Manufacturing in the Cloud
Today's Speakers

Fabio Fontana
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The value

Most innovative projects
Most complex challenges
Most creative solutions

SAP Customers → Privilege

Duty

Witness and share
Real-life experiences

Difficulties
Solutions
Methods
Accelerators
Tools

Make SAP innovation easy to consume
The context

- More agile
- More intelligent
- More efficient
- Resilient to the new normal

Make the right decisions

Execute the transformation
Let's Build the Intelligent Enterprise Together – May, June, July

SAP S/4HANA

- S/4 innovation cannot wait – the system conversion. February 9th
- Three reasons why SAP S/4HANA Private Cloud Edition is an unmissable opportunity. April 20th
- Why you should keep your core clean and how you can do it. June 29th
- SAP S/4HANA for Finance: the functionalities you cannot miss. July 27th
- Fast track to adoption of SAP Ariba and SAP Fieldglass, to increase the Spend Management processes resilience. July 13th

Business Network

Customer Experience

- The right Customer Experience platform for your business. April 6th
- How to leverage the Analytics embedded in SAP Customer Experience Solutions. February 23rd
- CX, commerce, performance: do not let your customers wait! May 4th

Industry 4.0.

- Secrets From The Field: benefits and ingredients for Asset Management, Predictive Maintenance and Productive Quality Control. March 9th
- Demand Driven MRP: a key ingredient for an intelligent and resilient Supply Chain. May 18th
- Extend the Intelligent Enterprise to the Edge. June 1st

Business Technology Platform

- An ocean of corporate data: diving in to discover hidden worlds. Data management and priorities in the Intelligent Enterprise. January 12th
- SAP Analytics Cloud. The innovation of the Analytics App. January 26th
- How to use the SAP Cloud Platform to extend SAP solutions and to create innovative applications. March 23rd
- Data Orchestration: what it is and why it matters. June 15th
Let's Build the Intelligent Enterprise Together – September → December

**SAP S/4HANA**
- SAP S/4HANA for Sales and Services: the Functionalities You Cannot Miss
  - November 9th
- Intelligent Technologies for Intelligent ERP: How to Start Immediately
  - December 14th

**Customer Experience**
- Turning configurable products selling into a rich e-commerce experiences: a production nightmare or a profitable dream?
  - November 16th

**Business Process Intelligence**
- Would you ever start a transformation Journey blind?
  - September 13th
- Keep your business processes healthy and simple with BPI
  - October 26th

**Industry 4.0**
- Discover how SAP Intelligent Asset Management Can Support the Entire Engineer-to-Operate Asset Lifecycle
  - October 5th
- Transform the Experience of Your Field Technicians to Digitally and Intelligently Streamline Your Maintenance and Inspection Processes
  - October 19th
- Predictive Maintenance & Predictive Quality in Support to Production Optimization
  - November 2nd

**BTP**
- Manufacturing in the Cloud
  - November 30th
- The good, the bad and the ugly: a thrilling story about Embedded Analytics, Date Warehousing and the Cloud
  - September 21st
Speed Deployment and User Productivity with SAP Training and Adoption

Questionmark Compliance (Turkish)  
September 28, 2021

Develop and increase your SAP Ariba skills (English)  
October 1, 2021

How to Adopt SAP Cloud solutions (English)  
October 7, 2021

Ensure user adoption of SAP SuccessFactors: the SAP example (English)  
October 26, 2021

From Deployment to Adoption: are you sure your users are happy with the new solutions implemented? (English)  
November 18, 2021

SAP Learning Hub, your digital SAP learning solution (English)  
Available On Demand

SAP Enable Now en S/4HANA Italy (Italian)  
Available On Demand

Implementación y Optimización de Software SAP gracias a SAP Training (Spanish)  
Available On Demand

Améliorez le rendement de vos projets de systèmes avec SAP Enable Now (French)  
Available On Demand

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Or write directly in the chat
Manufacturing in the Cloud

Andrea Pigozzi
Digital Supply Chain Business Architect
SAP Services EMEA South
Agenda

Supply Chain Planning: Overview

Supply Chain Planning: Harmonized planning

Intelligent Visibility

Synchronized Planning

Digital Manufacturing: Overview

Digital Manufacturing: Integrated Scenario

Execution and logistic

Insight data combination
Achieving a Resilient Supply Chain from **Design to Operate**

**Synchronized Planning**
Planning as a continuum across the supply chain

**Industry 4.0**
Automate for productivity

**Business Network**
Connect for next-level business collaboration

**Sustainable Supply Chain**
Circular Economy for zero waste
Supply Chain Planning
Overview
SAP Digital Business Planning Platform
Connect strategic and operational planning with real-time visibility and execution

**Digital Business Planning**

**SAP Integrated Business Planning (IBP)**

**Supply Chain Execution**
- SAP S/4HANA
- Leverage proximity to core for transactional planning and scheduling

**Value Chain Network Planning**
- SAP Integrated Business Planning (IBP)
- Real-time scenarios and analytics
- Flexible modeling / aligned with financials
- Synchronized planning with intelligent visibility

**Supply Chain Collaboration**
- SAP Business Network
- High scalability with access to trading partners for collaborative planning and execution

**Process Interoperability**

**Common User Experience**

**Common Data Model**

**Common Platform**

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Digital Business Planning in the Intelligent Enterprise

- **Customer centric and Resilient Planning**
- **Synchronized planning processes + 1 data model**
- **End-to-end visibility**
- **Faster planning cycles – 1 integrated system**
- **Advanced planning algorithms (predictive/ML)**

**SAP Integrated Business Planning**

- SAP Supply Chain Collaboration (SAP Ariba)
- SAP Supply Chain Control Tower
- SAP S/4HANA
  - Production Planning
  - Detailed Scheduling
  - MRP / DDMRP

**Planning Perspectives**

- Plant Centric planning
- Network Centric planning

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Full Value – A Streamlined Approach to Demand Planning
Cluster and Organize Your Demand Planning Process

Monitoring & Controlling of the Planning Process*

Consensus Demand Planning

Segmentation
Quarterly/Yearly

Time Series Analysis
Quarterly

Statistical Forecasting
Weekly/Monthly

Management by Exception*
Daily/Weekly

Forecast Accuracy Calculation
Monthly

*Additional licensing may apply
Experience Management information for Business Planning
Gain greater insight into experience-based demand signals

SAP Integrated Business Planning
✓ Supply Chain Control Tower
✓ Sales & Operation Planning
✓ Demand*
✓ Inventory
✓ Demand Driven Replenishment
✓ Response and Supply

Experience Management Solutions from SAP and Qualtrics
✓ Product Satisfaction & Loyalty
✓ Segmentation & Positioning

Business Value
✓ More accurately predict sales based on product satisfaction ratings
✓ Agile response to changing product perception in the market
✓ Better inventory control with more accurate forecasts
✓ Increased customer satisfaction, retention, and repeat purchase

*pre-packaged in SAP Integrated Business Planning for demand, experience management edition
Bridge the Gap between Tactical and Operational Processes
Accurate and granular short term forecast

Focus of classical forecasting:
- Aggregated (e.g. Customer Group)
- Mid to long term
- Weekly or even monthly buckets and planning cycles

Question:
How to come to a detailed daily forecast as input to operational supply planning processes like Deployment?

The Answer:
Demand Sensing as an extension to the classical forecasting
Demand Sensing – Next Level of Forecasting
Enhance and disaggregate Forecast based on short term Demand Signals

“Internal” Demand Signals like Deliveries, Sales Orders, Promotions and Open Orders

“External” Demand Signals like PoS or Weather* data

Demand Sensing
Time Horizon: 4-8 Weeks
Granularity: Days

Short Term Forecast

Consensus Demand Plan

Drive operational supply planning processes:
• Deployment
• Transportation planning
• Production and packaging sequences
• Purchasing Decision
• Inventory Optimization

* Future Direction
Demand Planning
Machine Learning embedded in SAP IBP

Demand Sensing
Pattern recognition within an SAP proprietary algorithm

Forecast Accuracy
New Forecasting Algorithm
Machine Learning Gradient Boosting
External Forecasting Algorithm
Results of External algorithms which can run in Hana or Cloud Platform

Forecast Automation
New Product Introduction (Ongoing)

Intelligent Technologies
Voice Recognition (Intelligent Bots’ Under discussion)

Data Management
Anomaly Detection in Master Data
(Dynamic Adjustments) Ongoing

Operational Excellence
Anomaly Detection in Batch Jobs
Job scheduling optimization

Visibility & Exception Handling
Outlier Detection in Custom Alerts

Available

Future / Research Phase
*This is the current state of planning and may be changed by SAP at any time.
Supply&Response – Next Level of Integration

Example process steps

**S/4**

**ePP/DS PP**
- ePP/DS planned Orders within DPS horizon
- Finite Lead Time Schedule
- Production Sequence

**ePP/DS DS**
- Production Planning
- Production Scheduling

**S/4 PP**
- Production/Process Order Processing
  - Release
  - Confirm
  - Close

**IBP**

**Tactical Supply Planning**
- S&OP
- RCCP
- Inventory Planning

**Operational Supply Planning**
- Supply Plans
  - Planned Orders outside horizon
  - Stock Transfer Req's
  - Purchase Req's

**S/4 SC Visibility**
- View Projected Stock
- Detailed Pegging (Analyse Supply Usage)
- Gating Factor Analysis

**Deployment**
- Confirmed Stock Transfer Req's

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IBP for Response & Supply: Supply Planning

- Development of **rough cut capacity plan**
- **Multi level sourcing** determination for both distribution and Bills of Material
- **Meet optimized inventory targets** set by IBP for inventory
- Gain visibility for projected stock or shortages at relevant levels of aggregation
- **Scenario planning** capabilities
UNCONSTRANDED demand propagation using supply heuristics

• The generated plan can be **infeasible without manual adjustments**
• For example, it can include negative projected inventory or capacity over-utilization

**HEURISTICS**
(Infinity)

**PRIORITY-BASED**
**FINITE HEURISTIC**

• Creates a **finite priority-based demand and supply plan**, taking into account certain supply and **resource constraints**.
• Provides a prioritized, **constrained feasible solution**, with priorities derived from the **costs of demand and sources of supply**
• The finite heuristic satisfies **demands** depending on the **priority** (higher non-delivery costs mean higher priority)

**OPTIMIZER**

• **Constrained supply optimization** for **profit maximization** or **cost minimization for full delivery**
• Computes a **feasible** plan to minimize the total costs or maximize the total profit
Supply Planning and **Collaboration with Supplier**

For a comprehensive planning view is reporting the component requirements the supplier, who evaluates the supplier forecast.

**SAP Integrated Business Planning**

- **Consensus Demand**
  - Supply Chain Planning BOM-Explosion
  - Finished Produkt
  - Semi-Finished
  - Component

**SAP Ariba**

- **Supply Review**
- **Forecast collaboration**
- **Supplier Commitment**
- Supplier forecast
- Suppliers

For a comprehensive planning view is reporting the component requirements the supplier, who evaluates the supplier forecast.
Deployment generates a short-term distribution plan to distribute available supply from plants and central stocking locations to meet the demands in downstream stocking locations.

- Tight order level integration to SAP ERP & S/4HANA
- Order based, constrained deployment heuristic considering demand priority (pull scenario)
- Order based, constrained deployment optimization considering network cost model (push and pull scenarios)
- Available-to-Deploy Profile allows for flexible definition of order types marked as available supply
- Deployment Stock Transfer Requisitions created, if pegged against available supply
- Multi-location planning
- What-if Simulation capabilities
Supply Chain Control Tower

Intelligent Visibility app
- Geographic view of product networks with search and alert visibility

Business Network Collaboration
- Supply side planning collaboration
- Integration to Ariba SCC

Sophisticated alert management
- Flexible Custom alerts with ML for outlier detection
- Dynamic navigation to other systems or analytics

Case management
- To collect unstructured information
- And track the issue
Top 5 Pain Points for Supply Chain Management
Supply Chain Planning can improve 3 of 5
Harmonized Supply Chain Planning

**INSIGHT**

- SAP Analytics Cloud
  - Supply Chain Control Tower
  - Intelligent Visibility

**ACTIONS**

- Execution Layer
  - Manufacturing
  - Transportation
- Planning Layer
  - S&OP
  - Demand Planning
  - Supply Planning
  - Synchronized Planning

**DETAILS**

- Assets Management
- Logistics
- Manufacturing
- Sales Execution
- Supply

**End to End Visibility**

- Simulation
- Insight to Action

**Executive visibility and KPIs**

- Financial and value-based assessments

**Detail insights**

- Domain-specific visibility and alerting
Intelligent Visibility

- **Strategic Objective**
  - (Why?)
  - Intelligent Visibility across the entire supply chain from Design to Operate
  - Connect supply chain application to generate e2e scenarios to analyze, understand impact and take actions
  - Ensure corrective action, cause-and-effect analysis and what-if simulations and contextual navigation across SAP and non-SAP applications

- **Offering**
  - (What?)
  - An application that enable customers to …
  - Gain near real-time visibility from one app using data from different sources
  - Sense, identify, and manage critical issues efficiently through alerts supported by rules and ML.
  - Support collaboration with external supply chain partners using a single business network like Ariba SCC

- **Business Value**
  - (Why relevant?)
  - Value Proposition
  - Get intelligent insights and warnings to prevent supply chain disruptions
  - Mitigate risk of unfulfilled orders, inventory shortages, production delays impacting the supply chain
  - Increase supply chain agility, resilience and decrease operating cost
Intelligent Visibility allows supply chain planner/analyst to:

- View the **supply chain as a network with the exceptions**
- Visualize the **relationships between locations** and where **disruptions** will happen
- **Navigate** into other IBP area or applications to **take actions** towards resolution.
Intelligent Visibility
Order based alerts

By selecting a location that has alerts, a detail screen is open. A summary of the alerts is displayed in a list.

Total alerts per locations displayed in red

By selecting an alert from the list you can see details (i.e. the sales order that are unconfirmed for the selected location).
Available navigation / integration scenarios

Examples

**S/4HANA order apps**
Manage Purchase Orders

**S/4HANA general apps**
Product Fact Sheet

**S/4HANA inventory management apps**
Dead Stock Analysis

**S/4HANA ePP/DS apps**
Production Scheduling Board

**ECC order transactions**
Change Purchase Order (ME22n)

**ECC general transactions**
View Material (MM03)

**ECC planning transactions**
Stock Requirements (MD04)

**SAP Enterprise Product Development**
3D visualization of products and locations

**SAP Digital Manufacturing Insights**
Plant Insights

**Generic navigation** to any application that can accept a parameterized URL

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Contextual navigation between IBP and ERP
Contextual navigation between IBP and ERP
Harmonized Supply Chain Planning

**INSIGHT**

- SAP Analytics Cloud
- Supply Chain Control Tower
- Intelligent Visibility

**ACTION**

- Execution Layer
  - Manufacturing
  - Transportation
  - Inventory

- Planning Layer
  - S&OP
  - Demand Planning
  - Supply Planning

**DETAILS**

- Assets Management
- Logistics
- Manufacturing
- Sales Execution
- Supply

**Executive visibility and KPIs**

**Financial and value-based assessments**

**End to End Visibility**

**Simulation**

**Insight to Action**

**Detail insights**

**Domain-specific visibility and alerting**
New perception of the planner’s role

From **multiple experts** for individual planning levels…

…to one expert for the whole **value chain of a product**

- High communication effort
- Distributed systems with different technologies
- High percentage of routine task
- Deep insight in all aspects of a product’s value chain
- Integrated systems and real-time data
- Mainly resolving exception

Separation of concerns between the roles is also configurable using underlying authorization concept.
Synchronized Planning provides a tight integration between SAP IBP and SAP S/4HANA embedded PP/DS as well as other products like TM in future under one common Planner’s Workspace (PWS).

It provides a consistent platform for end-to-end planning in the supply chain from customer demand to deployment.
Synchronized Planning – Planner Workspace

- Configurable and savable Views
- Selectable and collapsible grid views
- Collaboration
- Transactional Exceptions
- Planning and Simulation across IBP and Scheduling, Business network
- Execute option in S/4HANA
Synchronized Planning – Planner Workspace
Digital Manufacturing
Overview
SAP Digital Supply Chain Solutions for Manufacture

Digitally orchestrate manufacturing operations, resulting in better customer service levels, higher margins, lower Cost-of-Goods Sold, and higher return on assets.
## SAP Digital Manufacturing Cloud
Automate processes and resources to improve manufacturing efficiency, quality and productivity

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tbody>
<tr>
<td>Paperless production</td>
<td>Intuitive user interfaces for production operators, automatic data collections and set machine parameters, thereby lowering cost, increasing productivity and quality.</td>
</tr>
<tr>
<td>Design, distribute and control</td>
<td>Manifacturing shop floor activities enabling a smart factory.</td>
</tr>
<tr>
<td>Shift and Labor planning</td>
<td>To ensure business operations with right qualifications. Production Order scheduling and dispatching considering labor, resource and maintenance constraints to plan operations and adopt to short term changes.</td>
</tr>
<tr>
<td>Cross plant real-time analytics</td>
<td>For manufacturing performance e.g. Perfect Order Fulfillment, Overall Equipment Effectiveness, loss analysis along with machine data to identify improvement opportunities.</td>
</tr>
<tr>
<td>Ability to collect and share</td>
<td>Product genealogy data between members of the network to trace accountability and provide transparency.</td>
</tr>
</tbody>
</table>

SAP Digital Manufacturing Cloud

- **SAP Digital Manufacturing Cloud**
- **Data Lake**
  - Common data lake
  - Discrete Industries
  - Process Industries
- **Manufacturing Execution**
- **Manufacturing Insights**
- **Asset Central**
  - Common data foundation for master and transactional data (e.g. equipment, work order)
Model the digital twins of machines in the plant based on industry standard class, sub class, model and equipment template as per the OEM specification
- Capture the capabilities of the machines as well as communication interfaces
- Simplified onboarding of Machine object with connection to the shop floor
- Simplified machine integration by abstracting the technical aspects of machine configuration with remote configuration of Plant Connectivity (PCo)
SAP Digital Manufacturing Cloud for Execution
Orchestrate and control the shop floor

Key capabilities

- Implement top-floor to shop-floor scenarios to achieve rapid return-on-investment through out-of-the-box integration to SAP solutions
- Utilize intuitive user interfaces (UI) for production operators and transform to paperless production
- Dispatch and sequence operations to reflect the real world in the short term
- Monitor the entire manufacturing process to optimize resources and execution
- React quickly to unexpected events
SAP Digital Manufacturing Cloud for Execution
Discrete Industry - Production Operator Dashboard (POD)

- Support operators with a highly flexible and intuitive user interface (POD)
- Configure and design the POD based on user requirements
- Display execution-relevant information of production orders
- Guide operators through work instructions in the POD
- Support of data collections
- Logging of defects and subsequent rework and repair actions using the nonconformance functionality
- Provides product serialization and re-identification
- Recording of assembled components for traceability and to trigger goods movements
- Monitor OEE using established KPIs in the POD
- Post operation activity-level yield confirmations happen automatically as well as goods receipts as units are completed
SAP Digital Manufacturing Cloud for Insights
Digital system to gain real-time visibility of production performance with business context across the enterprise

Key capabilities

- Gain insights on performance and productivity across different levels of the enterprise hierarchy (i.e. across regions, plants, work centers, resources, etc.)
- Take informed decisions by combining and utilizing data from shop floor systems, execution systems, along with contextual information from business sources (i.e. ERP)
- Use pre-delivered interactive dashboards filled with standardized key performance indicators (KPI) based on harmonized data
- Incorporate data from non-SAP sources, build customized KPI’s and personalize your dashboards & reports
- Perform root cause analysis, drill down and up across different levels of the enterprise hierarchy
Insights From Global Level and Plant Level

- Use out-of-the-box standard pre-delivered manufacturing KPIs fed with ERP, ME and DMC execution data
- Gain real-time visibility and monitor the performance of the production process from a regional level through geographic mapping
- Compare the performance between regions, between plants within and across regions, between work centers and resources
- Get quick visibility of personalized KPI’s in “Global Insight” to identify non-performing regions, countries and plants
Deep Dive - KPI Analytics
Exploration of contributors

- Detailed analysis using KPI analytics application to identify contributors impacting the production performance
- Visibility of key areas impacting the performance of any selected KPI
- Drill-down to find the root cause pointing to which material, work center, or order is causing the loss in KPI values
- Compare various KPI’s across different nodes of the enterprise hierarchy
- Save the comparison result as a tile for instant access
Insights on Overall Equipment Effectiveness
Standard metric for measuring manufacturing productivity

- Overall equipment effectiveness (OEE) analytics based on SAP ME-OEE, SAP DMC Execution OEE and SAP MII-OEE
- Complete visibility of time losses happening in different buckets
- Analyze OEE over any defined level of the enterprise hierarchy across a custom time range, across materials, and across shifts
- Root cause analysis for all OEE losses (availability losses, performance losses, and quality losses)
- Perform OEE comparison and loss analysis between work centers, resources, and plants across different time zones of the world
Root Cause Identifier for OEE Losses
Helps to focus on the reasons for sub-optimal performance

- Root cause analysis for all OEE loss types, e.g. unscheduled down, schedule down, performance loss and quality loss
- Identify major contributors for losses
- Multi-level reason code drill-down to identify root cause of the issue
Digital Manufacturing
Integrated Scenario
SAP Digital Manufacturing Cloud for Execution

User-Centric Applications

User2Cloud

Digital Manufacturing Cloud

Master Data
Manufacturing Process
Machine Data

Cloud
On-Premise

OnPremise2Cloud

Real World Objects

Machine Data

Browser Access

S/4 HANA

User2OP

OP2OP

Thing2OP

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ISA-M Methodology

User-Centric Consumption
Process Invocation
Thing Integration
Data Movement
The dark side of the cloud...

Business Users at their Workplaces
…turning into a sunny edge
SAP Digital Manufacturing Cloud for edge computing

Provides maximum business continuity for mission critical applications in manufacturing
What is the *execution relevant* functionality?

<table>
<thead>
<tr>
<th>Supported Persona</th>
<th>Planned Functionality</th>
<th>Not in scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Supervisor</td>
<td>▪ Dispatching and Monitoring, Labor management (REO)</td>
<td>▪ Central design times (e.g. Production Process Designer*¹, POD Designer, Machine Model, ….)</td>
</tr>
<tr>
<td>Production Operator</td>
<td>▪ Order management</td>
<td>▪ Master data maintenance and configurations</td>
</tr>
<tr>
<td></td>
<td>▪ Production Operator Dashboards (standard and custom) and corresponding plug-ins</td>
<td>▪ Cross plant Analytics</td>
</tr>
<tr>
<td></td>
<td>▪ Management of holds and floor stocks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Machine integration and automation (e.g. connectivity, process engine runtime)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>▪ Alerts, operational reporting, execution of ML models</td>
<td></td>
</tr>
</tbody>
</table>

One Codeline (Cloud and Edge)
▪ Same processes and user experience, independently of deployment
▪ Existing functionality needs to be enabled for Edge incrementally over time

*¹ Shop Floor Designer (SFD) gets renamed to Production Process Designer (PPD) in 2111.
Example for Hybrid Digital Manufacturing Landscape

SAP Digital Manufacturing Cloud

- Manufacturing Execution
- Manufacturing Insights
- Data Lake
  - Common data lake
- Plant 5
- Plant 6
- Plant 7

SAP Analytics Cloud

S/4HANA ERP

SAP Ariba

IBP - Control tower

ISA-M Methodology
- User-Centric Consumption
- Process Invocation
- Thing Integration
- Data Movement

Asset Central
- Common data foundation for master and transactional data (e.g. equipment, work order)

SAP Digital Manufacturing Cloud

- Master Data
- Business Data
- Manufacturing Process
- Data Lake
- Machine Data

Plant 1
- ME/MII/PCo

Plant 2
- MII-OEE/PCo

Region
- ME/MII/PCo

Plant 3
- Plant 4

Plant 5
- PCo

Plant 6
- MII/PCo

Plant 7
- 3rd party systems

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SAP Digital Manufacturing Cloud for Execution
Manage Floor Stock including ERP Integration

- ERP integration has been enhanced to support these scenarios related to floor stock inventory:
  - Unrestricted floor stock inventory creation based on a goods movement transfer posting
  - Floor stock inventory creation based on goods movement assignment to an order
  - Floor stock inventory return and scrap based on shop floor request in DMC
  - Floor stock inventory consumption independent of yield confirmation
  - Floor stock inventory consumption within the yield confirmation
- A new Manage Floor Stock app has been introduced for floor stock inventory creation and update in DMC
  - Floor stock inventory created from the integration can be displayed and maintained in the new app
  - Local to DMC inventory can be created.
  - The inventory ID can be system-generated or input by the user directly.
  - The data fields attached to Material Master can be attached as data type details to related inventory.
The ERP integration has been enhanced to enable scenarios related to integration with EWM and shop floor inventory in DMCe:

- **Single Order Staging Request** provides for sending a request for the components to be staged for a specific order. You can stage packed or unpacked materials pallet-wise (handling unit after handling unit) from a warehouse managed with SAP Extended Warehouse Management (EWM) to a production supply area (PSA).

- **Single Order Staging Confirmation** will allow the transfer of shop floor inventory data from SAP EWM to SAP DMCe when the warehouse task of component staging is confirmed by the warehouse operator in SAP EWM.

- **Component Consumption to EWM** supports the reporting of Component Consumption w/o yield/scrap confirmation directly to SAP EWM.

- **Goods Receipt Upon Packing Unit Completion** will transfer a goods receipt message from DMCe to SAP EWM.
SAP Digital Manufacturing Cloud for Insights
SAP Analytical Cloud integration

Manufacturing data in SAP Analytical Cloud (SAC)

- Set up live connection from SAC to Digital Manufacturing Cloud for Insights
- Use DMC Insights KPIs in SAC stories and combine with other data in Digital Boardroom
SAP Digital Manufacturing Cloud for Insights

Navigation from IBP to DMC

- Seamlessly navigate from Supply Chain Control Tower (IBP) to Plant Insights to gain intelligent visibility
- Configure the Plant information in IBP to retain the context while navigating

- Triggered by alerts in Supply Chain Control Tower monitor the productivity of the specific plants to gain detailed visibility on the production performance that contributed to the alert
Thank you.

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