



# SAP Digital Supply Chain

## Connect Digitally to Perfect Reality

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# In a Dynamic World of Change, Technology is the Catalyst

## Technologies

3D Printing, IIoT, Big Data, AI, Blockchain; to do it now / today

## Impact



### Business Environment

- Aging workforce
- Increasing complexity
- Roles and Functions are changing



### Personal Environment

- Millennials set new priorities
- Private and Business boundaries are blurring
- Increased expectation of Sustainability

# Digital Supply Chain is Strategic to Transforming Businesses

## FROM...

- Sales forecasting
- Customer orders
- Outcome focused



## TO...

- Demand sensing
- Customer experience
- Circular economy

- Big data
- Responsive
- Linear supply chain



- Intelligent analysis
- Predictive
- Agile ecosystem

- Mass production
- Selling a product
- Cost reduction



- Mass customization
- Delivering a service
- Increase revenue

## WHY?

**Product Individualization  
& Heightened Customer  
Expectations**

**Transparency &  
Knowledge**

**Competitiveness &  
Differentiation**

# Leading Companies Respond to Market Dynamics

CUSTOMER  
EXPERIENCE



**Customer  
Centricity**



**Total  
Visibility**



**Business  
Innovation**



PRODUCT  
EXPERIENCE



# Center everything you do around your customer

## Customer Centricity



Drive processes based on real-time demand



Enable responsive and flexible planning



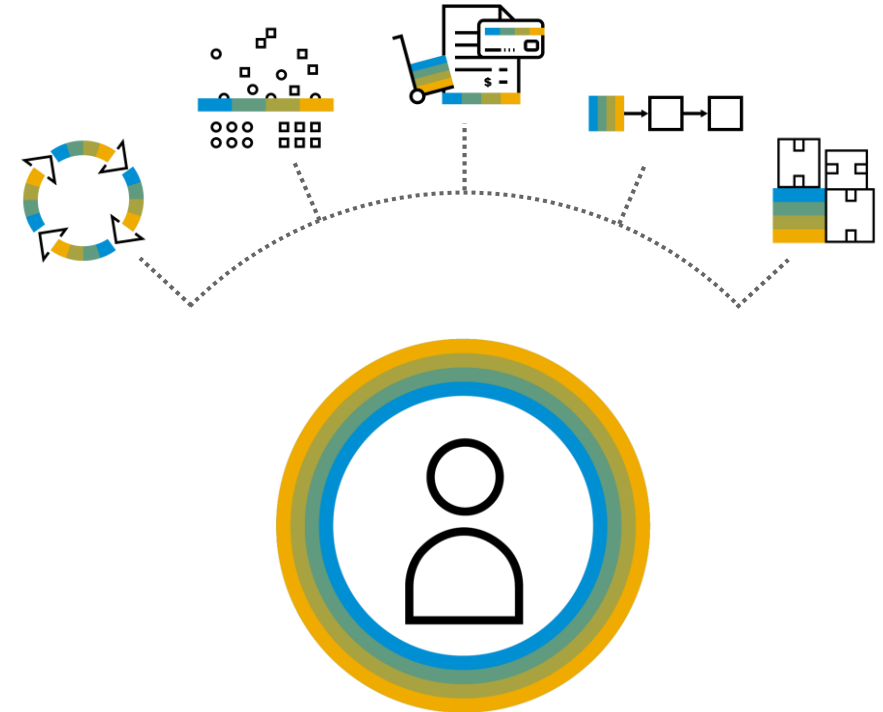
Closed loop feedback to design



Individualized products



Deliver through omni-channel logistics



# Customer Centricity

Traceability, from farm to table



**Improved**

traceability of goods to the customer, scrap, and safety stock

**Increased**

pick rate with real-time voice technology

**Improved**

Forecasting accuracy above their 80 - 90% rate

# Create a digital mirror of your end to end supply chain

## Total Visibility



Connect with your business network



Leverage Digital Twins of Physical Assets



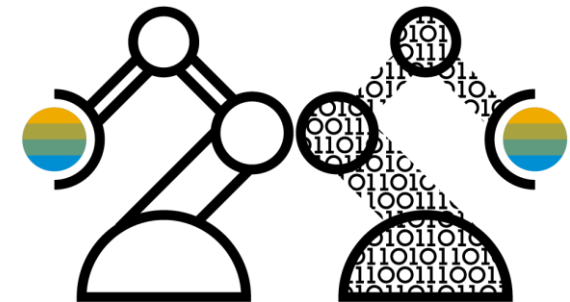
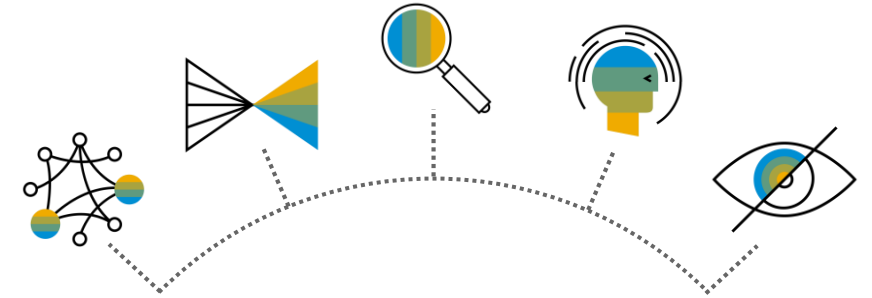
Analyze, search and discover in real time



Predict business outcomes



Role-based visibility



# Refine and reinvent simultaneously

## Business Innovation



Drive new revenue streams



Automate activities and processes



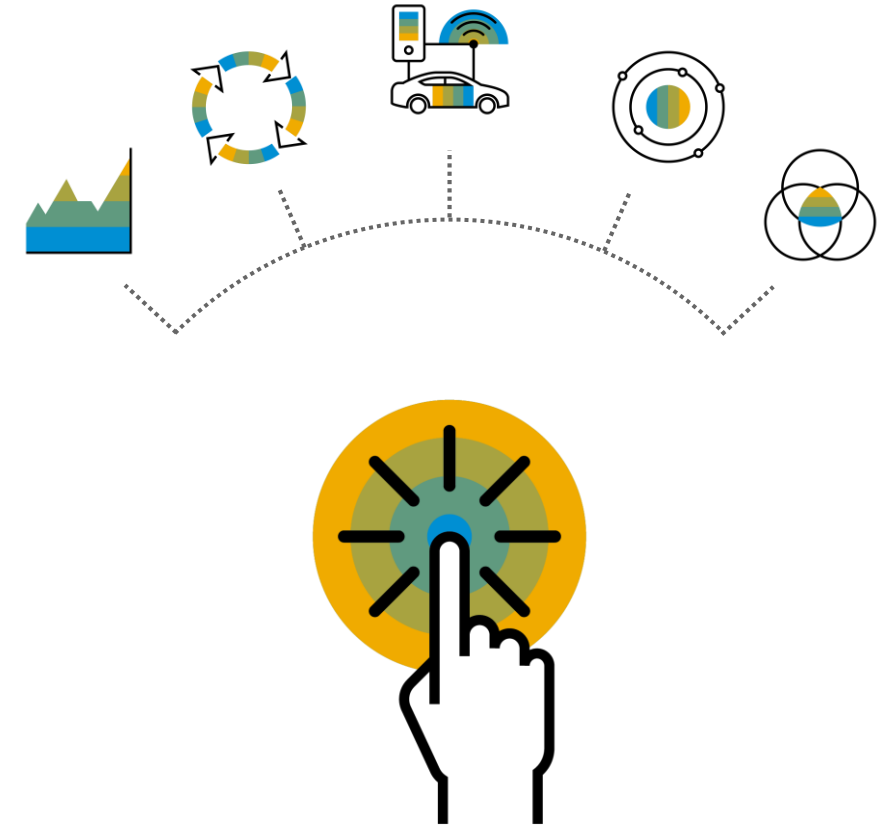
Build smart products and assets



Leverage innovative technologies



Enable new service and business models



# Business Innovation

## 3D Printing Spare Parts On-Demand

3D Printing at major DC's and selective stores

- **Reduce** spare parts carrying costs
- **Reduce** waste of obsolete parts
- **Reduce** inventory carrying costs



# Business Innovation

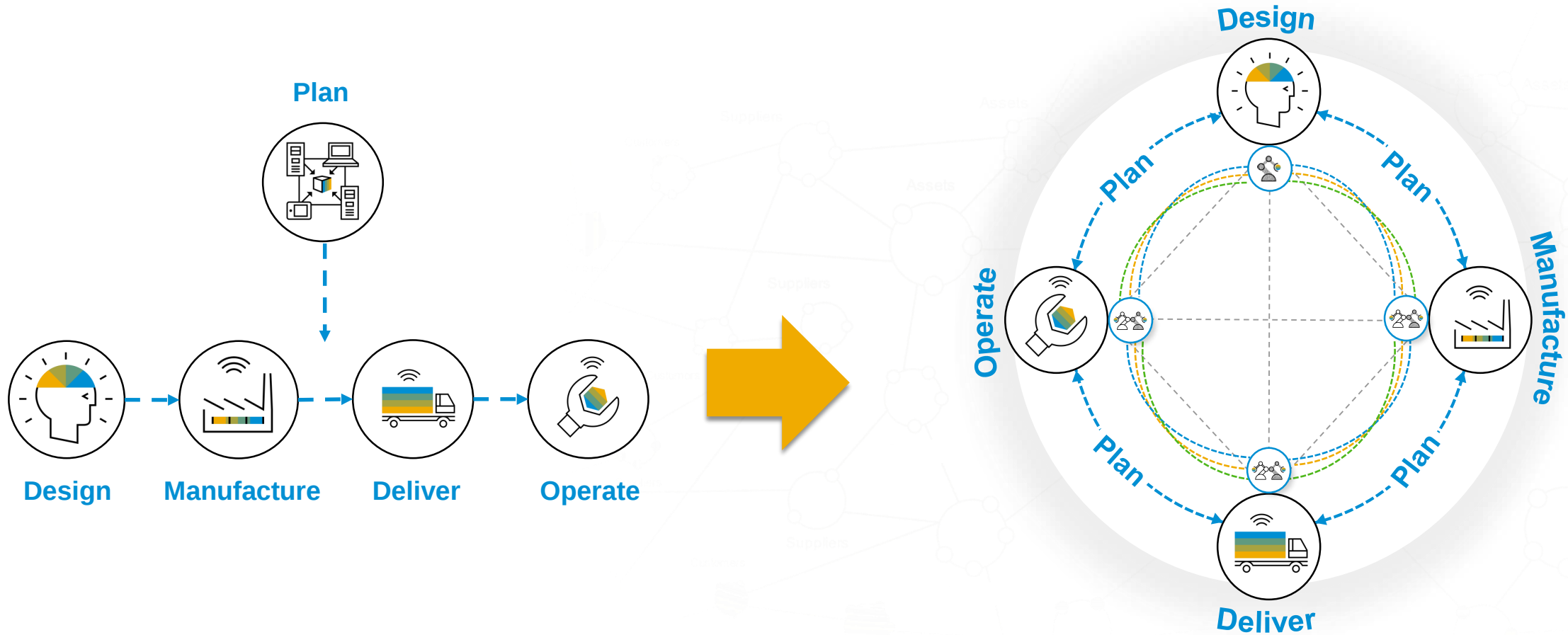
## Printing Spare Parts On-Demand

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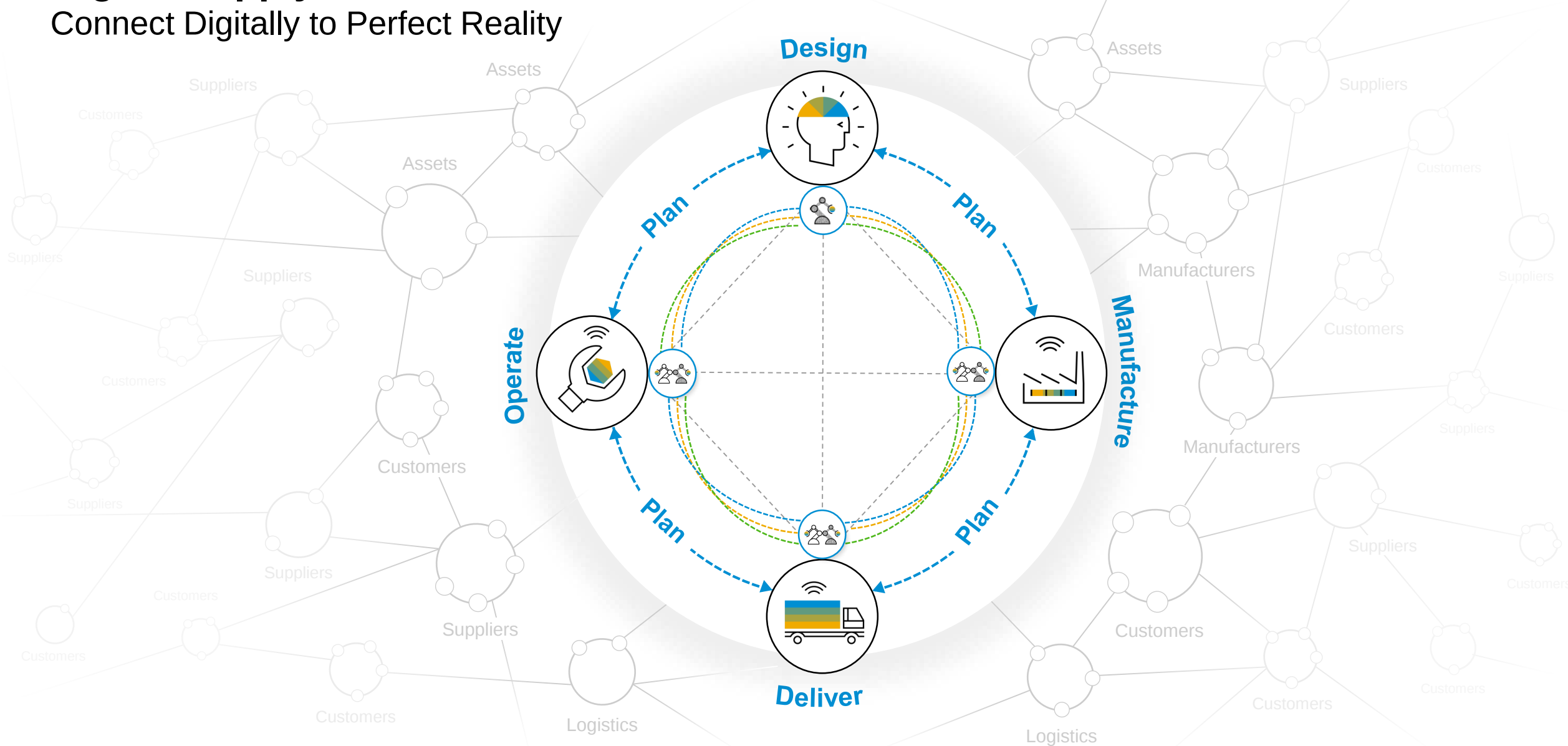


# Top floor wants the Connected Supply Chain but ... continues to organize in departmental silos



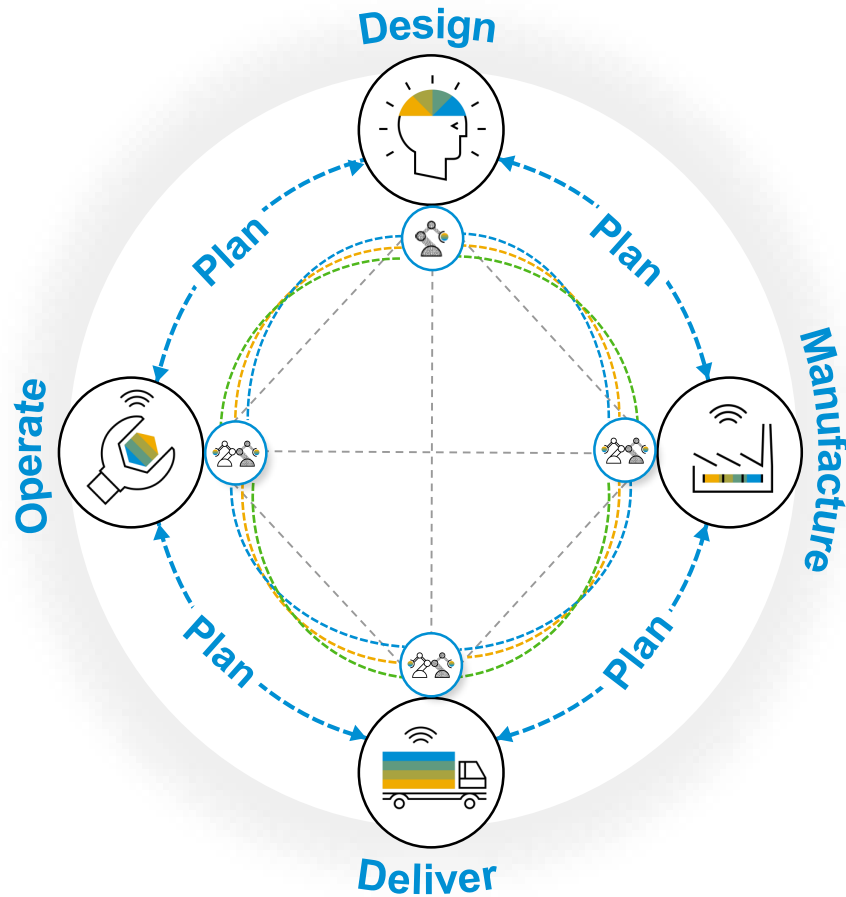
# Digital Supply Chain

## Connect Digitally to Perfect Reality



# Digital Supply Chain

## 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

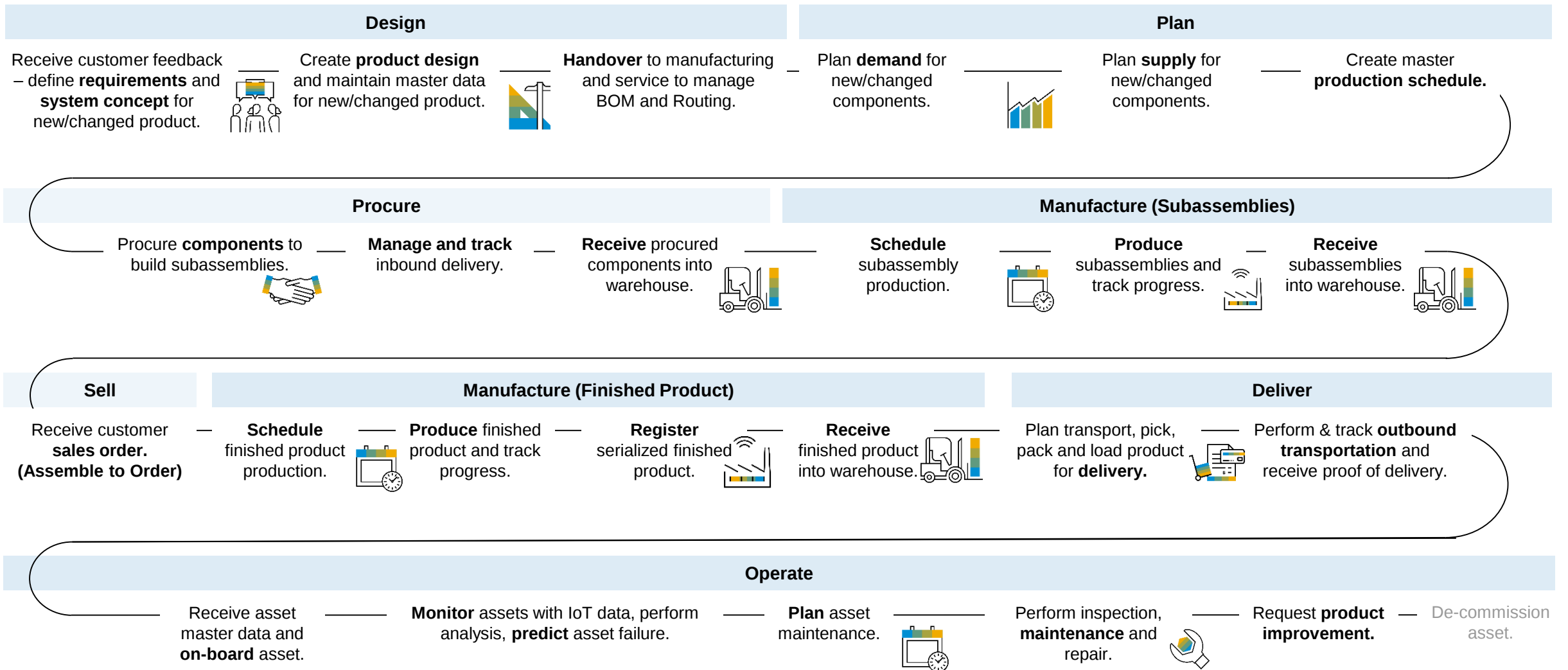
- Improve speed, efficiency and sustainability
- Deliver perfect orders consistently and profitably
- Increase utilization of warehouse and transportation



### Operate

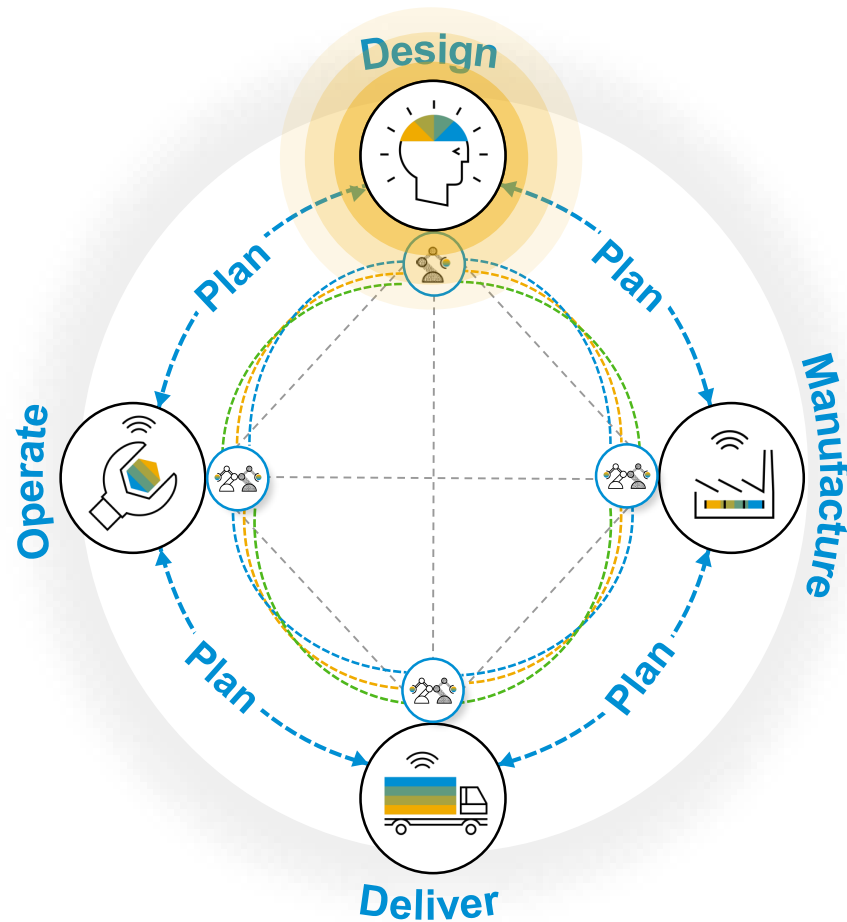
- Manage lifecycle of physical assets efficiently and sustainably
- Predict and simulate asset behavior
- Avoid unplanned downtime

# Design to Operate (Overview)



# Digital Supply Chain – Design

## R&D/Engineering



### Innovate digital products and services faster

Enable new business practices by managing digital product and asset intelligence across networks. Go beyond just making digital products and assets – sell performance.

### Project & Portfolio Management

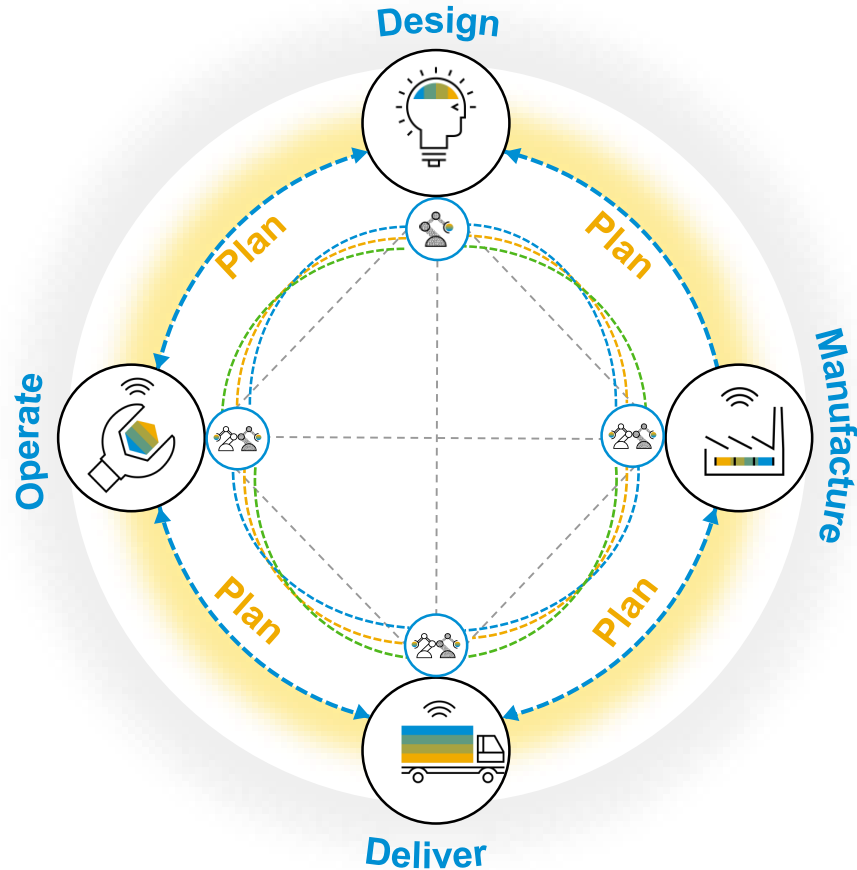
Optimize capital investment, IT and R&D project strategy and execution.

### Compliant Product Lifecycle Management

Collaborate across the silos and integrate product development to get to market first with innovative and compliant products

# Digital Supply Chain - Plan

## Supply Chain



### State-of-the-art business processes

Leverage SAP solutions to enable new end-to-end business processes, new business models and new revenue streams

### Synchronized planning processes

Break down planning silos through connected and integrated planning processes

### Leverage end-to-end visibility

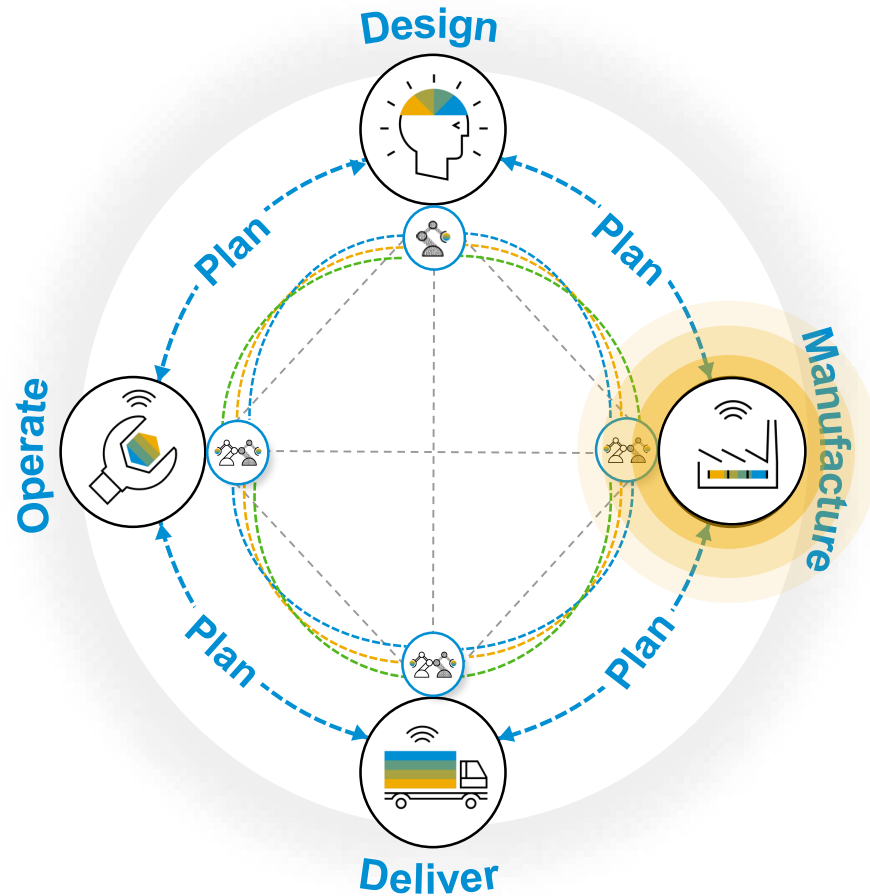
End-to-end visibility on strategic, tactical and operational level and across siloed or external data

### Faster planning cycles

React faster to changes in the business through complete integration,

# Digital Supply Chain – **Manufacture**

## Manufacturing



### **State-of-the-art business processes**

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

### **Connected manufacturing processes**

Break down manufacturing silos through single data model and connected and integrated manufacturing processes

### **Top floor to shop floor visibility**

End-to-end visibility on strategic, tactical and operational level

### **Faster more efficient execution**

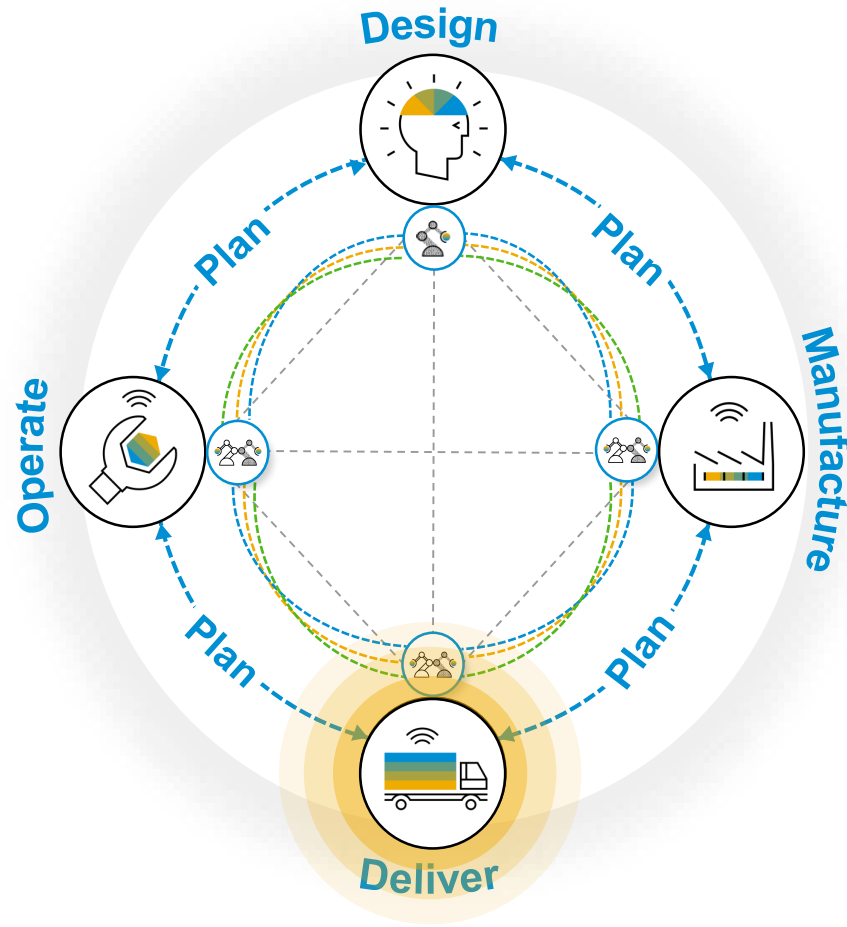
Improve throughput, increase quality, and reduce scrap

### **Advanced analytics**

Leverage configurable KPI to identify process performance bottlenecks and inefficiencies

# Digital Supply Chain – Deliver

## Logistics



### Balance customer service and delivery costs

Enable efficient digital logistics and order fulfillment by orchestrating the end-to-end process, increasing speed and reducing freight cost

### Warehouse Management

Optimize labor, storage, and fulfillment costs

### Transportation Management

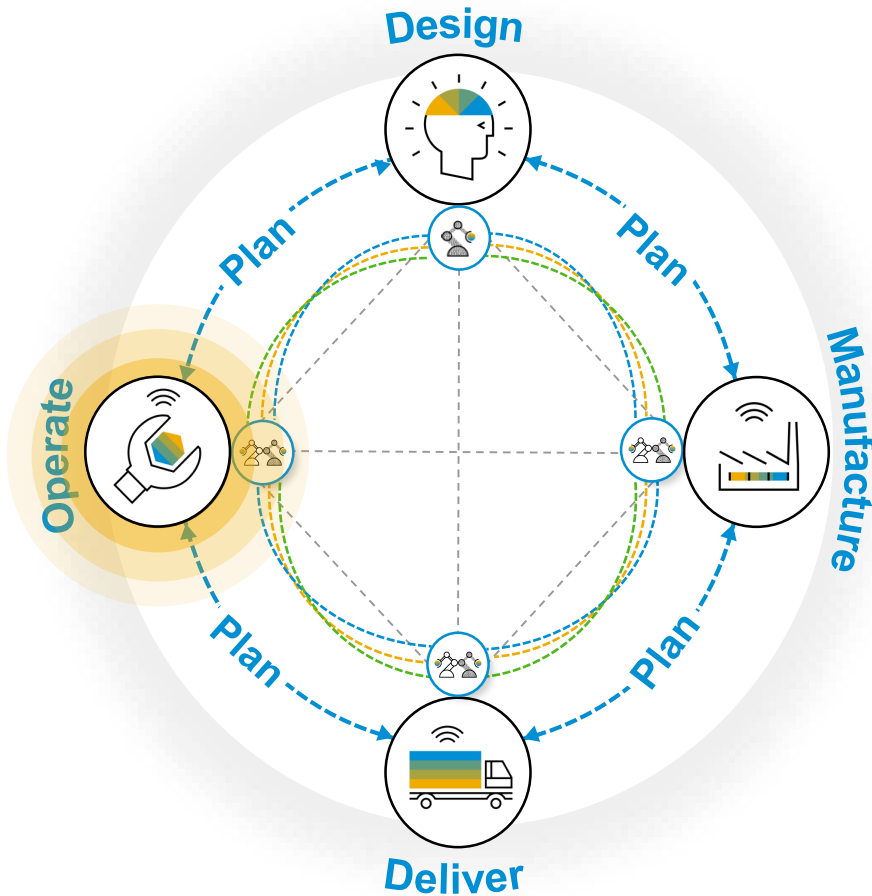
Reduce costs and improve service, efficiency, and sustainability

### Logistics Networks

Collaborate with logistics partners and orchestrate fulfillment through creating visibility and connecting to the internet of things

# Digital Supply Chain – Operate

## 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

End-to-end visibility on strategic, tactical and operational level

### Connected assets

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

### The power of prediction and simulation

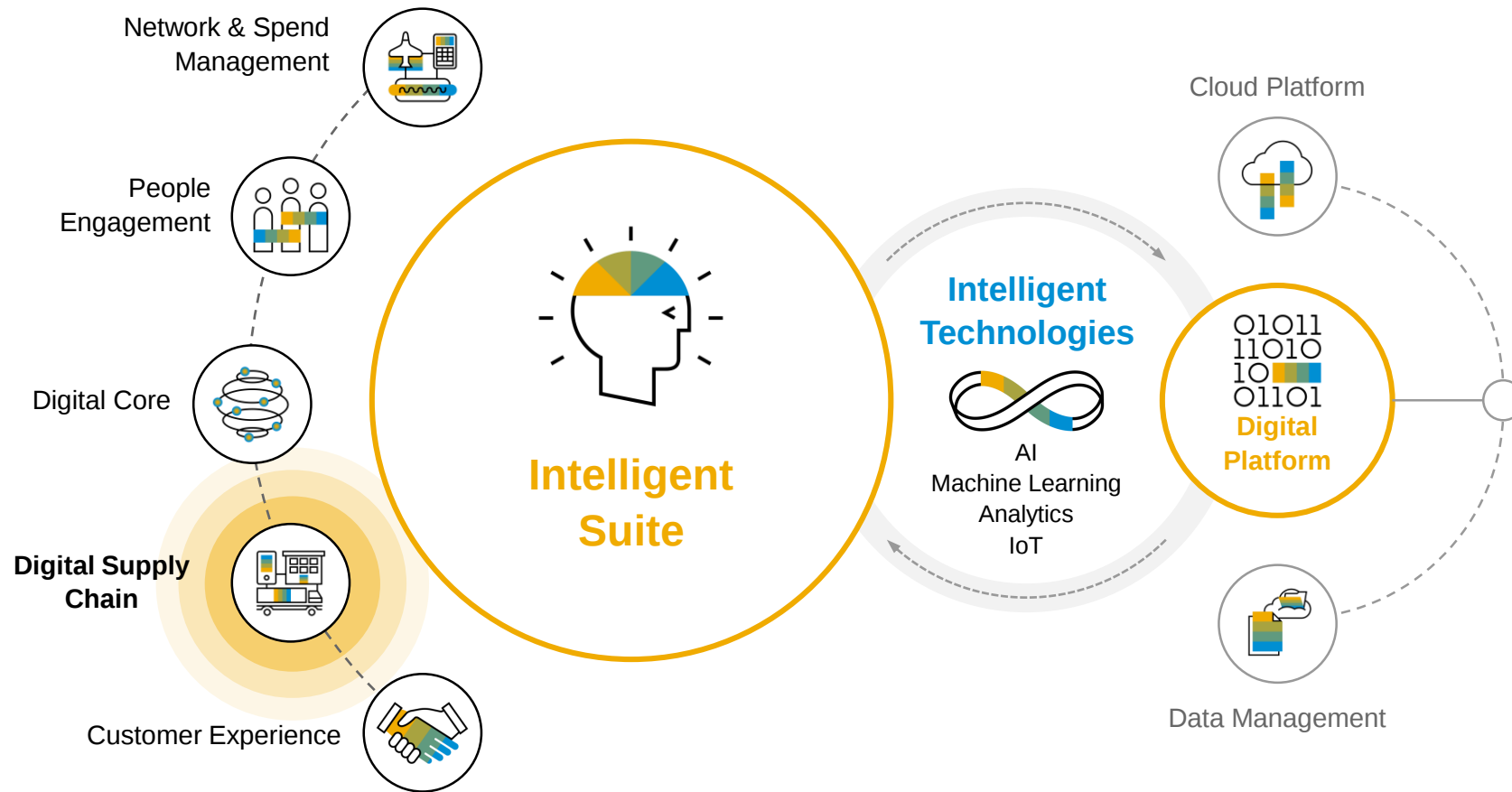
Drive smarter decisions, improve reliability, and reduce outages

### Collaboration throughout the asset lifecycle

Share asset information, access one version of the truth, and collaborate on a cloud-based business network with integrated processes

# The Intelligent Enterprise

## The foundation of a Digital Supply Chain



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

1

**Intelligent Suite**

2

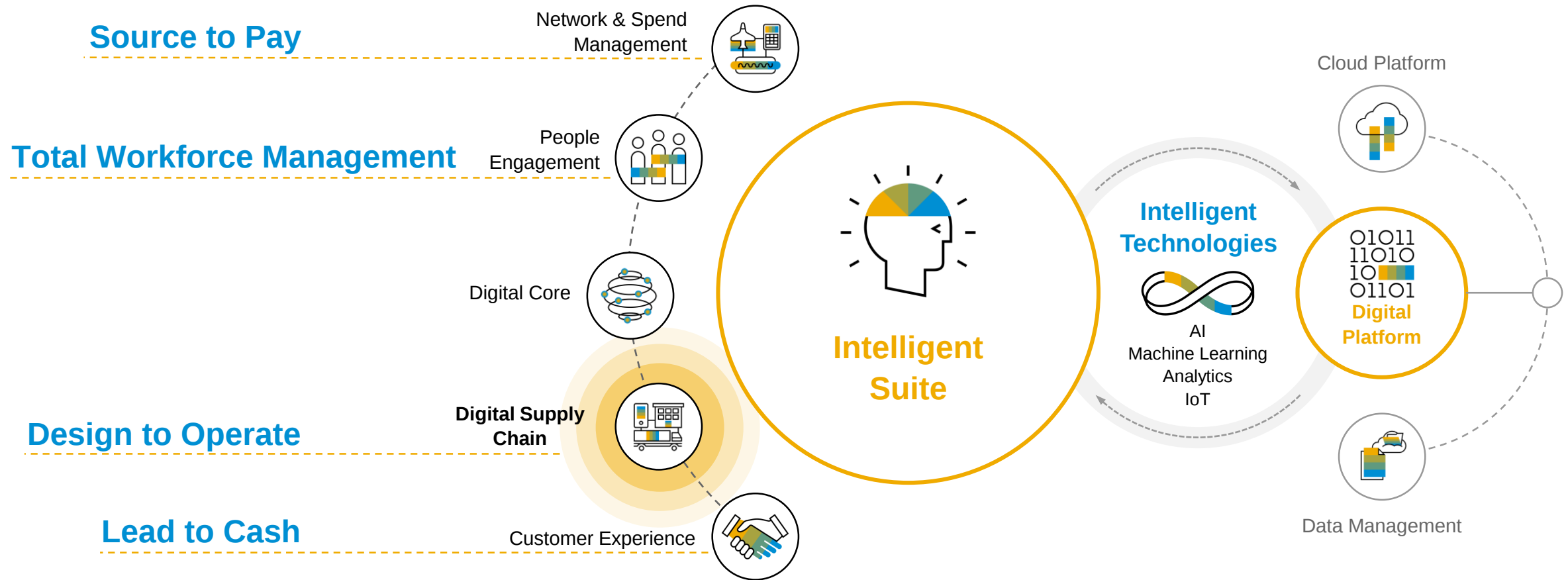
**Intelligent Technologies**

3

**Digital Platform**

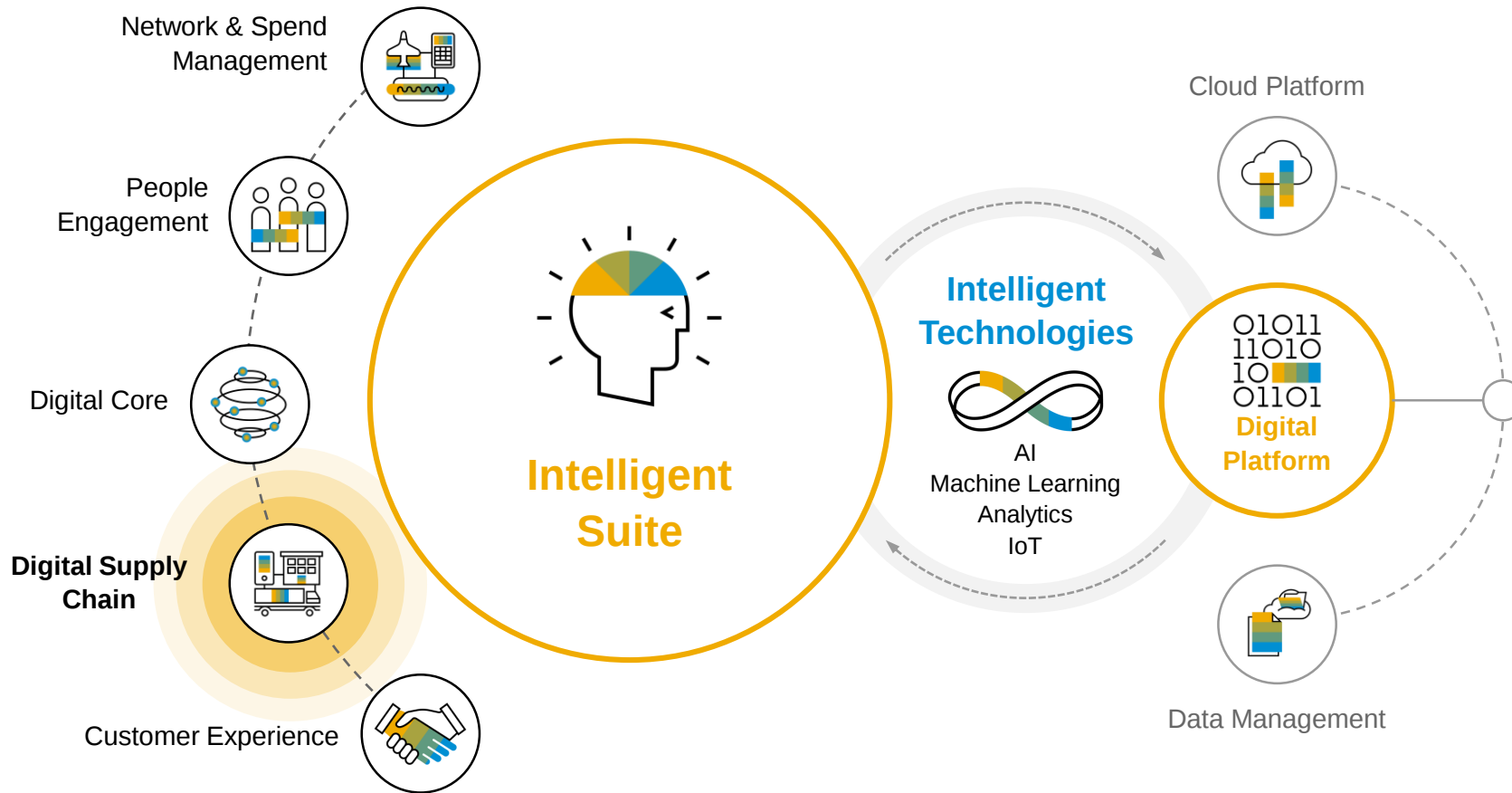
# The Intelligent Enterprise

## Key End-to-End Processes



# Design to Operate in the Intelligent Enterprise

## Key Differentiators



### Design to Operate 4 key differentiators:

1 Intelligence built into business processes

2 Seamless Integration

3 Digital Twin along value chain

4 Asset Central for all of IES

# Digital Supply Chain

## Technology Enablers



## Powered by Intelligent Technologies

Internet of Things | Big Data | Machine Learning  
Blockchain | Analytics | 3D Printing



### IoT

- Provides sensor-enabled value-added services and business outcomes



### Big Data

- Capture, cleanse and harmonize data from structured and unstructured sources



### Machine Learning

- Leverage data to augment and automate equipment and processes



### Blockchain

- Creating trust with increased transparency, auditability, and regulatory compliance



### Analytics

- Use predictive analytics to intelligently leverage real time data to improve decision making



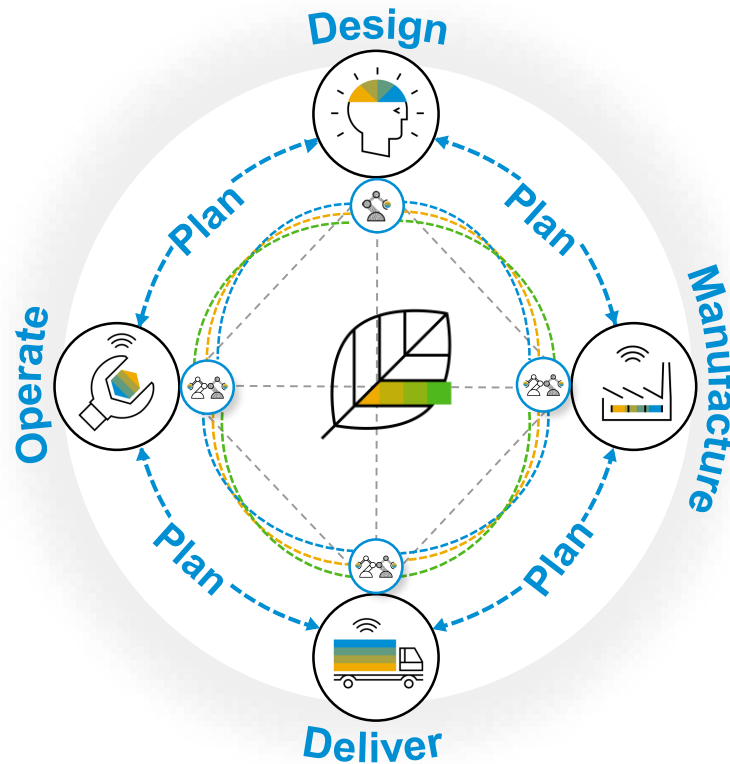
### 3D Printing

- Reduce inventory costs and increase flexibility and responsiveness with printing on demand services

# A Supply Chain With Purpose

“Sustainability and cost have a good correlation with each other”

- Design sustainable products
- Minimize usage of natural resources
- Imbedded product compliance and safety



- Improve energy efficiency
- Protect workers from accidents
- Minimize risks

- Ethically sourced material, zero waste
- Fair-trade compliance and safety
- Reduce incidents and Injuries

- Optimize loads and trip planning
- Reduce emissions and carbon footprint
- Decrease cost of environment, health, and safety

# Unmatched Supply Chain Expertise

## SAP's solutions for Digital Supply Chain enable:



**1-2%**

top line  
revenue growth



**5-10%**

better order  
fulfillment metrics,  
and improved  
customer experience



**5-15%**

better inventory turns  
and inventory  
efficiently through  
improved visibility



**28%**

decrease days in  
inventory with a pull-  
based production  
schedule driven by  
actual demand



**8%–10%**

Reduction in  
maintenance  
costs through  
predictive  
maintenance

# Thank you.

Contact information:

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