Innovation Highlights & Benefits
S/4HANA Enterprise Management 1610 & 1709

STEFAN BATZDORF, S/4HANA Pre-Sales Expert, SAP
Agenda

S/4HANA Introduction & Innovation Highlights
- New Data Modell and New User Experience are key pillars for Innovations and faster processes

Efficient Sales & Order Management
- Sales Order Processing, Fiori Sales Overview Page, Sales Analytics
- Embedded CRM in S/4HANA

Real-time Material Management, Inventory Handling & Supply Chain
- Inventory Management and integrated Extended Warehouse Management
- Embedded Transportation Management

Efficient Procurement & Analytics
- Procurement Analytics, Enhanced Purchase Requisition, Integration with Ariba
S/4HANA INTRODUCTION
SAP S/4HANA: The Guiding Principles

Modern Architecture

Role-based Design

Smart Business
SAP S/4HANA: The Guiding Principles

People Centric
Any Device
Browser based
Embedding Workflows
Decision Support

Role-based Design
SAP S/4HANA: The Guiding Principles

Modern Architecture

- Robust and Scalable
- Simple Data Structures
- Speed on Primary Data
- Single source of truth
- Flexible consumption
- Non Disruptive Journey
# SAP ECC vs. S/4HANA Database & Table Structures

Prepares Your Data Structures for New Real-time Requirements, Big Data and High Throughput

## SALES

<table>
<thead>
<tr>
<th>Document</th>
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<tbody>
<tr>
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<td>VBAP</td>
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<tr>
<td>Delivery</td>
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<td>LIPS</td>
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<td>Billing Document</td>
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<td>VBRP</td>
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<td>VBUP</td>
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<td>VBOX</td>
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### MATERIAL VALUES

Valuation in MM or Valuation ML

<table>
<thead>
<tr>
<th>Aggregates</th>
<th>History</th>
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</thead>
<tbody>
<tr>
<td>Hybrid: Master Data with Valuated Stock</td>
<td></td>
</tr>
<tr>
<td>MBEW</td>
<td>MBEWH</td>
</tr>
<tr>
<td>EBEW</td>
<td>EBEWH</td>
</tr>
<tr>
<td>QBEW</td>
<td>QBEWH</td>
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<tr>
<td>OBEW</td>
<td>OBEWH</td>
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</table>

<table>
<thead>
<tr>
<th>Aggregates</th>
<th>History</th>
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<tbody>
<tr>
<td>CKMLC</td>
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<td>CKMLPP</td>
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## FINANCE

<table>
<thead>
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<th>Header</th>
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<tbody>
<tr>
<td>GL, AR, AP</td>
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<td>BSEG</td>
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<tr>
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<td>FAGL</td>
<td>LEXA*</td>
</tr>
<tr>
<td>CO</td>
<td>COBK</td>
<td>COEP</td>
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<tr>
<td>AA</td>
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<td>ANEP</td>
</tr>
<tr>
<td>ML</td>
<td>MLHD*</td>
<td>MLIT*</td>
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### MATERIAL QUANTITIES

<table>
<thead>
<tr>
<th>Aggregates</th>
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<td>Material Document</td>
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<tr>
<td>Inventory Movements</td>
<td>MCHB</td>
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</table>

## SAP Business Suite

- **Aggregates**
  - MBEW
  - EBEW
  - QBEW
  - OBEW
- **History**
  - CKMLC
  - CKMLPP

- **Stock Aggregates**
  - MWARE
  - MARC
  - MARD
  - MSKA
  - MKOL
  - MSPR
  - MSLB
  - MSLH
  - MCHBH
  - MKOLH
  - MSKUH
  - MSKAH

- **History**
  - MSHAH
  - MSTBH
  - MSQOH
  - MSLBH
  - MCHBH
  - MSKUH
  - MSKAH

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SAP ECC vs. S/4HANA Database & Table Structures
Prepares Your Data Structures for New Real-time Requirements, Big Data and High Throughput

SALES

Document
Header incl. Status
VBK
LIK
VBK
PRCD
Elements
VB

Item incl. Status
VBAP
KIPS
VBAP

MATERIAL VALUES

Used for Master Data Only
MBE
EBE
OBE
CKMLC
R
CKMLPP

SALES

FINANCE

Document
Header incl. Status
MCHB
MSKA
MSL

Item incl. Status
MCHB
MSKA
MKOL
MSPR
MSLB

MATERIAL QUANTITIES

On the fly aggregation and compatibility views for indices and obsolete tables

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SAP S/4HANA: The Guiding Principles

Built for Scalability, Automation & IoT
Cockpits with Exception based Worklists
Embedded Analytics, Simulation, Prediction

Smart Business
SAP S/4HANA Embedded Analytics

**Embedded Analytics**
- Deliver contextualized analytics for SAP S/4HANA embedded within the context of work and tailored to **business needs and roles**
- Consist of Virtual Data Models based on Core Data Service (CDS) views covering role-based operational reports for lines of business
- Come with **tools for Business Users, Power Users and Developers** to analyze data and manage the lifecycle of reports and KPIs

**Highlights 1610 On-Premise**
- Continuous extension of the Virtual Data Model, **more than 6000 views and more than 120 new Embedded Applications (KPI’s)** planned
- View Browser Fiori Application to show all delivered Views
- SAP Smart Business and Analysis Path Framework Integration
S/4HANA Analytical Apps using Fiori Embedded Analytics

Procurement Overview Page

Role: Purchaser / Buyer
Delivered: Q4 2016
Description:
- A purchaser gets the most important information at a glance (instead of opening many different transactions)
- Combination of analytical and transactional information
- More detailed information can be found with one click
- Show all information (e.g. urgent contracts, purchasing spend etc.) for specific suppliers, materials etc. via the Smart Filter
- The entire page can be fully personalized

From this app, navigation is possible to e.g.:
- Manage Purchase Contracts
- Monitor Purchase Order Items
- Supplier Evaluation
- Purchasing Spend
- ... and many more
S/4HANA Analytical Apps using Fiori Embedded Analytics

Order-to-Cash Process Manager Overview Page

Role: Order-to-cash process manager

Delivered: Q3/2016

Description: Fiori Overview Page

- Provides performance and conformity of the sales processes in an
- Analyze Order-to-cash process performance based on some key Sales KPIs
- Identify trends and areas of improvements

From this app, navigation is possible to e.g.:

- Detailed Fiori smart business apps for Order-to-cash process performance
- Analysis path framework app for Order-to-cash process performance to drill down further
- Other detailed Fiori apps
**S/4HANA Analytical Apps using Fiori Embedded Analytics**

**Internal Sales Representative Overview Page**

**Role:** Internal Sales Representative  
**Delivered:** Q4/2016  
**Description:** Fiori Overview Page

- Analyze the different stages of a sales order.  
- Identify the back orders, demand fulfillment etc.  
- Provide insight to actions about sales quotations, customer returns, sales order fulfillment and more  
- Compare Sales revenue with previous year

From this app, navigation is possible to e.g.:

- Detailed Fiori smart business apps for Sales quotations, Customer returns etc.  
- Quick links to creating a Sales order, Sales quotation etc.  
- Other detailed Fiori apps
**S/4HANA Analytical Apps using Fiori Embedded Analytics**

**ALP for Monitor Purchase Contract Items**

**Role:** Purchaser / Buyer  
**Delivered:** Q1/2017  
**Description:** Analytical List Page

- A purchaser could monitor information about Purchase contract items
- Combination of analytical and transactional information
- Analytical chart to visualize, filter and drill down to table content
- Replacing old list reports with Fiori apps and include analytical data

From this app, navigation is possible to e.g.:

- Detailed Fiori Apps or transactions
SAP S/4HANA 1610 – S/4HANA Suite

**SAP S/4HANA FINANCE**
- SAP Ariba
- SAP SuccessFactors
- SAP Concur
- SAP Fieldglass
- SAP Ariba
- SAP Fieldglass
- SAP Concur
- SAP Ariba
- SAP Fieldglass
- SAP Concur
- SAP Ariba
- SAP Fieldglass
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- SAP Concur
- SAP Ariba
- SAP Fieldglass
- SAP Concur
- SAP Ariba
- SAP Fieldglass
- SAP Concur

**SAP S/4HANA HUMAN RESOURCES**
- Core Human Resources And Payroll
- Talent Mgmt.
- Time and Attendance Mgmt.
- Human Capital Analytics

**SAP S/4HANA SOURCING & PROCUREMENT**
- Supplier Collaboration
- Business Network
- Guided End-User Buying

**SAP S/4HANA MANUFACTURING**
- Responsive Manufacturing (ME, MI, QIM, VE)
- Production Operations (MI, QIM)
- Digital Operations for Manufacturing (MI)

**SAP S/4HANA SUPPLY CHAIN**
- Integrated Business Planning
- Global Batch Traceability
- Extended Warehouse Mgmt.
- Transportation Management

**SAP S/4HANA ASSET MANAGEMENT**
- Asset Operations and Maintenance*
- Environment, Health, and Safety

**SAP S/4HANA SERVICE**
- Service Mgmt.*
- Service Master Data Mgmt.*
- Service Parts Mgmt.*
- Service Agreement Mgmt.*

**SAP S/4HANA SALESW**
- Sales Planning and Performance Mgmt. (ICM)
- Order and Contract Mgmt.

**SAP HYBRIS**
- Cloud for Sales
- Cloud for Service
- Cloud for Customer
- Marketing Commerce
- SAP S/4HANA ASSET MANAGEMENT

**SAP HYBRIS RESEARCH & DEVELOPMENT**
- Digital Operations for R&D

**SAP S/4HANA MARKETING AND COMMERCE**
- Extended Warehouse Mgmt.
- Advanced ATP
- Inventory and Basic Warehouse Mgmt.*
- Production Planning

**SAP S/4HANA RESEARCH & DEVELOPMENT**
- Enterprise Portfolio and Project Mgmt.
- Commercial Project Mgmt.
- Compliant Product Lifecycle Mgmt.*

**INDUSTRIES**
- Financial Planning and Analysis
- Accounting and Financial Close
- Treasury Mgmt.
- Receivables Mgmt.
- Invoice Mgmt.
- Accounts Payable
- Real Estate Management

- Accounting and Closing Operations
- Accounting
- Cost Mgmt. and Profitability Analysis
- Time Recording

- Supplier Management
- Procurement Analytics
- Operational Purchasing
- Collaborative Sourcing and Contract Mgmt.
- Invoice and Payables Mgmt.
- Production Operations
- Quality Mgmt.
- Planning and Scheduling

- Constrained production planning
- Planning and Scheduling

- Maintenance Mgmt.
- Product Development and Project Control
- Product Engineering

- Billing and Revenue Innovation Mgmt. (BRIM)
- Environment, Health, and Safety
- Digital Asset Network

- Product Development and Project Mgmt.
- Commercial Project Mgmt.
- Compliant Product Lifecycle Mgmt.*
SAP S/4HANA 1709 – Delta Business Scope Highlights

**FINANCE**
- SAP Cash Application
- "Readiness Check"
- EPM: Legal Content Management
- "Migration Cockpit"

**HUMAN RESOURCES**
- Centralized Requisitioning

**SOURCING & PROCUREMENT**
- "Complex Manufacturing"
- Integration to IBP
- "Migration Cockpit"

**MANUFACTURING**
- "Transportation Management"

**SUPPLY CHAIN**
- "Basic Shipping "TM replaces LE TRA"

**TECHNOLOGY**
- API: IoT Application Development Services
- API: CoPilot
- "Migration Cockpit"
SAP S/4HANA 1709 Key Innovations in the 3rd big wave

**Embedded Transportation Management**
Basic Shipping and Data Harmonization Integration in extended warehouse mgmt.

**Consumer Products Industry**
Catch Weight Management for System Conversion

**Commodity Management**
Extending pricing with the commodity pricing engine

**Industry to Core Retail / Wholesale**
Wholesale Fashion enablement; Order allocation; Segmentation

**Service Core (CRM Add-On)**
Migrate installed base CRM with eliminated middleware, harmonized data models

**Manufacturing**
Demand Driven Manufacturing Advance Variant Configuration

**Finance**
Machine Learning with SAP Cash Application Integration; Financial Planning

**Procurement**
Centralized purchase requisitions through hub deployment Machine Learning for Contract Consumption

**Enterprise Asset Management**
Report and Repair Malfunction Breakdown Analysis

**Sales**
Electronic and digital payments with Integration with Payment Hub

**Manufacturing**
Engineering Cockpit Extension for Complex Assembly Industries

**Quality Management**
- Manage usage decisions
  - Analytics for quantitative results

**Extended Warehouse Management**
Advanced Labor Management Pallet Planning

**PLM**
Visual Enterprise Generator Conversion Recipe Management and Recipe finder

**Maximize SAP Fiori Experience**
SAP Fiori Overview Pages

**First delivery planned with SAP S/4HANA 1709 FPS01 in 2018**
S/4HANA SALES
Business Challenge: Sales Order Management
High volume Order-2-Cash needs too much manual attention and effort

OLTP based systems

Issues & exceptions are typically identified by working down lists of multiple table & aggregate structures – a time consuming and error-prone process

A people centric collection of issues & exceptions via embedded analytics and worklists in real-time on primary data to solve issues in seconds
SAP S/4HANA Sales
SAP S/4HANA Enterprise Management Scope for 1610 Shipment

E2E Business Process:

Solution Capabilities:

- **SALES MASTER DATA MGMT.**
  - Leverage simplified data model and central Business Partner approach.
  - Create, modify, or display sales documents with work lists, manage sales quotations, orders, credit and debit memo requests. Access documents quickly.

- **SALES CONTRACT MANAGEMENT**
  - Take immediate action using real-time analytical results to effectively manage Sales Contracts and Sales Quotations.

- **SALES ORDER MGMT. & PROCESSING**
  - Identify bottlenecks & issues with resolution proposals in the Sales Order Fulfillment Cockpit for maximizing "no-touch" order rate. Leverage worklists with smart links to related documents and transactions to streamline the flow.

- **BILLING & INVOICING**
  - Settle rebate flexibly using Condition Contract Settlement without any index table. Manage Billing Document efficiently with seamless integration to related operational transactions and use Intrastat Processing for Foreign Trade activities.

- **CLAIMS, RETURNS & REFUND MGMT.**
  - Reduce customer service & support cost by automating and streamlining return processes.

- **SALES MONITORING & ANALYTICS**
  - Monitor Order-to-Cash Process Performance and execute Sales Analysis on the fly and display contextual information, or analyze your sales quotation conversion rate, or open sales orders and deliveries and track overall O2C performance in your company.

Innovation & Highlights:

- Manage Sales contracts in just seconds
- Analyze your Sales Order Conversion Rate
- Use new Condition Contract Settlement
- Use new Sales Overview Page
Sales Order Management with SAP S/4HANA: What You Get…

Experience Transformation: Sales Order Fulfillment: DEMO / VIDEO

<table>
<thead>
<tr>
<th>Measure</th>
<th>SAP ERP with SAP GUI Sales Order Fulfillment</th>
<th>SAP S/4 HANA with SAP Fiori Sales Order Fulfillment</th>
<th>Improvement Factor</th>
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<tr>
<td>Duration</td>
<td>4.15 min</td>
<td>2.20 min</td>
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<td>Clicks</td>
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<tr>
<td>Fields filled</td>
<td>14</td>
<td>3</td>
<td>4.6 x</td>
</tr>
</tbody>
</table>

Use real-time alerts instead of checking yesterday's reports
Ensure resolution of the biggest issues first
Check impacts and act on any issue within seconds
S/4HANA Sales
Scope highlights for 1709 Shipment

Sales order management and processing
- “My sales overview” overview page provides internal sales representative with a central entry point to all his important daily working tasks.
- Get insight to all sales orders’ status and take immediate action along with the whole O2C lifecycle with “Track Sales Order”.
- Enhanced Sales Order Fulfillment cockpit with SOFM – Analyze and Resolve Issues
- Schedule the output of sales documents with the new output management

Billing and invoicing
- Converge external billing data. sales orders, sales contracts, debit memo request, and outbound deliveries into one invoice.
- Reduce the number of invoices needed when processing billing due list items of different categories and support Innovative omnichannel approach.
- Enable electronic and digital payments with payment hub integration in SAP S/4HANA

Claims, returns and refund management
- Simplify return processes with “Accelerated Returns”

Sales Monitoring and Analytics
- Sales order delivery performance to monitor his current situation, and instantly recognizes the effect of delivered as requested ratio of sales orders, because a critical delay of delivered goods endangers customer satisfaction and retention in the future.
- Insight to action - navigation via smart links.
- Analyze Backorders: Monitor sales confirmation situation, and instantly recognizes the risk of unconfirmed sales orders, because these endanger future sales volume.
- New key performance indicators for sales contracts, customer returns, outbound deliveries, and credit and debit memo requests.
Unified Functionality in the Core
Advanced Available to Promise

EXISTING ERP FUNCTIONAL MODEL

SAP ERP
Basic ATP

SAP APO
Global ATP

Core Interface
CIF

✓ Simple to Use & Implement
✓ Advanced Functionality

✗ Lack of Advanced Functionality
✗ Simple to Use & Implement

1610 RELEASE

S/4 HANA

Advanced Available to Promise

✓ Simple to Use & Implement
✓ Advanced Functionality
✓ New Innovations

Enhanced Backorder Processing
New concept for requirement classification

Enhanced Product Allocation
Synchronous, consistent data
Immediate error handling

Release for Delivery App
Enable timely action on short term supply and demand changes
Our ERP Multichannel Problem

Channels

**Mass Merchant A**
- Profitability: Low
- Demand: Monday 200 Units
- ERP ATP: ✓ 200 Units

**Mass Merchant B**
- Profitability: Low
- Demand: Tuesday 150 Units
- ERP ATP: ✓ 150 Units

**Specialty Shop A**
- Profitability: Mid
- Demand: Wednesday 50 Units
- ERP ATP: ✓ 50 Units

**Specialty Shop B**
- Profitability: Mid
- Demand: Thursday 50 Units
- ERP ATP: ✓ 0 Units × 50 Units

**Web Channel**
- Profitability: High
- Demand: Friday 50 Units
- ERP ATP: ✓ 0 Units × 50 Units

**MY CYCLES**
- Weekly Inventory: 400 bikes

**Most profitable orders didn’t get confirmed**
**New Back Order Processing in SAP S/4HANA**

**Win**
- Confirm as Requested
  - Shall be fully confirmed in time

**Gain**
- Improve if Possible
  - Shall keep the confirmations and should gain if possible

**Redistribute**
- Redistribute and Reconfirm
  - Might gain, might lose

**Fill**
- Delete Confirmation, if Required
  - Shall not gain anything, should keep confirmation, but may also lose

**Lose**
- Delete Confirmation
  - Shall lose all confirmations (e.g., orders under credit block)

- **Web**
- **Shop A**
- **Shop B**
- **Mass Merchant A**
- **Mass Merchant B**
Now with SAP S/4HANA Advanced ATP

**MY CYCLES**

Weekly Inventory
400 bikes

---

**Mass Merchant A**

- **ERP ATP:** ✓ 200 Units
- **S/4HANA ATP:** ✓ 200 Units

**Mass Merchant B**

- **ERP ATP:** ✓ 150 Units
- **S/4HANA ATP:** ✓ 50 Units

**Specialty Shop A**

- **ERP ATP:** ✓ 50 Units
- **S/4HANA ATP:** ✓ 50 Units

**Specialty Shop B**

- **ERP ATP:** ✓ 50 Units
- **S/4HANA ATP:** ✓ 50 Units

---

**Profitability**

- **Low**
- **Mid**
- **High**

**Demand**

- **Monday:** 200 Units
- **Tuesday:** 150 Units
- **Wednesday:** 50 Units
- **Thursday:** 50 Units
- **Friday:** 50 Units

**Web Channel**

---

**Channels**

- Mass Merchant A
- Mass Merchant B
- Specialty Shop A
- Specialty Shop B

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**MY CYCLES**

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SAP S/4HANA Advanced ATP
Extended LoB scope for 1610 Shipment

SAP S/4HANA enabled mass product availability check for sales, planned, and production orders

Product Allocation
- Supports the business decision if a sales order should be confirmed and, if yes, to which extent
- Decision can be based on almost every attribute of the underlying sales order, material, plant, or customer
- Grouping and aggregation capabilities (collective allocations) for simplification and ease of maintenance

Back-Order Processing
- New SAP Fiori UIs to set up back-order processing (BOP) runs
- New concept for requirement classification, like winner, gainer, redistributor, filler, loser
- New SAP Fiori app to display the BOP result – result is displayed on different aggregation levels and allows an easy identification of (and fast drill-down to) confirmation issues

Release-for-delivery app to enable timely actions on short-term supply-and-demand changes.
SAP S/4HANA CRM – Optimize Your Back Office, Simplify Your Front Office

**SAP Hybris (Y)**
Front Office Suite

- Marketing Cloud
- Commerce Cloud
- Sales Cloud
- Service Cloud
- Revenue Cloud

**SAP S/4HANA CRM**

- Digital Core
- HANA

**SIMPLIFY YOUR FRONT OFFICE**
- DELIVER GREAT CUSTOMER EXPERIENCES
- TRANSFORM AND BE AGILE

**FOCUSES ON THE HEAVY LIFTING**
- CUSTOMER PROCESSES

**SUPPORTING COMPREHENSIVE CORE PROCESSES**

**CENTRAL CUSTOMER DATABASE**
**Goal:** Provide rich CRM functionality in S/4HANA with superior integration and low TCO

1. Simplified on premise landscape & operations compared to side-by-side operation
2. HANA and UI innovations
3. Allow migration and on premise landscape consolidation for existing SAP CRM installations

Simplification roadmap for the SAP CRM stack in S/4HANA:

1. **Eliminate middleware for simplified scenarios**
   - Harmonize data models between CRM and S/4HANA and eliminate redundancies
2. **Eliminate Java stack and TREX**
3. **Optimize CRM OneOrder data base model for HANA DB**
4. **Fiori 2.0 visual harmonization with S/4HANA**
S/4HANA CRM Simplification Roadmap Overview
Data Harmonization and Elimination of Functional Redundancies

1. “Best of both worlds”: identify functional redundancies and select most suitable entity / process / engine
2. Harmonize object models between CRM and S/4HANA → objects share a common database representation, and thus require no middleware

<table>
<thead>
<tr>
<th>S/4HANA</th>
<th>CRM</th>
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<tbody>
<tr>
<td>Business Partner</td>
<td>Service &amp; Solution Quote</td>
</tr>
<tr>
<td>Material</td>
<td>Service Contract</td>
</tr>
<tr>
<td>Equipment</td>
<td>Service Order</td>
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<tr>
<td>Functional Location</td>
<td>Service Request</td>
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<td>Material BOM</td>
<td>Service Confirmation</td>
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<td>Maintenance Plan</td>
<td>Interaction Center</td>
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<td>Warranty</td>
<td>Dispatching (MRS)</td>
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Service Management

<table>
<thead>
<tr>
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<tr>
<td>Org Model</td>
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<tr>
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<td>Loyalty</td>
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<tr>
<td>Loyalty</td>
<td>Sales &amp; Order Management</td>
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</tbody>
</table>
UI Harmonization
Belize Theme for CRM WebUI - Design Direction
S/4HANA MATERIAL MANAGEMENT
# Use Cases Enabled

| High-volume backflush – parallel production combined postings |
| Internet of Things scenarios – real-time goods movements posting |
| Segment of one – smaller lot sizes passing through logistic operations |
| Combined postings from offline devices – fast parallel postings |

# Technical Innovation

| Simplified data model – MATDOC (material document) = MKPF (material document header table) + MSEG (material document segment table) + add; columns for fast calculations |
| No aggregates – on-the-fly aggregation of inventories |
| Insert only on database level – no database locks anymore |
| Insert only on application level – elimination of standard price (SPREIS) locking (taking rounding differences into account) |
| One valuation method (material ledger) instead of two (material management–inventory management and material ledger) |

# Improved Business Processes

| More effective inventory management like inventory turnover and inventory costs |
| More accurate material requirement planning |
| More efficient procurement processes |
| More accurate sales order fulfillment and delivery |
| More efficient production execution |
| Easier implementation of new processes (like just-in-time, kanban) |

*Does not reflect licensing*
Inventory Management in SAP S/4HANA: What You Get…
Built to scale

<table>
<thead>
<tr>
<th></th>
<th>SAP ERP Traditional Inventory Management</th>
<th>SAP S/4HANA Inventory Management based on Material Ledger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Throughput</td>
<td>1</td>
<td>1…30 x*</td>
</tr>
<tr>
<td># of Currencies/ Valuations</td>
<td>1</td>
<td>1 to 3</td>
</tr>
<tr>
<td>Parallel Postings</td>
<td>No</td>
<td>YES (insert only principle)</td>
</tr>
<tr>
<td>Valuation methods</td>
<td>2 + YE</td>
<td>3 + YE</td>
</tr>
<tr>
<td>Aggregate Tables</td>
<td>26</td>
<td>On the Fly</td>
</tr>
<tr>
<td>Transfer Prices &amp; Actual Costing</td>
<td>No</td>
<td>YES (optional)</td>
</tr>
<tr>
<td>Transparency of movements</td>
<td>No</td>
<td>YES</td>
</tr>
<tr>
<td>Reporting</td>
<td>Batch on Multiple aggregates</td>
<td>Real-time on primary data</td>
</tr>
<tr>
<td>Predict &amp; Simulate stock</td>
<td>No</td>
<td>YES</td>
</tr>
<tr>
<td>Analytics Performance</td>
<td>1</td>
<td>up to 800 x</td>
</tr>
</tbody>
</table>

*depending on scenario: esp. materials with known locking problems in ECC can achieve higher throughputs regarding large number of document positions and many identical parts, see note 2319579
Inventory Management with SAP S/4HANA: What You See…

Experience Transformation in Inventory Management: DEMO / VIDEO

<table>
<thead>
<tr>
<th>Measure</th>
<th>SAP ERP with SAP GUI</th>
<th>SAP S/4HANA with SAP Fiori</th>
<th>Improvement Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>8.10 min</td>
<td>3.58 min</td>
<td>2.1 x</td>
</tr>
<tr>
<td>Clicks</td>
<td>135</td>
<td>64</td>
<td>2.1 x</td>
</tr>
<tr>
<td>Number of Apps</td>
<td>10</td>
<td>7</td>
<td>1.4 x</td>
</tr>
<tr>
<td>Fields Filled</td>
<td>18</td>
<td>8</td>
<td>2.3 x</td>
</tr>
</tbody>
</table>
Integration steps required between EWM and ERP
1. Configuration of communication between ERP and EWM using qRFC
2. Definition of a warehouse in ERP and EWM
3. Integration of the warehouse with the organizational structure of ERP
4. Initial master data transfer from ERP to EWM
5. Creation and activation of a Core Interface (CIF) integration model for the master data transfer from ERP to EWM
## Business process view
Integrated Extended Warehouse Management

### Traditional system

<table>
<thead>
<tr>
<th>ECC</th>
<th>EWM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock posting change</td>
<td>Select stocks based on criteria</td>
</tr>
<tr>
<td>Inspection Lot</td>
<td>Create QIE document per HU</td>
</tr>
<tr>
<td>Check Pending Inspection lots and record inspection results</td>
<td>Create Quality Notification for Material and batch</td>
</tr>
<tr>
<td>Capture usage decision</td>
<td>Update QIE Document</td>
</tr>
<tr>
<td>Stock posting change</td>
<td>Read QIE Document by External Number</td>
</tr>
<tr>
<td></td>
<td>Decide Quality Inspection Document</td>
</tr>
<tr>
<td></td>
<td>Stock Posting</td>
</tr>
</tbody>
</table>

**With traditional system:**
- Complex Processes to align multifaceted supply chain realities and difficult economic conditions
- Lack of end-to-end insight and visibility with disparate systems and processes
- Analysis based on past performance and no real-time simulation capability

### Reinvented Business Processes with SAP S/4HANA

**Traditional Strategy**

**New Strategy**

**Value-Added Services (VAS):** assembling products, packing products, labeling, or kitting

**With SAP S/4HANA:**
- One System: Direct usage of master data and Support 40-digit material number
- Avoid data redundancy: Avoid redundant objects and Direct access to central objects
- Simplification and reduction of Data Redundancy

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SAP S/4HANA Extended Warehouse Management

Direct Read of SAP S/4HANA Master Data
Transportation Management in SAP S/4HANA
Process view and technical components
Basic Shipping within SAP S/4HANA

- Main Parts of the Transportation Network (except e.g. Trade Lane, Allocations, Business Shares, Resource integration to EAM)
- Freight Agreements
- Charge Management (except e.g. Air specific charges, event based shares, consolidated charge calculation)
- Separated Inbound / Outbound Freight Order / Booking Management (Delivery based)
- Basic Transportation Planning (POWLs / manual Freight Unit Selection)
- Transportation Execution without Event Management
- Freight Settlement Management
- Basic Agency Billing
- Direct Tendering for Service Agents (Subcontracting)
- Dangerous Goods Management (except TM specific enhancements)
- TM Output Management
- TM Analytics

Note: All new developed features in S/4HANA TM after Release 1709 will not be part of Basic Shipping.

This is the current state of planning and may be changed by SAP at any time.
SAP S/4HANA Supply Chain for Transportation Management

- Strategic Freight Management
- Service Product Catalog (Future Topic)
- Service Order Management
- Forwarding Management / Settlement (Future Topic)
- Combined Inbound / Stock Transfer / Outbound Transportation Process
- Planning:
  - Order and Delivery Based Planning Process
  - Transportation Cockpit
  - Vehicle Scheduling Routing Optimization
  - Gantt Chart
  - Planning on 2 monitors
  - Transportation Proposal
  - Automated Carrier Selection / Carrier Ranking List
  - Load Consolidation / Load Planning (3D Visualisation)
  - Package Building
  - Professional Tendering Management
- Driver Management
- Advanced Charge Calculation
- Carrier / Service Billing
- Group Logistics Management (Future Topic)
- Harmonized Transportation Scheduling (Future Topic)
- EWM Integration (via services)

This is the current state of planning and may be changed by SAP at any time.
S/4HANA Sourcing & Procurement
SAP S/4HANA Procurement
SAP S/4HANA Enterprise Management Scope for 1610 Shipment

E2E Business Process:

Solution Capabilities:

- **Self Service Requisitioning**
  - Allows employees to search and request goods/services in a cross-catalog search with a consumer-grade user experience. Highly integrated requesting process into core S/4HANA processes and existing master data.
  - Supports Indirect & Direct Procurement with high automation, high system support, and harmonized UI. Includes dynamic prefilling and provisioning of fields as well as templates to minimize errors. A standard integration into Ariba Network is provided natively.

- **Purchase Order Processing & Collaboration**
  - High percentage of automation tasks, and additional supporting functions for manual processing like proposals displaying available sources of supply to overall increase efficiency and speed of the sourcing process.

- **Requirements Processing**
  - Give buyers access to one, integrated system for service purchasing to create, display, change, and process purchase orders. Support automated and manual processes.

- **Services Purchasing & Entry**
  - With S/4HANA, automated and manual processes for source assignment to operational demands, by using source lists, purchase information records are supported.

- **Source Assignment**
  - Monitor contracts in contract work list and get instant information. Dynamic search helps propose possible values already while typing contract target value or target quantity updates.

- **Operational Contract Management**
  - With Supplier Invoice List and Create Supplier Invoice apps, S/4HANA offers the possibility to create supplier invoices with or w/o reference to a purchase order, view, and correct inaccurate supplier invoices directly. A standard integration into Ariba Network is provided natively.

- **Invoice Processing & Collaboration & Accounts Payables**
  - Classification and Segmentation offers logical grouping of similar expenditure items, such as expenses for advertising agency services or IT hardware into Purchasing Categories to organize spend, responsibilities, and organizations.

- **Supplier Mgmt. & Procurement Analytics**
  - Purchasers gain role based and quick access to the procurement information they need for analyzing purchasing spend, suppliers, and contracts in real-time.

Innovation & Highlights:

- **Next level of Procurement via Procurement Overview Page**

- **Use Self Service Requisitioning and shop in 3 steps with 1 UI**

- **Integrate your Business Network**
Diagram is highlighting the enhancements made in the individual procurement areas between releases S/4HANA OP1610 and OP1709.
SAP S/4HANA Procurement
Extended LoB scope for 1610 Shipment

Additional LoB Solutions**

- Leverage Supplier Collaboration, Business Network and Guided End-User Buying and integrate with S/4HANA Procurement processing
- This will allow customers more choice with true hybrid scenarios and incremental deployments
- Leverage Digital Handshakes between Buyer and Supplier to take more control of your Business Network in Procurement
- New Sourcing Request out of S/4HANA into Ariba
SAP S/4HANA Sourcing and Procurement 1709

Centralized purchase requisitions through hub deployment of SAP S/4HANA

**Background**
- Significant number of customers (typically large size) with SRM hub deployment connected to multiple backend systems use self-service procurement
- These customers require smooth transitioning from the Business Suite (SRM) to S/4HANA
- Central requisitioning is the first to step towards providing full procurement hub capabilities

**Benefits**
- Leverage economy of scale by consolidating purchase requisitions to a central procurement function
- Transition path to S/4HANA for Business Suite (SRM) customers with procurement hub deployment
- Enterprise-wide self-service procurement and approvals with consumer-grade UX via Fiori apps

**Technical**
- Enables the requisitioning process to run on the centralized hub system, with the follow-up documents (e.g., purchase orders) being created in the back-end systems
- Replication of source of supply from backend systems as import to the central procurement catalogue
- For 1709, only SAP ERP is supported as compatible back-end systems

**Current**
- SAP SRM
  - SAP ERP

**S/4HANA 1709**
- SAP S/4HANA
  - SAP S/4HANA
- SAP ERP

**Future**
- SAP S/4HANA
  - Subject to change
### SAP S/4HANA Sourcing and Procurement 1709 On Premise

**FIORI Apps for Procurement**

**Transactional**

**Task-based Access**

Access to tasks like change, create, or entire processes with guided navigation

1. All Approvals via Fiori Inbox (Purchase Requisition, Purchase Order, Contract, Supplier Invoice and Service Entry Sheets)
2. Create Purchase Requisition
3. My Purchase Requisitions
4. Confirm Goods and Services
5. Manage Purchase Requisitions
6. Manage Purchase Orders (incl. Create)
7. Manage Purchase Contracts
8. Manage Sources of Supply
9. Manage Supplier Invoices (incl. Create)
10. My Purchasing Document Items
11. Supplier Invoice List
12. Post Goods Receipt for Purchase Order
13. Evaluate Suppliers
14. Monitor Responses
15. Supplier Evaluation Response
16. Procurement Overview Page
17. Manage Quota Arrangements
18. Manage Purchase Requisitions

**Analytical**

**Insight to Action**

Visual overview over a complex topic for monitoring or tracking purposes

1. Purchase Order Value
2. Non-Managed Spend
3. Unused Contracts
4. Contract Expiry
5. Off-Contract Spend
6. Contract Leakage
7. Purchasing Spend
8. Invoice Price Change
9. Purchase Order Average Delivery Time
10. Spend Variance
11. Overdue Purchase Order Items
12. Purchasing Group Analysis
13. Operational Supplier Evaluation
14. Supplier Evaluation By Time
15. Supplier Evaluation By Price
16. Supplier Evaluation By Quantity
17. Overall Supplier Evaluation
18. Supplier Evaluation by Questionnaire
19. Value Contract Consumption
20. Quantity Contract Consumption
21. Purchase Requisition Item Types
22. Purchase Requisition Average Approval Time
23. Purchase Requisition To Order Cycle Time
24. Purchase Requisition No Touch Rate
25. Purchase Requisition Item Changes
26. Purchase Order Items by Account Assignment
27. Purchase Contract Items by Account Assignment
28. Purchase Requisition Items by Account Assignment
29. Supplier Invoice Items by Account Assignment
30. Monitor Supplier Confirmations
31. Monitor Purchase Requisition Items
32. Monitor Purchase Order Items
33. Monitor Purchase Requisition Items
34. Monitor Purchase Contract Items

**Object Pages with Contextual Navigation**

Search and Explore

View on essential information about an object and contextual navigation between related objects

1. Purchase Requisition
2. Purchase Requisition Item
3. Purchase Order
4. Supplier Invoice
5. Purchasing Info Record
6. Purchase Contract
7. Purchase Contract Item
8. Purchasing Category
9. Supplier
10. Material
11. Purchasing Category
12. Request for Quotation
13. Supplier Quotation
14. Quota Arrangement
SAP S/4HANA Sourcing and Procurement 1709 On Premise Release Highlights

Operational Procurement
- Business workflow for purchase requisitions, purchase order and invoices
- SAP Fiori 2.0 UX – notifications for purchase requisition approvals
- Enhanced Document Flow and Type-Ahead for Free-Texts in Self-Service Requisition
- New Fiori Apps for Monitoring and Mass Change of purchasing documents
- Central Requisitioning in S/4HANA allows for Purchase Order Creation in satellite ERP system

Sourcing and Contract Management
- Request for Quotation and Quote Comparison in SAP S/4HANA
- Integration of S/4HANA and Ariba Network and Ariba Sourcing to conduct sourcing events and create or update follow-on documents in SAP S/4HANA
- Analytical monitoring of request for quotation items and contract items
- Approval for Supplier Quotation Awarding
- Fiori Apps for Scheduling Agreement
- Legal Content Management

Supplier Management
- Reminder for evaluation responses and activity management
- Define Supplier evaluation weighting and scoring in general and based on purchasing categories
- Adjust Supplier Evaluation Scoring
- SAP Fiori 2.0 UX - Create activity using SAP CoPilot

Invoice and Payables Management
- Invoice integration to SAP Fieldglass
- Invoice posting with reference to asset
- Upload Supplier Invoices

Purchasing Analytics
- Predict purchase-order spend based on open purchase requisitions and delivery schedules
- Supplier performance monitoring for hard and soft facts in the Procurement Overview Page
- Predictive analytics for contract consumption
- Multi-dimensional report for purchasing spend
S/4HANA Roadmaps
Edge2Core – Roadmap for next generation order management with SAP Hybris Revenue Cloud and SAP S/4HANA

**SAP Hybris Revenue Cloud**

**Configure-Price-Quote (CPQ)**
- Bundling of tangible and digital products supporting one-time, recurring and pay-per-use pricing models
- Pluggable pricing & configuration that allows to leverage existing SAP CPQ engine
- Quotation lifecycle management with internal and external collaboration

**Order Management**
- Backend-agnostic order management
- Order lifecycle and exception management
- Rule-based orchestration and distribution of complex product bundles
- Dynamic sourcing across multiple fulfillment systems (SAP/non-SAP)

**Billing & Entitlements**
- Subscription management
- Metering integration & rating of high-volume usage
- Flexible pricing and Pay-per-use
- Real-time visibility of usage and combined revenue streams
- Support of revenue share models

**Tight integration and extension of existing Sales & Distribution capabilities in SAP S/4HANA**

**ATP and Delivery Sourcing**

**Sales & Distribution Fulfillment incl. Order Distribution**

**Invoice Creation & Sub-Ledger Integration**
Operational Procurement in SAP S/4HANA Enterprise Management

- Requirements Processing with Operational Source of Supply Assignment
- Self-Service Requisitioning
- Approval Processes
- Purchase Order Processing
- Simplified Service Purchasing
- Complex Services
- Operational Contract Management and Call Offs
- Invoice Processing for Financials and Logistics
- Invoice Verification
- Analytics
- Supplier Evaluation
Edge2Core – Roadmap for Supply Chain Management Integration in SAP S/4HANA

Supply Chain Planning
- Advanced Planning & Optimization (APO - DP, SNP, PP/DS, GATP)
- Supply Network Collaboration (SNC)
  - SAP HANA Platform

Integrated Business Planning (IBP) (New Unified Platform)
- Supply Chain Control Tower
- Sales & Operations Planning
  - Demand
  - Inventory
  - Supply & Response
  - SAP HANA Platform

Supply Chain Execution Platform
- Extended Warehouse Management
- Transportation Management
- Track & Trace
  - SAP HANA Platform

S/4HANA Enterprise Management

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Edge2Core – Roadmap for Manufacturing with SAP S/4HANA

**SAP On-Premise Solutions**
- Advanced Planning & Optimization (SAP APO)
- SAP Manufacturing Execution Suite (ME, MII, PCo)

**SAP Cloud Platform**
- Asset Intelligence Network (AIN)
- Digital Manufacturing Insights*
- Integrated Business Planning
- Collaborative Demand Manufacturing*

**SAP S/4HANA Manufacturing**
- Available-to-Promise
- Inventory Management
- Extended Warehouse Management*
- External processing/Subcontracting
- Manufacturing Engineering*
- Materials Requirements Planning
- Manufacturing Planning and Scheduling (PP/DS)*
- Manufacturing Execution and Orchestration for Complex Assembly*
- Quality Management

* New or enhanced functionality
Edge2Core – Roadmap for SAP S/4HANA Research and Development

Connected Products on SAP Cloud Platform

Embedded Systems
- Integrate mechanics, electronics, and software into Smart Connected Products.
- Enable requirements-driven Systems Engineering
- Link engineering master with digital twin completing the extended supply chain

Project and Design Collaboration
- Provide virtual collaboration on engineering documents and 3D designs
- Plan and execute collaborative tasks across company boundaries
- Connect IoT, Digital Core, and Business Networks creating seamless value chain

Research and Development in SAP S/4HANA

Enterprise Portfolio and Project Management
- End-to-end, transparent project management with real-time decision support
- Compelling SAP Fiori UX and HANA-optimized data model

Formulation and Engineering
- Process Industries: Specification, Recipe Development
- Discrete Industries: Engineering BoM, Engineering Record, Handover to Manufacturing
- Variant Configuration

Engineering Control Center
- Consistent integration of authoring tools along the value chain
- 360 degree product view including mechanics, electronics, software, and simulation etc.
Roadmap for Master Data Management for SAP S/4HANA and the complete enterprise

SAP Master Data Governance providing master data in corporate quality across the complete enterprise landscape

- Central master data governance and master data distribution
  - Workflow-driven governance processes
  - Staging, validation, and approval
  - Master data distribution
- De-central master data ownership and master data consolidation
  - Load master data from any source
  - Master data standardization, mass matching and best record calculation
  - Supports analytics and operational use cases
- Advanced analytics and hierarchy management for master data
  - Quality issue detection and remediation
  - Process analytics and SLA handling
  - Enhanced hierarchy management

Master data maintenance in SAP S/4HANA Enterprise Management to efficiently run business processes

- Central master data domains (Business Partner and Product)
- Master data analytics (quality KPIs and monitoring)
- Basic hierarchy handling for master data
Thank you.

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