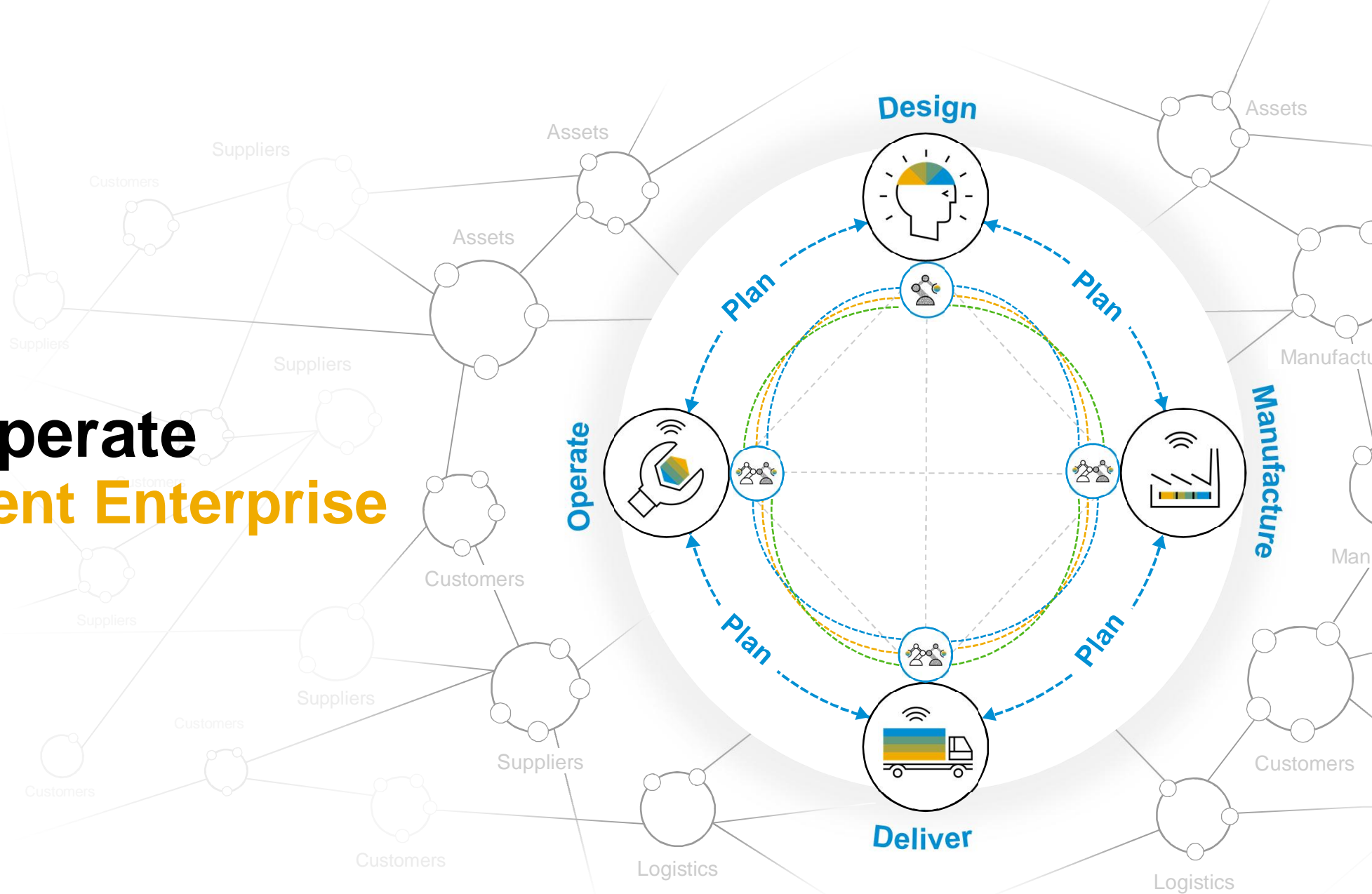


SAP® Digital Supply Chain

# Design to Operate In the Intelligent Enterprise

Lars Olson, SAP  
May 21, 2019

CUSTOMER



## SAP® Digital Supply Chain

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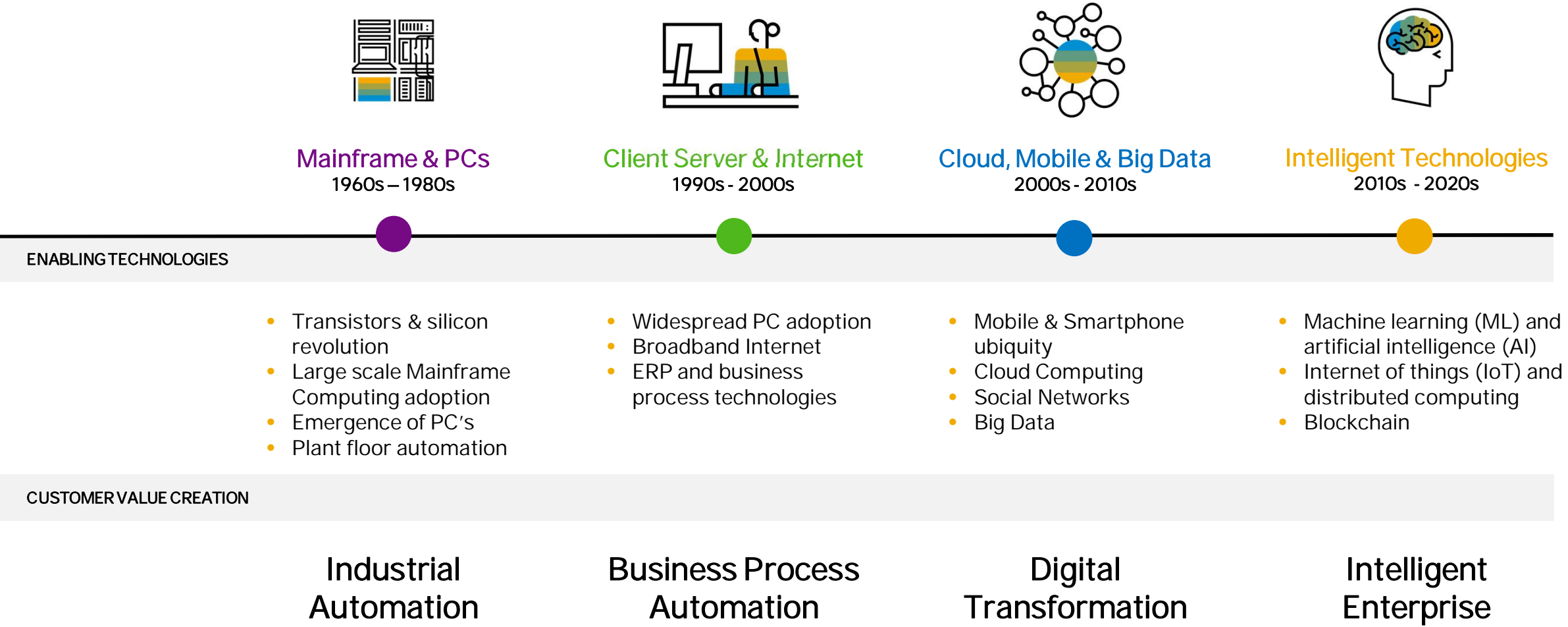
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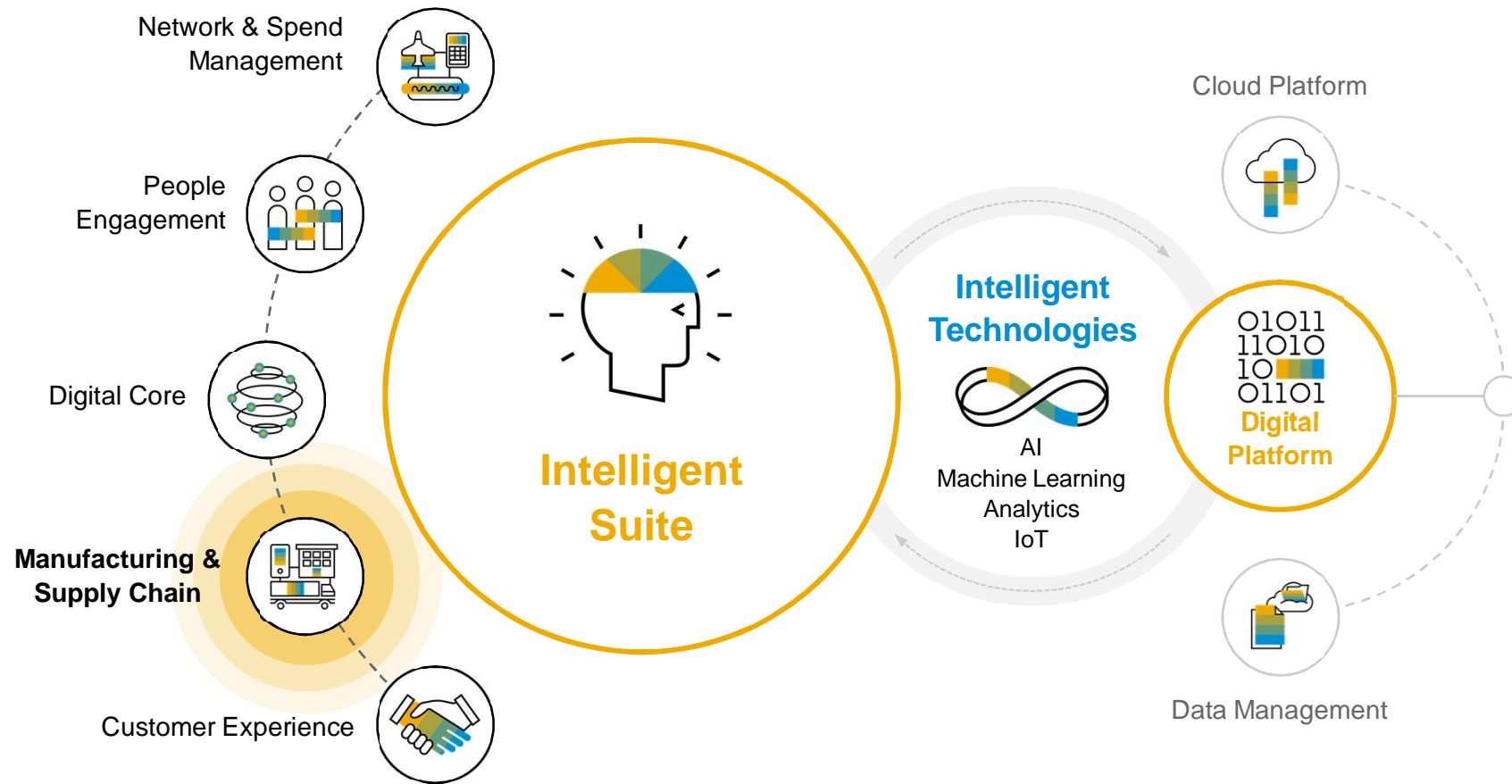
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# The Digital Era is evolving into The Intelligence Era



# The Intelligent Enterprise

## The foundation of a Digital Supply Chain



The Intelligent Enterprise features **3 key components**:

1

Intelligent Suite

2

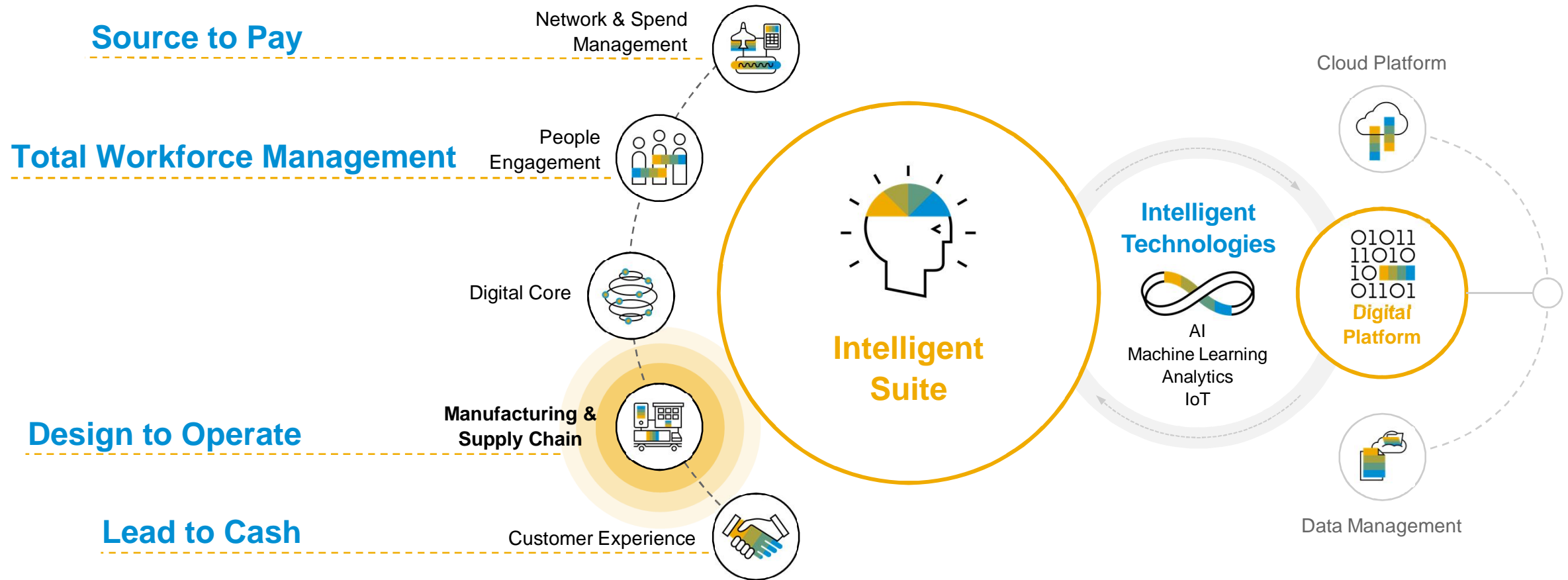
Intelligent Technologies

3

Digital Platform

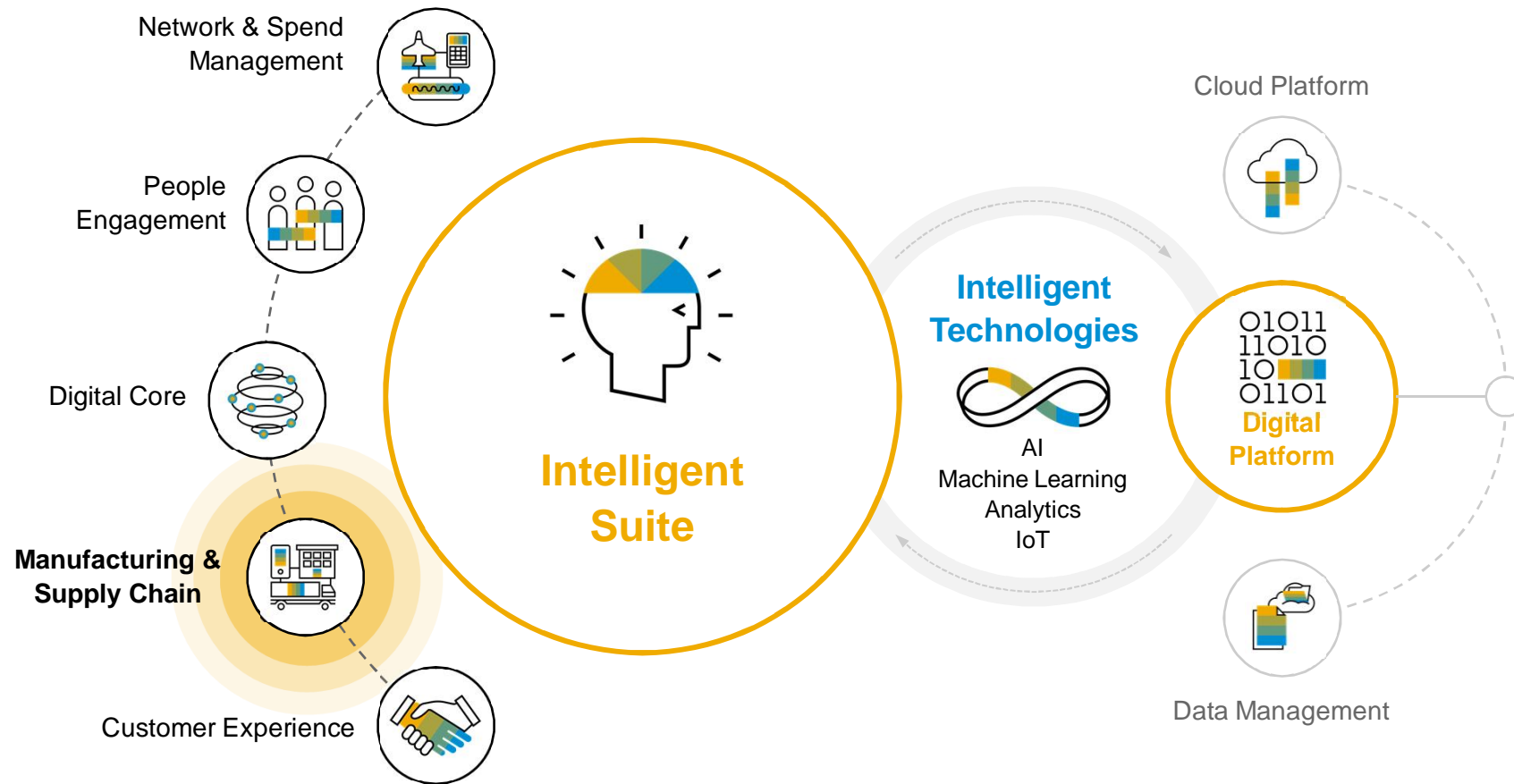
# The Intelligent Enterprise

## Key End-to-End Processes



# Design to Operate in the Intelligent Enterprise

## Key Differentiators

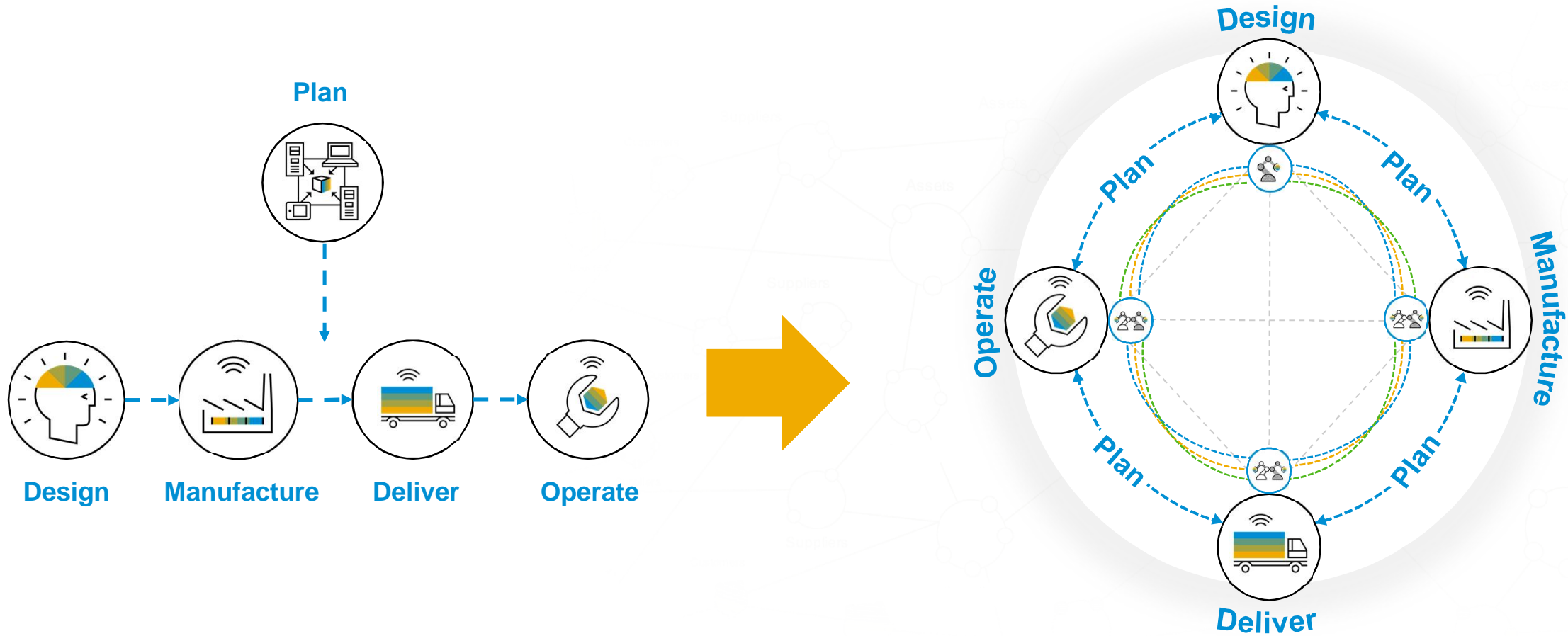


### Design to Operate

**Key differentiators:**

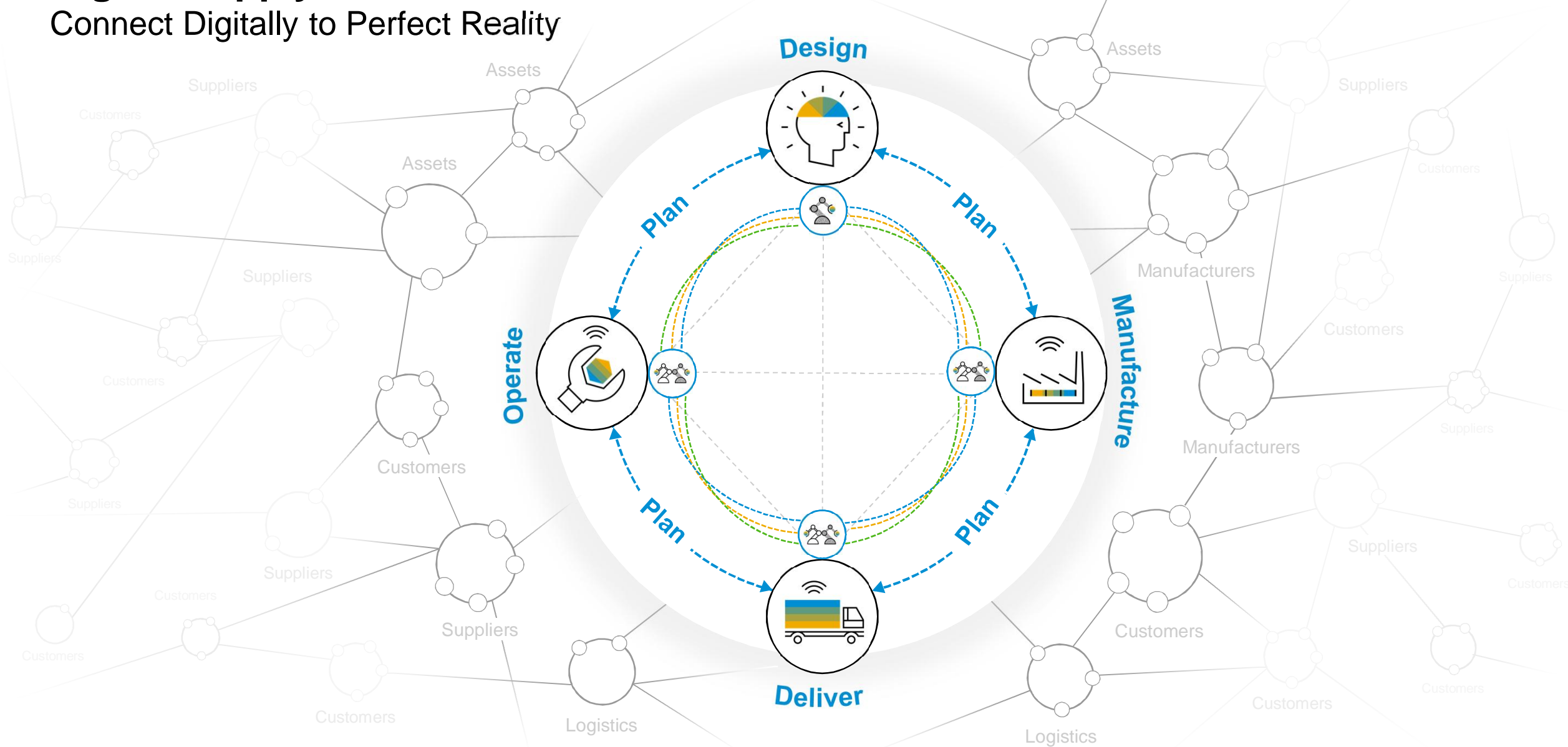
- 1 **Intelligence built into business processes**
- 2 **Seamless Integration**
- 3 **Digital Twin along value chain**
- 4 **Asset Central for all of IES**
- 5 **End to End Visibility**

# Top floor wants the Connected Supply Chain but ... continues to organize in departmental silos



# Digital Supply Chain

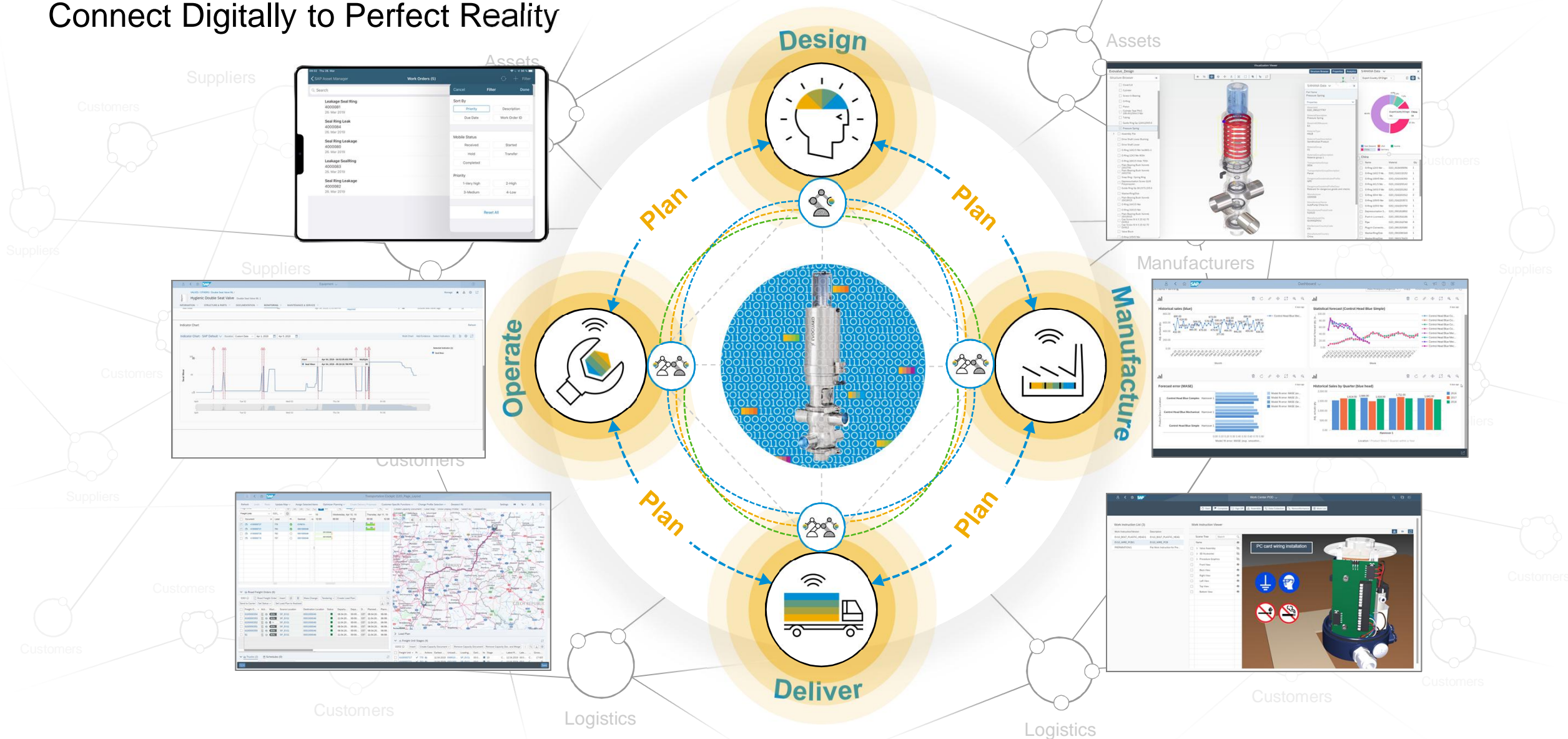
## Connect Digitally to Perfect Reality



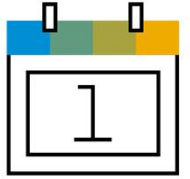


# Digital Supply Chain

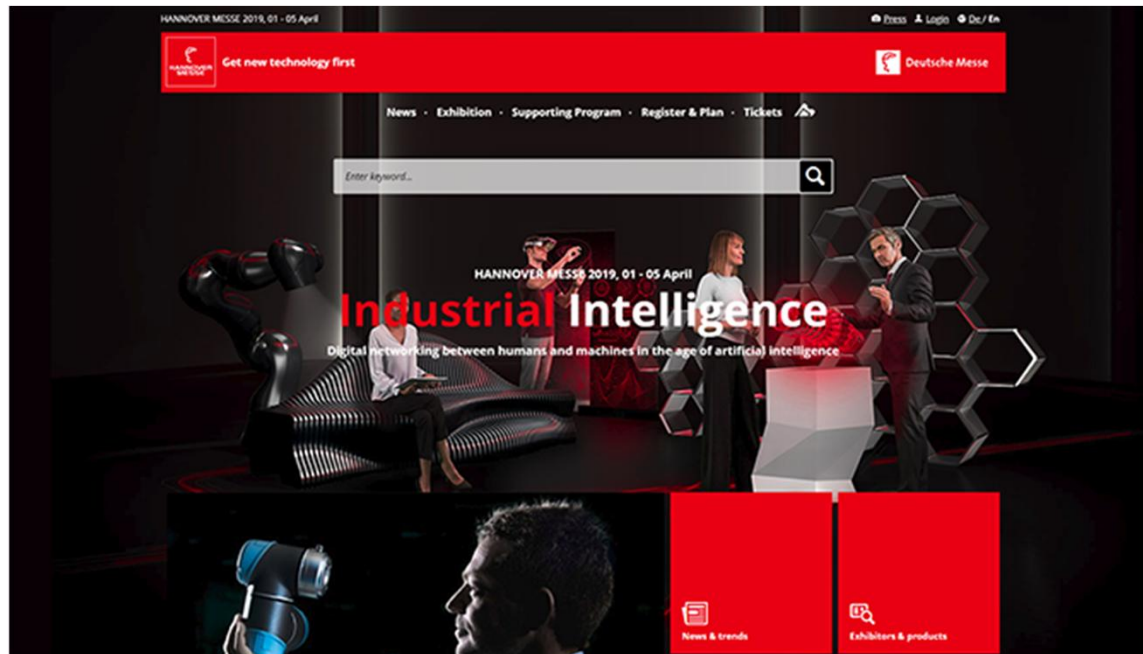
## Connect Digitally to Perfect Reality



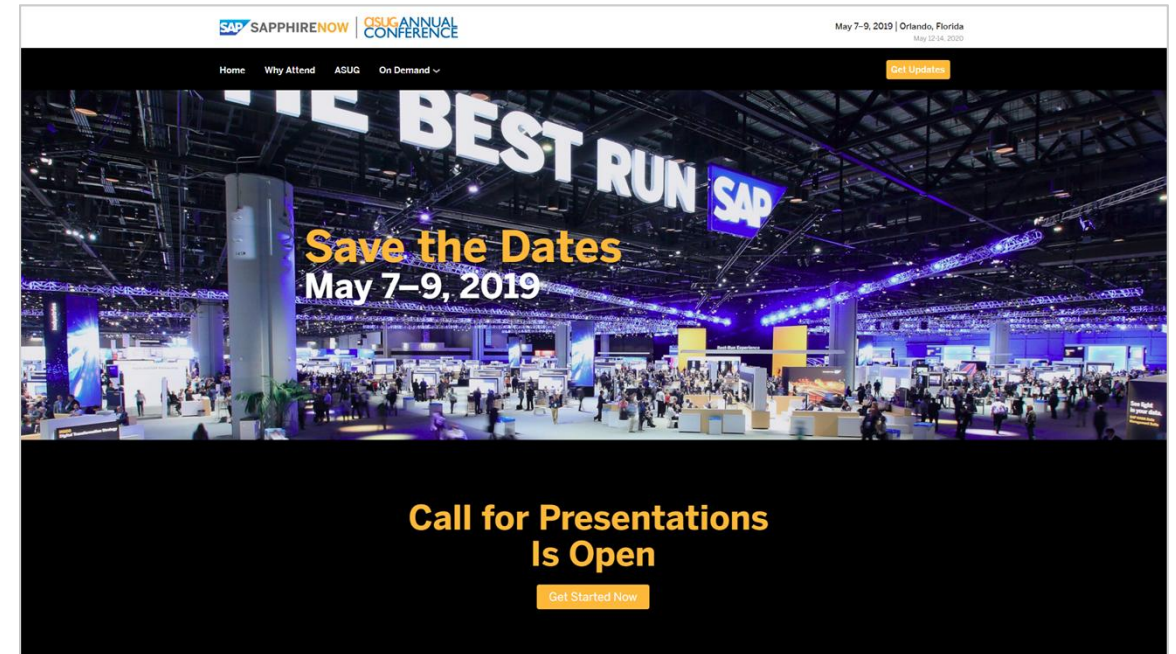
# 2019 Design to Operate Showcases!



## HANNOVER MESSE April 1–5, 2019



## SAPPHIRE NOW May 7–9, 2019 Orlando, Florida





# 2019 Design to Operate Showcase Videos!



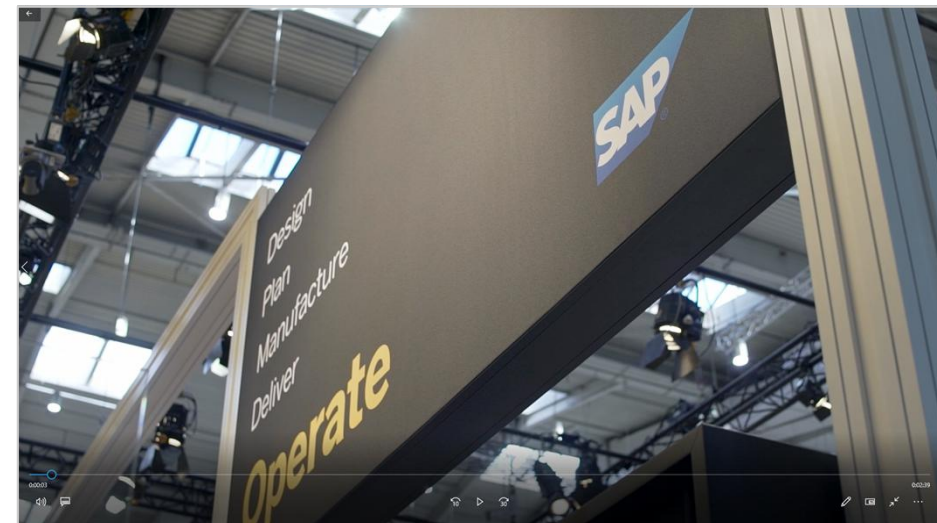
[https://www.youtube.com/watch?v=vZhpO1G7\\_hw](https://www.youtube.com/watch?v=vZhpO1G7_hw)



<https://www.youtube.com/watch?v=gnpQ-k24XYM>

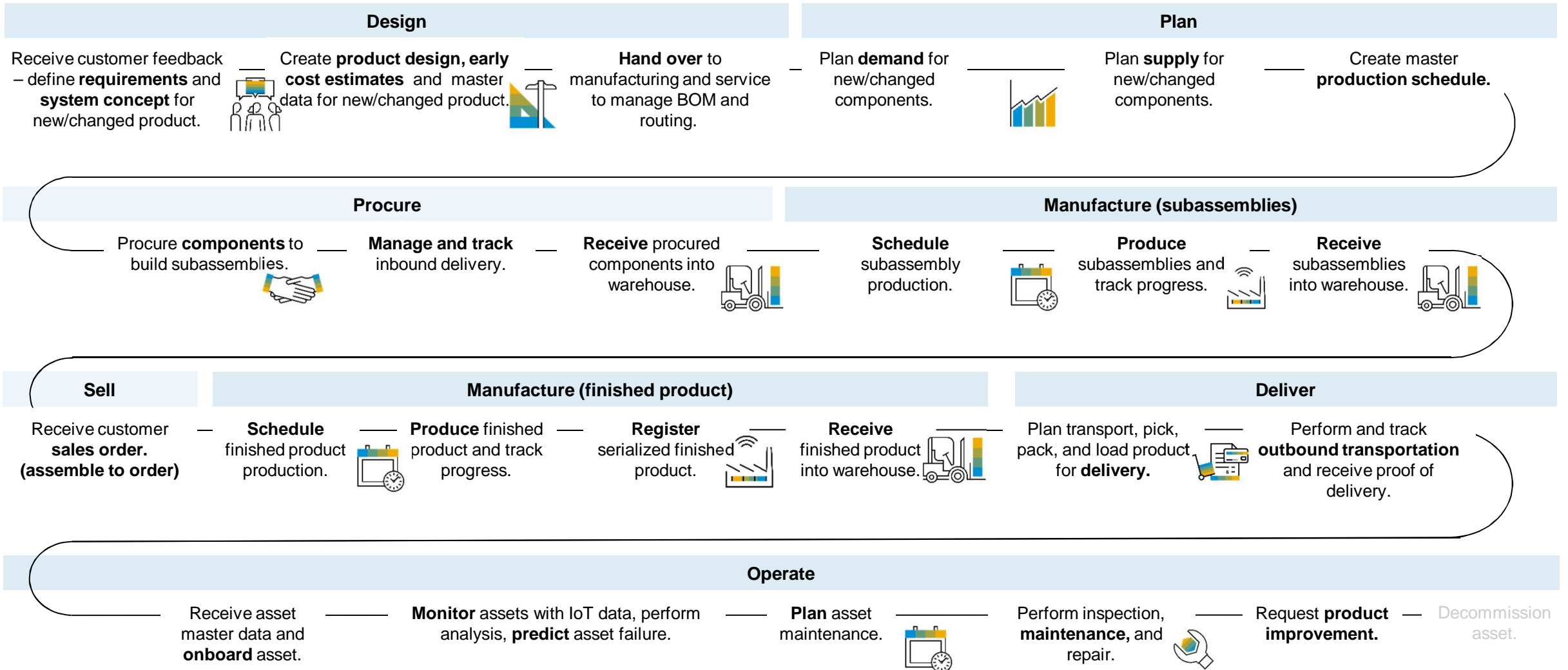


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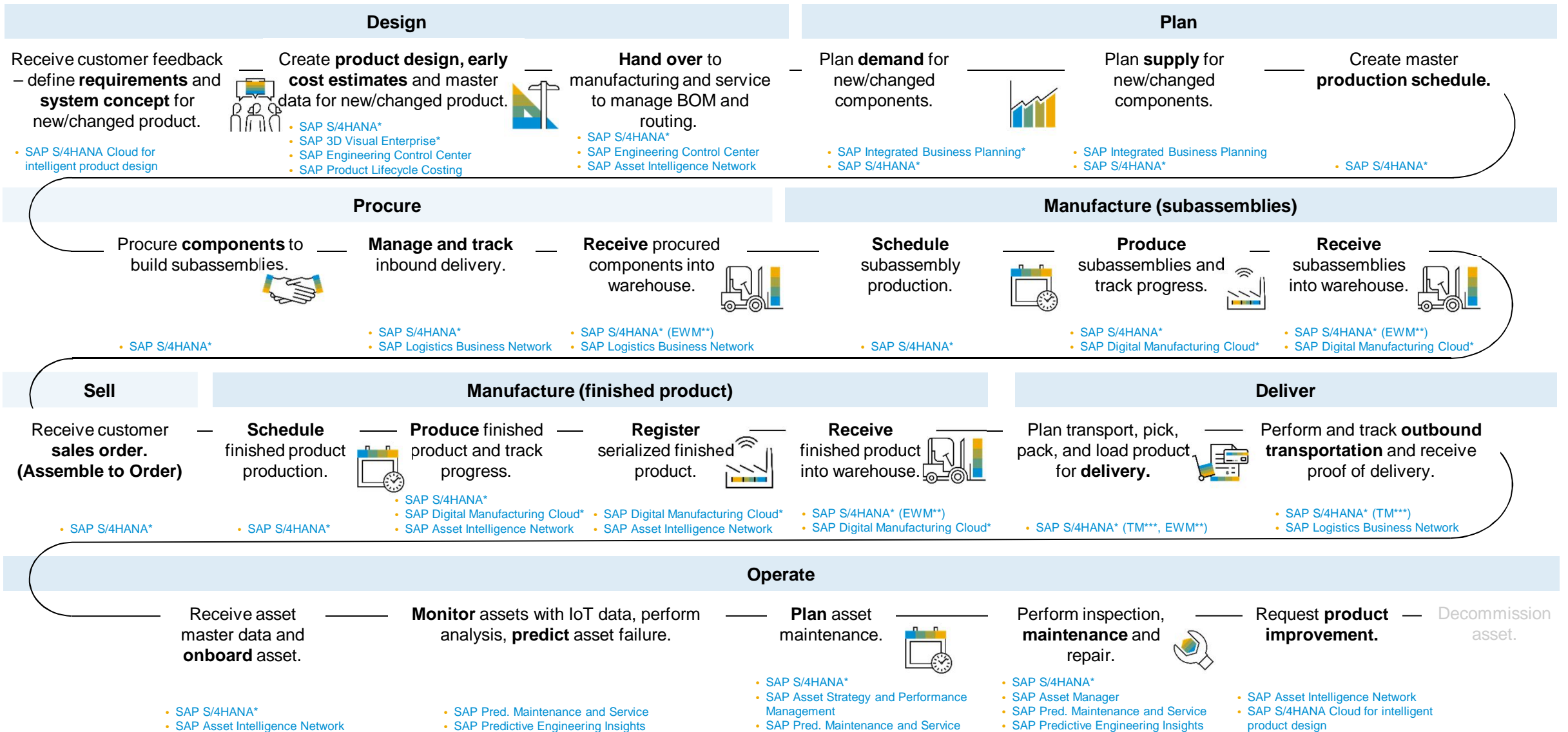


<https://www.youtube.com/watch?v=oeUqq4vIJAM>

# Design to operate (overview)

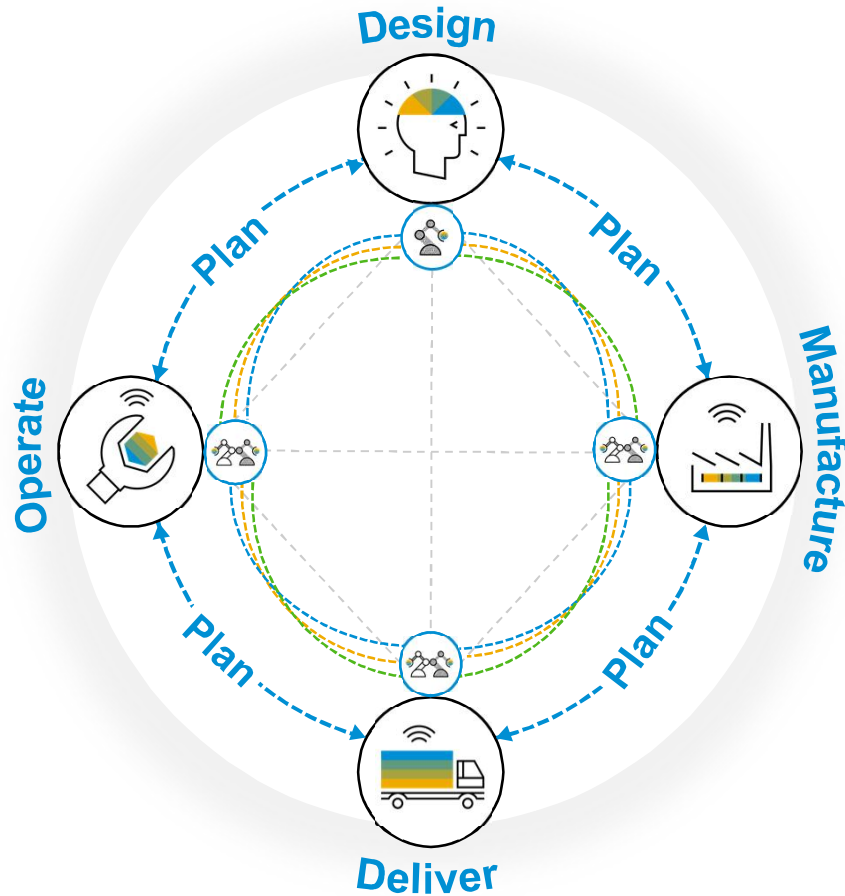


# Design to operate (overview)



# Digital Supply Chain

## From Design to Operate



### Design

- Reduce time to market
- Continuously and sustainably innovate
- Deliver on customer 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

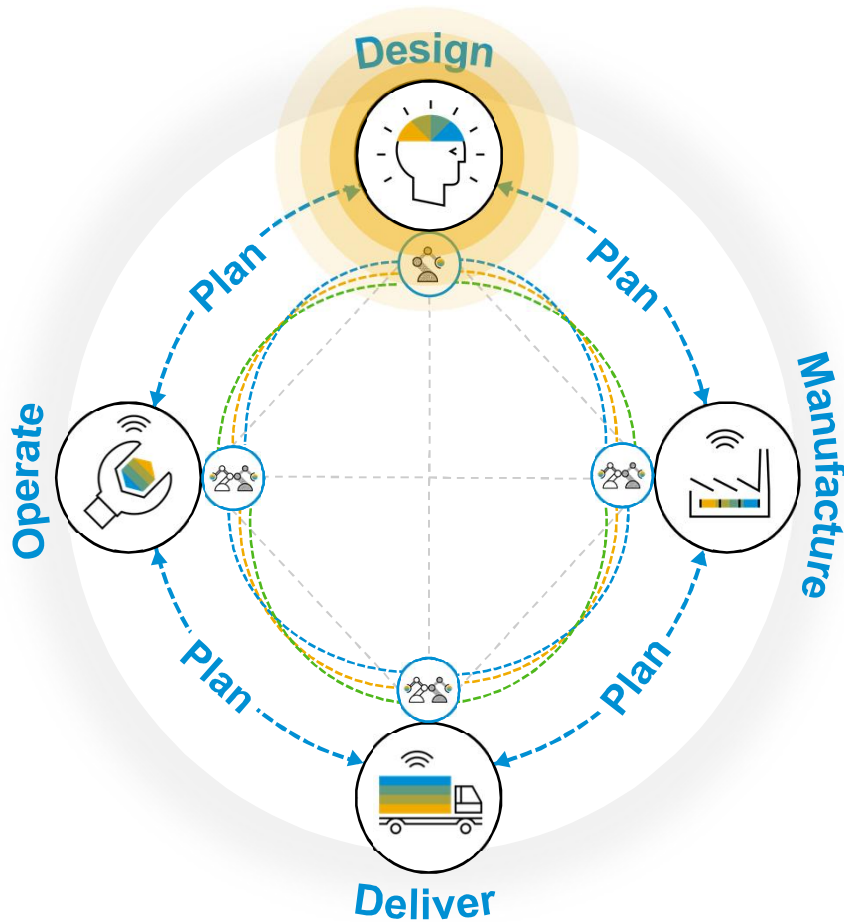


### Operate

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

# Connect Digitally to Perfect Reality – Design

Business value for R&D/Engineering



## Innovate digital products and services faster

Enable new business practices by managing product and asset intelligence across networks

## Institute design excellence

Drive product development based on requirements with an integrated systems engineering approach

## Compliant product lifecycle management

Improve collaboration and integrate product development to be first to market with innovative, sustainable and compliant products

## Increase profitability and visibility

Loop back failure and operational analysis from service to engineering for design improvement and lower product cost

8%

increase in meeting revenue goals with clearly documented and validated new product requirements.

SAP Performance Benchmarking

17%

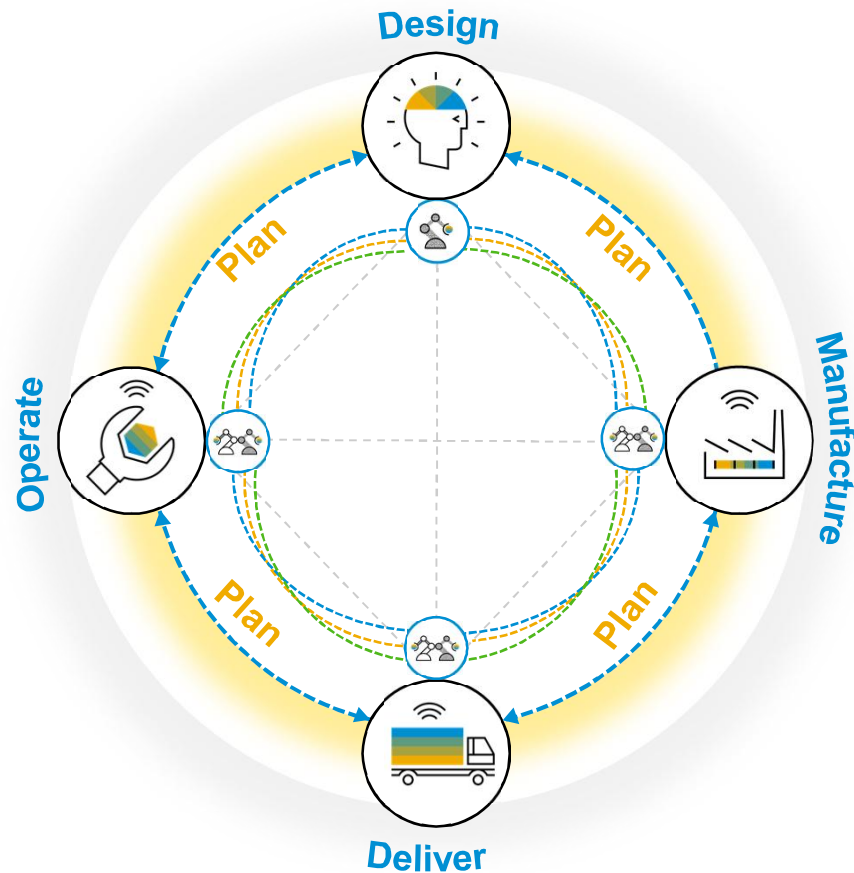
decrease in time to market where product development projects are managed from concept to launch.

SAP Performance Benchmarking



# Connect Digitally to Perfect Reality – Plan

Business value for Supply Chain



## State-of-the-art business processes

Enable new end-to-end business processes, models and revenue streams

## Synchronized planning processes

Eliminate planning silos through connected and integrated planning processes

## End-to-end visibility

Provide visibility on strategic, tactical and operational levels across internal and external data

## Faster planning cycles

React faster to changes in the business through complete integration across the supply chain

40%

shorter lead times with flexible rules-driven supply-demand matching.

SAP Performance Benchmarking

12%

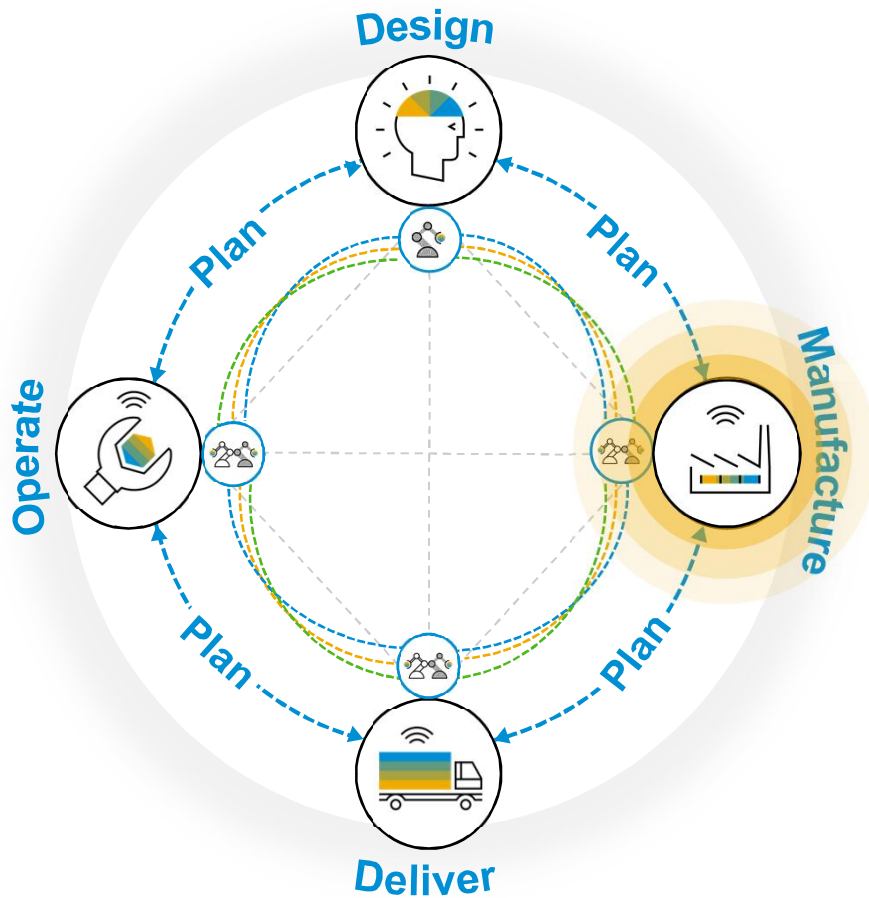
fewer days in inventory with dynamic, frequently updated forecasts.

SAP Performance Benchmarking



# Connect Digitally to Perfect Reality – **Manufacture**

Business value for Manufacturing



## State-of-the-art business processes

Leverage new technologies to identify and enable business processes with highly flexible UI's

## Connected manufacturing

Eliminate manufacturing silos through a single data model with connected, integrated processes

## Top floor to shop floor visibility

Complete end-to-end visibility on strategic, tactical and operational levels

## Faster more efficient execution

Improve throughput, increase quality, and reduce waste

## Advanced analytics

Leverage configurable KPI's to identify process bottlenecks and improve performance efficiency

**8%**

increase in plan adherence where delivery dates are integrated with material availability and real-time manufacturing conditions.

SAP Performance Benchmarking

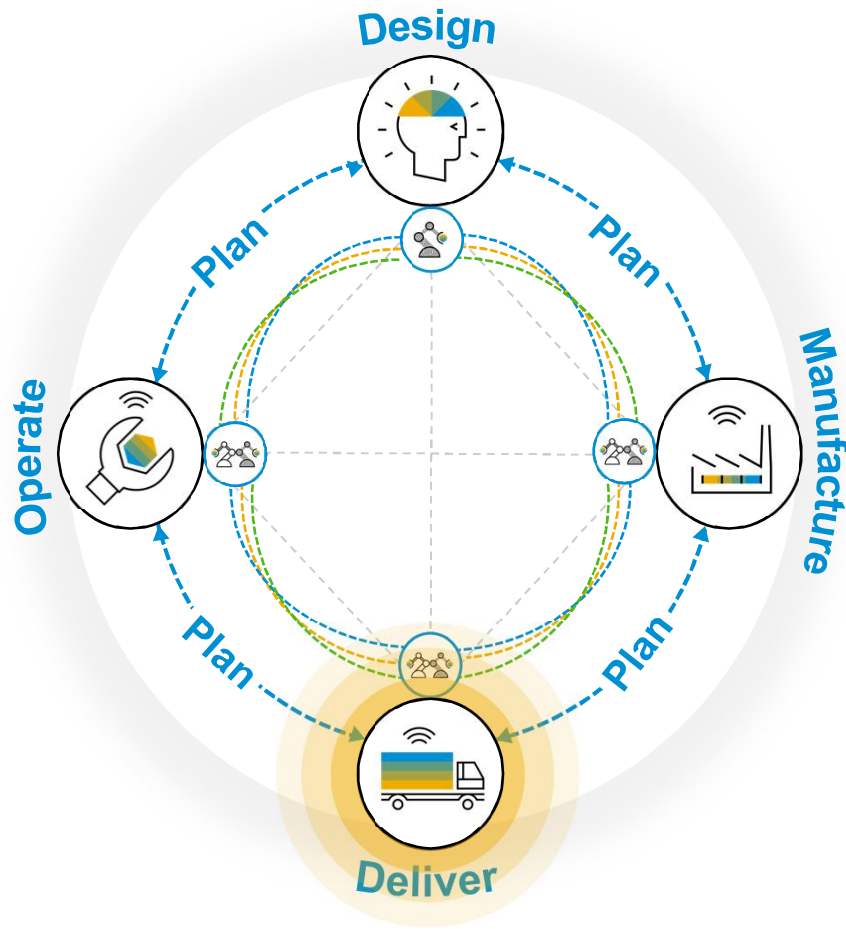
**28%**

decrease days in inventory where manufacturing processes are controlled through pull-based production schedule.

SAP Performance Benchmarking

# Connect Digitally to Perfect Reality – Deliver

Business value for Logistics



## Balance customer service and delivery costs

Enable efficient logistics and order fulfillment processes to increase speed and reduce cost and emissions

## Warehouse Management

Optimize labor, storage, and fulfillment costs

## Transportation Management

Reduce costs and carbon footprint and improve service, efficiency, and sustainability

## Logistics Networks

Collaborate with logistics partners and improve fulfillment through visibility and IoT connectivity

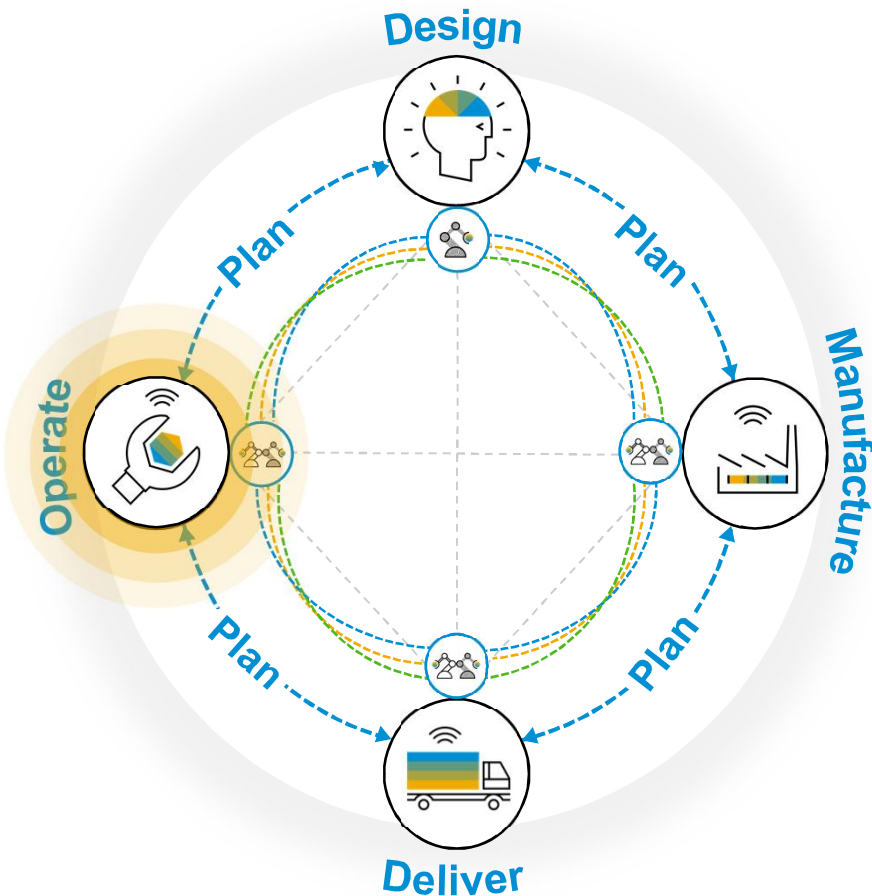
93%

increase of domestic on-time delivery.

SAP Performance Benchmarking

# Connect Digitally to Perfect Reality – Operate

Business value for Asset Management



## State-of-the-art business processes

Leverage new technologies to enable new asset management business processes with highly flexible UI's

## Real-time insights

Provide end-to-end visibility on strategic, tactical and operational levels

## Connected assets

Bring together information from operational and business systems using IoT for scalable transparency

## Prediction and simulation

Drive smarter decisions, improve reliability, and reduce outages and emissions

## Collaboration throughout the asset lifecycle

Share asset information and collaborate on a cloud-based business network with integrated processes

17%

increase in return on assets where asset management systems are fully integrated.

SAP Performance Benchmarking

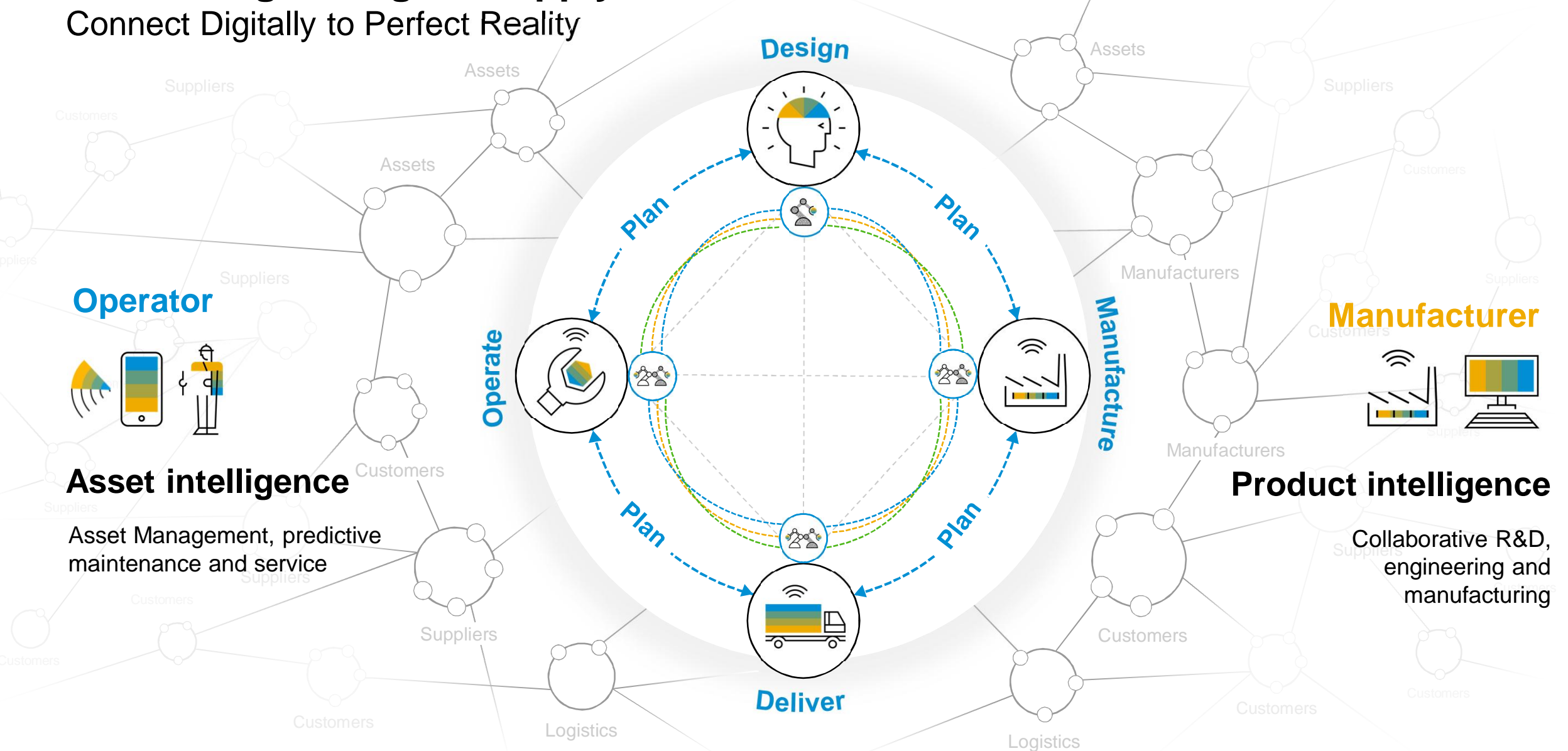
79%

decrease in accident frequency with monitoring of strong safety measures for people and assets.

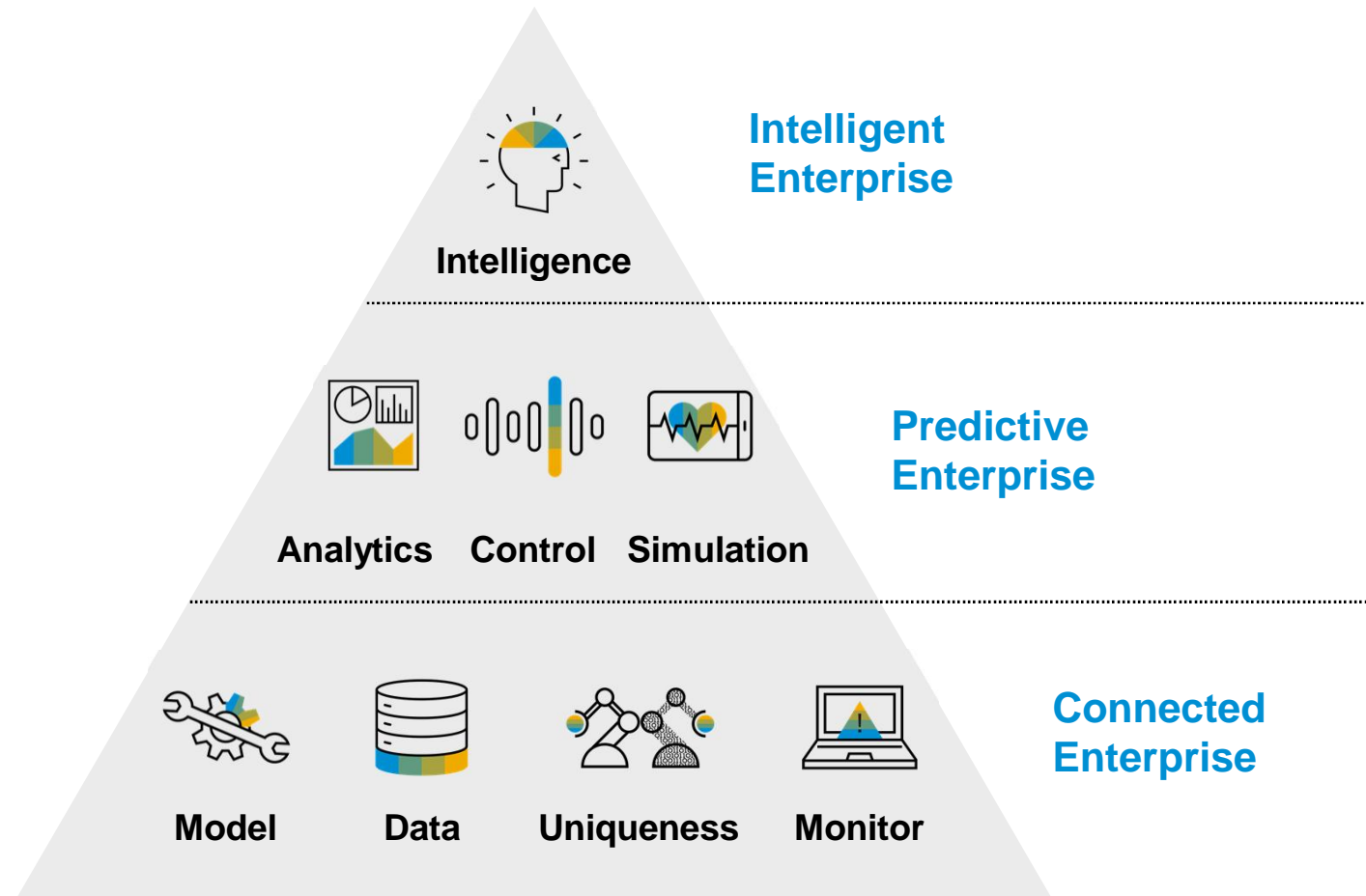
SAP Performance Benchmarking

# The Intelligent Digital Supply Chain

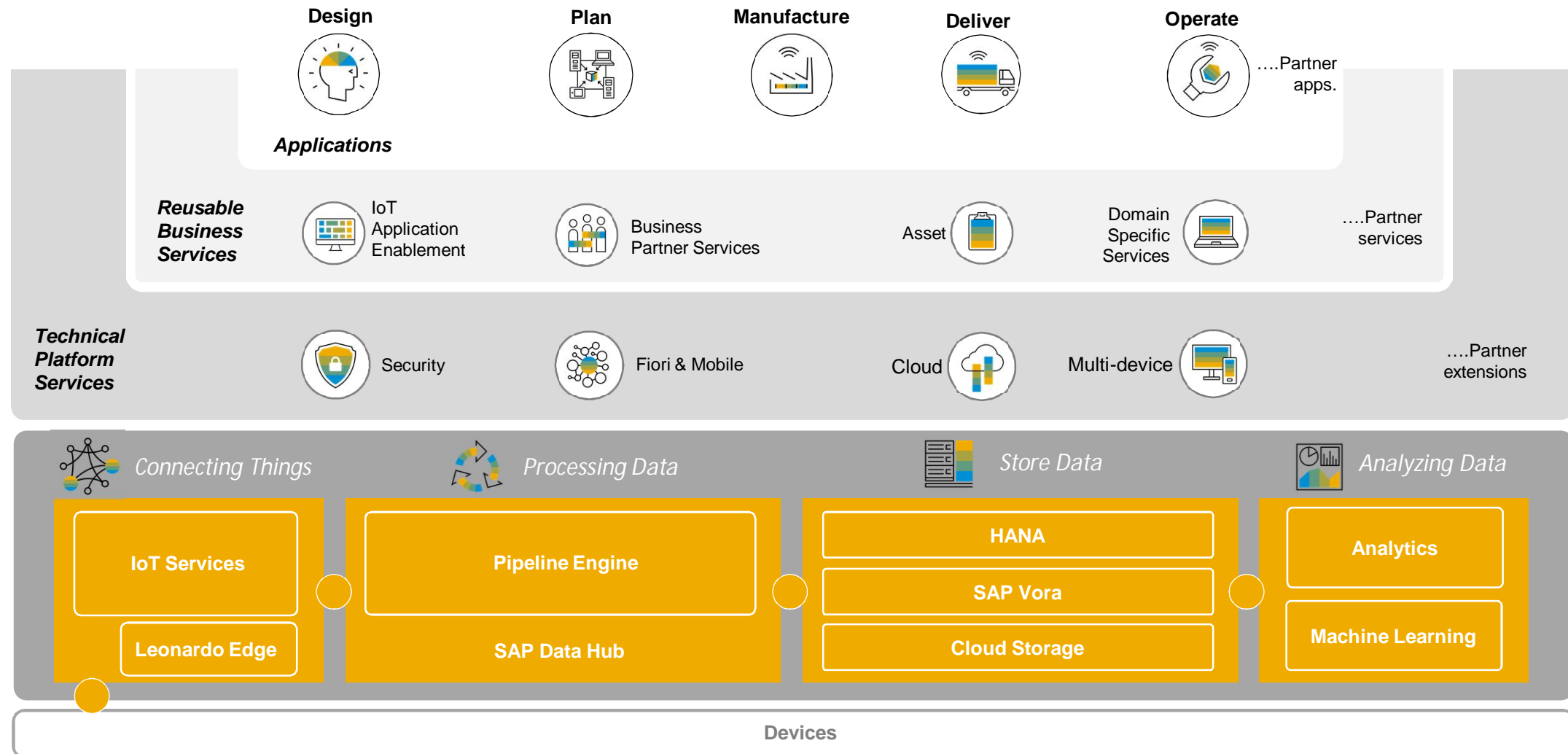
## Connect Digitally to Perfect Reality



# Evolution of the Digital Twin | From Data Repository to Intelligent Orchestrator

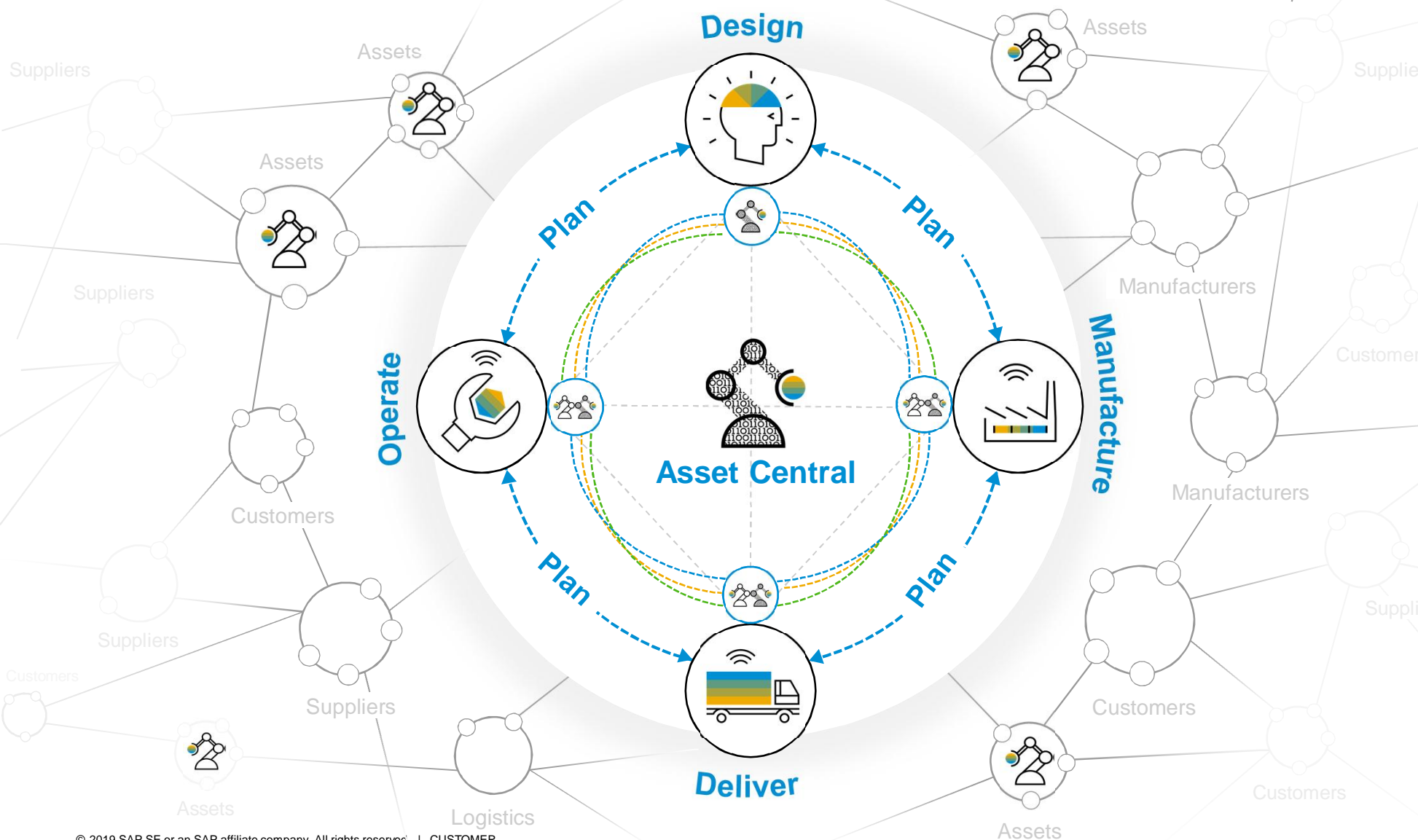


# Delivering the Customer Experience with SAP Digital Supply Chain

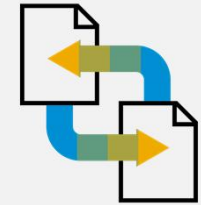


# Asset Central

A Digital Twin enabler for next generation product and asset modeling and management



## Asset Central One Common Foundation



**Asset Central** provides a common master and transactional data layer, a set of out-of-the-box integrations to SAP back-end business and Internet of Things solutions and standard basic functionalities enabling common next generation product and asset modeling and management.



# Why SAP

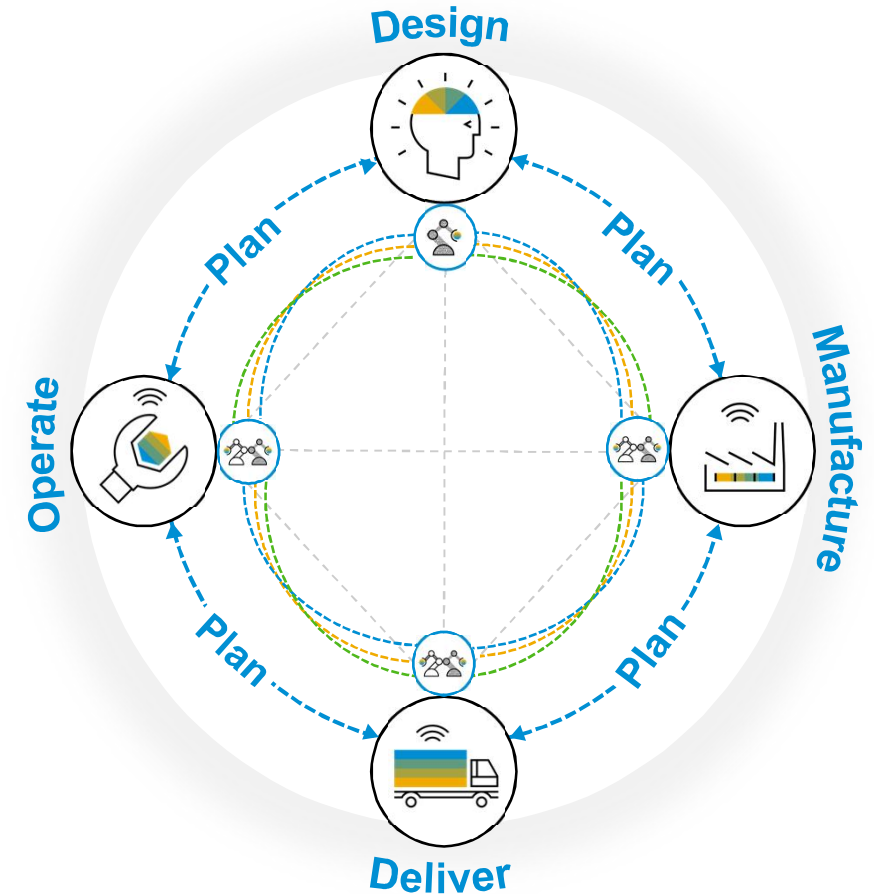
## Connect Digitally to Perfect Reality

SAP's supply chain solutions digitally connect your entire supply chain, so you can deliver at your best today, while you adapt and continuously improve to reshape how you deliver tomorrow.

With SAP, you can create a digital mirror of your complete supply chain—from design, planning and manufacturing to logistics and ongoing maintenance—embedding intelligence from beginning to end and ensuring your customers are central to each and every phase of your business.

You get total visibility as products are designed, delivered and deployed by connecting your business processes with real-time data from assets, equipment, customers and suppliers.

Only SAP can deliver all the processes and data with embedded innovations like 3D printing, IoT, machine learning, and blockchain into your everyday operations. With SAP's supply chain solutions, you get the operational visibility and customer intelligence to manage your entire supply chain digitally and execute flawlessly today, while transforming your business for the future.





# Thank you.

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Solution Management

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