

# THE DIGITAL ENTERPRISE

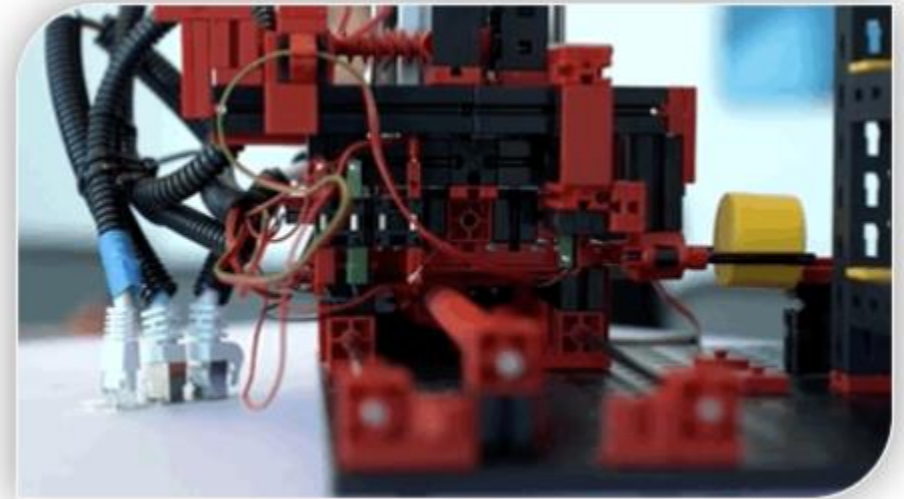
A Manufacturer's SAP Innovation Journey

ASUG Tennessee | October 20, 2023

Bernd Baier  
SAP Business Development Manager  
CNT Management Consulting Inc

# Session Highlights

- An SAP Story about how a Manufacturing Company is running completely on the latest 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, ...)
  5. Running a **Sustainable Enterprise**



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**
  - Running a **Sustainable Digital Enterprise**
- 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 Public Cloud
- SAP S/4HANA pre-studies and roadmaps
- SAP S/4HANA greenfield implementations
- SAP S/4HANA brownfield conversions

## SAP Consulting

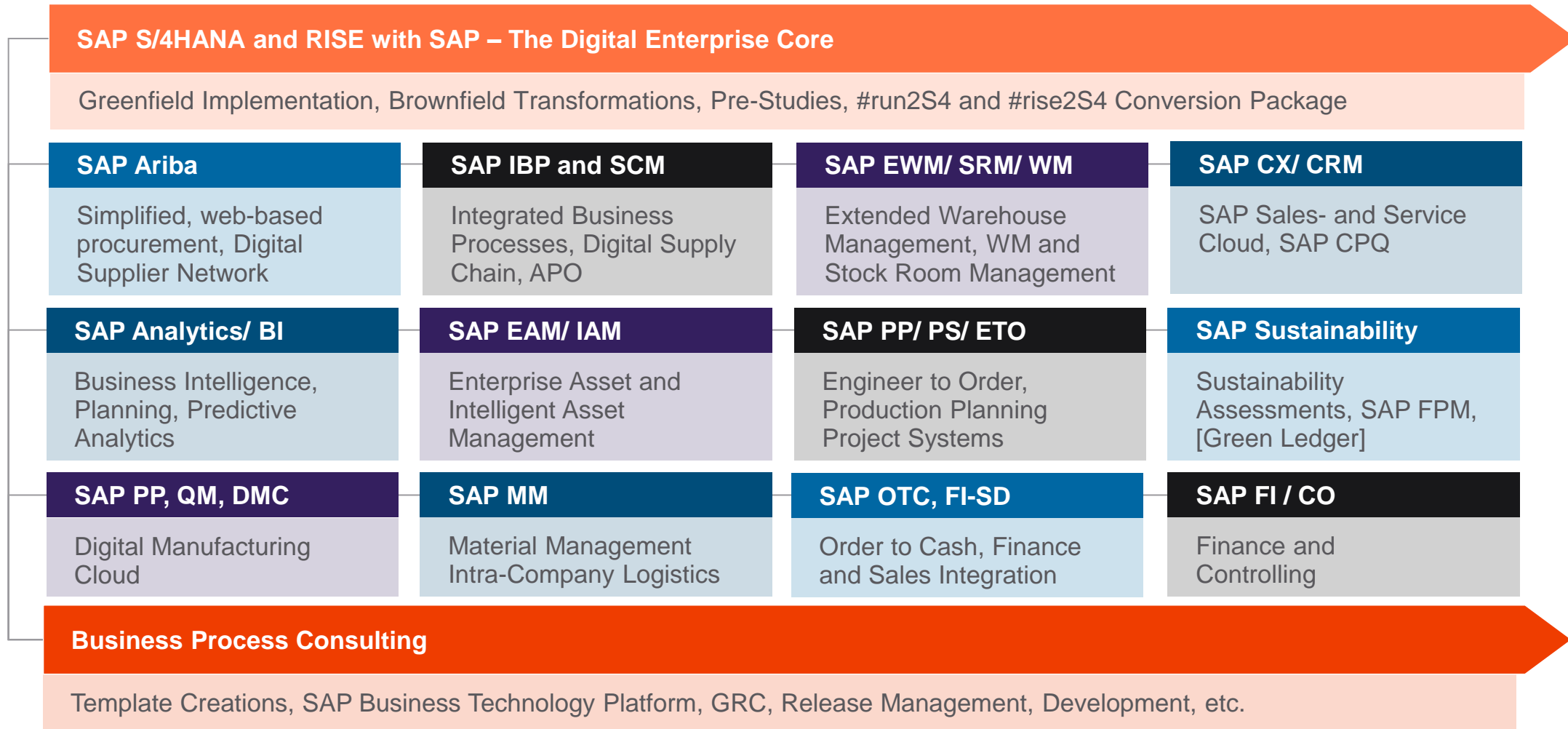
- Functional SAP consulting
- Global business processes and templates
- End-to-end SAP implementations and rollouts
- Integration management
- SAP master data and data migration
- Program-, project-, and change management

## 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

**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]



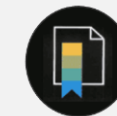
Quality Award 2018  
Business Transformation  
[Hoerbiger]



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

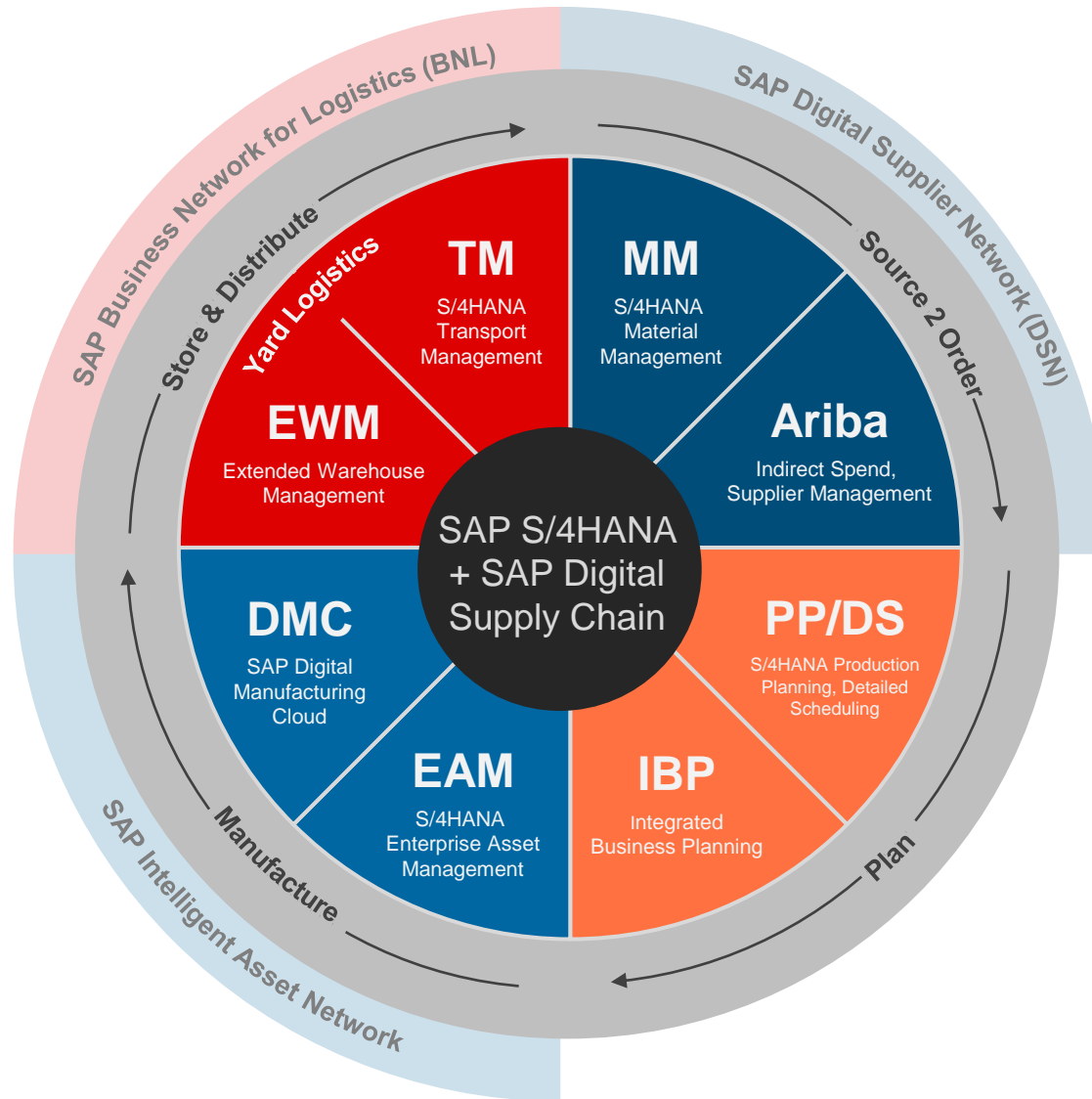
CNT is regularly recognized by SAP with Quality Awards



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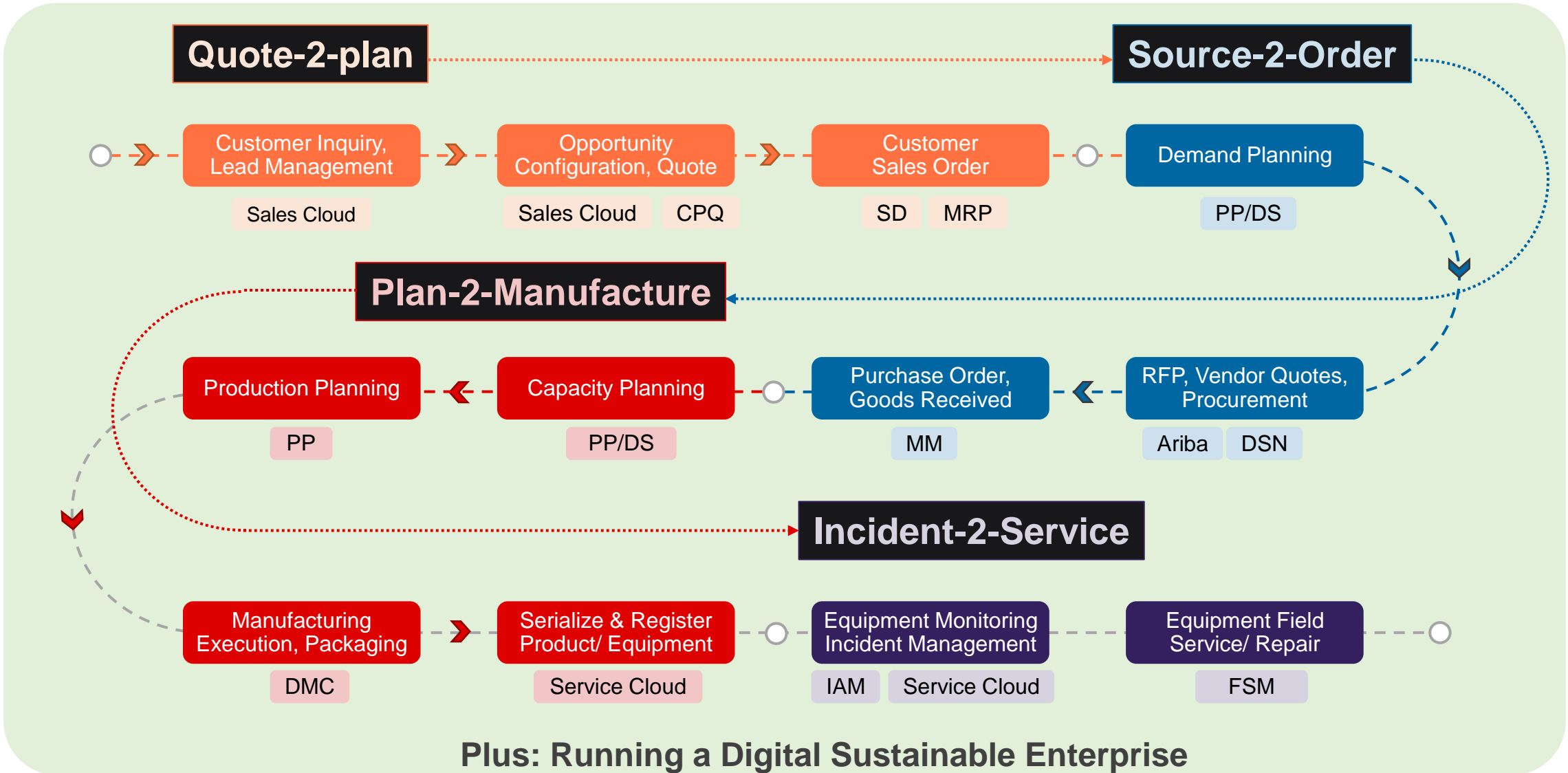
# Integrated Digital Supply Chain with and around SAP S/4HANA



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.

# The Digital Enterprise Processes



Plus: Running a Digital Sustainable Enterprise

# End-To-End Process Perspective Benefits

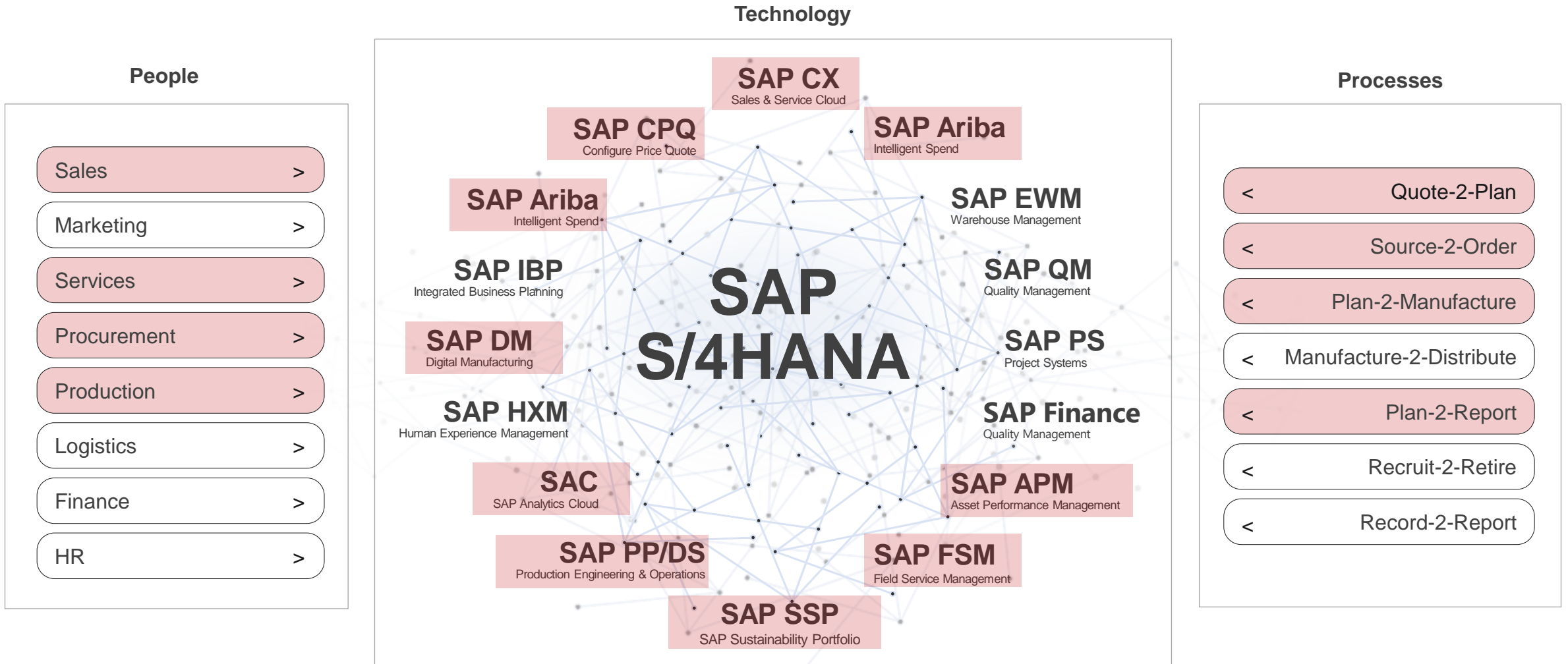
## E2E Business Processes Perspective

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.

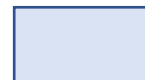
# The SAP-Driven Digital Enterprise



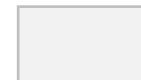
# Covered Processes with “CNT Industries”



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, DMC, EAM, QM, PEO, EPPS
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

# 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**

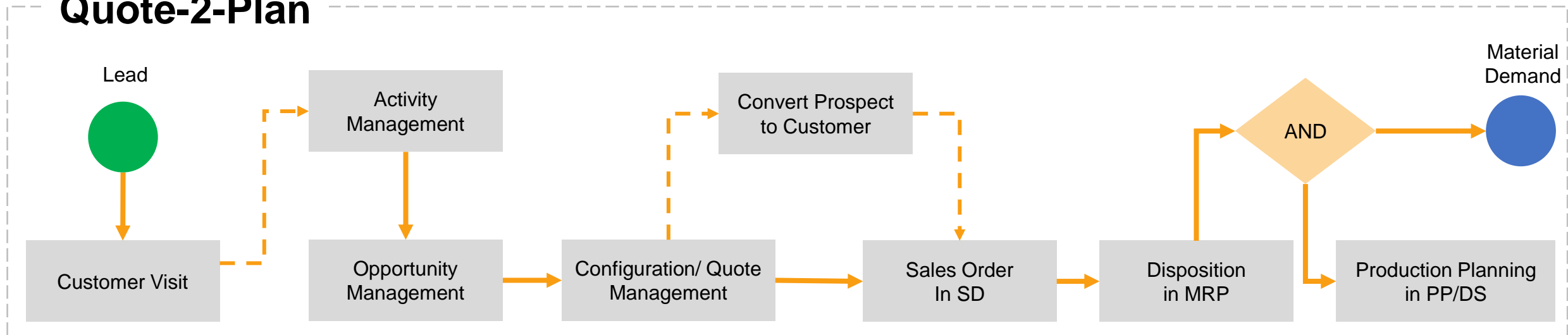
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# The Sales Story – Workflow

## 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

- Startseite
- Kalender
- Feed
- Analyse
- Kunden
- Wettbewerber
- Aktivitäten
- Besuche
- Verkauf
- Tickets
- Verträge
- Produkte**
- Installation
- Bibliothek
- Vertreter

Alle Produkte - CNT IoT Showcase (8)

 <p><b>CNT IoT Lagerroboter C1X</b> 1377</p> <p>Externe Nummer 000000000000001377 Sparte Maschinenbau Kategorie Fertigungskomponente</p>	 <p><b>CNT IoT Zahnrad Z40/32, schwarz</b> 1382</p> <p>Externe Nummer 000000000000001382 Sparte Allgemein Kategorie Elektronisches Bauteile</p>	 <p><b>CNT IoT Robotic proSo</b> 1387</p> <p>Externe Nummer 00 Sparte Ma Kategorie Ele</p>
 <p><b>CNT IoT Motor XS 9V, schwarz</b> 1380</p> <p>Externe Nummer 000000000000001380</p>	 <p><b>CNT IoT - Querträger 10er Bohrung</b> 1563</p> <p>Externe Nummer 000000000000001563</p>	 <p><b>CNT IoT - Längsträger 2</b> 1562</p> <p>Externe Nummer 00</p>

**SAP Sales Cloud**  
With product data from the S/4HANA backend

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
Steuerungssystem		
CNT Steuerungssystem CS9	€1,296.00	
Software		
CNT Robotic proSoftware		
Energieversorgung		
CNT USV Anlage	€7,000.00	
Produktabmessungen		
<p>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</p>		



# SAP CPQ

Customer Quotation- and Configuration Management

### IoT-Showcase

Gefiltert nach (2): Anzeigewährung, Auftraggeber

#### Gespernte Gutschriftenanforderungen

Sortiert nach: Zuletzt geändert/Angelegt am

Gutschriftenanforderung	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

#### 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
- Gutschriftenanforderung anlegen

#### Verkaufsangebotspipeline

Abgelaufen/Läuft heute ab



## S/4HANA SD

Client Quotes and Sales Orders overview

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# SAP Ariba Components

## 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, ...]

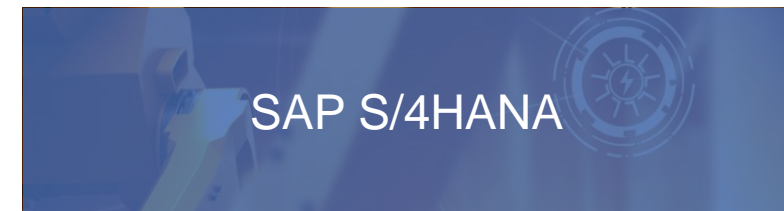
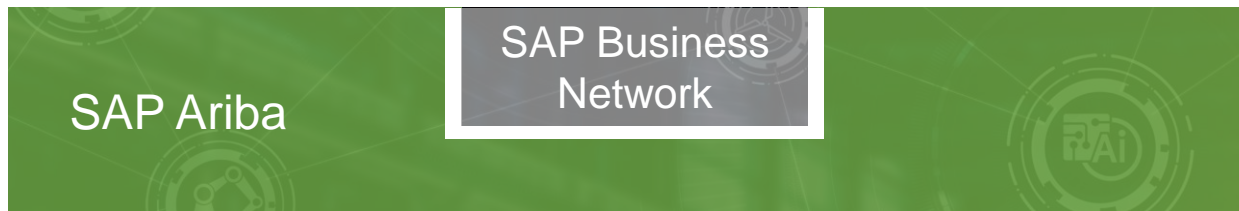
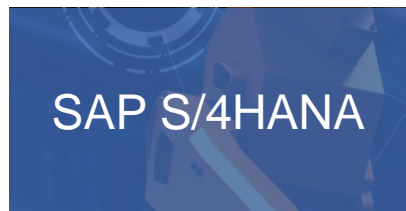
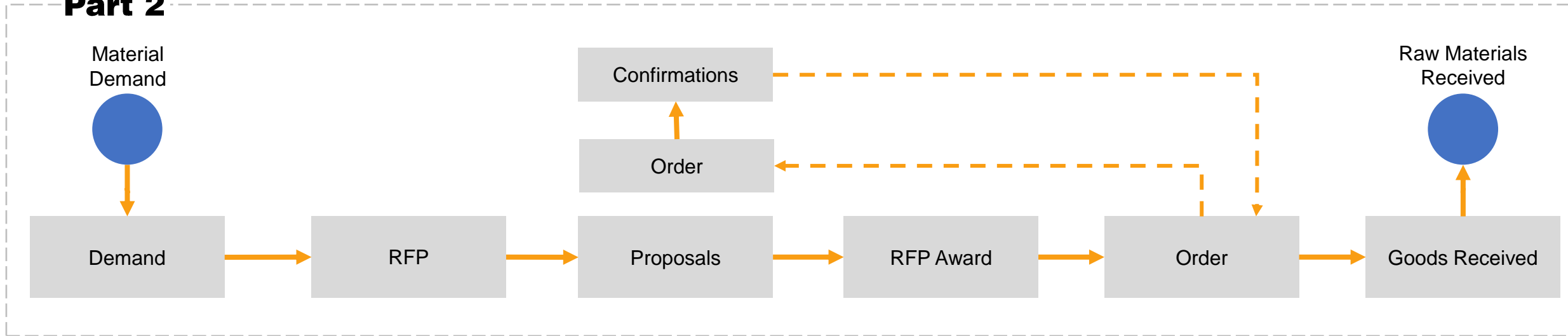
## SAP ERP Integration

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



# The Procurement Story – Workflow

## Part 2



6000000143 / Rohstoffanforderung Hochregallager (MID) Schließen

Rohstoffanforderung Hochregallager (MID)

Übersicht Artikel, für die Angebote benötigt werden Fragen, Voraussetzungen und Anlagen Nachrichten

### Lieferantenteilnahme

3 Eingeladene Lieferanten

[Weitere Informationen](#)

- Noch nicht angezeigt
- Teilnahme abgelehnt
- Angezeigt, aber noch nicht teilgenommen
- Gebote abgegeben

### Ereignisdauer

**29.09.2022, 12:22 Uhr - 30.09.2022, 12:22 Uhr**

**19 : 57 : 31**

Stunden    Minuten    Sekunden

[Bearbeiten](#)

### Gesamtartikelabdeckung

2 Artikel oder Lose mit mindestens 1 Gebot

[Weitere Informationen](#)

- Artikel oder Lose mit mindestens 1 Gebot
- Noch nicht erhalten

	Cornelson AG <span>...</span>	Tempo GmbH <span>...</span>	Nestlé Suisse SA <span>...</span>
2 Artikel und 12 Bedingungen <span>👁</span>	<b>1.332.420 € EUR</b>	<b>1.872.340 € EUR</b>	<b>4.684.990 € EUR</b>
> 1.0 CNT IoT - VERARBEITUNGSSTAHL <span>🔗</span> CNT IoT - Verarbeitungsstahl			
Preis <span>...</span>	1.306,75 € EUR Rang 1 <b>Niedrigster Wert</b>	1.844,23 € EUR Rang 2 <span>↗</span> 41,1 %	1.855,99 € EUR Rang 3 <span>↗</span> 42,0 %
> 2.0 CNT IoT - Palettenträger <span>🔗</span> CNT IoT - Palettenträger			
Preis <span>...</span>	51,34 € EUR Rang 1 <b>Niedrigster Wert</b>	56,22 € EUR Rang 2 <span>↗</span> 9,5 %	5.658 € EUR Rang 3 <span>↗</span> 10.920,6 %

[Alle erweitern](#) [Alle reduzieren](#)

## SAP Ariba

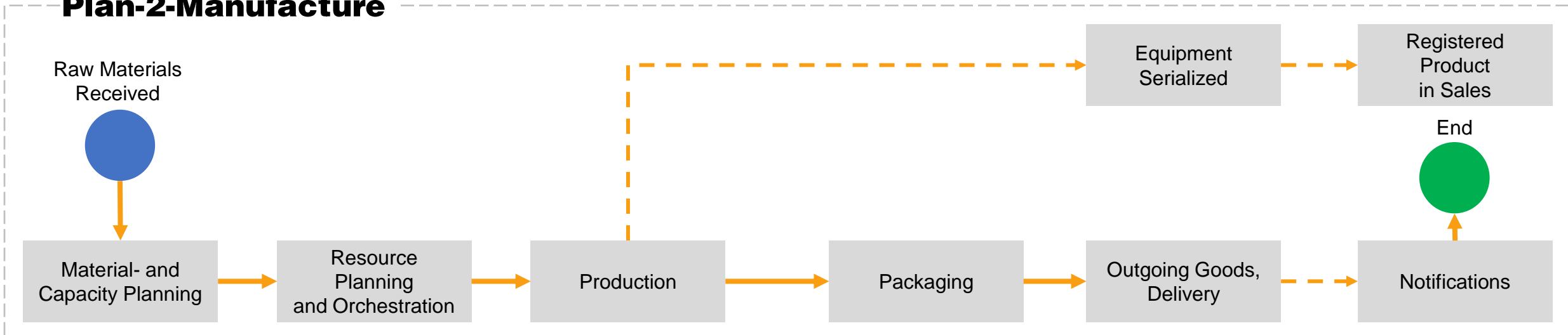
Raw Material Request Overview

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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 (BTP)

# 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

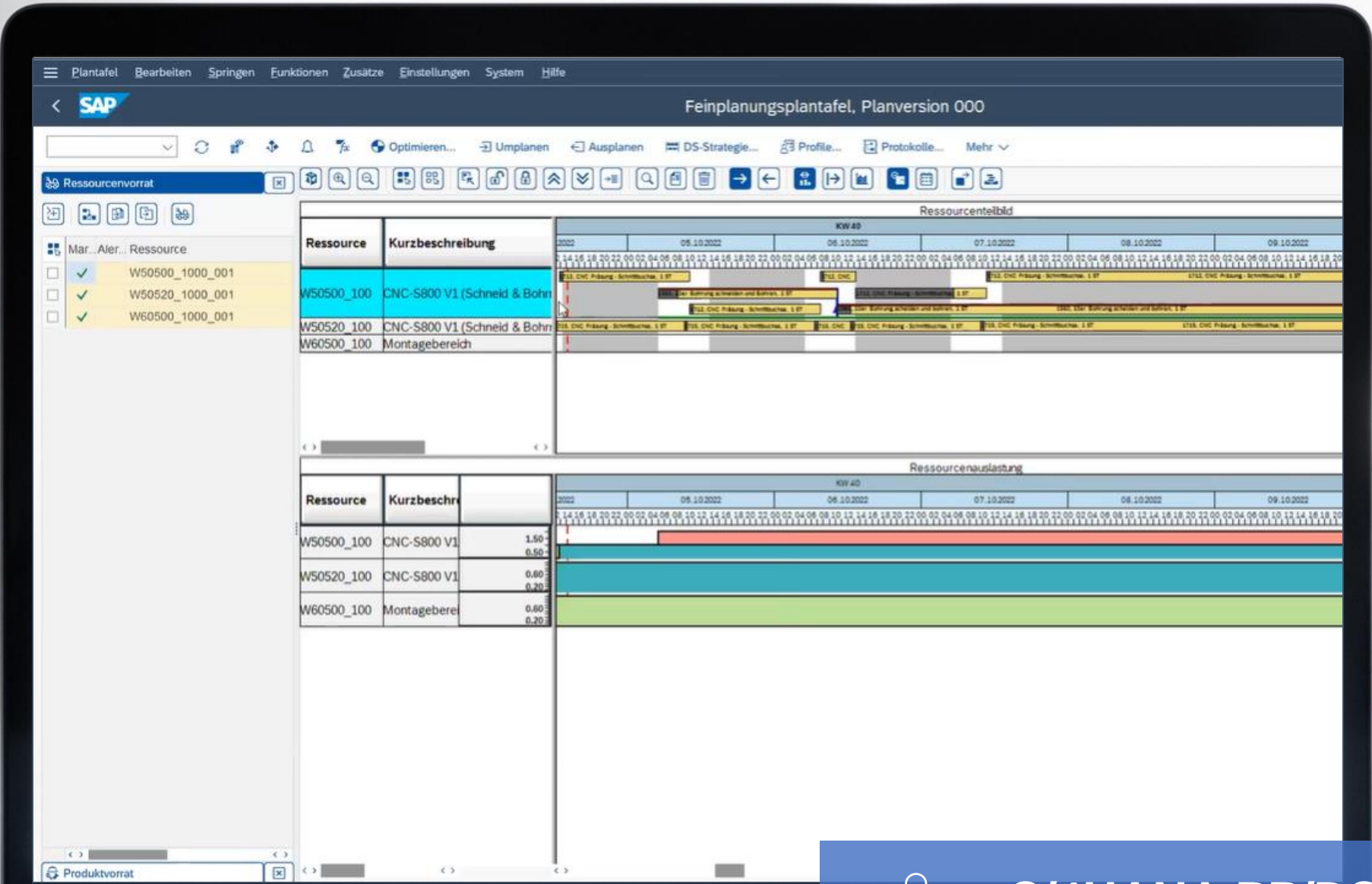
## SAP Digital Manufacturing Cloud

- 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



Auftrag Produktheuristik Strategie Variable Heuristik Mehr

Produkt: \* 1560 CNT IoT - Hochregal 2x3  
Lokation: 1000 CNT  
Kontierung:

Elemente Perioden Mengen Bestand Pegging-Übersicht Produktstamm Vorplanung

1560 in 1000 (Lagerfertigung)

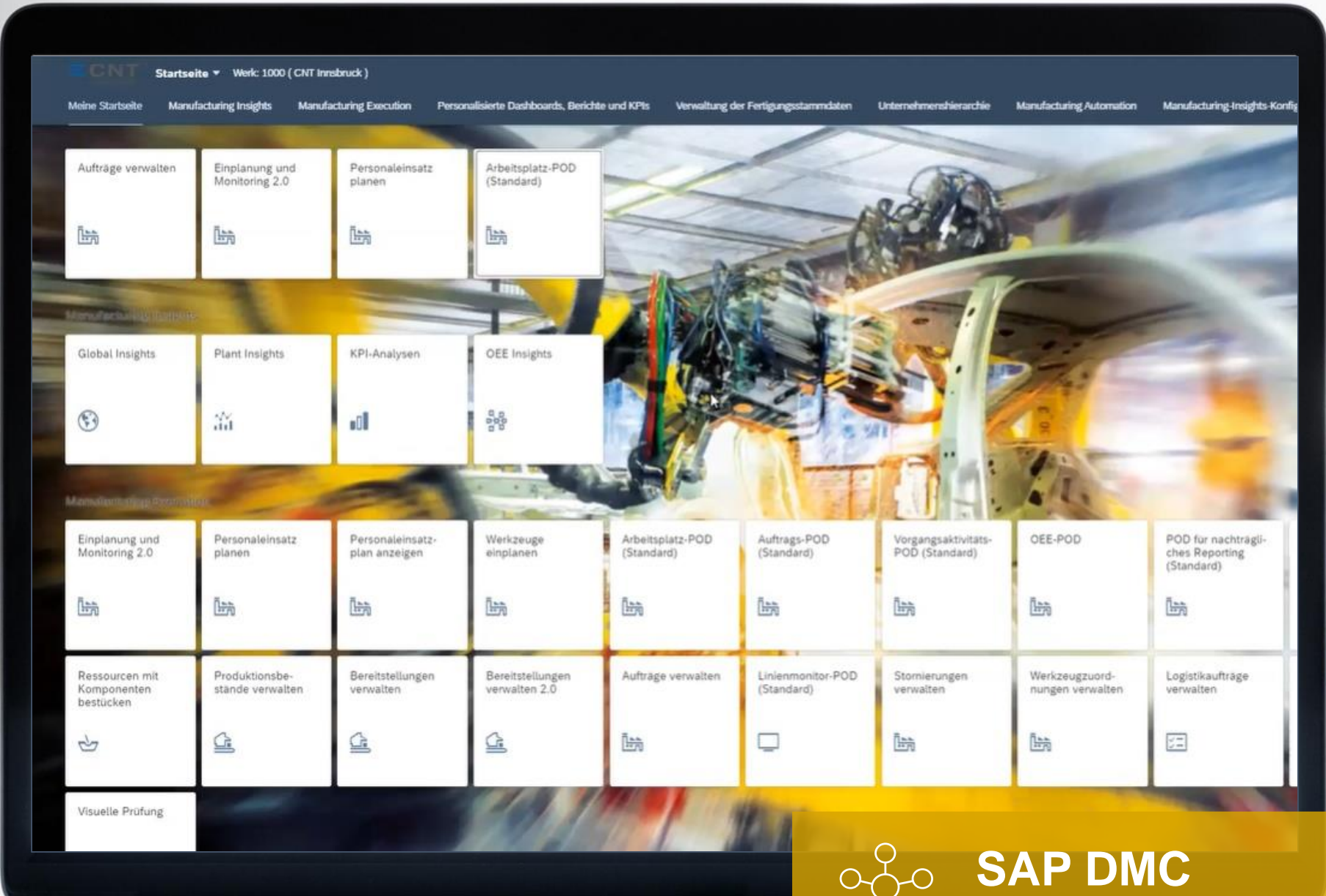
Mehrstufige MRP Planung Materialstamm Auftragsbericht Stammdatenübertragung

Verf/BedD.	Ver/BedZ	Langtext der Kategorie	Zug-/BedEimt.	Zg./BdMg	Verfügbar	Über/Unter	BME	PP-fixiert	Umsetzkzn.	N. peg-rei	Fehlteil	ATP-Status	Priorität	Startdatum	Startzeit	Ver	Sublok.	Ziel / Quelle
<input type="checkbox"/>	04.10.2022	16:13:42	Bewerteter, frei verwendbarer Bestand /1000/CC		0	0	0 ST				<input type="checkbox"/>							1000
<input type="checkbox"/>	13.10.2022	12:18:45	Planauftrag (nicht fixiert, unbestätigt)	18042	1	1	0 ST	<input checked="" type="checkbox"/>			<input type="checkbox"/>	Nicht geprüft	0	05.10.2022	07:00:00			1000 /1000
<input type="checkbox"/>	14.10.2022	00:00:00	Kundenauftrag	797/000010/1	1-	0	0 ST				<input type="checkbox"/>		3	14.10.2022	00:00:00			
<input type="checkbox"/>	28.06.2025	23:59:59	Ende des PP/DS-Horizonts	PP/DS-Horizont	0	0	0 ST											
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# S/4HANA PP

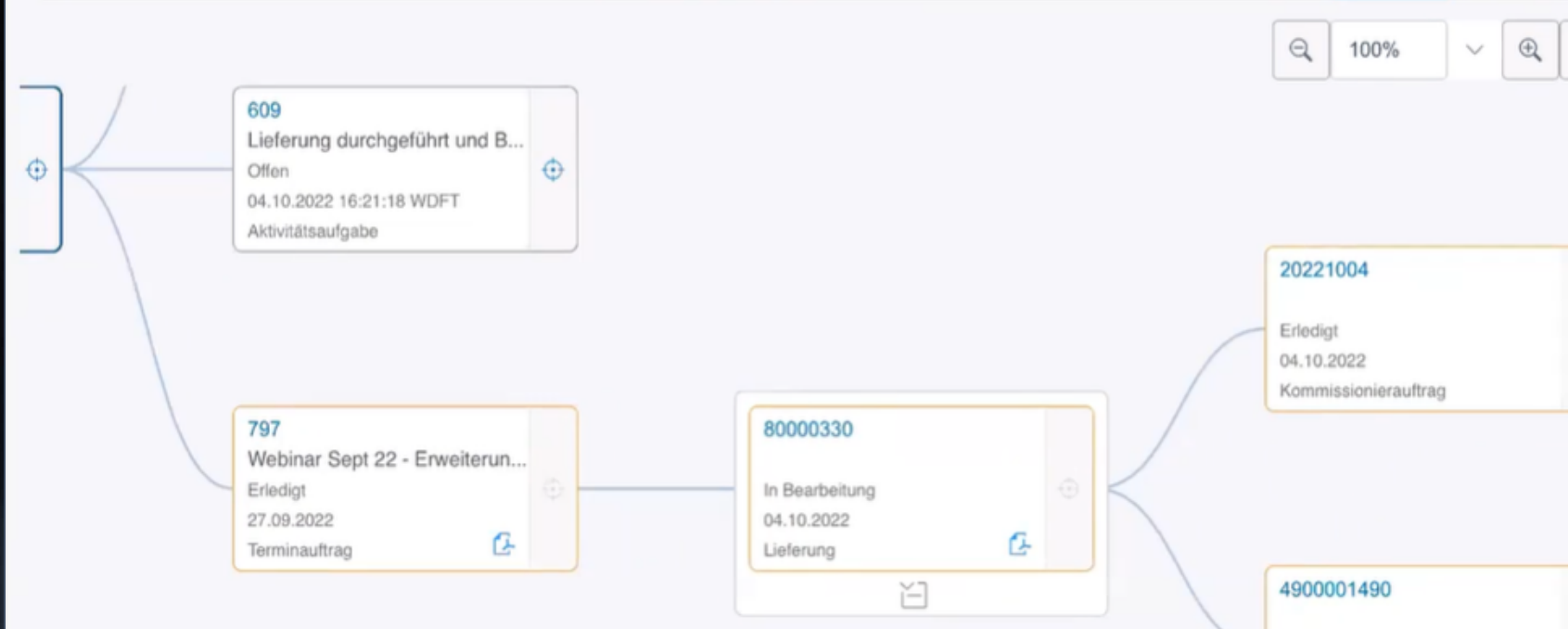
Production Planning in PP/DS




**SAP DMC**

Start Window





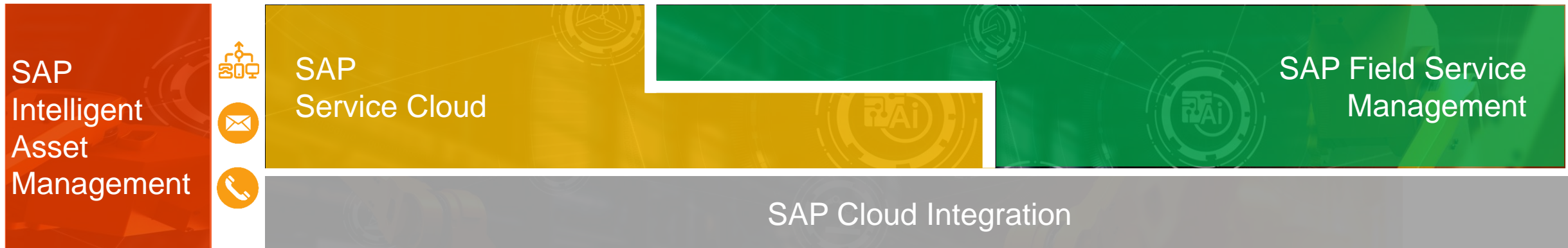
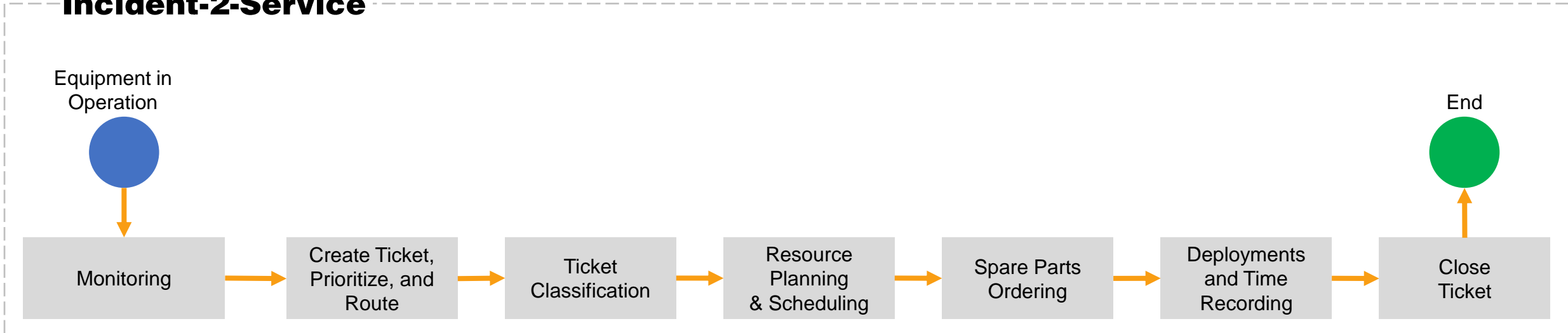
 **SAP Sales Cloud**  
Monitor Document Flow  
from S/4HANA and DMC

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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

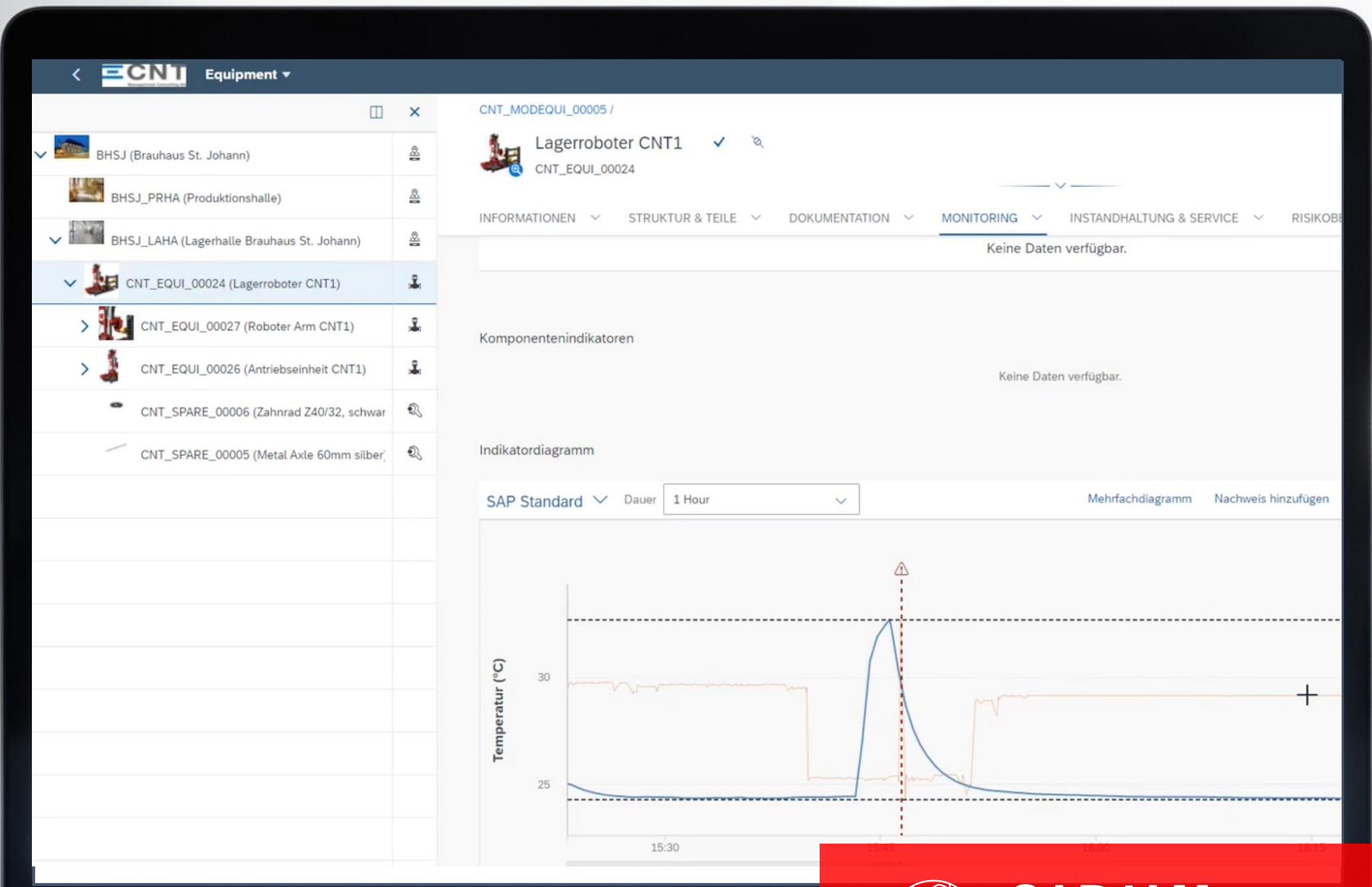
## SAP Field Service Management

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

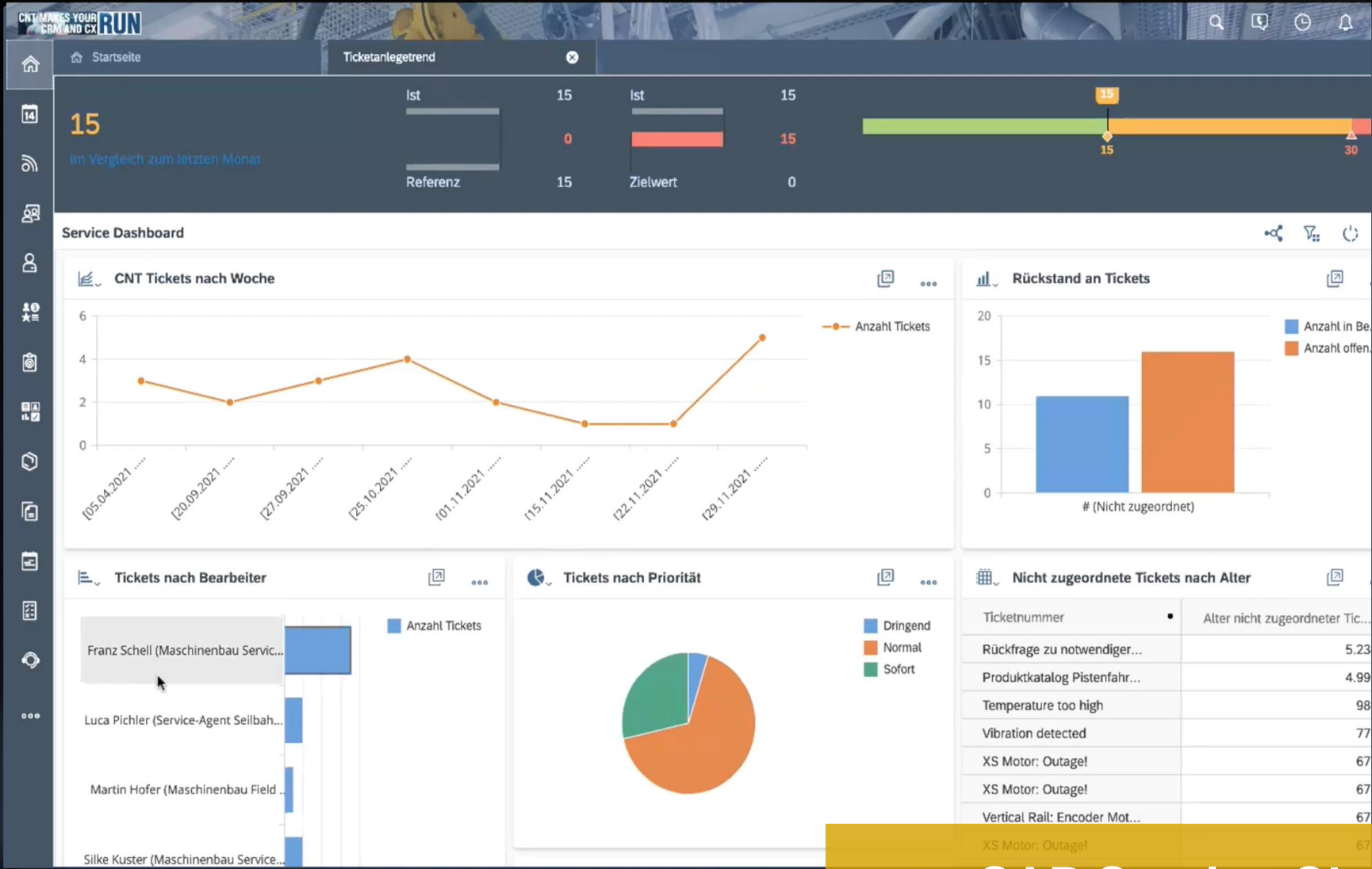
4

## 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



## Willkommen bei SAP Field Service Management

Self-Service für  
Kunden



Planung und  
Verteilung



Crowd Workforce



Smartforms und  
Feedback



Analysen und  
Berichte



Stammdaten



Grundlegende  
Services



Einstellungen und  
Konfiguration



Partner-Portal



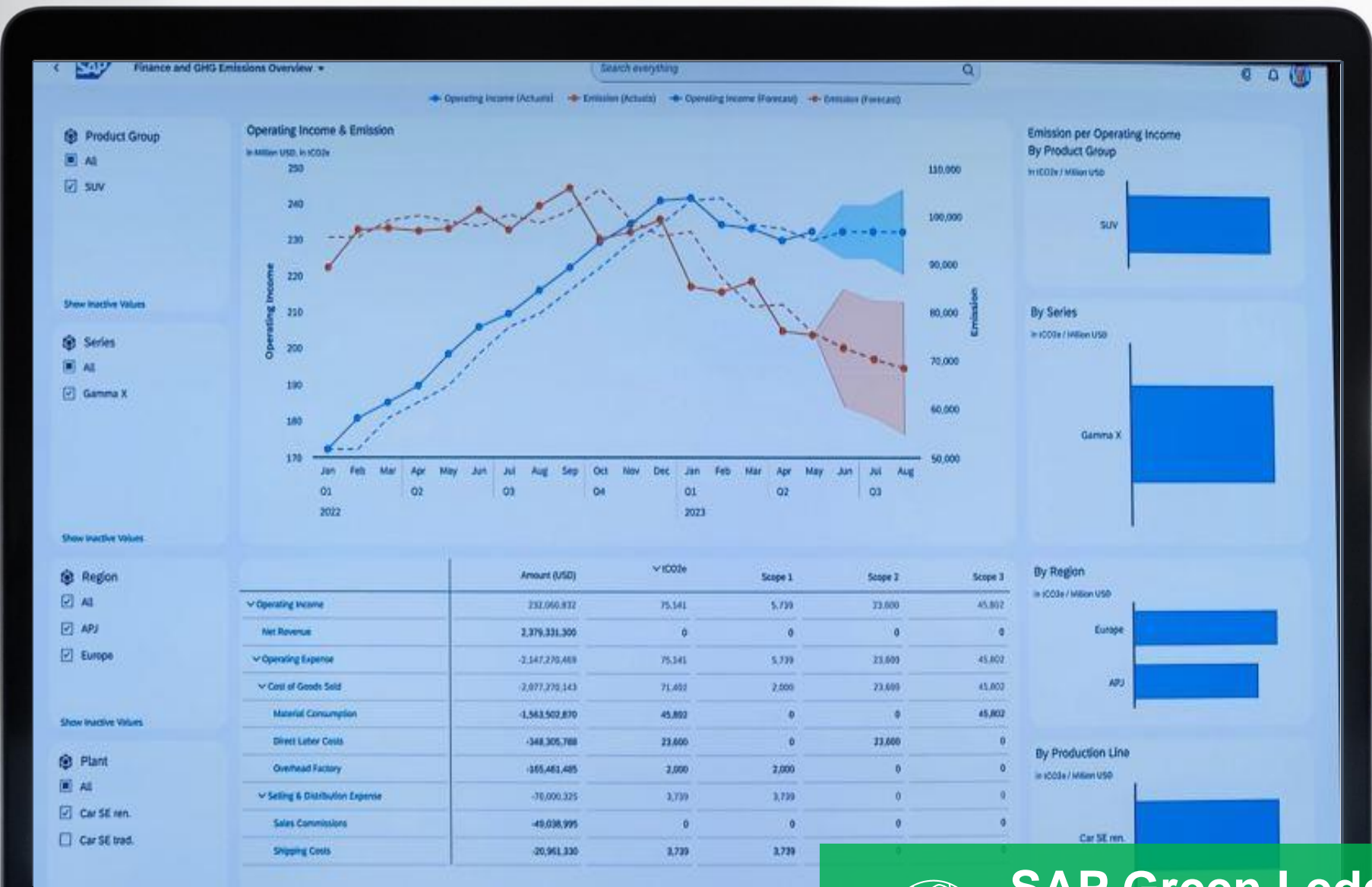
# SAP FSM

Manage Deployment  
of Technicians

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# SAP Green Ledger

Transactional-based  
Carbon Accounting

# The Sustainable Enterprise with SAP – Key Components

1

## SAP Sustainability Footprint Management

- Carbon Emission Management Solution
- Carbon Footprint and LifeCycle Assessments
- Track L1/L2/L3 Emissions Values on BOM Level
- Connect to S/4HANA to pull data
- SaaS based solution; available since 2021

2

## SAP Green Ledger

- Announced at SAPPHIRE 2023
- Transaction-based carbon accounting
- Parallel Carbon Ledger driven by SAP Finance Team
- GA 2024 for first carbon reports in 2025

3

## Ariba Risk Management

- Supplier Sustainability Reporting

4

## SAP Sustainability Control Tower

- Central Sustainability Data Warehouse
- Analyze and report sustainability business data
- Business-Unit level data on sustainability goals

# 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**

# Takeaways

- **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 Suite quality** – unified user interface using **modern FIORI UI**.
- **Cloud** – All new solutions are cloud-based, with all benefits of SaaS solutions.
- **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.

## Action Items

- Finalize your SAP S/4HANA Roadmap with RISE considerations
- Use Paradigm Shift with S/4HANA and RISE for an SAP Manufacturing Focused Assessment
- Start with a Sustainability Discovery Assessment sooner rather than later

# Questions?

For questions after this session, contact us at

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

**Get on the CNT distribution list to reserve  
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**Thank you.**