

SAP ERP to SAP S/4HANA 1809 Delta Scope

November 2018

PUBLIC



SAP S/4HANA 1809 - Business Area Overview

	Sales & Marketing	Finance		Manufacturing	Supply Chain	
Suite LoB Solutions**	SAP digital payments add-on SAP CRM SAP C/4HANA SAP Sales Cloud SAP Commerce Cloud SAP Marketing Cloud	Governance, risk, and com SAP Multi-Bank Connectivi SAP digital payments add- SAP Cash Application Financial planning & analys SAP Ariba S.	ity Production Digital	nsive manufacturing (ME, MII, QIM, VE) ction operations (MII, QIM) operations for manufacturing	Integrated business planning Global batch traceability Extended warehouse management Transportation management	
SAP S/4HANA LoB Solutions*	 Sales performance management Subscription billing and revenue management 	 Advanced accounting & fir Advanced financial operati Treasury management Enterprise risk and complia Commodity management 	ons sche	ended production planning and eduling nplex manufacturing	Advanced warehousingAdvanced transportationAdvanced order promising	
SAP S/4 HANA	Order and contract management Sales force support	Accounting and financial c Financial operations Cost management & profits	• Prodability analysis • Qua	duction planning duction operations lity management sufacturing insights	InventoryWarehousingShipping and transportationOrder promising	
Enterprise Management	Service master data and agreement management Service operations and processes Service parts management	Maintenance management	Project control Product engineering	Operational procurement Sourcing and contract mana Supplier management Procurement analytics Invoice management	Core HR and time recording	
SAP S/4HANA LoB Solutions*		Asset operations and maintenance Environment, health, and safety	 Enterprise portfolio and proje management Product lifecycle managemer Product compliance 			
Suite LoB Solutions**	• SAP CRM SAP C/4HANA • SAP Service Cloud	Asset performance and intelligence	Digital operations for R&D Requirement management (Supplier collaboration Business network Guided end-user buying External workforce managem SAP Ariba A SAP Concur C SAP F		
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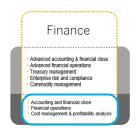
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SAP S/4HANA – LoB Finance

, reference.								
	Treasury Management	Cash and Liquidity Management	Debt and Investment Management	Financial Risk Management	Payments and Bank Communication			
SAP S/4HANA LoB Solutions*	Advanced Financial Operations	Dispute Resolution	Credit Evaluation and Management	Contract Accounting	Portfolio and Lease Management	Collections Management	Energy and Safety	Investment and Construction
		Maintenance and Repair	Space Management	Indirect Tax Management	Financial Supply Chain	E-Invoicing	Invoice Management	Online Bill Presentment & Payment
SAP S/4 HANA Enterprise Management	Cost Management and Profitability Analysis	Overhead Cost Management	Product Costing	Profitability Analysis				
	Accounting and Financial Close	Financial Accounting	Entity Close	Financial Reporting				
	Financial Operations	Accounts Payable	Accounts Receivable	Cash Management	Settlement Management	International Trade Management	Electronic Billing and Payment ***	
	Commodity Management	Risk Management for Commodities	Commodity Procurement	Commodity Sales				
SAP S/4HANA LoB Solutions*	Enterprise, Risk & Compliance	Controls and Compliance Management	Enterprise Risk Management	Audit Management	Automated Monitoring & Screening			
	Advanced Accounting and Financial Close	Financial Close Governance	Corporate Close	Advanced Compliance Reporting	Joint Venture Accounting	Revenue Accounting & Reporting		

^{*} Additional license

LoB Finance – Financial Operations – accounts payable



FINANCIAL OPERATIONS

Accounts Payable

Accounts Receivable Cash Management Settlement Management International Trade Management

Electronic Billing and Payment***

Purpose

- Simplify the way you record and manage accounts payable data from vendors
- Streamline accounts payable processes through real-time integration with purchasing software
- Keep records current by updating postings to accounts payable simultaneously in the general ledger
- Enable effective liquidity planning by updating cash management records with invoice data in real time
- Support compliance with local country rules and regulations using country-specific payment formats

Benefits

- Record and manage accounts payable data received from vendors
- Integrate accounts payable data with company purchasing data for enhanced financial insight
- Post to accounts payable and the general ledger simultaneously
- Use invoice data to update cash management information, supporting liquidity planning

LoB Finance – Financial Operations – accounts payable



FINANCIAL OPERATIONS

Accounts Payable

Accounts Receivable Cash Management Settlement Management International Trade Management

Electronic Billing and Payment***



Functional changes

- Built-in operational reporting with SAP Smart Business cockpits, eliminating the need for data replication
- More-efficient processes for posting and clearing outgoing payments and scheduling automatic payments
- Integration with discounting capability in the SAP Ariba Payables solution to capture early-payment discounts



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Accounts Payable Accountant
 - Accounts Payable Manager
 - Cash Manager
 - Manager Financial Info
 - Accounts Receivable Accountant
- Credit Controller
- General Ledger Accountant
- Cash Management Specialist

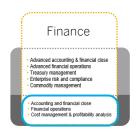
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library.</u>



Data innovations

- No need to rely on preaggregated data for reporting
- Ability to drill down from vendor balances to line items
- Simplified data model, with the removal of total and index tables

LoB Finance – Financial Operations – accounts receivable



FINANCIAL OPERATIONS

Accounts Payable

Accounts Receivable Cash Management Settlement Management International Trade Management

Electronic Billing and Payment***

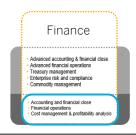
Purpose

- Manage accounts receivable data efficiently for all customers
- Trigger postings automatically to accounts receivable in response to sales and logistics transactions, and record postings in the general ledger
- Integrate data with SAP or third-party applications for dispute, collections, and credit management

Benefits

- Lower audit costs using automation tools that eliminate error-prone manual processes
- Decrease finance department costs through automated postings, self-service tools, and mobile access to key receivables information
- Improve compliance and risk management with automated processes
- Cut days sales outstanding with insight into customer positions during every interaction

LoB Finance - Financial Operations - accounts receivable



FINANCIAL OPERATIONS

Accounts Payable

Accounts Receivable Cash Management Settlement Management International Trade Management

Electronic Billing and Payment***



Functional changes

- Built-in operational reporting with SAP Smart Business cockpits, eliminating the need for data replication
- More-efficient processes for posting and clearing incoming payments, including handling of discounts
- Integration with cloud extensions such as the SAP S/4HANA Cloud solution for credit integration, SAP S/4HANA Cloud solution for customer payments, SAP digital payments add-on, and SAP Cash Application software



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Accounts Receivable Accountant
 - Accounts Receivable Manager
- Cash Management Specialist
- Credit Controller
- Accounts Payable Accountant
- General Ledger Accountant
- Project Manager
- Cash Management Specialist
- Administrator
- Credit Controller

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- No need to rely on preaggregated customer data for reporting
- Ability to drill down from accounts receivable analytics to line items

LoB Finance – Financial Operations – cash management



FINANCIAL OPERATIONS

Accounts Payable

Accounts Receivable Cash Management Settlement Management International Trade Management

Electronic Billing and Payment***

Purpose

- Monitor basic cash flows in real time to manage and maintain sufficient liquidity
- Access and maintain bank accounts

Benefits

 Reduce finance cost by automating cash management processes to reduce demand for cash and banking costs

LoB Finance – Financial Operations – cash management



FINANCIAL OPERATIONS

Accounts Payable

Accounts Receivable Cash Management Settlement Management International Trade Management

Electronic Billing and Payment***



Functional changes



User experience improvement



Data innovations

- Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as monitoring liquidity
- Functionality equivalent to scope in SAP ERP; advanced functionality for cash management available with SAP S/4HANA Finance for cash management. For additional details about the scope of this functionality with SAP S/4HANA compared to the advanced functionality, go to SAP Help Portal.

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- SAP Fiori-based user experience across all process steps
- Integration with a simplified data model of SAP S/4HANA

LoB Finance – Financial Operations – settlement management



FINANCIAL OPERATIONS

Accounts Payable

Accounts Receivable Cash Management Settlement Management International Trade Management

Electronic Billing and Payment***

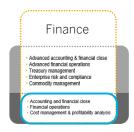
Purpose

- Offer financial services to business partners by handling complex, high-volume settlement processes
- Bundle, split, and settle a variety of invoice types by automating invoicing processes
- Optimize cash flow, reduce total cost of ownership, and grow profits with process integration and automation
- Manage settlement scenarios with solutions for pooled payment, central billing, brokerage and factoring, expense and commission, and payment card

Benefits

- Increase revenue growth from existing partners by simplifying and automating settlement processing tasks
- Reduce accounts receivable management cost by providing automation tools to eliminate manual, error-prone processes

LoB Finance – Financial Operations – settlement management



FINANCIAL OPERATIONS

Accounts Payable

Accounts Receivable Cash Management Settlement Management International Trade Management

Electronic Billing and Payment***



Functional changes



User experience improvement



Data innovations

 Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as settlement management functionalities

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Settlement Clerk
 - Billing Clerk

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.

 Integration with a simplified data model of SAP S/4HANA

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LoB Finance – Financial Operations – international trade management



FINANCIAL OPERATIONS

Accounts Payable

Accounts Receivable Cash Management Settlement Management International Trade Management

Electronic Billing and Payment***

Purpose

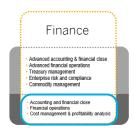
- Manage foreign and international trade activities by integrating them efficiently into the supply chain
- Ensure legal compliance and clear customs quickly
- Increase profitability from international trade activities with automation

Benefits

- Reduce cost by automating cross-border trade processes related to the export of goods
- Enhance compliance processes related to global trade, such as embargoes, export control, Intrastat, and integration for screening of business partners
- Minimize operational expenses through use of international trade capabilities delivered as part of SAP S/4HANA, reducing integration effort and maintenance

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LoB Finance – Financial Operations – international trade management



FINANCIAL OPERATIONS

Accounts Payable

Accounts Receivable Cash Management Settlement Management International Trade Management

Electronic Billing and Payment***



Functional changes



User experience improvement



Data innovations

- Management and activation of content from external data providers for commodity codes used in classification
- Scheduling of content requests with external data providers for new and updated commodity code information
- Custom tariff number updates
 - Custom tariff number management, including creation, change, and display
 - Time-dependent assignment of customer tariff numbers to classified and unclassified products
 - Assignment of customer tariff number to multiple products at the same time
- Integration of purchase orders in watch list screening, embargo, and legal control processes
- Management of legal control rules to determine blacklisting, whitelisting, or license determination in a sequence hub

- UI updates for managing commodity codes and Intrastat services codes
- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Intrastat Specialist
 - Trade Classification Specialist
 - Trade Compliance Specialist

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.

- Rebuilt international trade functionality with optimized data models for better use of the SAP HANA database
- Synchronization of master data, such as commodity codes, between the SAP Global Trade Services application and SAP S/4HANA for international trade to eliminate the need for manual interaction

LoB Finance – Accounting Financial Close – financial accounting



ACCOUNTING AND FINANCIAL CLOSE

Financial Accounting

Entity Close

Financial Reporting

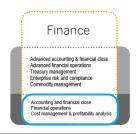
Purpose

- Accelerate the entity close process through automation and standardization
- Improve corporate governance, share best practices, and drive efficiency by using templates across multiple entities and closing cycles
- Support quick and efficient peer-to-peer reconciliation of intercompany balances and invoices between group subsidiaries
- Run closing processes across multiple SAP and third-party solutions

Benefits

- Reduce audit cost by enabling automated, highly efficient tasks for intercompany reconciliation and entity close management
- Reduce days to close annual books by supporting fast, peer-to-peer intercompany reconciliation; automating closing tasks; and increasing user efficiency
- Reduce finance cost by using templates across multiple entities

LoB Finance – Accounting Financial Close – financial accounting



ACCOUNTING AND FINANCIAL CLOSE

Financial Accounting

Entity Close

Financial Reporting



Functional changes



User experience improvement



Data innovations

- Automation of accruals management for specific scenarios
- Predictive accounting for increased visibility into sales order entry and commitments
- SAP Fiori-based user experience across all process steps
- Role with new, dedicated SAP Fiori apps:
 - General Ledger Accountant

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.

Introduction of predictive documents to the universal journal in extension ledger

LoB Finance – Accounting Financial Close – entity close



ACCOUNTING AND FINANCIAL CLOSE

Financial Accounting

Entity Close

Financial Reporting

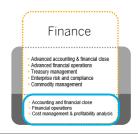
Purpose

- Simplify corporate accounting and financial close processes while improving accuracy and compliance by recording financial accounting data for multiple companies, currencies, charts of accounts, accounting principles, and industry requirements
- Close books, create financial statements, and manage reports at the entity and corporate levels according to International Financial Reporting Standards (IFRS) as well as local legal regulations
- Perform soft closes to produce interim reports
- Accelerate closing operations through automation and standardization
 - Run comprehensive closing functionality of the general ledger and subledgers
 - Support quick, efficient, peer-to-peer reconciliation of intercompany balances and invoices between group subsidiaries

Benefits

- Cut the time to close books by:
 - Supporting fast, accurate, peer-to-peer intercompany reconciliation
 - Automating and accelerating closing tasks
 - Increasing user efficiency
- Decrease finance department costs and streamline administrative processes by enabling automated, highly efficient tasks for intercompany reconciliation and closing operations

LoB Finance – Accounting Financial Close – entity close



ACCOUNTING AND FINANCIAL CLOSE

Financial Accounting

Entity Close

Financial Reporting



Functional changes

- Option to apply overhead in real time rather than waiting for period close
- Option to derive market segment information in real time from postings to cost centers, internal orders, or work breakdown structure elements
- Accelerated transactions for settlement, variance calculation, and work-in-progress calculation, delivering fast, real-time results by leveraging the power of in-memory computing
- No longer any maintenance of closing cockpit functionality (limited free version) with SAP S/4HANA; use of SAP Financial Closing cockpit (separate license) encouraged
- No support currently of SAP Invoice and Goods Receipt Reconciliation analytic application in SAP S/4HANA



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- General Ledger Accountant
- Cost Accountant (Inventory, Production, Sales, and Overhead)
- Asset Accountant
- Contract Valuation Specialist
- Controller
- Project Financial Controller
- Configuration Expert
- Project Manager
- External Auditor

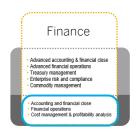
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Single transaction table for general ledger, controlling, asset accounting, and inventory accounting items, eliminating the need for reconciliation
- Intercompany reconciliation with real-time access to open items in accounts receivable and accounts payable, eliminating the need to store items in a special ledger

LoB Finance – Accounting Financial Close – financial reporting



ACCOUNTING AND FINANCIAL CLOSE

Financial Accounting

Entity Close

Financial Reporting

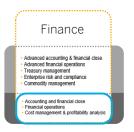
Purpose

- Gain insight into financials to reduce the time, cost, and risk of regulatory filings and disclosures
- Accelerate financial reporting and disclosure with fact-based decision-making
- Access relevant information anytime and anywhere to better understand business needs for quick and confident action
- Generate pixel-perfect reports and clear, understandable metrics to gain visibility into what's driving the business
- Use transparency and insight to boost profitability, reduce risk, and comply with International Financial Reporting Standards (IFRS) and local GAAP or US GAAP With the transparency and insight

Benefits

- Increase finance FTE productivity by utilizing the comprehensive portfolio of business intelligence solutions
- Reduce audit cost by using comprehensive audit trails, audit information functions, and tax data retention and reporting functions
- Reduce days to close annual books by streamlining financial reporting, disclosure, and filing processes
- Reduce finance cost by streamlining financial reporting, disclosure, and filing processes

LoB Finance – Accounting Financial Close – financial reporting



ACCOUNTING AND FINANCIAL CLOSE

Financial Accounting

Entity Close

Financial Reporting



Functional changes

- Financial statement KPIs
- Financial statement grid reporting



User experience improvement



- Role with new, dedicated SAP Fiori apps:
 - General Ledger Accountant

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

KPI calculations based on core data services (CDS) views

LoB Finance – Cost Management and Profitability Analysis – profitability analysis



COST MGMT & PROFITABILITY ANALYSIS

Profitability Analysis

Product Costing

Overhead Cost Management

Purpose

- Make better-informed profitability and cost decisions
- Deliver service at a lower cost
- Gain real-time access to financial data, with the ability to drill down to line-item levels
- Deliver forward-looking insights based on operational transactional information

Benefits

- Cut finance department cost with automated functionality that reduces the need for manual tasks
- Lower audit cost by enabling detailed audit trails, retention of tax data, and reporting
- Accelerate time to close books by minimizing financial processing disruptions during period-end closing
- Achieve more-effective delivery of financial insights for business steering through increase in automated reporting and embedded predictions

LoB Finance – Cost Management and Profitability Analysis – profitability analysis



COST MGMT & PROFITABILITY ANALYSIS

Profitability Analysis

Product Costing

Overhead Cost Management



Functional changes

- Ability to quickly change predefined reports and create new reports using a query designer tool
- Additional reporting variants, including plan versus actual, actual, currency conversion, year to date, cost centers, internal orders, projects, market segments, profit centers, profit-and-loss functional areas, and sales orders
- Real-time availability of profitability information for profitability reporting during the month, including predictive margin information for selected scenarios, resulting in a more-efficient month-end closing and faster decision-making
- Availability of transfer pricing for clear insight into the internal supply chain
- Integrated financial planning with SAP Analytics
 Cloud solution for planning* directly connected to the
 universal journal with SAP S/4HANA
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User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Controller
- Controller Production Costs
- Cost Accountant Inventory
- Cost Accountant Sales

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Simplified data model, allowing fast and transparent reporting
- Inclusion of profitability segments in the universal journal in real time, allowing for fast and transparent profitability reporting during the month and faster, more-reliable decision-making, including incoming orders and statistical conditions and splitting of cost of goods sold (COGS)
- Extension of the universal journal to include planning and consolidation data, including integration to SAP Analytics Cloud for planning*
- Capture of intercompany relationships in the material ledger integrated in the universal journal, used as a basis for transfer pricing
- Ability to add flexible hierarchies and semantic tagging, which allows for adding ad hoc reporting structures (alternative views on data)

* SAP Analytics Cloud solution for planning is a separate SaaS offering that requires a subscription.

LoB Finance - Cost Management and Profitability Analysis - product costing



COST MGMT & PROFITABILITY ANALYSIS

Profitability Analysis

Product Costing

Overhead Cost Management

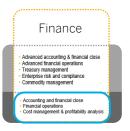
Purpose

- Determine the true costs incurred by products or services to enable effective management of the product portfolio
- Break costs down into each step of the value chain
- Map the quantity flow of products from logistical areas to support accurate inventory valuation

Benefits

- Increase transparency into the value chain by taking advantage of data captured in logistics processes
- Optimize cost structures for company-wide margin maximization

LoB Finance - Cost Management and Profitability Analysis - product costing



COST MGMT & PROFITABILITY ANALYSIS

Profitability Analysis

Product Costing

Overhead Cost Management



Functional changes

 Greater transparency into the value chain by taking advantage of data captured in logistics processes



User experience improvement



- Roles with new, dedicated SAP Fiori apps:
- Cost Accountant
- Controller Production Costs

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>



Data innovations

 Storing of material movements now in material ledger as integrated part of the universal journal (based on the principle of one), resulting in a single source for product cost and material valuation information (does not require applying actual costing)

LoB Finance – Cost Management and Profitability Analysis – overhead cost management



COST MGMT & PROFITABILITY ANALYSIS

Profitability Analysis

Product Costing

Overhead Cost Management

Purpose

- Improve profitability with enhanced organizational cost management
- Gain deeper insight into the drivers of cost and the causes of underperformance
- Access complete, accurate, real-time information on the profitability of products, customers, and channels

Benefits

- Decrease finance department cost by using a universal journal, lessening the need to move data between controlling and financial applications or perform manual reconciliation
- Reduce the time needed to close books, thanks to acceleration of certain period-end closing tasks

LoB Finance – Cost Management and Profitability Analysis – overhead cost management



COST MGMT & PROFITABILITY ANALYSIS

Profitability Analysis

Product Costing

Overhead Cost Management



Functional changes

- Direct reporting of account assignment, simplifying the solution and eliminating the need to rely on object numbers representing specific combinations of dimensions
- Direct reporting of controlling-profitability assignment
- Allocations that trigger updates to areas such as partner profit centers and functional areas
- First step to harmonization of allocations (in design and runtime) across actual and plan; currently for cost center planning only
- Allowance of parallel valuations in all areas to be based on parallel ledgers
- Inclusion of cost elements as part of the chart of accounts, allowing maintenance to occur in account master data, not in separate master data transactions for cost elements
- Optimization of the creation of plan data through the use of embedded planning scenarios (separate license for the SAP Business Planning and Consolidation application or SAP Analytics Cloud solution required); provision of preconfigured planning scenarios for cost center planning, profit center planning



User experience improvement

- SAP Fiori based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Controller
 - Cost Accountant Overhead
 - Cost Accountant Sales
 - Cost Accountant Inventory
 - Project Financial Controller
 - General Ledger Accountant
 - Inventory Accountant
 - Manager Financial Info

For additional information on roles and apps, visit the <u>SAP Fioriapps reference library</u>.



Data innovations

- Universal journal now includes:
 - Cost centers, orders, projects, and dependent objects
 - Profitability segments
 - Results of allocations and settlements
- Market dimensions stored in table CE4 now part of the universal journal
- Ability to add flexible hierarchies and semantic tagging, allows for adding ad hoc reporting structures (alternative views on data)

LoB Finance – Advanced Accounting and Financial Close – financial close governance



ADVANCED ACCOUNTING & FINANCIAL CLOSE

Financial Close Governance

Corporate Close

Advanced Compliance Reporting

Joint Venture Accounting Revenue Accounting & Reporting

Purpose

- Execute, control, and monitor the creation and updating of important master data efficiently
- Accelerate financial close, generate accurate reports, and comply with multiple regulations with access to reliable data
- Increase compliance by documenting the internal control system and streamlining testing and assessments

Benefits

- Reduce days to close annual books by automating workflows, introducing tighter internal controls, and aligning master data to increase data quality
- Reduce audit cost by providing comprehensive audit trails and automated testing of internal controls
- Reduce finance cost by centralizing maintenance, fostering collaboration, and automating distribution of master data

LoB Finance – Advanced Accounting and Financial Close – financial close governance



ADVANCED ACCOUNTING & FINANCIAL CLOSE

Financial Close Governance

Corporate Close

Advanced Compliance Reporting

Joint Venture Accounting Revenue Accounting & Reporting



Functional changes



User experience improvement



Data innovations

No functional changes

SAP Fiori-based user experience across all process steps

No change to data model

LoB Finance – Advanced Accounting and Financial Close – corporate close



ADVANCED ACCOUNTING & FINANCIAL CLOSE

Financial Close Governance

Corporate Close

Advanced Compliance Reporting

Joint Venture Accounting Revenue Accounting & Reporting

Purpose

- Increase the accuracy and completeness of corporate close reports through control and validation checks, and real-time access to underlying financial data
- Accelerate the corporate close process by automating processes and eliminating time-consuming errors
- Improve compliance by maintaining a fully documented audit trail
- Reduce total cost of ownership with a single, fully-integrated financial solution supporting both local and corporate financial reporting

Benefits

- Decrease finance cost by reducing the need for manual work through comprehensive, automated functionality
- Reduce days to close annual books by providing real-time integration and automating period-end tasks in the general ledger and subledgers

LoB Finance – Advanced Accounting and Financial Close – corporate close



ADVANCED ACCOUNTING & FINANCIAL CLOSE

Financial Close Governance

Corporate Close

Advanced Compliance Reporting

Joint Venture Accounting Revenue Accounting & Reporting



Functional changes

- Introduction of group reporting and consolidation in SAP S/4HANA
- Enhancements to continuous accounting:
 - Integration of SAP Financial Closing cockpit with SAP S/4HANA, including harmonized user interface
 - Expanded automation through integration of the SAP Shared Service Framework for SAP S/4HANA
- Predictive close that enables forward-looking enterprise performance management in SAP S/4HANA



User experience improvement

- SAP Fiori-based user experience across all process steps
- Role with new, dedicated SAP Fiori apps:
- Consolidation Specialist

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library



Data innovations

- Entity and consolidated information centralized in the universal journal
- New table ACDOCU introduced

LoB Finance – Advanced Accounting and Financial Close – advanced compliance reporting



ADVANCED ACCOUNTING & FINANCIAL CLOSE

Financial Close Governance

Corporate Close

Advanced Compliance Reporting

Joint Venture Accounting Revenue Accounting & Reporting

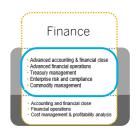
Purpose

- Manage end-to-end legal reporting process through harmonized user experience with global legal reporting solution
- Facilitate auditability through tracking of reports and individual documents considered in report preparation
- Define additional legal reports or extend existing reports as per business needs using platform capabilities offered by the solution

Benefits

- Reduce the cost to support tax accounting and reporting by generating and managing end-to-end processing of statutory reports centrally through harmonized solution
- Bring transparency through a reporting dashboard or compliance dashboard to the business team and in the audit process through drilldown and analytics
- Reduce the cost involved in creation of customer-specific legal reports through a design time tool for advanced compliance reporting available with SAP S/4HANA

LoB Finance – Advanced Accounting and Financial Close – advanced compliance reporting



ADVANCED ACCOUNTING & FINANCIAL CLOSE

Financial Close Governance

Corporate Close

Advanced Compliance Reporting

Joint Venture Accounting Revenue Accounting & Reporting



Functional changes

- Advanced compliance reporting functionality in addition to basic compliance reporting:
 - Data preview
 - Audit trail
 - Ad hoc reporting
 - Reporting activities
 - Smart collaboration using SAP CoPilot
 - Manual adjustments to manage tax item
 - Global compliance monitoring through the SAP Cloud Analytics solution*



User experience improvement

- SAP Fiori-based user experience across all process steps
- Compliance monitor with embedded analytics in SAP S/4HANA
- Roles with new, dedicated SAP Fiori apps:
 - Administrator
 - Configuration Expert
 - General Ledger Accountant
 - Accounts Payable Manager
 - Accounts Payable Accountant

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

Immediate access to data source resulting in flexible generation of reports

^{*} SAP Analytics Cloud is a separate SaaS offering that requires a subscription.

LoB Finance – Advanced Accounting and Financial Close – joint venture accounting



ADVANCED ACCOUNTING & FINANCIAL CLOSE

Financial Close Governance

Corporate Close

Advanced Compliance Reporting

Joint Venture Accounting Revenue Accounting & Reporting

Purpose

- Increase visibility into joint ventures and production-sharing contracts for billing and reporting
- Gain full visibility into capital and operating expenses using joint venture software from SAP
- Comply with production sharing and joint-venture agreements by capturing jointventure data and calculating partner expense shares
- Support timely invoice handling by distributing billable and non-billable costs to different cost centers and projects, according to joint operating agreements and production sharing agreement rules

Benefits

- Increase auditability by processing transactions to consistently apply business rules to generate files for auditors of joint-venture partners
- Reduce days to close annual books by streamlining cash call and joint-interest billing processes
- Reduce finance cost by increasing visibility into related costs for joint venture and partner billing
- Reduce uncollectible accounts receivable write offs by capturing detailed joint venture data in real time, through distinguishing between billable and non-billable costs

LoB Finance – Advanced Accounting and Financial Close – joint venture accounting



ADVANCED ACCOUNTING & FINANCIAL CLOSE

Financial Close Governance

Corporate Close

Advanced Compliance Reporting

Joint Venture Accounting Revenue Accounting & Reporting



Functional changes

No functional changes



User experience improvement

SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- No change to data model
- SAP intends to change the joint venture accounting (JVA) data model to universal journal in a future release. This will make the special ledger tables obsolete and will integrate the special ledger JVA data into the universal journal, thereby offering one single source of truth for upstream accounting.

LoB Finance – Advanced Accounting and Financial Close – revenue accounting & reporting



ADVANCED ACCOUNTING & FINANCIAL CLOSE

Financial Close Governance

Corporate Close

Advanced Compliance Reporting

Joint Venture Accounting Revenue Accounting & Reporting

Purpose

- Automate and simplify the revenue recognition and accounting process
- Enable businesses to comply with the implementation of revenue recognition regulations, especially the regulation effective in countries adhering to both US GAAP and IFRS
- Automate the revenue recognition and accounting process and simplify the tasks of revenue accountants
- Increase accuracy by keeping up with accounting changes on an ongoing basis

Benefits

- Reduce audit cost by delivering a financial audit trail from the general ledger back to subledger posting
- Reduce compliance and risk management costs by using a comprehensive, integrated framework to adhere to IFRS and local accounting mandates

LoB Finance – Advanced Accounting and Financial Close – revenue accounting & reporting



ADVANCED ACCOUNTING & FINANCIAL CLOSE

Financial Close Governance

Corporate Close

Advanced Compliance Reporting

Joint Venture Accounting Revenue Accounting & Reporting



Functional changes

 Comparable SAP ERP functionality provided in SAP S/4HANA



User experience improvement

SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 Integration with a simplified data model of SAP S/4HANA

LoB Finance – Enterprise Risk and Compliance – controls and compliance management



ENTERPRISE, RISK AND COMPLIANCE

Controls and Compliance Management

Enterprise Risk Management Audit Management Automated Monitoring & Screening

Purpose

- Achieve continuous compliance and effective business processes with less risk
- Focus resources on high-impact processes, regulations, and risks to gain ongoing insight to help ensure continuous compliance and control with SAP S/4HANA
- Help ensure effective, ongoing controls and compliance management
- Increase visibility to reduce costs while increasing business process reliability and quality

Benefits

- Improve financial reporting efficiency by continuously monitoring controls and effectively managing issues
- Reduce compliance and risk management costs by automating control tests and sharing controls across multiple regulations

LoB Finance – Enterprise Risk and Compliance – controls and compliance management



ENTERPRISE, RISK AND COMPLIANCE

Controls and Compliance Management

Enterprise Risk Management Audit Management Automated Monitoring & Screening



Functional changes

 Comparable SAP ERP functionality provided in SAP S/4HANA



User experience improvement



For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 Integration with a simplified data model of SAP S/4HANA

LoB Finance – Enterprise Risk and Compliance – enterprise risk management



ENTERPRISE, RISK AND COMPLIANCE

Controls and Compliance Management

Enterprise Risk Management Audit Management Automated Monitoring & Screening

Purpose

- Use enterprise risk management to protect and grow business value
- Increase productivity by focusing enterprise risk management on the business risk with SAP S/4HANA
- Gain insight into critical risks with risk assessments, continuous monitoring, and a bow-tie builder
- Act on emerging risks and opportunities with alerts based on risk appetite
- Predict the impact of unplanned events by using simulations and what if scenarios

Benefits

- Reduce compliance and risk management costs by integrating various SAP software and using shared risk, control organization, and activity frameworks
- Reduce enterprise risk management cost by automating surveys, assessments, and alerts

LoB Finance – Enterprise Risk and Compliance – enterprise risk management



ENTERPRISE, RISK AND COMPLIANCE

Controls and Compliance Management

Enterprise Risk Management Audit Management Automated Monitoring & Screening



Functional changes

 Comparable SAP ERP functionality provided in SAP S/4HANA



User experience improvement



For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 Integration with a simplified data model of SAP S/4HANA

LoB Finance – Enterprise Risk and Compliance – audit management



ENTERPRISE, RISK AND COMPLIANCE

Controls and Compliance Management

Enterprise Risk Management Audit Management Automated Monitoring & Screening

Purpose

- Streamline audit management and align internal audit activities within the business
- Improve productivity and audit management with technology that enables creation, organization, and sharing of working papers
- Provide insight into key business risks with automated processes
- Deliver advice beyond the obvious by using next-generation analytics

Benefits

- Reduce service and support cost by eliminating unnecessary controls and reducing loss
- Improve tax audit and compliance FTE by automating documentation and reporting processes for audit planning
- Reduce audit cost by maximize staff utilization and reduce travel costs with better internal audit planning, resource management, and scheduling

LoB Finance – Enterprise Risk and Compliance – audit management



ENTERPRISE, RISK AND COMPLIANCE

Controls and Compliance Management

Enterprise Risk Management Audit Management Automated Monitoring & Screening



Functional changes

 Comparable SAP ERP functionality provided in SAP S/4HANA



User experience improvement

SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 Integration with a simplified data model of SAP S/4HANA

LoB Finance – Enterprise Risk and Compliance – automated monitoring and screening



ENTERPRISE, RISK AND COMPLIANCE

Controls and Compliance Management

Enterprise Risk Management Audit Management Automated Monitoring & Screening

Purpose

- Minimize financial losses through more effective automated monitoring and screening
- Detect suspicious activity faster by scanning high volumes of data and transactions in real time and screening any entities with which you conduct business
- Improve detection strategies by monitoring detection performance and using predictive analytics
- Limit false positives with real-time calibration and simulation of large volumes of data

Benefits

- Reduce cost of error corrections or investigations by improving the accuracy of exception detection through calibration and simulation
- Reduce losses due to fraud by offering real-time detection that enables early intervention

LoB Finance – Enterprise Risk and Compliance – automated monitoring and screening



ENTERPRISE, RISK AND COMPLIANCE

Controls and Compliance Management

Enterprise Risk Management Audit Management Automated Monitoring & Screening



Functional changes

 Comparable SAP ERP functionality provided in SAP S/4HANA



User experience improvement

SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 Integration with a simplified data model of SAP S/4HANA

LoB Finance – Advanced Financial Operations – dispute resolution



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Lease Energy and Safety **ADVANCED** Resolution and Management Accounting Management Construction Repair Management Management FINANCIAL **OPERATIONS** Online Bill Financial Supply Indirect Tax Invoice E-Invoicing Presentment & Management Chain Management Payment

Purpose

- Create and process invoices, credit and debit memos, pro forma invoices, and cancellation notices in real time
- Avoid errors and delays due to lost invoices, process receivables instantly, and improve service by presenting bills and payment options in a customer portal
- Streamline dispute resolution with real-time customer collaboration

Benefits

 Reduce finance cost by automating processes, eliminating printing and postage, and decreasing staffing needs through customer self-services

LoB Finance – Advanced Financial Operations – dispute resolution



ADVANCED FINANCIAL **OPERATIONS**

Dispute Resolution

and Management

Credit Evaluation

Contract Accounting

Portfolio and Lease Management

Collections Management Energy and Safety

Investment and Construction

Maintenance and Repair

Space Management

Financial Supply Indirect Tax Chain Management

E-Invoicing

Invoice Management

Online Bill Presentment & Payment



Functional changes

Comparable SAP ERP functionality provided in SAP S/4HANA



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Accounts Payable Accountant
 - Accounts Receivable Accountant

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

No change to data model

LoB Finance – Advanced Financial Operations – credit evaluation and management



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Lease Energy and Safety **ADVANCED** Resolution and Management Accounting Management Construction Repair Management Management FINANCIAL **OPERATIONS** Online Bill Financial Supply Invoice Indirect Tax E-Invoicing Presentment & Management Management Chain Payment

Purpose

- Reduce risk by assessing your customers' credit worthiness in real time using a scorecard based on internal and external factors
- Minimize customer defaults by deriving and enforcing credit limits instantly across logistics systems
- Accelerate operations by automating credit application and approval processes
- Increase receivables by measuring, allocating, and monitoring credit exposure in real time
- Manage risk proactively by evaluating customer credit before you confirm pricing and sales

Benefits

- Reduce compliance and risk management costs by using a comprehensive, integrated framework to adhere to International Financial Reporting Standards (IFRS) and local accounting mandates
- Reduce audit cost by delivering a financial audit trail from the general ledger back to subledger posting

LoB Finance – Advanced Financial Operations – credit evaluation and management



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Lease Energy and Safety **ADVANCED** Resolution and Management Accounting Management Construction Repair Management Management FINANCIAL **OPERATIONS** Online Bill Indirect Tax Financial Supply Invoice E-Invoicing Presentment & Management Chain Management Payment



Functional changes

Comparable SAP ERP functionality provided in SAP S/4HANA



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Accounts Payable Accountant
 - Accounts Receivable Accountant

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

No change to data model

LoB Finance – Advanced Financial Operations – contract accounting



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Energy and Safety Lease **ADVANCED** Resolution and Management Accounting Management Construction Repair Management Management FINANCIAL **OPERATIONS** Online Bill Financial Supply Invoice Indirect Tax E-Invoicing Presentment & Management Management Chain Payment

Purpose

- Manage automated accounts payables and accounts receivables processes for high volumes of documents
- Execute accounts receivable and payable tasks more effectively with automated processes
- Improve compliance with support for statutory obligations and country-specific requirements
- Keep records up-to-date through automatic data transfer to the general ledger on a cumulative basis

Benefits

- Reduce non compliant records management by ensuring compliance with statutory obligations and country-specific requirements
- Improve invoice processing FTE efficiency by automatically transferring receivables, payables, revenue, and expenses to the general ledger on a cumulative basis
- Reduce penalty cost of lost business due to billing errors by managing data better to ensure fewer billing errors, impacting customer satisfaction

LoB Finance – Advanced Financial Operations – contract accounting



ADVANCED FINANCIAL

Dispute Resolution

Credit Evaluation and Management

Contract Accounting

Portfolio and Lease Management

Collections Energy and Safety Management

Investment and Construction

Maintenance and Repair

Space Management

OPERATIONS

Indirect Tax Management

Financial Supply Chain

E-Invoicing

Invoice Management

Online Bill Presentment & Payment



Functional changes

- Comparable business processes with SAP S/4HANA
- Analytical apps for accounts payable/receivable manager (FI-CA) enhanced



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Accounts Payable and Receivable Manager
 - Accounts Payable and Receivable Accountant

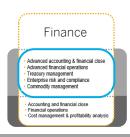
For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

Different system framework in SAP S/4HANA. For details, see SAP Note 2253765 - SAP S/4HANA, onpremise edition, Restriction Note.

LoB Finance – Advanced Financial Operations – portfolio and lease management



Portfolio and Credit Evaluation Contract Space Dispute Collections Investment and Investment and Energy and Safety Lease **ADVANCED** Resolution and Management Management Construction Construction Management Accounting Management FINANCIAL **OPERATIONS** Online Bill Financial Supply Invoice Indirect Tax E-Invoicing Presentment & Management Management Chain Payment

Purpose

- Streamline property management by integrating critical data with computer-aided design (CAD) applications for robust analytics
- Gain insights by tracking building attributes and spatial relationships and using thematic reports to visualize complex data
- Comply with new lease accounting standards (IFRS 16 and ASC 842), with valuation cashflows being systematically calculated and posted using standard integration
- Lower costs by automating contingent rent calculations and settlements and applying criteria such as a consumer price index to set rental fees
- Monitor critical-date, renewal, and termination notices and options

Benefits

- Reduce effort to comply with new leasing standards with automatic valuation calculations, tracking of lease modifications, and consistency between lease agreements and financial postings
- Avoid costly errors with critical-date monitoring and renewal and termination notices and options to ensure only intended options are exercised
- Reduce administrative costs by automating invoicing, postings, and payments
- Lower vacancy rate and length of vacancy by gaining visibility into upcoming vacancies
- Increase revenue through improved asset utilization by automating lease-out processes for prospective tenants
- Reduce write-offs resulting from uncollectible accounts receivable by automating dunning and installment handling

LoB Finance – Advanced Financial Operations – portfolio and lease management



ADVANCED FINANCIAL OPERATIONS Dispute Resolution

Indirect Tax

Management

Credit Evaluation and Management

Financial Supply

Chain

Contract Accounting

E-Invoicing

Portfolio and Lease Management

Invoice

Management

Collections
Management
Energy ar

Online Bill

Presentment &

Payment

Energy and Safety I

Investment and Invest Construction Cons

Investment and Construction

Space Management

Functional changes

 Optimization of real estate processes and improvements in the user experience through simplification provided by the SAP Real Estate Management application

For more information on simplification provided in SAP S/4HANA Finance and project financial control, see the Simplification List for SAP S/4HANA.



User experience improvement

 SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

- No need to rely on preaggregated data for reporting
- Simplified data model, allowing fast and transparent reporting
- Optimized reports for faster response time

LoB Finance – Advanced Financial Operations – collections management



ADVANCED FINANCIAL OPERATIONS	Dispute Resolution	Credit Evaluation and Management		Portfolio and Lease Management	Collections Management	Energy and Safety	Investment and Construction	Maintenance and Repair	Space Management	
	Indirect Tax Management	Financial Supply Chain	E-Invoicing	Invoice Management	Online Bill Presentment & Payment					

Purpose

• Deploy a customer-centric process for prioritizing customer accounts in real time

Benefits

- Increase the efficiency of the cash collections team by digitalizing business processes to document promises to pay, open invoice disputes, and send correspondence
- Accelerate escalation of customer accounts by automating the tracking of follow-on activities
- Improve team effectiveness by using analytics and worklist balancing tools

LoB Finance – Advanced Financial Operations – collections management



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Lease Energy and Safety **ADVANCED** Resolution and Management Management Construction Repair Management Accounting Management FINANCIAL **OPERATIONS** Online Bill Financial Supply Indirect Tax Invoice E-Invoicing Presentment & Management Chain Management Payment



Functional changes

 In-process analytics based on real-time data to help guide teams



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Accounts Payable Accountant
 - Accounts Receivable Accountant

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

No change to data model

LoB Finance – Advanced Financial Operations – energy and safety



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Lease Energy and Safety **ADVANCED** Resolution and Management Accounting Management Construction Repair Management Management FINANCIAL **OPERATIONS** Online Bill Indirect Tax Financial Supply Invoice E-Invoicing Presentment & Management Chain Management Payment

Purpose

- Mitigate environment, health, and safety (EHS) risks by performing risk assessments, measuring and reporting emissions, designing effective controls, and communicating safe work practices
- Support intelligent change by testing controls and tracking incidents to learn from events
- Lower emissions spend with real-time views of energy consumption

Benefits

- Reduce energy cost by improving energy utilization
- Reduce emissions cost by monitoring resource consumption by location
- Improve environmental safety and compliance by standardizing safety compliance procedures
- Reduce lost time resulting from accidents by tracking safety incidents

LoB Finance – Advanced Financial Operations – energy and safety



ADVANCED FINANCIAL **OPERATIONS**

Dispute Resolution

Credit Evaluation and Management

Contract Accounting

Portfolio and Lease Management

Collections Management

Energy and Safety

Investment and Construction

Maintenance and Repair

Space Management

Indirect Tax Management

Financial Supply Chain

E-Invoicing

Invoice Management

Online Bill Presentment & Payment



Functional changes

- Accelerated performance of daily environmental data processing
- Graphical user interface to manage emission data
- File-based import of emission data
- Delivery of example methodologies for greenhouse gas emission calculations
- Accelerated performance of daily health and safety data processing
- Dedicated risk identification process
- Monitoring of implementation of controls to mitigate risks
- Support of business unit-specific setup of risk identification and assessment process
- Core data services (CDS) based analytics to gain better and faster insights into safety performance



User experience improvement

- SAP Fiori-based user experience across all process steps
- Scalable role assignment that uses the location hierarchy
- More scalable setup process with the new copy compliance scenario feature
- Roles with new, dedicated SAP Fiori apps:
 - Industrial Hygienist
 - Environmental Manager
 - Change Management Coordinator

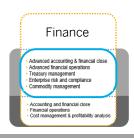
For additional information on roles and apps, visit the <u>SAP Fiori</u> apps reference library.



Data innovations

- 17 equations related to 40 CFR Part 75 and 98 Emissions Monitoring Policy Manual regarding continuous emission monitoring
- 8 predefined calculation methodologies for 40 CFR Part 98, referred to as the Greenhouse Gas Reporting Program: calculations covering 746 emission factors from tier 1, tier 2, and tier 3 of 40 CFR Part 98 Subpart C, W, UU, NN, and RR, and the conversion of CO₂, N₂O and CH₄ emissions into CO₂ equivalents
- CDS views for detailed analysis of materials and chemicals in stock, including greenhouse gas classification and hazardous ingredients
- Delivery of occupational exposure limit values with good worldwide coverage (~70,000 limit values, ~100 regulatory lists, and ~ 65 countries)

LoB Finance – Advanced Financial Operations – investment and construction



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Energy and Safety Lease **ADVANCED** Resolution and Management Management Construction Repair Management Accounting Management FINANCIAL **OPERATIONS** Online Bill Financial Supply Invoice Indirect Tax E-Invoicing Presentment & Management Management Chain Payment

Purpose

- Analyze investment alternatives and details
- Increase efficiency by tracking project budgets, milestones, and delivery as well as communicating electronically on bids
- Manage process steps, automate payments, and track architectural, usage, and land data
- Help managers keep on track, meet deadlines, and make better decisions with management, monitoring, and collaboration functionality
- Get a clear view into investments and property portfolios, gain project insights and budget control, reduce project risk, save time in supplier collaboration, and improve the bidding process

Benefits

- Reduce total manufacturing costs by closely monitoring construction project budgets
- Manage spend more strategically by closely monitoring spending on construction
- Reduce finance cost by automating vendor invoice processing and asset capitalization
- Reduce write-offs for uncollectible accounts receivable by tracking each phase of a construction project in accounting
- Improve cycle time for new contract creation by tracking the bid and award for construction services

LoB Finance – Advanced Financial Operations – investment and construction



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Lease Energy and Safety **ADVANCED** Resolution and Management Accounting Management Construction Repair Management Management FINANCIAL **OPERATIONS** Online Bill Financial Supply Indirect Tax Invoice E-Invoicing Presentment & Management Chain Management Payment



Functional changes

 Comparable SAP ERP functionality provided in SAP S/4HANA



User experience improvement

SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the <u>SAP Fiori apps reference library</u>.



Data innovations

No change to data model

LoB Finance – Advanced Financial Operations – maintenance and repair



Portfolio and Maintenance and Credit Evaluation Space Dispute Contract Collections Investment and Lease Energy and Safety **ADVANCED** Resolution and Management Accounting Management Construction Repair Management Management FINANCIAL **OPERATIONS** Online Bill Financial Supply Invoice Indirect Tax E-Invoicing Presentment & Management Management Chain Payment

Purpose

- Plan and monitor budgets, collaborate electronically with suppliers, and automate invoice processing
- Create and track maintenance and repair orders, and recover maintenance expenses
- Avoid budget overruns, automate paper-based processes, and accurately track energy consumption with effective maintenance and repair management processes
- Keep projects on budget, reduce processing costs through automation, increase service-level agreement fulfillment, and fully allocate operational costs

Benefits

- Reduce service and support cost by automating maintenance, repair, and service order handling between tenant, planner, and technician
- Improve customer satisfaction by providing faster replies and better status updates to tenants' requests
- Reduce call abandonment rate by following defined standard procedures in request handling

LoB Finance – Advanced Financial Operations – maintenance and repair



ADVANCED FINANCIAL **OPERATIONS**

Dispute Resolution

Indirect Tax Management

Credit Evaluation and Management

Financial Supply Chain

Contract Accounting

E-Invoicing

Collections Management Management

Invoice Presentment & Management

Portfolio and

Lease

Energy and Safety

Investment and Construction

Maintenance and Repair

Space Management



Functional changes

- SAP Geographical Enablement Framework for SAP S/4HANA provides:
 - Foundation to enrich business data with geometric attributes
- SAP Geo Framework for SAP S/4HANA Asset Management provides:
 - Bidirectional navigation between the geo framework and SAP S/4HANA Asset Management solution
 - Geo-enabled technical objects: equipment, functional location
 - Geo-enabled business transactions: plant maintenance notification, plant maintenance order



User experience improvement

Online Bill

Payment

 SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

No change to data model

LoB Finance – Advanced Financial Operations – space management



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Lease Energy and Safety **ADVANCED** Resolution and Management Accounting Management Construction Management Repair Management FINANCIAL **OPERATIONS** Online Bill Financial Supply Invoice Indirect Tax E-Invoicing Presentment & Management Management Chain Payment

Purpose

- Optimize workspace by tracking employee and contractor assignments and monitoring planned occupancies
- Monitor available rental spaces, forecast vacancies, and ensure compliance with critical lease dates
- Increase lease revenue by automating rent calculations and payment details
- Improve space utilization and gain more-accurate equipment assignments by creating and scheduling move plans
- Enhance management of conference room occupancy with the ability to charge for ordered services

Benefits

- Increase lease revenue by reducing vacancies and by leasing available space
- Increase asset availability by monitoring asset utilization and assignments
- Improve return on assets by improving asset allocation
- Optimize the size of the real estate portfolio through accurately monitoring and planning workspace utilization

LoB Finance – Advanced Financial Operations – space management



ADVANCED FINANCIAL OPERATIONS Dispute Resolution

Indirect Tax

Management

Credit Evaluation and Management

Financial Supply

Chain

Contract Accounting Portfolio and Lease Management

Invoice

Management

Collections Ene

Online Bill

Presentment &

Payment

Energy and Safety

Investment and Construction

Maintenance and Repair

Space Management

Functional changes

 Optimization of real estate processes and improvements in the user experience through simplification provided by the SAP Real Estate Management application

For more information on simplification provided in SAP S/4HANA Finance and project financial control, see the Simplification List for SAP S/4HANA.



E-Invoicing

User experience improvement

 SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

- No need to rely on preaggregated data for reporting
- Simplified data model, allowing fast and transparent reporting
- Optimized reports for faster response time

LoB Finance – Advanced Financial Operations – indirect tax management



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Lease Energy and Safety **ADVANCED** Resolution and Management Management Construction Management Accounting Repair Management FINANCIAL **OPERATIONS** Online Bill Indirect Tax Financial Supply Invoice E-Invoicing Presentment & Management Management Chain Payment

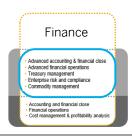
Purpose

- Manage indirect tax in a comprehensive, consistent and cost-savings manner
- Adapt to the rapidly changing regulations across the globe
- Automate tax determination, calculation, reporting and compliance while integrating them with core business processes on a global scale
- Fulfill all reporting obligations related to e-Invoicing, and periodic tax returns
- Have processes and tools to mitigate tax compliance issues with a company-wide tax control framework
- Improve visibility of global tax processes

Benefits

- Improve tax compliance efficiency of FTEs by reviewing tax declarations before submitting the VAT return to tax authorities
- Reduce the cost to support tax accounting and reporting by identifying the source of inaccuracies in tax postings

LoB Finance – Advanced Financial Operations – indirect tax management



Dispute **ADVANCED** Resolution FINANCIAL **OPERATIONS** Indirect Tax

Management

Credit Evaluation and Management

Financial Supply

Chain

Contract Accounting

E-Invoicing

Portfolio and Lease Management

Invoice

Management

Collections Management

Online Bill

Presentment &

Payment

Energy and Safety

Investment and Construction

Maintenance and Repair

Space Management

Functional changes

Comparable SAP ERP functionality provided in SAPS/4HANA



User experience improvement

• SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

No change to data model

LoB Finance – Advanced Financial Operations – financial supply chain



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Lease Energy and Safety **ADVANCED** Resolution and Management Accounting Management Construction Repair Management Management FINANCIAL **OPERATIONS** Online Bill Indirect Tax Financial Supply Invoice E-Invoicing Presentment & Management Management Chain Payment

Purpose

- Turn payables into strategic assets with SAP S/4HANA to enhance financial supply chain performance
- Close the procure-to-pay loop with secure electronic payment, rich remittance, and improved visibility to reduce supplier inquiries
- Help suppliers reduce days sales outstanding, with prorated or dynamic earlypayment discounts
- Manage payment terms to maintain or extend days payable outstanding to free up cash

Benefits

- Improve return on assets by optimizing early payment discounts
- Lower finance cost by reducing errors and improving the productivity of accounts payable workflows

LoB Finance – Advanced Financial Operations – financial supply chain



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Energy and Safety Lease **ADVANCED** Resolution and Management Accounting Management Construction Repair Management Management FINANCIAL **OPERATIONS** Online Bill Indirect Tax Financial Supply Invoice E-Invoicing Presentment & Management Chain Management Payment



Functional changes

 Comparable SAP ERP functionality provided in SAP S/4HANA



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Accounts Payable Accountant
 - Accounts Receivable Accountant

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

No change to data model

LoB Finance – Advanced Financial Operations – e-invoicing



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Lease Energy and Safety **ADVANCED** Resolution and Management Accounting Management Construction Repair Management Management FINANCIAL **OPERATIONS** Online Bill Financial Supply Indirect Tax Invoice E-Invoicing Presentment & Management Chain Management Payment

Purpose

- Empower your organization and your suppliers with advanced invoice management that leverages an intelligent network to post invoices straight through
- Speed invoice processing by eliminating paper-based and manual activities and integrating quickly with back-office systems
- Maximize early-payment discounts by accelerating invoice processing, enabling cost reduction

Benefits

- Improve invoice processing efficiency of FTEs by creating a more efficient invoice approval process for suppliers
- Reduce finance cost by reducing errors and improving the productivity of accounts payable workflows

LoB Finance – Advanced Financial Operations – e-invoicing



ADVANCED FINANCIAL OPERATIONS Dispute Resolution

Indirect Tax

Management

Credit Evaluation and Management

Financial Supply

Chain

Contract Accounting

E-Invoicing

Portfolio and Lease Management

Invoice

Management

Collections Management

Online Bill

Presentment &

Payment

Energy and Safety

Investment and Construction

Maintenance and Repair

Space Management

Functional changes

Native integration with Ariba Network*



User experience improvement



- Roles with new, dedicated SAP Fiori apps:
 - Invoicing Manager
 - Invoicing Specialist

For additional information on roles and apps, visit the SAP Fiori apps reference library.

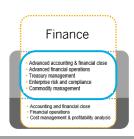


Data innovations

No change to data model

^{*} Ariba Network is separate SaaS offering that requires a subscription.

LoB Finance – Advanced Financial Operations – invoice management



Portfolio and Space Credit Evaluation Maintenance and Dispute Contract Collections Investment and Energy and Safety Lease **ADVANCED** Resolution and Management Accounting Management Construction Repair Management Management FINANCIAL **OPERATIONS** Online Bill Financial Supply Invoice Indirect Tax E-Invoicing Presentment & Management Management Chain Payment

Purpose

- Simplify and automate invoice processing, from creation and management to monitoring and routing
- Access relevant and real-time accounts payable and invoice information anytime, anywhere, and on any device
- Communicate with the entire network of suppliers and engage in e-invoicing through Ariba Network*

Benefits

- Reduce invoice capture and processing headcount costs by handling exceptionbased invoice processing with workflow approvals and preconfigured business rules
- Reduce finance cost by identifying invoice errors before they happen with configurable business rules

^{*} Ariba Network is separate SaaS offering that requires a subscription.

LoB Finance – Advanced Financial Operations – invoice management



ADVANCED FINANCIAL **OPERATIONS**

Dispute Resolution

Indirect Tax

Management

Credit Evaluation and Management

Financial Supply Chain

Contract Accounting

E-Invoicing Management

Collections Management

Online Bill

Presentment &

Payment

Energy and Safety

Investment and Construction

Maintenance and Repair

Space Management



Functional changes

- Comparable SAP ERP functionality provided in SAPS/4HANA
- Two configuration options:
 - Simple mode (SAP Fiori only)
 - Classic mode (comparable to SAP ERP)



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:

Portfolio and

Lease

Management

Invoice

- Accounts Payable Accountant
- Accounts Receivable Accountant

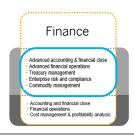
For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

No change to data model

LoB Finance – Advanced Financial Operations – online bill presentment and payment



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Lease Energy and Safety **ADVANCED** Resolution and Management Management Construction Management Accounting Repair Management FINANCIAL **OPERATIONS** Online Bill Indirect Tax Financial Supply Invoice E-Invoicing Presentment & Management Chain Management Payment

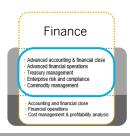
Purpose

- Enable self-service offerings for customers to improve collaboration
- With SAP software for online bill presentment and payment, invoice recipients can:
 - Check their account balance and review their bills, credits, or payments
 - Initiate payments or download bills into their accounts payable system
 - Dispute bills from the Internet and collaborate with the biller

Benefits

- Reduce finance cost by reducing the need of manual work through comprehensive, built-in, automatic functionality
- Reduce days to close annual books by providing real-time integration and comprehensive, automatic, period-end functionality
- Reduce audit cost by enabling detailed audit trails and tax data retention and reporting functionality

LoB Finance – Advanced Financial Operations – online bill presentment and payment



Portfolio and Credit Evaluation Maintenance and Space Dispute Contract Collections Investment and Energy and Safety Lease **ADVANCED** Resolution and Management Management Construction Management Accounting Repair Management FINANCIAL **OPERATIONS** Online Bill Indirect Tax Financial Supply Invoice E-Invoicing Presentment & Management Chain Management Payment



Functional changes

Comparable SAP ERP functionality provided in SAP S/4HANA



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Controller
 - Cost Accountant Overhead
 - Cost Accountant Sales
 - Controller Production Costs

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

No change to data model

LoB Finance – Treasury Management – cash and liquidity management



TREASURY MANAGEMENT

Cash and Liquidity Management Debt and Investment Management

Financial Risk Management Payments and Bank Communications

Purpose

- Monitor cash flows in real time to have sufficient liquidity to cover payment obligations
- Access real-time information on global bank balances and cash flow
- Create a single version of the truth by integrating data from multiple sources
- Manage bank accounts centrally, including workflow mechanism, and improve internal controls
- Leverage integrated planning capabilities using SAP Business Planning and Consolidation for SAP S/4HANA

Benefits

- Increase efficiency by managing bank accounts centrally
- Improve processes for transferring cash to operations worldwide in a timely manner
- Reduce banking fees, borrowing costs, and demand for cash
- Benefit from new user interfaces using SAP Fiori user experience principles and interface technology

LoB Finance – Treasury Management – cash and liquidity management



TREASURY MANAGEMENT Cash and Liquidity Management Debt and Investment Management

Financial Risk Management Payments and Bank
Communications



Functional changes

- Switching off of cash management functionality in the SAP ERP application when activating SAP S/4HANA Finance
- New cash position and liquidity forecast based on SAP Fiori apps
- New functionality for central bank account management, including bank fee analysis
- Replacement of liquidity planner function by SAP Fiori app "Cash Flow Analyzer"
- Embedded planning functionality in SAP Business Planning and Consolidation for SAP S/4HANA
- Integration to the SAP Bank Communication Management application
- For additional details about the scope of this functionality with SAP S/4HANA compared to the advanced functionality, go to <u>SAP Help Portal</u>.



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Cash Manager
 - Cash Management Specialist

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Change in table structure
- New data model, called "one exposure," based on SAP S/4HANA

For additional information, see <u>Data Setup Guide for</u> Cash Management.

LoB Finance – Treasury Management – debt and investment management



TREASURY MANAGEMENT

Cash and Liquidity Management Debt and Investment Management

Financial Risk Management Payments and Bank Communications

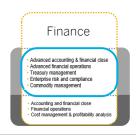
Purpose

- Improve capital structure with winning strategies that balance debt against equity, risk, and returns in real time
 - Define hedging strategy to mitigate financial risks
 - Benefit from a wide range of financial instruments supported by the solution
 - Increase productivity by harnessing the power of automation and collaboration to free up resources for high-value tasks
 - Bolster efficiency by integrating end-to-end financial processes and automatically posting transactions to the general ledger
 - Increase efficiency by automating back-office processes such as payment, matching, and correspondence
 - Enhance collaboration through connectivity with banks and trading partners through cloud offerings such as trading platform integration for cloud editions of SAP Treasury and Risk Management and SAP Cash Management applications

Benefits

- Reduce finance cost by optimizing the capital structure and by balancing trade-offs, debts, equity, and risk
- Reduce write-offs for uncollectible accounts receivable by automating transaction posting and position reporting in the general ledger

LoB Finance – Treasury Management – debt and investment management



TREASURY MANAGEMENT Cash and Liquidity Management Debt and Investment Management

Financial Risk Management Payments and Bank Communications



Functional changes

- Simplified foreign exchange management process
- Enablement of most-used trade finance processes in the SAP Treasury and Risk Management application
- New SAP Fiori-based reporting capabilities with unlimited granularity
- Cloud-based enhancement for European Market Infrastructure Regulation (EMIR) reporting: SAP Trade Repository Reporting application by Virtusa
- Simplified front-office integration capabilities such as trading platform integration for cloud editions of SAP Treasury and Risk Management and SAP Cash Management applications



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Treasury Risk Manager
- Treasury Specialist
- Treasury Accountant

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 New data model, called "one exposure," based on SAP S/4HANA

LoB Finance – Treasury Management – financial risk management



TREASURY MANAGEMENT

Cash and Liquidity Management Debt and Investment Management

Financial Risk Management Payments and Bank Communications

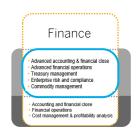
Purpose

- Assess financial risks, including foreign exchange, interest rate, price, and credit risks, and manage market conditions in real time using robust analytics
- Gain immediate insight into various risk positions using what-if analyses and make proactive decisions
- Improve compliance, reduce exposure to solvency issues, and create effective hedging strategies that meet GAAP and IFRS standards
- Get instant insights with real-time analytics, enterprise-wide data integration, and a consistent user experience across all devices
- Keep up with changing global regulations, enhance compliance, and mitigate risks

Benefits

Reduce compliance and risk management costs by automating reporting and by using risk scenarios to create real-time hedging strategies

LoB Finance – Treasury Management – financial risk management



TREASURY MANAGEMENT

Cash and Liquidity Management Debt and Investment Management

Financial Risk Management Payments and Bank Communications



Functional changes

- SAP Fiori-based reporting capabilities with unlimited granularity
- Identification of risk exposures across the organization
- Optimized foreign exchange (FX) and hedge management capabilities
- Legal compliance and preparedness for upcoming regulatory challenges such as IFRS 9
- Treasury reporting:
 - Balance sheet, FX exposure: further drill-down functionality into exposures and hedging instruments
 - Credit line analysis
 - Overview pages for FX process and for interest rate management to bundle different apps into one factsheet



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Treasury Risk Manager
- Treasury Specialist
- Treasury Accountant

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

 New data model, called "one exposure," based on SAP S/4HANA

LoB Finance – Treasury Management – payments and bank communications



TREASURY MANAGEMENT Cash and Liquidity Management Debt and Investment Management

Financial Risk Management Payments and Bank Communications

Purpose

- Improve compliance with integrated bank account management capabilities that are linked to payment approvals and rule-based workflows
- Increase transparency based on end-to-end monitoring for bank statements and outgoing payment messages
- Reduce reliance on banks and the need to transfer cash to regions
- Improve bank connectivity with access to multiple payment networks, including the SAP Multi-Bank Connectivity solution, providing SWIFT connectivity options and direct bank connectivity

Benefits

- Reduce finance cost by efficiently processing and approving requests
- Reduce uncollectible accounts receivable write-offs by providing cash-flow information in real time, integrating with banks, and monitoring end-to-end status

LoB Finance – Treasury Management – payments and bank communications



TREASURY MANAGEMENT Cash and Liquidity Management Debt and Investment Management

Financial Risk Management Payments and Bank Communications



Functional changes

- Combination of capabilities in the SAP Bank Communication Management and SAP Cash Management applications
- Enhanced integrated bank account management capabilities delivered with SAP Cash Management, specifically in the area of authorized approvers per bank group or account, which is checked during the payment approval process
- Simplified corporation-to-bank communications using the SAP Multi-Bank Connectivity solution to connect to the SWIFT network or directly to banks



User experience improvement



- Roles with new, dedicated SAP Fiori apps:
- Cash Manager
- Accounts Payable Accountant

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

No change to data model

LoB Finance – Commodity Management – risk management for commodities



COMMODITY MANAGEMENT

Risk Management for Commodities

Commodity Procurement

Commodity Sales

Purpose

- Identify and quantify exposure to commodity price risks resulting from commodity procurement and commodity sales
- Mitigate commodity price risks with financial commodity derivatives, supporting all major exchange traded and over-the-counter derivative types for commodities
- Comply with regulations and accounting standards applicable to financial commodity derivatives
- Provide comprehensive insight into commodity risk positions by flexible querybased position, mark-to-market, and profit-and-loss (P&L) reporting, including P&L attribution

Benefits

- Accurate and real-time commodity risk management that can be achieved by an integrated and real-time view on commodity risk positions from commodity procurement, commodity sales, and financial commodity derivatives
- End-of-day risk analysis based on versioned risk data together with end-of-day snapshot time definitions, providing insights into risk changes between consistent sets of data
- Seamless integration of commodity derivatives with SAP applications for accounting and financial supply chain
- Compliance with regulations on financial transaction processing
- Full auditability
- Support for all major publicly traded and over-the-counter derivative types for commodities

LoB Finance – Commodity Management – risk management for commodities



COMMODITY MANAGEMENT

Risk Management for Commodities

Commodity Procurement

Commodity Sales



Functional changes

- New approach providing versioned risk data from financial commodity derivatives to position, mark-to-market and trading profit-and-loss reporting
- Simplified approach for integration and reporting of commodity risk data from the SAP Commodity Procurement application and documents from the SAP Commodity Sales application
- Core-data-services (CDS) view based on commodity risk reporting, covering the specifics of all major commodity market segments, such as agricultural, metals, crude oil (energy), and chemicals
- Commodity derivative order and trade execution (CDOTE) functionality to capture and manage orders to buy or sell commodity futures at exchanges, send them to brokers or exchanges, and automatically receive back fills and create financial transactions in the system

For more information on simplification provided in commodity management, see the <u>Simplification List for SAP S/4HANA</u>.



User experience improvement



- Risk analytics through CDS query technology, consumable by SAP Analytics solutions
- Role with new, dedicated SAP Fiori apps:
 - Trader
- SAP Fiori-based transactions for CDOTF

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Remodeled commodity master data
- Remodeled commodity market data
- Remodeled databases for commodity risk reporting

LoB Finance - Commodity Management - commodity procurement



COMMODITY MANAGEMENT

Risk Management for Commodities

Commodity Procurement

Commodity Sales

Purpose

- Manage procurement processes for buying commodities and goods containing commodities
- Capture commodity purchase orders, priced or unpriced, with reference to commodity market quotes, supporting manual or automated commodity-quotation based pricing
- Receive goods and capture quantity and quality information
- Enable provisional, differential, and final invoice verification
- Automate provisioning of commodity procurement process—related commodity price risk information to commodity risk reporting provided with the SAP Commodity Risk Management application

Benefits

- Increase visibility into the supply chain by capturing commodity purchase orders in SAP S/4HANA immediately when they are transacted, rather than waiting until they are fully priced
- Reduce procurement function costs by providing embedded formulas to automate very complex price calculations for commodities
- Embed commodity procurement business processes fully into SAP S/4HANA solution functionality for procurement, quality management, and finance
- Increase risk-data quality, improve hedging decisions, and reduce double work, manual errors, and time delays with real-time, integrated risk management available in SAP Commodity Risk Management

LoB Finance – Commodity Management – commodity procurement



COMMODITY MANAGEMENT

Risk Management for Commodities

Commodity Procurement

Commodity Sales



Functional changes



User experience improvement



Data innovations

- Simplified commodity pricing engine (CPE) formula assembly by using Business Rules Framework plus (BRF+) instead of condition technique
- Simplified CPE formulas, terms, and rules
- New approach for the integration of commodity procurement documents into versioned commodity risk data

For more information on simplification provided in commodity management, see the <u>Simplification List for SAP S/4HANA</u>.

SAP Fiori-based user experience across all process steps

- Remodeled commodity master data
- Remodeled commodity market data

LoB Finance – Commodity Management – commodity sales



COMMODITY MANAGEMENT

Risk Management for Commodities

Commodity Procurement

Commodity Sales

Purpose

- Manage processes for commodity sales or sales of goods containing commodities
- Capture commodity sales contracts and orders, priced or unpriced and with reference to commodity market quotes, supporting manual or automated commodity-quotation based pricing,
- Ship and deliver goods and capture quantity and quality information
- Enable provisional, differential, and final invoicing
- Extract and provide sales document—related commodity price-risk information to commodity risk reporting provided with the SAP Commodity Risk Management application

Benefits

- Increase visibility into the supply chain by capturing commodity sales contracts and orders in SAP S/4HANA immediately when they are placed, instead being required to wait until the point that their prices are fixed
- Reduce administrative costs and errors by providing embedded formulas to automate very complex price calculations for commodities
- Embed commodity sales business processes fully into SAP S/4HANA solution functionality for sales, quality management, and finance
- Increase risk data quality, improve hedging decisions, and reduce double work, manual errors, and time delays with real-time, integrated risk management available in SAP Commodity Risk Management

LoB Finance – Commodity Management – commodity sales



COMMODITY MANAGEMENT

Risk Management for Commodities

Commodity Procurement

Commodity Sales



Functional changes



User experience improvement



Data innovations

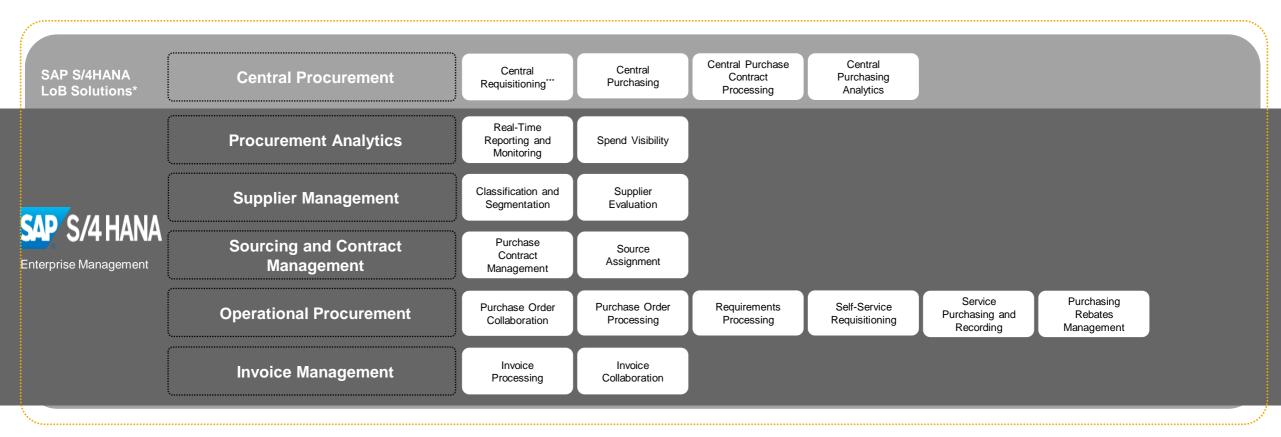
- Simplified commodity pricing engine (CPE) formula assembly by using Business Rules Framework plus (BRF+) instead of condition technique
- Simplified CPE formulas, terms, and rules
- New approach for the integration of commodity sales documents into versioned commodity risk data

For more information on simplification provided in commodity management, see the <u>Simplification List for SAP S/4HANA</u>

SAP Fiori-based user experience across all process steps

- Remodeled commodity master data
- Remodeled commodity market data

SAP S/4HANA – LoB Sourcing and Procurement



^{*} Additional license

^{***} Slides on these solution capabilities are not included in this PPT.

LoB Sourcing and Procurement – Invoice Management – invoice processing



INVOICE MANAGEMENT Invoice Processing Invoice Collaboration

Purpose

- Manage invoices efficiently from creation through reconciliation
- Gain transparency and control throughout the invoice processing lifecycle
- Match invoice data with predecessor documents and verify that all legally binding information is included
- Identify any discrepancies between price, number, and quantity of items listed in the PO and in the supplier invoice
- Set up approval and release procedures that help ensure timely payment

Benefits

- Improve process efficiency with flexible, dynamic search features in supplier invoice lists and with integration to fact sheets
- Streamline document creation using reverse and release features to correct data in draft invoices, directly post the invoice, or reverse an erroneous invoice
- Identify and resolve invoice creation issues quickly

LoB Sourcing and Procurement – Invoice Management – invoice processing



INVOICE MANAGEMENT

Invoice Processing Invoice Collaboration



Functional changes

- More-comprehensive authorization checks for supplier invoices, verifying general authorization for company code and specific plant authorization when an item with a PO reference changes
- Reverse and release action in supplier invoices already created
- Flexible and dynamic search capabilities in supplier invoice list
- Enhanced user interfaces for payment execution and invoice processing
- Integration of business networks
- Use of machine learning in the SAP Fiori app "Manage Supplier Invoices" app to proactively display issues requiring attention, providing analysis and recommendations to avoid the loss of cash discounts due to payment blocks



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Accounts Payable Accountant
 - Buyer

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- No need to rely on preaggregated data for reporting
- Ability to drill down from vendor balances to line items
- Simplified data model, with the removal of total and index tables

LoB Sourcing and Procurement – Invoice Management – invoice collaboration



INVOICE MANAGEMENT Invoice Processing Invoice Collaboration

Purpose

- Deliver accurate invoices to accounts payable more quickly using electronic invoice submission and automated verification
- Resolve invoice exceptions quickly
- Receive digitally signed, legally compliant invoices over Ariba Network*

Benefits

- Lower procurement cost by replacing paper-based manual processes with automatic sending and receipt of invoice data
- Increase annual procurement savings by improving process efficiency through automated tasks
- Reduce the volume of supplier calls with increased supplier visibility into invoice status

LoB Sourcing and Procurement – Invoice Management – invoice collaboration



INVOICE MANAGEMENT Invoice Processing Invoice Collaboration



Functional changes

- Ability of business user to view draft invoices coming from Ariba Network directly and create a supplier invoice using the available data
- Complete integration with the SAP Application Interface Framework tool, which oversees message exchange and error handling between SAP S/4HANA and Ariba Network*



User experience improvement



Role with new, dedicated SAP Fiori apps:

Accounts Payable Accountant

For additional information on roles and apps, visit the

SAP Fiori apps reference library.



Data innovations

Native integration to Ariba Network*

^{*} Ariba Network is separate SaaS offering that requires a subscription.

LoB Sourcing and Procurement – Operational Procurement – purchase order collaboration



OPERATIONAL PROCUREMENT

Purchase Order Collaboration Purchase Order Processing

Requirements Processing Self-Service Requisitioning Service Purchasing and Recording Purchasing Rebates Management

Purpose

- Transmit POs and order documents, and onboard suppliers to your network
- Share, shop, and make better-informed decisions through megashifts in technology.
 Connectivity to our business network solutions can help you:
 - Support PO automation and collaboration to transmit POs and other orderrelated documents
 - Access and respond quickly to order activities from internal stakeholders and suppliers
 - Collaborate fully on order fulfillment, change orders, confirmations, and cancellations as well as advance shipping notices and related notifications

Benefits

- Simplify collaboration and increase procurement savings by automating the transmission of purchasing documents, supplier status checks, and supplier change requests
- Decrease procurement cost by reducing time-consuming, manual tasks for buyers and suppliers
- Lower cost and complexity by connecting to the largest, most-comprehensive business network
- Reduce PO error rate by improving the transmission of POs and communication between buyers and suppliers

LoB Sourcing and Procurement – Operational Procurement – purchase order collaboration



OPERATIONAL PROCUREMENT

Purchase Order Collaboration Purchase Order Processing

Requirements Processing Self-Service Requisitioning Service Purchasing and Recording Purchasing Rebates Management



Functional changes

 In line with SAP's strategy to simplify the solution portfolio, not all integration processes and messages that are provided with SAP Ariba solution integration for SAP Business Suite rapid deployment solution are available.

For more information, see the <u>Simplification List for SAP S/4HANA</u>.



User experience improvement



For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Native integration with Ariba Network*, making former add-on obsolete
- Unification of customer and vendor master data under business partner

^{*} Ariba Network is separate SaaS offering that requires a subscription.

LoB Sourcing and Procurement – Operational Procurement – purchase order processing



OPERATIONAL PROCUREMENT

Purchase Order Collaboration Purchase Order Processing Requirements Processing Self-Service Requisitioning Service Purchasing and Recording Purchasing Rebates Management

Purpose

- Simplify buying activities through streamlined processing of POs
- Use one integrated business solution to create, display, change, and process POs

Benefits

- Reduce PO errors by integrating the creation of procurement documents
- Lower procurement costs by handling sourcing and contracts efficiently
- Increase annual procurement savings by improving process efficiency through automated tasks
- Enhance efficiency by prefilling data fields dynamically based on selected supplier or material types

LoB Sourcing and Procurement - Operational Procurement - purchase order processing



OPERATIONAL PROCUREMENT

Purchase Order Collaboration Purchase Order Processing

Requirements Processing Self-Service Requisitioning Service Purchasing and Recording Purchasing Rebates Management



Functional changes

- Provision of foreign trade functionality with the SAP S/4HANA solution for international trade, such as Intrastat reporting
- Adoption of new output management functionality
- Dynamic prefilling and provisioning of fields based on selected supplier or material type to facilitate manual creation of POs
- Restricted set of available field entries to minimize errors during the change process
- Mass change of POs to increase efficiency with change log
- Option to adopt the new flexible workflow (configurable without need for development) to facilitate compliance with policies
- Situation handling for purchase order confirmations and professional purchase requisitions without contract assignment



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Accounts Payable Accountant
 - Purchase Documents by Requirement Tracking Number
 - Purchaser
 - Employee Procurement
 - Configuration Expert
 - Manager Procurement
 - Purchasing Manager

For additional information on roles and apps, visit the <u>SAP Fioriapps reference library</u>.



Data innovations

- Simplified data model for pricing, in line with SAP's strategy to simplify the solution portfolio
- Unification of customer and vendor master data under business partner

LoB Sourcing and Procurement – Operational Procurement – requirements processing



OPERATIONAL PROCUREMENT

Purchase Order Collaboration Purchase Order Processing Requirements Processing Self-Service Requisitioning Service Purchasing and Recording Purchasing Rebates Management

Purpose

- Streamline both automated and manual purchasing processes
- Bundle demands and automate sourcing and order processing activities
- Simplify approval and release procedures
- Manage demand for a wide range of requirements, from project and material requirements planning to sales, production, and maintenance order processing

Benefits

- Enhance processing efficiency by avoiding redundant data entry
- Reduce PO errors by integrating the creation of procurement documents
- Lower procurement costs by efficiently handling sourcing and contracts
- Increase annual procurement savings by improving process efficiency through automated tasks

LoB Sourcing and Procurement – Operational Procurement – requirements processing



OPERATIONAL PROCUREMENT

Purchase Order Collaboration Purchase Order Processing

Requirements Processing Self-Service Requisitioning Service Purchasing and Recording Purchasing Rebates Management



Functional changes

- Embedded visualization of analytical data (including spend and supplier evaluation score) in sourcing process to facilitate informed decision-making
- Dynamic search and filtering and automatic proposal of search values
- Changing of search parameters in same screen
- Automatic proposal of available information records or agreements
- Direct creation of POs
- Redistribution of workload between purchasing groups
- Situation handling for purchase order confirmations and professional purchase requisitions without contract assignment



User experience improvement

- SAP Fiori-based user experience across all process steps
- Support for tasks such as search, filter, assign source of supply, and create PO through role-based SAP Fiori launchpad
- Roles with new, dedicated SAP Fiori apps:
 - Purchaser
 - Purchase Documents by Requirement Tracking Number
 - Purchasing Manager
 - Configuration Expert
 - Employee Procurement
 - Warehouse Clerk
 - Inventory Manager

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Simplified data model for pricing, in line with SAP's strategy to simplify the solution portfolio
- Unification of customer and vendor master data under business partner

LoB Sourcing and Procurement - Operational Procurement - self-service requisitioning



OPERATIONAL PROCUREMENT

Purchase Order Collaboration Purchase Order Processing

Requirements Processing Self-Service Requisitioning Service Purchasing and Recording Purchasing Rebates Management

Purpose

- Simplify the purchasing process for casual users and employees using self-service requisitioning solutions from SAP
- Enable employees to purchase goods and services directly, while ensuring they are following purchasing policies and pricing agreements and using preferred suppliers
- Automate, tightly control, and streamline the purchasing process using catalogdriven pricing, contract logic, and an approval workflow with self-service requisitioning solutions from SAP

Benefits

- Improve employee productivity by delivering ease of use and business-to-consumerlike shopping experiences
- Optimize procurement process efficiencies by providing catalog-based navigation
- Reduce procurement cost by enabling employee self-service functionality

LoB Sourcing and Procurement – Operational Procurement – self-service requisitioning



OPERATIONAL PROCUREMENT

Purchase Order Collaboration Purchase Order Processing

Requirements Processing Self-Service Requisitioning Service Purchasing and Recording Purchasing Rebates Management



Functional changes

- Shopping cart functionality provided by the SAP Supplier Relationship Management (SAP SRM) application now in SAP S/4HANA Enterprise Management
- Ability to load internal and external catalog content into SAP S/4HANA
- Replacement of the master data management (MDM)
 catalog in the SAP SRM application (no longer available in
 SAP S/4HANA) by the catalog search function as part of
 self-service procurement in SAP S/4HANA (functional
 limitations may apply); ability to integrate an MDM catalog
 instance with SAP S/4HANA as a punch-out catalog
 through an open catalog interface
- Extended document history for transparency in the selfservice process
- Option to adopt the new flexible workflow (configurable without need for development) to facilitate compliance with policies



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps for creating, displaying, managing, and approving purchase requisitions:
 - Configuration Expert
 - Employee Procurement
 - Manager Procurement
 - Purchaser
 - Administrator
 - Marketing Manager
- Improved user experience for free-text purchase requisitions with "type-ahead" search based on historical data

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- For simplification, inclusion of self-service procurement functionality in the purchase requisition data structures for SAP S/4HANA no longer a requirement for data replication
- Unification of customer and vendor master data under business partner

LoB Sourcing and Procurement – Operational Procurement – service purchasing and recording



OPERATIONAL PROCUREMENT

Purchase Order Collaboration Purchase Order Processing

Requirements Processing Self-Service Requisitioning Service Purchasing and Recording Purchasing Rebates Management

Purpose

- Empower buyers to create, display, and change POs for services
- Create, display, change, and process purchase orders more easily with one integrated system for services purchasing
- Support faster automated and manual entry and other processes for purchase order efficiency
- Gain the transparency needed to manage service purchases quickly and accurately by streamlining purchase order processing

Benefits

- Reduce procurement function costs by seamlessly passing sourcing and contracts to an enterprise resource planning system
- Increase annual savings total spend by improving process efficiency

LoB Sourcing and Procurement – Operational Procurement – service purchasing and recording



OPERATIONAL PROCUREMENT

Purchase Order Collaboration Purchase Order Processing

Requirements Processing Self-Service Requisitioning Service Purchasing and Recording Purchasing Rebates Management



Functional changes

- Personalized, workflow-based release of service entry sheets (contact person named in service entry sheet header)
- Simplified limit (value-only) PO items, receipted through SAP Fiori app "Approve Service Entry Sheet" (3-way match for limit PO items)



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Purchaser
 - Purchase Documents by Requirement Tracking Number
 - Manager
 - Employee Procurement

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- One master data object for materials and services (use of product type to differentiate between material and service)
- Unification of customer and vendor master data under business partner

LoB Sourcing and Procurement – Operational Procurement – purchasing rebates management



OPERATIONAL PROCUREMENT

Purchase Order Collaboration Purchase Order Processing

Requirements Processing Self-Service Requisitioning Service Purchasing and Recording Purchasing Rebates Management

Purpose

- Claim all money owed from rebate agreements by ensuring reconciliation of eligible purchases, accrued earned income, and accruals with supplier payments
- Boost profitability by allocating rebates to purchases for true cost determination
- Improve rebate management by modeling net purchase costs to determine profitability after subsequent sales

Benefits

- Improve profitability by providing better margin visibility based on the true net cost of purchases after rebates
- Increase productivity of chargebacks / rebate processing FTEs by automating the rebate collecting, accrual, and settlement processes
- Increase annual rebates captured through better discovery an visibility by reconciling supplier payments with accrued income earned from rebates

LoB Sourcing and Procurement – Operational Procurement – purchasing rebates management



OPERATIONAL PROCUREMENT

Purchase Order Collaboration Purchase Order Processing

Requirements Processing Self-Service Requisitioning Service Purchasing and Recording Purchasing Rebates Management



Functional changes

 Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports



User experience improvement



For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 Integration with a simplified data model of SAP S/4HANA

LoB Sourcing and Procurement – Sourcing and Contract Management – purchase contract management



SOURCING AND CONTRACT MGMT

Purchase Contract Management

Source Assignment

Purpose

- Manage contract creation, execution, and monitoring effectively
- Maximize the value and consumption of sourcing contracts
- Guide day-to-day contract operations with clear, actionable insight

Benefits

- Enhance contract monitoring to provide information instantly about contract consumption, status, and validity
- Reduce maverick buying by proposing only suppliers with valid contracts as a supply source
- Accelerate the identification of contracts through dynamic, flexible search and the filtering of data in the contract repository

LoB Sourcing and Procurement – Sourcing and Contract Management – purchase contract management



SOURCING AND CONTRACT MGMT

Purchase Contract Management

Source Assignment



Functional changes

- Dynamic and flexible search and filtering across entire contract worklist, displaying contracts about to expire, and graphical elements that help users visualize contract consumption, both of which accelerate business decision-making
- Direct navigation to contract and supplier object pages
- Availability of additional information, such as status, approver, and notes
- Insight-to-action capabilities, such as renewal of contract with using predictive algorithm for future consumed quantity based on historic data
- Mass update capability for contracts and templates for better user experience of managing contract data
- Business card information of supplier



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Purchaser
 - Employee Procurement
- Manager Procurement
- Transportation Manager
- Accounts Payable Accountant
- Production Planner
- Material Planner
- Shipping Specialist
- Receiving Specialist
- Strategic Buyer

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 Unification of customer and vendor master data under business partner

LoB Sourcing and Procurement – Sourcing and Contract Management – source assignment



SOURCING AND CONTRACT MGMT

Purchase Contract Management

Source Assignment

Purpose

- Support automated and manual processes for managing source assignments
- Automate operational sourcing processes

Benefits

- Reduce PO errors by creating integrated procurement documents
- Accelerate assignment of sources through automated identification of available suppliers
- Increase annual procurement savings by improving process efficiency through automated tasks
- Streamline order processing by grouping, filtering, and downloading open demands

LoB Sourcing and Procurement – Sourcing and Contract Management – source assignment



SOURCING AND CONTRACT MGMT

Purchase Contract Management

Source Assignment



Functional changes

- Immediate display of all available supply sources, speeding the work of purchasing agents
- Execution of simple and manual request for quotation (RFQ) process now possible with SAP S/4HANA
- Improved user experience with SAP Fiori apps to manage the RFQ process, including comparison of supplier quotations and approvals for awarded quotations



User experience improvement



- Roles with new, dedicated SAP Fiori apps for managing purchase requisitions and managing supply sources:
- Purchaser
- Purchase Documents by Requirement Tracking Number
- Strategic Buyer
- Employee Procurement
- Transportation Manager
- Warehouse Clerk
- Inventory Manager

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

 Unification of customer and vendor master data under business partner

LoB Sourcing and Procurement – Supplier Management – classification and segmentation



SUPPLIER MANAGEMENT

Classification and Segmentation Supplier Evaluation

Purpose

- Gain transparency into suppliers and purchasing categories
- Group similar expenditure items, such as expenses for advertising agency services or IT hardware, into purchasing categories to organize spend, responsibilities, and organizations

Benefits

- Increase insight into the supplier portfolio with classified attributes and flexible search functionality
- Reduce risk by identifying low-performing suppliers
- Enhance spend analysis using real-time reports across purchasing categories

LoB Sourcing and Procurement – Supplier Management – classification and segmentation



SUPPLIER MANAGEMENT

Classification and Segmentation Supplier Evaluation



Functional changes

- Addition of a purchasing category as a new business entity, to streamline classification and segmentation activities
- Classification and segmentation of suppliers and review of evaluation results related to purchasing categories



User experience improvement



- Roles with new, dedicated SAP Fiori apps:
 - Strategic Buyer
 - Employee Procurement
 - Purchaser

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 Unification of customer and vendor master data under business partner

LoB Sourcing and Procurement – Supplier Management – supplier evaluation



SUPPLIER MANAGEMENT

Classification and Segmentation Supplier Evaluation

Purpose

- Analyze the supply base continuously using predefined criteria
- Monitor and evaluate supplier performance using automated, real-time calculations based on relevant data stored in business documents, such as price and quantity in POs

Benefits

- Gain deeper insight into supplier performance through evaluation results
- Take corrective actions that address supplier issues more quickly by working collaboratively with stakeholders

LoB Sourcing and Procurement – Supplier Management – supplier evaluation



SUPPLIER MANAGEMENT

Classification and Segmentation

Supplier Evaluation



Functional changes

- Gradual move of the SAP Supplier Lifecycle Management (SAP SLM) application to SAP S/4HANA
- Automatic data collection of hard facts: time, quantity, price accuracy, and quality from relevant transactions
- Possibility to manually adjust supplier performance scores with auditable change history
- Embedding of supplier evaluation in assignment of source of supply to compare multiple suppliers
- Supplier soft-fact evaluations based on questionnaires
- Configurable questions and questionnaires with individual scoring and overall weighting
- Monitoring of hard and soft facts for supplier evaluation in one KPI
- Navigation to detailed KPIs for single evaluations of each hard fact and evaluation scorecards
- Definition of internal activities to track supplier performance



User experience improvement

- Real-time and embedded analytics with live integration to the SAP Analytics Cloud solution*
- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Strategic Buyer
- Employee Procurement
- Purchaser

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

- Supplier evaluation based on SAP HANA technology using core data services (CDS) views and SAP Smart Business cockpits, which eliminates data redundancy (former logistics information system)
- Unification of customer and vendor master data under business partner

^{*}SAP Analytics Cloud is separate SaaS offering that requires a subscription.

LoB Sourcing and Procurement – Procurement Analytics – real-time reporting and monitoring



PROCUREMENT ANALYTICS

Real-Time Reporting and Monitoring

Spend Visibility

Purpose

- Gain up-to-the-minute insights with real-time reporting and monitoring
- Simplify the daily work of purchasers with real-time reporting and monitoring, enabling companies to:
 - Provide extensive, real-time information on purchasing spend by analyzing POs, purchase requisitions, invoices, and contracts
 - Evaluate supplier performance in real time, based on criteria such as on-time delivery, price, and quantity accuracy
 - Visualize data in various chart types and by criteria such as supplier, purchasing group, or material group

Benefits

- Accelerate reporting cycles and reconciliation by directly accessing purchasing and inventory analysis in real time
- Increase availability of real-time, predictive insights into business processes with accelerated and accurate reporting and real-time calculation of KPIs
- Enable instant insight-to-action capabilities through navigation to relevant business processes and business objects

LoB Sourcing and Procurement – Procurement Analytics – real-time reporting and monitoring



PROCUREMENT ANALYTICS

Real-Time Reporting and Monitoring

Spend Visibility



Functional changes

- Live KPI calculations based on actual data on a lineitem level
- Overview of multiple KPIs and relevant charts in easyto-consume cards and tiles
- Availability of relevant visualizations as mini-charts together with a table-format list in some monitoring report applications; for example, analytics reports such as "Monitor Supplier Confirmations"
- Contract consumption analytical report based on predictive algorithms
- Real-time and embedded analytics with live integration to the SAP Analytics Cloud solution*



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Purchaser
 - Strategic Buyer
- Employee Procurement

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- KPI definitions and calculations based on SAP HANA technology using core data services (CDS) views and SAP Smart Business cockpits, which eliminates data redundancy and allows live KPI calculations without the need to replicate data to a business warehouse
- Unification of customer and vendor master data under business partner

^{*}SAP Analytics Cloud is separate SaaS offering that requires a subscription.

LoB Sourcing and Procurement – Procurement Analytics – spend visibility



PROCUREMENT ANALYTICS

Real-Time Reporting and Monitoring

Spend Visibility

Purpose

- Gain real-time visibility into spend performance and savings opportunities
- Aggregate spend data, analyze it for new insights, and share new intelligence with spend analysis solutions from SAP. With SAP software, companies can:
 - Gain a holistic view of corporate spending
 - Access clean, complete, and accurate spend data quickly
 - Identify and act on opportunities for cost savings and cost avoidance with synthesized information that is ready for analysis

Benefits

- Unlock savings opportunities by analyzing purchasing spend
- Control purchasing spend by monitoring off-contract and nonmanaged spend

LoB Sourcing and Procurement – Procurement Analytics – spend visibility



PROCUREMENT ANALYTICS

Real-Time Reporting and Monitoring

Spend Visibility



Functional changes

- Comprehensive spend analysis across relevant areas
- Multidimensional interactive spend report (similar to the pivot table with drag-and-drop of key figures and dimensions) based on real-time data in SAP S/4HANA
- Purchase order value report now incorporates purchase requisitions as "expected spend"
- Real-time and embedded analytics with live integration to the SAP Analytics Cloud solution*



User experience improvement



- Multidimensional spend report that allows for interactions such as drag-and-drop of dimensions and key values into rows and columns; also capability of drill-downs and navigation to other relevant applications such as list of contracts; and downloading of resultant reports to Microsoft Excel
- Roles with new, dedicated SAP Fiori apps:
 - Strategic Buyer
 - Purchaser

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Spend analysis based on SAP HANA technology using core data services (CDS) views and SAP Smart Business cockpits, which eliminates data redundancy
- Unification of customer and vendor master data under business partner

^{*}SAP Analytics Cloud is separate SaaS offering that requires a subscription.

LoB Sourcing and Procurement – Central Procurement – central requisitioning



CENTRAL PROCUREMENT

Central Requisitioning Central Purchasing Central Purchase Contract Processing Central Purchasing Analytics

Purpose

- Simplify requisitioning and reduce TCO by consolidating employee users in a central SAP S/4HANA system
- Reduce TCO by setting up one central approval workflow instead of multiple approvals in each back-end system using SAP S/4HANA
- Increase user adoption by offering an innovative, simple user experience
- Increase catalog usage by offering one central catalog access across all available catalogs

Benefits

- Increase employee productivity by providing one central access to all catalogs
- Reduce procurement function costs by setting up the workflow approval process only once

LoB Sourcing and Procurement – Central Procurement – central requisitioning



CENTRAL PROCUREMENT

Central Requisitioning Central Purchasing Central Purchase Contract Processing Central Purchasing Analytics



Functional changes

- Central self-service creation of purchase requisitions by employees
- Central approval of purchase requisitions in the hub system using the approval process within the hub system
- Extraction of source-of-supply data from back-end systems to the hub system for import to the central procurement catalog
- Replication of purchase requisitions created in the hub system to back-end systems
- Confirmation of goods receipt by users for their central requisitions



User experience improvement



Data innovations

- SAP Fiori-based user experience across all process steps
- Role with new, dedicated SAP Fiori apps:
 - Employee Procurement

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.

LoB Sourcing and Procurement – Central Procurement – central purchasing



CENTRAL PROCUREMENT

Central Requisitioning Central Purchasing Central Purchase Contract Processing Central Purchasing Analytics

Purpose

- Initiate and manage purchase orders across multiple business units centrally
- Manage purchase orders centrally across multiple back-end systems
- Display purchase orders and purchase requisition details from backend systems in central work lists
- Centralize or localize approval of purchase orders as most efficient
- Manage purchase requisitions centrally across multiple back-end systems

Benefits

- Reduce operating expenses by streamlining the purchasing process for team members and vendors
- Reduce overall procurement costs by increasing buying power by bundling purchase requirements across the organization
- Reduce procurement function costs by supporting the global purchasing with a centralized and optimized process

LoB Sourcing and Procurement – Central Procurement – central purchasing



CENTRAL PROCUREMENT

Central Requisitioning Central Purchasing Central Purchase Contract Processing Central Purchasing Analytics



Functional changes

- Extraction of purchasing documents (such as purchase requisitions and purchaser orders) from the connected SAP ERP application or SAP S/4HANA back-end system
- Central assignment of source of supply for extracted purchase requisitions
- Central approval of extracted purchase orders using approval process within the hub system
- Display of extracted purchase orders centrally in SAP S/4HANA hub system
- Direct access to all back-end purchasing documents using UI navigation
- Creation of purchase orders in the respective backend system from the SAP solution hub system



User experience improvement



Data innovations

- SAP Fiori-based user experience across all process steps
- Role with new, dedicated SAP Fiori apps:
 - Purchaser

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.

LoB Sourcing and Procurement – Central Procurement – central purchase contract processing



CENTRAL PROCUREMENT

Central Requisitioning Central Purchasing Central Purchase Contract Processing Central Purchasing Analytics

Purpose

- Initiate and manage purchase contracts across multiple business units centrally
- Negotiate contracts centrally to global longer-term agreements among purchasing organizations and suppliers
- Manage the supply of materials or the performance of services within a certain period following predefined terms and conditions
- Enable company purchasers from different locations to take advantage of the negotiated terms and conditions

Benefits

- Reduce compliance and risk management costs by reducing supply risk using standardized processes and procedures
- Reduce maverick spend overall by reducing maverick buying, thereby lowering leakage in procurement spend and achieving savings
- Reduce missed or lost rebates through better discovery and visibility by tracking rebates and ensuring relevant negotiated savings are included in the sourcing cycle

LoB Sourcing and Procurement – Central Procurement – central purchase contract processing



CENTRAL PROCUREMENT

Central Requisitioning Central Purchasing

Central Purchase Contract Processing Central Purchasing Analytics



Functional changes



User experience improvement



Data innovations

- Creation and management of central contracts in the SAP S/4HANA hub system
- Distribution of central contracts to connected ERP back-end systems
- Notification of distribution errors through the notification center in SAP Fiori launchpad

- SAP Fiori-based user experience across all process steps
- Role with new, dedicated SAP Fiori apps:
 - Purchaser

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.

LoB Sourcing and Procurement – Central Procurement – central purchasing analytics



CENTRAL PROCUREMENT

Central Requisitioning Central Purchasing Central Purchase Contract Processing Central Purchasing Analytics

Purpose

- Increase efficiency with a holistic view of global spending in SAP S/4HANA
- Analyze and monitor central purchasing documents, such as central purchase contracts and central purchase orders in real-time
- Get transparency about the global spend across your organization
- Provide the capability to check material price variances in purchase orders

Benefits

- Improve supplier compliance (spend management) by gaining access to data on the supplier level
- Increase sourcing savings through increased spend capture by analyzing spend holistically across the organization
- Reduce procurement function costs by providing procurement with role-based reports

LoB Sourcing and Procurement – Central Procurement – central purchasing analytics



CENTRAL PROCUREMENT

Central Requisitioning Central Purchasing Central Purchase Contract Processing Central Purchasing Analytics



Functional changes

 New central purchasing analytics functionality than provides insights into overall, corporate-wide procurement performance based on central procurement



User experience improvement

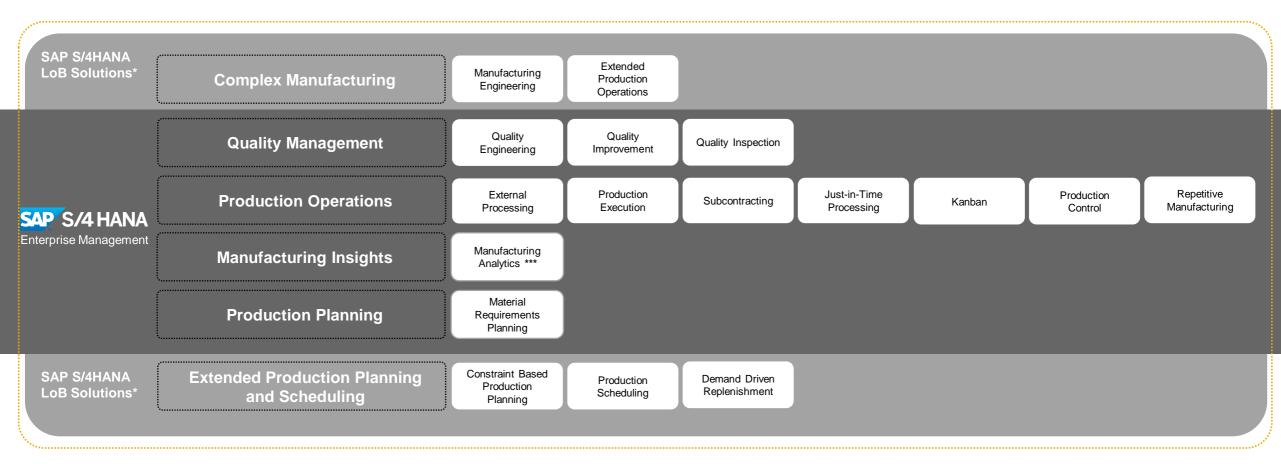


Data innovations

- SAP Fiori-based user experience across all process steps
- Role with new, dedicated SAP Fiori apps:
 - Purchaser

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.

SAP S/4HANA – LoB Manufacturing



^{*} Additional license

^{***} Slides on these solution capabilities are not included in this PPT.

LoB Manufacturing - Production Planning - material requirements planning



PRODUCTION PLANNING

Material Requirements Planning

Purpose

- Monitor stock-outs effectively
- Create procurement proposals automatically for purchasing and production
- Enable production planners to guarantee availability of procured or produced materials at the right time

Benefits

- Reduce the cost of customer service and support by making proactive decisions in response to changing demand
- Increase annual procurement savings and reduce revenue loss with clear visibility across the supply chain
- Improve on-time delivery performance by tailoring available capacity and receipts to meet required product quantities
- Improve inventory accuracy by considering inventory data, lead times, and procurement timing in planning

LoB Manufacturing – Production Planning – material requirements planning



PRODUCTION PLANNING

Material Requirements Planning



Functional changes

- Performance optimization of material requirements planning (MRP) functionality by using the SAP HANA database
- New reporting functionality for scheduling and capacity control in basic scope; can be enhanced with SAP S/4HANA for extended planning and/or demand-driven replenishment



User experience improvement

- SAP Fiori-based user experience across all process steps
- Support for exception-based processing by means of new SAP Fiori apps that show the issues to be resolved by the respective roles in the role-based work environment for production operators, production supervisors, production planners, and production engineers
- Role with new, dedicated SAP Fiori apps:
 - Production Planner

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- New planning file, which improves update performance in all logistical processes
- Improved insight into MRP master data issues
- Manual adjustment of planning file entries

LoB Manufacturing - Production Operations - external processing



PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing

Purpose

- Avoid capacity bottlenecks and reduce inventory volumes
- Integrate financials and other business areas with manufacturing processes
- Execute processes that cannot be completed in-house using subcontractors

Benefits

- Circumvent capacity shortages in times of high demand with increased visibility into all business areas
- Optimize the planning, execution, and monitoring of external processing efforts with proactive, smart decisions

LoB Manufacturing - Production Operations - external processing



PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing



Functional changes

No functional changes



User experience improvement



Data innovations

SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.

Extension of material number to 40 characters

LoB Manufacturing – Production Operations – production execution



PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing

Purpose

- Initiate and control manufacturing processes
- Monitor and adjust production worklists
- Release production and process orders
- Monitor production execution
- Provide shop-floor workers with current information

Benefits

- Manage manufacturing processes efficiently
- Gain more transparency with integration to production with planning

LoB Manufacturing - Production Operations - production execution



PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing



Functional changes

 Integration with SAP S/4HANA Manufacturing for production engineering and operations or manufacturing execution systems for enhanced shop-floor control



User experience improvement



Data innovations

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Production Engineer
- Production Supervisor
- Production Operator
- Production Process Specialist
- Material Planner
- Quality Engineer

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.

• Extension of material number to 40 characters

LoB Manufacturing - Production Operations - subcontracting



PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing

Purpose

- Optimize the subcontracting process from planning and execution to monitoring
- Overcome capacity bottlenecks and reduce inventory with proactive, fact-based decision-making
- Gain the visibility needed to detect and resolve potential scheduling problems

Benefits

- Increase the first-call resolution rate by effectively tracking product batches
- Reduce manufacturing cost through outsourcing of noncore activities
- Improve on-time delivery performance using an electronic data interchange infrastructure that streamlines subcontracting processes
- Reduce procurement cost by automating basic subcontracting processes

LoB Manufacturing - Production Operations - subcontracting



PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing



Functional changes

- Use of default planning parameters when material master records specific to an MRP area do not exist, eliminating the need to create material master attributes specific to an MRP area for each subcontractor
- Simplified planning logic, with two, instead of three, ways to plan for parts provided by a subcontractor



User experience improvement



Data innovations

SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.

• Extension of material number to 40 characters

LoB Manufacturing - Production Operations - just-in-time processing



PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing

Purpose

- Request and replenish components just-in-time for production from internal sources or external suppliers, according to lean principles
- Produce and deliver just-in-time or just-in-sequence according to the demand of your customers
- Use highly flexible JIT techniques to orchestrate and process material flows efficiently and prevent stock-outs

Benefits

- Improve on-time delivery performance by monitoring production supply in real time
- Reduce days in inventory by optimizing inventory levels to meet customer demand
- Reduce revenue loss due to stock-outs by replenishing stock based on your customers' production planning demand

LoB Manufacturing – Production Operations – just-in-time processing



PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing



Functional changes

 Immediate availability of SAP ERP application functionality in SAP S/4HANA, as the industry switch for discrete industries and mill products for the activation of specific features is no longer required



User experience improvement

- SAP Fiori-based user experience across all process steps
- Availability of classical just-in-time (JIT) inbound processing transactions in SAP Fiori launchpad

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

Extension of material number to 40 characters

LoB Manufacturing – Production Operations – kanban



PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing

Purpose

- Execute production and material flow according to lean principles
- Support lean material-flow control methods within repetitive and shop-floor manufacturing environments
- Use kanban processing in lean replenishment for:
 - A supplier kanban process for external material flow
 - A move kanban process for internal material flow
 - Flow manufacturing for internal material flow

Benefits

- Reduce costs by eliminating waste
- Increase customer satisfaction through higher product, process, and service quality
- Enhance visibility into manufacturing and supply chain processes using lean principles
- Improve flexibility of manufacturing and supply chain processes through kanban processing

LoB Manufacturing – Production Operations – kanban



PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing



Functional changes

 Support for plant- and MRP-area levels instead of storage-location level with planning functionality in SAP S/4HANA for greater simplicity



User experience improvement

SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>



Data innovations

Extension of material number to 40 characters

LoB Manufacturing – Production Operations – production control



PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing

Purpose

- Monitor released production and process orders
- Confirm production progress
- Share relevant data about how to execute manual production steps
- Record and log production information

Benefits

- Prepare efficiently for production activities
- Integrate production with inventory management and financials in near-real time

LoB Manufacturing – Production Operations – production control



PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing



Functional changes

- Integration with SAP S/4HANA Manufacturing for production engineering and operations
- Major redesign of a new SAP Fiori app "Manage Unassigned Engineering Bill of Materials," including the decoupling of the ID and description as well as major usability improvements for mass editing



User experience improvement



Data innovations

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Production Supervisor
 - Production Engineer
 - Production Process Specialist

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.

Extension of material number to 40 characters

LoB Manufacturing – Production Operations – repetitive manufacturing

Manufacturing

- Extended production planning and scheduling
- Complex manufacturing

- Production planning
- Production operations
- Quality management
- Manufacturing insights

PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing

Purpose

- Optimize production planning and control in repetitive, make-to-stock or make-toorder environments, for both configurable and nonconfigurable products
- Create and revise production quantities on a period and quantity basis

Benefits

- Simplify production processes by reducing individual lot- and order-specific processing
- Reduce inventory through creation of a balanced product mix
- Lower cost by eliminating waste
- Streamline production completion confirmations by including the back-flushing of components and posting of production costs

LoB Manufacturing – Production Operations – repetitive manufacturing



PRODUCTION OPERATIONS

External Processing

Production Execution

Subcontracting

Just-in-Time Processing

Kanban

Production Control Repetitive Manufacturing



Functional changes

 Accelerated performance of daily manufacturing activities, thanks to powerful in-memory data processing



User experience improvement

SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

Extension of material number to 40 characters

LoB Manufacturing – Quality Management – quality engineering



QUALITY MANAGEMENT

Quality Engineering Quality Improvement

Quality Inspection

Purpose

- Create high-quality products, processes, and services right from the start of the product lifecycle
- Provide the correct tools and implement appropriate quality planning strategies
- Recognize risks and potential defects early in the product design process
- Prepare, execute, and monitor quality inspections in areas such as purchasing, production, and sales
- Reduce costs and increase efficiency by supporting high-quality operations

Benefits

- Increase compliance with industry standards
- Reduce costs using closed-loop inspection planning
- Improve quality planning using transparent, nonredundant master data
- Support continuous improvement by analyzing the causes and effects of failures
- Enhance traceability and product safety through data consistency and simplified IT infrastructure
- Limit rework and scrap through sustained quality-control efforts
- Increase efficiency with streamlined, standardized quality processes, whether in the lab or on the shop floor

LoB Manufacturing - Quality Management - quality engineering



QUALITY MANAGEMENT

Quality Engineering Quality Improvement

Quality Inspection



Functional changes

Functionality with SAP S/4HANA Enterprise
 Management that enables users to carry out several
 inspections and record multiple sets of characteristic
 results for an operation as well as record and monitor
 defects in a single cockpit



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Quality Engineer
 - Quality Planner
 - Quality Technician

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Extension of material number to 40 characters
- SAP intends to provide functionality in SAP S/4HANA that allows reduction of quality costs and sustainable prevention of defects based on an advanced, closed-loop inspection planning process, including:
- Failure mode and effects analysis (FMEA) and control plan
- Production part approval process (PPAP)
- Audit management
- Predictive quality management

LoB Manufacturing – Quality Management – quality improvement



QUALITY MANAGEMENT

Quality Engineering Quality Improvement

Quality Inspection

Purpose

- Reach corporate quality goals through enhanced insight into quality evaluations
- Achieve higher visibility into operations across plants and regions
- Establish transparent, enterprise-wide quality audit planning, execution, and reporting

Benefits

- Improve tracking of key quality metrics at all operational and business levels through KPIs
- Accelerate identification of systematic errors with the ability to analyze problems, eliminate root causes, and respond more quickly to unforeseen events and deviations
- Reinforce process excellence by enabling comprehensive oversight of operations, audit cycles, and quality improvement efforts

LoB Manufacturing – Quality Management – quality improvement



QUALITY MANAGEMENT

Quality Engineering Quality Improvement

Quality Inspection



Functional changes

- SAP S/4HANA now provides:
 - Flexible, harmonized action management functionality (and catalog) to streamline quality improvement processes
 - Additional functionality and support for the standardization of complaint processes, enabling more-accurate tracking of quality issues
 - Evaluations to analyze key figures for quality management data
 - Streamlined interface with SAP Extended Warehouse Management and SAP Transportation Management applications



User experience improvement

- SAP Fiori-based user experience across all process steps
- Enhanced overview pages containing analytical information as entry points for different roles in quality management
- Newly designed object pages and flexible worklists with user-friendly, intuitive UIs to manage quality tasks
- Roles with new, dedicated SAP Fiori apps:
 - Quality Engineer
 - Quality Technician

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Extension of material number to 40 characters
- SAP intends to:
 - Use machine learning capabilities to enable a guided and proactive complaint process supported by proposed issue resolutions
 - Standardize issue resolution procedures, including root cause analysis and collaborative scenarios
 - Reduce the IT footprint and increase response time
 - Provide comprehensive analysis of quality management data to enable insight to action

LoB Manufacturing – Quality Management – quality inspection



QUALITY MANAGEMENT

Quality Engineering Quality Improvement

Quality Inspection

Purpose

- Prepare, execute, and monitor quality inspections in areas such as purchasing, production, and sales
- Reduce costs and increase efficiency by supporting high-quality operations
- Record and track inspection results and defects
- Connect, monitor, and maintain test equipment to help ensure accuracy of inspection results

Benefits

- Limit rework and scrap through sustained quality-control efforts
- Increase efficiency with streamlined, standardized quality processes, whether in the lab or on the shop floor
- Enable timely responses to exceptions with improved visibility into real-time quality data throughout the product lifecycle
- Increase options for recording and evaluating inspection results with integrated quality operations

LoB Manufacturing – Quality Management – quality inspection



QUALITY MANAGEMENT

Quality Engineering Quality Improvement

Quality Inspection



Functional changes

- Greater efficiency with SAP S/4HANA with the ability to carry out several inspections, record multiple sets of characteristic results for an operation, and record and monitor defects
- Inclusion of a display of the worklist, a graphical representation option for setting the inspection stage, and options to tighten or reset a quality level in the overview page



User experience improvement



- New SAP Fiori apps and overview pages for the role of quality engineer and quality technician to have one central place for all the inspection lots that require action:
 - SAP Fiori app "Manage Inspection Lots"
 - SAP Fiori app "Manage Usage Decisions"
 - SAP Fiori app "Results History"

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

• Extension of material number to 40 characters

LoB Manufacturing – Extended Production Planning and Scheduling – constraint based production planning



EXTD. PROD. PLANNING & SCHEDULING

Constraint Based Production Planning

Production Scheduling Demand Driven Replenishment

Purpose

- Shorten lead times and reduce costs with constraint-based production planning using SAP S/4HANA
- Maintain quality products and decrease costs by reacting quickly to changes on the plant floor

Benefits

- Increase speed and responsiveness of production planning by linking advanced planning processes to manufacturing execution
- Improve customer service by enhancing visibility into manufacturing capacity and responding quickly to new demand

LoB Manufacturing – Extended Production Planning and Scheduling – constraint based production planning



EXTD. PROD. PLANNING & SCHEDULING

Constraint Based Production Planning

Production Scheduling Demand Driven Replenishment



Functional changes

 Introduction of advanced production and capacity planning directly into SAP S/4HANA, capabilities that were available only in the SAP Advanced Planning and Optimization (SAP APO) component



User experience improvement



- Roles with new, dedicated SAP Fiori apps:
- Production Planner
- Material Planner

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Integration of SAP liveCache technology in SAP HANA database
- Core interface (CIF) simplification
- Data harmonization
- Extension of material number to 40 characters

LoB Manufacturing - Extended Production Planning and Scheduling - production scheduling



EXTD. PROD. PLANNING & SCHEDULING

Constraint Based Production Planning

Production Scheduling Demand Driven Replenishment

Purpose

- Integrate production planning tightly with scheduling and execution for a detailed view of inventory, capacity, and material flow
- Schedule resources optimally by considering finite capacity, sequencing and setup, and material availability
- Address many industry-specific sequencing requirements with configurable, multilevel production scheduling

Benefits

- Reduce days in inventory (work in progress) by integrating scheduling and execution to gain a consistent, real-time view of inventory and product data
- Cut manufacturing cycle time by instantly adapting production schedules to current plant conditions

LoB Manufacturing – Extended Production Planning and Scheduling – production scheduling



EXTD. PROD. PLANNING & SCHEDULING

Constraint Based Production Planning

Production Scheduling

Demand Driven Replenishment



Functional changes

- Introduction of advanced production and capacity planning directly into SAP S/4HANA, capabilities that were available only in the SAP Advanced Planning and Optimization (SAP APO) component
- Mill industry scheduling scenario functionality enhanced



User experience improvement



- Roles with new, dedicated SAP Fiori apps:
 - Production Planner
 - Material Planner

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Integration of SAP liveCache technology in SAP HANA database
- Core interface (CIF) simplification
- Data harmonization
- Extension of material number to 40 characters

LoB Manufacturing – Extended Production Planning and Scheduling – demand driven replenishment



EXTD. PROD. PLANNING & SCHEDULING

Constraint Based Production Planning

Production Scheduling Demand Driven Replenishment

Purpose

- Promote material flow with strategically placed buffers, reducing inventory and improving service
- Promote end-to-end material flow through demand-driven replenishment processes
- Reduce inventory and manage variability by strategically locating and sizing stock buffers to decouple the supply chain into segments
- Minimize lead times and manage priorities by replenishing buffers based on consumption-based replenishment logic

Benefits

- Reduce inventory obsolescence by decoupling supply chain with strategically placed stock buffers
- Improve on-time delivery performance by replenishing buffers based on consumption logic and make clear replenishment priorities to production and procurement
- Reduce inventory carrying cost by sizing stock buffers based on demand-and-supply variability, dynamically adjusting them as demand and lead time change

LoB Manufacturing – Extended Production Planning and Scheduling – demand driven replenishment



EXTD. PROD. PLANNING & SCHEDULING

Constraint Based Production Planning

Production Scheduling Demand Driven Replenishment



Functional changes



User experience improvement



Data innovations

- New demand-driven MRP to manage buffers of components and semifinished products across the complete bill of material (BOM) dynamically – completely embedded in existing MRP strategies
- Visualizations in SAP S/4HANA to support buffer positioning in demand-driven replenishment and display the position of decoupling points in a multilevel BOM along the supply chain
- SAP Fiori-based user experience across all process steps, including apps to manage buffer levels, replenishment planning, replenishment execution, schedule product classification (DD), mass maintenance of products (DD), schedule lead time classification of products, and schedule buffer proposal calculation
- Demand-driven replenishment overview page
- Role with new, dedicated SAP Fiori apps:
 - Production Planner

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.

 Integration with a simplified data model of SAP S/4HANA

LoB Manufacturing - Complex Manufacturing - manufacturing engineering



COMPLEX MANUFACTURING

Manufacturing Engineering Extended Production Operations

Purpose

- Simplify, enrich, and extend digital collaboration between product design and manufacturing engineering
- Facilitate digital collaboration of manufacturing master data, design structures handovers, process planning, and intelligent change management
- Reduce cost and time with simplified processing and an enhanced user experience
- Foster communication, collaboration, and speed to market with accurate, enhanced build packages across global manufacturing
- Increase manufacturing quality by validating production processing via system checks and visual engineering model assembly simulation
- Enhance enterprise collaboration by leveraging the digital twin for manufacturing consumption
- Enable manufacturing impact analysis to minimize production disruptions that result from changed routings, work instructions, or production orders

Benefits

- Reduce engineering change cost by providing a real-time, integrated environment that enables all stakeholders to collaborate in the change process
- Improve manufacturing planning function efficiency by seamlessly integrating design, process planning, and manufacturing change management collaboration capabilities
- Reduce time to market for new products by creating dramatic efficiencies that accelerate innovation and expedite production operations
- Reduce the cost to support quality management by validating production processing through system checks and visual, engineering model assembly simulation

LoB Manufacturing – Complex Manufacturing – manufacturing engineering



COMPLEX MANUFACTURING

Manufacturing Engineering Extended Production Operations



Functional changes



User experience improvement



Data innovations

- New functionality for complex manufacturing:
 - Version-managed BOM and routing
 - BOM conversion: engineering BOMs to manufacturing BOMs
 - Change record management
 - Change impact analysis
 - Standard text management
 - Shop-floor routing maintenance

- SAP Fiori-based user experience across all process steps to help visualize and analyze impacts in manufacturing engineering and operations
- Role with new, dedicated SAP Fiori apps:
 - Production Engineer

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.

- New data available for HTML work instruction
- Data model adjustments to support functional changes

LoB Manufacturing – Complex Manufacturing – extended production operations



COMPLEX MANUFACTURING

Manufacturing Engineering Extended Production Operations

Purpose

- Manage shop-floor operations with real-time insight, monitoring, data collection, and analytics
- Monitor production orders and operations
- Optimize system monitoring of shop-floor production operations with automatic issue detection, root-cause analysis, and decision support
- Manage adjustments to existing production orders and related master data
- Manage the work queue as well as get all information necessary to streamline operations
- Use tracking and tracing of individual parts and part-specific genealogy by shopfloor item

Benefits

- Reduce manufacturing cycle time by prioritizing operations based on product and material availability and reducing idle time
- Reduce revenue loss due to quality and compliance issues by enforcing the process for component assembly and manufacturing data collection, and error proofing the process
- Reduce other manufacturing costs by having near-real-time insight on resource and process availability
- Reduce expedited transportation spend by enabling proactive issue resolution
- Reduce days in inventory (raw material) by improving material flow
- Reduce days in inventory (work in progress) by consuming materials at operational level

LoB Manufacturing – Complex Manufacturing – extended production operations



COMPLEX MANUFACTURING

Manufacturing Engineering

Extended Production Operations



Functional changes



User experience improvement



Data innovations

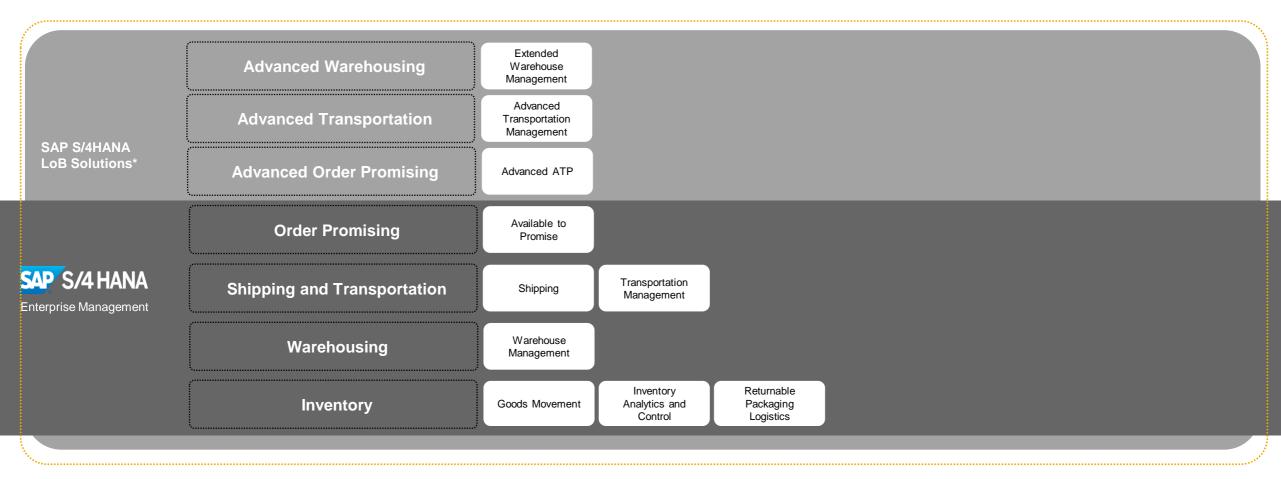
- Enhanced functionality for complex manufacturing:
 - Monitor production process
 - Check operator certifications
 - Create rich-text work instructions
 - Offer 3D visualizations
 - Record genealogy data
 - Enable buy-off production activities
 - Support action handlers for custom logic
 - Hold production orders

- SAP Fiori-based user experience across all process steps to help visualize and analyze impacts in manufacturing engineering and operations
- Roles with new, dedicated SAP Fiori apps:
 - Production Supervisor
 - Production Operator

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.

 New data available for genealogy, buy-offs, holds, and so on

SAP S/4HANA – LoB Supply Chain



* Additional license

LoB Supply Chain – Inventory – goods movement



INVENTORY

Goods Movement

Inventory Analytics Returnable Packaging Logistics

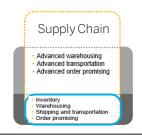
Purpose

- Improve inbound and outbound logistics by streamlining material flow and by creating transparency across outbound logistics
- Integrate bar-code and RFID technology to manage just-in-time availability, unit handling, serial numbers, electronic data exchange, and proof of delivery
- Minimize delivery errors, speed up fulfillment, improve customer service, and cut operating costs

Benefits

- Improve inbound process FTE productivity by increasing automation and improving access to real-time information
- Improve on-time delivery performance by improving shipping performance, streamlining material flow, and establishing transparency across outbound logistics operations

LoB Supply Chain – Inventory – goods movement



INVENTORY

Goods Movement

Inventory Analytics Returnable Packaging Logistics



Functional changes

- Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports, optimizing the process of goods movement
- Enhancements to work-in-process (WIP) batch functionality for order combinations
- Inclusion of batch selection into the goods receipt process
- Predictive analytics and machine learning for decision support through the inclusion of the predicted delivery date into the creation of stock transport orders



User experience improvement

- SAP Fiori-based user experience across all process steps, even for complex goods movement (MIGO transaction code)
- SAP Fiori user experience improvements:
 - Direct access to material documents after posting through links, improving overall process flow
 - Bar-code scanning in goods receipt process supported for devices that can host the SAP Fiori Client mobile app
- Roles with new, dedicated SAP Fiori apps:
 - Receiving Specialist
 - Shipping Specialist
 - Warehouse Clerk
- SAP CoPilot: quick-create apps
- SAP Extended Warehouse Management application: delivery object pages

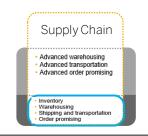


Data innovations

- Integration with a simplified data model of SAP S/4HANA
- Simplified data model that eliminates aggregates and database locks
- Real-time inventory management through a redesigned data model in SAP S/4HANA
- SOAP API for sending and receiving "goods receipt" notes

For additional information on roles and apps, visit the <u>SAP Fioriapps reference library</u>

LoB Supply Chain – Inventory – inventory analytics



INVENTORY

Goods Movement

Inventory Analytics Returnable Packaging Logistics

Purpose

- Enable real-time reporting in inventory management
- Support better-informed inventory management decisions with real-time and historical data
- Improve profitability with rapid access to relevant information when inquiring about, comparing, or choosing recommended actions for processes
- Accelerate decision-making aligned with supply, inventory, and fulfillment goals through increased insights

Benefits

- Improve on-time delivery performance by analyzing deviations in delivery plan and schedule and making timely adjustments
- Reduce days in inventory by analyzing inventory coverage and ensuring inventory is aligned with demand
- Reduce carrying cost of spare-parts inventory by making informed spare-parts inventory decisions based on real-time and historical data aligned with supply, inventory, and fulfillment goals

LoB Supply Chain – Inventory – inventory analytics



INVENTORY

Goods Movement

Inventory Analytics Returnable Packaging Logistics



Functional changes

- Real-time inventory management through a redesigned data model in SAP S/4HANA
- Overview page to support the inventory manager and warehouse clerk in daily business by presenting selected and relevant KPIs and charts at a glance
- Inventory KPI analysis with follow-on actions on slowmoving materials
- Improved analysis of goods movements
- Analysis of goods receipt blocked stock and stock in transit (predictive analytics and machine learning)
- Analytical query for physical inventory documents, available for consumption in SAP Cloud Platform and analytical tools



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Inventory Manager
- Warehouse Clerk

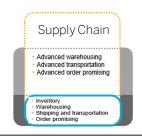
For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

Simplified data model that eliminates aggregates and database locks

LoB Supply Chain – Inventory – returnable packaging logistics



INVENTORY

Goods Movement

Inventory Analytics Returnable Packaging Logistics

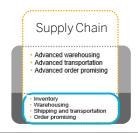
Purpose

- Manage the inventory and logistics of returnable packaging in the supply chain
- Track shipping and receiving of returnable packaging materials to and from business partners using a real-time solution
- Gain visibility in materials distribution and reduce overall volume of materials by integrating logistics information into a single version of the truth
- Cut cost by avoiding stock-outs for packing and supplying goods
- Reduce operating costs arising from deviant packaging materials

Benefits

- Increase asset availability by optimizing logistics for returnable packaging
- Reduce procurement total spend by tracking the receipts and return of packaging materials in real time.
- Reduce total logistics cost by tracking shipments and receipts of returnable packaging to and from partners to minimize loss, waste, and damage

LoB Supply Chain – Inventory – returnable packaging logistics



INVENTORY

Goods Movement

Inventory Analytics Returnable Packaging Logistics



Functional changes



User experience improvement



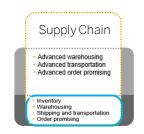
Data innovations

 Immediate availability of SAP ERP functionality in SAP S/4HANA, as the industry switch for discrete industries and mill products for the activation of specific features is no longer required SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.

• Extension of material number to 40 characters

LoB Supply Chain – Warehousing – warehouse management



WAREHOUSING

Warehouse Management

Purpose

- Deliver the right products to the right place
- Automate warehouse operation processes
- Streamline material flows and make warehouse operations more transparent

Benefits

- Improve inventory accuracy with real-time reports on inventory positions and flows that use preconfigured analytical views
- Enhance on-time delivery performance by integrating pick, pack, and ship processes
- Increase inventory turnover and reduce days in inventory by making informed decisions based on accurate demand and supply data
- Perform standardized inbound and outbound processing with internal movements and physical inventory and reporting

LoB Supply Chain – Warehousing – warehouse management



WAREHOUSING

Warehouse Management



Functional changes

- Alternative-based confirmation analysis on products based on confirmed warehouse tasks
- Warehouse monitor enhancements
- SAP Extended Warehouse Management application integration with SAP Global Batch Traceability application
- Item unique identification (IUID) handling in SAP Extended Warehouse Management
- Synchronous stock postings between inventory management and SAP Extended Warehouse Management
- Synchronous feasibility check for order-driven changes and enablement of unplanned returns process triggered from SAP Extended Warehouse Management
- Batch management: global batch with deactivation for dedicated plants



User experience improvement

- SAP Fiori-based user experience across select process steps
- New SAP Fiori apps for packing outbound deliveries and physical inventory counting
- Enhancements to existing SAP Fiori apps to change inbound delivery and process outbound delivery
- Enhancements to existing SAP Fiori apps for product master maintenance to maintain warehouse-related data

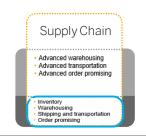
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Simplified master data structure
- Removal of redundancy in transaction data objects
- Simplified configuration
- Stock-type enhancements to define stock-type description at warehouse level
- Reuse of the logistics execution delivery number in warehouse requests

LoB Supply Chain – Shipping and Transportation – shipping



SHIPPING AND Shipping Transportation Management

Purpose

- Automate shipping processes
- Manage asset usage, throughput, and order fulfillment
- Streamline material flows and make warehouse operations more transparent

Benefits

- Improve inventory accuracy with real-time reports on inventory positions and flows with preconfigured analytical views
- Enhance on-time delivery performance by integrating pick, pack, and ship processes
- Increase inventory turnover and reduce days in inventory by making informed decisions based on accurate demand and supply data

LoB Supply Chain – Shipping and Transportation – shipping



SHIPPING AND TRANSPORTATION Shipping

Transportation Management



Functional changes

 Comparable SAP ERP functionality provided in SAP S/4HANA



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Inventory Manager
- Shipping Specialist
- Warehouse Clerk

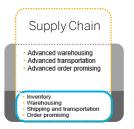
For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Elimination of status tables VBUK and VBUP, with status fields moved to the corresponding header and item tables (VBAK and VBAP for sales documents and LIKP and LIPS for delivery documents)
- Field length extension of sales and distribution document category:
 - Data element VBTYP (Char1) replaced by data element VBTYPL (Char4)
 - Field VBTYP EXT (Char4) eliminated

LoB Supply Chain – Shipping and Transportation – transportation management



SHIPPING AND TRANSPORTATION

Shipping

Transportation Management

Purpose

- Deliver perfect orders with integrated logistics execution processes that improve shipping quality
- Ship the right products without delay and deliver them to the right place at the right time, with modernized inbound and outbound shipping processes
- Reduce logistics costs through stakeholder communication and transparency across basic transportation processes
- Ensure on-time and accurate order fulfillment with automated shipping processes

Benefits

- Improve on-time delivery performance by integrating pick, pack, and ship processes
- Increase revenue through improved asset utilization by automating processes for inbound and outbound shipment
- Reduce transportation function cost by making informed decisions based on accurate data and supply data

LoB Supply Chain – Shipping and Transportation – transportation management



SHIPPING AND TRANSPORTATION

Shipping

Transportation Management



Functional changes

- Change propagation of calculation date and exchange rate date
- Filtering of zero charges
- Retention of manual charges
- Deficit weight rating (DWR)
- Functionality in basic scope enhanced with the SAP Transportation Management application



User experience improvement

- SAP Fiori-based user experience across all process steps
- Role with new, dedicated SAP Fiori apps:
 - Transportation Manager

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Elimination of status tables VBUK and VBUP, with status fields moved to the corresponding header and item tables (VBAK and VBAP for sales documents and LIKP and LIPS for delivery documents)
- Simplification through less complex coding as SAP Transportation Management controls the processing sequence
- Field length extension of sales and distribution document category:
 - Data element VBTYP (Char1) replaced by data element VBTYPL (Char4)
 - Field VBTYP_EXT (Char4) eliminated

LoB Supply Chain – Order Promising – available to promise



ORDER PROMISING

Available to Promise

Purpose

- Provide order commitment dates and quantities during order creation and change processes
- Consider material availability when promising orders

Benefits

 Improve customer satisfaction by automatically matching end-item or component supply with demand

LoB Supply Chain - Order Promising - available to promise



ORDER PROMISING

Available to Promise



Functional changes

- No impact on business processes. For information about technical changes, see the <u>Simplification List</u> for SAP S/4HANA.
- Extend functionality with the SAP S/4HANA solution for advanced ATP*



User experience improvement

- Performance improvements when carrying out available-to-promise (ATP) checks on large orders
- Role with new, dedicated SAP Fiori apps:
 - Internal Sales Representative

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Removal of database table VBBS, which contains preaggregated sales requirements
- Daily aggregation of requested (OMENG) and confirmed (VMENG) quantities no longer needed, thanks to the new ATP functionality running in SAP HANA, making this table obsolete
- Redirection of the old SAP ERP coding for ATP check to use database table VBBE

LoB Supply Chain - Advanced Order Promising - advanced ATP



ADVANCED ORDER PROMISING

Advanced ATP

Purpose

- Provide order commitment dates and quantities during online order creation or change and in batch mode
- Make promises on orders, maintaining visibility of real-time inventory to help ensure fulfillment
- Improve customer satisfaction with real-time inventory information for advanced available-to-promise (ATP) order commitment dates with SAP S/4HANA
- Commit to orders quickly and accurately by automatically checking for material availability and product allocations
- Boost delivery performance with embedded logic for automatically matching supply of ordered items with demand

Benefits

- Improve customer satisfaction by using embedded logic to automatically match supply with demand
- Improve on-time delivery performance by replenishing inventories frequently based on the latest information about stock levels and demand forecasts
- Reduce inventory carrying cost by using real-time information on inventory availability and projected availability to provide accurate order commitment dates
- Reduce days in inventory by leveraging real-time information regarding inventory availability to shorten replenishment cycles and to respond to demand on a frequent basis

LoB Supply Chain - Advanced Order Promising - advanced ATP



ADVANCED ORDER PROMISING

Advanced ATP



Functional changes

New functionality with SAP S/4HANA, with the following functional scope:

- Product allocation functionality: displays and analyzes the product allocation availability situation and automatically reorganizes product allocation planning data after deletion, deactivation, or reactivation of clear value chains
- Back-order processing and release for delivery: now provides more automation on fallbacks, visualization for constraints, and support for multiple time zones
- Alternative-based confirmation functionality: now available to configure alternative control and substitution strategy and determine the delivering plant with best availability during sales order creation



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Internal Sales Representative
- Order Fulfillment Manager
- Order Fulfillment Specialist

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Removal of database table VBBS, which contains preaggregated sales requirements
- Daily aggregation of requested (OMENG) and confirmed (VMENG) quantities no longer needed, thanks to the new ATP functionality running in SAP HANA, making this table obsolete
- Redirection of the old SAP ERP coding for ATP check to use database table VBBE

LoB Supply Chain – Advanced Warehousing – extended warehouse management



ADVANCED WAREHOUSING

Extended Warehouse Management

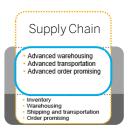
Purpose

- Optimize extended warehouse operations, including inbound processing, crossdocking, outbound processing, warehouse storage, and physical inventory management
- Support workforce management, slotting, and advanced inventory optimization
- Support extended warehouse services such as billing, transit warehousing for logistics service providers, and direct control of warehouse automation equipment

Benefits

• Improve asset utilization, throughput, and safety, and ensure on-time, compliant, and accurate order fulfillment

LoB Supply Chain - Advanced Warehousing - extended warehouse management



ADVANCED WAREHOUSING Extended Warehouse Management



Functional changes

- Embedding of the SAP Extended Warehouse
 Management application in SAP S/4HANA
- Alternative-based confirmation analysis of products based on confirmed warehouse tasks
- Warehouse monitor enhancements
- Synchronous stock postings between inventory management and SAP Extended Warehouse Management
- Item unique identification (IUID) enabled with the SAP Extended Warehouse Management application
- Integration of the SAP Global Batch Traceability application for handling unit traceability of batchmanaged materials



User experience improvement

- SAP Fiori-based user experience across all process steps
- New SAP Fiori apps for packing outbound deliveries and physical inventory counting
- Enhancements to existing SAP Fiori apps to change inbound delivery and process outbound delivery
- Enhancements to existing SAP Fiori apps for product master maintenance to maintain warehouse-related data

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Simplified master data structure
- Removal of redundancy in transaction data objects
- Simplified configuration
- Stock-type enhancements to define stock-type description at warehouse level
- Reuse of the logistics execution delivery number in warehouse requests

LoB Supply Chain – Advanced Transportation – advanced transportation management



ADVANCED TRANSPORTATION Advanced Transportation Management

Purpose

- Reduce costs and improve service with streamlined transportation management processes
- Support the complete transportation management lifecycle for both domestic and international freight to improve customer satisfaction: manage the transportation requirements by planning, optimizing, tendering, and settling freight; booking carriers; managing forwarding orders; and complying with international trade and hazardous goods requirements

Benefits

- By deploying integrated transportation management:
 - Executives have a holistic view of end-to-end logistics operations
 - Planners have real-time access to information and can react faster
 - Planners have earlier visibility into orders and can secure first-choice carriers

LoB Supply Chain – Advanced Transportation– advanced transportation management



ADVANCED TRANSPORTATION Advanced Transportation Management



Functional changes

- System and process integration between SAP S/4HANA Supply Chain solution for transportation management and SAP S/4HANA Enterprise Management
- Additional deployment option of a decentralized SAP S/4HANA Supply Chain for transportation management
- Harmonized transportation master data and customizing
- Improved mixed-pallet building and load optimization
- Support for freight forwarder scenario
- Package unit: new single document user interface and new personal object worklist
- Scenario builder: support for planning profiles, scheduling settings, and optimizer settings



User experience improvement

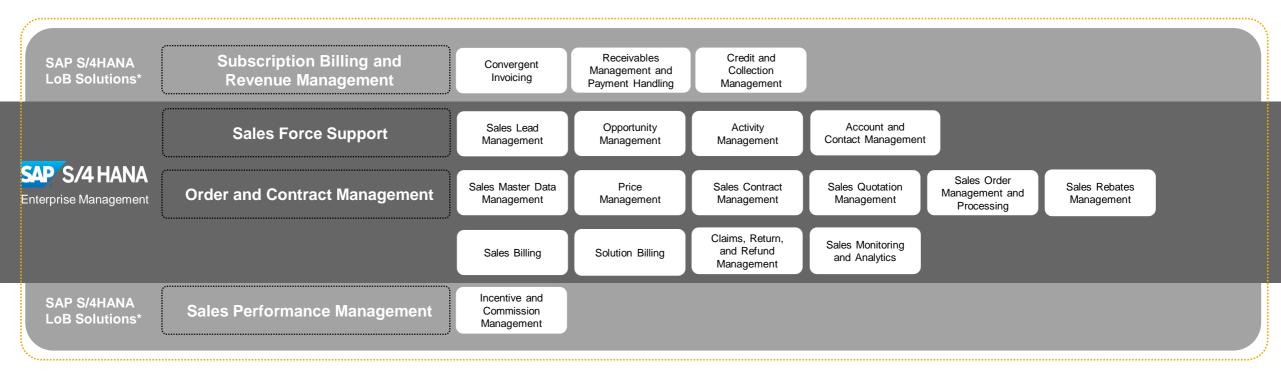
- SAP Fiori-based user experience across all process steps
- Drill-down function into KPIs for detailed analysis with embedded analytics
- Enhancements to GANTT chart



Data innovations

 Reduced data redundancy through harmonized master data and simplified processes, thereby lowering the total cost of ownership

SAP S/4HANA – LoB Sales



^{*} Additional license

LoB Sales – Order and Contract Management – sales master data management



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns and Refund Management

Sales Monitoring and Analytics

Purpose

- Provide accurate, structured, and accessible master data
- Collect, analyze, organize, and deliver a single version of sales master data across the company
- Support customer-specific marketing campaigns and deliver the right products at the right time with harmonized master data

Benefits

- Increase sales productivity with anytime, anywhere access to more-accurate sales master data
- Enhance logistics management using integrated logistics processes, such as material and inventory management
- Improve decision-making with sales data insight supported by higher data quality
- Improve sales document quality with more-accurate product and item details
- Foster additional sales through the use of the cross-selling feature
- Simplify data capture with the help of material determination functionality

LoB Sales – Order and Contract Management – sales master data management



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns and Refund Management

Sales Monitoring and Analytics



Functional changes

- Business partner as the central approach to maintain customer master data
- Standard API-enabling access and integration to sales master data
- Unified master data, which enables SAP S/4HANA to natively integrate with the SAP Commerce Cloud and SAP Sales Cloud solutions*



User experience improvement

- SAP Fiori-based user experience across all process steps
- Access to available sales master-data transaction using SAP Fiori launchpad
- Role with new, dedicated SAP Fiori apps:
 - Internal Sales Representative

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

- Simplified data model for sales and distribution pricing, which stores pricing results from documents, such as sales documents and POs, in a database table
- Increased length of material numbers supported in SAP S/4HANA to address requirements of mill products and discrete industries
- Support for business partners in conjunction with customer and vendor integration functionality, which further simplifies the data model

LoB Sales – Order and Contract Management – price management



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns, and Refund Management

Sales Monitoring and Analytics

Purpose

- Deliver accurate pricing to customers with configurable pricing management to maintain customer relationships and strengthen loyalty
- Streamline pricing changes through maintenance capabilities
- Ensure all steps in the pricing process, from opportunity to quote to order and invoicing, share the same source for pricing information

Benefits

- Increase sales force efficiency
- Ensure consistent price towards customers
- Reduce customer churn

LoB Sales – Order and Contract Management – price management



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

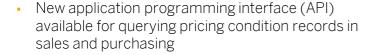
Solution Billing

Claims, Returns, and Refund Management

Sales Monitoring and Analytics



Functional changes





User experience improvement

SAP Fiori-based user experience across all process steps



Data innovations

- Direct access for analytics with data model simplification in pricing
- More flexibility in pricing and condition technique with enhanced field lengths
- Improved data footprint with removal of redundant table fields
- Increase in number of condition tables

LoB Sales – Order and Contract Management – sales contract management



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns and Refund Management

Sales Monitoring and Analytics

Purpose

- Manage contracts holistically for long-term sales agreements
- Unify the order management process by integrating contract management with sales, pricing, and logistics processes
- Monitor sales contracts throughout the agreement lifecycle
- Respond quickly to customer contract renewal issues
- Track and compare actual customer purchases against volumes specified in sales agreements
- Manage rebate agreements with insight into contract conditions

Benefits

- Improve customer retention by tailoring sales agreements to match each customer's unique needs
- Enhance sales forecast accuracy with the ability to anticipate sales revenues from long-term agreements
- Raise the number of customer interactions that result in sales by monitoring contract fulfillment and renewal
- Increase sales volume according to the terms of customer-specific agreements
- Simplify handling of sales orders through contract call-offs, which allow the creation and processing of customer orders by referencing a contract

LoB Sales – Order and Contract Management – sales contract management



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns and Refund Management

Sales Monitoring and Analytics



Functional changes

- Condition-contract settlement management to allow users to flexibly define and execute rebate agreements
- Unified customer experience thanks to native integration with the SAP Commerce Cloud and SAP Sales Cloud solutions*



User experience improvement



- Role with new, dedicated SAP Fiori apps:
 - Internal Sales Representative

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

- Enhanced guery performance by reducing select statements and by simplifying joins for headers and items, such as status and business data
- Increased robustness of rebate processing by decreasing redundancies created with aggregates
- Smaller memory footprint by streamlining document flow, eliminating index tables, and requiring fewer aggregates

LoB Sales – Order and Contract Management – sales quotation management



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management Price Management Sales Contract Management Sales Quotation Management

Sales Order Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns, and Refund Management

Sales Monitoring and Analytics

Purpose

- Record customer inquiries and quotation
- Track quotation to order conversion performance
- Predict quotation to order conversion with machine learning capability

Benefits

- Provide insight to sales performance with streamlined presales and sales activities
- Allows sales clerk to focus on the sales quotations with highest probability

LoB Sales – Order and Contract Management – sales quotation management



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management Price Management Sales Contract Management Sales Quotation Management

Sales Order Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns, and Refund Management Sales Monitoring and Analytics



Functional changes

 Predicted sales-quotation-to-order conversion rate using embedded machine learning capability



User experience improvement

- SAP Fiori-based user experience across all process steps
- Role with new, dedicated SAP Fiori apps:
 - Billing Clerk

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 Simplified data model and embedded analytics with SAP S/4HANA

LoB Sales - Order and Contract Management - sales order management and processing



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns, and Refund Management

Sales Monitoring and Analytics

Purpose

- Integrate order management and processing, from order to shipment and from billing to booking revenue
- Capture sales data from multiple channels
- Provide role-based access to information

Benefits

- Increase sales by reducing days sales outstanding and boosting overall sales effectiveness
- Enhance sales productivity with a streamlined, redefined order management process
- Improve customer retention through a better flow of information on order status and tracking

LoB Sales - Order and Contract Management - sales order management and processing



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management Price Management Sales Contract Management Sales Quotation Management

Sales Order Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns and Refund Management

Sales Monitoring and Analytics



Functional changes

- Provision of credit management functionality for sales now with the SAP Credit Management application included in SAP S/4HANA Enterprise Management
- Foreign trade function now part of SAP S/4HANA for international trade; provision of basic letter of credit function by integration with the SAP Treasury and Risk Management application; and advanced letter of credit function covered by SAP Treasury and Risk Management
- Provision of revenue recognition functionality for sales now with revenue accounting functionality
- Unified customer experience thanks to native integration with SAP Commerce Cloud and SAP Sales Cloud solutions*
- Mass change for sales order header information
- Low-touch order using exception-based order management
- Prediction of delivery delay with embedded machine learning capability
- Simplified order execution with natural language processing



User experience improvement

- SAP Fiori-based user experience across all process steps
- Role with new, dedicated SAP Fiori apps:
 - Internal Sales Representative

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Enhanced query performance by reducing select statements and by simplifying joins for headers and items, such as status and business data
- Smaller memory footprint by streamlining document flow, eliminating index tables, and requiring fewer aggregates

LoB Sales – Order and Contract Management – sales rebates management



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns and Refund Management

Sales Monitoring and Analytics

Purpose

- Define, monitor, and modify sales rebate agreements flexibly based on customer, product, and volume-based sales commitments
- Provide transparency in validating and processing rebate agreements with a clear trail of rebate accruals and settlement activity
- Boost sales through rebate incentives to customers
- Increase customer loyalty by paying rebates on schedule

Benefits

- Increase revenue from higher effectiveness of sales rebate programs by providing flexible and transparent rebate programs
- Reduce sales rebate overpayments by accurately calculating and validating earned rebate revenues and liabilities based on sales rebate agreements
- Increase revenue growth by providing incentives to purchase additional quantities of goods/services

LoB Sales – Order and Contract Management – sales rebates management



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns and Refund Management

Sales Monitoring and Analytics



Functional changes

- Condition-contracts management that enables users to flexibly define and execute rebate agreements
- Handling of clearance of condition contracts through the settlement management feature
- Availability of extended sales and distribution rebate processing only to customers using the SAP Trade Promotion Management application



User experience improvement

- SAP Fiori-based user experience across all process steps to accelerate the returns process
- Role with new, dedicated SAP Fiori apps:
- Internal Sales Representative

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

- Enhanced query performance by reducing select statements and by simplifying joins for headers and items, such as status and business data
- Increased robustness of rebate processing by decreasing redundancies created with aggregates
- Smaller memory footprint by streamlining document flow, eliminating index tables, and requiring fewer aggregates

LoB Sales – Order and Contract Management – sales billing



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns, and Refund Management

Sales Monitoring and Analytics

Purpose

- Simplify billing operations
- Streamline the order-to-cash process

Benefits

- Improve customer satisfaction by reducing billing errors
- Decrease days sales outstanding and improve cash flow through automated billing and invoicing functions

LoB Sales – Order and Contract Management – sales billing



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns and Refund Management

Sales Monitoring and Analytics



Functional changes

Integration with SAP digital payments add-on to enable electronic and digital payments



User experience improvement

- SAP Fiori-based user experience across all process steps
- Role with new, dedicated SAP Fiori apps:
 - Billing Clerk

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

- Smaller memory footprint by streamlining document flow, eliminating index tables, and requiring fewer aggregates
- Enhanced query performance by reducing select statements and by simplifying joins for headers and items, such as status and business data
- Increased robustness of rebate processing by decreasing redundancies created with aggregates
- Ability of the rebates feature of SAP S/4HANA to run without an index table

LoB Sales – Order and Contract Management – solution billing



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns and Refund Management

Sales Monitoring and Analytics

Purpose

- Enable business model transformation through a flexible billing process for outcome-based services
- Reduce days sales outstanding with accurate and timely billing
- Reduce manual effort, time, and cost using a flexible billing system to combine services, projects, and products in a single integrated invoice
- Improve the customer experience and reduce bill disputes with one quote, one contract, and one invoice for sophisticated B2B offerings

Benefits

- Reduce revenue leakage by enabling a flexible approval process before the bill is created
- Increase accounts receivable FTE productivity with an efficient solution billing process
- Reduce days sales outstanding (one-time benefit) by reducing the bill creation time and customer complaints

LoB Sales - Order and Contract Management - solution billing



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns and Refund Management

Sales Monitoring and Analytics



Functional changes

- New functionality that allows customers to convert external billing data, sales orders, sales contracts, debit memo requests, and outbound deliveries into one invoice and perform invoice split analysis
- Microsoft Excel-based upload for external billing data



User experience improvement



Data innovations

- SAP Fiori-based user experience across all process steps
- Role with new, dedicated SAP Fiori apps:
 - Billing Clerk

For additional information on roles and apps, visit the SAP Fiori apps reference library.

Leverage simplified SAP S/4HANA data model

LoB Sales – Order and Contract Management – claims, returns, and refund management



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns, and Refund Management

Sales Monitoring and Analytics

Purpose

- Streamline complaints and returns process
- Trigger follow-on actions, such as inspection of returned material, resolution of issues, processing of a refund, or exchange of materials due to damage or incorrect delivery

Benefits

- Reduce customer service and support costs by automating and streamlining returns processes
- Improve services by using the knowledge gained from successfully resolved complaints

LoB Sales – Order and Contract Management – claims, returns, and refund management



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns, and Refund Management

Sales Monitoring and Analytics



Functional changes

- Monitoring of customer complaints; acceleration and management of customer returns
- Availability of advanced customer returns management with simplified configuration and use of intuitive SAP Fiori apps dealing with return process
- Rebuilt beverage sales return function through native advanced returns management functionality in SAP S/4HANA



User experience improvement

- SAP Fiori-based user experience across all process steps
- SAP intends to develop SAP Fiori apps for the following roles in a future release of SAP S/4HANA:
- Returns and Refund Clerk
- Internal Sales Representative

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Smaller memory footprint by streamlining document flow, eliminating index tables, and requiring fewer aggregates
- Enhanced query performance by reducing select statements and by simplifying joins for headers and items, such as status and business data

LoB Sales – Order and Contract Management – sales monitoring and analytics



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns, and Refund Management

Sales Monitoring and Analytics

Purpose

- Gain transparency on sales performance, evaluated against sales KPIs
- Insight-to-action capability allows sales manager and sales clerk to take immediate action based on sales insight
- Embedded predictive analytics helps sales team to work more efficiently by working on the prioritized tasks

Benefits

- Reduce sales and operations costs with real-time, enhanced insights and greater efficiency
- Improve on-time, on-budget delivery performance by accelerating operations

LoB Sales – Order and Contract Management – sales monitoring and analytics



ORDER AND CONTRACT MANAGEMENT

Sales Master Data Management

Price Management Sales Contract Management

Management

Sales Order Sales Quotation Management and Processing

Sales Rebates Management

Sales Billing

Solution Billing

Claims, Returns, and Refund Management

Sales Monitoring and Analytics



Functional changes

- To reduce the IT footprint and increase response time, SAP intends to provide functionality similar to logistics and sales information systems in SAP S/4HANA, with database analytics provided through OData and core data services (CDS) views.
- Ability for power users to define new reports based on the CDS-based order-to-cash virtual data model
- Availability of new KPIs for sales contracts, customer returns, outbound deliveries, and credit and debit memo requests



User experience improvement

- SAP Fiori-based user experience across all process steps
- Insight into the performance of the order-to-cash process by using the overview pages
- Roles with new, dedicated SAP Fiori apps:
 - Sales Manager
 - Order-to-Cash Process Manager
 - Internal Sales Representative

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

- Smaller memory footprint by streamlining document flow, eliminating index tables, and requiring fewer aggregates
- Enhanced query performance by reducing select statements and by simplifying joins for headers and items, such as status and business data
- Analytics that are built on core database views
- Release of core data services (CDS) views to customers

LoB Sales – Sales Force Support – sales lead management

Sales
Sales performance management
Subscription billing and revenue
management

Order and contract management
Sales force support

SALES FORCE SUPPORT

Sales Lead Management Opportunity Management Activity Management Account and Contact Management

Purpose

- Gain a complete view across the enterprise by accessing a single source of customer and lead information
- Generate high-quality leads by coordinating and executing marketing activities
- Improve lead conversion and avoid losing prospects to competitors by accelerating follow-on activities

Benefits

Increase sales force efficiency

LoB Sales – Sales Force Support – sales lead management



SALES FORCE SUPPORT

Sales Lead Management Opportunity Management Activity Management Account and Contact Management



Functional changes

- Rebuild of sales capabilities of SAP CRM into SAP S/4HANA:
 - Manual or automatic creation of leads
 - Classification of leads
 - Assignment of leads to a person responsible
 - Use of questionnaires and surveys to evaluate leads
 - Definition of rules for document distribution



User experience improvement





Data innovations

- Harmonized data models and engines between SAP CRM and SAP S/4HANA
- Simplified and optimized data models for improved performance and smaller data footprint

LoB Sales – Sales Force Support – opportunity management



SALES FORCE SUPPORT

Sales Lead Management Opportunity Management Activity Management Account and Contact Management

Purpose

- Optimize bid effectiveness and meet deadlines with opportunity management
- Manage business relations and opportunities with all stakeholders including owners
- Create opportunities and track decisions by capturing, managing and sharing data for reference and analysis
- Increase the "work in hand" ratio by developing an integrated, consistent data repository for bids, client information, and opportunities

Benefits

- Increase revenue growth by focusing on the bid pipeline with the potential for higher value and rate of success
- Manage business relations and opportunities with all stakeholders including owners
- Increase customer interactions that result in a sale by helping business relations through improved organization and monitoring of contact activity
- Increase contracting officer/manager productivity by helping target and develop, from inquiry to contract, the best-fit opportunities
- Increase sales force efficiency by helping commercial teams bid more often with fewer resources

LoB Sales – Sales Force Support – opportunity management



SALES FORCE SUPPORT

Sales Lead Management Opportunity Management Activity Management Account and Contact Management



Functional changes



- Mapping of sales cycles and stages
- Classification of opportunities
- Creation of opportunity hierarchies
- Use of sales methodology tools to help sales employees
- Creation of an opportunity plan



User experience improvement



Data innovations

 SAP Fiori-based user experience across all process steps with the Web Client UI of SAP CRM harmonized with the most recent UI theme of SAP Fiori for SAP S/4HANA

- Harmonized data models and engines between SAP CRM and SAP S/4HANA
- Simplified and optimized data models for improved performance and smaller data footprint

LoB Sales – Sales Force Support – activity management



SALES FORCE SUPPORT

Sales Lead Management Opportunity Management Activity Management Account and Contact Management

Purpose

- Support effective customer engagements by enabling sales force to quickly capture and track activities and interactions
- Interpret and convert customer activities into accurate interaction history

Benefits

 Increase sales force efficiency by helping sales reps effectively capture and track their activities and interactions with customers

LoB Sales – Sales Force Support – activity management



SALES FORCE SUPPORT

Sales Lead Management Opportunity Management Activity Management Account and Contact Management



Functional changes

- Rebuild of sales capabilities of SAP CRM into SAP S/4HANA:
- Creation of activities such as interaction logs or appointments to document any interaction with customers
- Creation of tasks to manage workload
- Viewing of appointments and activities in the calendar
- Access to the fact sheet for valuable information about accounts
- Monitoring of activities using worklist and search functionality



User experience improvement

 SAP Fiori-based user experience across all process steps with Web Client UI for SAP CRM harmonized with the most recent UI theme of SAP Fiori for SAP S/4HANA



Data innovations

- Harmonized data models and engines between SAP CRM and SAP S/4HANA
- Simplified and optimized data models for improved performance and smaller data footprint

LoB Sales – Sales Force Support – account and contact management

Sales performance management Subscription billing and revenue management

Order and contract management Sales force support

SALES FORCE SUPPORT

Sales Lead Management Opportunity Management Activity Management Account and Contact Management

Purpose

- Deliver a holistic view of each customer by supporting comprehensive sales account and contact management
- Organize and manage sales operations by identifying key contacts and defining and visualizing the account hierarchy and relationships
- Empower sales process stakeholders with access to account data, context reports, and account activities

Benefits

- Increase sales force efficiency
- Increase customer interactions that result in a sale

LoB Sales – Sales Force Support – account and contact management



SALES FORCE SUPPORT

Sales Lead Management Opportunity Management Activity Management Account and Contact Management



Functional changes

 Rebuild of sales capabilities of SAP CRM into SAP S/4HANA:



User experience improvement

 SAP Fiori-based user experience across all process steps with Web Client UI for SAP CRM harmonized with the most recent UI theme of SAP Fiori for SAP S/4HANA



Data innovations

- Harmonized data models and engines between SAP CRM and SAP S/4HANA
- Simplified and optimized data models for improved performance and smaller data footprint

LoB Sales – Sales Performance Management – incentive and commission management



SALES PERFORMANCE MANAGEMENT

Incentive and Commission Management

Purpose

- Motivate sales teams and drive revenue with compelling incentive and compensation schemes
- Implement compelling variable compensation programs with incentive and commission management
- Retain and motivate top performers by building and maintaining an accurate, strategically aligned compensation plan
- Enable your organization to handle commission and incentive programs for employees and partners by automating routine tasks

Benefits

- Increase sales force efficiency by focusing your sales resources on the most strategic portfolio
- Increase revenue from new products or services by focusing your sales teams on new-product introductions
- Increase sales incentive management productivity of FTEs by automating routine tasks and providing an intuitive tool to align incentives with strategic priorities
- Increase channel management productivity of FTEs by automating routine tasks and providing an intuitive tool to align incentives and commissions with strategic priorities

LoB Sales – Sales Performance Management – incentive and commission management



SALES PERFORMANCE MANAGEMENT

Incentive and Commission Management



Functional changes

Comparable SAP ERP functionality provided in SAP S/4HANA



User experience improvement

SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

No change to data model

LoB Sales – Subscription Billing and Revenue Management – convergent invoicing



SUBSCRIPTION BILLING AND REVENUE MGMT.

Convergent Invoicing Receivables Management and Payment Handling Credit and Collection Management

Purpose

- Enhance cash flow and customer care by simplified invoicing with SAP S/4HANA
- Streamline viewing, adjustment, accuracy, and timely generation of invoices with SAP Fiori apps
- Become transparent, reduce enquiries, consolidate invoicing and billing items from multiple lines of business, and save on printing and mailing costs
- Accommodate third-party partnerships, and keep customers informed of responsible parties for charges

Benefits

- Improve customer satisfaction by generating clear, easy-to-understand invoices for all services on a single bill
- Reduce application lifecycle management costs by consolidating multiple billing systems into one source
- Reduce days sales outstanding (one-time benefit) by making bills easier to understand to help ensure prompt payment without disputes
- Reduce service and support cost by reducing billing-related inquiries with clear, consolidated billing

LoB Sales – Subscription Billing and Revenue Management – convergent invoicing



SUBSCRIPTION BILLING AND REVENUE MGMT.

Convergent Invoicing

Receivables Management and Payment Handling Credit and Collection Management



Functional changes

No functional changes



User experience improvement



- Roles with new, dedicated SAP Fiori apps:
 - Invoicing Manager (Convergent Invoicing)
 - Invoicing Specialist (Convergent Invoicing)

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

No change to data model

LoB Sales – Subscription Billing and Revenue Management – receivables management and payment handling



SUBSCRIPTION BILLING AND REVENUE MGMT

Convergent Invoicing

Receivables Management and Payment Handling Credit and Collection Management

Purpose

- Manage receivables, payments, and reporting of high volumes of financial transactions with SAP S/4HANA
- Streamline revenue collection and payment reconciliation to reduce days sales outstanding with SAP Fiori apps
- Reduce costs by automating receivables management and payments from multiple sources in one system
- Manage customer accounts with flexible payment options, and avoid uncollected revenue by integrating customer care and dispute management

Benefits

- Reduce uncollectible accounts receivable write offs by making better decisions with a consolidated view of outstanding debts across multiple billing systems
- Reduce days sales outstanding (one-time benefit) by automating the payment reconciliation process and removing manual processing
- Reduce application lifecycle management costs by consolidating multiple bills into a single invoice
- Reduce customer churn by properly processing payments and targeting collections to customers who require it

LoB Sales – Subscription Billing and Revenue Management – receivables management and payment handling



SUBSCRIPTION BILLING AND REVENUE MGMT.

Convergent Invoicing

Receivables Management and Payment Handling Credit and Collection Management



Functional changes

No functional changes



User experience improvement



Data innovations

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Accounts Payable and Receivable Manager (FI-CA)
 - Accounts Payable and Receivable Accountant (FI-CA)

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.

No change to data model

LoB Sales – Subscription Billing and Revenue Management – credit and collection management



SUBSCRIPTION BILLING AND REVENUE MGMT

Convergent Invoicing

Receivables Management and Payment Handling Credit and Collection Management

Purpose

- Tailor credit decisions and collection management processes to customer profiles with SAP S/4HANA
- Automate credit and collection management to cut costs, deliver expert service, and avoid uncollected revenue with integrated customer care and dispute management
- Manage payments from multiple sources in one system and enable flexible payment options
- Manage work lists and analyze overdue items and dunning actions success rates with SAP Fiori apps

Benefits

- Reduce uncollectible accounts receivable write-offs by extending credit and delivering services based on proper credit scoring
- Reduce days sales outstanding (one-time benefit) by automating, continuously analyzing, and optimizing credit scoring and collections strategies
- Reduce customer churn by properly evaluating a customer's ability to pay in advance

LoB Sales – Subscription Billing and Revenue Management – credit and collection management



SUBSCRIPTION BILLING AND REVENUE MGMT

Convergent Invoicing

Receivables Management and Payment Handling Credit and Collection Management



Functional changes

- No functional changes
- Integration to payment service providers through SAP digital payment add-on



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Accounts Payable and Receivable Manager (FI-CA)
- Accounts Payable and Receivable Accountant (FI-CA)

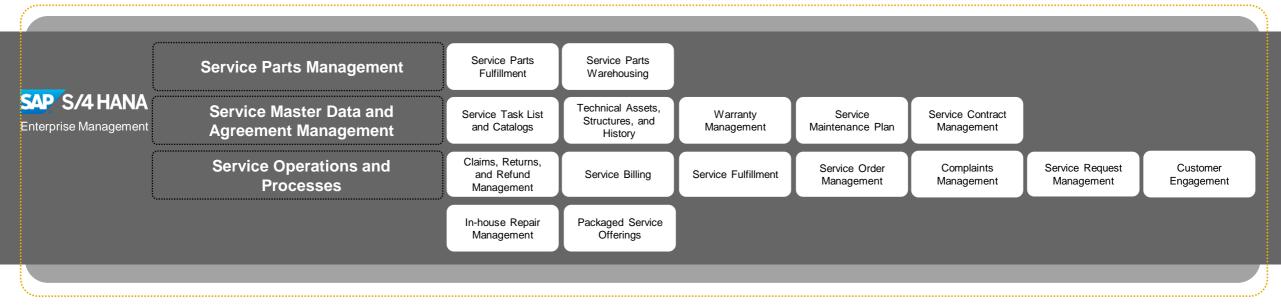
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

No change to data model

SAP S/4HANA – LoB Service



LoB Service – Service Operations and Processes – claims, returns, and refund management



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management

Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings

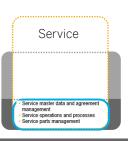
Purpose

- Streamline complaints and returns process
- Trigger follow-on actions, such as inspection of returned material, resolution of issues, processing of a refund, or exchange of materials due to damage or incorrect delivery

Benefits

- Reduce customer service and support costs by automating and streamlining returns processes
- Improve services by using the knowledge gained from successfully resolved complaints

LoB Service – Service Operations and Processes – claims, returns, and refund management



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings



Functional changes

 SAP intends to develop features for advanced returns management, including monitoring complaints and managing customer returns.



User experience improvement

- SAP Fiori-based user experience across all process steps
- SAP intends to develop SAP Fiori apps for the returns and refund clerk in a future release of SAP S/4HANA.

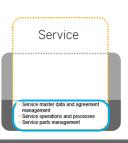
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Smaller memory footprint by streamlining document flow, eliminating index tables, and requiring fewer aggregates
- Enhanced query performance by reducing select statements and by simplifying joins for headers and items, such as status and business data
- Harmonization of data structures (product, organization, and business partner) to remove the need for data replication between SAP CRM and SAP S/4HANA

LoB Service – Service Operations and Processes – service billing



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings

Purpose

- Generate accurate bills for services performed, including materials used
- Create periodic bills to provision regularly scheduled services
- Deliver a complete set of billing documents, such as invoices, credit statements, and debit memos

Benefits

- Improve the accuracy of billing data with automated invoicing processes
- Reduce the number of invoicing disputes by using documents that increase the transparency and flexibility of billing and cost-settlement processes
- Enhance customer satisfaction by offering a wide range of invoicing methods to meet customer requirements
- Lower the number of service days sales outstanding by quickly and accurately capturing service data and connecting service delivery with billing processes
- Increase service revenue contribution by providing timely service billing

LoB Service – Service Operations and Processes – service billing



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings



Functional changes

 Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports



User experience improvement



Proven user interface from SAP Web Client UI

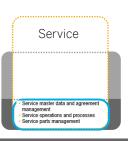
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 Harmonization of data structures (product, organization, and business partner) to remove the need for data replication between SAP CRM and SAP S/4HANA

LoB Service – Service Operations and Processes – service fulfillment



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings

Purpose

- Create a flexible approach to service delivery, addressing the unique financial and logistical considerations of each request
- Manage, monitor, and complete the service process by using a standardized service request
- Capture internal and external resource consumption and efforts required to successfully execute a service order
- Fulfill complex service and support requests quickly and efficiently

Benefits

- Optimize service delivery by selecting the appropriate delivery approach
- Increase customer satisfaction by enhancing the timeliness and accuracy of service execution
- Improve service-level performance and compliance with greater insight into customer requests
- Reduce the cost of customer service and support by integrating service control with core business processes, which enhances operational efficiency
- Improve service agility by using targeted operational insights

LoB Service – Service Operations and Processes – service fulfillment



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings



Functional changes

- Functionality to expense items, enabling service technicians to include ad hoc expense items consumed during the service execution in service transactions
- Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports



User experience improvement



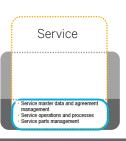
Data innovations

- SAP Fiori-based user experience across all process steps
- Proven user interface from SAP Web Client UI

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.

 Harmonization of data structures (product, organization, and business partner) to remove the need for data replication between SAP CRM and SAP S/4HANA

LoB Service – Service Operations and Processes – service order management



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings

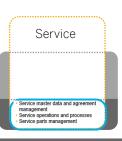
Purpose

- Plan services with appropriate resources and a standardized list of required materials
- Execute services smoothly by ensuring availability of required materials through checks and integrated procurement
- Control costs through granular recording and aggregated real-time views of costs for services provided to customers

Benefits

- Reduce service delivery and support cost by referencing relevant information such as service requests and bills of material
- Reduce services and maintenance parts inventory by integrating with inventory management and material requirements planning to optimize stock level

LoB Service – Service Operations and Processes – service order management



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings



Functional changes

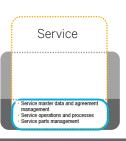


User experience improvement



Data innovations

LoB Service – Service Operations and Processes – complaints management



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings

Purpose

- Manage customer interactions smoothly based on complete visibility of customers, service, and maintenance history to minimize complaints
- Initiate follow-up actions with service contracts based on standardized task lists to manage complaint resolution
- Track the status of the follow-up actions and follow through the service process end to end

Benefits

- Reduce cost of researching and assisting customers by providing employees with service and maintenance history, customer data, and service contract data
- Increase service contract renewals by enhancing an employees' capability of responding to customers' needs when interacting with them
- Reduce operations cost (services) by automatically adding follow-up activities

LoB Service – Service Operations and Processes – complaints management



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings



Functional changes

 Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports



User experience improvement



- SAP Fiori-based user experience across all process steps
- Proven user interface for Web and desktop client

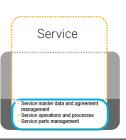
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Data innovations

 Harmonization of data structures (product, organization, and business partner) to remove the need for data replication between SAP CRM and SAP S/4HANA

LoB Service – Service Operations and Processes – service request management



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings

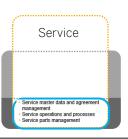
Purpose

- Gain quick access to service and maintenance history, customers entitlements, and price arrangements while logging and managing service requests
- Initiate follow-on processes generated from a standardized task list for managing service requests
- Monitor and track the progress of these initiated service request tasks from the request to completion

Benefits

- Reduce cost of noncompliance to service contracts by automatically referencing relevant service contracts
- Reduce operations cost (services) by automatically filling in fields related to customers and maintenance items such as equipment or facility
- Reduce service delivery and support cost by automatically adding follow-on activities through the standardized task list

LoB Service – Service Operations and Processes – service request management



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings



Functional changes

 Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports



steps

User experience improvement



Proven user interface from SAP Web Client UI.



Data innovations

 Harmonization of data structures (product, organization, and business partner) to remove the need for data replication between SAP CRM and SAP S/4HANA

LoB Service – Service Operations and Processes – customer engagement



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings

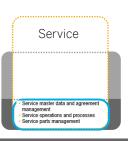
Purpose

- Support efficient issues resolution through customer engagement and smart interactions
- Speed issue resolution by enabling contact-center agents to quickly engage customers by identifying their interaction history in multiple channels
- Increase customer knowledge by providing a 360-degree view of customer data
- Improve efficiency by giving agents access to pre-categorized templates, surveys, and checklists for multiple channels

Benefits

- Improve contact center management FTE productivity by providing agents with intuitive user experience that helps them to respond faster and smarter to customer requests
- Reduce service and support cost by automating routine tasks and empowering service representatives
- Reduce contact center cost by improving productivity of contact centers

LoB Service – Service Operations and Processes – customer engagement



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings



Functional changes

No functional changes



User experience improvement



Proven user interface from SAP Web Client UI

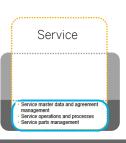
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Data innovations

 Harmonization of data structures (product, organization, and business partner) to remove the need for data replication between SAP CRM and SAP S/4HANA

LoB Service – Service Operations and Processes – in-house repair management



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings

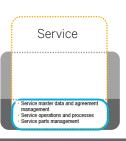
Purpose

- Manage service requests based on real-time data about customers' contracts and warranty entitlements
- Initiate and distribute incoming service requests based on the customer's requirements
- Leverage real-time information on customers' service contracts and warranty entitlements
- Assess service requirements quickly
- Log and streamline processes from start to end, including monitoring and follow-up of the needs and requests

Benefits

 Reduce operations cost (services) by automating the entire in-house repair process across multiple lines of business for maximum transparency

LoB Service – Service Operations and Processes – in-house repair management



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings



Functional changes

No functional changes



User experience improvement

- SAP Fiori-based user experience across all process steps
- Proven user interface for Web and desktop client

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

 Harmonization of data structures (product, organization, and business partner) to remove the need for data replication between SAP CRM and SAP S/4HANA

LoB Service – Service Operations and Processes – packaged service offerings



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings

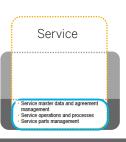
Purpose

- Differentiate yourself from the competition with packaged service offerings and product bundles
- Up-sell with ease by combining tangible products and services in a single offering as a package
- Help ensure that packages include all required components by defining rules and dependencies
- Simplify the processing of all related sales and service order items by leveraging a packaged view on customers' deliverables

Benefits

- Increase as-a-service revenue by combining products and services in a packaged offering to target a specific business problem
- Increase customer retention by creating innovative packaged services, which satisfy customer demand holistically

LoB Service – Service Operations and Processes – packaged service offerings



SERVICE OPERATIONS AND PROCESSES

Claims, Returns, and Refund Management

Service Billing

Service Fulfillment

Service Order Management Complaints Management Service Request Management Customer Engagement In-house Repair Management Packaged Service Offerings



Functional changes



User experience improvement



Data innovations

- Functionality now available for solution quotation with product bundles, enabling different types of items such as services and physical goods to be bundled and presented as a packaged solution in a quotation
- Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports
- SAP Fiori-based user experience across all process steps
- Proven user interface from SAP Web Client UI.

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.

 Harmonization of data structures (product, organization, and business partner) to remove the need for data replication between SAP CRM and SAP S/4HANA

LoB Service – Service Master Data and Agreement Management – service task list and catalogs



SERVICE MASTER DATA AND AGREE. MGMT

Service Task List and Catalogs Technical Assets, Structures, and History

Warranty Management Service and Maintenance Plan Service Contract Management

Purpose

- Bundle standardized services for faster copying and execution, rather than creating new services from scratch
- Use standard services as building blocks when defining the scope of work for regularly scheduled contract services
- Define and specify services, including internal offerings and procurement of external services, in service catalogs

Benefits

- Reduce planning efforts significantly by using predefined, ready-to-use task lists at any level of task detail
- Calculate the cost of services more efficiently based on the scope of work

LoB Service – Service Master Data and Agreement Management – service task list and catalogs



SERVICE MASTER DATA AND AGREE. MGMT

Service Task List and Catalogs

Technical Assets, Structures, and History

Warranty Management Service and Maintenance Plan Service Contract Management



Functional changes

 Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports



User experience improvement



Proven user interface for Web and desktop client

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

 Integration with a simplified data model of SAP S/4HANA

LoB Service – Service Master Data and Agreement Management – technical assets, structures, and history



SERVICE MASTER DATA AND AGREE. MGMT

Service Task List and Catalogs Technical Assets, Structures, and History

Warranty Management Service and Maintenance Plan Service Contract Management

Purpose

- Collect and store technical master data on a granular level, from simple serialnumber records to enriched equipment information
- Update dynamic technical attributes, such as measurement counters, and their value readings
- Build hierarchical or networked relationship structures among technical assets
- Maintain the technical history of master data changes, service work activities, and measurement readings to support analysis and legal compliance

Benefits

- Improve overall service delivery with insight enabled by high-quality master data
- Enhance customer support through highly accurate information about the customer installed base
- Increase the productivity of service technicians by giving them the ability to access service master data on any device
- Improve service efficiency due to the structural flexibility of customer asset data and the ability to clearly identify assets covered by service agreements

LoB Service – Service Master Data and Agreement Management – technical assets, structures, and history



SERVICE MASTER DATA AND AGREE. MGMT

Service Task List and Catalogs

Technical Assets, Structures, and History

Warranty Management Service and Maintenance Plan Service Contract Management



Functional changes

 Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports



User experience improvement

- SAP Fiori-based user experience across all process steps
- Proven user interface for Web and desktop client

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

 Integration with a simplified data model of SAP S/4HANA

LoB Service – Service Master Data and Agreement Management – warranty management



SERVICE MASTER DATA AND AGREE. MGMT

Service Task List and Catalogs Technical Assets, Structures, and History

Warranty Management Service and Maintenance Plan Service Contract Management

Purpose

- Improve customer satisfaction by streamlining the entire warranty claims process
- Handle warranty claims efficiently for basic conditions or specific requirements, such as time-dependent or performance-dependent limits defined in warranties
- Perform basic checks for warranty claims, whether they result from a customer message, service or maintenance order, or billing request

Benefits

- Enhance flexibility to handle warranty conditions and entitlements for both customer and vendor claims processing
- Reduce risk of missed warranty claims through improved monitoring of timelines for claims processes
- Decrease cost of claims assessment and follow-up processing, thanks to streamlined claims-handling processes
- Increase processing efficiency by automating checks for basic warranty commitments

LoB Service – Service Master Data and Agreement Management – warranty management



SERVICE MASTER DATA AND AGREE. MGMT

Service Task List and Catalogs

Technical Assets, Structures, and History

Warranty Management Service and Maintenance Plan Service Contract Management



Functional changes

 Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports



User experience improvement



Proven user interface for Web and desktop client

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

Integration with a simplified data model of SAP S/4HANA

LoB Service – Service Master Data and Agreement Management – service and maintenance plan



SERVICE MASTER DATA AND AGREE. MGMT

Service Task List and Catalogs Technical Assets, Structures, and History

Warranty Management Service and Maintenance Plan Service Contract Management

Purpose

- Combine the defined scope of work and the contractual delivery obligation through a service or maintenance plan
- Trigger recurring service events based on multiple scheduling strategies, including time and date and counter readings, such as operation hours and mileage

Benefits

- Reduce the service planning workload by initiating and monitoring the scheduling of recurring events automatically
- Increase the accuracy and reliability of budget planning with improved simulation and forecasting of service events
- Enhance service quality, thanks to less deviation between scheduling and execution of service events

LoB Service – Service Master Data and Agreement Management – service and maintenance plan



SERVICE MASTER DATA AND AGREE. MGMT

Service Task List and Catalogs

Technical Assets, Structures, and History

Warranty Management Service and Maintenance Plan Service Contract Management



Functional changes

 Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports



User experience improvement

- SAP Fiori-based user experience across all process steps
- Proven user interface for Web and desktop client

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

 Integration with a simplified data model of SAP S/4HANA

LoB Service – Service Master Data and Agreement Management – service contract management



SERVICE MASTER DATA AND AGREE. MGMT

Service Task List and Catalogs Technical Assets, Structures, and History

Warranty Management Service and Maintenance Plan Service Contract Management

Purpose

- Equip employees with easy access to a holistic view of each customer's entitlements
- Manage discounts and other pricing agreements to offer customers services with appropriate pricing
- Fulfill service contracts accurately and minimize administrative overhead by using service plans to manage recurring maintenance services
- Execute periodic billing automatically to efficiently manage revenue stream

Benefits

- Reduce cost of goods or services sold by minimizing complexity and manual intervention in automatic transfer of contract information in follow-on processes
- Increase service revenue by automatically applying terms according to service contracts
- Reduce cost of customer billing, credit, and collections by automatically processing periodic billing according to service contracts

LoB Service – Service Master Data and Agreement Management – service contract management



SERVICE MASTER DATA AND AGREE. MGMT

Service Task List and Catalogs

Technical Assets, Structures, and History

Warranty Management Service and Maintenance Plan Service Contract Management



Functional changes

 Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports



User experience improvement

- SAP Fiori-based user experience across all process steps
- Proven user interface for Web and desktop client

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

 Integration with a simplified data model of SAP S/4HANA

LoB Service – Service Parts Management – service parts fulfillment



SERVICE PARTS MANAGEMENT

Service Parts Fulfillment Service Parts Warehousing

Purpose

- Improve service parts planning, fulfillment, and customer service through integrated functionality for global parts sourcing, availability, and price optimization
- Gain real-time visibility into service parts inventory across the supply chain
- Increase the efficiency of supply chains for service parts through aligned, streamlined processes that address parts planning, warehousing, and fulfillment

Benefits

- Increase customer satisfaction by providing on-time delivery of service parts, thanks to accurate inventory
- Reduce sales and operations planning costs by increasing the profitability of fulfillment operations for service parts
- Improve on-time delivery by responding quickly and flexibly to customer demand

LoB Service – Service Parts Management – service parts fulfillment



SERVICE PARTS MANAGEMENT

Service Parts Fulfillment Service Parts Warehousing



Functional changes

 Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports



User experience improvement

- SAP Fiori-based user experience across all process steps
- Proven user interface for Web and desktop client

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

 Integration with a simplified data model of SAP S/4HANA

LoB Service – Service Parts Management – service parts warehousing



SERVICE PARTS MANAGEMENT

Service Parts Fulfillment Service Parts Warehousing

Purpose

- Optimize warehousing activities for service parts, from inbound and outbound processing to distribution and storage
- Increase service levels and control cost by balancing capacity, maximizing throughput, and effectively managing high order volumes
- Streamline supply chain operations with enhanced alignment of parts planning, warehousing, and fulfillment processes

Benefits

- Increase inventory turnover and reduce days in inventory by optimizing use of available space
- Reduce inventory carrying costs by decreasing volume of goods stored and lowering logistics expense

LoB Service – Service Parts Management – service parts warehousing



SERVICE PARTS MANAGEMENT

Service Parts Fulfillment Service Parts Warehousing



Functional changes

 Capabilities of the SAP HANA business data platform and database that deliver new business insight, such as operational analytics, and complement traditional service reports



User experience improvement

- SAP Fiori-based user experience across all process steps
- Proven user interface for Web and desktop client

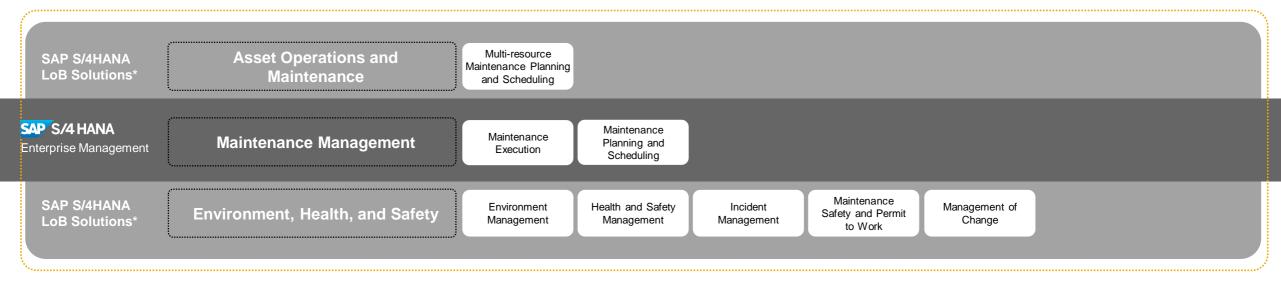
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Data innovations

 Integration with a simplified data model of SAP S/4HANA

SAP S/4HANA – LoB Asset Management



LoB Asset Management – Maintenance Management – maintenance execution



MAINTENANCE MANAGEMENT

Maintenance Execution

Maintenance Planning and Scheduling

Purpose

- Execute maintenance plans to ensure optimal operation of enterprise assets
- Manage preventive or condition-based maintenance proactively
- Perform maintenance activities that enhance safety, environmental, and operational results

Benefits

- Improve "wrench time" with proactive maintenance execution
- Increase reliability of assets with the collection of accurate information
- Enhance safety and environmental compliance through integrated permit and work clearance features

LoB Asset Management – Maintenance Management – maintenance execution



MAINTENANCE MANAGEMENT

Maintenance Execution

Maintenance Planning and Scheduling

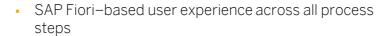


Functional changes

- Enhancement of technical object breakdown analysis (combines transactions MCI7, MCJB, and MCJC)
- Simplified search and viewing of all master data and transactional data from maintenance management



User experience improvement



- SAP intends to provide additional SAP Fiori apps to support more efficient management of the breakdown maintenance process in a future release of SAP S/4HANA by improving information gathering and reducing asset downtime.
- Roles with new, dedicated SAP Fiori apps:
 - Maintenance Planner
 - Maintenance Technician
 - Employee Maintenance Info

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Core data services (CDS) view for damage analysis, location analysis, object statistics, planner group analysis, and manufacturer analysis
- SAP intends to provide more flexible and improved analytical capabilities to monitor the performance of assets in a future release of SAP S/4HANA, helping to reduce risk through improved asset reliability.

LoB Asset Management – Maintenance Management – maintenance planning and scheduling



MAINTENANCE MANAGEMENT

Maintenance Execution

Maintenance Planning and Scheduling

Purpose

- Plan maintenance activities that will help enterprise assets run reliably
- Schedule proactive preventive or condition-based maintenance tasks
- Focus maintenance efforts on activities that enhance safety, environmental, and operational results

Benefits

- Improve asset uptime with proactive maintenance planning and scheduling
- Reduce total cost of ownership by avoiding asset breakdowns
- Enhance safety and environmental compliance through integrated permit and work clearance features

LoB Asset Management – Maintenance Management – maintenance planning and scheduling



MAINTENANCE MANAGEMENT Maintenance Execution

Maintenance Planning and Scheduling



Functional changes

- Mass update of material availability status for maintenance orders
- Enhancement of technical object breakdown analysis (combines transactions MCI7, MCJB, and MCJC)
- Simplified search and viewing of all master data and transactional data from maintenance management



User experience improvement

- SAP Fiori-based user experience across all process steps
- Overview page to support maintenance planners in daily business by presenting selected and relevant KPIs and charts at a glance
- Enhanced object pages with SAP S/4HANA
- Technical object damage analysis: identification of repeated failures and ways to reduce root causes in the future
- Roles with new, dedicated SAP Fiori apps:
 - Maintenance Planner
 - Maintenance Planner Resource Scheduling
 - Maintenance Technician
 - Employee Maintenance Info

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Core data services (CDS) view for damage analysis, location analysis, object statistics, planner group analysis, and manufacturer analysis
- Flexible and improved analytical capabilities to monitor the performance of assets in SAP S/4HANA, helping to reduce risk through improved asset reliability

LoB Asset Management – Environment, Health, and Safety – environment management



ENVIRONMENT, HEALTH, AND SAFETY

Environment Management Health and Safety Management Incident Management Maintenance Safety and Permit to Work

Management of Change

Purpose

- Reduce environmental impact with comprehensive environment management
- Comply with regulations, internal policies, and environmental operating permits, and reduce waste and emissions, with environment management software from SAP that allows you to:
 - Define requirements and ensure timely completion of related tasks
 - Collect, calculate, and process environmental emission data
 - Record deviations and take corrective action
 - Give plant managers a comprehensive view of environmental performance

Benefits

- Reduce environment, health, and safety (EH&S) penalties and fines by meeting regulatory agency, industry, and corporate needs for emissions and other EH&S regulations
- Reduce write-offs for uncollectible accounts receivable by understanding and planning for regulatory and emissions risk management

LoB Asset Management – Environment, Health, and Safety – environment management



ENVIRONMENT, HEALTH, AND SAFETY

Environment Management Health and Safety Management Incident Management Maintenance Safety and Permit to Work

Management of Change



Functional changes

- Accelerated performance of daily environmental data processing
- Graphical user interface to manage emission data
- File-based emission data import
- Support for hourly calculations
- Support of list substance synonyms and conditions
- Delivered example methodologies for greenhouse gas emission calculations



User experience improvement

- SAP Fiori-based user experience across all process steps
- Scalable role assignment that leverages the location hierarchy
- More scalable setup process with the new copy compliance scenario feature
- Improved substance handling: new list and improved search features
- Role with new, dedicated SAP Fiori apps:
 - Environmental Manager

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- 17 equations related to 40 CFR Part 75 Emissions Monitoring Policy Manual regarding continuous emission monitoring
- 8 predefined calculation methodologies for 40 CFR Part 98, referred to as the Greenhouse Gas Reporting Program: calculation methodologies covering 56 single expressions from tier 1, tier 2, and tier 3 of 40 CFR Part 98 Subpart C and the conversion of CO₂, N₂O and CH₄ emissions into CO₂ equivalents

LoB Asset Management – Environment, Health, and Safety – health and safety management



ENVIRONMENT, HEALTH, AND SAFETY

Environment Management Health and Safety Management Incident Management Maintenance Safety and Permit to Work

Management of Change

Purpose

- Reduce risks by taking a proactive approach to health and safety management
- Identify hazards, implement controls, and manage tasks to reduce risk and ensure compliance with health and safety management software from SAP that can help you:
 - Prevent exposure to chemicals and workplace hazards by monitoring industrial hygiene and health
 - Engage workers in health and safety efforts by providing easy access to chemical safety information and running safety inspections
 - Reduce operational risks by ensuring that plant managers have a comprehensive view of risk data

Benefits

- Increase employee engagement by providing clear instructions to workers so that they can take proper action to control risks
- Reduce environment, health, and safety (EH&S) penalties and fines by providing a systematic way to identify, analyze, and control risks
- Reduce unplanned downtime or outages by proactively identifying and mitigating safety risks to help ensure that production processes run more smoothly and equipment is more reliable

LoB Asset Management – Environment, Health, and Safety – health and safety management



ENVIRONMENT, HEALTH, AND SAFETY

Environment Management Health and Safety Management Incident Management Maintenance Safety and Permit to Work

Management of Change



Functional changes

- Accelerated performance of daily health and safety data processing
- Dedicated risk Identification process
- Monitoring of implementation of controls to mitigate risks
- Support of business unit-specific setup of risk identification and assessment process
- Core data services (CDS)—based analytics to gain better and faster insights into safety performance



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Industrial Hygienist
- Hazardous Substance Manager
- Environmental Manager

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- CDS views for detailed analysis of materials and chemicals in stock, including greenhouse gas classification and hazardous ingredients
- Delivery of occupational exposure limit values with good worldwide coverage (~70,000 limit values, ~100 regulatory lists, and ~ 65 countries)

LoB Asset Management – Environment, Health, and Safety – incident management



ENVIRONMENT, HEALTH, AND SAFETY

Environment Management Health and Safety Management Incident Management Maintenance Safety and Permit to Work

Management of Change

Purpose

- Identify and resolve safety issues and learn from incidents
- Provide intuitive entry forms that encourage participation from all employees
- Offer a comprehensive incident management process that enables subject-matter experts to thoroughly respond to, investigate, analyze, correct, prevent, and report incidents
- Gain insight into all safety issues, leading to better preventive actions and a reduction in the likelihood and severity of incidents

Benefits

- Reduce environment, health, and safety (EH&S) penalties and fines by supporting comprehensive recording and managing of incidents and safety issues
- Increase employee engagement by encouraging employee participation so that they can have a voice and help create a culture of safety
- Reduce unplanned downtime or outages by proactively addressing safety issues to help ensure that production processes run more smoothly and equipment is more reliable

LoB Asset Management – Environment, Health, and Safety – incident management



ENVIRONMENT, HEALTH, AND SAFETY

Environment Management Health and Safety Management Incident Management Maintenance Safety and Permit to Work

Management of Change



Functional changes

- Accelerated performance of daily incident management data processing
- Core data services (CDS)—based analytics for detailed analysis of incidents, injuries, and illnesses data



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Industrial Hygienist
- Employee EHS Info
- Environmental Manager

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 CDS views for detailed analysis of incidents, injuries, and illnesses, including incident root causes, locations, plants, organizations, units, and time data

LoB Asset Management – Environment, Health, and Safety – maintenance safety and permit to work



ENVIRONMENT, HEALTH, AND SAFETY

Environment Management Health and Safety Management Incident Management Maintenance Safety and Permit to Work

Management of Change

Purpose

- Control maintenance work through clear safety instructions and permits
- Link environment, health, and safety (EH&S) information to technical equipment and plant maintenance tasks, enabling:
 - Plant managers to automatically generate work order safety plans and concrete safety measures
 - Maintenance workers to receive easy-to-read instructions on their job cards, so they can protect themselves from a variety of hazards on the shop floor
- Support flexible levels of permits natively integrated with the work order process in enterprise asset management
- Automate the permit process, enforcing fully auditable procedures that promote consistent behavior
- Integrate flexible levels of permits into the work order process to help ensure efficient execution of maintenance work

Benefits

- Reduce EH&S penalties and fines by enabling streamlined work order planning and execution, including effective safety measures
- Reduce fixed asset service and maintenance costs by enabling streamlined work order planning and execution, including effective safety measures
- Reduce unplanned downtime or outages by controlling maintenance work through permits and lock-out/tag-out procedures

LoB Asset Management – Environment, Health, and Safety – maintenance safety and permit to work



ENVIRONMENT, HEALTH, AND SAFETY

Environment Management Health and Safety Management Incident Management Maintenance Safety and Permit to Work

Management of Change



Functional changes

- Accelerated performance of daily work permit processing, as well of related safety certificates, such as isolation certificates for lock-out/tag-out procedures
- Full user status enablement for work permits and safety certificates
- New functions for requesting and printing isolation certificates



User experience improvement



- Improved handling (fewer clicks) for user processing of safety certificates
- Dedicated mobile work clearance management (WCM) app for lock-out/tag-out procedures

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.

Data innovations

No change to data model

LoB Asset Management – Environment, Health, and Safety – management of change



ENVIRONMENT, HEALTH, AND SAFETY

Environment Management Health and Safety Management Incident Management Maintenance Safety and Permit to Work

Management of Change

Purpose

- Manage operational changes with thorough review, risk mitigation, and documentation approval
- Ensure consistent execution through the use of templates and rules
- Mitigate risks caused by changes to equipment, substances, operating conditions, and procedures
- Make changes that facilitate growth without disrupting operations and harming employees, assets, and the environment

Benefits

- Reduce unplanned downtime or outages by planning and monitoring all necessary actions related to a change
- Reduce EH&S penalties and fines by approving changes that contain appropriate risk mitigations and helping ensure compliance with all safety precautions
- Reduce fixed asset service and maintenance costs by planning and executing technical changes that increase asset reliability and reduce maintenance inefficiencies
- Reduce engineering change cost by efficiently planning and executing all aspects of technical changes
- Reduce PO error rate by helping ensure that spare part and vendor information is up to date and accurate after a technical change

LoB Asset Management – Environment, Health, and Safety – management of change



ENVIRONMENT, HEALTH, AND SAFETY

Environment Management Health and Safety Management Incident Management Maintenance Safety and Permit to Work

Management of Change



Functional changes



User experience improvement



Data innovations

Comparable SAP ERP functionality provided in SAP S/4HANA

SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.

 Integration with simplified data model of SAP S/4HANA

LoB Asset Management – Asset Operations and Maintenance – multiresource maintenance planning & scheduling



ASSET
OPERATIONS &
MAINTENANCE

Multiresource MaintenancePlanning &Scheduling

Purpose

- Plan and schedule maintenance tasks
- Control costs and budgeting
- Plan and schedule maintenance activities with the right person, providing the right tools and resources
- Schedule preventive or condition-based maintenance tasks
- Leverage integrated documentation for maintenance job planning and scheduling execution and safety for a holistic view of the asset status

Benefits

- Reduce unplanned downtime or outages by better managing assets
- Reduce fixed asset service and maintenance costs by having an efficient maintenance strategy and executing it
- Increase asset availability by managing asset maintenance holistically
- Increase revenue through improved asset utilization

LoB Asset Management – Asset Operations and Maintenance – multi-resource maintenance planning & scheduling



ASSET OPERATIONS & MAINTENANCE

Multiresource MaintenancePlanning &Scheduling

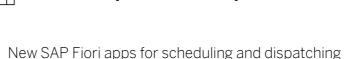


Functional changes

- Comparable SAP ERP functionality provided in SAP S/4HANA
- Use of SAP Multiresource Scheduling, option for SAP S/4HANA in conjunction with SAP S/4HANA Asset Management for resource scheduling to gain insights into maintenance schedules and work center utilization
- Transparency about workload at work center level, taking maintenance plans into account



User experience improvement



Management for resource scheduling)

SAP Fiori-based scheduling board as part of SAP
S/4HANA Asset Management for resource scheduling to
get an overview of maintenance activities and share the

maintenance activities across work centers (available

with the additional license for SAP S/4HANA Asset

• Roles with new, dedicated SAP Fiori apps:

maintenance schedule with other users

- Maintenance Planner Resource Scheduling
- Project Resource Manager
- Resource Manager

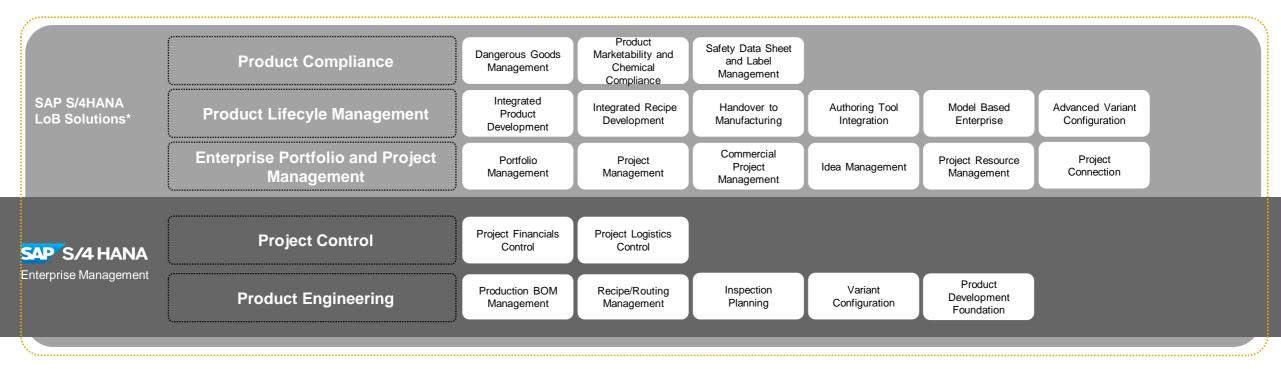
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

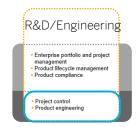
 Integration with simplified data model of SAP S/4HANA

SAP S/4HANA – LoB R&D/Engineering



* Additional license

LoB R&D/Engineering – Product Engineering – production BOM management



PRODUCT ENGINEERING

Production BOM Management

Recipe/Routing Management

Inspection Planning

Variant Configuration Product
Development
Foundation

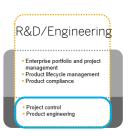
Purpose

- Create a complete product description in the bill of materials
- Enable the production engineer to systematically and completely define the product
- Help the production engineer define product changes

Benefits

• Minimize the risk of creating products with the wrong parts

LoB R&D/Engineering – Product Engineering – production BOM management



PRODUCT ENGINEERING

Production BOM Management

Recipe/Routing Management Inspection Planning

Variant Configuration Product
Development
Foundation



Functional changes

- Use of BOM data to create a production version, eliminating confusion over correct product data
- Support for versioned BOM handover with routing and parameter (handover of versioned EBOMs to MBOMs, component allocation to shop-floor routing, and parameter effectivity support for versioned BOMs)
- Choice of most recent value when selecting a valid BOM item to help ensure accuracy
- Availability of BOM version management in parallel to date validity—controlled BOM
- Effective change management that supports creation of change numbers and navigation to different change states of BOM from within the application; support for new use cases when setting up or changing a BOM
- Automatic save of BOM in draft mode through draft support functionality until final save of BOM is done



User experience improvement

- Self-service configuration UI (SSCUI) for allowed material types for BOM header and items
- Redesign of SAP Fiori app "Manage Bill of Materials:" usability improvements for mass editing
- SAP Fiori-based user experience across all process steps
- Role with new, dedicated SAP Fiori apps:
 - BOM Engineer

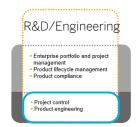
For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

Enhancement of existing tables with versioning fields

LoB R&D/Engineering – Product Engineering – recipe/routing management



PRODUCT ENGINEERING

Production BOM Management

Recipe/Routing Management

Inspection Planning

Variant Configuration Product Development Foundation

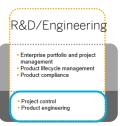
Purpose

- Describe process steps to be executed to create products
- Specify details about work centers where operations are carried out
- List required production resources and tools

Benefits

- Streamline production through integration with other resource planning functionality, such as quality management and controlling
- Increase insight through tracking of changes

LoB R&D/Engineering – Product Engineering – recipe/routing management



PRODUCT ENGINEERING

Production BOM Management

Recipe/Routing Management

Inspection Planning

Variant Configuration Product
Development
Foundation



Functional changes

New functionality available, such as shop-floor routing



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Production Engineer
 - BOM Engineer

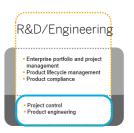
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

No change to data model

LoB R&D/Engineering - Product Engineering - inspection planning



PRODUCT ENGINEERING

Production BOM Management

Recipe/Routing Management

Inspection Planning

Variant Configuration Product Development Foundation

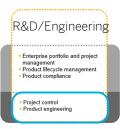
Purpose

- Recognize risks based on standardized, proven inspection planning
- Develop closed-loop inspection planning to comply with industry standards such as ISO/TS 16949 and ISO 9000
- Integrate quality-related information across the organization and implement a riskbased product and process design
- Use failure mode and effects and analysis as well as control plans to recognize risks and potential defects at an early stage

Benefits

- Reduce revenue loss due to quality and compliance issues by avoiding scrap through optimized inspection strategy
- Reduce the cost to support quality management by following a standardized, proven inspection plan

LoB R&D/Engineering - Product Engineering - inspection planning



PRODUCT ENGINEERING

Production BOM Management

Recipe/Routing Management

Inspection Planning

Variant Configuration Product
Development
Foundation



Functional changes

 SAP intends to simplify inspection planning with intuitive handling of inspection characteristics in a future release of SAP S/4HANA Enterprise Management.



User experience improvement



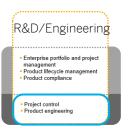
Data innovations

- SAP Fiori-based user experience across all process steps
- SAP intends to provide additional SAP Fiori apps to streamline the inspection planning process.
- Role with new, dedicated SAP Fiori apps:
 - Quality Planner

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library

No change to data model

LoB R&D/Engineering – Product Engineering – variant configuration



PRODUCT ENGINEERING

Production BOM Management

Recipe/Routing Management

Inspection Planning

Variant Configuration Product Development Foundation

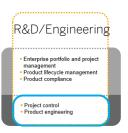
Purpose

- Support sales and manufacturing processes with integrated variant configuration
- Improve your company's product engineering, sales, and manufacturing performance for integrated variant configuration and classification
- Enable your business processes to handle highly individualized products in engineering, sales, quality management, and manufacturing

Benefits

- Increase sales force efficiency by a higher level of tool support within order configuration to allow the sales force to focus on selling
- Reduce order management cost by embedding variant configuration into the order entry process, reducing order configuration activities

LoB R&D/Engineering – Product Engineering – variant configuration



PRODUCT ENGINEERING

Production BOM Management

Recipe/Routing Management

Inspection Planning Variant Configuration Product
Development
Foundation



Functional changes

- Field extension of characteristic values integrated into classification and variant configuration processes
- Disabling of "actions" (documented as obsolete even earlier); use of actions still works for existing models
- Disabling of concept "classification used as a selection condition" in BOMs; use of concept still works for existing models

For more information on adaptations or changes, see the Simplification List for SAP S/4HANA.



User experience improvement



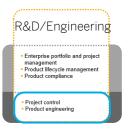
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 Integration of classification and configuration data in SAP S/4HANA embedded analytics using core data services (CDS) views

LoB R&D/Engineering – Product Engineering – product development foundation



PRODUCT ENGINEERING

Production BOM Management

Recipe/Routing Management

Inspection Planning

Variant Configuration Product Development Foundation

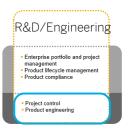
Purpose

- Create new, individualized product offerings for an increasingly demanding customer base
- Define all design requirements and constraints while maintaining rigorous design standards
- Produce high-quality goods that deliver value to customers

Benefits

- Reduce time to market for new products by increasing the reuse of components and providing product design and manufacturing information sooner, shortening development time
- Lower the cost of engineering changes with a platform that supports crossenterprise innovation and product development processes
- Increase innovation and market reach by managing the design process with a consistent, configurable product model

LoB R&D/Engineering – Product Engineering – product development foundation



PRODUCT ENGINEERING

Production BOM Management

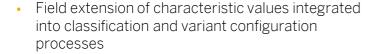
Recipe/Routing Management

Inspection Planning

Variant Configuration Product Development Foundation

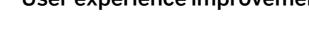


Functional changes





User experience improvement



- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - BOM Engineer
 - Recipe Developer
 - Systems Engineer

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

Integration of classification and configuration data in SAP S/4HANA embedded analytics

LoB R&D/Engineering – Project Control – project financials control



PROJECT CONTROL

Project Financials Project Logistics Control

Control

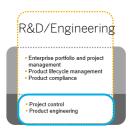
Purpose

- Manage project financials effectively and deliver projects within budget
- Define work breakdown structures accurately, creating a basis for hierarchical project accounting
- Plan costs and budgets efficiently and track actual versus planned costs
- Monitor progress and financial performance of projects, identifying deviations and at-risk activities or issues

Benefits

- Reduce project delivery cost by automating the management of financial performance
- Improve operational efficiency through integration of project controls with core business processes
- Anticipate financial risks and avoid cost overruns by performing ad hoc analysis and calculations
- Improve resource productivity and project profitability with data-driven insight

LoB R&D/Engineering – Project Control – project financials control



PROJECT CONTROL

Control

Project Financials Project Logistics Control



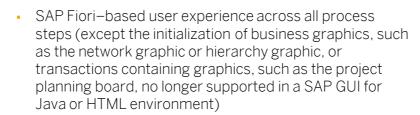
Functional changes

- Optimization of project financial processes through simplification provided by the SAP S/4HANA Finance solution
- Simplified enterprise portfolio and projectmanagement analytics to monitor purchase requisitions and purchase orders assigned to project work breakdown structure (WBS) elements, as well as an overview report on project costs.

For more information on simplification provided in SAP S/4HANA Finance and project financial control, see the Simplification List for SAP S/4HANA.



User experience improvement



- Role with new, dedicated SAP Fiori apps:
 - Project Financial Controller

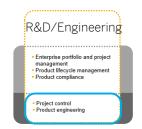
For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Stability of core data model to facilitate a simple migration for existing customers
- Core data services (CDS) views for master data of milestone, project definition, and WBS elements

LoB R&D/Engineering – Project Control – project logistics control



PROJECT CONTROL

Control

Project Financials Project Logistics Control

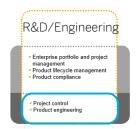
Purpose

- Deliver high-quality projects on time and within the estimated scope
- Define project structures with appropriate work breakdown and network structures to support project logistics planning and execution
- Plan and schedule all project activities, resource demands, and required materials
- Trigger and control all procurement processes for internal and external resources
- Understand all logistics-related execution details

Benefits

- Improve project performance by minimizing delays and preventing business disruption
- Enhance delivery performance with insights into project cost, time, scope, and quality
- Increase operational efficiency through integration of project logistics with core operational processes
- Improve resource productivity and project profitability with data-driven insight

LoB R&D/Engineering - Project Control - project logistics control



PROJECT CONTROL

Control

Project Financials Project Logistics Control



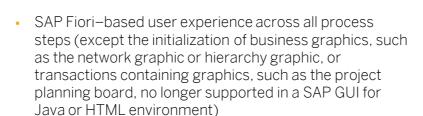
Functional changes

- Availability of long material numbers and dedicated industry functions, such as grouping, pegging, and distribution in standard
- Optimization of project logistics processes through simplification provided by the SAP S/4HANA Manufacturing solution

For more information on simplification provided in SAP S/4HANA Manufacturing and project logistics control, see the Simplification List for SAP S/4HANA.



User experience improvement



- Role with new, dedicated SAP Fiori apps:
 - Project Logistics Controller

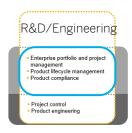
For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Stability of the core data model to facilitate simple migration for existing customers
- Core data services (CDS) views for master data of network, network activity, and material component overview

LoB R&D/Engineering – Enterprise Portfolio and Project Management – portfolio management



ENTERPRISE PORTFOLIO AND PROJECT MGMT

Portfolio Management Project Management Commercial Project Management

ldea Management

Project Resource Management Project Connection

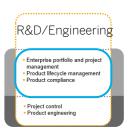
Purpose

- Align project portfolios with business goals while analyzing risk and performance in real time with SAP S/4HANA
- Invest in the right projects by aligning your project portfolio with enterprise strategy
- Identify the projects that can generate the most business value by instantly scoring and ranking proposals against each other
- Gain rapid insights into the performance of your entire project portfolio through realtime analytics and monitoring

Benefits

- Reduce time to market for new products by tracking project milestones and deadlines in real time
- Increase revenue from new products or services by enabling decision makers to quickly identify the most profitable initiatives
- Reduce commercialization cost for new products or services by offering insight into a portfolio's health and status, and by comparing planned and actual budgets and deadlines

LoB R&D/Engineering – Enterprise Portfolio and Project Management – portfolio management



ENTERPRISE PORTFOLIO AND PROJECT MGMT

Portfolio Management Project Management Commercial Project Management

Idea Management

Project Resource Management Project Connection



Functional changes

- Integration of portfolio management functionality into SAP S/4HANA, removing the need to install a separate add-on as for previous versions
- Live tracking of financial project KPIs by leveraging in-memory technology of SAP HANA
- Ability to manage large number of portfolio items through in-memory technology of the SAP HANA business data platform
- Monitoring of actual, planned, and forecasted project costs directly in portfolio view



User experience improvement

- All information in one place, enabling the right decisions for stage gate—driven development projects with embedded analytical insights and automation
- SAP Fiori-based user experience across all process steps
- SAP Fiori launchpad to directly access:
 - User-specific portfolio items or initiatives
 - Buckets
 - Portfolio administration

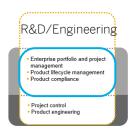
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Stability of core data model to facilitate a simple migration for existing customers
- Optimized data model to reduce data redundancy and to improve performance
- Linking of ideas with project proposals

LoB R&D/Engineering – Enterprise Portfolio and Project Management – project management



ENTERPRISE PORTFOLIO AND PROJECT MGMT

Portfolio Management Project Management Commercial Project Management

ldea Management

Project Resource Management Project Connection

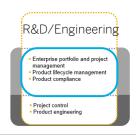
Purpose

- Plan, execute, and monitor projects in real time to minimize deviations in schedule, cost, and scope
- Provide live insights into project cost, time, scope, and quality performance through integration with SAP S/4HANA
- Manage the resources, schedule, and financial performance for each project phase, from initiation through closure
- Minimize delays and prevent business interruptions by monitoring the progress of projects in real time
- Access project information through role-based user interfaces

Benefits

- Increase portfolio and project management efficiency of FTEs by optimizing portfolios, project schedules, roles, and resources
- Improve gross margin by monitoring a project's status in real time throughout its lifecycle to optimize its value and ROI
- Reduce time to market for new products by accelerating the implementation of planned and scheduled project activities
- Reduce commercialization cost of new products or services by reducing the costs of planning, financing, and monitoring projects

LoB R&D/Engineering – Enterprise Portfolio and Project Management – project management



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ENTERPRISE PORTFOLIO AND PROJECT MGMT

Portfolio Management Project Management Commercial Project Management

Idea Management

Project Resource Management Project Connection



Functional changes

- Integration of project management functionality into SAP S/4HANA, removing the need to install a separate add-on as for previous versions
- Tracking of milestones and percentage of completion through project progress monitor
- Simplified access for project members to confirm tasks and check list items
- Traffic lights to indicate issues with project schedule, costs, staffing, and quality
- Visibility into actual project costs by using one integrated application
- Direct and accurate access to project financial and logistic information
- Ability to drill into details for project costs, resource usage, and progress



User experience improvement

- SAP Fiori apps "My Tasks" and "My Checklist Items" for project team members to access project overview page to review status and exceptions for projects assigned to individual as project manager
- SAP Fiori apps to access projects or tasks as a substitute
- Roles with new, dedicated SAP Fiori apps:
 - Project Manager
 - Project Team Member

For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Stability of core data model to facilitate a simpler migration for existing customers
- Optimized data model to reduce data redundancy and to improve performance
- Integration with SAP Product Lifecycle
 Management objects such as engineering change request, material master, and recipes
- Sharing and collaboration on project documents in a secure cloud environment accessible anywhere on any device (SAP Document Center solution)

LoB R&D/Engineering – Enterprise Portfolio and Project Management – commercial project management



ENTERPRISE PORTFOLIO AND PROJECT MGMT

Portfolio Management Project Management Commercial Project Management

ldea Management

Project Resource Management Project Connection

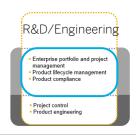
Purpose

- Establish a single version of the truth for project information across different departments and roles, such as project management, senior management, controlling, sales, procurement, and so on
- Provide an integrated view on all aspects of a customer project, such as cost planning, procurement, billing, risk management, and so on
- Integrate project-related data and processes along the complete project lifecycle, from selling to planning and execution
- Compare plan data versus actual data to quickly identify deviations
- Manage and track project-related risks
- Provide full visibility of project status, enabling timely corrective actions

Benefits

- Reduce project delivery cost by providing advanced planning, tracking, and forecasting capabilities and enabling project managers to identify project deviations and cost drivers in time to take corrective measures
- Decrease number of unprofitable projects by providing optimized, end-to-end business support and full transparency of project statuses across systems and applications

LoB R&D/Engineering – Enterprise Portfolio and Project Management – commercial project management



ENTERPRISE PORTFOLIO AND PROJECT MGMT

Portfolio Management Project Management Commercial Project Management

ldea Management

Project Resource Management Project Connection



Functional changes

- Integration of commercial project management functionality into SAP S/4HANA, removing the need to install a separate add-on as for previous versions
- Project workspace as work environment for project professionals that provides an integrated view across systems and applications to support users in the completion of their tasks
- Project cost and revenue planning to plan and forecast quantities, cost, and revenue throughout the complete project lifecycle (bid, baseline planning, and execution)
- Project cut-off date forecasting functionality
- Project issue and change management to systematically track project issues and change requests; availability of simpler change-request approvals and multiple print-form configurations



User experience improvement

- SAP Fiori-based user experience across all process steps
- Project issue reporting with SAP Fiori app
- Simplified change request approvals
- Role with new, dedicated SAP Fiori apps:
 - Project Manager (Commercial Project Management)

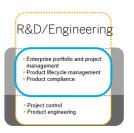
For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- CDS views:
 - KPIs
 - Alerts
 - General project data
 - Project status
 - Ageing of receivables
 - Billing plan
 - Debit memo requests
 - Invoices
 - Purchase orders
- Purchase requisitions

LoB R&D/Engineering – Enterprise Portfolio and Project Management – idea management



ENTERPRISE PORTFOLIO AND PROJECT MGMT

Portfolio Management Project Management Commercial Project Management

ldea Management

Project Resource Management Project Connection

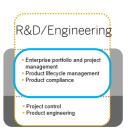
Purpose

- Translate your best ideas into successful, innovative products, services, and business models
- Integrate processes from ideation to development execution
- Accelerate the ideation phase: turn ideas into concepts faster using the flexible stage-gate process
- Run an innovation office to evaluate and manage ideas throughout the pipeline with the help of configurable evaluation questionnaires
- Bridge innovation silos across functions, business units, and geographies with the innovation community
- Foster interdisciplinary team building for better idea development by leveraging social collaboration features
- Encourage employees to participate in the ideation process with the help of an open innovation platform

Benefits

- Reduce ideation and innovation management cost by shortening the ideation process: fail fast, fail forward, measure innovation performance, and increase throughput
- Measure and manage your ability to innovate from end to end
- Improve process efficiency with seamless navigation and retrieval of detailed information
- Track sales trends and analyze success of ideas formerly submitted in the SAP Project and Portfolio Management application
- Increase revenue from new products and services by managing a portfolio of newproduct development projects to generate a continuous pipeline of product innovations
- Boost employee engagement by offering an intuitive mobile client and hands-on idea community that can interface with any third-party enterprise 2.0 solution
- Reduce commercialization cost of new products and services by identifying promising ideas early in the process and stopping development efforts for lowpotential product ideas

LoB R&D/Engineering – Enterprise Portfolio and Project Management – idea management



ENTERPRISE PORTFOLIO AND PROJECT MGMT

Portfolio Management Project Management Commercial Project Management

ldea Management

Project Resource Management Project Connection



Functional changes

- Transparency for campaign participants on campaign milestones and phases
- Capturing of additional information about an idea in a structured way
- Collaboration with and coordination of suggestions from various users before creating and submitting an idea for evaluation
- Support for scenarios where ideas need to be evaluated by an expert before a specific due date
- Rewarding of employees for their ideas
- Campaign registration periods



User experience improvement

- SAP Fiori-based user experience across all process steps
- Improved user productivity: back navigation and fast access to completed ideas from user and campaign home page
- Enhanced collaboration and participation when developing ideas
- Visibility of votes
- Continued engagement of campaign participants

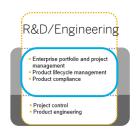
For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

 Integration with a simplified data model of SAP S/4HANA

LoB R&D/Engineering – Enterprise Portfolio and Project Management – project resource management



ENTERPRISE PORTFOLIO AND PROJECT MGMT

Portfolio Management Project Management Commercial Project Management

Idea Management

Project Resource Management Project Connection

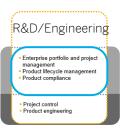
Purpose

- Improve performance and reduce costs by streamlining processes and avoiding bottlenecks
- Help commercial-project providers efficiently allocate and procure their project resources
- Improve closed-loop resource handling by running transparent processes supporting high-level capacity planning, detailed resource allocation, and time entry processes
- Plan resource demands aligned with project financials, create material components, and trigger and control procurement
- Reduce operating costs, prevent resource bottlenecks, increase productivity, and identify opportunities to maximize profitability

Benefits

- Reduce time to fill resource requests with advanced staffing process capabilities tightly integrated with project scheduling and cost and revenue planning
- Increase employee productivity by optimizing resource utilization and advanced staffing processes based on resource availability
- Improve demand forecast accuracy by providing integrated closed-loop resource planning capabilities for high-level capacity planning, detailed resource allocation, and time entry processes
- Reduce project delivery cost by providing advanced planning, tracking, and forecasting capabilities and enabling project managers to identify project deviations and cost drivers in time to take corrective measures

LoB R&D/Engineering – Enterprise Portfolio and Project Management – project resource management



ENTERPRISE PORTFOLIO AND PROJECT MGMT

Portfolio Management Project Management Commercial Project Management

Idea Management

Project Resource Management Project Connection



Functional changes

 Native integration of commercial project management functionality, making former add-on obsolete



User experience improvement

SAP Fiori-based user experience across all process steps

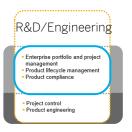
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

No change to data model

LoB R&D/Engineering – Enterprise Portfolio and Project Management – project connection



ENTERPRISE PORTFOLIO AND PROJECT MGMT

Portfolio Management Project Management Commercial Project Management

Idea Management

Project Resource Management Project Connection

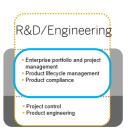
Purpose

- Drive project success by integrating all relevant, live information enterprise-wide with SAP S/4HANA
- Gain an integrated, real-time view across your portfolio by incorporating external project management tools
- Improve efficiency by automating processes, simplifying project management, and synchronizing project data to form a single source of truth
- Reduce cost by identifying resource requirements and variances using your tool of choice

Benefits

- Increase portfolio and project management efficiency of FTEs by offering instant access to accurate resource requirement information when disparate project management tools are used
- Reduce time to market for new products by giving the right real-time information to the right people at the right time to make smart decisions in the moment
- Reduce unplanned downtime or outages by providing accurate, real-time information to project planners so they can prevent and manage unplanned activities
- Reduce engineering change cost by having live, accurate insights into project scheduling and resource requirements to reduce time and cost variances

LoB R&D/Engineering – Enterprise Portfolio and Project Management – project connection



ENTERPRISE PORTFOLIO AND PROJECT MGMT

Portfolio Management Project Management Commercial Project Management

Idea Management

Project Resource Management Project Connection



Functional changes

- Bi-directional synchronization of project information in SAP S/4HANA with external scheduling tool (SAP Enterprise Project Connection application)
- Integration of SAP Portfolio and Project Management for SAP S/4HANA with Oracle Primavera
- Integration of SAP Portfolio and Project Management for SAP S/4HANA with Microsoft Project Server



User experience improvement

SAP Fiori-based user experience across all process steps

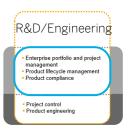
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

 Sample integration solution (SIS) for exchanging project information between SAP Portfolio and Project Management for SAP S/4HANA and thirdparty scheduling tools

LoB R&D/Engineering – Product Lifecycle Management – integrated product development



PRODUCT LIFECYCLE MANAGEMENT

Integrated Product Development

Integrated Recipe Development Handover to Manufacturing Authoring Tool Integration

Model Based Enterprise Advanced Variant Configuration

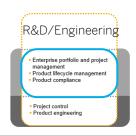
Purpose

- Accelerate product ideation and development with flexible tools that integrate the design process
- Speed up design by integrating product lifecycle management in a single environment
- Manage complex product structures using systems engineering and a multidisciplinary innovation platform
- Create individualized products by defining and reusing variant product structures across the supply chain
- Differentiate your product from the competition and improve its reliability by collaborating with customers and end-users and by incorporating operational feedback into product development processes

Benefits

- Decrease engineering change cost by lowering compliance risk, improving product quality, and involving purchasing, production, and marketing in changes
- Cut time to market for new products by making development an integrated collaborative process and by providing the right product information downstream
- Reduce commercialization cost of new products and services by enabling the reuse of approved and available materials and components

LoB R&D/Engineering - Product Lifecycle Management - integrated product development



PRODUCT LIFECYCLE MANAGEMENT

Integrated Product Development

Integrated Recipe Development Handover to Manufacturing Authoring Tool Integration

Model Based Enterprise Advanced Variant Configuration



Functional changes

- Comparable SAP ERP functionality provided in SAP S/4HANA
- More efficient processes for management of engineering changes
- Provision of capabilities to manage constraints that support the definition and management of hardware and software compatibility
- Modern rules engine and user-friendly modeling UI with the advanced variant configuration capability of SAP S/4HANA
- At-a-glance project status for users through project brief



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Design Engineer
- BOM Engineer

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Integration with a simplified data model of SAP S/4HANA
- Introduction of new change record object across multiple disciplines
- Introduction of version management for engineering bill of materials (EBOM)
- Representation of software objects to support systems engineering scenarios
- Creation of hardware and software constraints to support constraint management
- New rules engine for advanced variant configuration capability
- Enhancements to classification

LoB R&D/Engineering – Product Lifecycle Management – integrated recipe development



PRODUCT LIFECYCLE MANAGEMENT

Integrated Product Development

Integrated Recipe Development Handover to Manufacturing Authoring Tool Integration

Model Based Enterprise Advanced Variant Configuration

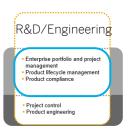
Purpose

- Accelerate time to market through collaborative product development and massive efficiency gains
- Streamline manufacturing with integrated, multipoint approaches for managing projects and product data in real time
- Develop recipes and formulas rapidly, reuse existing ingredients, and design packaging and labeling in a single, high-performance environment
- Gain instant insight into product performance with real-time contextual analytics
- Collaborate with suppliers throughout a product's lifecycle
- Work seamlessly with partners to accelerate product development and comply with regulations, while managing product development costs

Benefits

- Reduce commercialization cost of new products and services by enabling the reuse of substances and embedding compliance checks and formula optimization within product development
- Cut time to market for new products by supporting the collaborative development of ingredients and recipes and by accelerating the handover to manufacturing
- Lower project cost overrun by offering early input cost estimates and ongoing insights into product performance with real-time contextual analytics
- Cut maverick spend overall by providing advanced, high-speed search capabilities for existing substances and recipes

LoB R&D/Engineering – Product Lifecycle Management – integrated recipe development



PRODUCT LIFECYCLE MANAGEMENT

Integrated Product Development

Integrated Recipe Development Handover to Manufacturing

Authoring Tool Integration

Model Based Enterprise Advanced Variant Configuration



Functional changes

- Recipe finder functionality to enhance searching based on scientific and technical attributes
- Automatic validation for new recipe versions with recipe version handling
- Improved specification handling with additional quick-entry capabilities
- Recipe finder enhancements
 - New analytics app supporting recipe list analysis
 - Quantity handling for calculation-based searches
 - Ability to find recipes by their standard compositions and input materials
 - View of recipes containing certain input materials directly or indirectly
 - Ability to set the search date to see recipes with past or future validity



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Administrator Recipe Development
- BOM Engineer
- Product Configuration Modeler
- Recipe Developer
- Systems Engineer
- Overview pages for process industry roles
- SAP CoPilot mobile app for process industry roles

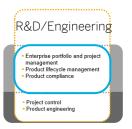
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Stability of the core data model to facilitate simple migration for existing customers
- Optimized data model to reduce data redundancy and to improve performance

LoB R&D/Engineering - Product Lifecycle Management - handover to manufacturing



PRODUCT LIFECYCLE MANAGEMENT

Integrated Product Development

Integrated Recipe Development Handover to Manufacturing Authoring Tool Integration

Model Based Enterprise Advanced Variant Configuration

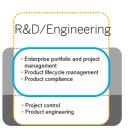
Purpose

- Simplify and accelerate the transition of engineering master data into manufacturing production data
- Reduce time to volume by working directly with engineering and manufacturing data structures in one real-time solution
- Minimize product cost by thoroughly understanding master data and product structures before executing production runs
- Improve agility by deploying flexible manufacturing practices based on plant resources and capabilities
- Increase quality by eliminating errors in production master data through instant visualization and robust work instructions during the planning process
- Avoid disruption to engineering design and production operations by providing realtime conflict and change management capabilities

Benefits

- Reduce scrap and rework costs related to engineering changes by instantly identifying manufacturing issues up-front through visualization and design review of products
- Reduce engineering change cost by providing a real-time, integrated environment that enables all stakeholders to collaborate in the change process
- Reduce time to market for new products by creating dramatic efficiencies that accelerate innovation and expedite production ramp-up

LoB R&D/Engineering – Product Lifecycle Management – handover to manufacturing



PRODUCT LIFECYCLE MANAGEMENT

Integrated Product Development

Integrated Recipe Development Handover to Manufacturing

Authoring Tool Integration

Model Based Enterprise Advanced Variant Configuration



Functional changes

- Comparable SAP ERP functionality provided in SAP S/4HANA
- More-efficient processes for management of engineering change
- Extended handover to manufacturing scenarios for visual enterprise manufacturing planner functionality



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Production Engineer
- Discrete Manufacturing
- Design Engineer
- BOM Engineer
- Quality Engineer

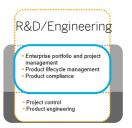
For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Integration with a simplified data model of SAP S/4HANA
- Introduction of new change record object across multiple disciplines

LoB R&D/Engineering – Product Lifecycle Management – authoring tool integration



PRODUCT LIFECYCLE MANAGEMENT

Integrated Product Development

Integrated Recipe Development Handover to Manufacturing Authoring Tool Integration

Model Based Enterprise Advanced Variant Configuration

Purpose

- Accelerate product development by integrating diverse CAD authoring tools on one real-time platform
- Develop products in real time by integrating mechanical, electrical, and electronic CAD authoring tools with SAP S/4HANA
- Get a 360-degree product view with instant transparency across disciplines and an intuitive user experience
- Synchronize metadata, structures, access, and file handling across design and business data for a complete product description

Benefits

- Reduce engineering change cost by harmonizing all CAD authoring tool data with an intuitive, easy-to-use interface that streamlines product development
- Reduce time to market for new products by increasing component reuse and providing relevant product information instantly to improve downstream processing
- Reduce commercialization cost for new products and services by involving all key departments in real time, including engineering, purchasing, production, quality, and marketing

LoB R&D/Engineering – Product Lifecycle Management – authoring tool integration



PRODUCT LIFECYCLE MANAGEMENT

Integrated Product Development

Integrated Recipe Development Handover to Manufacturing Authoring Tool Integration

Model Based Enterprise Advanced Variant Configuration



Functional changes

Comparable SAP ERP functionality provided in SAP S/4HANA



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Production Engineer
 - Discrete Manufacturing
 - Design Engineer
 - BOM Engineer
 - Quality Engineer

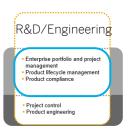
For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

 Integration with a simplified data model of SAP S/4HANA

LoB R&D/Engineering - Product Lifecycle Management - model based enterprise



PRODUCT LIFECYCLE MANAGEMENT

Integrated Product Development

Integrated Recipe Development Handover to Manufacturing Authoring Tool Integration

Model Based Enterprise Advanced Variant Configuration

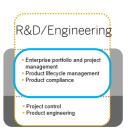
Purpose

- Extend the digital product definition outside of design engineering and into the hands of the extended enterprise
- Extend model-based definition (MBD) to true model-based enterprise (MBE) use
- Define the product in a virtual model, with all its drawings, product and manufacturing information (PMI), and geometric dimensions and tolerances (GD&T)
- Extend the virtual model to use quality inspection, manufacturing definition, aftermarket spare parts definition, and so on downstream from engineering

Benefits

- Improve downstream efficiencies by leveraging a model-based approach to product development
- Ensure product security and accuracy by controlling and managing who has access to product data and ensuring they are working with the correct data
- Reduce rework by leveraging engineering designs in handover to manufacturing, quality inspection, technical publications, and manufacturing execution
- Extend the basics of the model-based enterprise principles by using engineering data in advanced user experience scenarios such as virtual reality, augmented reality, and mixed/blended reality

LoB R&D/Engineering – Product Lifecycle Management – model based enterprise



PRODUCT LIFECYCLE MANAGEMENT

Integrated Product Development

Integrated Recipe Development Handover to Manufacturing Authoring Tool Integration

Model Based Enterprise Advanced Variant Configuration



Functional changes

- Comparable SAP ERP functionality provided in SAP S/4HANA
- More-efficient processes for management of engineering changes
- Extended handover to manufacturing scenarios for visual enterprise manufacturing planner functionality



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Production Engineer
 - Discrete Manufacturing
 - Design Engineer
 - BOM Engineer
 - Quality Engineer

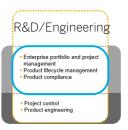
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

- Integration with a simplified data model of SAP S/4HANA
- Introduction of new change record object across multiple disciplines

LoB R&D/Engineering – Product Lifecycle Management – advanced variant configuration



PRODUCT LIFECYCLE MANAGEMENT

Integrated Product Development

Integrated Recipe Development Handover to Manufacturing Authoring Tool Integration

Model Based Enterprise Advanced Variant Configuration

Purpose

- Optimize usability and cost reduction with sophisticated variant configuration
- Improve sales and product engineering performance for advanced variant configuration by implementing a new state-of-the-art configurator
- Create a comprehensive simulation environment for variant configuration models
- Benefit from the user-friendly classification capabilities

Benefits

- Increase sales force efficiency by higher tool support within order configuration to allow the sales force to focus on selling
- Reduce order management cost by seamlessly embedding variant configuration into the order entry process, reducing order configuration activities

LoB R&D/Engineering - Product Lifecycle Management - advanced variant configuration



PRODUCT LIFECYCLE MANAGEMENT

Integrated Product Development

Integrated Recipe Development Handover to Manufacturing Authoring Tool Integration

Model Based Advanced Variant Enterprise Configuration



Functional changes

- Field extension of characteristic values integrated into classification and variant configuration processes
- Field extensions of characteristic values integrated into classification and variant configuration processes
- Disabling of "actions" (documented as obsolete even earlier); use of actions still works for existing models
- Disabling of concept "classification used as a selection condition" in BOMs; use of concept still works for existing models
- Variant configuration process: inclusion of multilevel configurations supported by the advanced variant configurator and integrated into purchasing, the production order, customer quotation

For more information on adaptations or changes, see the <u>Simplification List for SAP S/4HANA</u>.



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
- Production Engineer
- Discrete Manufacturing
- Design Engineer
- BOM Engineer
- Quality Engineer
- New SAP Fiori-based configurator UI embedded into sales order app
- Personalized overview page for the variant configuration modeler

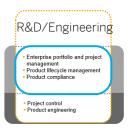
For additional information on roles and apps, visit the <u>SAP</u> Fiori apps reference library.



Data innovations

- Integration of classification and configuration data in SAP S/4HANA embedded analytics using core data services (CDS) views
- New configurator engine leveraging capabilities of the SAP HANA business data platform by using an advanced function library concept
- New tool enabling migration of existing configurations created in logistics-variant configuration to the new model

LoB R&D/Engineering – Product Compliance – dangerous goods management



PRODUCT **COMPLIANCE** Dangerous Goods Management

and Chemical Compliance

Prod. Marketability Safety Data Sheet and Label Management

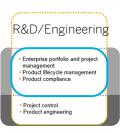
Purpose

- Provide safe and compliant transportation of hazardous materials to avoid delivery delays and to protect brand value
- Manage dangerous goods information centrally, automate dangerous goods classification, and leverage provided dangerous goods content
- Ensure all shipments comply with dangerous goods regulations with integrated dangerous goods checks that provide adequate packaging and accurate transportation modes and routing
- Automate the creation and provisioning of dangerous goods documents

Benefits

- Reduce penalties and fines by automating the verification of safety requirements as part of transportation management
- Lower transportation planning cycle time by automating the verification of safety requirements as part of transportation management
- Improve on-time delivery performance by avoiding delivery disruptions due to violations of dangerous goods regulations or missing dangerous goods documents

LoB R&D/Engineering – Product Compliance – dangerous goods management



PRODUCT **COMPLIANCE**

Dangerous Goods Management

and Chemical Compliance

Prod. Marketability Safety Data Sheet and Label Management



Functional changes

- SAP intends to simplify dangerous goods management functionality in a future release of SAP S/4HANA.
- Services for dangerous goods determination and classification as well as substance group assignment based on machine learning models
- Integration of the services into the SAP S/4HANA solution for product compliance



User experience improvement



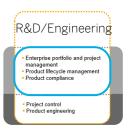
For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

New data model for a future release

LoB R&D/Engineering – Product Compliance – product marketability and chemical compliance



PRODUCT COMPLIANCE

Dangerous Goods Management

Prod. Marketability and Chemical Compliance

Safety Data Sheet and Label Management

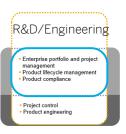
Purpose

- Ensure compliance of products and chemicals to secure the right to market, sell, and ship products
- Manage material and ingredient information and satisfy legal and customer requirements
- Collect compliance data from suppliers and customers and publicize compliance information
- Track volumes of regulated substances automatically and assess and verify products and materials for different compliance requirements, including required registrations and tracked-versus-allowed quantities

Benefits

- Reduce noncompliance of products by implementing compliance controls across product lifecycle processes
- Cut time to market for new products by ensuring on-time registration and provision of all required information
- Increase revenue from new products and services by accessing existing and new markets despite increasingly complex regulatory and customer-driven compliance requirements
- Reduce write-offs for uncollectible accounts receivable by providing a robust and auditable compliance assurance system
- Avoid penalties and fines by ensuring compliance with required registrations and substance volume limits in import, manufacture, and distribution

LoB R&D/Engineering – Product Compliance – product marketability and chemical compliance



PRODUCT COMPLIANCE

Dangerous Goods Management Prod. Marketability and Chemical Compliance

Safety Data Sheet and Label Management



Functional changes

- Provisioning of all product compliance capabilities in one solution, covering all industries
- Analytics for assessment of product compliance based on real-time data
- SAP intends to simplify product marketability and chemical compliance functionality in a future release of SAP S/4HANA.



User experience improvement

- SAP Fiori-based user experience across all process steps
- Roles with new, dedicated SAP Fiori apps:
 - Product Stewardship Specialist Product Compliance
 - Master Data Specialist Product Compliance
 - Internal Sales Representative

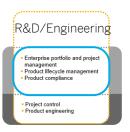
For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

New data model for a future release

LoB R&D/Engineering – Product Compliance – safety data sheet and label management



PRODUCT COMPLIANCE

Dangerous Goods Management Prod. Marketability and Chemical Compliance

Safety Data Sheet and Label Management

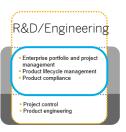
Purpose

- Manage safety data sheet and labeling requirements to ensure compliance and accelerate product introduction
- Manage substance and regulatory information centrally, streamline component and product classification, and automate safety data sheet creation
- Use SAP content and authoring solutions to reduce effort and ensure ongoing compliance
- Automate label printing and safety data sheet shipping integrated in logistics processes

Benefits

- Reduce compliance and risk management costs by automating product classification and creation, management, and automatic printing of compliant labels
- Improve on-time delivery performance by enabling timely generation of market and customer-specific compliance documentation and ensuring compliant and accurate labeling, thereby avoiding holdup of products by authorities or carriers
- Reduce penalties and fines by ensuring that safety data sheets and labels meet legal and customer requirements

LoB R&D/Engineering – Product Compliance – safety data sheet and label management



PRODUCT COMPLIANCE

Dangerous Goods Management

and Chemical Compliance

Prod. Marketability Safety Data Sheet and Label Management



Functional changes

SAP intends to simplify safety data sheet and label management functionality in a future release of SAP S/4HANA.



User experience improvement

 SAP Fiori-based user experience across all process steps

For additional information on roles and apps, visit the SAP Fiori apps reference library.



Data innovations

New data model for a future release

Technology Platform – Database and Data Management – master data management

Database and Data Management Master Data Management

Purpose

- Consolidate, create, maintain, and harmonize your most critical information with master data management from SAP
- Implement a collaborative workflow process that integrates business rules and subject-matter domain expertise

Benefits

- Accelerate master data management activities within business processes through automation
- Expand access to complete, accurate master data of all domains to all systems and business applications
- Simplify master data management through visualizations of process metrics
- Enable power users to process master data any time and anywhere on mobile devices

Technology Platform – Database and Data Management – master data management

Database and Data Management

Master Data Management



Functional changes

Master data quality management:

- Manage business rules in collaboration of business users and data stewards
- Measure and analyze data quality and trends
- Correction of data quality issues supported by worklists and embedded analytics

Central governance

 Master data governance (MDG) now supporting centralized governance, compliance and transparency of internal order data



User experience improvement

Enhanced SAP Fiori user experience in process analytics with summary dashboard and analytical list pages displaying relevant process information at a glance

For additional information on roles and apps, visit the <u>SAP</u> <u>Fiori apps reference library</u>.



Data innovations

Master data governance: data innovations in central governance:

Product_data

 Adoption of simplifications and industry-specific enhancements in SAP S/4HANA

Business partner data

 Enhancements in multiple customer and vendor assignments through integration with SAP S/4HANA Cloud (data enrichment of master data with name, address, and identification information from external data providers)

Financial data

- Adoption of universal journal in SAP S/4HANA: G/L accounts as basis for cost element
- Support for new domain: internal order

Thank you.

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