

# THE DIGITAL ENTERPRISE

A Manufacturer's SAP Innovation Journey

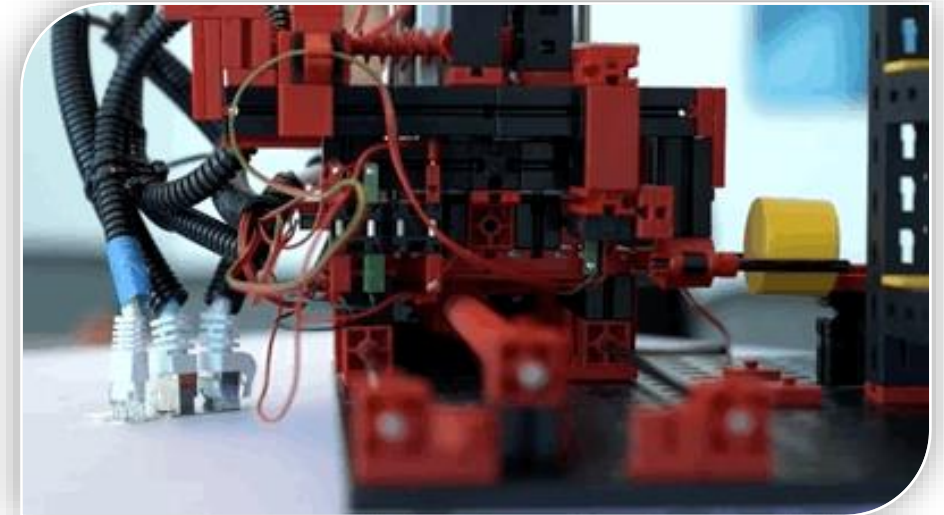
ASUG Georgia | March 30, 2023

Alex Paulus  
SAP Project Manager & Managing Director  
CNT Management Consulting Inc



# Session Highlights

- An SAP Story about a fictitious Manufacturing Company running completely on SAP Solutions
- Show an end-to-end business process across multiple SAP Solutions, including:
  1. **Quote-2-Plan** (SAP CX/ Sales Cloud, CPQ, ...)
  2. **Source-2-Order** (SAP MM, Ariba, ..)
  3. **Plan-2-Manufacture** (SAP PP/DS, DMC, ...)
  4. **Incident-2-Service** (SAP CX/ Service Cloud, FSM, ...)



**The Digital Enterprise Showcase is also available as Live Demonstration**

**Sponsored by:**



# Agenda

- **Introduction**
- The Digital Enterprise Story
  - The Sales Story from **Quote to Plan**
  - The Procurement Story from **Source to Order**
  - The Manufacturing Story from **Plan to Manufacture**
  - The Service Story from **Incident to Service Fulfilment**
- Takeaways, Q&A

# CNT Management Consulting





## SAP Business Transformation

- #rise2s4 conversion package to RISE with SAP
- #run2s4 conversion package ECC to SAP S/4HANA
- SAP S/4HANA pre-studies and roadmaps
- SAP S/4HANA greenfield implementations
- SAP S/4HANA brownfield conversions

## SAP Consulting

- Functional SAP consulting
- Global business processes and templates
- End-to-end SAP implementations and rollouts
- Integration management
- SAP master data and data migration
- Program-, project-, and change management

## SAP Cloud Solutions

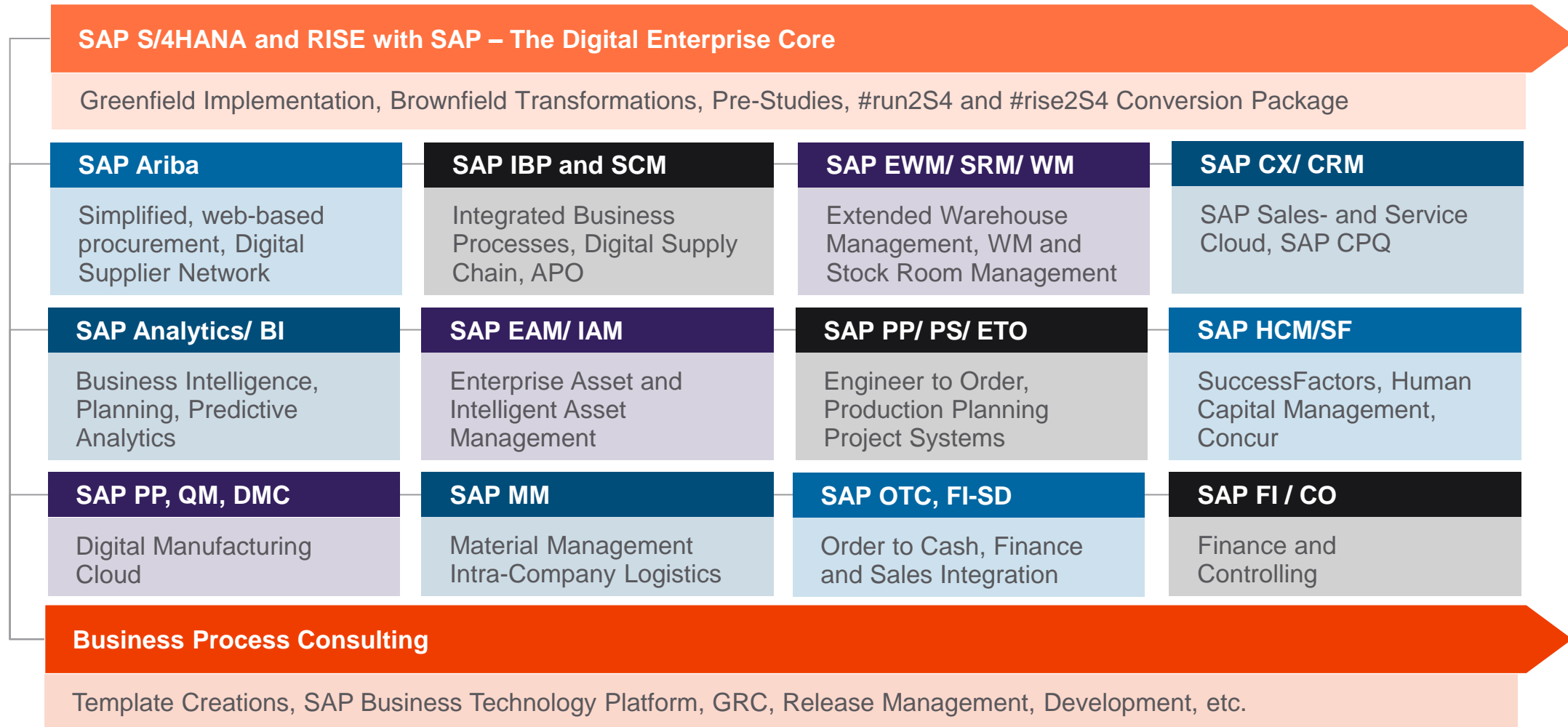
- SAP S/4HANA Cloud and RISE with SAP PCE
- SAP Ariba / Spend and SAP Business Networks
- SAP CX, CS / Customer Experience, Service Cloud
- SAP IBP/ Integrated Business Planning
- SAP SuccessFactors and Concur
- SAP DMC/ Digital Manufacturing Cloud
- SAP BTP/ Business Technology Platform

## SAP Industry Best Practices

- Industry-specific end-to-end processes
- Plug-in solutions for industrial manufacturing
- Industries: Manufacturing, Industrial Manufacturing, Regulated Industries, and various others

**CNT is an SAP implementation firm covering the complete SAP spectrum**

# SAP Competences



CNT maintains dedicated competence teams for the different SAP areas

# CNT Awards and Recognitions by SAP



**Winner of the 2021 SAP  
Partner Pinnacle Award\***



Quality Award 2022  
Rapid Time to Value  
[Rosenbauer]



Quality Award 2022  
Rapid Time to Value  
[UBM]



Quality Award 2022  
Business Transformation  
[Pfeiffer]



Quality Award 2021  
Time to Value  
[Bachem]



Quality Award 2021  
Business Transformation  
[Pfeiffer]



Quality Award 2021  
S/4HANA Transformation  
[Boehringer Ingelheim]



Quality Award 2019  
Cloud Transformation  
[Porr Group]



Quality Award 2019  
Fast Delivery  
[Porsche]



Quality Award 2018  
Fast Delivery  
[TANN Group]



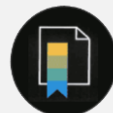
Quality Award 2018  
S/4HANA Innovation  
[Listroj]



Quality Award 2018  
Business Transformation  
[Hoerbiger]



SAP Partner of the Year 2020  
SAP LoB Cloud



SAP Partner of the Year 2019  
SAP Quality



SAP Partner of the Year 2019  
SAP S/4HANA Move



SAP Gold Partner

CNT is regularly recognized by SAP with Quality Awards



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# Model Company “CNT Industries”

## Model Company: CNT Industries



- Manufacturer of solutions for **intra-company logistics**
- Portfolio includes **warehouse robots** and storage bays
- Driven by fully digitalized integrated processes

**Runs completely on SAP**



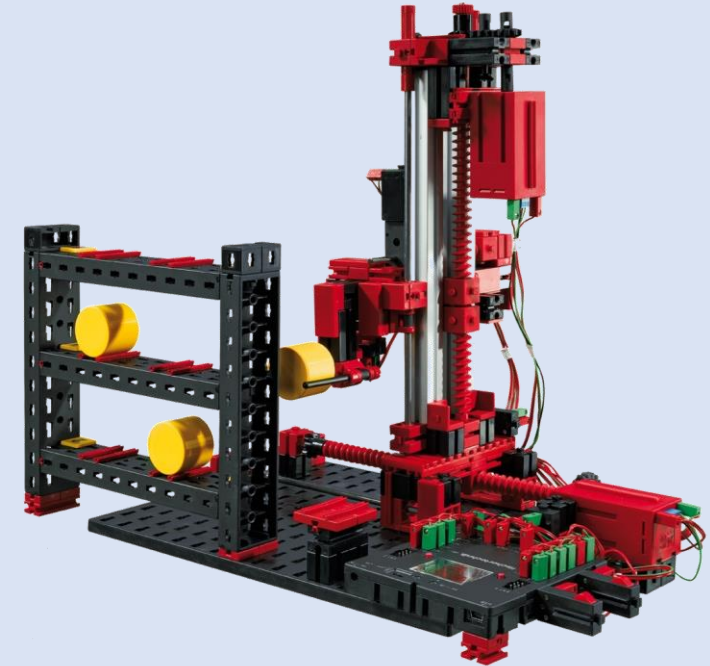
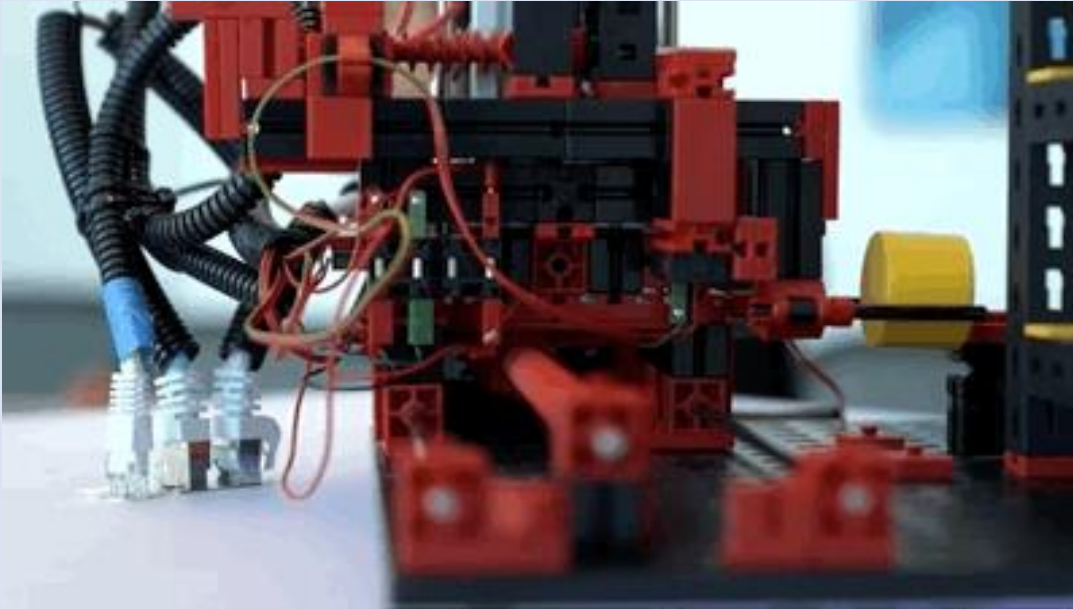
## Model Customer: Local Brewery



- Startup beer brewery and client of CNT Industries
- Uses new brewing techniques to improve quality
- Requires products agitated/ moved during fermentation

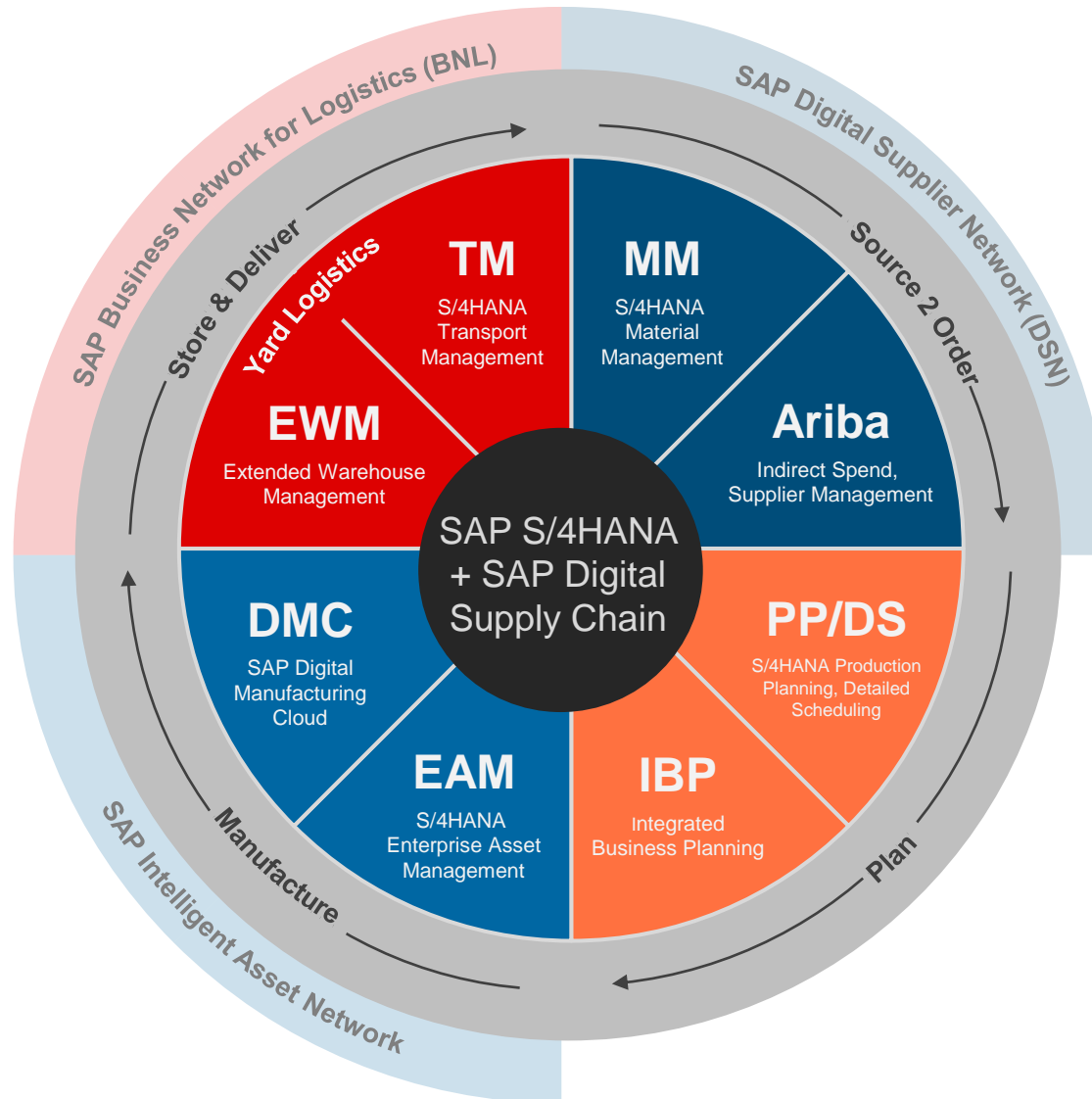
**Seeks new warehouse robots to move products continuously and extend high-bay storage**

# “CNT Industries” – Warehouse Robot Solution



**CNT's Robot Showcase is based on the Fischertechnik Industrial Simulation Series connected to SAP via an Arduino Controller**

# Integrated Digital Supply Chain with and around SAP S/4HANA



With the Digital Supply Chain, SAP integrates multiple solutions, including S/4HANA, Ariba, DMC, IBP, EWM, and the three business networks DSN, IAN, and BNL.

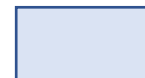
With the Digital Enterprise, CNT expanded the Digital Supply Chain to add more SAP components and add Quote-2-Plan for Sales, and Incident-2-Service for Services.

# Covered Processes with “CNT Industries”

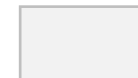
## CNT Industries



Process	Business Function	SAP Solutions
Quote-2-Plan	Sales	SAP CX/ Sales Cloud, SAP CPQ, SAP S/4HANA SD
Source-2-Order	Procurement	SAP S/4HANA MM, SAP Ariba, SAP Fieldglass
Plan-2-Manufacture	Production	SAP S/4HANA PP, PP/DS, SAP DMC, QM
Manufacture-2-Distribute	Logistics	SAP EWM, SAP TM, SAP Yard Logistics
Incident-2-Service	Services	SAP CX/ Service Cloud, SAP EAM, SAP FSM
Plan-2-Report	Business Intelligence	SAP S/4HANA, SAP Analytics Cloud, SAP IBP
Recruit-2-Retire	Human Resources	SAP S/4HANA, SAP HXM, SuccessFactors, Concur
Record-2-Report	Finance	SAP S/4HANA Finance, Central Finance, etc.



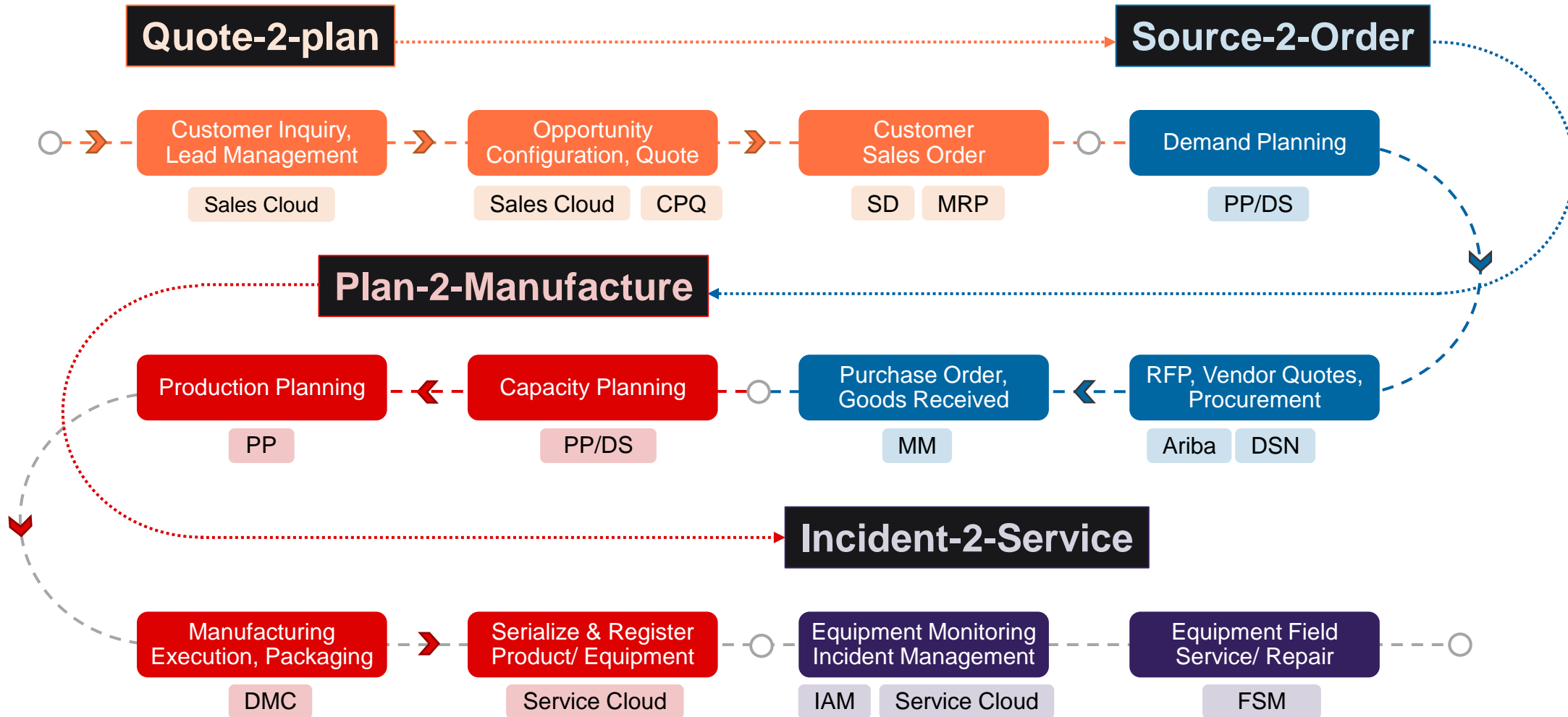
= Covered with CNT Industries



= Planned for later



# The Digital Enterprise Processes



# End-To-End Process Perspective Benefits

## E2E Business Processes Perspective

Set of processes allowing companies to **look at the value chain from beginning to end**. The E2E process covers various functional and integrated areas.

## Benefits

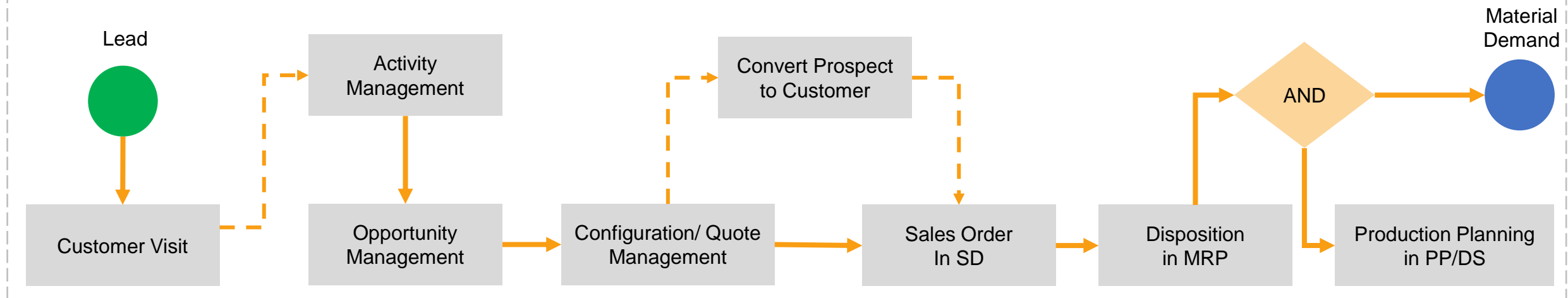
- **Prioritize Business Values** – Starting with a big picture allows focusing on the processes with the most value for the organization.
- **Eliminate Functional Siloes** – Create a shared purpose to work and facilitate collaboration to enable smoother operation.
- **Big Picture Perspective** – Holistic approach allows understanding of how changes to one function can influence the other.
- **Transparency and Outside Perspective** – Enables stakeholders to think about the business from a customer perspective
- **Clear KPIs for the ERP implementation** – Functional discussions are a breeze with the E2E process in mind.

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# The Sales Story – Workflow

## Quote-2-Plan



# The Sales Story – Components

1

## SAP CX – SAP Sales Cloud

- Cloud-based CRM Solution
- End-to-End Customer Experience solution
- Integrated with SAP Service Cloud
- **Integrated into SAP S/4HANA**

2

## SAP CPQ – Configure Price Quote

- Cloud-based SAP Configuration Solution
- Formerly Callidus Software
- Falls between Sales and Sales Order
- **Integrated into SAP Sales Cloud and S/4HANA**

3

## S/4HANA SD – Sales Distribution

- Core functional module in S/4HANA
- Covers all selling, shipping, and billing

4

## S/4HANA MRP – Material Requirement Planning

- Core functional module in S/4HANA
- Plan material supply based on requirements

5

## S/4HANA PP/DS – Planning/Detailed Scheduling

- Core functional module in S/4HANA
- Functionality previously in APO
- Covers finite production planning

6

## SAP Cloud Integration

- Connect cloud and on-premise applications with other SAP and non-SAP cloud and on-premise applications



# SAP CPQ – Key Functions



- Configure and create complex customer quotes
- Guided Selling
- Margin Protection
- Integrated with SAP CX and SAP S/4HANA

☰

CNT MAKES YOUR CRM AND CX RUN

Startseite

Kalender

Feed

Analyse

Kunden

Wettbewerber

Aktivitäten

Besuche

Verkauf

Tickets

Verträge

Produkte


Installation

Bibliothek

Vertreter

Produkte

- Alle Produkte - CNT IoT Showcase (8)




**CNT IoT Lagerroboter C1X**  
1377

Externe Nummer 000000000000001377

Sparte Maschinenbau

Kategorie Fertigungskomponente




**CNT IoT Zahnrad Z40/32, schwarz**  
1382

Externe Nummer 000000000000001382

Sparte Allgemein

Kategorie Elektronisches Bauteile




**CNT IoT Robotic proSo**  
1387

Externe Nummer 00


Sparte Ma

Kategorie Ele




**CNT IoT Motor XS 9V, schwarz**  
1380

Externe Nummer 000000000000001380



**CNT IoT - Querträger 10er Bohrung**  
1563

Externe Nummer 000000000000001563



**CNT IoT - Längsträger 2**  
1562

Externe Nummer 00



# SAP Sales Cloud

With product data from the S/4HANA backend

Angebote

CPQ-Angebot: 472



[Aktuelles Angebot](#) / 
 [Startseitenkategorie](#) / 
 [CNT Lagerroboter](#) / 
 [CNT Roboter](#) / 
 [CNT Lagerroboter CNT1](#)

CNT Lagerroboter CNT1

Unvollständig



[Produktbeschreibung](#) / 
 [Roboter Eigenschaften](#) / 
 [Aufbau des Roboters](#) / 
 [Zubehör](#) / 
 [Software](#) / 
 [Services](#)

Wählen Energieversorgung \*



CNT USV Anlage  
 [€7,000.00]

Wählen Steuerungssystem



CNT Steuerungssystem  
 CS9 [€1,296.00]



CNT Steuerungssystem  
 CS8 [€1,200.00]

Wählen Handsteuerung



CNT Handgerät CU1  
 [€270.00]

< Zurück

Weiter >

Konfigurationsübersicht

Konfigurationsbaum

Teilenummer	1377
Grundpreis	€541,296.00
Wiederkehrender Grundpreis	€0.00

Positionen	NRC	MRC
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Steuerungssystem		
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CNT Steuerungssystem CS9	€1,296.00	
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Software		
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CNT Robotic proSoftware		
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Energieversorgung		
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CNT USV Anlage	€7,000.00	
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Produktabmessungen		
--------------------	--	--

Als Hochregallager bezeichnet man ein Lagersystem, in dem die Waren vollautomatisch ein- und ausgelagert werden. Große Hochregallager können bis zu 50 Meter hoch sein und bieten Platz für mehrere tausend Paletten. Anhand der Bauanleitung baust du das Modell „Hochregallager“ auf und verdrahtest die elektrischen Elemente. Im



# SAP CPQ

Customer Quotation- and Configuration Management



## IoT-Showcase ▾

Gefiltert nach (2): Anzeigewährung, Auftraggeber



### Gesperrte Gutschriftsanforderungen

Sortiert nach: Zuletzt geändert/Angelegt am

Gutschriftsanforderung	Gesamtstatus	Nettowert
------------------------	--------------	-----------

Keine Daten

### Kundenkontakte (abgekündigt)

Sortiert nach: Klassifikation/Kunde

Kunde	Klassifikation	Ansprechpartner
-------	----------------	-----------------

Keine Daten

### Kundenretouren

Sortiert nach: Zuletzt geändert/Angelegt am

Aktive Retouren ▾

Keine Daten

### Offene Verkaufsangebote

Sortiert nach: Zuletzt geändert/Angelegt am

Angebot	Gültig bis	Nettowert
---------	------------	-----------

20000001	<b>vor 8 Monaten</b>	<b>385.967</b> EUR
----------	----------------------	-----------------------

20000000	<b>vor 10 Monaten</b>	<b>120.000</b> EUR
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### Verkaufsangebotspipeline

Abgelaufen/Läuft heute ab

2

### Offene Kundenaufträge

3 von 13

Sortiert nach: Zuletzt geändert/Angelegt am

731	Nicht relevant	<b>vor 2 Wochen</b> 0 EUR
-----	----------------	------------------------------

790	offen	<b>vor 2 Wochen</b> 1.499 EUR
-----	-------	----------------------------------

724	Nicht relevant	<b>vor 3 Wochen</b> 0 EUR
-----	----------------	------------------------------

### Schnellaktionen

 Kundenauftrag anlegen

 Verkaufsangebot anlegen

 Gutschriftsanforderung anlegen



# S/4HANA SD

Client Quotes and Sales  
Orders overview

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## Digital Supplier Network

### Ariba Buying

[Procurement  
and Invoicing]

### Ariba Catalog

[Simplified  
Shopping  
experience]

### Ariba Contracts

[Contract  
management]

### Supplier Management

#### SLP

[Supplier Lifecycle  
Performance]

#### Risk

[Supplier Risk,  
Monitor Issues]

### Ariba Sourcing

[RFI, RFP, RFQ,  
Auctions, etc]

### Spend Analysis

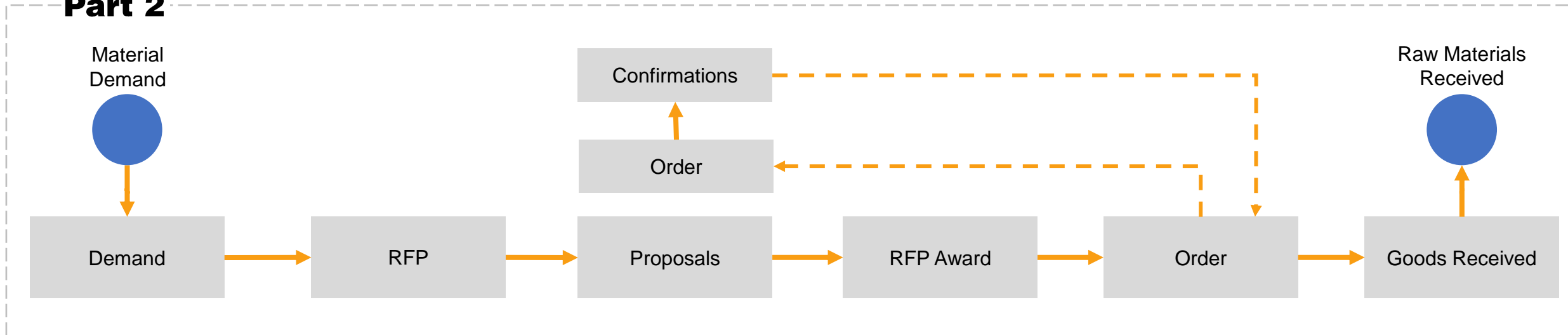
[Classifications,  
benchmarks, ...]

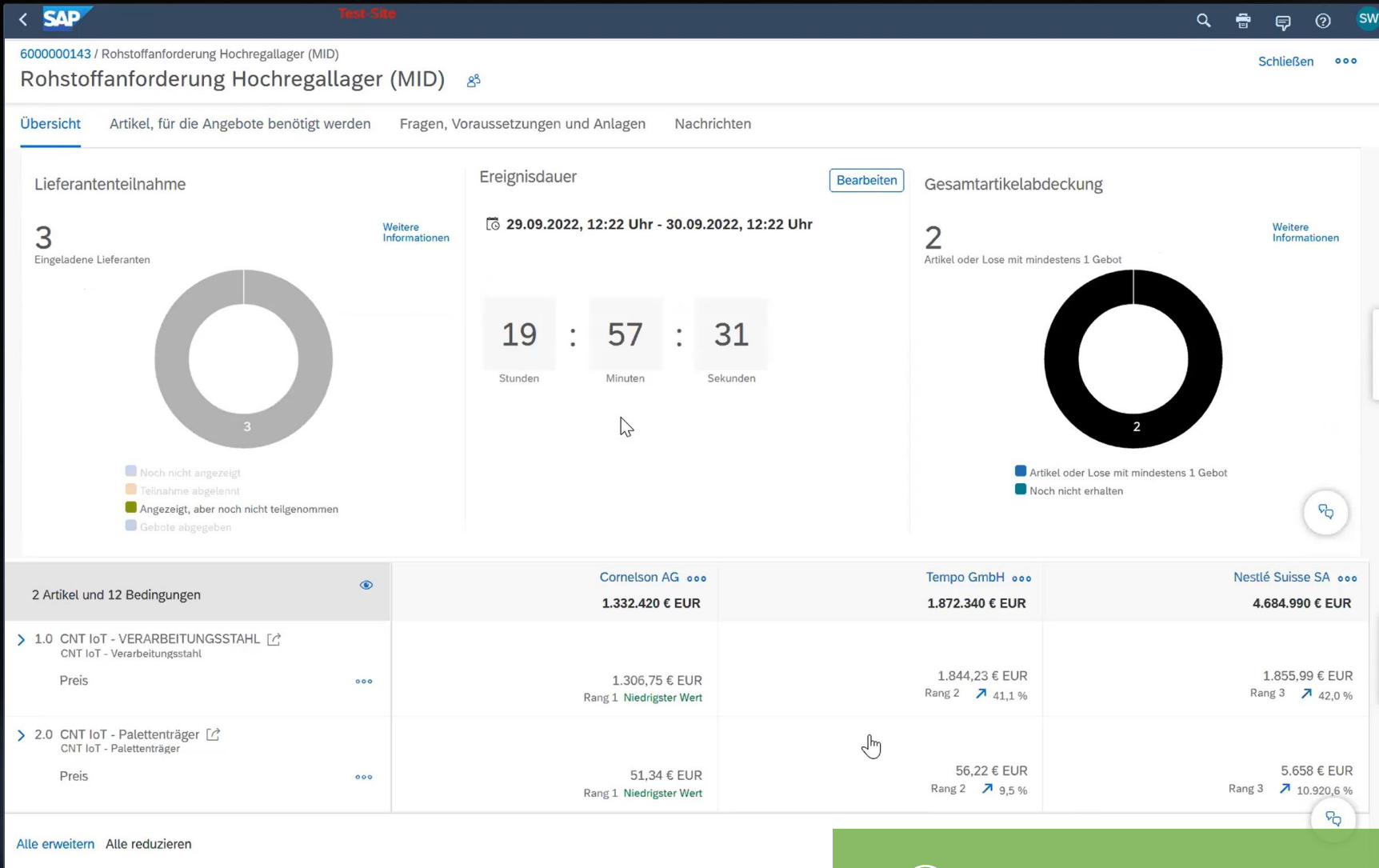
## SAP ERP Integration

[CGI, SAP Cloud Connector, Commerce Automation, ...]

# The Procurement Story – Workflow

## Part 2





# SAP Ariba

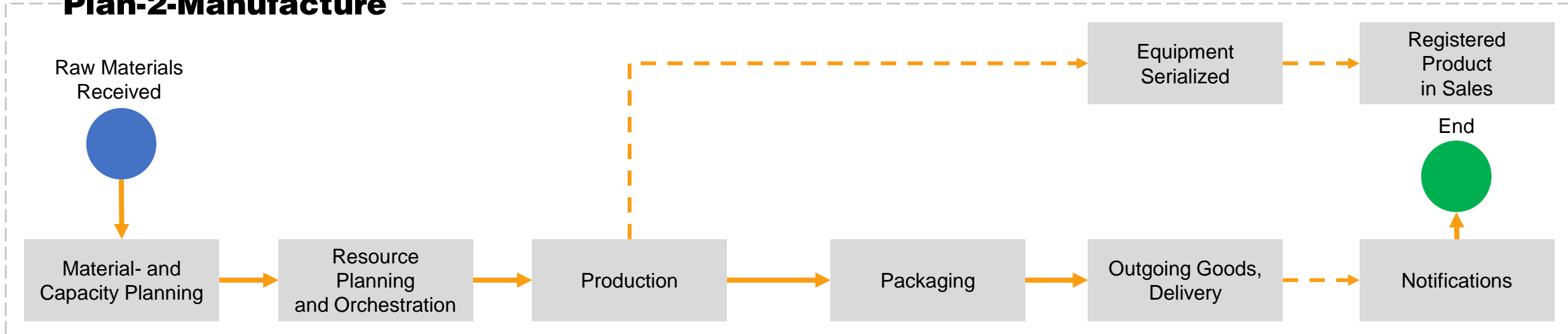
## Raw Material Request Overview

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# The Manufacturing Story - Workflow

## Plan-2-Manufacture



SAP S/4HANA

SAP Digital Manufacturing Cloud

SAP S/4HANA

Sales Cloud

SAP Cloud Integration



# Manufacturing Story – Components

1

## S/4HANA PP/DS – Planning/Detailed Scheduling

- Core functional module in S/4HANA
- Covers finite production planning
- Final production planning

2

## S/4HANA PP, QM, WM/EWM, TM

- Core functional modules in S/4HANA covers Production Planning, Quality-, Warehouse- and transport management

3

## SAP Cloud Integration

- Connect SAP cloud and on-premise applications with other cloud and on-premise applications

4

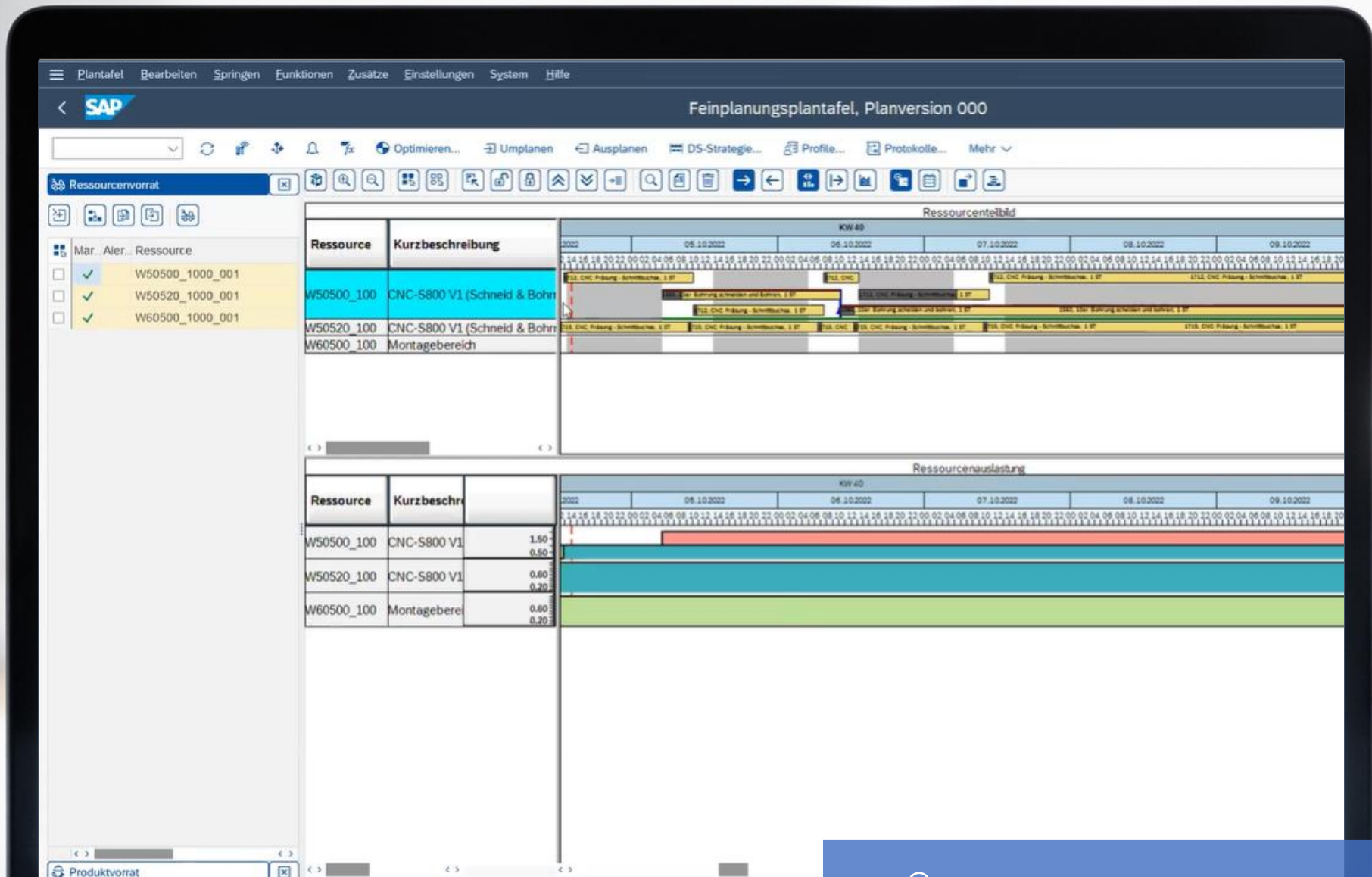
## SAP Digital Manufacturing Cloud

- Manufacturing Execution
  - Resource Orchestration
  - Manufacturing
  - Packaging
  - Quality Management
  - Create Serialization
- Manufacturing Insights, OEE, etc.
- Digital Manufacturing Cloud Network (DMCn)

5

## SAP CX – SAP Sales + Service Cloud

- Register serialized product
- Connect with SAP Service Cloud
- Integrated into SAP S/4HANA

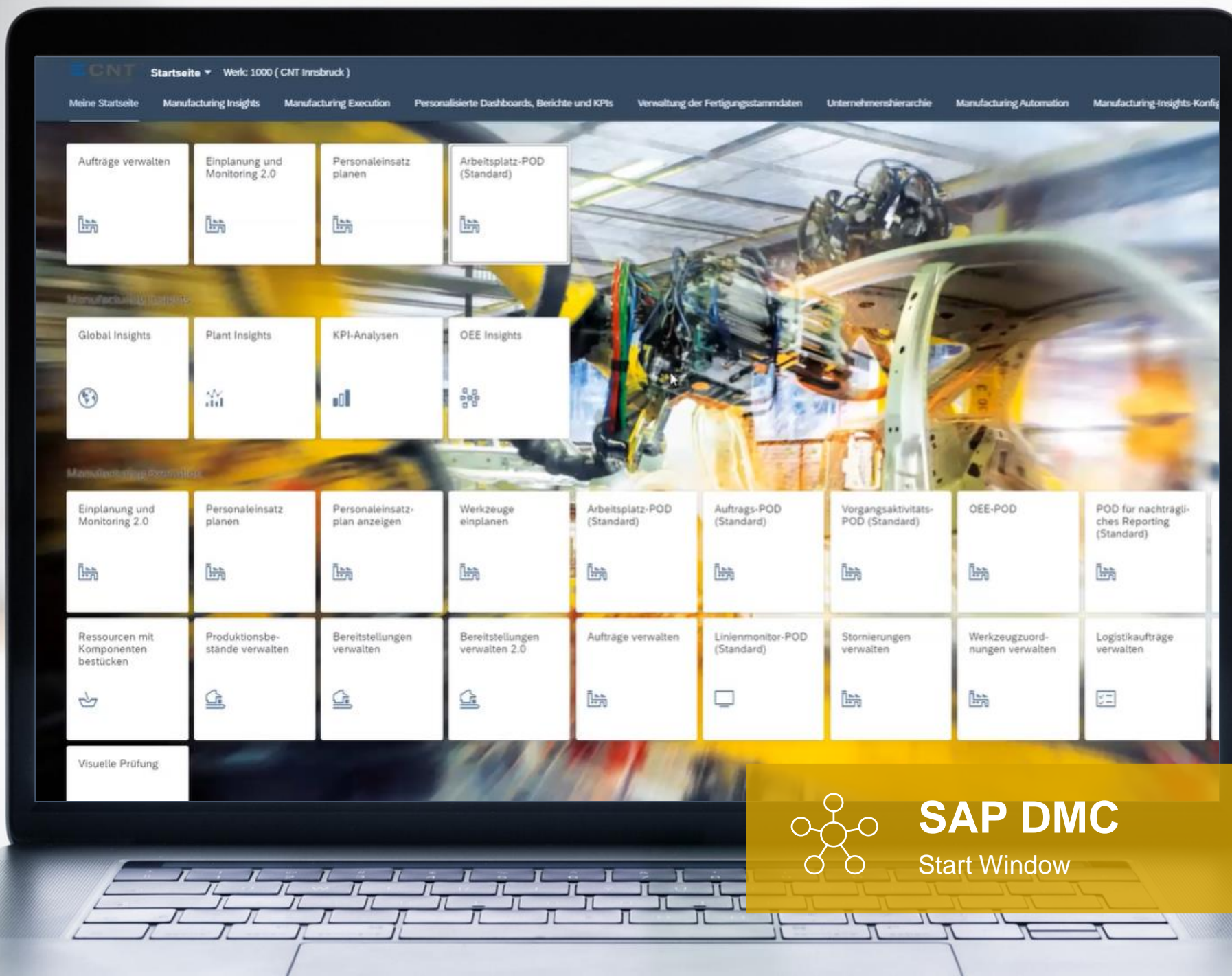


**S/4HANA PP/DS**

Detailed Planning

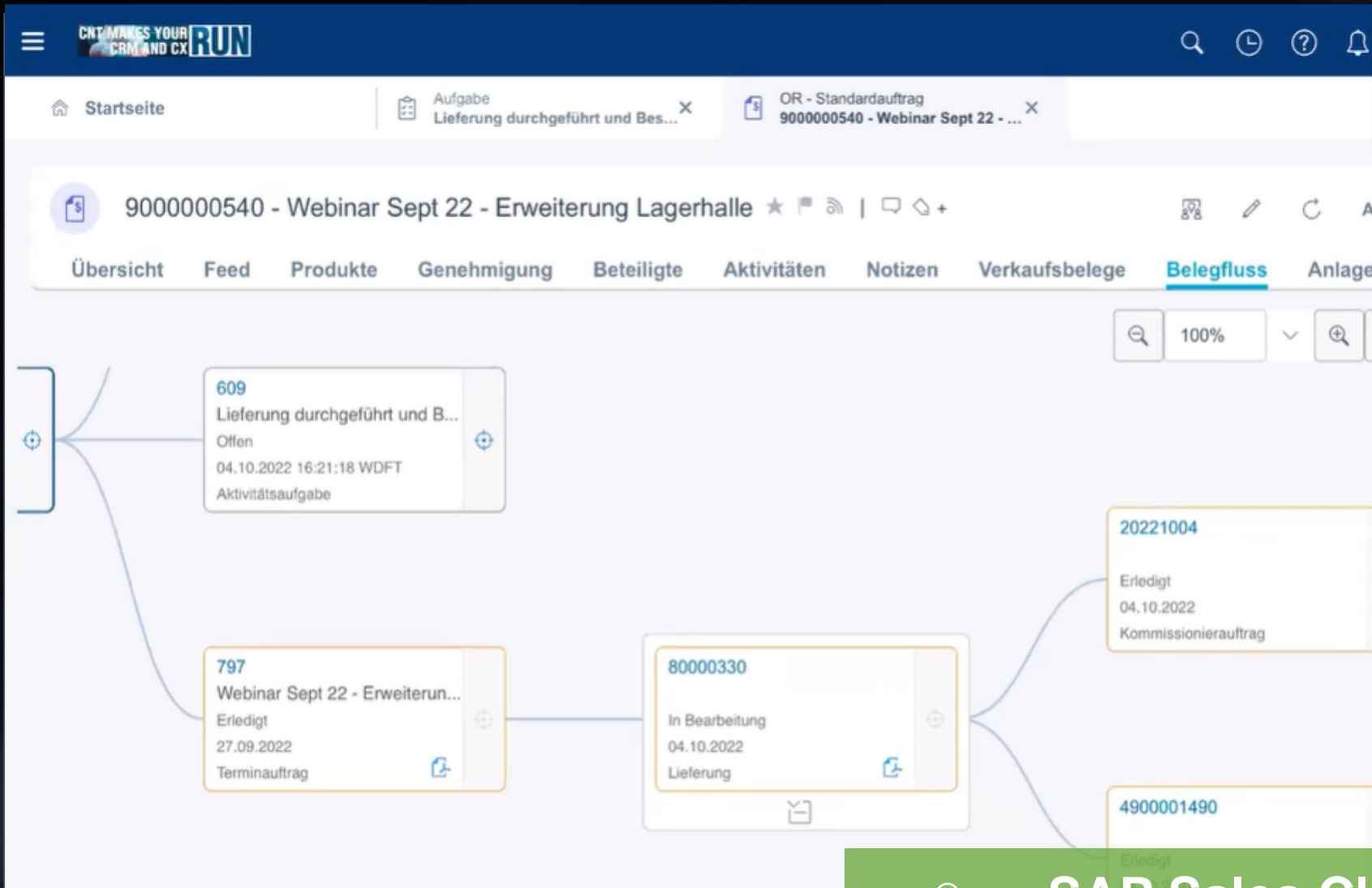
## Production Planning to DMC





**SAP DMC**

Start Window



## SAP Sales Cloud

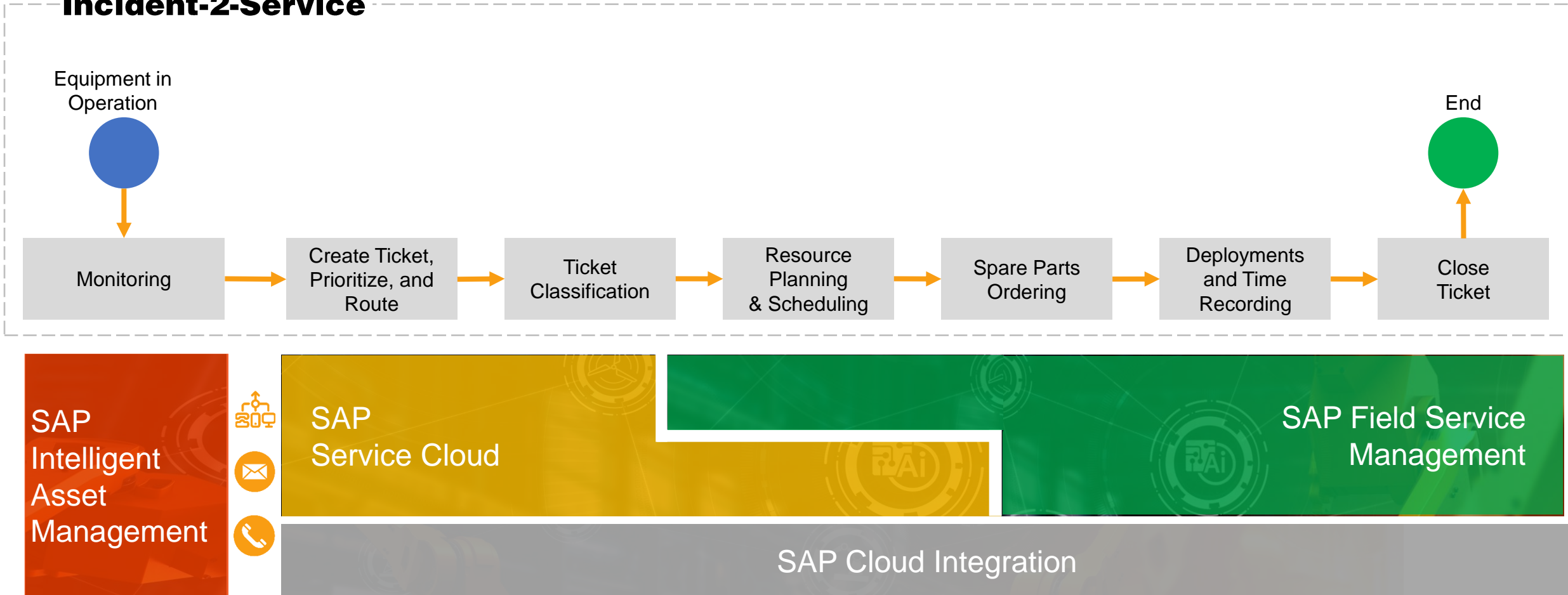
Monitor Document Flow  
from S/4HANA and DMC

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# The Service Story - Workflow

## Incident-2-Service





# Service Story – Components

1

## SAP Intelligent Asset Management

- Suite of Cloud Solutions for Asset Management
- SAP PM is a subset of EAM

2

## SAP Service Cloud

- Cloud-based service solution
- Part of SAP CX portfolio
- Deliver personalized customer service
- Increase service efficiency

3

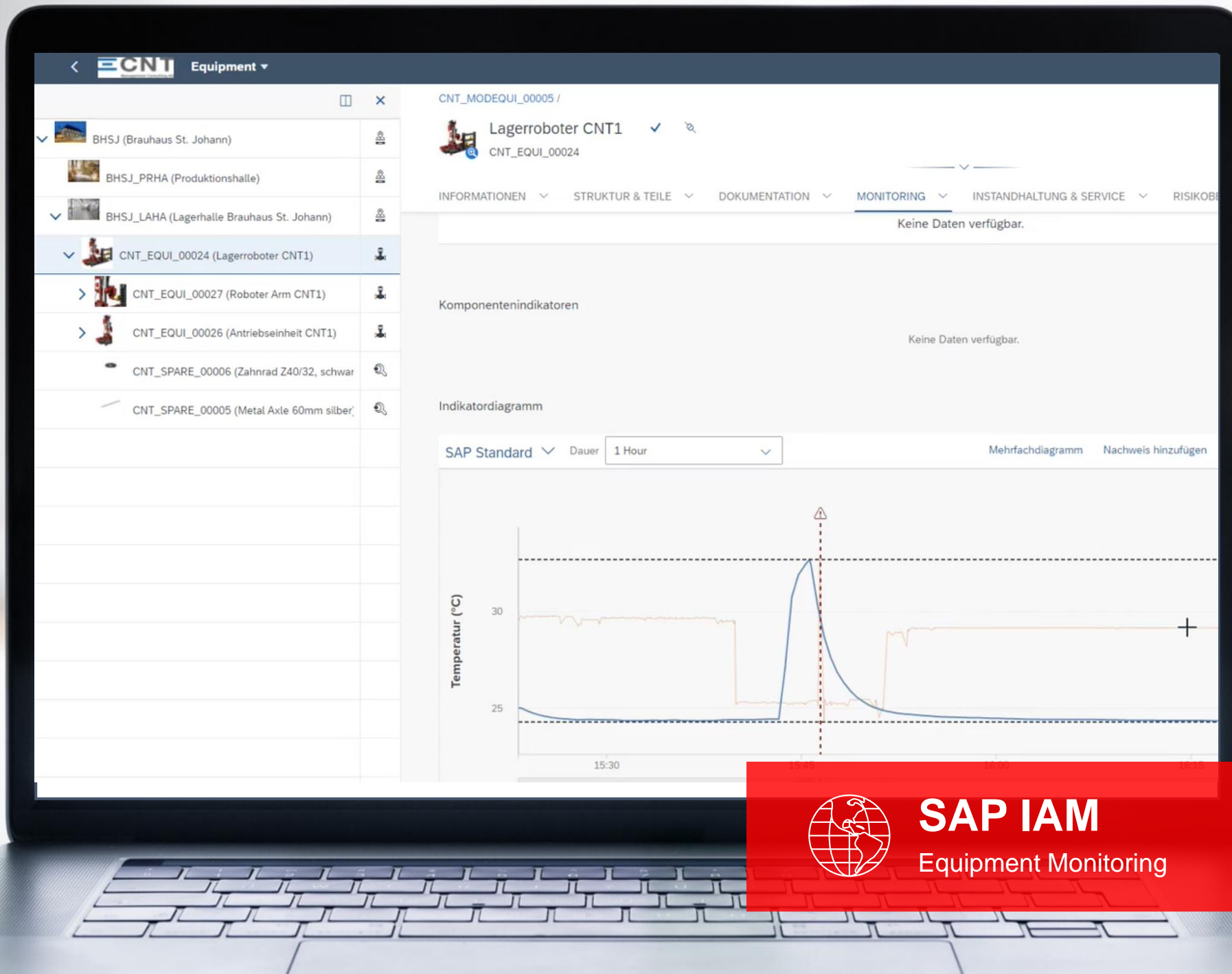
## SAP Field Service Management

- Cloud-based solution for professional deployment of technicians, vehicles, materials and tools

4

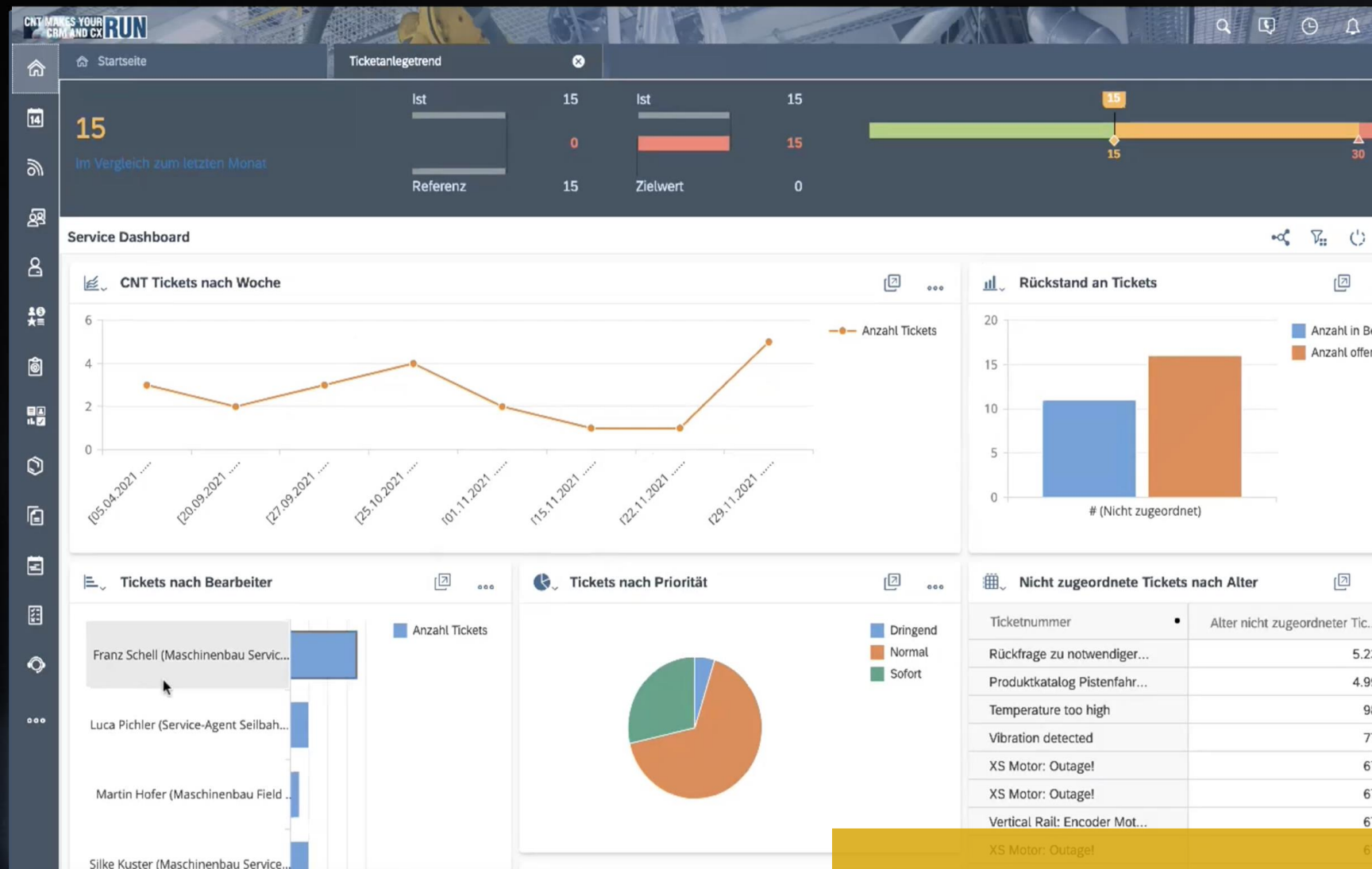
## SAP Cloud Integration

- Connect SAP cloud and on-premise applications with other cloud and on-premise applications



**SAP IAM**

Equipment Monitoring



**SAP Service Cloud**  
Service Cockpit



Self-Service für  
Kunden



Planung und  
Verteilung



Crowd Workforce



Smartforms und  
Feedback



Analysen und  
Berichte



Stammdaten



Grundlegende  
Services



Einstellungen und  
Konfiguration



Partner-Portal



# SAP FSM

Manage Deployment  
of Technicians



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- **Completeness** – SAP systematically expanded to the most complete ever ERP portfolio through improvements and new developments (S/4HANA, SAP CX, EWM, IBP, DMC, etc.) or acquisitions (e.g., Ariba, CPQ, FSM).
- **UX** – Nearly all solutions are **available as modern FIORI UI**.
- **Cloud** – All new solutions are cloud-based, with all benefits of SaaS solutions. Whatever is left on-premise will slowly migrate
- **End-to-end View** – eliminates silos and enables a value-chain perspective
- **Business Value** – Getting passed ECC to S/4 migration allows for more exciting SAP projects.
- **Choice of SI** – Choose an SAP system integration partner that understands the full SAP spectrum, is focused on quality and is committed to delivering.



# Questions?

For questions after this session, contact us at

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**The Digital Enterprise will be presented live  
in Summer 2023 in a webcast series.**

**Get on the CNT distribution list to reserve  
your spot!**

**Thank you.**