SAP S/4HANA DIGITAL SUPPLY CHAIN - STRATEGIE & ROADMAP: NEUESTE TRENDS UND INNOVATIONEN FÜR IHR "LOGISTIK BUSINESS“

MATTHIAS MARTENS // 4. MAI 2022

AGENDA

1

SAP Solution Strategy

Digital Supply Chain

2

SAP Portfolio „Deliver“ Warehouse & Transportation

3

Deployment-Strategy

Digital Supply Chain

4

SAP S/4 Public Cloud & Digital Supply Chain

5

Take Aways

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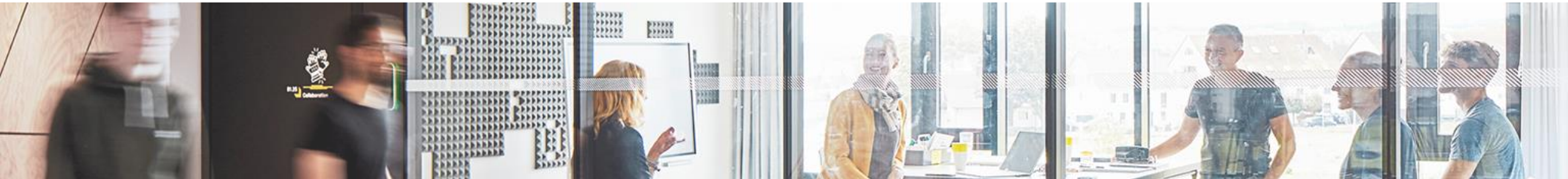
1 SAP SOLUTION STRATEGY DIGITAL SUPPLY CHAIN



Take the lead

Industry innovation for top-line, bottom-line and green-line growth

Top line

Enable new business models

Transforming business into selling bundled solutions, combining products, services, projects and subscriptions/outcome-based services.

Bottom line

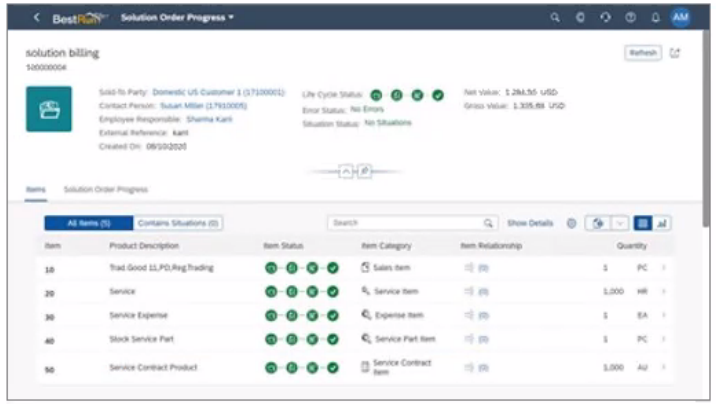
Unlock efficiencies

Provide intuitive user experience, streamlined workflows and embedded artificial intelligence to continuously improve efficiency.

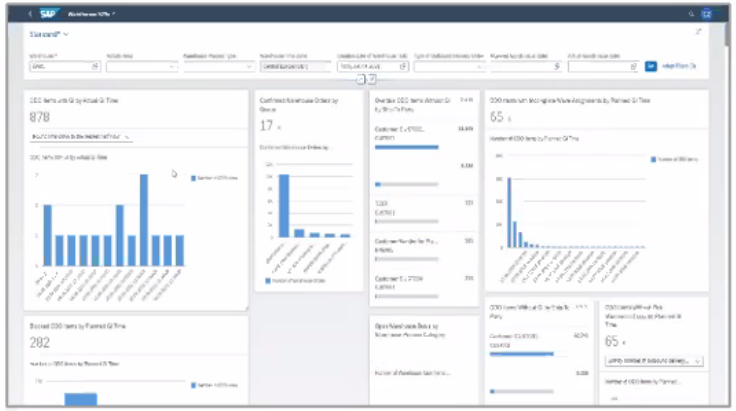
Green line

Drive sustainability

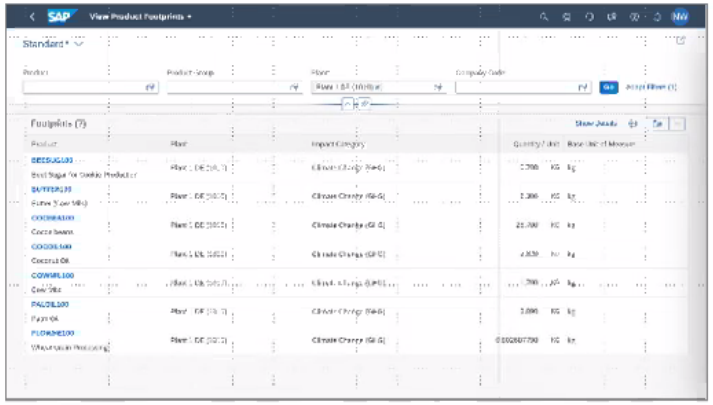
Quantify, analyze, and act on real-time data across the end-to-end operations to establish a “green line” through the entire business.



Solution Business



Embedded Warehouse Mgmt.



Product Footprints

Effective E2E business steering, agile and efficient processes including embedded compliance based on a single business foundation

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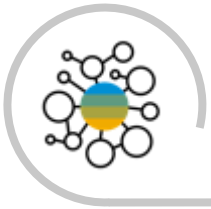
NEW REALITY IN LOGISTICS



Supply Chain Resilience

Operate supplier networks to hedge risk and flexibly engage external resources where required

Supply chain efficiency & Logistics 4.0

Optimize the flow of goods, increase asset and warehouse utilization and address sustainability goals

Supply chain integrity and sustainability

Create a digital twin of fulfillment building on asset insights, stakeholder collaboration and uniquely identified products.

Delightful delivery experience

Fulfill the promise of omnichannel commerce with state-of-the-art logistics execution and customer service.

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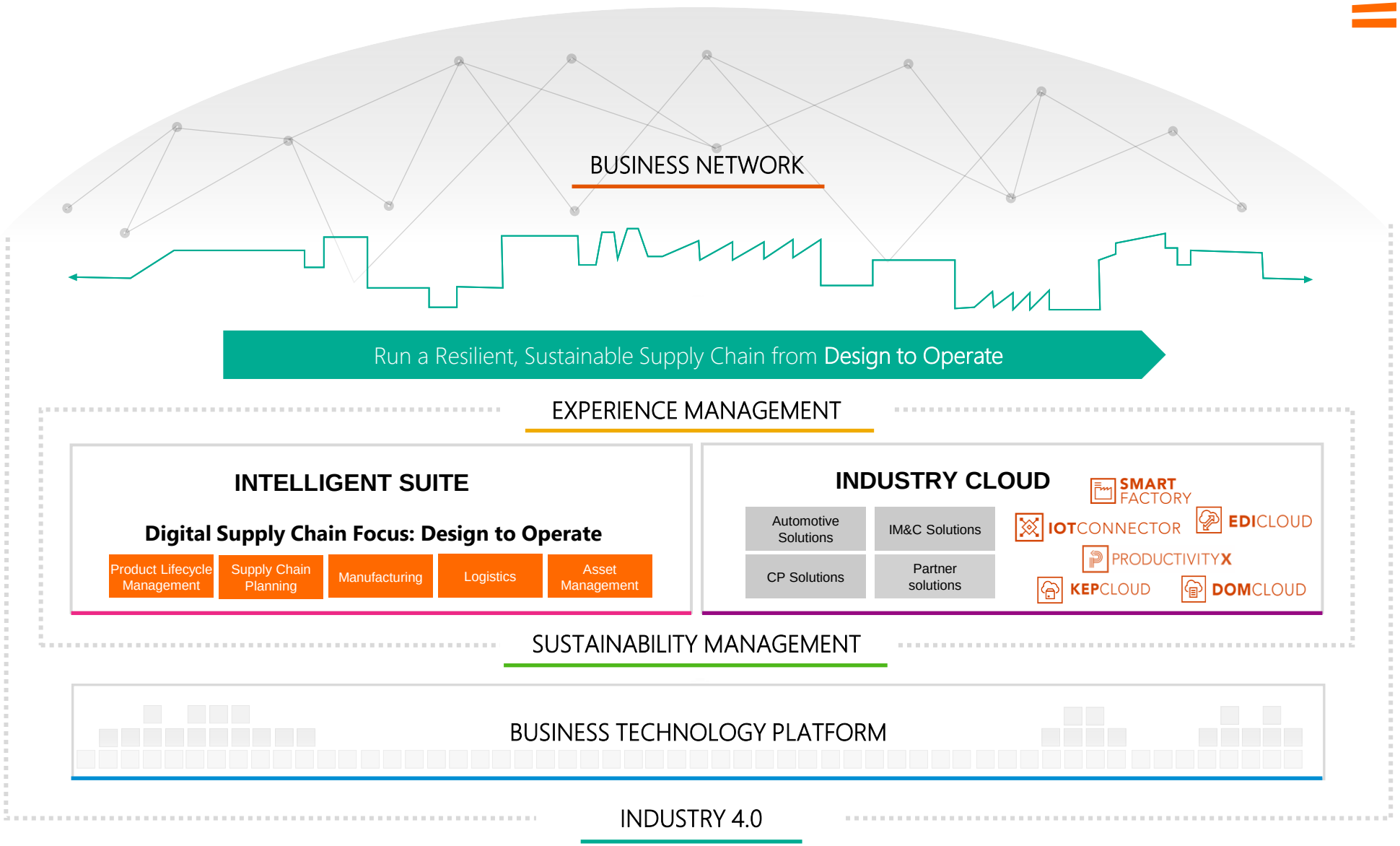
SAP Digital Supply Chain in the Intelligent Enterprise



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THE INTELLIGENT LOGISTICS ENTERPRISE

Holistic Visibility

Networked Operations

Seamless process execution

Itemized Tracking & Reporting

Intelligent Insights

CHALLENGE DIGITAL SUPPLY CHAIN

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Real **WACHSENDE** Supply Chain **KOMPLEXITÄT**

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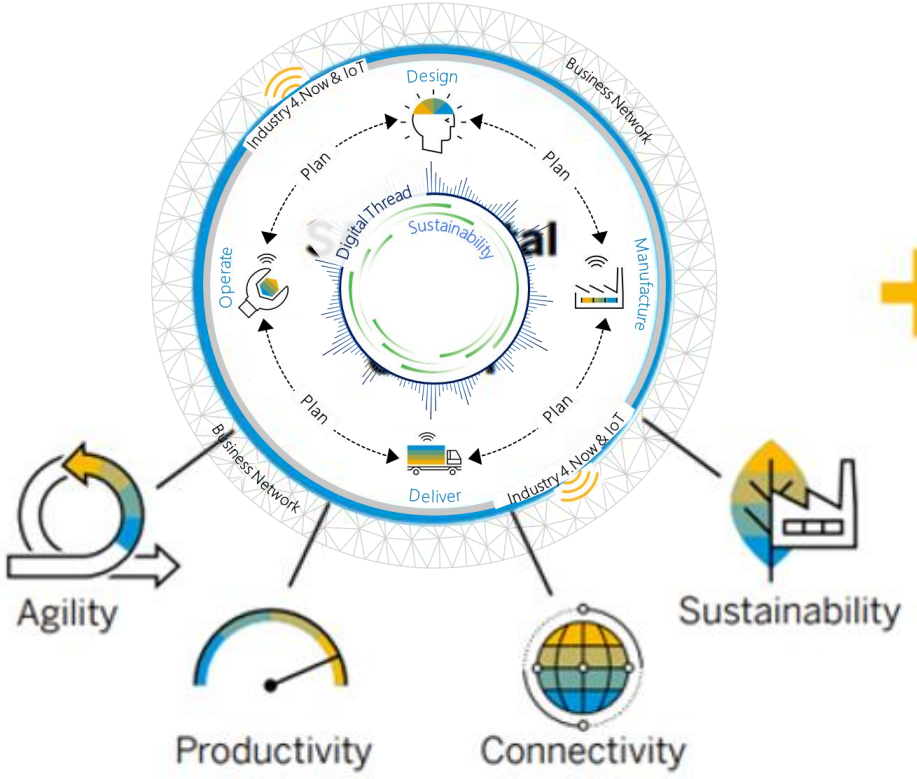
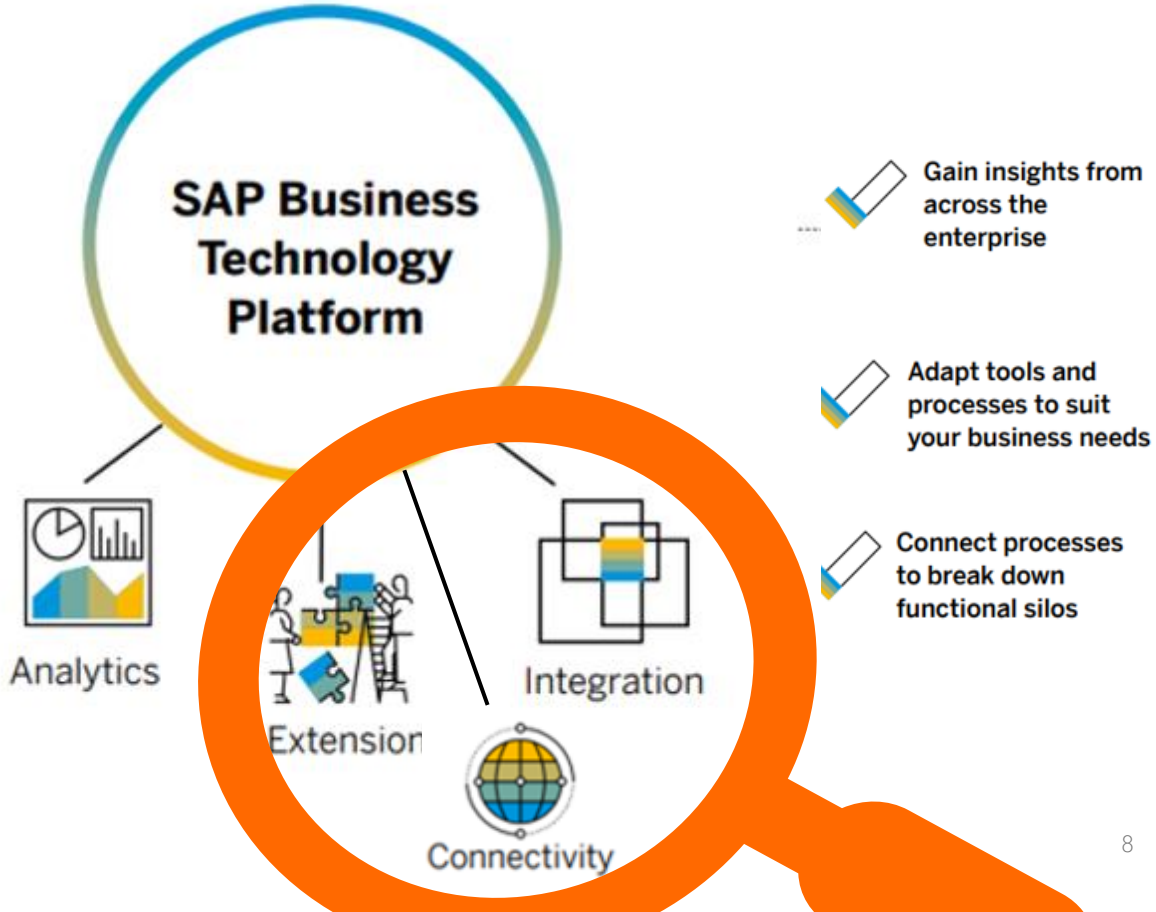
SAP DIGITAL SUPPLY CHAIN UND BTP

IOT-DRIVEN SUPPLY CHAIN:

"Create a data-**driven supply chain** management solution that would make use of **IoT** technologies and **extended cloud functionalities**"





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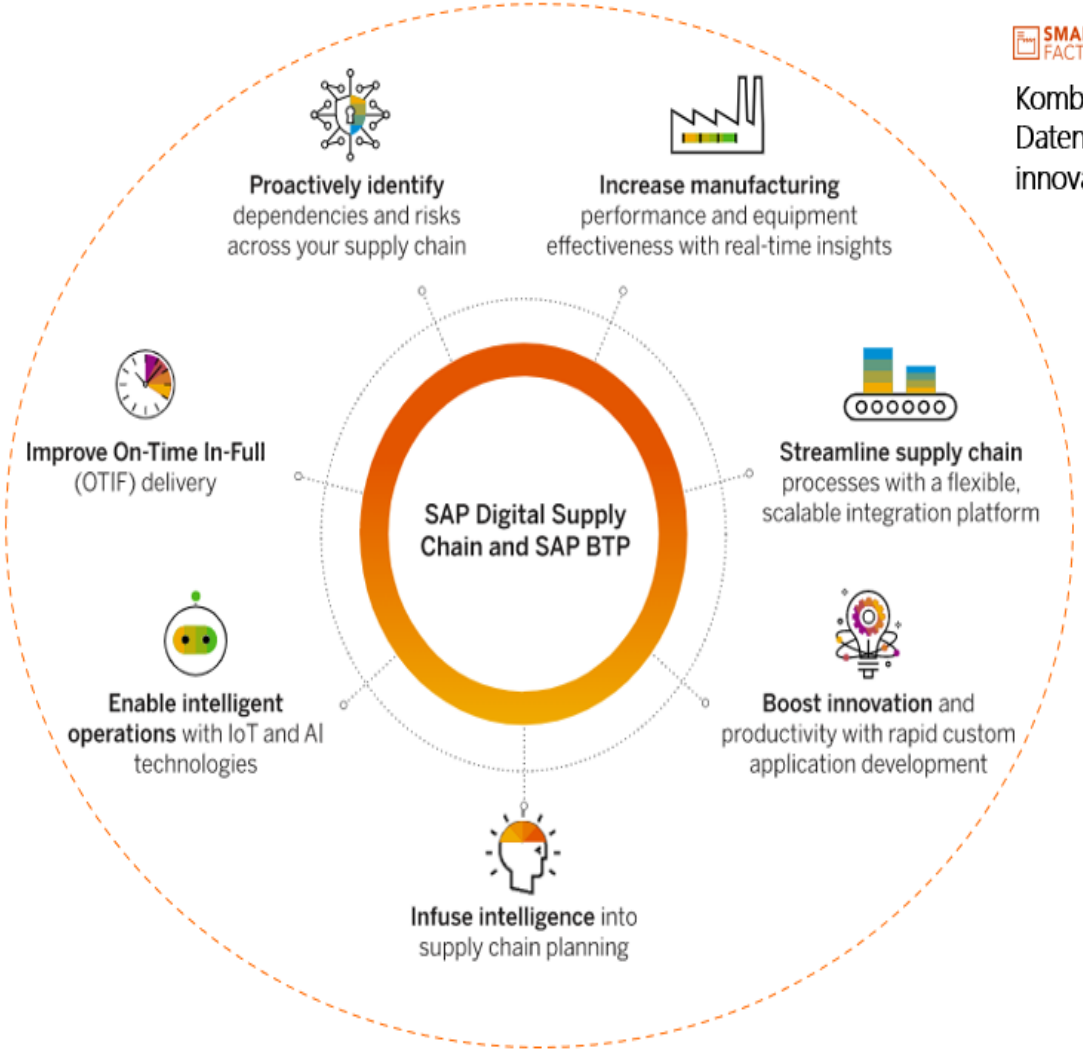
SAP BTP: SKALIERBARE PLATTFORM

7x



SMART FACTORY

Kombinierte Nutzung von IoT-Daten und Business Daten mit innovativen UI

KEPCLOUD EDICLOUD

Integration von Cloud Extended Functionality in SAP S/4 (z.B. Track&Trace Status über CloudCarrier Services oder Orderstatus)

IOTCONNECTOR

Integration von Sensordaten in SAP S/4HANA

VISIOSERVICES

AI-basierte Bilderkennung

APPDEVELOPMENT

Individuelle APP zur Ergänzung S/4-Funktionalität

All for One Industry Cloud Solutions

SMART FACTORY
IOTCONNECTOR EDICLOUD
PRODUCTIVITYX
KEPCLOUD DOMCLOUD

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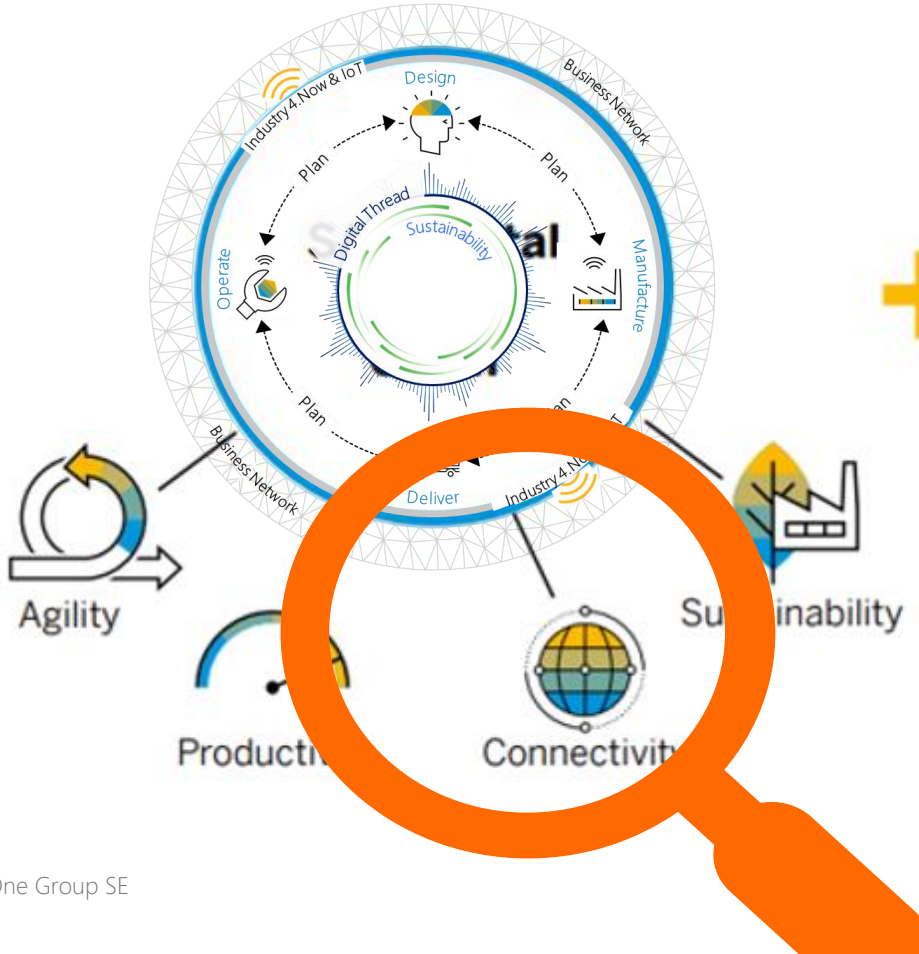

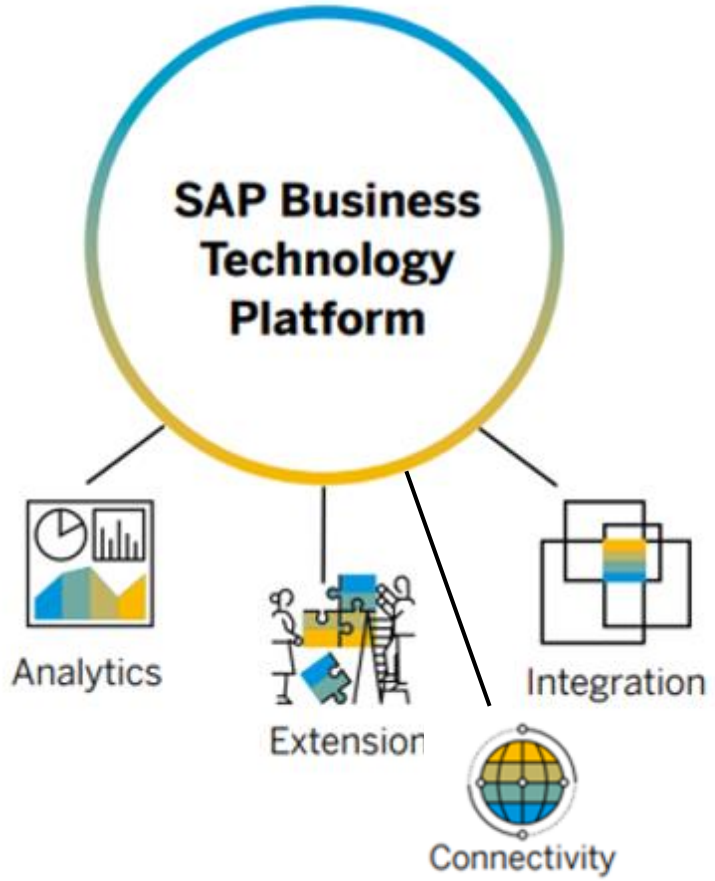

- Gain insights from across the enterprise
- Adapt tools and processes to suit your business needs
- Connect processes to break down functional silos

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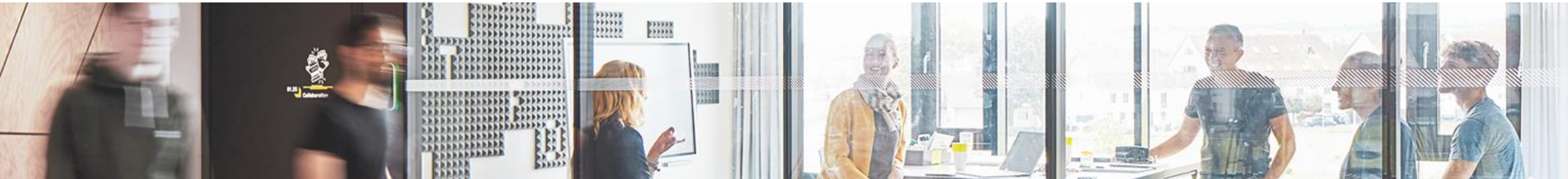
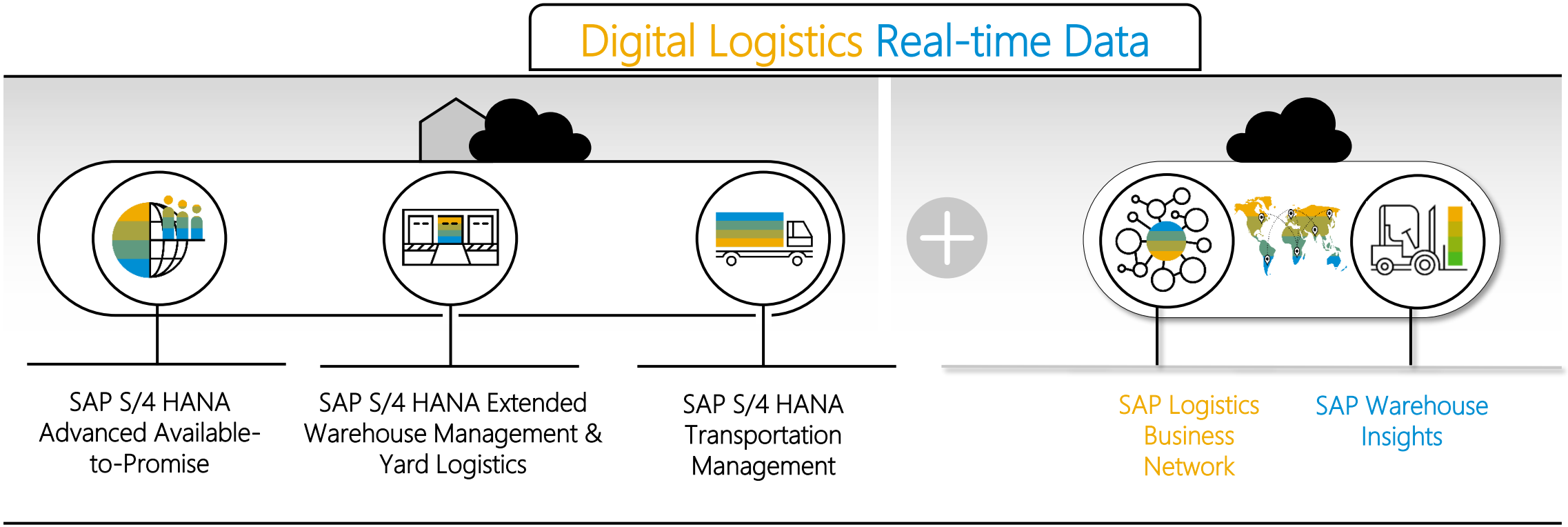
2 SAP PORTFOLIO WAREHOUSE & TRANSPORTATION



SAP Digital Supply Chain solutions for Deliver

Enables just-in-time consumption creating the product experience by making delivery part of the promise



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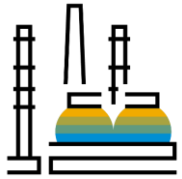
Types of warehouses for SAP EWM



Production Warehouse

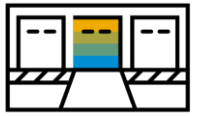
- Raw-material handling
- Integration of quality management
- Production supply
- Receipt from production
- Staging and consumption
- JIT- JIS Integration

Distribution Center

- Complex process and high volume
- High degree of automation
- Wave management
- Slotting and rearrangement
- Replenishment

Service Parts Warehouse

- Low to very high complexity
- Kitting and value-added service
- High volatility
- Serial numbering
- Heterogeneous product range



Cross-Dock or Transit Warehouse

- Regional hubs, gateways, and container freight station
- Air and ocean freight handling
- Unit-load device and container handling
- Receive from and send to airport or seaport (drayage)

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From traditional stocking warehouses to flexible multi channel fulfilment centers

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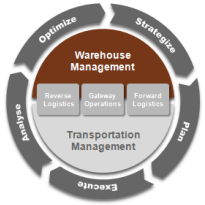
SOLUTION DETAILS SAP EWM (ON-PREMISE)

A COMPLETE OFFERING RESULTING FROM SOLID, CONTINUOUS INVESTMENT



- EWM 5.0
  EWM 5.1
  EWM 7.0
  EWM 7.01
  EWM 7.02

- EWM 9.0
- EWM 9.1
- EWM 9.2
- EWM 9.3
- EWM 9.4
- EWM 9.5 / S/4HANA 1709
- S/4HANA 1809
- S/4HANA 1909
- S/4HANA 2020
- S/4HANA 2021

CORE PROCESSES

Inbound Processing

- ASN data receiving, validation
- Transportation unit mgmt.
- Goods receipt
- Putaway bin determination
- Internal routing
- Deconsolidation
- Putaway
- Returns / reverse logistics
- Goods receipt optimization
- Advanced returns mgmt.
- Direct receipt from production
- Lean Warehouse Clerk Inbound
- E-commerce Returns
- Direct EWM-PP synchronous postings (embedded)

Storage & Operations

- Slotting
- Rearrangement
- Inventory counts / record accuracy
- Replenishment
- Scrapping
- Kit-to stock
- Warehouse Billing
- Stock consolidation
- ABC analysis
- Pack warehouse stock

Outbound Processing

- Order deployment
- Route determination
- Transportation unit mgmt.
- Wave management
- Wave release simulation
- Picking bin determination
- Warehouse order creation
- Picking, packing, staging & loading, Goods issue
- Pack Outbound Deliveries
- Kit-to-order
- Direct outbound delivery
- Production supply
- Production staging and consumption
- Lean Warehouse Clerk Outbound
- Pick to Cart
- Support of tugger trains
- JIT integration

CROSS

- Transportation cross docking
- Pick from goods receipt/ push deployment
- Yard management
- Shipping Cockpit
- Labor management
- Opportunistic cross docking
- Merchandise distr. X-docking
- Stock-specific unit of measure
- Task interleaving
- Semi-system-guided work
- Transit warehousing
- Attachment services
- Plant Maintenance integration *new*

SUPPORTING AREAS

- Warehouse Monitor
- RF / RFID enablement
- Quality inspection
- Import / export integration
- EH&S integration
- Migration tools
- Pick by Voice
- Pallet building algorithm
- Seamless pallet tracking
- IUID support
- Direct EWM – ME integration
- Enhanced MES/DMC integration *new*
- Packaging specification
- Batch management
- Serial numbers
- Catch weight
- Material Flow System
- Warehouse cockpit
- Dock Appointment Scheduling
- ERP transportation integration
- Direct TM – EWM Integration
- Advanced Shipping & Receiving *new*
- Claims & Returns
- Multiple EAN
- Cartonization
- Best-practice content
- Warehouse Insights as Add-On
- Warehouse Analytics
- More synchronous postings (embedded)
- RF WebGUI *new*

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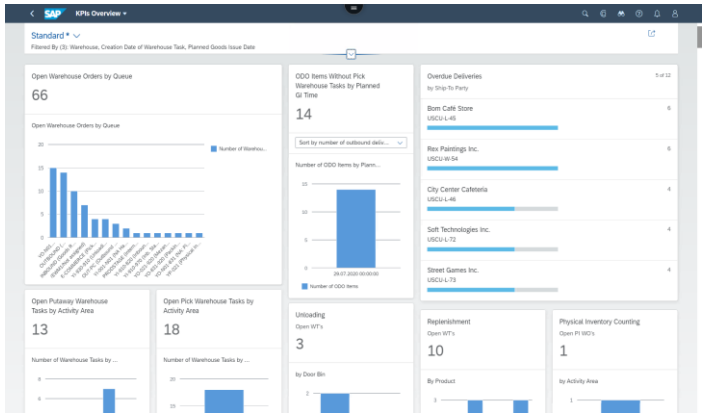
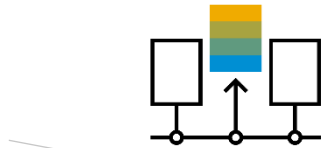
ANALYTICS AND MONITORING WITH SAP EWM

COMPREHENSIVE STOCK AND PROCESS TRANSPARENCY FROM REPORTING TO EXECUTION

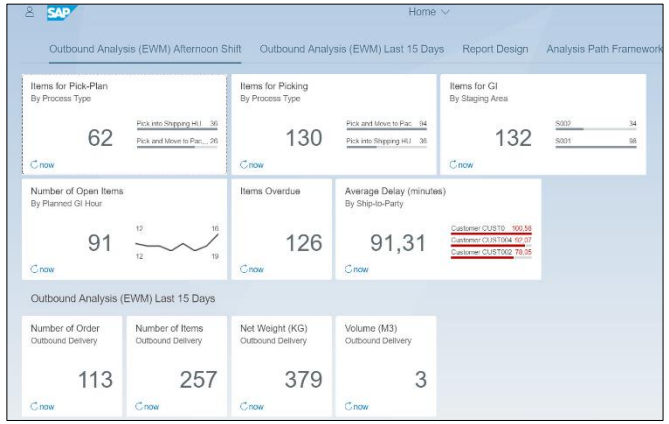
KPI Dashboard





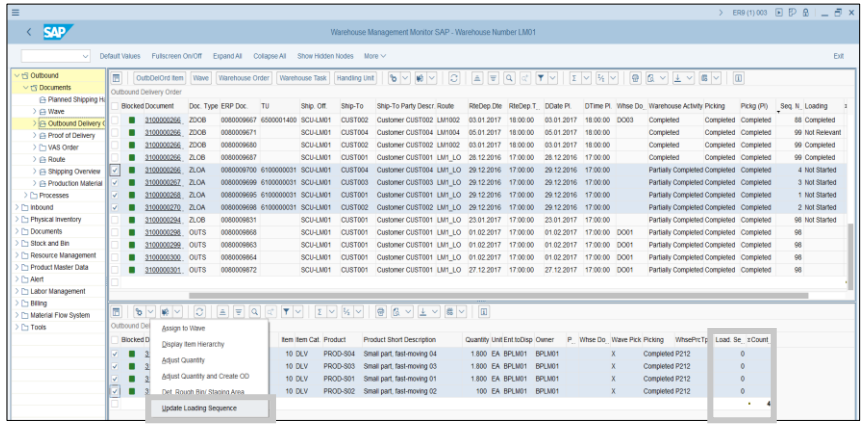
90 Standard KPIs

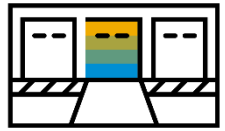
CDS views



33 CDS views

Warehouse monitor





465 Standard reports

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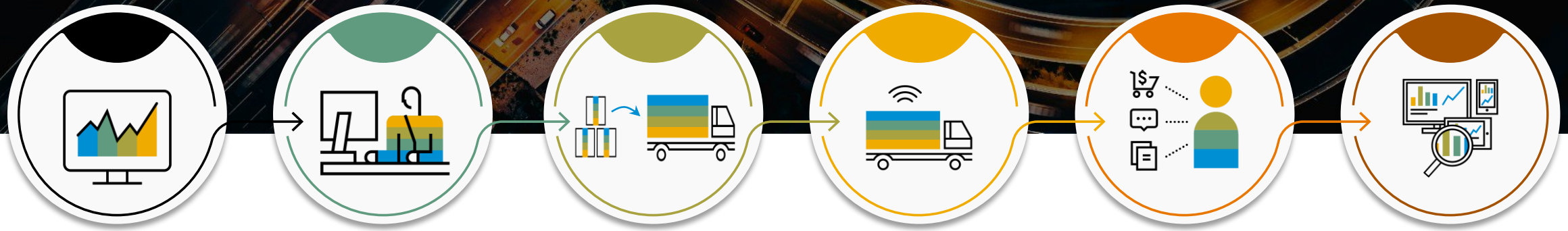
SAP S/4HANA Supply Chain for TM

Overview



Strategic Freight Management

Order Management

Transportation Planning

Transportation Execution

Freight Costing and Settlement

Analytics and Reporting

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SAP TM OUT OF THE BOX INTEGRATION
WITH SAP SOLUTIONS

Sales & Procurement

- Sales, purchase, returns, & STOs, Scheduling Agreements

Logistics Execution

- Warehouse planning & execution (EWM)
- Delivery & shipment processing

Environment Health & Safety

- Compliant dangerous goods shipment

Global Trade Services

- International trade regulation compliance
- Customs export processing

Financial Management

- Carrier invoice verification & payment/self-invoicing
- Sales order profitability & material valuation

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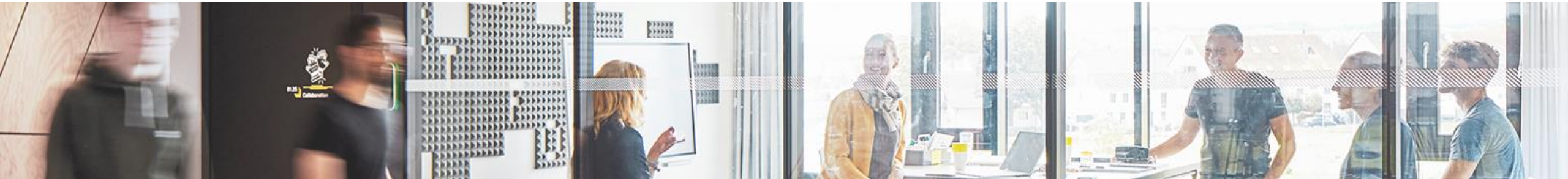
3

DEPLOYMENT-STRATEGIES DIGITAL SUPPLY CHAIN

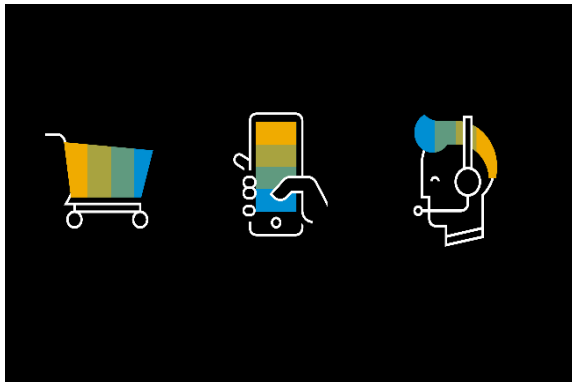


SAP Extended Warehouse Management

Solution strategy

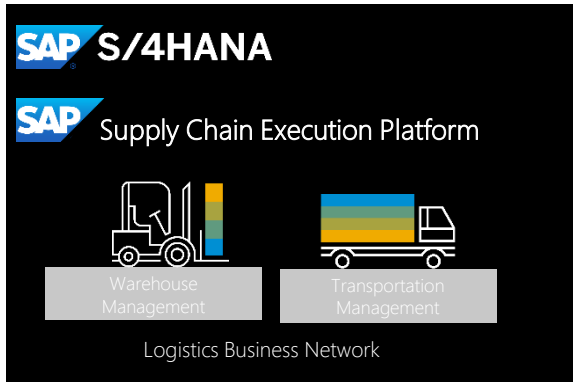
Functional

- Continuous core improvement for SCE
- New industry capabilities
- Enhanced user experience



Integration

- Enhanced SCE platform integration
- Enhanced integration with SAP S/4HANA

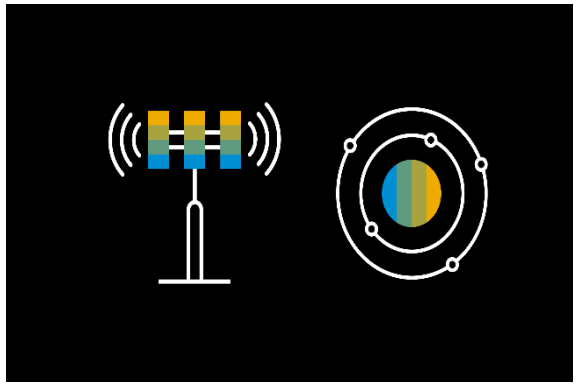


Deployment

- SAP EWM embedded in SAP S/4HANA
- SAP EWM standalone, connected to ECC or S/4HANA
- SAP EWM in Cloud

IoT

- Next-generation automation and robotics
- Enhanced device and asset connectivity
- Integration with wearable devices add new layer of visibility



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Rise with SAP & Digital Supply Chain – Deployment options

RISE WITH SAP | Driving business innovation together

RISE Core

1

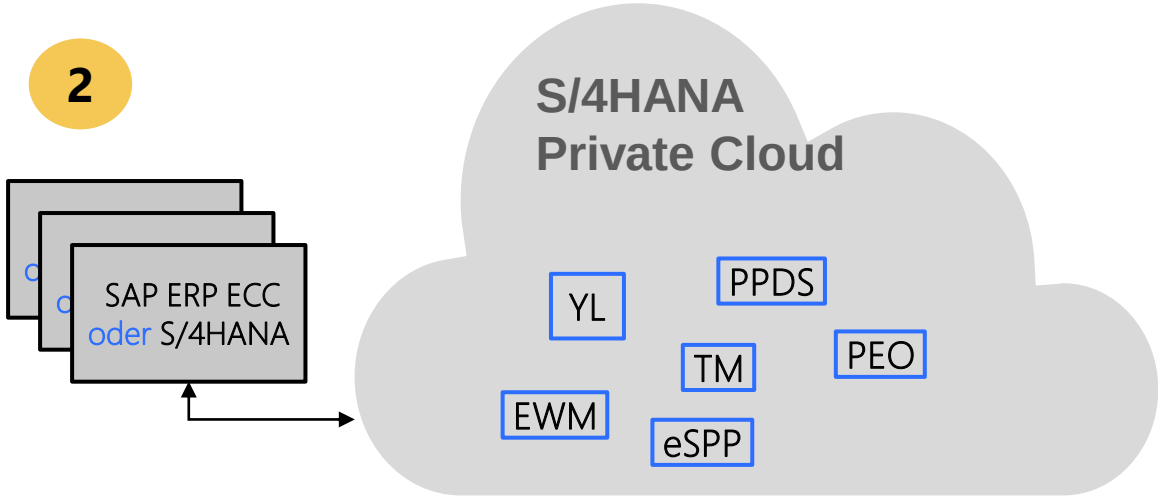
S/4HANA Public
oder Private Cloud

+ advanced DSC Engines
(TM, EWM, aVC, EPPM, PPDS, EH&S, Prod. Compliance, PDM Integration,…)

- Wertbeitrag durch embedded DSC engines
- Starterpakete Nutzung BTP
- Conversionansatz:
  - Integrierte Prozessinnovationen & UI
  - Ggf. Nutzung Stock Room Management parallel

PCE Side-Cars („DSC S/4 Edition“)

2



- Wertbeitrag durch sep. Umstellung DSC-Solutions
  - Stabilität ERP ECC und Kernprozesse
  - Profitieren von DSC-Neuerungen
  - Neue Betriebs- und Updatemöglichkeiten

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Digital Supply Chain – 2 beispielhafte Szenarien Conversion

1. **Umstellung SAP ECC mit WM und LE-TRA inkl. Z-Eigenprogrammierung Transportoptimierung**
   - WM kompatibel mit S/4 Stock Room Management Lizenzierung?
   - Lagerautomatisierung im Einsatz?
   - LE-TRA Anforderung abbildbar mit SAP TM bzw. Advanced Shipping & Receiving?
   - LE-TRA Integration weiternutzen bis 2030? Integration EWM möglich?
   - EWM-Standardfunktionalitäten inkl. Prozessvereinfachungen in S/4 Core vorteilhaft?

2. **Umstellung SAP ECC mit WM zur Produktionsversorgung und EWM 9.5. als europ. Distributionslager**
   1. EWM-Produktionsversorgung in S/4 Core vorteilhaft?
   2. S/4 Stock Room Management für produktionsnahe Handlager weiternutzen?
   3. Migration EWM 9.5. auf S/4 embedded (advanced) oder S/4 decentral, extra Stack?
   4. Side-Car-Ansatz für EWM 9.5. auf S/4 EWM inkl. Ausprägung Template Prozesse?

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Empfehlung: Conversion-Szenarienbewertung zur Optimierung der digitalen Transformation der Supply Chain Prozesse.

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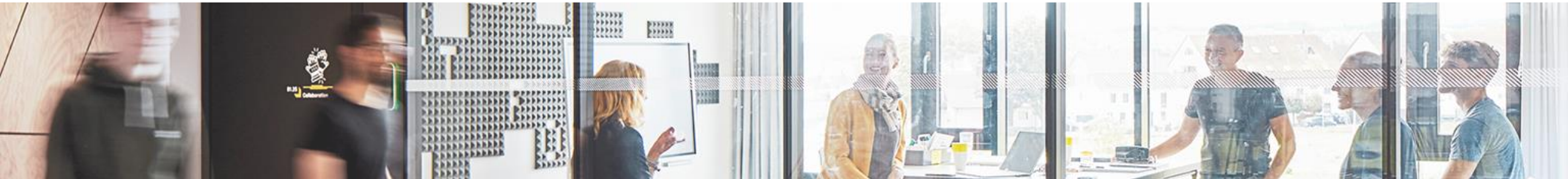
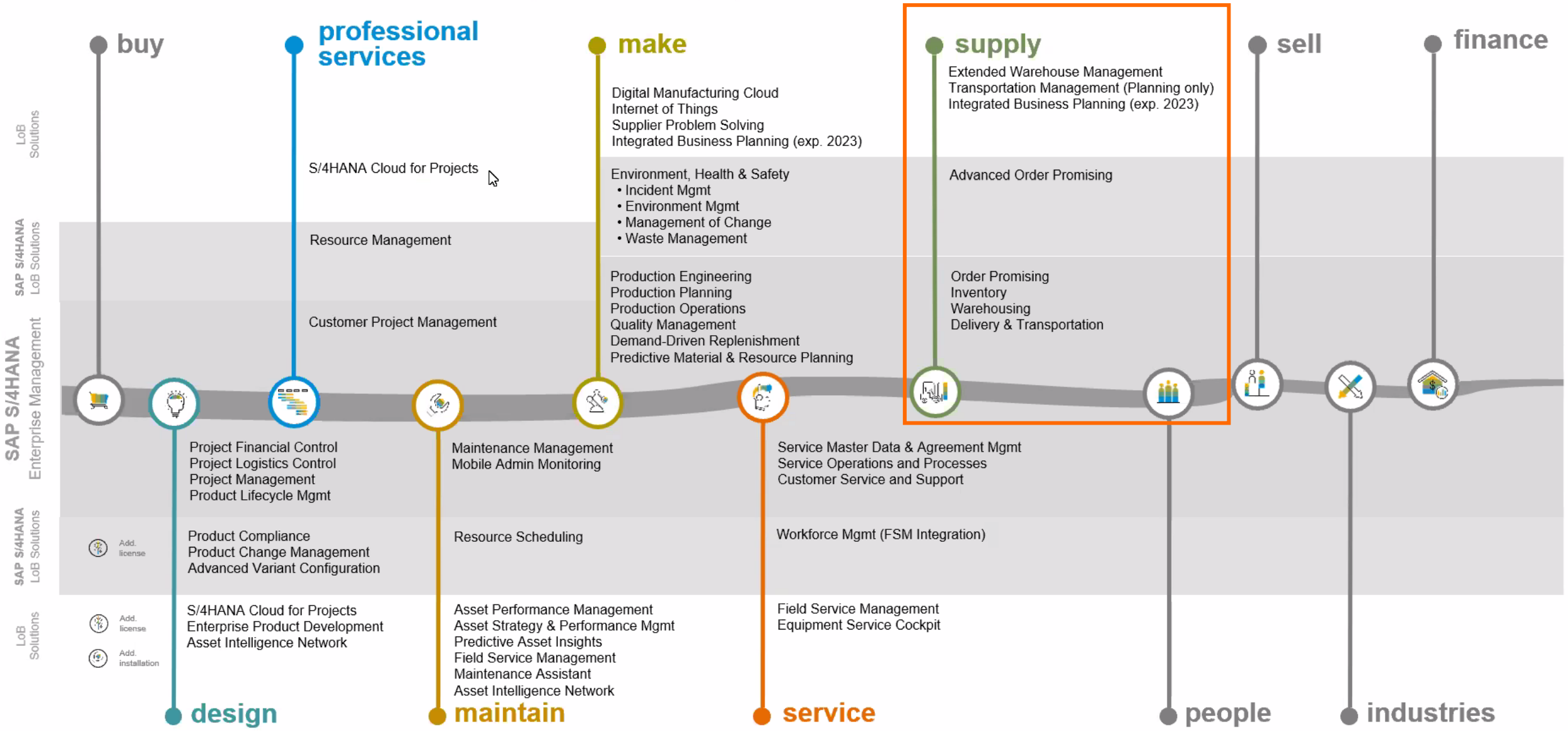
SAP S/4 PUBLIC CLOUD & DIGITAL SUPPLY CHAIN



SAP S/4HANA Cloud & Digital Supply Chain Solutions

based on
Feature Scope Description 2202



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SAP S/4HANA Cloud Supply Chain

Plan to Fulfill

Inventory

Physical Inventory
- Inventory Counting
- Cycle Counting
- Scheduled Document Creation
- Situation Handling

Inventory Analytics and Control
- Inventory Overview
- Stock Analysis
- Throughput Analysis
- Dead Stock Analysis
- Slow- / Non-Moving Stock Analysis and Prediction

Goods Movement
- Goods Receipt
- In-Plant Stock Transfer
- Cross-Plant Stock Transfer
- Stock-in-Transit Monitoring / Prediction
- Manual Reservations

Inventory Manager, Inventory Analyst
Plant Manager

Warehousing

Warehouse Management

Extended Warehouse Mgmt.**
- Inbound Processing (incl. Quality Mgmt.)
- Outbound Processing (incl. Ad Hoc GI)
- Production Supply (incl. Kanban)
- Production Receipt (incl. Repetitive)
- Posting Changes (incl. Replenishment)
- Resource Management
- Third-party WMS Integration**

Warehouse Clerk, Warehouse Operator
Shift Supervisor

Order Promising

Available to Promise
- Availability Check
- Back Order Processing

Order Fulfillment Manager, Specialist

Delivery and Transportation

Delivery Management
- Delivery Creation
- Delivery Scheduling
- Delivery Packing
- Delivery Monitoring
- Goods Issue

Transportation Management
- Freight Unit Creation
- Freight Order Planning
- Charge Management
- Freight Settlement

Receiving Specialist, Shipping Specialist
Transportation Buyer, Planner, Manager

Logistics Material Identification

Serial Number Management
- Serial Number Profiles
- Serial Number Creation
- Serial Number Tracking

Batch Management
- Batch Master Creation
- Batch Master Changes
- Batch Monitoring

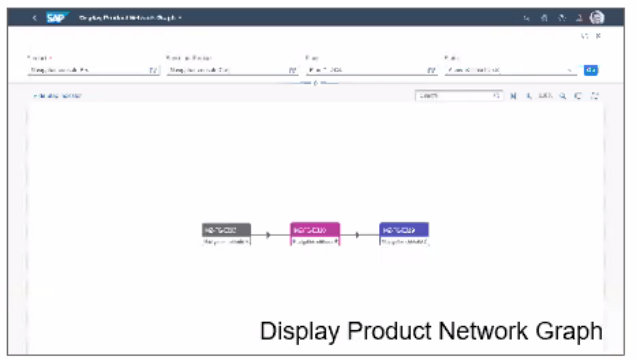
Handling Unit Management
- Handling Unit Creation
- Handling Unit Monitoring
- Manual / Automatic Packing
- Situation Handling

Master Data Specialist

Advanced Order Promising

Advanced Available to Promise*
- Product Allocation
- Alternative-Based Confirmation
- Release for Delivery
- Supply Protection

Order Fulfillment Manager, Specialist



Display Product Network Graph

SAP S/4HANA Business Benefits[1]

10%-15% reduction in revenue loss due to stock-outs

10%-12% reduction in total logistics cost

10%-15% reduction in order lead times

25%-30% reduction in inventory levels

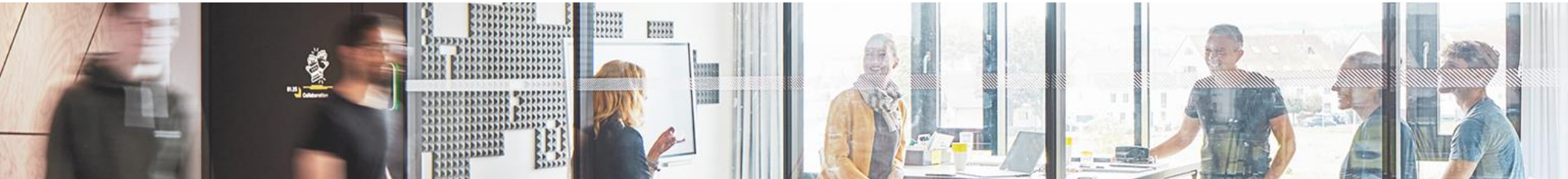
10%-30% increase in on-time delivery

* Additional subscription

** Additional subscription and separate setup

[1] Benefits are conservative outside-in estimates of the benefits of moving from a traditional ERP system to enhanced SAP S/4HANA with line-of-business and cloud capabilities. As each enterprise is at a different level of maturity, our recommendation is that you

5 TAKE AWAYS



TAKE AWAYS

IM CONVERSIONANSATZ SIND DIE DEPLOYMENTOPTIONEN FÜR EWM & TM EXPLIZIT ZU BEWERTEN.

DSC SETZT AUF 2 SÄULEN:
S/4 INTELLIGENT SUITE UND SAP BTP (EXTENDED FUNCTIONALITIES, INDUSTRY CLOUD)

S/4 PUBLIC CLOUD & DSC ZUNEHMEND ATTRAKTIV FÜR STANDARDISIERTE, EINFACHE LOGISTISCHE SZENARIEN.

VIELEN DANK!

IHRE FRAGEN?

https://bit.ly/3sY0MRz

HIER FINDEN SIE:

- die Präsentationsunterlagen
- ab morgen die Aufzeichnung des Vortrags
- weiterführende Informationen

Sie erhalten den Link am Freitag auch per E-Mail.

KONTAKT

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