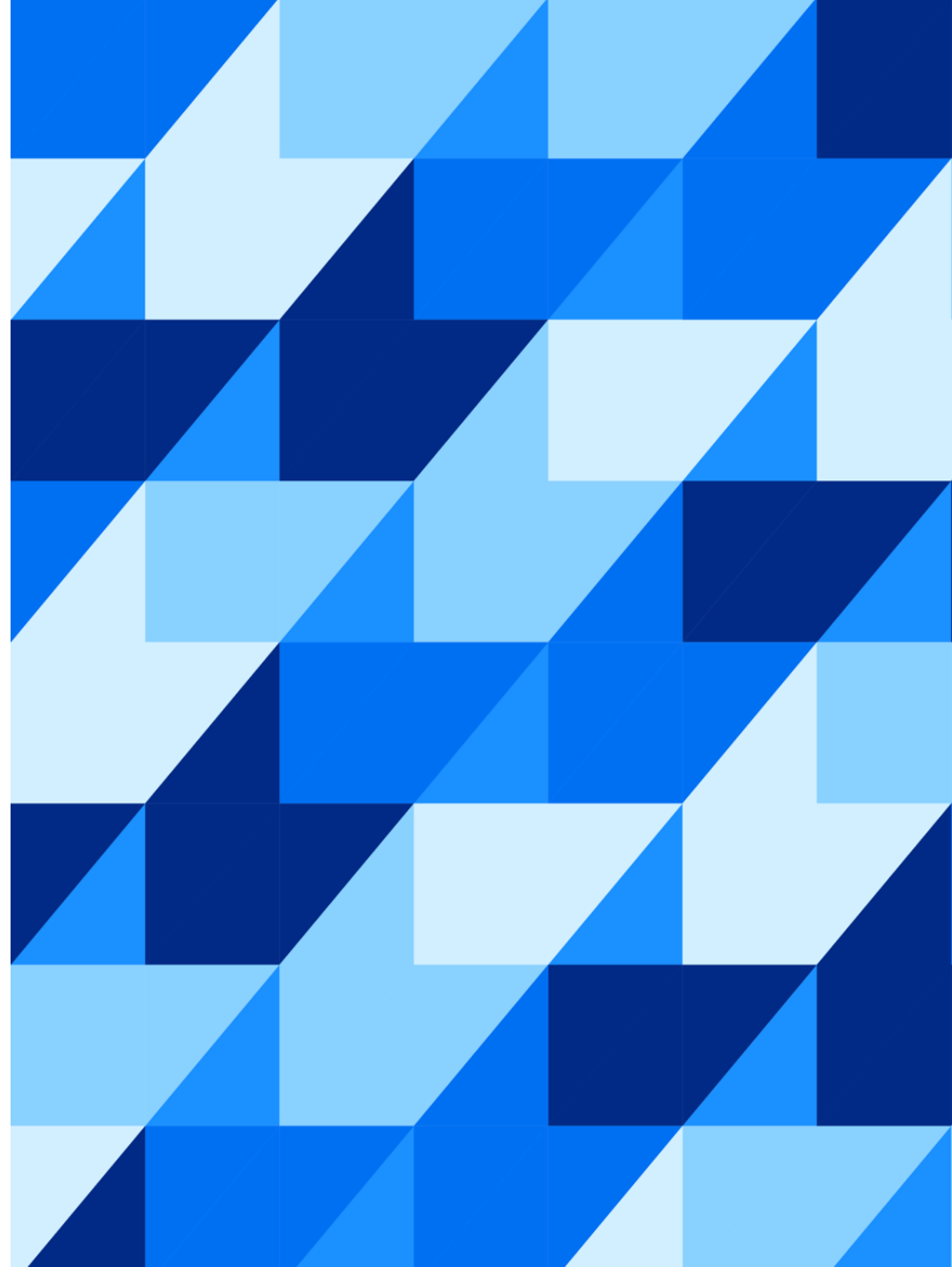




Thought Leadership

Transform Business Performance
Design to Operate



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Agenda

- 01 Introduction
- 02 Transform Business Performance with Design to Operate
- 03 Today's Supply Chain Challenges addressed
- 04 Integrated, Intelligent Design to Operate
- 05 Process Deep Dive 'Synchronized Planning'
- 06 Next Steps

01 Introduction

Introduction

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Cross-Product Management
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Enterprise Customer Success
Manager




Kai Wussow

Head of Digital Transformation
Business Transformation Services



02 Transform Business Performance with Design to Operate

The Situation



**Post-pandemic supply chain operations are highly exposed to the risk of disruptions ...
So how to transform your supply chain from cost-conscious to responsive and resilient?**

The Challenge



Reactive, short-term actions where most impact is felt, won't fix foundational problems. They don't build a supply chain for the long-term that can withstand the forces of change.

The Strategy



**Break down silos and manage your business holistically:
Connect every process within and across the supply chain,
contextualize every decision, and collaborate with the ecosystem**

The Execution



From Design to Operate ...

Digitalize the entire supply chain
Enable end-to-end integrated & interoperable business processes

Leverage intelligent technologies
Enable end-to-end visibility
Assess & balance trade-offs

The Outcome



Risk-resilient, responsive and sustainable Supply Chain

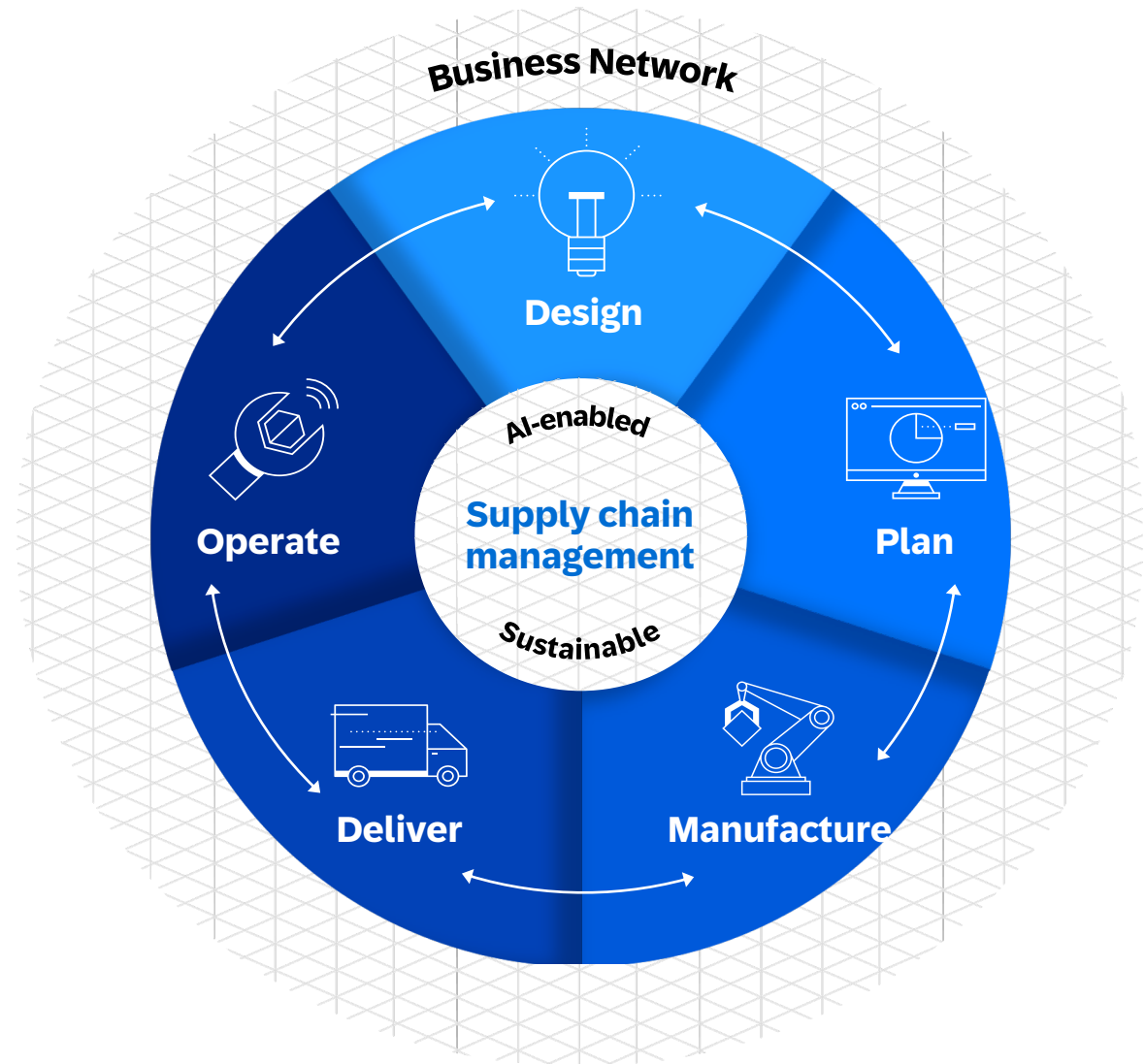
03 Today's Supply Chain Challenges addressed

Transform your supply chain to be resilient, responsive and sustainable

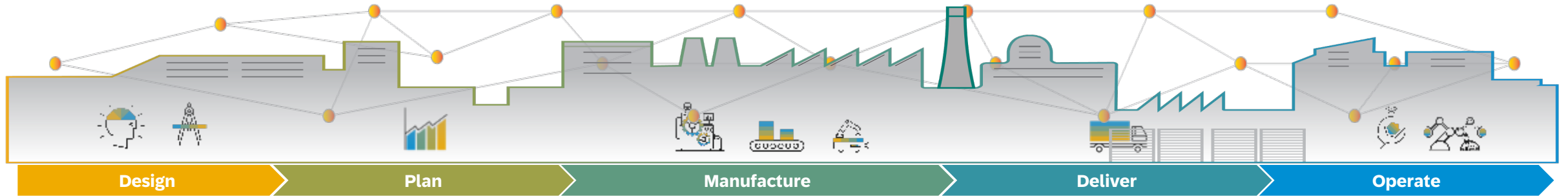
Connect every process within your supply chain and across your business.

Contextualize every decision linking real-time operational and business data together throughout the work process.

Collaborate with your ecosystem creating digital connections with all your partners.



Understanding Design to Operate



D2O is a **comprehensive** set of fully **interoperable** digital capabilities
that can be implemented in a **modular** fashion
to enable **end-to-end supply chain responsiveness, resiliency and sustainability**

Main D2O Attributes



Digitalization of the
Supply Chain



End-to-End **integrated**
and **interoperable**
business processes



End-to-End **Visibility**



Assess and balance
trade-offs

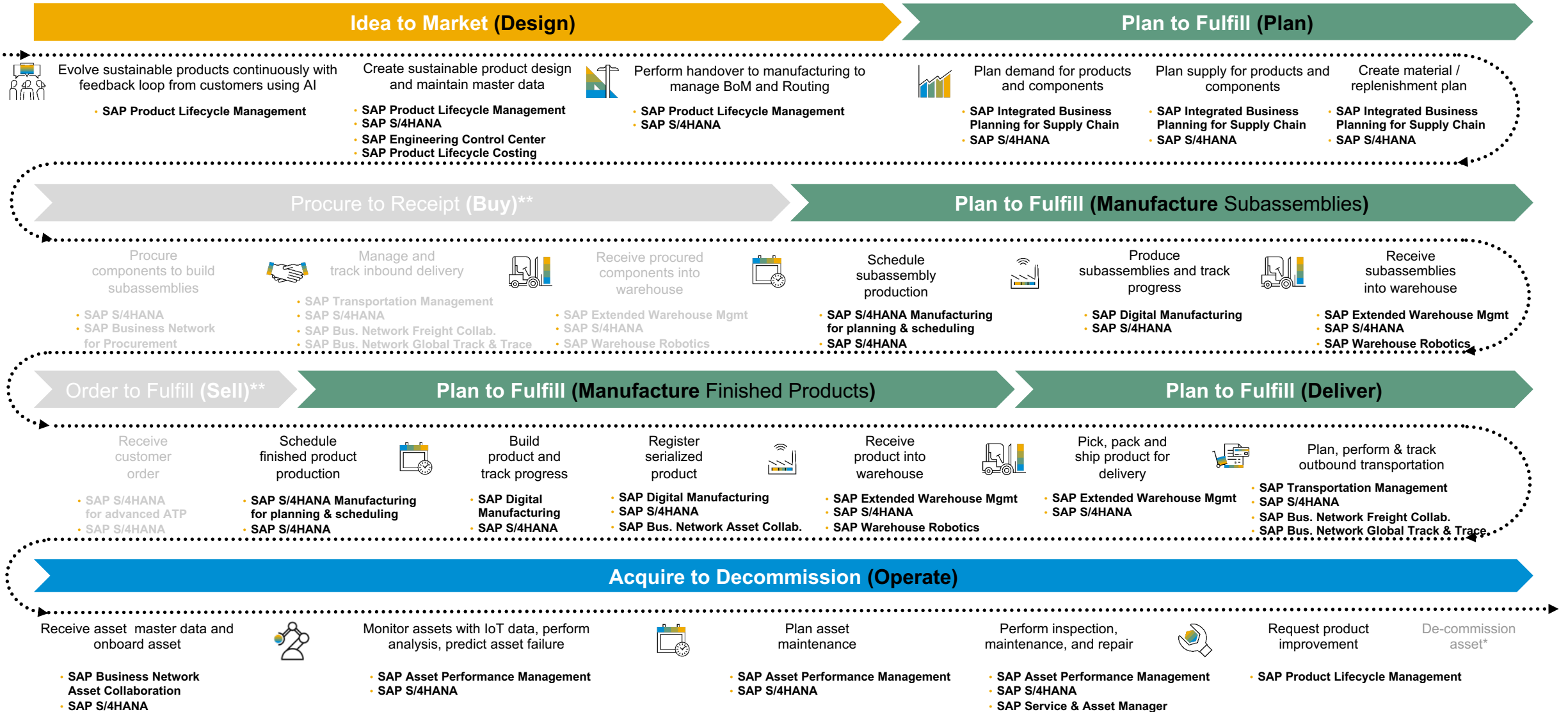


Leverage **intelligent**
technologies



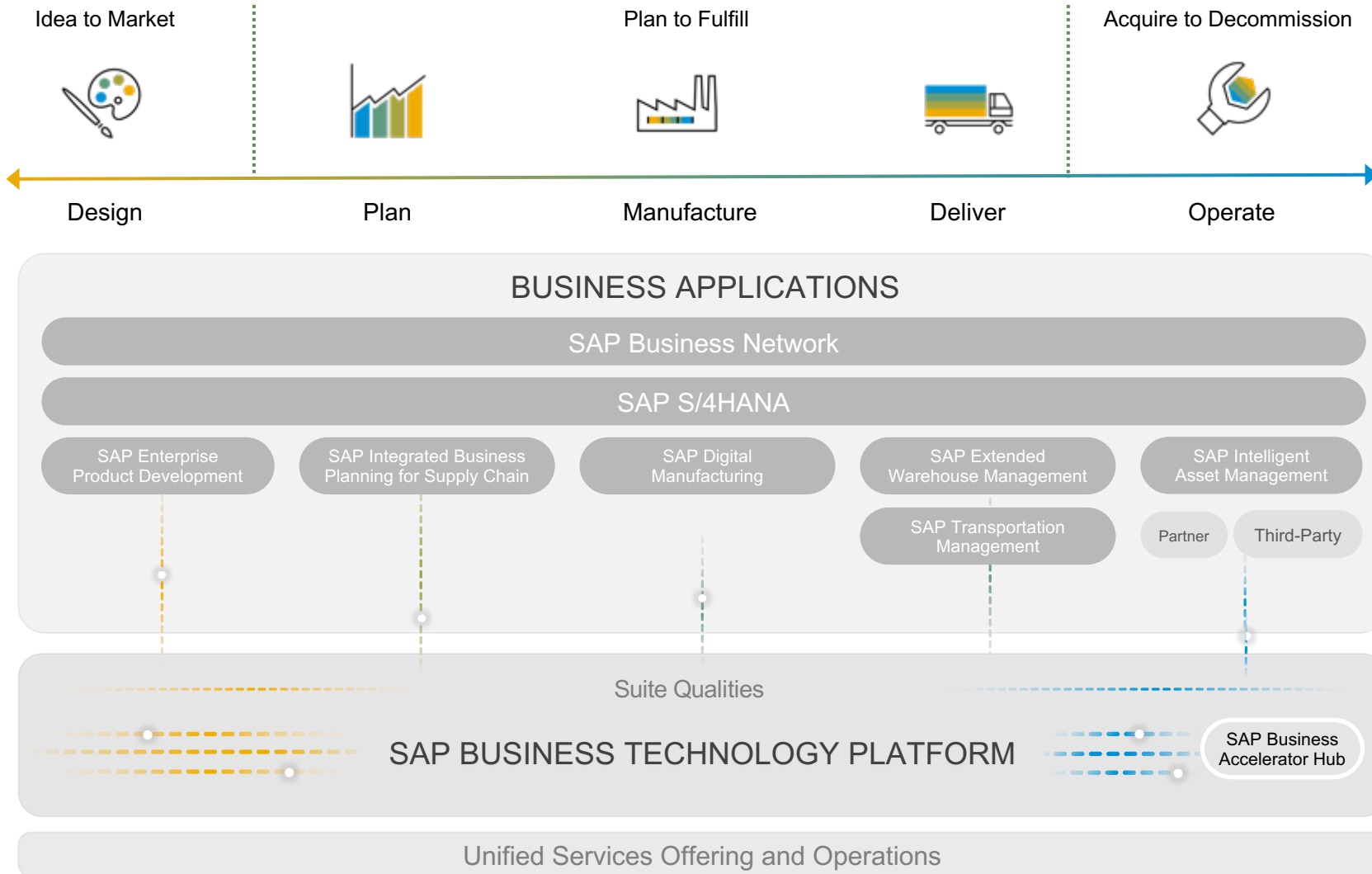
Lead on **Sustainability**

'Design to Operate' end-to-end Process Flow*



* Discrete Ind., Assemble to Order ** not part of D2O, but integrated into the D2O process

Design to Operate Solution Overview



Design

- Reduce time to market
- Decarbonize products
- Deliver custom demand



Plan

- Holistic view of demand
- Balance inventory and service levels
- Improve forecast accuracy



Manufacture

- Optimize manufacturing processes and minimize waste
- Improve collaboration with contractors
- Increase agility and responsiveness



Deliver

- Improve speed, efficiency and sustainability
- Deliver perfect orders consistently and profitably
- Increase utilization of warehouse and transportation



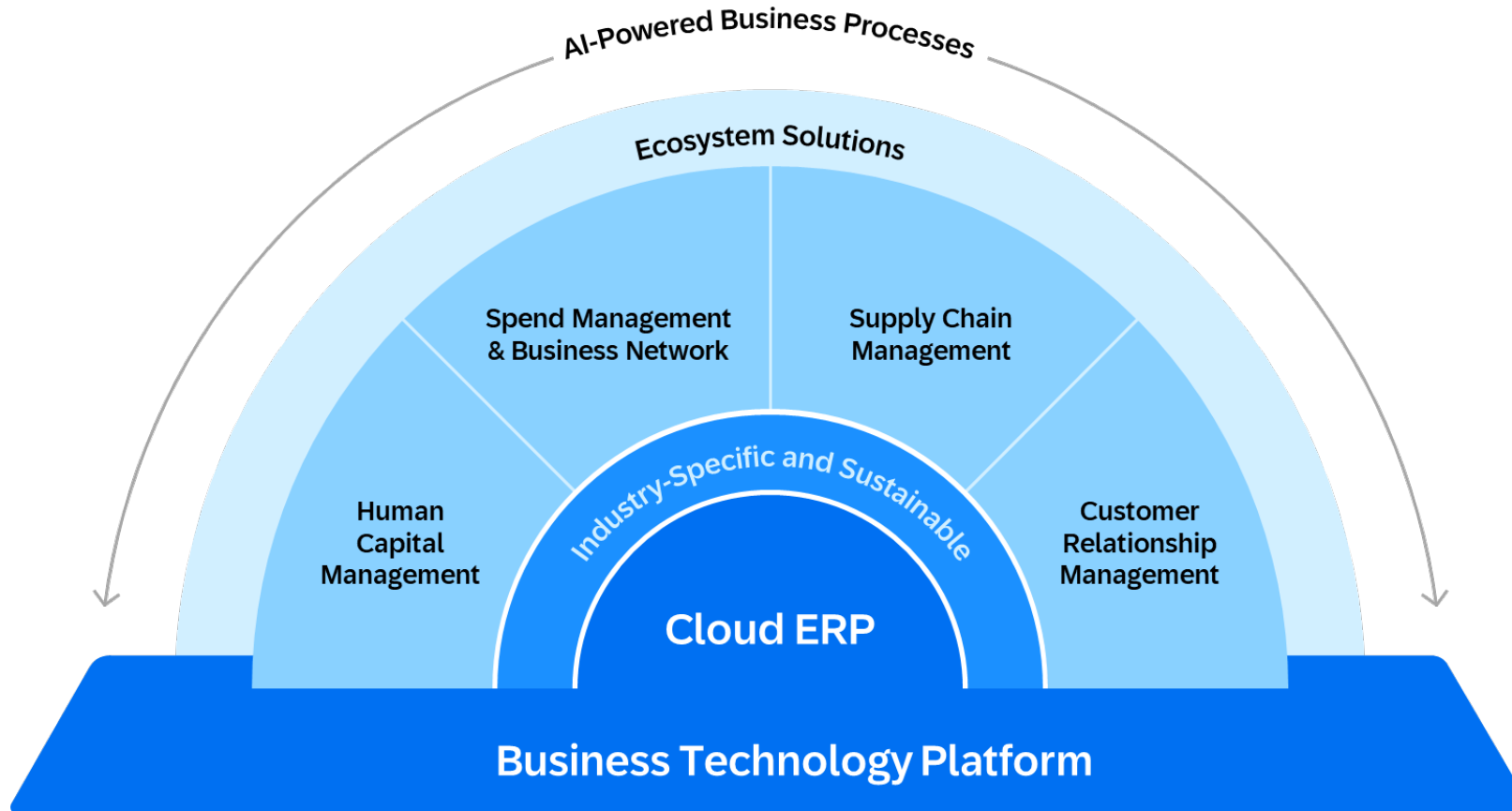
Operate

- Manage lifecycle of physical assets efficiently and sustainably
- Predict and simulate asset behavior
- Avoid unplanned downtime

04 Integrated, Intelligent Design to Operate

SAP's Integration Strategy: Integrate to Innovate

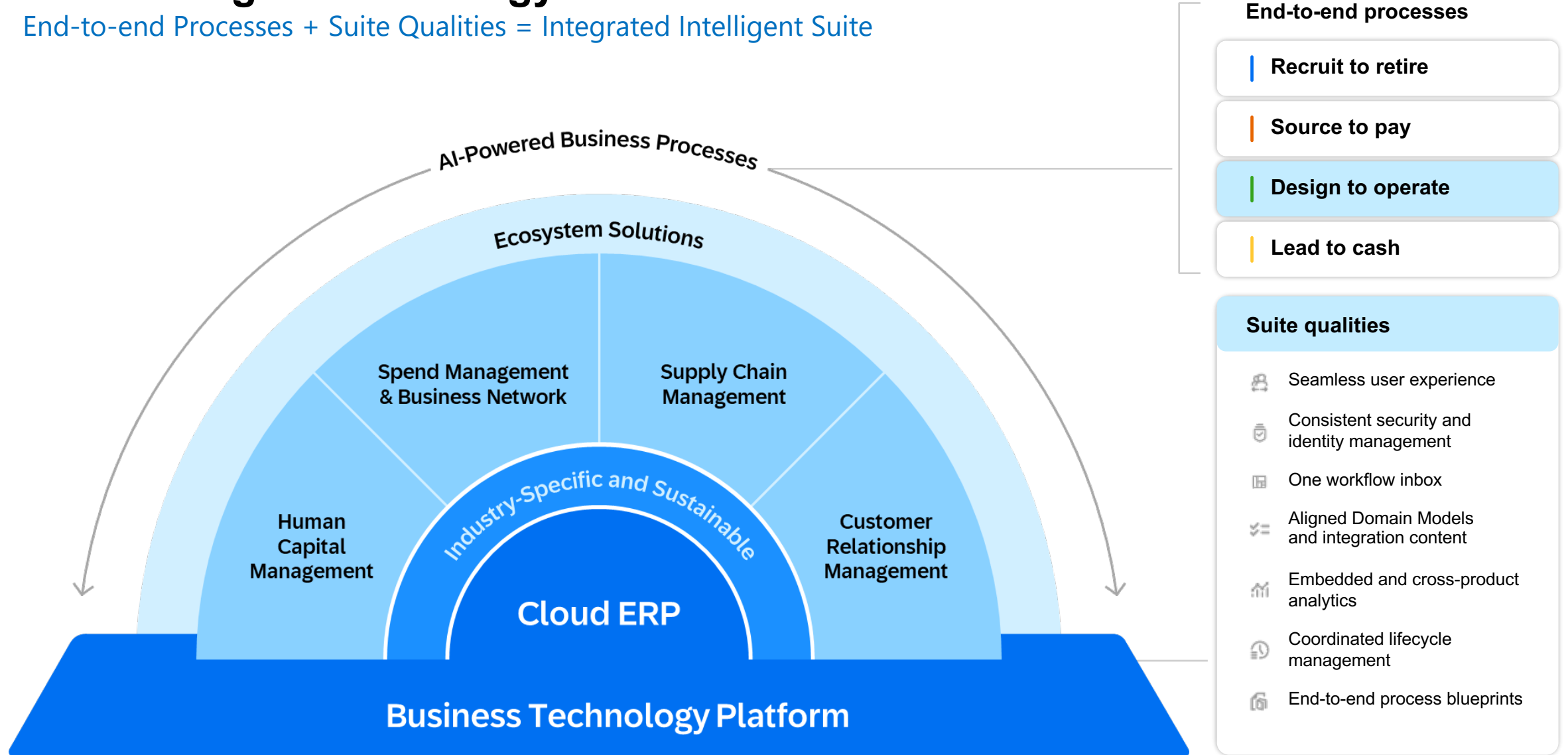
Our unique value proposition: a leading suite of integrated solutions with end-to-end processes and a consistent and seamless experience with the Business Technology Platform as the glue between our solutions.



- SAP provides the advanced technologies and services to ensure **integrated end-to-end business processes** across SAP, partner, and third-party applications
- Out-of-the-box '**suite qualities**' facilitate a consistent experience across applications with unified security, workflow, data semantics, user interface, lifecycle management, and process architectures
- The **Business Technology Platform** provides the critical integration capabilities to ensure connected end-to-end business processes across SAP and third-party applications

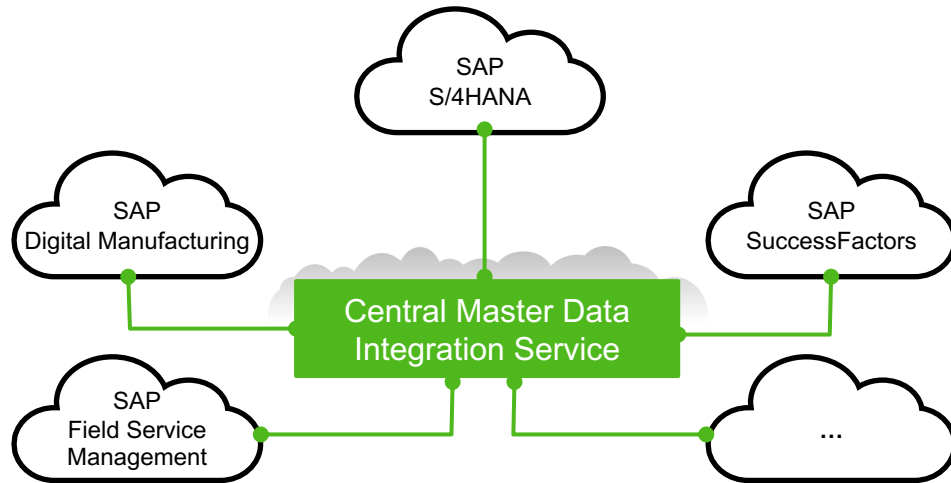
SAP's Integration Strategy

End-to-end Processes + Suite Qualities = Integrated Intelligent Suite



Aligned Domain Models **Benefits**

1:many integration



- **Faster:** Efficient centralized distribution
- **Cheaper:** Standardized, out-of-the-box, reusable
- **Better:** Consistent, scalable, compliant: purpose-driven master data replication

Business Benefits

- Enables effective and efficient personnel plan shift for production supervisors (ex. integration of workforce person data between SAP Success Factors and SAP Digital Manufacturing through MDI)
- Harmonized master data drive data consistency and quality cross solution landscape
- Power end-to-end business processes to run seamlessly across the P2F value chain and reduces IT expenses

Technology Benefits

- Enables harmonized models for seamless and interoperable data resulting in efficient data analysis
- Provides consistent APIs based on open standards
- Offers technical foundation for other suite qualities such as identity management and one workflow inbox

Aligned Domain Models **Benefits & Example** Integration of Workforce Person Data in Plan to Fulfill

Capacity	Demand Hours	Work Center Allocat...	DAY	EVENING	NIGHT	Absent	Shift Overtime
360 hrs	13.1 hrs	360 hrs	135 hrs	105 hrs	120 hrs	0 hrs	0 hrs

Shift Plan for CW 17 - 2023				April 23, 2023 - April 29, 2023						
First Name	Last Name	Qualification	Allocation	Sun 23	Mon 24	Tue 25	Wed 26	Thu 27	Fri 28	Sat 29
Worker 10	Worker	BR1 ASSEMBLY	100%		DCBR-A1 DAY	DCBR-A1 DAY	DCBR-A1 DAY	DCBR-A1 DAY	DCBR-A1 DAY	
Worker 2	Worker	BR1 PAINT	100%		Unavailable	DCBR-PA1 DAY	DCBR-PA1 DAY	DCBR-PA1 DAY	DCBR-PA1 DAY	
Worker 3	Worker	BR1 INSPECTION	100%		DCBR-I1 DAY	DCBR-I1 DAY	DCBR-I1 DAY	DCBR-I1 DAY	DCBR-I1 DAY	
Worker 4	Worker	BR1 ASSEMBLY	100%		DCBR-A1 EVENING	DCBR-A1 EVENING	DCBR-A1 EVENING	DCBR-A1 EVENING	DCBR-A1 EVENING	
Worker 5	Worker	BR1 PAINT	100%		DCBR-PA1 EVENING	DCBR-PA1 EVENING	DCBR-PA1 EVENING	DCBR-PA1 EVENING	DCBR-PA1 EVENING	
Worker 6	Worker	BR1 INSPECTION	100%		DCBR-I1 EVENING	DCBR-I1 EVENING	DCBR-I1 EVENING	DCBR-I1 EVENING	DCBR-I1 EVENING	
Worker 7	Worker	BR1 ASSEMBLY	100%		DCBR-A1 NIGHT	DCBR-A1 NIGHT	DCBR-A1 NIGHT	DCBR-A1 NIGHT	DCBR-A1 NIGHT	
Worker 8	Worker	BR1 PAINT	100%		DCBR-PA1 NIGHT	DCBR-PA1 NIGHT	DCBR-PA1 NIGHT	DCBR-PA1 NIGHT	DCBR-PA1 NIGHT	
Worker 9	Worker	BR1 INSPECTION	100%		DCBR-I1 NIGHT	DCBR-I1 NIGHT	DCBR-I1 NIGHT	DCBR-I1 NIGHT	DCBR-I1 NIGHT	

Business Benefits



Optimized allocation of labor resources in SAP Digital Manufacturing, improving productivity and managing workforce requirements more effectively across your manufacturing operations

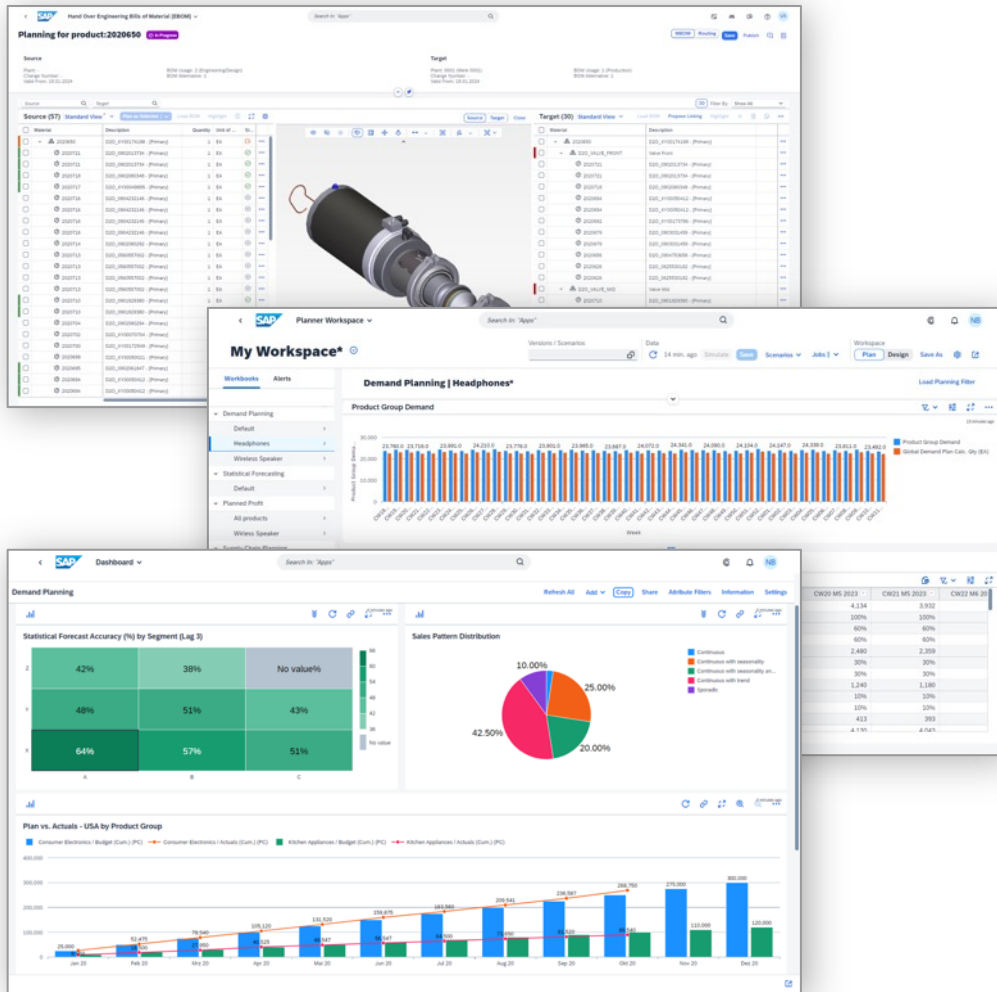


Single source of employee data, managed by Human Resources, in SuccessFactors



No duplication of data and additional manual effort

Seamless User Experience Benefits



Business Benefits

- Best-in-class and modern UX across all D2O products
- Support all personas every step of the way throughout D2O, from planning to execution, optimized with intelligent insights
- Embedded intelligence that guides users toward smarter insights to action, leading to timely, efficient and effective outcomes
- Provides seamless, harmonized, context aware and well-integrated applications across multiple products and systems, achieving unparalleled ease of use

Harmonized

Intelligent

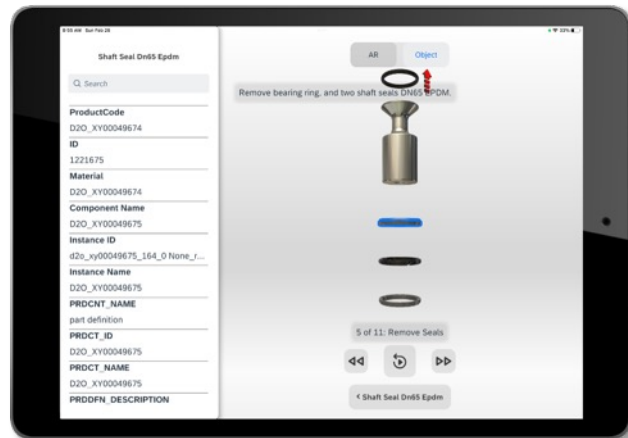
Integrated

Seamless User Experience Benefits & Example

Empower service and maintenance workforce in Acquire to Decommission

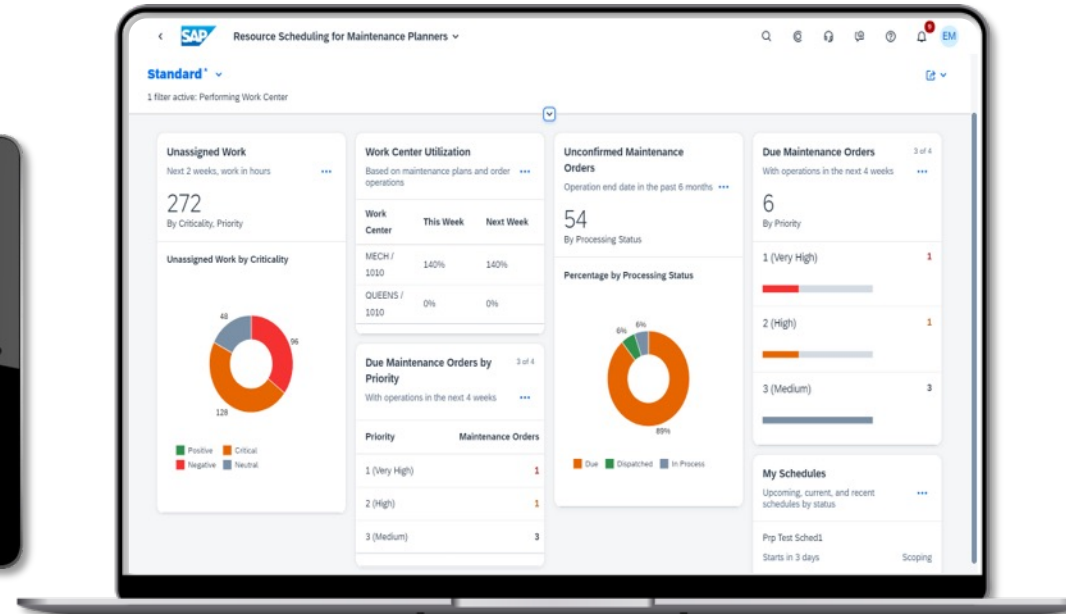
3D visualizations, AR, and geo-spatial

Speed up field service work with on-device 3D visualizations, AR-based visual work instructions, and maps.



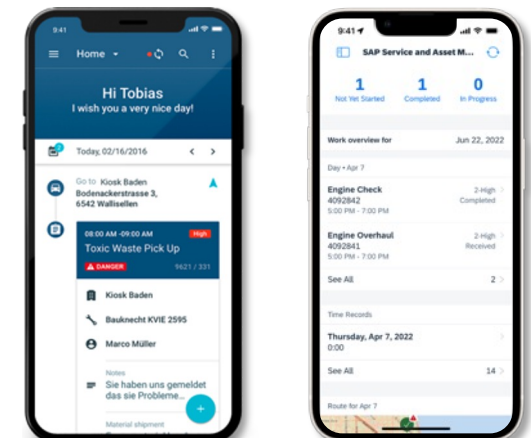
Role-based and persona-centric

Intuitive, persona-based apps for optimal task execution in E2E best practice processes.

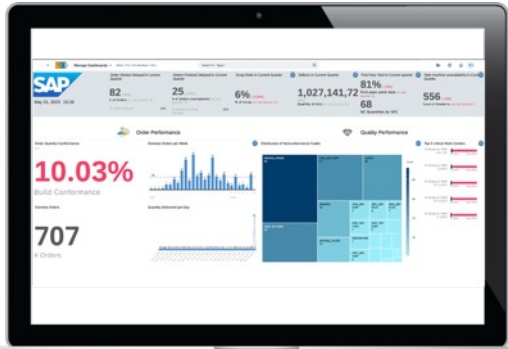


Mobile-enabled processes

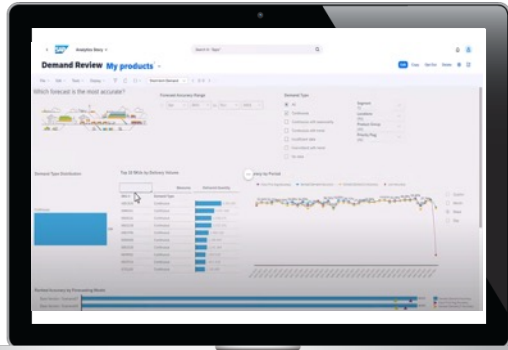
Provide intelligence and automation for all field tasks including work order management, inventory, inspections, and safety permits.



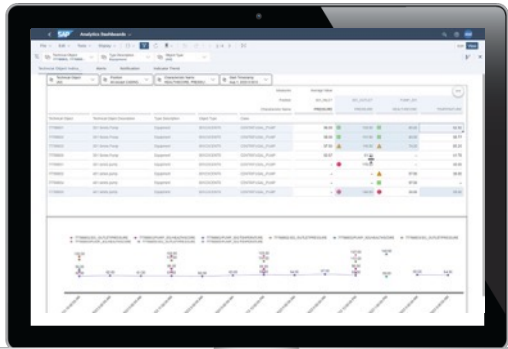
Embedded Analytics **Benefits**



Digital Manufacturing



Integrated Business Planning



Asset Performance Management

Business Benefits

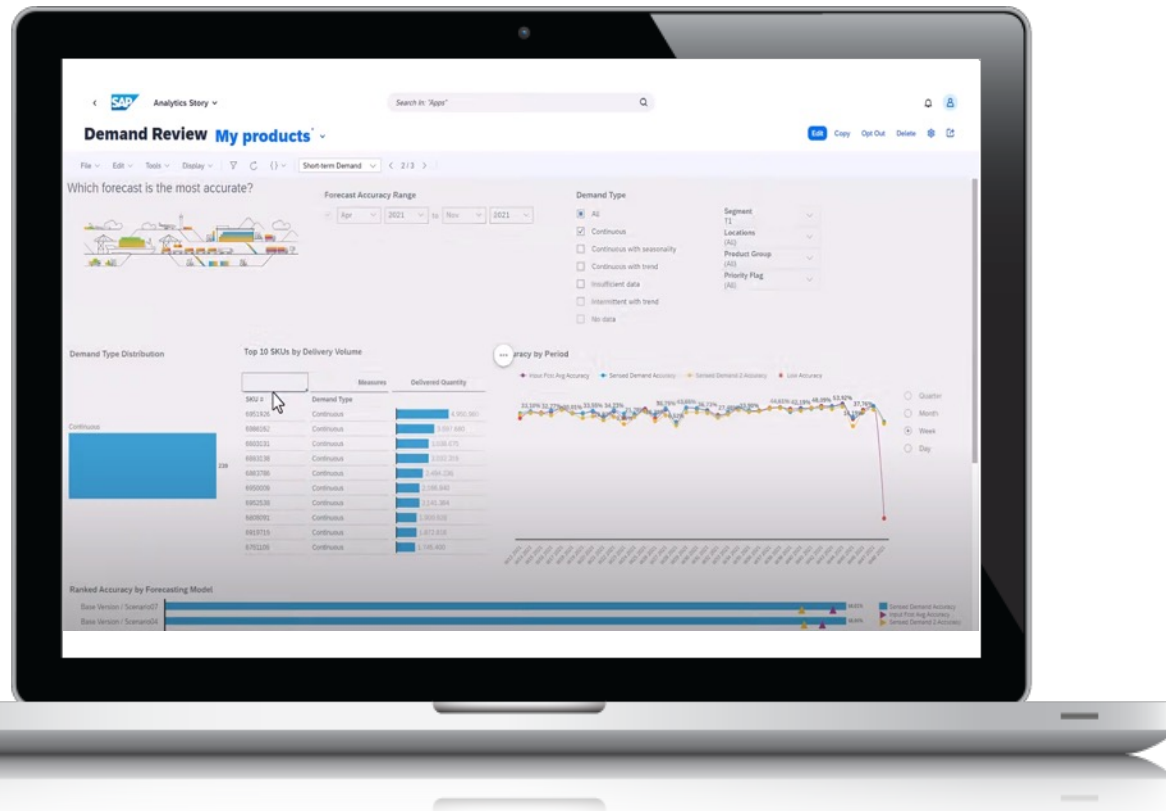
- Access application specific, near real-time, out-of-the-box analytical insights
- Enable tailored supply chain analytics using self-service KPIs and dashboards
- Ability to leverage commonly used analytics tools across D2O solutions
- Built-in analytical insights are all accessible to users online, reducing IT's need to set up applications or perform maintenances

Capabilities

- Similar key user tools to create custom dashboards across D2O applications
- Fully integrated analytical capabilities
- Seamless navigation

Embedded Analytics **Benefits & Example**

SAP Analytics Cloud embedded with SAP Integrated Business Planning for Supply Chain



Analytics Stories


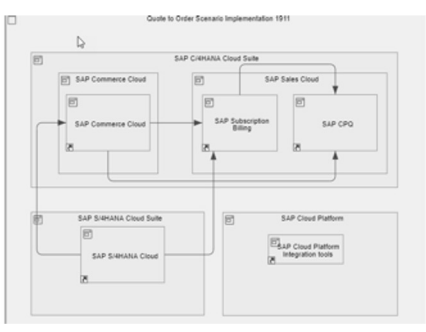

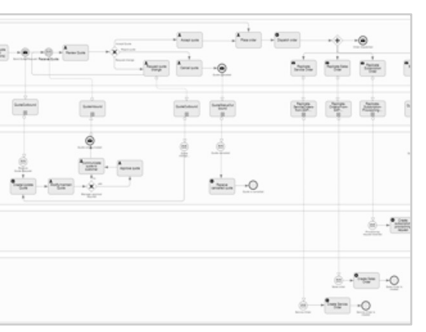
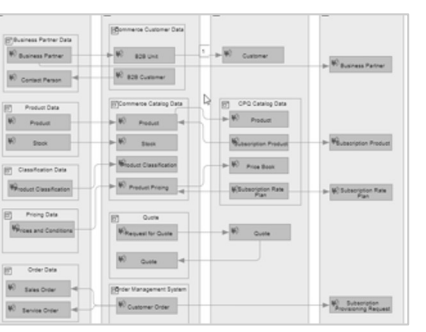
- Best-in-class analysis
- Consistent reporting experience
- Flexible and instant
- Up-to-date data at your fingertips
- Powerful and user-friendly

Business Benefits

- Improve decisions with powerful analysis and reporting capabilities
- Provide quick answers to business questions with flexible, user-driven design
- Real-time analysis of planning results and business outcomes

The 'Manage Analytics Stories' app of SAP Integrated Business Planning for Supply Chain allows you to create powerful and user-friendly visualizations to complement the planning capabilities of SAP IBP, leveraging the best-in-class analysis and visualization capabilities of SAP Analytics Cloud (also see [SAP Help](#)).

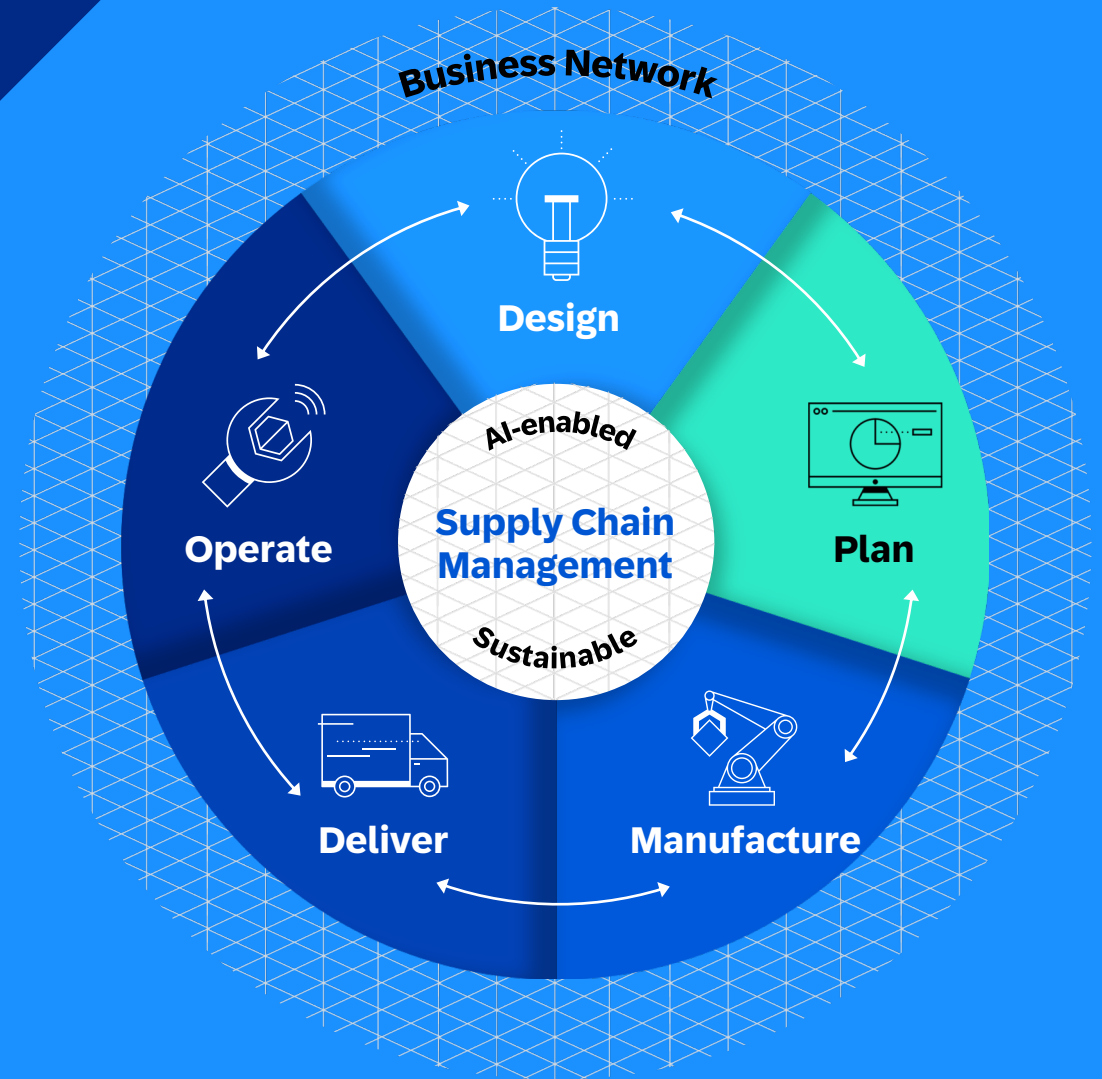
End-to-End Process Blueprints **Benefits & Examples** (in [SAP Bus. Accelerator Hub](#))

SAP Reference Business Architecture	SAP Reference Solution Architecture			
Business Value Flow	Solution Component	Solution Value Flow	Solution Process Flow	Solution Data Flow
Simple overview on business processes and business activities	Architecture blueprint of required solution components and communication channels	High-level mapping of implemented business activities to the solution components and capabilities	Detailed illustration of flows through the solution components with drill downs to further integration content	Representation of the typical data flow for key master, transactional and configuration data
				

Business Benefits

- Easy way to explore all Design to Operate scenarios from business and solution perspectives
- Understand how various SAP applications interact in order to address various business scenarios and needs
- Comprehensive and consistent architecture help align multiple stakeholders for effective architecture decision making
- Accelerate multi-solution project implementation while reducing planning efforts

05 Process Deep Dive Synchronized Planning

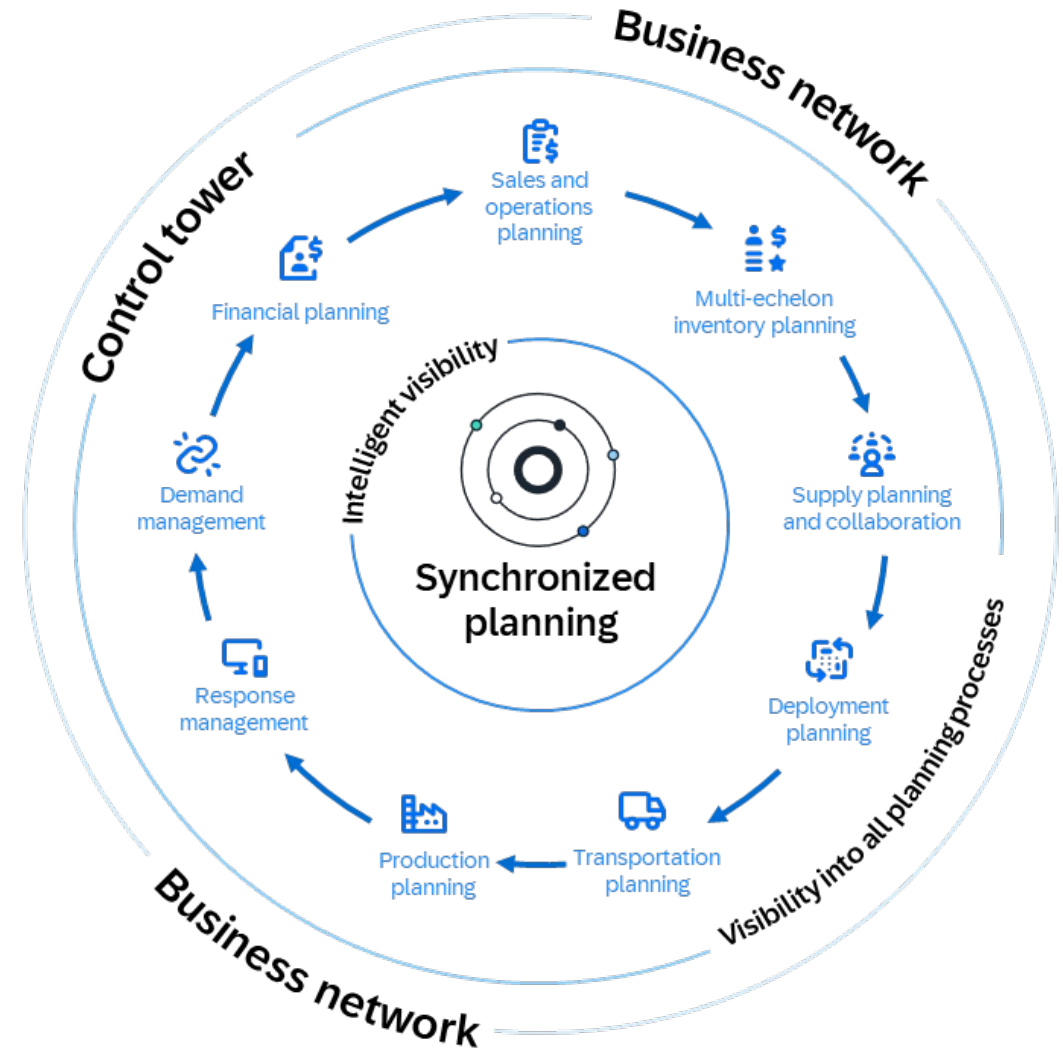


Plan

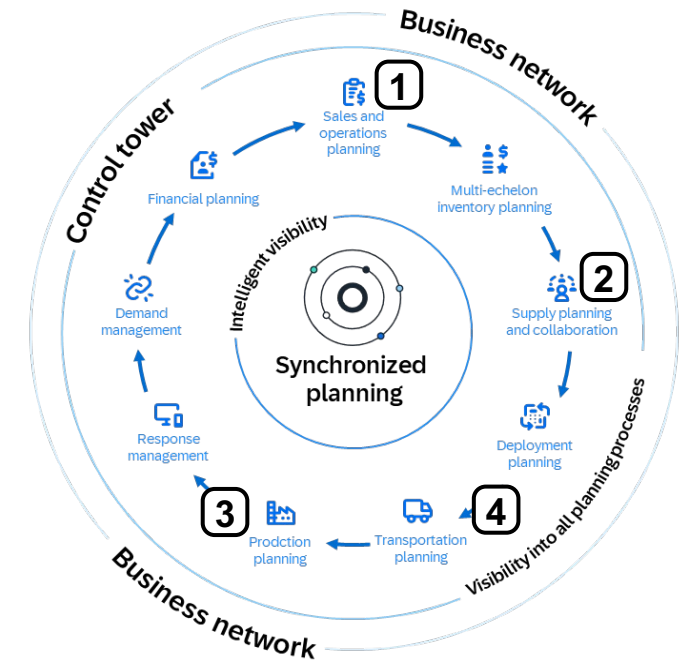
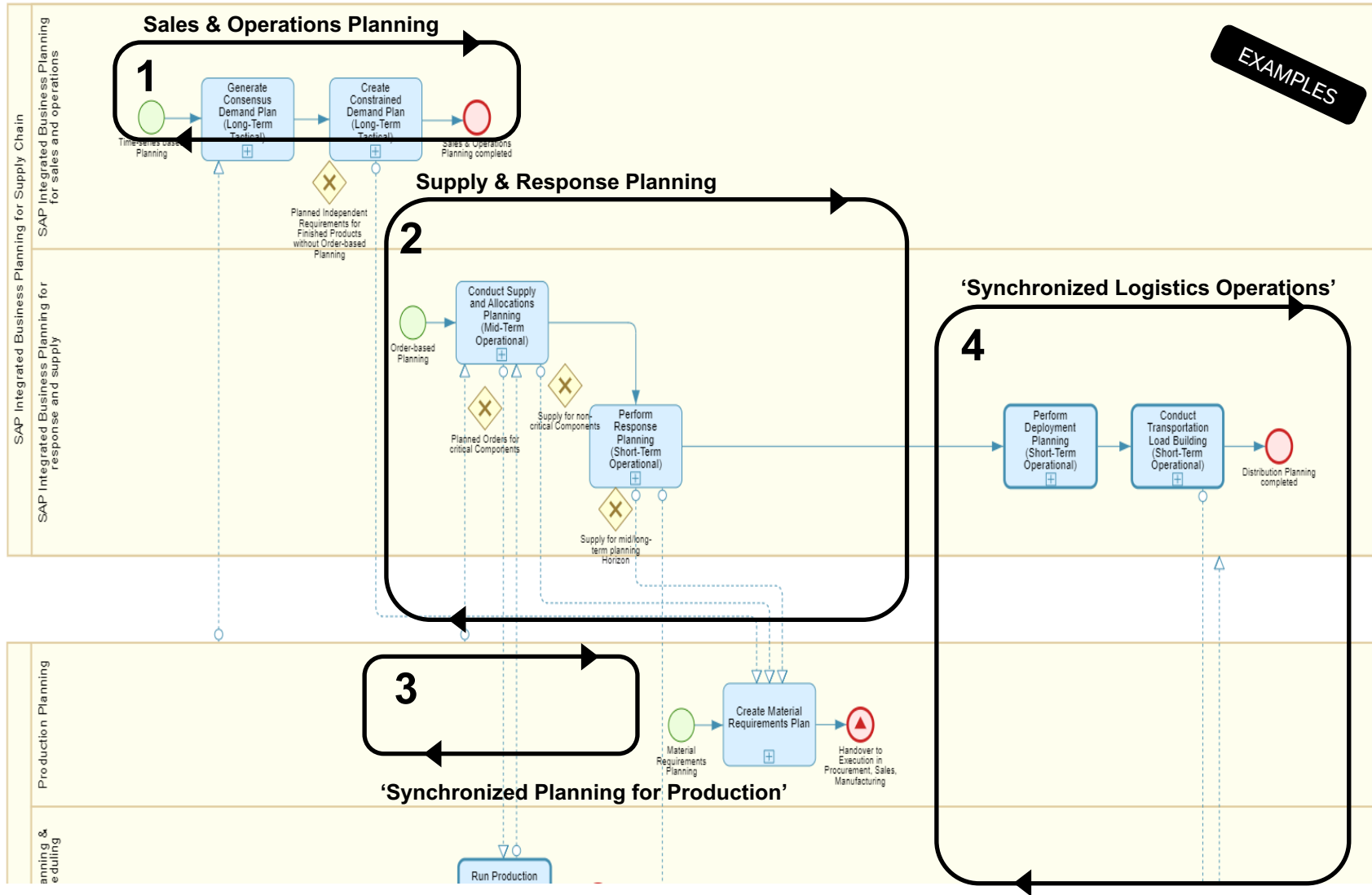
Connect Every Process

Imagine if you could:

- **Connect demand, supply, and inventory planning** to allocate resources, reduce downtime and disruptions, and increase customer satisfaction
- **Connect financial and operational data** to develop profitable and aligned plans that help hit your topline, protect your bottom line, and take better care of customers
- **Connect strategic and operational planning** with real-time visibility and execution



Plan - Connect Every Process with Synchronized Planning



The D2O Reference Architecture provides an e2e view of the closed loop planning and execution processes in a comprehensive and consistent way.

Plan

Contextualize Every Decision

Imagine if you could:

- **See the future now** using advanced analytics and machine learning to predict demand, plan your supply, and ensure production efficiency.
- **Create continuity** using embedded analytics to anticipate disruptions, analyze impacts and alternatives, and take action.
- **Evaluate sustainability from every angle** by ensuring reporting and tracking mechanisms include sustainability targets.



Plan

Collaborate With Your Ecosystem

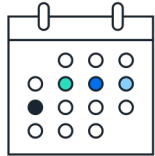
Imagine if you could:

- **Plan beyond your four walls** by proactively sharing your goals and suppliers' capacity and performance constraints.
- **Improve sustainability** by working with suppliers to balance inbound and outbound deliveries and reduce waste from obsolete and excess inventory.
- **Leverage information about risk** and uncertainty with your ecosystem to better evaluate potential disruptions and their impact.



Synchronized Planning is continuously evolving to drive business value for supply chain managers and planners

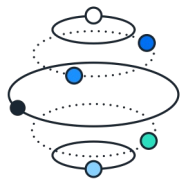
Planning to execution



Extended planning and analysis (xP&A) with finance and commercial



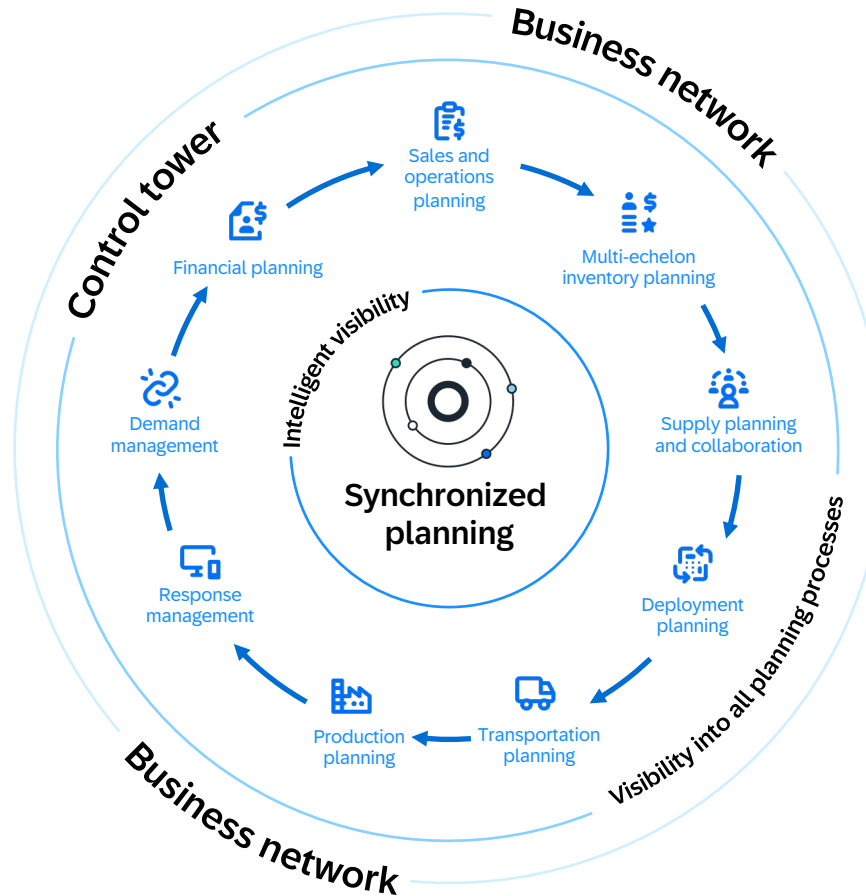
Synchronized production planning



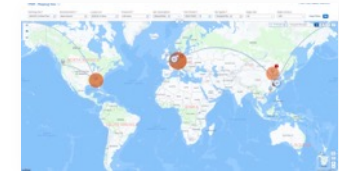
Network-aware planning



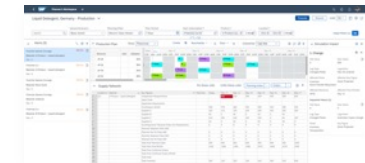
Synchronized logistics operations



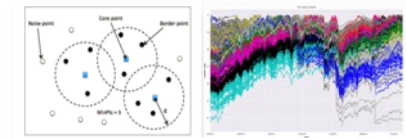
Focused innovations



Intelligent visibility



Planner's workspace



Machine learning and AI



Achieve planning excellence:

Synchronize supply chain planning decisions across lines of business to respond effectively to changes in supply, demand, and market conditions.

36% **lower revenue loss** due to stock-outs where forecasts are run for combinations of SKUs and inventory locations

16% **shorter order fulfillment lead time** where constraint-based supply planning process is run at regular intervals

SAP Performance Benchmarking insights pertain to year 2017 and run on overall data collected in the last 5 years. Number of data points analyzed for every insight is provided above. The insight states average performance difference between organizations with high and low maturity on the following best practice.

Key Takeaways

Your streamlined Supply Chain Processes from Design to Operate

- 1** Look at D2O as a comprehensive set of fully interoperable digital capabilities that can be implemented in a modular fashion to improve **your end-to-end supply chain responsiveness, resiliency and sustainability**
- 2** Break down silos and **manage your business holistically: connect** every process within and across your supply chain, **contextualize** every decision, and **collaborate** with your ecosystem
- 3** Transform your supply chain end-to-end processes with our **intelligent suite of integrated solutions** leveraging the power of a seamless user experience and embedded artificial intelligence



06 Next Steps

Food for Thought



Do you use software in a truly integrated way?



Do you really offer a seamless, personalized experience?

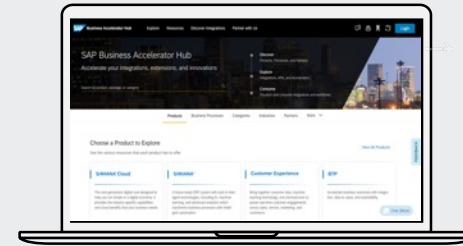


Where could your Supply Chain processes be improved ?

Useful Resources



[Integration Whitepaper](#)

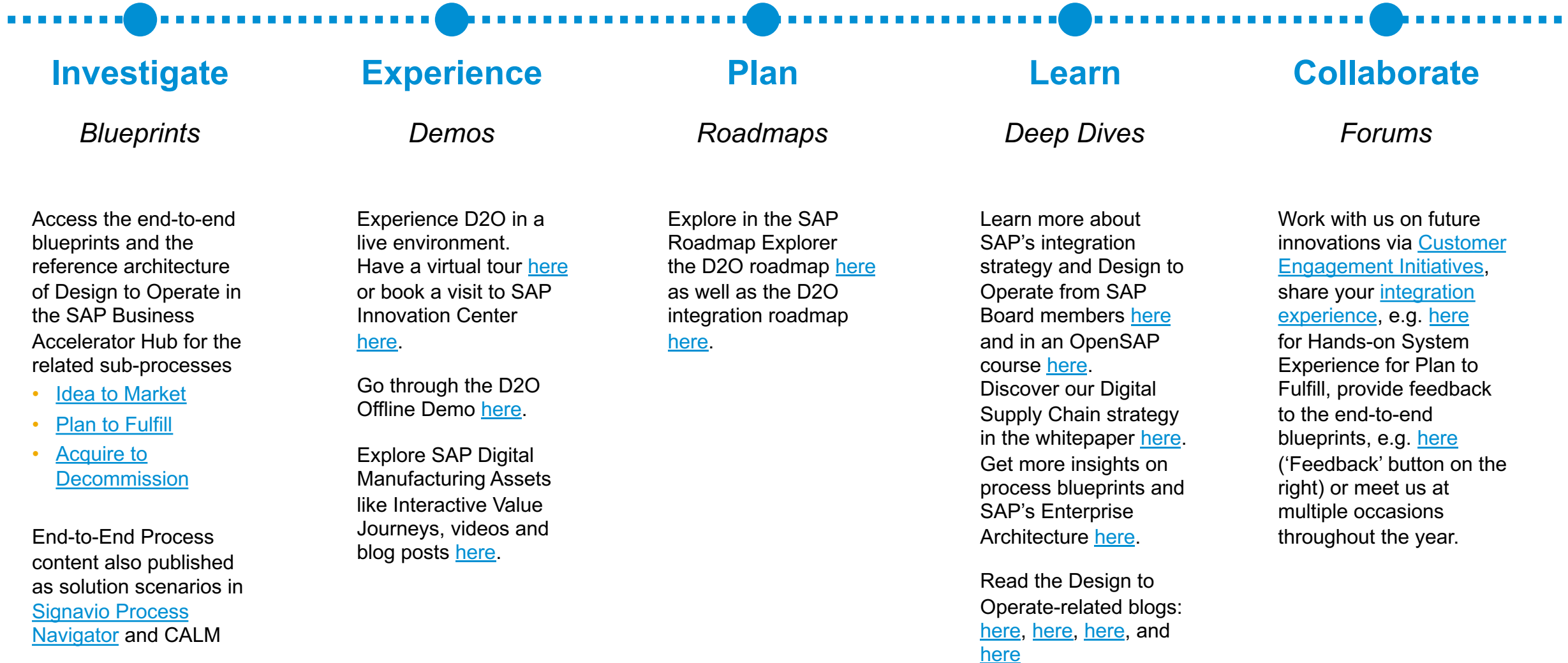


[Business Processes](#)



[D20 Roadmap](#)

Learn more



Your Next Steps

- 1** Visit the related SAP Community [topic](#) and make yourself familiar with our Integration Strategy in the context of the intelligent enterprise
- 2** Identify your key supply chain challenges as a starting point to your supply chain transformation
- 3** Reach out to your SAP contact or mail to [SAP Business Performance@sap.com](mailto:SAP_Business_Performance@sap.com) to discuss an individual assessment of your Design to Operate processes

Already registered for the upcoming session of this series?

06.05.2024, 04:00-04:45 pm CEST – [Source to Pay](#)

The previous Recruit to Retire session you can find [here](#).
The previous Lead to Cash session you can find [here](#).





Thank you

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