**

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