

SAP Product Road Map SAP S/4HANA 1709

September 2017

CUSTOMER



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Introduction to product road maps

Purpose

Product road maps are designed to support the product adoption planning activities of SAP customers. A product road map helps a customer match short-term and long-term goals with technology plans.

A product road map describes how the features and function capabilities in an SAP product or technology are planned to progress over time. In general:

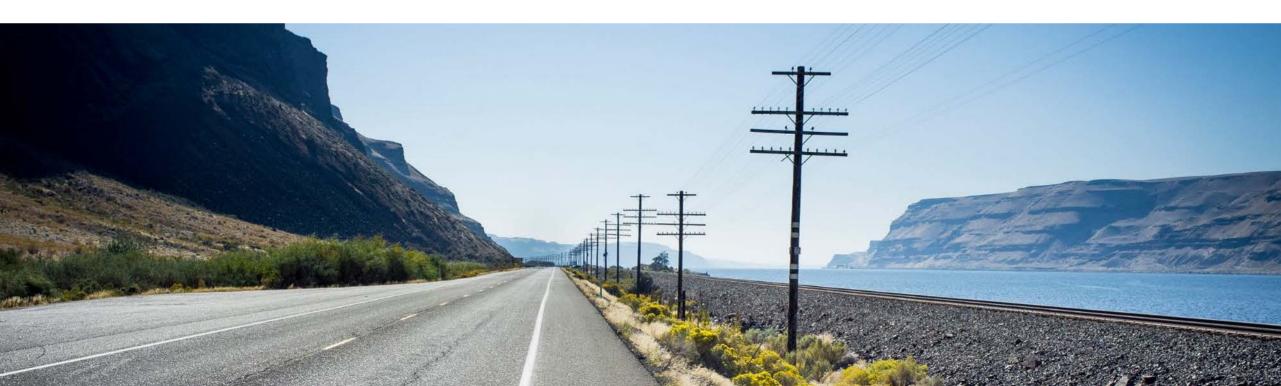
- Recent innovations = changes in the current and recent released version(s)
- Planned innovations = changes planned in one or more upcoming development release
- Product direction = proposed themes for major product releases beyond the current development plan
- Product vision = areas in which the product would be evolved based on technological and industry trends

Complementary resources

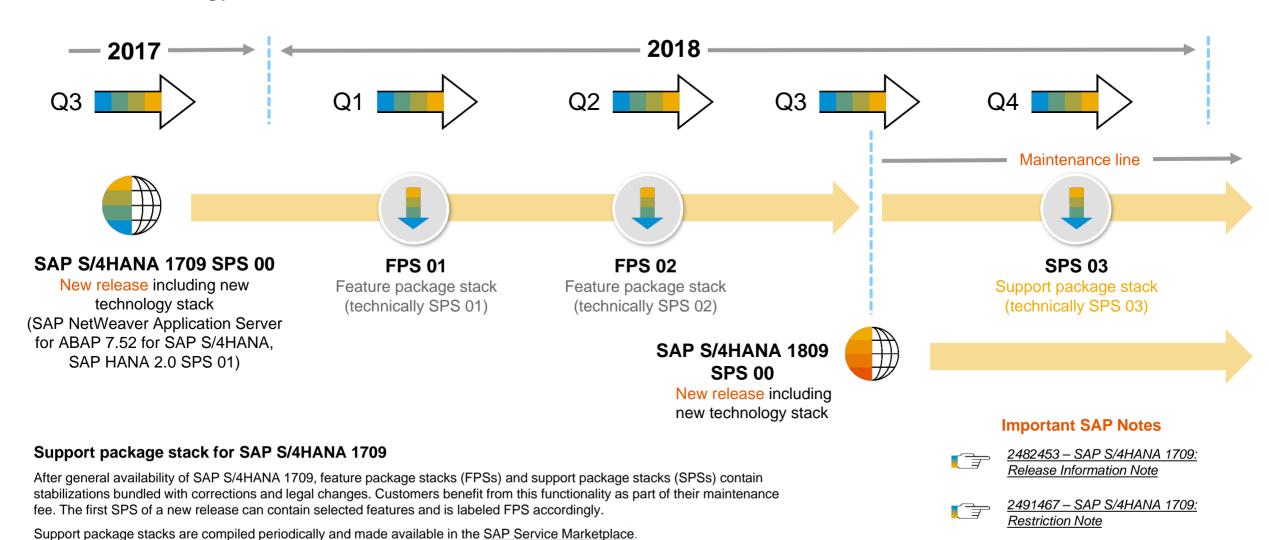
For a more general description of the business problems and processes being solved and supported by SAP, refer to solution road maps.

For more detailed technical information, please refer to the product availability matrix and product documentation.

Product overview



Release strategy for 2017–2018 and definition of deliveries



Key innovations



Embedded transportation management

- Basic shipping and data harmonization
- Integration in extended warehouse mgmt.



Consumer products industry

- Catch weight management for system conversion



Commodity management

- Extending pricing with the commodity pricing engine



Industry to core: retail, wholesale

- Wholesale fashion enablement; order allocation; segmentation



Service core (CRM add-on)*

- Migration of installed-base CRM with eliminated middleware, harmonized data models



Manufacturing

- Demand-driven manufacturing
- Advance variant configuration



Finance

- Machine learning with integration to SAP Cash Application; financial planning



Procurement

- Centralized purchase requisitions through hub deployment
- Machine learning for contract consumption



Enterprise asset management

- Report and repair malfunction
- Breakdown analysis



Sales

- Electronic and digital payments with integration with payment hub



New innovations

Manufacturing

- Engineering cockpit
- Extension for complex assembly industries

Existing and enhanced innovations



Quality management

- Managing usage decisions
- Analytics for quantitative results



Extended warehouse management

- Advanced labor management
- Pallet planning



Product lifecycle management

- Visual enterprise generator conversion
- Recipe management and recipe finder



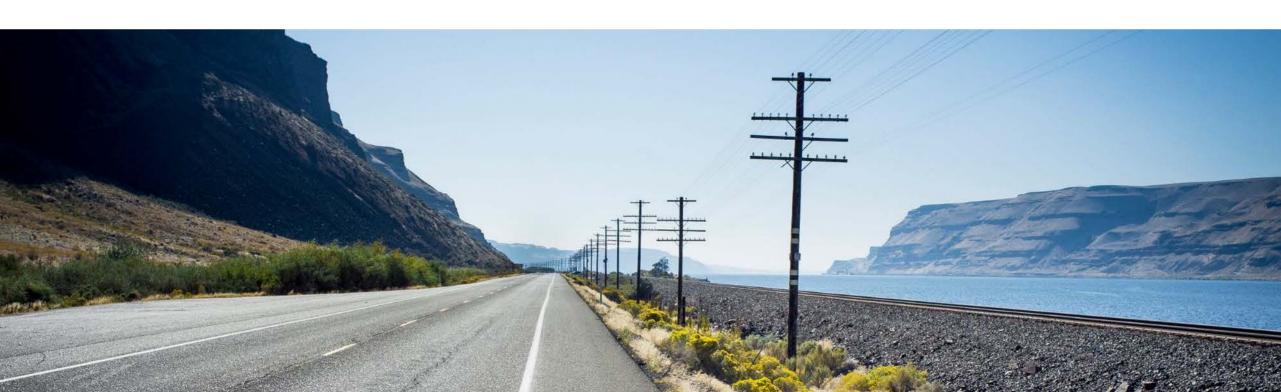
Maximizing the SAP Fiori user experience

- SAP Fiori overview pages

First delivery planned with SAP S/4HANA 1709 FPS01 in 2018

Product road map

- Recent innovations
- Planned innovations
- Product direction
- Product vision

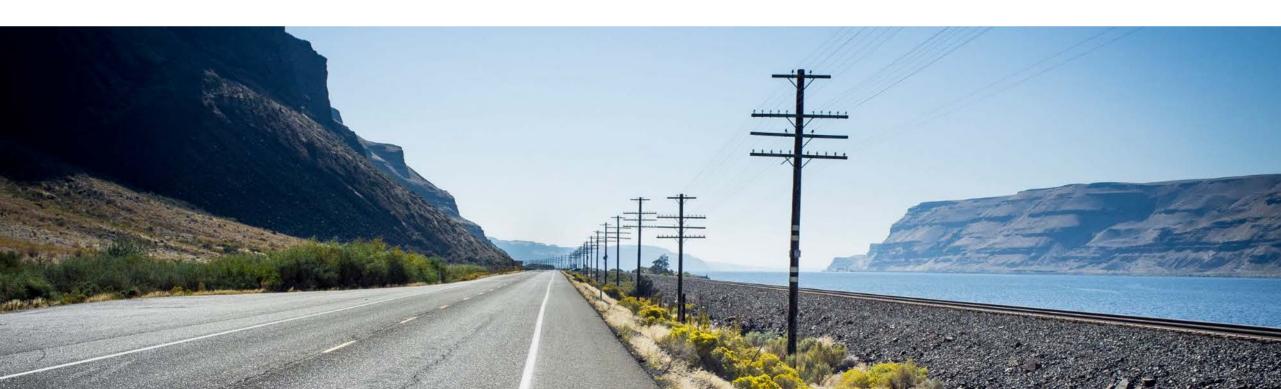


Contents

- Lines of business (LoBs)
 - Sourcing and procurement
 - R&D/engineering
 - Commercial project management
 - Asset management
 - Manufacturing
 - Supply chain
 - Sales
 - Service
 - Commerce
 - Finance
 - Human resources

- Cross-topics
 - Master data management
 - Analytics
 - Additional cross-topics
- Industries

Lines of business



LoB: sourcing and procurement

1709 - Recent innovations*

- Type ahead for free text items and enhanced document flow for purchase requisitions
- Enablement of SAP S/4HANA as central selfservice hub with central purchase requisitions
- New SAP Fiori apps for monitoring and mass change of purchasing documents
- New simplified service process in SAP S/4HANA
- Business workflow for purchase requisitions, purchase order and invoices
- Contract templates and navigation to legal transaction from purchasing contract
- New solution capability for legal content management supported by SAP Fiori apps
- Simple request for quotation process with integration option to quote automation in Ariba Network
- SAP Fiori apps for category and activity management, supplier evaluation, and supplier scorecard processing in SAP S/4HANA
- Uploading of supplier invoices and invoice posting with reference to an asset
- Purchase order and Invoice processing with integration to SAP Transportation Management
- Embedded and predictive analytics for contract consumption
- Procurement application programming interfaces (APIs) for side-by-side extensibility

2018 - Planned innovations

- Enablement of SAP S/4HANA as central contract management hub with contract hierarchies, distribution, and annual contract negotiation capabilities
- Situation handling for contract consumption and purchase requisition processing
- Increased invoice automation with machine learning and efficient invoice monitoring for exception handling
- Integration of SAP Ariba Buying with SAP S/4HANA
- Simplified service procurement integrated with preceding and subsequent business processes in SAP S/4HANA and SAP Fieldglass solutions
- End-to-end smart contracting scenario integrating with legal content assembly on SAP Cloud Platform to generate, process, and archive legal content based on preapproved clauses and templates
- Analytics for scheduling agreements
- Material price variance analytics

2019 - Product direction

- Semantic, multiple back-end process capabilities: procurement shared services center with SAP S/4HANA
- Holistic supplier and category monitoring
- Inclusion of social media platforms and sentiment analysis in procurement analytics
- Established partner ecosystem-building procurement extensions in SAP Cloud Platform
- Conversational voice interfaces and machine learning
- Auditing of procurement collaboration with block chain
- Enhanced semantic analysis of legal documents to clean up legacy content archives

- Transform manual procurement processes in requisitioning, ordering, and sourcing to systemoperated automatic processes based on machine learning and data prediction
- Highly integrated internal and external collaboration accelerates and improves procurement business decisions
- Innovation and business value drive and determine supplier selection and relationship
- Provide transparent, real-time insight into supplychain processes

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: R&D/engineering (1/4) – variant configuration

1709 - Recent innovations*

- Advanced analytics for configuration data | (on premise)
- Classification reuse user interface component (on premise)
- New advanced variant configuration leveraging SAP HANA capabilities (on premise)

2018 - Planned innovations

Variant configuration

- Support of multilevel scenarios
- Integration into configure-price-quote (CPQ) software
- Integration of new configuration along key processes
- Integration of routing with simulation environment
- Support through machine-learning algorithms
- Enabling of variant functions
- Improved trace functionality
- Further analytical scenarios
- Grouping of characteristics in variant configuration and classification

Classification

- Integration of new configuration into classification
- Integration of classification SAP Fiori UX into further objects
- Extended characteristic types (such as LONGTEXT, files)
- Machine learning—based auto-classification
- Extended search capabilities

2019 - Product direction

Variant configuration

- Separate configuration for sales and manufacturing through loose coupling
- Simplified digital modeling in engineer to order through reuse of configurable models
- Support for closed-loop engineering by enhancing variant configuration to engineering and order change management
- Enhanced product modeling environment for hardware, electrics, electronics, software, and services
- Syntax enhancements
- New syntax editor for bill-of-material (BOM) maintenance (with SAP Fiori UX)

Classification

Nonclassifying characteristics (tagging)

2020 - Product vision

Variant configuration

- Integrated interactive 3D visualization for configurable products in engineering, sales, and production processes
- Test environment supporting systematically tests and analysis of variant configuration models
- Enhanced engineer-to-order process supported by machine-learning
- Integration with SAP Asset Intelligence Network and SAP Digital Twin for business

Classification

- Simplified class types
- Extended search and "where used" capabilities for classification and variant configuration
- Enhanced mass-change capabilities for classification and variant configuration

This is the current state of planning and may be changed by SAP at any time.

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: R&D/engineering (2/4) – discrete and process industries

1709 - Recent innovations*

- Change record in SAP S/4HANA
- Access control management
- Product lifecycle management content search on SAP S/4HANA
- <u>Linking of components between engineering bills of materials and manufacturing bills of materials</u>
- Visual enterprise generator conversion and viewing enhancements in ERP
- Replacement of ActiveX controls for the SAP 3D Visual Enterprise Viewer application in product lifecycle management Web UI applications

Product lifecycle management (PLM) recipe development

- Recipe development enhancements for SAP S/4HANA 1709
- SAP Fiori enablement for PLM recipe development
- Recipe finder on SAP S/4HANA

2018 - Planned innovations

- Requirement linking to business objects
- Software compatibility management
- Copy bill of materials to a new header
- OData API for PLM BOM creation and update
- APIs for versioned bill of material
- Adopt version creation in "where used" app for bill of materials
- Embedded software in bill of materials
- Enhancements in SAP Fiori app to maintain bill of materials
- Display thumbnails at the bill of materials header and items level
- SAP Document Center 2.0 for document management system from SAP

PLM recipe development

 Recipe development enhancements for SAP S/4HANA 1809

2019 - Product direction

- Internet of Things (IoT) and equipment model integration into SAP Asset Intelligence Network and the IoT for handover of engineering data
- Cloud CAD integration
 - Engineering control center for cloud
 - Test data manager (TDM) integration
- Integration of software development tools
- SAP Document Center 2.0 for SAP Extended Enterprise Content Management by OpenText and document services from SAP
- Digital content processing incl. machine learning and partner integration
- Scalable, flexible process management to configure rule-based business processes (UI, data, and workflow)
- Support of engineering, manufacturing, and industry-specific change management

PLM recipe development

- Labeling enhancements
- Compliance management enhancements
- Additional collaboration scenarios with intelligent product design

2020 - Product vision

- Interdisciplinary and configurable BOM management
- Next-generation product structure management
- Status and release management for orchestration of change across business objects
- Engineer-to-order (ETO) process
 - Fast ETO based on configure to order
 - ETO including parametrical CAD

PLM recipe development

- Compliance management enhancements
- Cloud content integration

This is the current state of planning and may be changed by SAP at any time.

12

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: R&D/engineering (3/4) – enterprise portfolio and project management

1709 - Recent innovations*

Project financial control

Project cost reporting

Enterprise portfolio and project management

- SAP Portfolio and Project Management for SAP S/4HANA
- Continuous improvements for SAP Portfolio and Project Management for SAP S/4HANA (2015 – extended project)

SAP Enterprise Project Connection

 Integration with Web services of Oracle's Primavera P6 Enterprise Project Portfolio Management 16.2 2018 - Planned innovations

Enterprise portfolio and project management

- Financial control for enterprise projects
- Review of enterprise projects
- Simplified enterprise portfolio and project management analytics
- Project collaboration

2019 - Product direction

Enterprise portfolio and project management

- Project planning for enterprise projects
- Central resource management for enterprise projects
- Capital project management with enterprise projects
- R&D/innovation projects with enterprise projects

2020 - Product vision

Enterprise portfolio and project management

- Engineer-to-order management with enterprise projects
- Investment portfolio management for enterprise projects

^{*} See <u>feature scope description</u> of SAP S/4HANA 1709 for full scope.

LoB: R&D/engineering (4/4) – product compliance

1709 - Recent innovations*

Product compliance

- Enhancements for the new ruling of the European Court of Justice, interpreting articles in the REACH regulation regarding the presence of substances of very high concern (SVHC)
- SAP Transportation Management integration for dangerous goods
- SAP S/4HANA for product compliance as successor product of product safety and stewardship in SAP S/4HANA compatibility package

SAP EHS Regulatory Content

Quarterly shipment of content updates

2018 - Planned innovations

Product compliance

- Simplified, ready-to-run solution for product marketability using dashboards and SAP Fiori apps
- Enabled and standardized data model for compliance management and versioning
- Verticalize end-to-end processes in procure to pay, plan to product, and order to cash with embedded product compliance
- Regulation aspects as a self-contained processing and delivery unit with multiple versions at the same time
- Simple customer extensibility of regulation aspects
- Insight into action analytics leveraging logistic data to optimize compliance processes
- Intelligent compliance management with machine learning capabilities

SAP EHS Regulatory Content

Quarterly shipment of content updates

2019 - Product direction

Product compliance

- Compliance-driven recipe development
- Extend end-to-end business process verticalization
- Supply-chain-integrated compliance checks and compliance documentation
- Purpose-driven increase of regulatory coverage together with partners
- Insight into the business by combining logistics with compliance analytics and proposing actions
- Enhanced marketability checks by substance volume tracking
- End-to-end integration of safety data sheet (SDS) management services with SAP EHS Regulatory Documentation OnDemand
- Increase machine learning capabilities for compliance checks

SAP EHS Regulatory Content

Quarterly shipment of content updates

2020 - Product vision

Product compliance

- Simplified processing of regulatory updates
- Simplified, ready-to-run solution for dangerous goods with embedded content using dashboards and SAP Fiori apps
- Sales-and-shipment-integrated dangerous goods checks and information on packing lists and delivery notes

SAP EHS Regulatory Content

Quarterly shipment of content updates

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: commercial project management

1709 - Recent innovations*

- Delivery of SAP Commercial Project
 Management with SAP S/4HANA (and no longer as an add-on) starting with release 1709, which simplifies installation and operations
- Period distribution of quantities, costs, and revenues based on predefined distribution curves
- Uniform business partner search across
 SAP Commercial Project Management
- Simplified integration with SAP Portfolio and Project Management
- Enhanced API coverage for integration with SAP CRM solution supporting the bidding process

2018 - Planned innovations

- Framework for simplified project creation including automation of work breakdown structure (WBS) generation
- Framework for launching a Web-based application for planning and forecasting based on SAP Lumira (as an alternative to SAP Analysis for Microsoft Office)
- Web-based application for forecasting based on SAP Lumira
- Alternate project hierarchies for reporting and forecasting
- SAP Fiori app to manage activities related to risks, issues, change requests, and checklist items
- Simplification of change request processing
- Introducing project reporting currency to simplify reporting in cross-border projects

2019 - Product direction

- Cash-flow planning during project execution
- Integration of bid structure into change management processes
- Enhanced project reporting using SAP Analytics Cloud
- Enhanced process integration with SAP Multiresource Scheduling

2020 - Product vision

 Seamless integration with SAP Analytics Cloud to cover business planning and forecasting

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: asset management

1709 - Recent innovations*

- Technical object breakdown analysis for enterprise asset management for SAP S/4HANA 1709
- SAP Fiori app "Report and Repair Malfunction" for SAP S/4HANA
- SAP Fiori apps for scheduling maintenance plans and making available-to-promise (ATP) checks in SAP S/4HANA
- SAP Geographical Enablement Framework, extension for SAP Enterprise Asset Management (SAP EAM)

2018 - Planned innovations

- Enhanced object pages to find task list and operations with SAP S/4HANA 1809
- Enhanced object pages to perform quick actions
- Overview page for planner
- Damage analysis for enterprise asset management
- Synchronization of EAM master data when deactivating a technical object 1709 feature package stack 1
- Cost analysis for enterprise asset management in SAP S/4HANA
- SAP Geographical Enablement Framework, extension for SAP EAM
- Workload analysis for enterprise asset management in SAP S/4HANA
- Integration between SAP EAM and SAP Asset Intelligence Network in SAP S/4HANA

2019 - Product direction

- SAP Fiori apps for maintenance technicians and planner to manage internal refurbishment activities
- Enable maintenance technician to support end-to-end process for preventive maintenance (SAP Fiori UX)
- Manage inspection check list for monitoring performance of assets
- SAP Fiori app for productive and nonproductive time recording
- Improved integration with procurement of parts and service
- Cost-based approval for maintenance order
- Simplified project-based maintenance work management
- SAP Fiori app for recoding installation and dismantling of equipment
- Analytical application to visualize important asset management—specific KPIs

- Risk-based backlog planning
- Risk-based lifecycle costing

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: asset management – environment, health, and safety

1709 - Recent innovations*

- Compliance management and emissions reporting
- Chemical inventory reporting
- Simplified risk identification process
- Enhanced incident management and analytics

2018 - Planned innovations

- Event-based emissions reporting
- Water/wastewater management
- Simplified risk assessment process
- Basic management of change process
- Basic content provider integration
- Enhanced task management

2019 - Product direction

- Assistance for workers and EHS specialists everywhere and on any device
- IoT and connected worker use cases
- Waste generation tracking
- Extended management of change functionality
- Extended content provider integration
- Use of predictive analytics and leading indicators to improve safety and risk management

- Incorporation of machine learning into EHS processes
- Further focus on IoT and connected worker use cases
- Innovations related to specific industry use cases (such as operational integrity)

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: manufacturing (1/5) – inventory management

1709 - Recent innovations*

Goods receipt process

- Analysis of goods receipt including stock in transit
- Improvements to process and usability through posting of goods receipts for deliveries
- Analysis of goods receipt including goods receipt of blocked stock

Inventory analytics

- Overview page to support the inventory manager in daily business by presenting selected and relevant KPIs and charts at a glance
- Inventory KPI analysis with follow-up actions on slow-moving materials (on premise)
- Overview page to support the warehouse clerk in daily business by presenting selected and relevant KPIs and charts at a glance

Catch weight management (CWM) and direct store delivery (DSD)

- CWM functionality for customers having it already in use
- DSD and empties moved in SAP S/4HANA compatibility mode

2018 – Planned innovations

Predictive analytics/machine learning

 Enhancements for predictive analytics in process monitoring for decision support

Goods receipt process

- Process and usability improvements through posting goods receipt for a production order
- Improvements to process and usability through posting of goods receipts without reference

Inventory analytics

 Overview page to support the inventory analyst in daily business by presenting selected and relevant KPIs and charts at a glance

CWM

Process enablement of further CWM scenarios related to restriction note

2019 - Product direction

Predictive analytics/machine learning

 Real-time stock accuracy and process efficiency improvement for physical inventory by machine learning capabilities

CWM

 Finalization of process enablement of further CWM scenarios related to restriction note.

2020 - Product vision

Demand-driven material flow

- Supply to production
- IoT integration

18

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: manufacturing (2/5) – available to promise (ATP)

1709 - Recent innovations*

- Support stock transport orders and "supply assignment" in backorder processing
- Product allocation with alternative sources of supply (new SAP Fiori app "Manage Product Allocation Sequences")
- Product availability check consider dedicated segments of supply when checking availability
- Consider stock transport orders in product allocation
- Explain the product allocation check result
- Release for delivery: enable customer-specific ratings of the business impact of shortage situations
- OData APIs for product allocation object and product allocation sequence
- <u>Use custom and standard fields as</u>
 <u>characteristics in sales order-specific product</u>
 allocation objects

2018 - Planned innovations

Product allocation

- Support sales and distribution (SD) document category "order without charge (I)"
- Display and analyze confirmation situation of requirements and product allocation availability situation
- Reorganize product allocation planning data and assignments after deletion or deactivation /reactivation of characteristic value combinations automatically

Advanced ATP

- Alternative-based confirmation: automatically determine the best possible plant to fulfill a requirement
- Backorder processing:
 - Use custom and standard fields for sorting and filtering
 - Trigger an alternative backorder processing run automatically when an exception occurs

2019 - Product direction

Product allocation

- Display the availability situation for a materialplant combination
- Calculate a feasible confirmation by simultaneously considering multiple product allocation objects as an alternative source of supply
- Use analytical insights for optimal allocation

Advanced ATP

- Smart material substitution to determine the best possible material to fulfill a requirement
- Flexible backorder processing leveraging enhanced user experience

- Reuse sophisticated scheduling capabilities of the integrated SAP Transportation

 Management (SAP TM)
- Enable customers to define characteristic value groups for product allocation
- Enable users to analyze the constraining factors of an ATP check in the backorder processing (BOP) monitor (product availability, product allocations, supply assignment)
- Interactive backorder processing: manual and fast adjustment of the confirmation of multiple order lines within an integrated UI

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: manufacturing (3/5) – logistics execution

1709 - Recent innovations*

Outbound and inbound processing

- SAP Fiori apps to schedule activities for inbound deliveries in SAP S/4HANA
- SAP Fiori app to create outbound deliveries from sales orders in SAP S/4HANA
- SAP Fiori app to manage outbound deliveries in SAP S/4HANA
- SAP Fiori app to analyze delivery logs in SAP S/4HANA
- Reduced total cost of ownership through simplified order integration with embedded SAP Transportation Management
- Increased change flexibility for deliveries integrated to SAP Extended Warehouse Management
- Enterprise search and object page for inbound deliveries in SAP S/4HANA
- Enterprise search and object page for outbound delivery in SAP S/4HANA
- Enterprise search and object page for returns delivery in SAP S/4HANA

2018 - Planned innovations

Outbound and inbound processing

- Unplanned returns process triggered from SAP Extended Warehouse Management
- Analytics for delivery performance
- Overview page for shipping specialists to provide
 - Up-to-date insight into daily business activities based on key facts and figures
 - Intuitive forward navigation in order to achieve routine and exceptional task
 - Drill-down options to access more detailed information

2019 - Product direction

Delivery cockpit for SAP Cloud Platform

 Cross-system process monitoring covering process steps in SAP S/4HANA core, SAP Extended Warehouse Management (SAP EWM), and SAP TM

Outbound and inbound processing

- Integrate IoT-driven track and trace scenarios
- Overview page for receiving specialists to provide
 - Improved insight into daily business activities based on key facts and figures
 - Intuitive forward navigation in order to achieve routine and exceptional task
 - Drill-down options to access more detailed information

2020 - Product vision

New delivery scheduling

Delivery scheduling involving detailed timing information from SAP TM and SAP FWM

Business process monitoring

 Graphical representation of selected KPIs to foster insight to action (such as lead-time reduction in picking and packing)

Analytics for shipping

- Embedded analytics in transactional apps
- Analytical apps for KPIs such as returns rate, delivery workload, delivery processing times, delivery splits

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: manufacturing (4/5) – production planning

1709 - Recent innovations*

- Monitor stock status and stock levels of demand-driven materials (on premise)
- Manage safety stock and the reorder point for demand-driven replenishment (on premise)
- Automated replenishment of demand-driven materials (on premise)
- Manage capacity utilization and shifts for advanced planning—enabled work center
- Monitor detailed scheduling constraints for production scheduling board
- Combined order scheduling with production planning/detailed scheduling (PP/DS) for SAP S/4HANA

2018 - Planned innovations

- Demand-driven replenishment:
 - Overview page for the planner
 - Time-dependent buffer levels
 - Visualize and support buffer positioning
 - Buffer monitoring in planning and execution – visibility and interactive planning

2019 - Product direction

- Finite, interactive demand-driven production scheduling
- Automated sequencing via optimizers and intelligent algorithms
- High-performance plant forecasting for capacity, production, purchasing, and internal material flow

- Demand-driven order release and operations mgmt. including capacity and component availability check
- Self-regulating production schedule, supporting the planner by automated decisions and feedback loops based on machine learning algorithms
- Collaborative manufacturing for seamless integration of manufacturing preparation and execution across the supply network

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: manufacturing (5/5) – quality management

1709 - Recent innovations*

Quality inspection

- Manage usage decisions in quality management
- Manage inspection overview for quality technicians
- Manage inspection overview for quality engineers
- <u>Document handling for master data and usage</u> decisions in quality management (QM)
- Analytics for quantitative results with graphics and statistical parameters in QM

Complaint management

 Provide analytical information, such as defects, for different roles in QM

2018 - Planned innovations

Quality inspection

- Record results during production on a regular basis
- Manage quality level in order to tighten or reduce inspection scope
- Use statistical process control to monitor and control production processes

Complaint management

- Manual recording and monitoring of defects
- Manage quality tasks

Quality planning

 Manage settings in quality info record for procurement

Quality improvement

 Evaluate and analyze key figures for quality management data

2019 - Product direction

Complaint management

- Machine learning capabilities to enable a guided and proactive complaint process, supported by proposed issue resolutions
- Standardization of issue resolution procedures ("eight disciplines" [8D]) and corrective and preventive actions, including root cause analysis, such as "5-why analysis" and collaborative scenarios

Quality improvement

- Enhanced overview pages containing analytical information as entry points for different roles in QM
- New evaluations for quality management data

2020 - Product vision

Quality engineering

- Reduction of quality costs and sustainable prevention of defects based on an advanced closed-loop inspection planning process that includes:
- Failure mode and effects analysis (FMEA) and control plan
- Production part approval process (PPAP)
- Audit management
- Predictive quality management
- Simplified inspection planning process

Calibration inspection

Streamlined test equipment management

^{*} See <u>feature scope description</u> of SAP S/4HANA 1709 for full scope.

LoB: supply chain (1/2) – extended warehouse management

1709 - Recent innovations*

- SAP Extended Warehouse Management in SAP S/4HANA – advanced integration to quality management
- SAP Extended Warehouse Management in SAP S/4HANA – improved warehouse optimization – functionalities related to stock consolidation, pallet planning and picking improvements
- SAP Extended Warehouse Management in SAP S/4HANA – advanced e-commerce capability
- SAP Extended Warehouse Management in SAP S/4HANA – advanced labor management
- SAP Extended Warehouse Management in SAP S/4HANA – core data services viewbased analytics on outbound process

2018 - Planned innovations

- Improved user experience with new SAP Fiori apps related to:
 - Task confirmation
 - Inventory counting
 - Outbound packing
 - E-commerce returns in SAP S/4HANA
- Advanced QM integration
- Additional embedded analytics for EWM in area labor management reporting
- Improved integration to inventory management related to customer-owned stock and separation of storage location assignment
- Continued improvements related to:
 - RF and voice handling
 - Existing SAP Fiori apps
 - Monitor nodes and methods
- Comprehensive integration to defense related to integration of Item Unique Identification data and Ammunition management

2019 - Product direction

- Automotive extensions for SAP Extended Warehouse Management:
 - Just in time/just in sequence (JIT/JIS)
 - Repetitive manufacturing
 - Support "supply to line"
- Comprehensive integration to mill industry solutions by supporting to batch-specific unit of measure
- Extended supply chain execution integration scenarios with transportation management system from SAP
- Extended material flow capabilities to perform:
 - Physical inventory for handling units
 - New work centers UI
 - Sequencing
- Comprehensive integration to global track and trace
- Extended warehouse management delivered in SAP S/4HANA Cloud

- Enhanced labor planning capabilities
- Further industry-specific scenarios
- Further SAP Fiori apps for SAP Extended Warehouse Management
- Advanced analytics for SAP Extended Warehouse Management
- New IoT scenarios

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: supply chain (2/2) – transportation management

1709 - Recent innovations*

- Provide system and process integration within SAP S/4HANA Enterprise Management
- Harmonize transportation master data and customizing
- Provide user interface for SAP S/4HANA
- Manual planning and optimization
- Transportation management: real-time embedded analytics

2018 - Planned innovations

- Continued system and process integration
- Advanced driver planning
- Integration into global track and trace
- ETA calculation based on actual data
- Starting collaboration through logistics business network
- First version of process coverage of LE-TRA functionality
- Industry enhancements for retails
- Stand-alone version of SAP S/4HANA for TM
- Migration tools for SAP TM to SAP S/4HANA for TM

2019 - Product direction

- Direct store delivery
- Second version of process coverage of LE-TRA functionality
- Integration to external planning and cooperation between shipper, forwarder, and carrier
- Starting common transportation scheduling
- Simplified integration of SAP TM and SAP EWM embedded in SAP S/4HANA
- Integrated supply chain planning and execution, such as forecasting or real-time strategic planning and simulation
- First version of SAP S/4HANA Cloud for TM

2020 - Product vision

 Additional innovations will be added based on market need

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: sales (1/3)

1709 - Recent innovations*

Sales order management

- My sales overview page for internal sales representatives in SAP S/4HANA (SAP Fiori)
- Track the status of your sales orders and take action
- Display debit and credit memo requests and the process flow for billing documents from the "customer 360-degree" view in SAP S/4HANA
- Sales inquiry processing in SAP S/4HANA manage sales inquiries
- Resolve payment card issues in SAP S/4HANA
- Schedule the output of sales documents with new output management functionality in SAP S/4HANA
- List incomplete sales documents
- <u>List sales documents by object status in SAP S/4HANA (SAP Fiori for internal sales representatives)</u>

Sales, returns, and refund management

Accelerated returns processing in SAP S/4HANA

 manage customer returns and orders without charge

Sales master data management

 Sales master data management in SAP S/4HANA: manage customer material information records

2018 - Planned innovations

Sales order management

- Simplified sales order creation (SAP Fiori for internal sales representatives)
- Execute mass changes for sales orders in SAP S/4HANA
- Approval workflow for credit memo requests in SAP S/4HANA
- New approval workflows and notifications for sales processes in SAP S/4HANA
- Maintain item proposals for sales documents in SAP S/4HANA (SAP Fiori for internal sales representatives)
- <u>List and release sales documents that have</u> discrepancies between customer-expected price and actual price in SAP S/4HANA (SAP Fiori for internal sales representatives)

2019 - Product direction

Sales order management

Enablement of mass changes for sales order items

Intelligent digital core

 Machine learning and natural language processing to support the sales and billing department for a higher level of automated processes and smarter analytics

Extensibility

 Use whitelisted core data services views to create custom views and business logic

User experience

 Complete adoption of the latest SAP Fiori 2.0 capabilities and the digital assistant (SAP CoPilot)

2020 - Product vision

Intelligent digital core

Machine learning and natural language processing to support the sales and billing department for a higher level of automated processes and smarter analytics

Efficiency of sales operations

 Improved sales efficiency by provisioning of a lowtouch order and contract management

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: sales (2/3)

1709 – Recent innovations*

Analytics

- Sales management overview page for sales managers in SAP S/4HANA (SAP Fiori)
- Analyze your sales order confirmations
- Analyze your delivery performance in SAP S/4HANA
- Analyze your sales volume
- Maintain sales planning data
- New key performance indicators for sales contracts, customer returns, outbound deliveries, and credit and debit memo requests

Billing and invoicing

- Convergence of external billing data, sales orders, sales contracts, debit memo requests, and outbound deliveries into one invoice in SAP S/4HANA
- Create temporary billing document drafts in SAP S/4HANA
- Manage invoice lists (SAP Fiori for billing clerks)

2018 - Planned innovations

Analytics

 Compare planned and actual sales data in SAP S/4HANA

Billing and invoicing

 Preliminary billing documents in SAP S/4HANA

2019 - Product direction

Analytics and planning

- Full coverage of analytical and planning features embedded in SAP S/4HANA core:
 - Support for analysis along the core sales business objects
 - Planning features that keep track of internal sales goals
 - Simpler creation of queries and graphics to the KPIs that matter most of the businesses
- Creation of customer-specific reports by using whitelisted core data services views to access business process data

2020 - Product vision

Analytics and planning

Threshold alerts when defined situations occur

^{*} See <u>feature scope description</u> of SAP S/4HANA 1709 for full scope.

LoB: sales (3/3)

1709 – Recent innovations*

Integration

- Integration of SAP digital payments add-on with SAP S/4HANA Sales
- Transportation management in SAP S/4HANA 1709
- Integration of letter of credit in treasury management with SAP S/4HANA Sales
- Legal control for sales orders and outbound deliveries for international trade
- OData API for sales orders (read) (SAP S/4HANA)
- OData API for sales contracts (read) (SAP S/4HANA)
- OData API for sales quotations (read) (SAP S/4HANA)
- OData API for sales inquiries read (SAP S/4HANA)
- OData API for credit memo requests (read) (SAP S/4HANA)
- OData API for debit memo requests (read) (SAP S/4HANA)
- OData API for return orders (read) (SAP S/4HANA)
- OData API for customer material information records (read) (SAP S/4HANA)

2018 - Planned innovations

Integration

- OData API for sales orders (create, update, read) (SAP S/4HANA)
- <u>OData API for sales contracts (create, delete, and update) (SAP S/4HANA)</u>
- OData API for sales quotations (create, delete, and update) (SAP S/4HANA)
- OData API for sales inquiries (create, delete, and update) (SAP S/4HANA)
- OData API for credit memo request (create, update, delete) (SAP S/4HANA)
- <u>OData API for debit memo request (create, update, delete)</u> (SAP S/4HANA)
- <u>OData API for customer material information</u> records (create, delete, and update) (SAP S/4HANA)
- OData API for billing document requests (create, read, and delete) (SAP S/4HANA)
- OData API for billing document (create, read, and cancel) (SAP S/4HANA)

2019 - Product direction

Integration

- Integration of SAP Hybris Commerce with SAP S/4HANA Sales
- Integration of SAP Hybris Marketing with SAP S/4HANA Sales
- Ariba Network seller-side integration for SAP S/4HANA
- Integration of SAP Fieldglass solutions with SAP S/4HANA Sales

2020 - Product vision

Further innovations will be added according to market need

27

^{*} See <u>feature scope description</u> of SAP S/4HANA 1709 for full scope.

LoB: service – customer management

1709 - Recent innovations*

SAP S/4HANA for customer management (FSP01)

- Service core: service order mgmt.:
 - Service request
 - Service order
 - Service confirmation
 - Interaction center
- Replication-free and harmonized master data for:
 - Business partner
 - Material
 - Equipment
 - Org data
- System consolidation
 - Switch to SAP S/4HANA engines for pricing and billing
 - One customizing
 - Visual harmonization with SAP S/4HANA

2018 - Planned innovations

SAP S/4HANA for customer management

- Service core
 - Service contract mamt.
 - Installed base mgmt.
 - Service (package) quotation mgmt.
 - Case management
 - SAP Leonardo capabilities integration for ticket and e-mail categorization
- Sales core
 - Activity: tasks and appointments
 - Calendar
- Replication-free and harmonized master data for:
- Functional locations
- Product bundles
- System consolidation
 - SAP Fiori launchpad integration mode

2019 - Product direction

SAP S/4HANA for customer management

- Service core
 - Returns and complaints mgmt.
 - Planned service
 - Qualification notification
 - Counter and readings
- Sales core
 - Lead
 - Opportunity
- System consolidation
 - Master data migration tools

2020 - Product vision

SAP S/4HANA for customer management

- Service core
 - In-house repair
 - Installation mgmt.
 - Plant maintenance (PM) integration
- Material movement
- Sales core
 - Territory mgmt.
 - Call lists
 - Desktop connection
- System consolidation
 - Transactional data migration tools

28

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: commerce – SAP Hybris Billing

1709 - Recent innovations*

- Additional billing-plan capabilities simulation and exceptions
- SAP Fiori: KPIs, revenue assurance, customer fact sheets for accounts payable/receivable managers (FI-CA)
- SAP Fiori management of clarification cases, credit/debit memos and billing plans for invoicing specialists (convergent invoicing)
- Integration of SAP Hybris Billing and SAP Hybris Commerce, release 2.4

2018 - Planned innovations

- Improved support for digital payments: customer financial integration to payment service providers via the digital payment hub in SAP Cloud Platform
- Integration with SAP Hybris Revenue Cloud for subscription and usage billing
- Invoicing direct acquisition of consumption items from convergent mediation
- Customer financial integration to SAP Bank Communication Management

2019 - Product direction

- SAP Hybris Billing in SAP S/4HANA add-ons for sales and service
- Collaborative draft invoice cockpit for product bundles incorporating converging billing relevant data from various sources
- Financial simulation of subscription and usage changes (hierarchy, configuration,...)
- Best price billing
- Cost consideration of consumption for controlling/profitability analysis
- Cost-based activity charging and intercompany billing/settlement
- Customer payment portal on SAP Cloud Platform connected to customer financials management

- Continued improvements in usability and realtime analytics
- Further adoption of artificial intelligence, machine learning, and predictive models (such as collection strategies, error detection, and correction)
- Support for blockchain ecosystem

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: finance (1/3) – key process innovations

1709 - Recent innovations*

Enterprise consistency through universal journal

Subsequent implementation of document split

Parallel valuation

Cost of goods manufactured

Lease accounting for lessee contracts

- Further enhancements regarding International Financial Reporting Standards (IFRS) 16 and U.S. GAAP ASC 842
- Integration with legal content management

Financial planning

- Content for basic sales planning as well as activity price and consumption planning
- Product cost calculation

Business reporting content

- Profitability and cash flow
- Key figure content to support customer-specific KPIs
- Flexible hierarchy handling for cost center, profit center and company code
- Advanced compliance reporting

Consolidation

Validation at source for consolidation

Financial shared service

Enhance process automation in shared services

2018 - Planned innovations

Leveraging soft close and prediction

- Accounting for incoming sales orders
- First commitment scenarios

Parallel valuation

Multiple currencies for follow-on processes

Financial planning

- Plan data allocations reworked to update new universal planning persistency
- Connectivity of SAP Analytics Cloud to on-premise planning environment

Business reporting content

Enhancements for flexible hierarchies

Consolidation

- Intercompany reconciliation report
- Consolidation of plan data

2019 - Product direction

Parallel value flow

- Enhance multiple valuation and currencies as basis for consolidation
- Subsequent implementation of currencies

Financial planning

- Integration with SAP Integrated Business Planning for sales and operations
- Adoption of further planning processes to new universal planning persistency

Organizational change

Impact analysis

Business reporting content

Value chain reporting

2020 - Product vision

Accounting standards

 Adoption of future legal requirements of accounting principles

Leveraging soft close and prediction

Early predictive insight into business trends

Parallel value flow

- Enhancements for service business and enablement of industry scenarios
- Support for parallel cost allocations

Financial planning

End-to-end profitability simulation

Organizational change

Orchestration change cockpit

* See <u>feature scope description</u> of SAP S/4HANA 1709 for full scope.

This is the current state of planning and may be changed by SAP at any time.

30

LoB: finance (2/3) – key process innovations

1709 - Recent innovations*

Treasury and risk management

- Optimize foreign currency management process
- Finalization of foreign currency hedge management and accounting (adoption of IFRS 9 changes)
- Integration of sales and distribution with trade finance

Central finance

- Extended cost object reporting scenarios
- Support shared services with central processes in accounts payables and accounts receivables

Integration with business networks

Additional integration scenarios for SAP Fieldglass solutions

Digital transformation with contract accounting

Improved appliance for Big Data companies

Cash management

- Integration with SAP Bank Communication Management for cash position
- Cash Flow Analyzer (SAP Fiori app)
- Integration with more data sources like payment request and payment order
- Simplified dual control process for bank account management

2018 - Planned innovations

Treasury and risk management

 Basic coverage of legislations in foreign currency hedge management and accounting for U.S. GAAP

Central finance

- Central reporting for profit centers and commitments*
- Replication and reporting for projects*
- Improvements and simplifications for onboarding and operations
- Provide finance data hub for real-time consolidation

Integration with business networks

- Purchase order accruals
- Cost center integration with SAP SuccessFactors
 Employee Central and SAP SuccessFactors Employee
 Central Payroll

Real estate

- Optimizations for high-volume processes
- Lease questionnaire

Cash management

- Enhance liquidity forecast by integration of real estate data
- Snapshot of historic cash position report
- Bank fee import and report
- Correspondence for bank account management (on premise)

2019 - Product direction

Treasury and risk management

- Enhancement of treasury reporting capabilities
- Expand coverage of legislations in foreign currency hedge management and accounting for U.S. GAAP

Central finance

- Empower additional central processes and reporting scenarios
- Enable cross-industry scenarios

Real estate

Integration of Ariba Network for procurement of real estate services

Cash management

- Enhance liquidity forecast with integration of project system data
- Increase automation of bank account management with electronic bank account management (eBAM)
- Provide predictive liquidity forecast utilizing machine learning
- Generate cash flow statement based on direct method

2020 - Product vision

Central finance

- Central close including soft close and prediction
- Additional central processes
- Further financial reporting scenarios

Digital transformation with contract accounting

Integration of SAP Bank Communication Management

Treasury and risk management

- Adoption of future legal requirements
- Treasury analytics

Cash management

Bank relationship dashboard

Integration with business networks

 Comprehensive integration scenarios with SAP Ariba, SAP Fieldglass, SAP SuccessFactors, and Concur solutions

This is the current state of planning and may be changed by SAP at any time.

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: finance (3/3) – extension to the digital core**

1709 - Recent innovations*

Leverage SAP Cloud Platform for finance

- SAP RealSpend for new scenario addressing human resources aspects
- Bank statement processing integrating SAP Cash Application
- SAP S/4HANA Cloud for customer payments machine learning and credit card payment
- SAP S/4HANA Cloud for credit integration
- SAP digital payments add-on integration to payment service providers
- Evolve capabilities of SAP Financial Statement Insights
- Software development kit enabling partners and customers to extend the digital core

Leverage SAP Cloud for Real Estate for corporate real estate management

- Provide efficient spaces and workplaces to support the core business
- Extended contract management

2018 - Planned innovations

Adoption of legal changes in revenue accounting

- Functional round-offs for IFRS 15 and ASC 606
- Improved support for disclosures

Leverage SAP Cloud Platform for finance

- Application for goods receipt and invoice receipt monitor
- SAP RealSpend for developing additional expense management scenarios
- Credit management cockpit
- SAP Financial Statement Insights smart alerting
- SAP S/4HANA Cloud for credit integration: integration of additional credit agencies
- SAP digital payments add-on enablement of additional payment service providers and bitcoin payments

Leverage SAP Cloud Platform for treasury

Integration of Trading Platform 360T – inbound and outbound services

Leverage SAP Cloud for Real Estate for corporate real estate management

- Integration of Ariba Network
- Further integration of partner cloud solutions
- Deliver extended KPI management
- Scenarios for employee productivity

Leverage SAP Cloud Platform for consolidation

 Enhanced data collection for nonfinancial measures and nonintegrated subsidiaries

2019 - Product direction

Adoption of legal changes in revenue accounting

Increase automation for IFRS 15 or ASC 606 requirements

Leverage SAP Cloud Platform for finance

 Functional enhancements for delivered applications built on SAP Cloud Platform utilizing game-changing transformations

Leverage SAP Cloud for Real Estate for corporate real estate management

Leverage blockchain for real estate processes

2020 - Product vision

Leverage SAP Cloud Platform for finance

 Lights-out financial operations leveraging further machine learning scenarios powered by SAP Cash Application

Leverage SAP Cloud Platform for consolidation

Unified local and group close processes

This is the current state of planning and may be changed by SAP at any time.

^{**} Not part of SAP S/4HANA shipment; requires additional products.

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

LoB: human resources

1709 - Recent innovations*

- Enablement of country transfer, concurrent employment and global assignment via multiple vendor usage
- Public API to interface employee data

2018 – Planned innovations

- Conversion of contingent worker to employee including supplier handling
- Enablement of activity-based time recording by using different accounting objects such as purchase order, internal order, cost center, work package, and WBS elements
- Enablement of approval process through use of My Inbox app for line and project managers
- Enhanced employee-related object page with information from other SAP applications or from public APIs, to give the user more business insights

2019 - Product direction

- Provide immediate insights for staffing and resource processes with integration of skills, licenses, and time-off information into SAP S/4HANA to help ensure the right people are in the right projects
- Supplier/vendor master data integration from SAP S/4HANA to SAP SuccessFactors solutions

2020 - Product vision

 Total workforce integration in SAP S/4HANA with the contingent worker determination in SAP Fieldglass solutions** to provide automatic information and workforce proposals for project managers based on unexpected resource changes

Further innovations will be added according to market need

^{**} Not part of SAP S/4HANA shipment; requires additional products.

Cross-topics



Master data management (1/2) – master data governance

1709 - Recent innovations*

- Cross-domain framework enhancements enabling archiving of change requests, integrated object creation in the hierarchy-processing UL and the like
- Material enhanced data model covering shelf-life data and service parts management
- Business partner (customer or supplier) scope enhancements supporting documents, payment cards, and more
- Support for contract account
- Classification in central governance
- Classification in consolidation (on premise)
- Consolidation of active records (on premise)
- Support of business partner relationships in consolidation (on premise)
- Support of business partner relationships in mass processing (on premise)
- <u>Data quality control and remediation of product data (on premise)</u>

2018 - Planned innovations

Consolidation

 Support multiple vendor and customer assignments of business partners

Mass processing

- Support multiple vendor and customer assignments of business partners
- Support classification data of materials, customers, and vendors

Central governance of financial data

- Central governance of internal orders
- Central governance of contract accounts (FI-CA)
- Adoption of SAP S/4HANA universal journal with G/L accounts as the basis for cost element data

End-to-end integration scenarios

 SAP Hybris Commerce, SAP Hybris Billing, SAP Hybris Cloud for Customer, SAP Ariba solutions

Central governance of material data

 Adoption of SAP S/4HANA simplifications and industryspecific enhancements

Central governance of business partners

- Use newly created multiple cust./vend. with different addresses in partner functions
- Integration with SAP Credit Management (FSCM)

SAP HANA-based analytics

- Analysis and reporting capabilities for master data governance and consolidation processes
- Integration with data enrichment

2019 - Product direction

- Use master data as a foundation to prepare for the next steps of the enterprise software journey
- Mobilize the business with consumer-grade user experiences and efficient master data access
- Attain high-quality master data by using SAP HANA to address IoT and Big Data challenges with an enhanced degree of automation that leverages predictive analytics and machine learning
- Support system landscape simplification and the move to the cloud with synchronized master data across ondemand and on-premise solutions

2020 - Product vision

- Complete core master data governance and management capabilities for the entire master data lifecycle
- Leverage strategic trends such as business networks and the cloud to provide trusted master data as the DNA of the enterprise and the extended value

35

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

This is the current state of planning and may be changed by SAP at any time.

Master data management (2/2) – master data maintenance

1709 - Recent innovations*

- Enhancement of retail master with the creation of "generic article," "structured article along with seasons," "product hierarchy," and "article hierarchy" integrations
- Object page navigation for product master (DC object page, store object page, and article object page)
- Product master enhancements through copilot "quick create" and "quick view" functionalities
- Easier creation of master data using "compressed create" functionality and improved payment card maintenance (on premise)
- Disabling support for HCM in the "customer/vendor migration" report
- Mass maintenance of master data (on premise)

2018 - Planned innovations

- Basic duplicate identification
- Master data directories with drill-down capabilities
- Enhancement of integration scenarios
- Support of product information management (PIM) solutions (data provisioning and integration)
- End-to-end integration with SAP Hybris and SAP Ariba solutions
- Two-tier ERP for SAP S/4HANA
- Support of configuration for products
- Support of classification for business partner and product master
- Integration with data enrichment

2019 - Product direction

- Data ownership defines which data is maintained centrally or locally, and likewise persisted and distributed
- Support for capabilities within the Internet of Things
- Extended capabilities for master data maintenance using machine learning

- SAP S/4HANA as the central provider of consolidated, central master data (product and business partner) for the complete SAP world and beyond
- Product and business partner supported in all SAP S/4HANA solutions as generic entities

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

Additional cross-topics, embedded analytics frameworks and tools

1709 - Recent innovations*

Add-ons**

- For add-ons available for SAP S/4HANA, see SAP Note 2214409
- For information on third-party add-ons, see SAP Note 2392527

Personalized search

Enable personalized search tracking option

Output management

SAP Fiori app for managing output requests

Business event handling

Subscription and event gueue

Responsibility management

 Determine flat list/team of recipients for a workflow step process

Information lifecycle management

 Maintain configurations for the information lifecycle manager rule generator

Analytics

- Dynamic date functions for time selections
- KPI runtime
- Report modelling apps
- Virtual data model browse

2018 - Planned innovations

App search

Enterprise search, improve performance

Output management

- Data retention
- Improved business rule framework plus (BRFplus) lifecycle
- SAP Fiori app for managing logos and texts for master form templates

Transaction search

 Enable searches for all SAP transactions from the SAP Fiori launchpad

Custom dictionaries

App for text analysis and unstructured data

Analytics

KPI modeler app

2019 - Product direction

Integration: easy implementation of integration scenarios

- Use of best-practice content for easier integration
- Easier adaptation of integration content to the customer needs

Integration: simplified maintenance and monitoring of integration scenarios

- Focus on few tools for both cloud and on premise
- Use cloud principles, such as key-user adaptation, business-level error handling, and automated monitoring for on premise

Further innovations will be added according to market need

2020 - Product vision

This is the current state of planning and may be changed by SAP at any time.

Further innovations will be added according to market need

^{**} Not part of SAP S/4HANA shipment; requires additional products.

^{*} See **feature scope description** of SAP S/4HANA 1709 for full scope.

Extensibility and localization

1709 - Recent innovations*

In-app extensibility

- Support field extensibility of nonvisible SAP standard fields in custom forms and gueries
- Inventory: extensibility objects in one transaction including their changes and their dependencies
- New features for custom business objects:
 - Define associations from a custom field to a custom business object

Side-by-side extensibilities

 SAP S/4HANA SDK to support building applications for SAP S/4HANA on SAP Cloud Platform

Localization

- Bank reconciliation for China (on-premise version of SAP S/4HANA)
- Consumer and mortgage loan (CML) localization for Hungary
- Advanced compliance reporting

2018 - Planned innovations

In-app extensibility

- Support analytics key user processes from custom core data services view to published KPI and report
- Extensibility cockpit as central repository for extensibility capabilities of SAP S/4HANA items, in order to:
 - Get information about extendable objects
 - Get details of extendable objects depending on object type
- New features for custom fields:
 - Select released core data services views to associate in custom fields
- New features for custom business objects:
 - Select released core data services views to associate in custom business objects

Side-by-side extensibilities

Support custom fields of SAP APIs (OData, SOAP)

Integration technology

 SAP Cloud Platform view replication: replication of SAP S/4HANA data to SAP Cloud Platform for building apps

Localization

Advanced compliance reporting

2019 - Product direction

Further innovations will be added according to market need

2020 - Product vision

Further innovations will be added according to market

38

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

This is the current state of planning and may be changed by SAP at any time.

Integration (1/5)

1709 - Recent innovations*

Sourcing and procurement

- Purchase order and Invoice processing with integration to SAP Transportation Management
- Simple request for quotation process with integration option to quote automation in Ariba Network
- Procurement APIs for side-by-side extensibility

R&D/engineering

 SAP Transportation Management integration for dangerous goods

Commercial project management

- Simplified integration with SAP Portfolio and Project Management
- Enhanced API coverage for integration with CRM solution supporting the bidding process

2018 - Planned innovations

Sourcing and procurement

- Integration of SAP Ariba Buying with SAP S/4HANA
- Simplified service procurement integrated with preceding and subsequent business processes in SAP S/4HANA and SAP Fieldglass solutions
- End-to-end smart contracting scenario integrating with legal content assembly on SAP Cloud Platform to generate, process, and archive legal content based on preapproved clauses and templates

R&D/engineering

- Integration into CPQ
- Integration of new configuration along key processes
- Integration of routing with simulation environment
- Integration of new configuration into classification
- Integration of classification SAP Fiori UX into further objects
- OData API for PLM BOM create and update
- APIs for versioned bill of material

Asset Management

- Integration between EAM and SAP Asset Intelligence Network in SAP S/4HANA
- EHS: Basic content provider integration

2019 - Product direction

R&D/engineering

- Discrete and process industries IoT/equipment model integration into SAP Asset Intelligence Network/IoT for handover of engineering data
- Discrete and process industries cloud CAD integration
 - SAP Engineering Control Center for cloud
 - TDM integration
- Product compliance End-to-end integration of SDS management services with SAP EHS Regulatory Documentation OnDemand

Asset management

EHS: Extended content provider integration

2020 - Product vision

R&D/engineering

- Integration into SAP Asset Intelligence Network and SAP Digital Twin for business
- End-to-end integration of SDS management services with SAP EHS Regulatory Documentation OnDemand

Commercial project management

 Seamless integration with SAP Analytics Cloud to cover business planning and forecasting

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

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Integration (2/5)

1709 - Recent innovations*

Manufacturing

- OData API for physical inventory (read, create, enter count, and post) (on premise)
- OData API for material document (read) (on premise)
- OData APIs for product allocation object and product allocation sequence
- Reduced total cost of ownership through simplified order integration with embedded SAP Transportation Management

Supply chain

- SAP Extended Warehouse Management in SAP S/4HANA – advanced integration to quality management
- SAP TM Provide system and process integration within SAP S/4HANA Enterprise Management
- Integration of transportation management and extended warehouse management in SAP S/4HANA

2018 - Planned innovations

Supply chain

- EWM improved integration to inventory management related to customer-owned stock and separation of storage location assignment
- EWM comprehensive integration to defenserelated to integration of Item Unique Identification data and ammunition management
- TM continued system and process integration
- TM integration into global track and trace

Master data management

- Integration with data enrichment
- Enhancement of integration scenarios
- Support of product information management (PIM) solutions (data provisioning and integration)
- End-to-end integration with SAP Hybris and SAP Ariba solutions
- Two-tier ERP for SAP S/4HANA (business partner, product)

2019 - Product direction

Manufacturing

 Logistics execution, outbound and inbound processing – integrate IoT-driven track and trace scenarios

Supply chain

- EWM comprehensive integration to mill industry solutions by supporting to batchspecific unit of measure
- EWM extended supply chain execution integration scenarios with SAP TM
- EWM comprehensive integration to global track and trace
- TM Integration to external planning and cooperation between shipper, forwarder and carrier
- TM Simplified integration of SAP TM and SAP EWM embedded in SAP S/4HANA
- TM Integrated supply chain planning and execution, such as forecasting or real-time strategic planning and simulation

2020 - Product vision

Manufacturing

- Inventory management IoT integration
- Enhanced collaboration via integration scenarios for manufacturing engineering in design networks

Service – customer management

- SAP S/4HANA for customer management
- Service core
 - Installation mgmt.
 - Plant maintenance (PM) integration

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

This is the current state of planning and may be changed by SAP at any time.

Integration (3/5)

1709 - Recent innovations*

Sales

- Integration of SAP digital payments add-on with SAP S/4HANA Sales
- Transportation management in SAP S/4HANA 1709
- Integration of letter of credit in treasury management with SAP S/4HANA Sales
- Legal control for sales orders and outbound deliveries for international trade
- OData API for sales orders (read) (SAP S/4HANA)
- OData API for sales contracts (read) (SAP S/4HANA)
- OData API for sales quotations (read) (SAP S/4HANA)
- OData API for sales inquiries read (SAP S/4HANA)
- OData API for credit memo requests (read) (SAP S/4HANA)
- OData API for debit memo requests (read) (SAP S/4HANA)
- OData API for return orders (read) (SAP S/4HANA)
- OData API for customer material information records (read) (SAP S/4HANA)

Commerce

 Integration of SAP Hybris Billing and SAP Hybris Commerce, release 2.4

2018 - Planned innovations

Sales

- OData API for sales orders (create, update, read) (SAP S/4HANA)
- OData API for sales contracts (create, delete, and update) (SAP S/4HANA)
- OData API for sales quotations (create, delete, and update) (SAP S/4HANA)
- <u>OData API for sales inquiries (create, delete, and update)</u> (SAP S/4HANA)
- OData API for credit memo request (create, update, delete) (SAP S/4HANA)
- OData API for debit memo request (create, update, delete) (SAP S/4HANA)
- OData API for customer material information records (create, delete, and update) (SAP S/4HANA)
- OData API for billing document requests (create, read, and delete) (SAP S/4HANA)
- OData API for billing document (create, read, and cancel) (SAP S/4HANA)

Commerce

- Improved support for digital payments: customer financial integration to payment service providers via SAP Cloud Platform digital payment hub
- Integration with SAP Hybris Revenue Cloud for subscription and usage billing
- Customer financial integration to SAP Bank Communication Management

2019 - Product direction

Sales

- Integration of SAP Hybris Commerce with SAP S/4HANA Sales
- Integration of SAP Hybris Marketing with SAP S/4HANA
- Ariba Network seller-side integration with SAP S/4HANA
- Integration of SAP Fieldglass solutions** with SAP S/4HANA Sales

2020 - Product vision

Further innovations will be added according to market need

^{**} Not part of SAP S/4HANA shipment; requires additional products.

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^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

Integration (4/5)

1709 - Recent innovations*

Finance

- Integration with legal content management
- Integration of sales and distribution with trade finance
- Additional integration scenarios for SAP Fieldglass solutions
- Integration with SAP Bank Communication
 Management for cash position
- Integration with more data sources such as payment request and payment order
- SAP S/4HANA Cloud for credit integration
- SAP digital payments add-on integration to payment service providers

Human resources

Public API to interface employee data

2018 - Planned innovations

Finance

- SAP S/4HANA Cloud for credit integration: integration of additional credit agencies
- Integration of trading platform 360T for inbound and outbound services
- Integration of Ariba Network
- Further integration of partner cloud solutions
- Enhance liquidity forecast by integration of real estate data
- Integration with business networks:
 - Purchase order accruals
 - Cost center_integration with SAP SuccessFactors Employee Central and SAP SuccessFactors Employee Central Payroll
 - Enhance liquidity forecast by integration of real estate data

Human resources

 Enhanced employee-related object page with information from other SAP applications or from public APIs, to give the user more business insights

2019 - Product direction

Finance

- Integration with SAP Integrated Business Planning for sales and operations
- Integration of Ariba Network for procurement of real estate services

Human resources

- Provide immediate insights for staffing and resource processes with integration of skills, licenses, and time-off information into SAP S/4HANA to help ensure the right people are in the right projects
- Supplier/vendor master data integration from SAP S/4HANA to SAP SuccessFactors solutions

2020 - Product vision

Finance

- Contract accounting integration with SAP Bank Communication Management
- Comprehensive integration scenarios with SAP Ariba solutions, SAP Fieldglass solutions, SAP SuccessFactors solutions, and Concur solutions

Human resources

 Total workforce integration in SAP S/4HANA with the contingent worker determination in SAP Fieldglass solutions** to provide automatic information and workforce proposals for project managers based on unexpected resource changes

^{*} See <u>feature scope description</u> of SAP S/4HANA 1709 for full scope.

Integration (5/5)

1709 - Recent innovations*

Oil and gas

- SAP Integrated Business Planning and
- SAP Trader's and Scheduler's Workbench integration of forecast data for bulk and rack movements
- Multichannel ticketing (application integration interface, SAP Fiori apps online, and mobile offline ticketing solution)
- Integration of oil functionality with commodity management

2018 - Planned innovations

Oil and gas

- SAP Integrated Business Planning and
- SAP Trader's and Scheduler's Workbench integration for integrated business planning (IBP) supply-based deployment proposals
- Global simulations for inventory planning workbench to improve collaboration and integration with IBP and visualization
- Support of cloud scheduling scenarios with and without integration to on-premise back-end system
- Integration of third-party data for supply chain visualization
- Upstream, volumetric, and revenue accounting enabling integration into third-party product and extend into enterprise functions

Retail and fashion foundation

EWM integration enhancements for tied empties

Financial services - banking

 Integration: open banks core systems with banking APIs from SAP for fintechs (for example, according to PSD2 regulations)

Public services

 Business networks – Concur solutions: integration of travel and expense to grant and fund budget control and encumbrance process

2019 - Product direction

Automotive

- Next-generation just-in-time processing integrated to FWM
- Next-generation just-in-time processing integrated to manufacturing execution

Insurance

- Integrate relevant insurance-specific processes of SAP S/4HANA with SAP Hybris Commerce for digital customer engagement
- Integrate relevant insurance-specific processes of SAP S/4HANA with insurance sales assistant app for Apple iOS

2020 - Product vision

Industrial machinery and components

 Integration of select product configuration intelligence features into SAP S/4HANA for advanced variant configuration

Banking

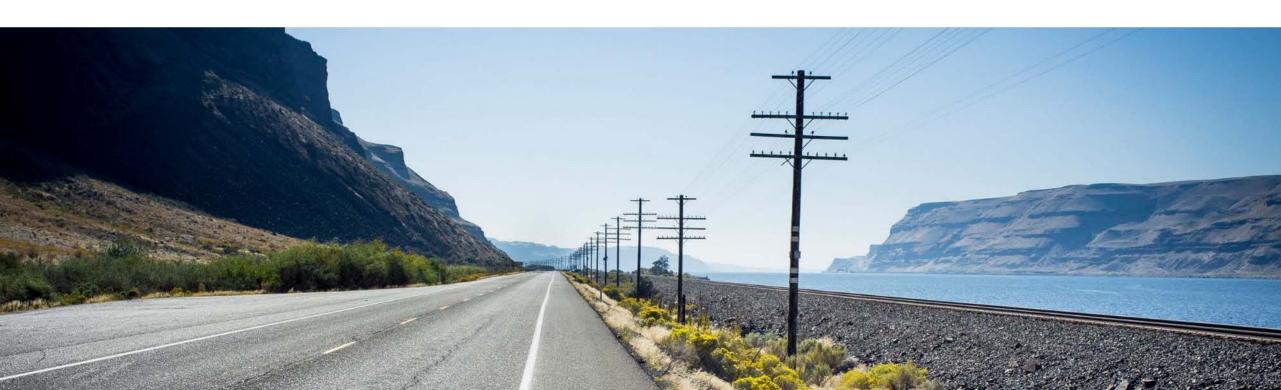
- Build SAP Leonardo capabilities for banking with core banking services as basis, enriched by partner- and customer-specific services, and integrate with bankingspecific processes in SAP S/4HANA
- Integrate banking-specific processes in cloud solutions from SAP (such as financing within SAP Ariba solutions)

Insurance

- Build SAP Leonardo capabilities for insurance with core insurance services as basis, enriched by partner- and customer-specific services, and integrate with insurancespecific processes in SAP S/4HANA
- Integrate insurance-specific processes in cloud solutions from SAP (such as risk coverage within SAP Ariba solutions)

^{*} See **feature scope description** of SAP S/4HANA 1709 for full scope.

Industries



Consumer industries (1/2) – retail and fashion

1709 - Recent innovations*

Wholesale fashion enablement

- Supply assignment (order allocation run)
- Demand and supply segmentation
- Logistic enhancements (multiple ship to order with collective shipment)

Merchandise management - master data

- Enhanced material/article harmonization
- Enhanced distribution scenarios for generic article and site master

Merchandise management - logistics

- Structured articles with full products
 - Master data maintenance
 - Support in logistical processes
- Support material requirement planning (MRP) areas for special processes

Merchandise management - in-store merchandising

- Transfer Products app
- Enhancements for SAP Fiori apps:
 - Order Products
 - Look Up Retail Products

Merchandise management - user interface

- Improved usability of selected key transactions in SAP Fiori for classical GUI
- Object pages for product, site, allocation table

2018 - Planned innovations

Retail and fashion foundation

- New object page for promotions and enhanced object pages for article and allocation
- Extended SAP Fiori app "Look Up Retail Products": map for nearby stores
- Enable SAP Fiori apps "Receive Products" and "Transfer Products" for mobile RFID antennas
- SAP Fiori app to manage single listings
- EWM integration enhancements for tied empties

Wholesale fashion enhancements

- Enablement of fashion contracts and enhanced stock segmentation strategies
- Supply demand optimization using supply assignment ("ARun") capabilities
- Flexible purchasing commitments
- Collection execution management

Enable manufacturing functionality for vertical retail and wholesale

- Stock segmentation within the manufacturing process
- Master production/planned order and workbench
- Intelligent services: feasibility analysis
- Markers and bundles.
- Smart products: made to measure

2019 - Product direction

Retail and fashion foundation

- Digitally assisted user experience for selected processes, such as for store associates
- "Lean" listing procedure
- SAP BW/4HANA content foundation (phased)
- Further extension of selected generic apps to support retail processes

Wholesale fashion enhancements

- Advanced supply demand optimization using supply assignment (ARun) capabilities
- Advanced flexible purchasing commitments
- Advanced collection execution management

Enhance manufacturing functionality for vertical retail and wholesale

- Process manufacturing for retail
- IoT: automated production of individual products
- Digitally assisted shop-floor processes

2020 - Product vision

Retail and fashion foundation

- Digitally assisted listing workbench
- Smart sales price calculation
- Digitally assisted user experience for additional retail processes in key roles
- Catch weight management support in retail
- SAP BW/4HANA content foundation (phased)

Wholesale fashion andmanufacturing

- Integrated planning scenario with IBP and fashion
- Enablement of Industry 4.0 manufacturing platform for fashion

^{*} See <u>feature scope description</u> of SAP S/4HANA 1709 for full scope.

Consumer industries (2/2) – wholesale | service industries: media

1709 - Recent innovations*

Wholesale - settlement management

Sales rebate processing, enhancement

- Settlement management enhancement

Service industries: media

Sales rebate processing

Establish media product hierarchy in product master records

Wholesale - settlement management

Settlement management – enhancement

2018 - Planned innovations

- Sales rebate processing enhancement
- Purchasing rebate processing enhancement

Wholesale – global trade management

 Improvements for the association management functionality from SAP Customer Engagement Initiative program projects

2019 - Product direction

Wholesale - settlement management

- Core business processes
- Enhancements for sales and purchasing rebate processing

2020 - Product vision

Wholesale - settlement management

- Core business processes enhancements
- Enhancements for sales and purchasing rebate processing

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

Discrete industries (1/2) – automotive and industrial machinery and components

1709 - Recent innovations*

Automotive

 Vehicle search with enterprise search on SAP HANA

2018 - Planned innovations

Automotive

Next-generation just-in-time supplies to customers

Industrial machinery and components

- Product configuration and pricing in sales and commerce, integrated to SAP S/4HANA for advanced variant configuration, pricing, and order management
- Product configuration intelligence in sales and commerce – popularity of options, based on configurations in SAP S/4HANA
- Product configuration intelligence in sales and commerce – search and intelligent ranking of sales documents, material variants, and configurable equipment
- Integration of select product configuration intelligence features into SAP S/4HANA for advanced variant configuration

2019 - Product direction

Automotive

- Enhancements in next-generation just-in-time supply to customer
- Next-generation just-in-time supply to production
- Next-generation just-in-time processing integrated to FWM
- Next-generation just-in-time processing integrated to manufacturing execution

Industrial machinery and components

- Product configuration intelligence in sales and commerce – data-driven guided configuration leveraging machine learning, based on historic configurations in SAP S/4HANA
- Product configuration intelligence in sales and commerce – needs-based product selection, budgetary cost/price estimation leveraging machine learning
- Product configuration intelligence in sales and commerce – data-driven cross- and up-selling of options
- Integration of select product configuration intelligence features into SAP S/4HANA for advanced variant configuration

2020 - Product vision

Automotive

- Leverage machine learning for next-generation iust-in-time processing
- Build IoT capabilities for next-generation just-intime processing

Industrial machinery and components

- Product configuration intelligence in sales and commerce – intelligent display and sequence of options, option recommendations, auto-complete configurations, auto-resolve conflicts
- Product configuration intelligence in sales and commerce – predict option impact on product lead time
- Product configuration intelligence in sales and commerce – digital configuration assistant to explain options, answer questions, and make recommendations
- Integration of select product configuration intelligence features into SAP S/4HANA for advanced variant configuration

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

Discrete industries (2/2) – aerospace and defense

1709 - Recent innovations*

2018 - Planned innovations

Further innovations will be added according to market need

2019 - Product direction

Aerospace and defense (A&D)

- Earned value management (EVM)
 - Replacement of current EVM solution (WBS and cost element level) with a solution that can be at the "end item P/N" level by cost element and WBS
- May include real-time A&D Grouping, Pegging and Distribution (GPD) pegging and real-time GPD cost distribution resulting in reporting of real-time EVM and delivery of smart alerts to mobile devices and production orders
- Contract flow down
 - U.S. DOD Defense Federal Acquisition Regulation Supplement (DFARS) requires Defense Property Accountability System (DPAS) ratings and contract terms be on purchase orders
 - This info is passed to the vendors and subordinate contractors requiring an automatic update solution to manage changes
 - Solution involves SAP S/4HANA and SAP Ariba solutions
- Next-generation GPD
 - Connect material requirements planning; production planning and detailed scheduling, earned value management, the as-built list (ABL), the complex assembly management system, and ATP functionality to GPD pegging.
 - Fill design gaps to encourage customer migration to the cloud with a universal solution
 - Provide serial number pegging
 - Provide simulation GPD

2020 - Product vision

Aerospace and defense

- Leverage restricted blockchain
 - Secure communication of sensitive info with vendors and customers (stakeholders) in the supply chain
 - Would include SAP S/4HANA and SAP Ariba solutions per DFARS requirements for DPAS ratings and contract flowdown

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

Financial services – banking, insurance

1709 - Recent innovations*

Banking

- SAP Loans Management for Banking, SAP S/4HANA edition – enterprise services in the area of "rollover"
- SAP Loans Management for Banking, SAP S/4HANA edition – enterprise services in the areas of "deferral" and "capitalization of overdue items"

Insurance

Banking

- Role-based overview page for the role insurance claims supervisor
- SAP Fiori app providing first notification of loss
- SAP Fiori launchpad as main entry point for different claims roles

 Amount field length extension – remediation of amount field length in the general ledger to support dedicated business processes in financial service industries for SAP S/4HANA

2018 - Planned innovations

- General ledger enhancements for banks (such as multicurrency accounting [MCA], error correction [ECS], and average daily balance [ADB])
- Integration: open banks core-systems with banking APIs from SAP for fintechs (for example, according to PSD2 regulations)

Insurance

- Amount field length extension remediation of amount field length in the general ledger to support dedicated business processes in financial service industries for SAP S/4HANA
- SAP Policy Management as an integrated part of SAP S/4HANA
- Predefined anchor points for linking business objects and transactions to the SAP Fiori launchpad

2019 - Product direction

Banking

- Continuous banking innovations based on cooperation with customers – for example, in the areas IS-B-BCA (bank current accounts), FS-CML (consumer and mortgage loans), and FS-CMS (collateral management)
- Innovate banking product portfolio by integrating new technologies like blockchain or machine learning

Insurance

- SAP Accounting for Insurance as an integrated part of SAP S/4HANA
- Integrate relevant insurance-specific processes of SAP S/4HANA with SAP Hybris Commerce for digital customer engagement
- Integrate relevant insurance-specific processes of SAP S/4HANA with insurance sales assistant app for Apple iOS
- Leverage specific principles of SAP S/4HANA for insurance and consolidate insurancespecific applications and functions into the digital core SAP S/4HANA
- Innovate insurance product portfolio by integrating new technologies such as blockchain, machine learning, and the Internet of Things

2020 - Product vision

Banking

- Leverage SAP S/4HANA–specific principles and continuously provide innovations in the banking area based on cooperation with customers
- Build SAP Leonardo capabilities for banking with core banking services as basis, enriched by partner- and customer-specific services, and integrate with banking-specific processes in SAP S/4HANA
- Integrate banking-specific processes in cloud solutions from SAP (such as financing within SAP Ariba solutions)

Insurance

- Build SAP Leonardo capabilities for insurance with core insurance services as basis, enriched by partner- and customer-specific services, and integrate with insurance-specific processes in SAP S/4HANA
- Integrate insurance-specific processes in cloud solutions from SAP (such as risk coverage within SAP Ariba solutions)

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

This is the current state of planning and may be changed by SAP at any time.

Public services (1/3) – public sector

1709 - Recent innovations*

Public sector management on premise

- Redefined user experience (UX) for the role of budget specialist:
- Master data and budget maintenance
- Interactive deep-dive analysis for funds management data
- Consumable virtual data model for funds management analytics (release 1)

Tax, benefits, and payment processing for public sector

- Redefined user experience (UX) for the role of customer service representative
- Additional content for multichannel foundation
- Enhanced interest handling in dunning processes
- Continuous improvements in core functions

Leverage SAP Analytics Cloud for public sector, digital boardroom

Connected products (SAP Cloud Platform)

 Leverage connection discovery for investigative case management

SAP Hybris citizen engagement accelerator

- Bill payments and API
- Relationships and permissions
- Forms prefilling
- WCAG 2.0 AA accessibility

2018 - Planned innovations

Public sector management on premise

- SAP Fiori apps for budget specialist funds management in SAP S/4HANA (enhancements)
- Consumable virtual data model for funds management analytics (release 2)
- Redefined user experience (UX) for the role of grant manager and grant specialist
- Consumable virtual data model for grantee mgmt
- IS-PS-XT enablement for SAP S/4HANA

Tax, benefits, and payment processing for public sector

- Smart business apps for overdue filers, registrations, and tax returns key figures
- "Search Form Bundle" SAP Fiori app
- Additional smart business apps for overdue filers, registrations and tax returns key figures
- Redefined user experience (UX) for accountant roles
- Interactive deep-dive analysis for tax, benefits, and payment processing data
- Improve penalty and interest calculation

Leverage CRM add-on for SAP S/4HANA

Integration to SAP SuccessFactors solutions

Additional features for concurrent employment

Integration to business networks – SAP Concur solutions

- Integration of Concur Travel & Expense to grant and fund budget control and encumbrance process
- SAP Hybris citizen engagement accelerator
- EU data privacy compliance
- Citizen assets
- Citizen dashboards

2019 - Product direction

Public sector management on cloud

- SAP S/4HANA Cloud for public sector (focus on U.S. state, local, and education market)
 - Funds management capabilities
 - U.S. fund accounting

Integration to SAP SuccessFactors solutions

Additional features for concurrent employment

Leverage CRM add-on for SAP S/4HANA

 Full leverage of social benefits, investigative case management, debt collections, and grantor management on SAP S/4HANA stack

Embedded omnichannel experience

- Tax community engagement (SAP Hybris solutions)
- Grantee engagement (SAP Hybris solutions)
- Citizen engagement for social protection (SAP Hybris solutions)

Machine learning and predictive business actions for government capabilities

Increase automation for government processes and embed digital assistant features

2020 - Product vision

Public sector management on cloud

- SAP S/4HANA Cloud for public sector
- Additional funds management capabilities
- Grantee management capabilities

Public sector management on premise

U.S. federal financials in universal journal

Public security platform

 Infrastructure with common data model, authorization concept, and API for all security-related applications

Leverage blockchain usage in governments

- Trusted workflows
- Document digitalization

Machine learning and predictive business actions for government capabilities

Increase automation for government processes and embed digital assistant features

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

Public services (2/3) – higher education and research

1709 - Recent innovations*

Student Lifecycle Management

- Optimization of the data model in SAP Student Lifecycle Management
- SAP Customer Connection improvement requests for SAP Student Lifecycle Management
- Continuous improvements to the My Requests app, the admissions portal, and the form designer tool

Leverage SAP Analytics Cloud for digital boardroom for higher education and research

Including financial grants

Leverage public sector management innovations

- Redefined user experience (UX) for the role of budget specialist:
- Master data and budget maintenance
- Interactive deep-dive analysis for funds management data
- Consumable virtual data model for funds management analytics (release 1)

2018 - Planned innovations

SAP Student Lifecycle Management

- Generic form designer tool reuse of groups of fields
- SAP Fiori app "My Exams for Student Role"
- Optimization of the data model in SAP Student Lifecycle Management wave 2

Leverage SAP Analytics Cloud for digital boardroom for higher education and research

Including student/academic data

Leverage public sector management innovations

- SAP Fiori apps for budget specialist funds management in SAP S/4HANA (enhancements)
- Consumable virtual data model for funds management analytics (release 2)
- Redefined user experience (UX) for the role of grant manager and grant specialist
- Consumable virtual data model for grantee management

Integration to business networks – SAP Concur solutions

 Integration of Concur Travel & Expense to grant and fund budget control and encumbrance process

Connected products (SAP Cloud Platform)

 SAP Student Activity Hub adapter to SAP Student Lifecycle Management

2019 - Product direction

Public sector management on cloud

- SAP S/4HANA Cloud for public sector (focus on U.S. state, local, and education market)
 - Funds management capabilities
- U.S. fund accounting

Connected products (SAP Cloud Platform)

 Leverage SAP Student Activity Hub for additional analytical-based applications

Smart campus and other IoT scenarios

Leverage blockchain usage in higher education and research organizations

2020 - Product vision

Public sector management on cloud

- SAP S/4HANA Cloud for public sector
- Additional funds management capabilities
- Grantee management capabilities

Connected products (SAP Cloud Platform)

 Leverage SAP Student Activity Hub for additional analytical-based applications

Smart campus and other IoT scenarios

Leverage blockchain usage in higher education and research organizations

Machine learning and predictive business actions for academic capabilities

Increase automation of academic processes and embed digital assistant features

^{*} See <u>feature scope description</u> of SAP S/4HANA 1709 for full scope.

Public services (3/3) – defense and security

1709 - Recent innovations*

2018 - Planned innovations

Explosives management in SAP Extended Warehouse Management (SAP EWM)

- Manage storage of explosives (such as receipt, storage, issue, returns)
- Manage warehouse-specific aspects of explosives quality and safety (such as quality inspections, shelf life, storage compatibility)

Enable item unique identifier (iUID) in SAP Extended Warehouse Management (SAP EWM)

Integrate iUID into the relevant SAP EWM processes and tables

2019 - Product direction

SAP S/4HANA Defense and Security (simplify and optimize)

- Foundation of defense and security capabilities in the digital core around the new force element concept
- Real-time capability/readiness analytics and operational reporting on live transactional data

2020 - Product vision

SAP S/4HANA Defense and Security (innovate and extend)

- Replenishment of material or services through self-service catalog UI
- Planning capabilities, setting of priorities, and allocation of scarce defense and security resources
- Simulation and enhanced analytics capabilities
- Support of off-line capabilities
- Support of flight operations
- Relocation capabilities
- Disconnected operations: Leverage newest technologies to provide capabilities that enable collaborative processes in communicationchallenged environments across a number of defense and security concept of operations.
- Predictive business actions in defense operations
- Machine learning for defense capabilities
- Increase automation for defense processes and operations

^{*} See **feature scope description** of SAP S/4HANA 1709 for full scope.

Energy and natural resources (1/2) – oil and gas

1709 - Recent innovations*

Downstream

- Hydrocarbon supply chain visualization (geo-spatial presentation of shipments, inventories, alerts and vehicle information)
- SAP Integrated Business Planning and SAP Trader's and Scheduler's Workbench integration of forecast data for bulk and rack movements
- Enhanced alert framework to differentiate locations, materials, time intervals
- Multichannel ticketing (application integration interface, SAP Fiori online and mobile offline ticketing app)
- SAP Fiori online and mobile offline inventorycapturing app integrated with data allocation functionality
- UX improvements through new enterprise search and SAP Fiori object pages
- Integration of oil functionality with commodity management
- Technical improvements (new locking concept with increased throughput for material postings, data aging and archiving)
- New reports and analytics upstream operations management (UOM) enhancements, nominations

Upstream – new functionality in SAP Production and Revenue Accounting

 Generic royalty reporting solution 2.0 developed together with PROFOG through service-level agreement

Upstream - enablement of UOM

 Enablement of all UOM processes including enhancements to deferment and forecast mgmt.

2018 - Planned innovations

Downstream

- Cost framework for capturing primary and secondary costs
- SAP Integrated Business Planning and SAP Trader's and Scheduler's Workbench integration for IBP supply-based deployment proposals
- Global simulations for inventory planning workbench to improve collaboration and integration with IBP and visualization
- Support of cloud scheduling scenarios with and without integration to on-premise back-end system
- Enhancements for ticketing and data capturing scenarios
- Integration of third-party data for supply chain visualization

Upstream – new functionality in SAP Production and Revenue Accounting

Tax reporting for New Mexico to support new regulations

Upstream – integrated volumetric and revenue accounting

- End-to-end process support from well head to revenue, cost, and finance management
- Single integrated platform for process management, workflow, and reporting
- Enable integration into third-party product and extend into enterprise functions

2019 - Product direction

Oil and gas - downstream

- Stronger decision support in various scenarios based on given constraints and real-time information
- Improved collaboration processes, such as for exchange agreements

2020 - Product vision

Oil and gas - downstream

- Cloud enablement for downstream end-to-end processes, including excise duties
- Oil and gas downstream enriched planning, scheduling, and execution processes with machine learning and automation

* See feature scope description of SAP S/4HANA 1709 for full scope.

Energy and natural resources (2/2): Utilities

1709 - Recent innovations*

Utilities

Utilities

Overview page for periodic meter reading (SAP Fiori for meter data specialist [utilities])

- Overview pages for utilities billing (SAP Fiori for billing specialist [utilities])
- SAP Fiori: KPIs, revenue assurance, customer fact sheets for accounts payable and receivable managers (FI-CA)
- Enablement of large systems SAP S/4HANA Utilities
- Analysis of premise, installation, and utilities contract

Analysis of installation, meter reading, and business partner

2018 - Planned innovations

- Market process management for utilities
- SAP S/4HANA for customer management: Interaction center for utilities and data harmonization of business partner and contract account
- SAP Fiori apps for utilities billing and invoicing
- Efficient handling of implausible readings using machine learning
- SAP S/4HANA for customer management: data harmonization of technical objects in utilities
- Billing for German meter operator
- EEG billing (Germany)

Utilities

- Utilities commerce accelerator integration with SAP S/4HANA Utilities
- Machine learning as part of utilities process management

2019 - Product direction

- Modernization of core functionality (hybrid scenarios) in SAP S/4HANA Utilities by integrating with cloud solutions (customer and energy focus)
- Product simplification

2020 - Product vision

Utilities

- Machine learning as part of utilities process management
- Modernization of core functionality (hybrid scenarios) in SAP S/4HANA Utilities by integrating with cloud solutions from SAP (customer and energy focus)

Further innovations will be added according to market need

^{*} See feature scope description of SAP S/4HANA 1709 for full scope.

Thank you.



Key links for more information

For customers and partners

Key links

SAP road maps www.sap.com/roadmaps

SAP Community
 www.sap.com/community.html

IT planning resources https://wiki.scn.sap.com/wiki/x/ggvRGg

SAP innovation discovery <u>www.sap.com/innovationdiscovery</u>

SAP Transformation Navigator <u>www.sap.com/transformationnavigator</u>

SAP S/4HANA www.sap.com/s4hana

Where to go to provide product feedback and ideas

The idea place hosted by SAP https://ideas.sap.com

Influence programs http://influence.sap.com

SAP user groups www.sapusergroups.com

Road map terminology clarification

SAP S/4HANA is released annually. Between the annual release, we release periodical updates to the features through feature pack stacks. This road map covers all innovations that are planned in the yearly release as well as in feature packs.

- 1. 1709 recent innovations: innovations introduced in the release at the time of publishing of the road map, selected items only
- 2. 2018 planned innovations: innovations in the following year that are planned to be released throughout the year
- 3. 2019 product direction: areas of innovation in which SAP expects to invest in the product two major releases from the current one. It is more directional than detailed functions and features.
- 4. 2020 product vision: areas in which the product will be evolved by adopting technological and industry trends

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