



Design To Operate – Deep Dive

Connect persona, processes, applications & data

Digital Supply Chain

Phil Loewen, Jimmy Wei, Ekta Narang
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Updated Portfolio Visual
13.02.2025



Cross Product
Engineering &
Experience



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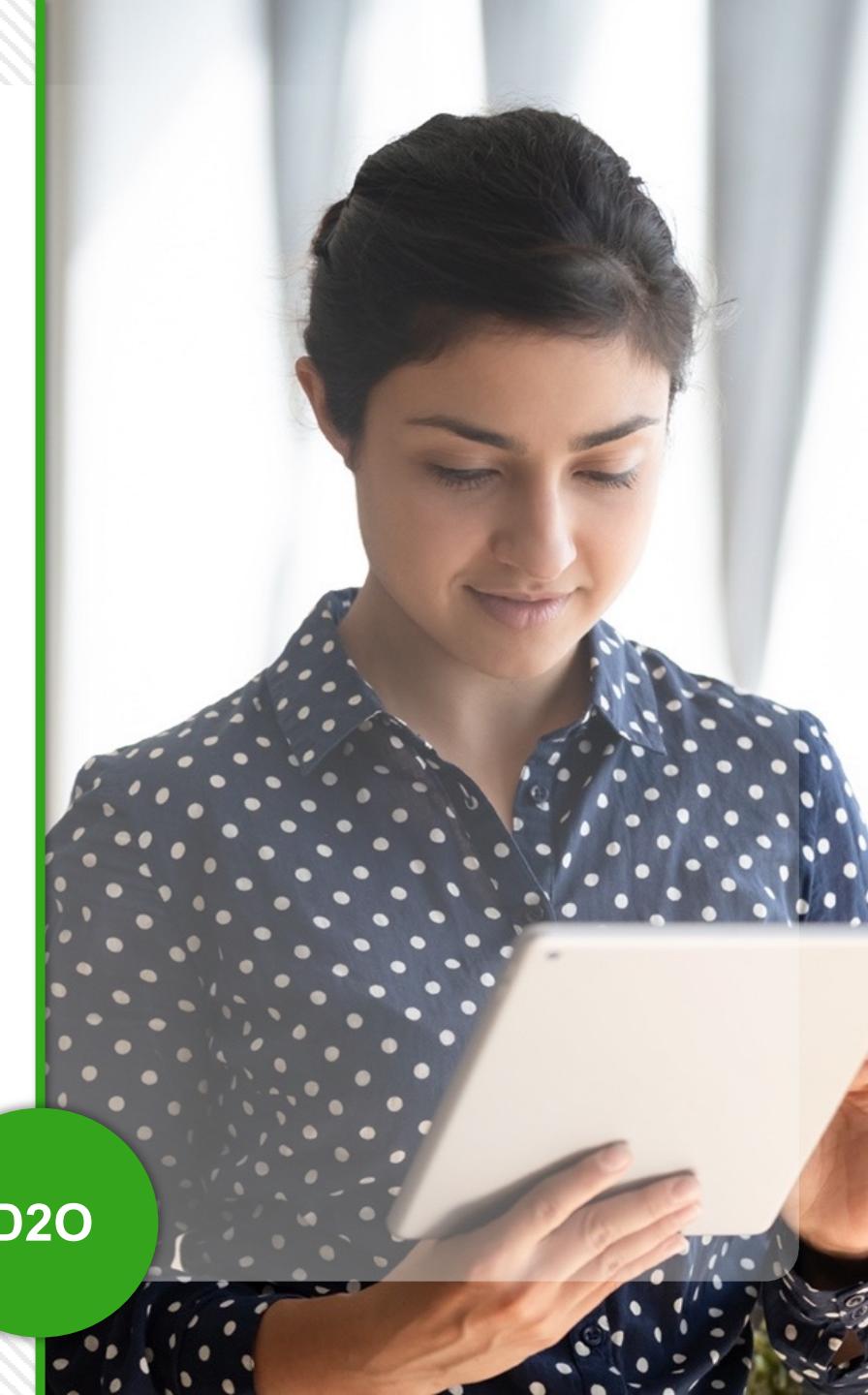
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Content

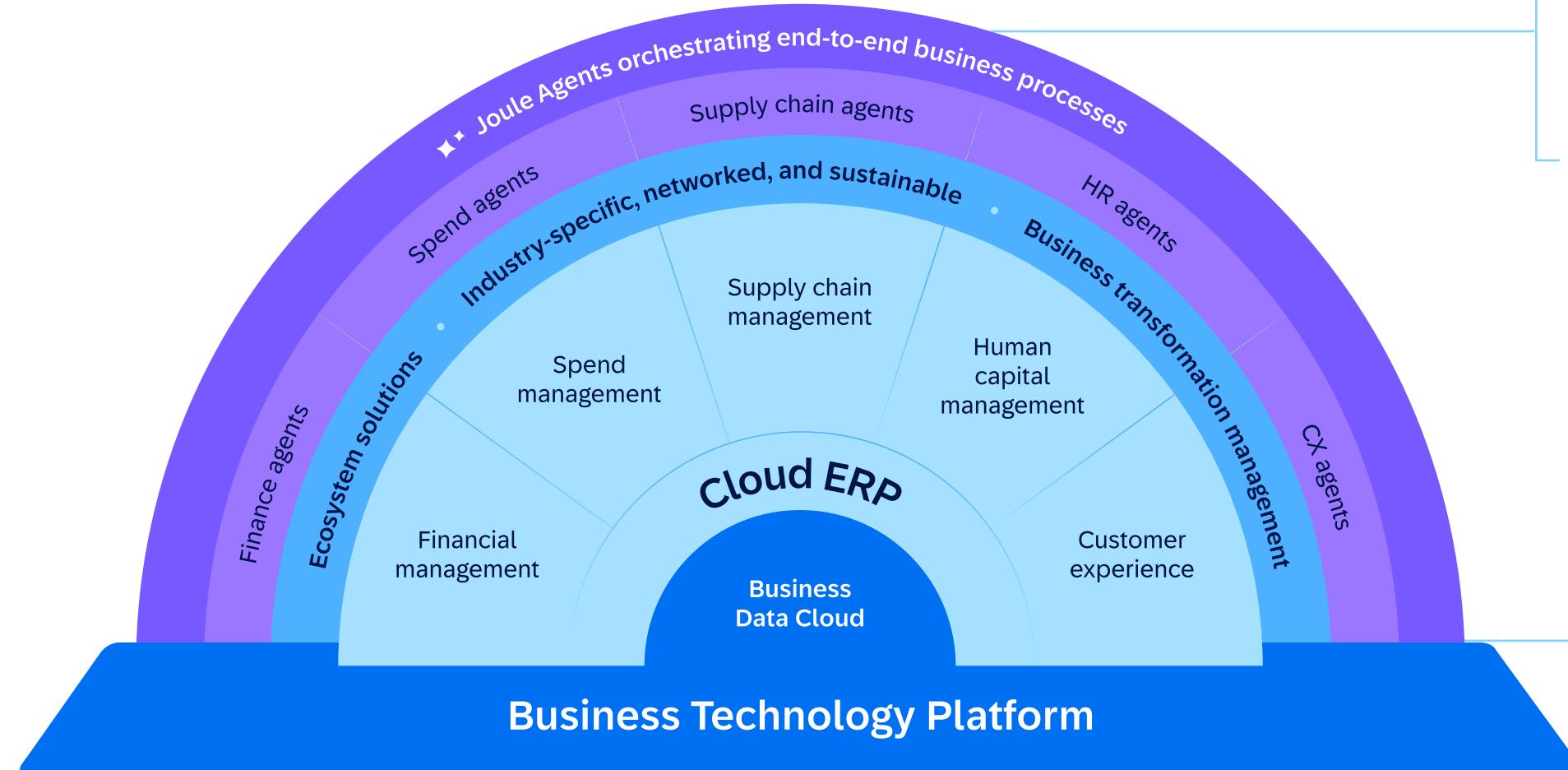
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D2O

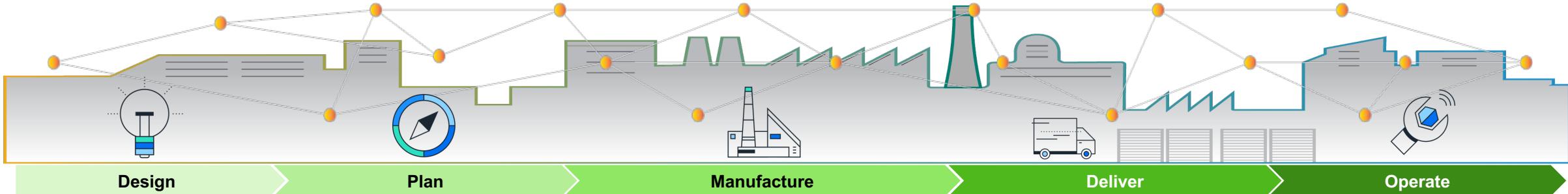


SAP Portfolio | End-to-End Processes and Suite Qualities

Out of the box **suite qualities** facilitate a **consistent experience** across applications, while the business technology platform provides the critical integration capabilities to ensure **connected end-to-end business processes**.



What Is Design to Operate (D2O)

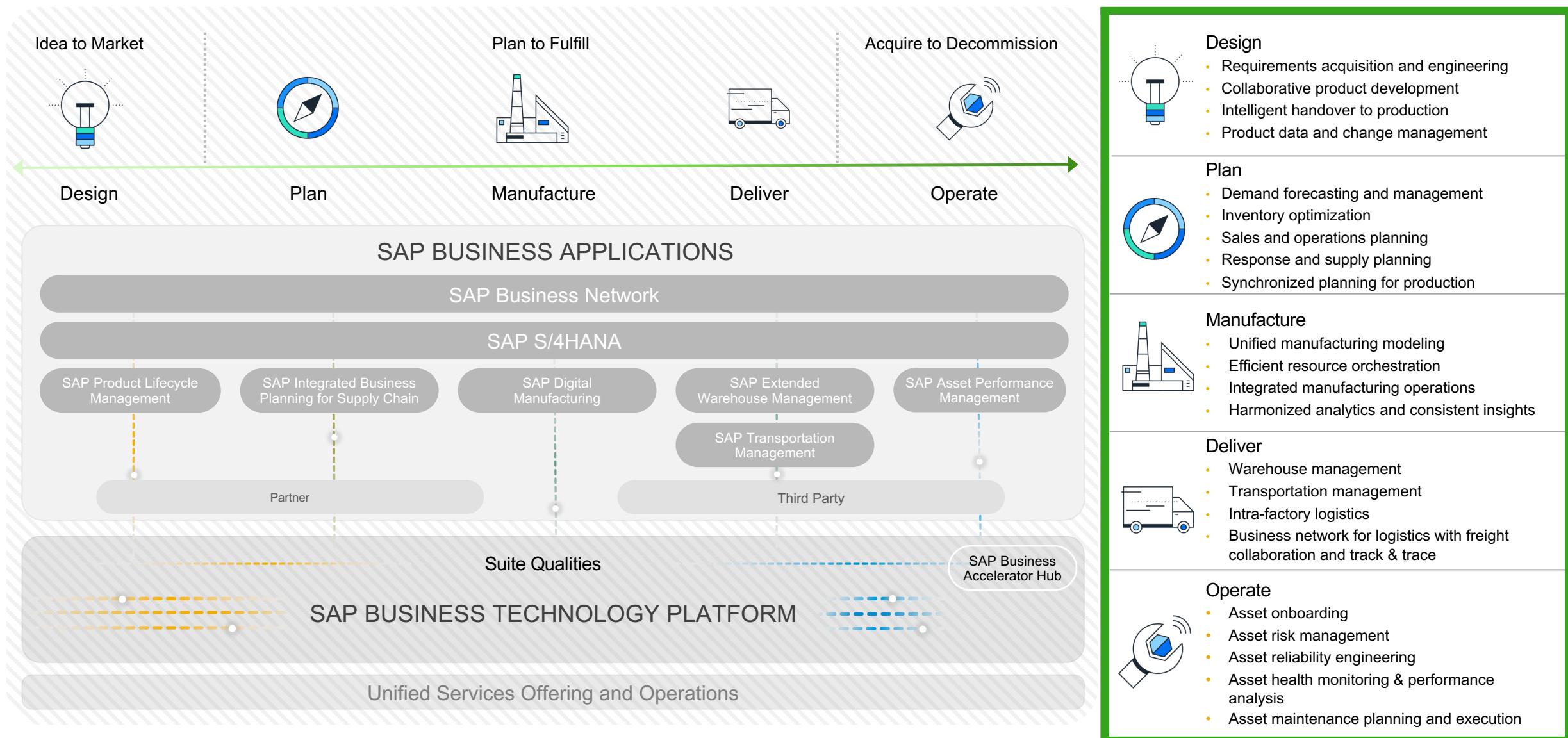


D2O is a **comprehensive set of fully interoperable digital capabilities** that can be implemented in a **modular fashion** to enable end-to-end supply chain responsiveness, resiliency and sustainability

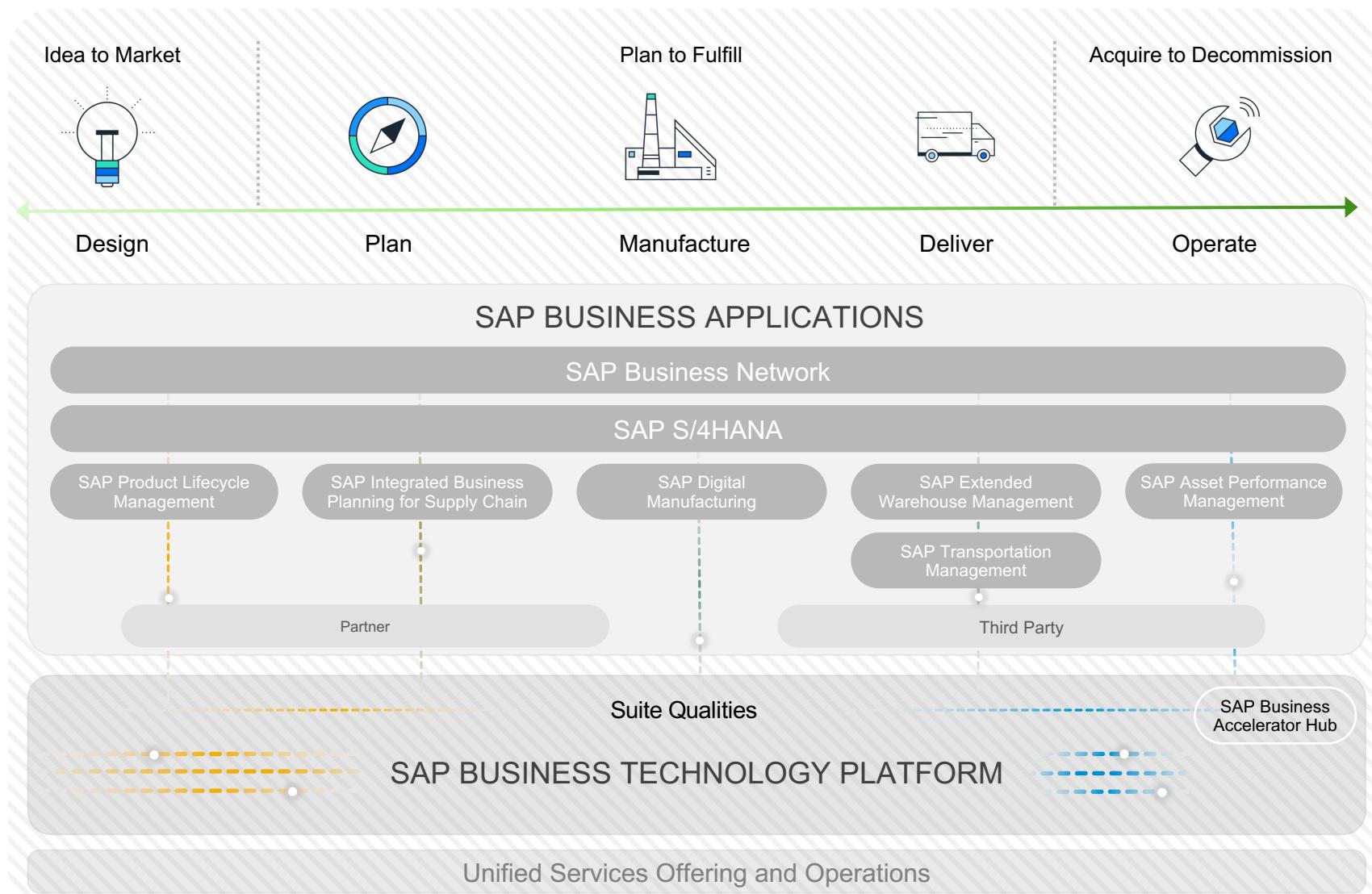
Main Design to Operate Attributes

Digitalization of the Supply Chain	End-to-End integrated and interoperable processes	End-to-End Visibility	Assess and balance trade-offs	Leverage intelligent technologies	Lead on Sustainability
Creates a digital representation of the physical supply chain that eliminates manual operations and provides near real-time insight into operations, thus improving efficiency, productivity, agility, consistency, and quality of the business processes	Connects people, processes, and products as well as systems and data across the supply chain to enable efficient, consistent and synchronized communication, coordination and collaboration between lines of business and their ecosystem	Provides a single source of truth for data and information across the entire supply chain to provide transparency at all stages and leverage cross line of business data for contextualizing every decision	Provides the means to assess, simulate, and quantify competing objectives to find the best solution that will increase overall efficiency and better mitigate incidents and risks	Drives innovation by automating data collection, enhancing and automating business processes, enhancing decision making processes and assessing situations with advanced analytics, ML, AI, etc.	Aligns and synchronizes sustainability targets in every process step for a net-zero supply chain aspiration

Supply Chain Management With an Integrated, Intelligent Design to Operate



Supply Chain Management With an Integrated, Intelligent Design to Operate



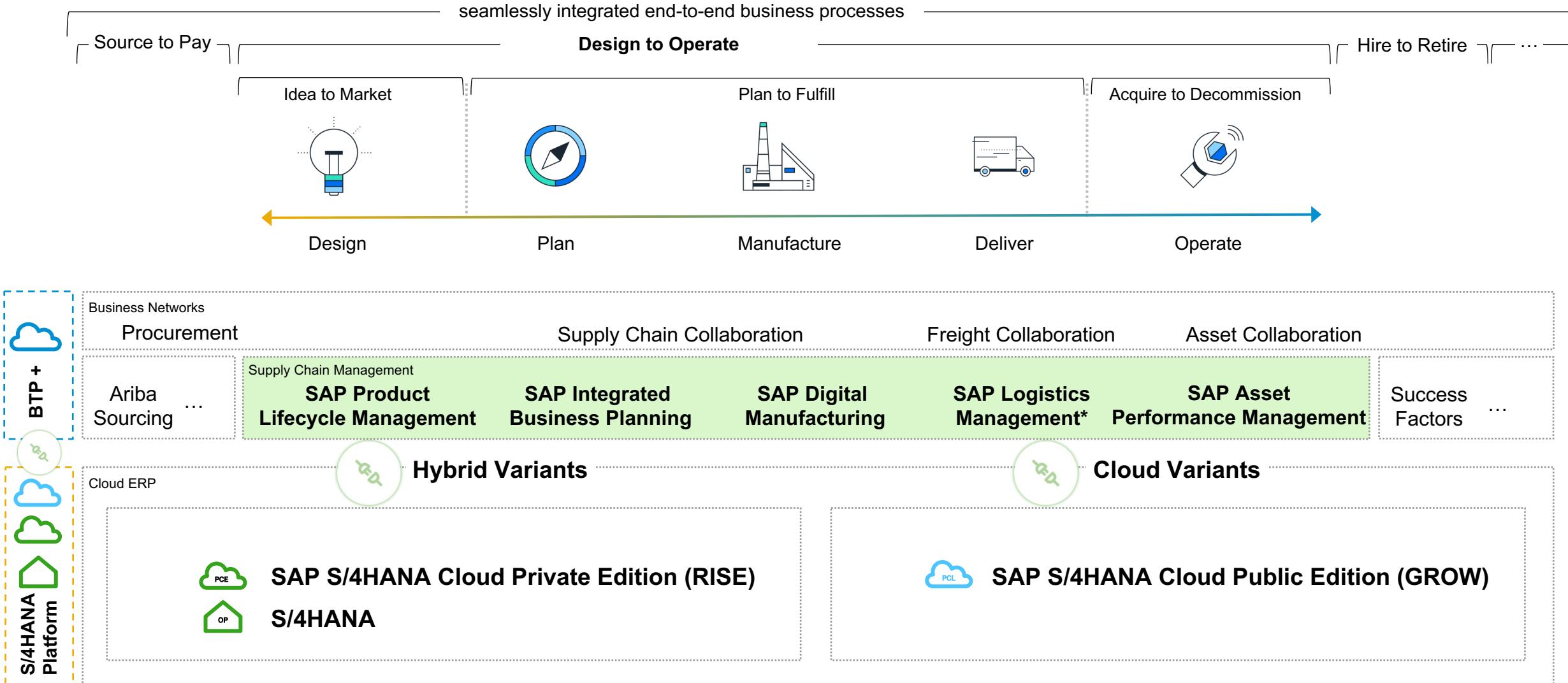
Transform your supply chain to be responsive, resilient and sustainable

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.

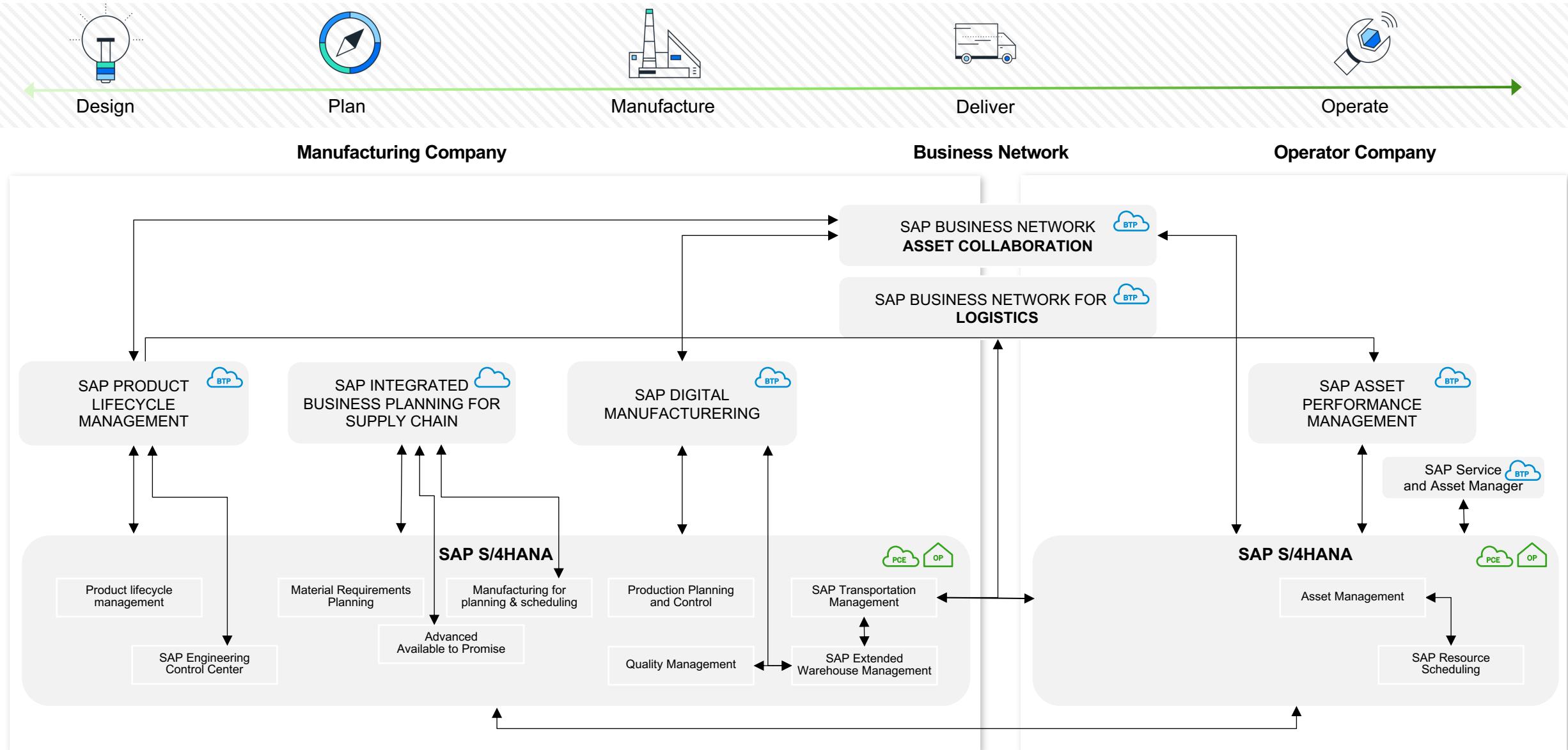
D2O Solution Variants for Hybrid and Cloud Deployment



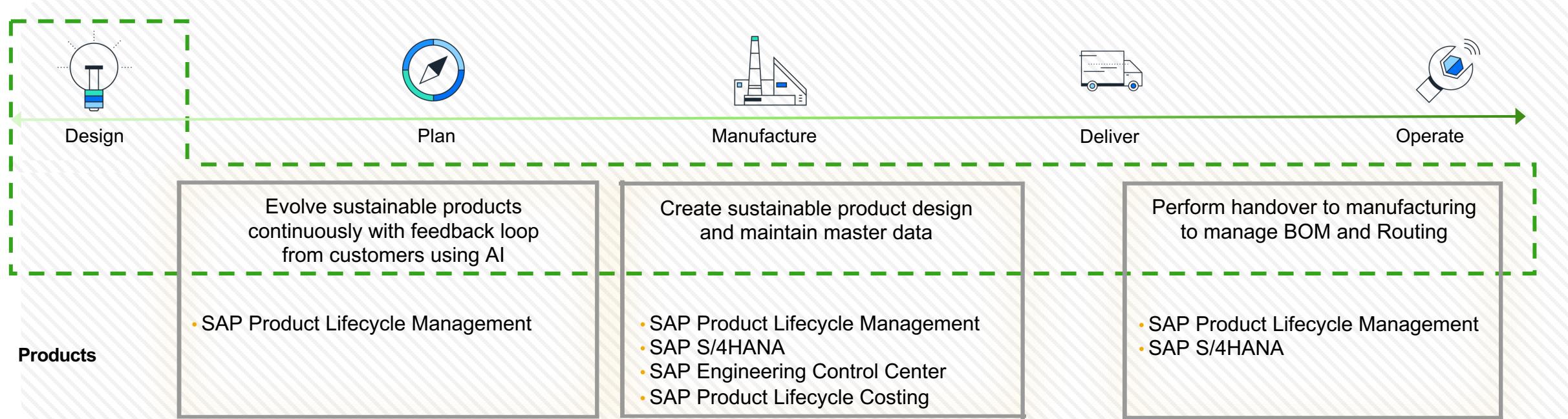
* Planned

Public Cloud Private Cloud On-Premise

Design to Operate sample System Landscape for Hybrid Deployment



Idea to Market: Design – Products & Value Drivers



Business Benefits

Connect Every Process

- 1 Accelerate time to market by connecting development with the extended enterprise and supply chain.
- Realize the digital thread by keeping information flowing throughout the product lifecycle and eliminate costly silos.
- Evolve sustainable products continuously with feedback loop from customers using AI.
- Stay in sync with manufacturing using interactive product models to share assembly instructions.

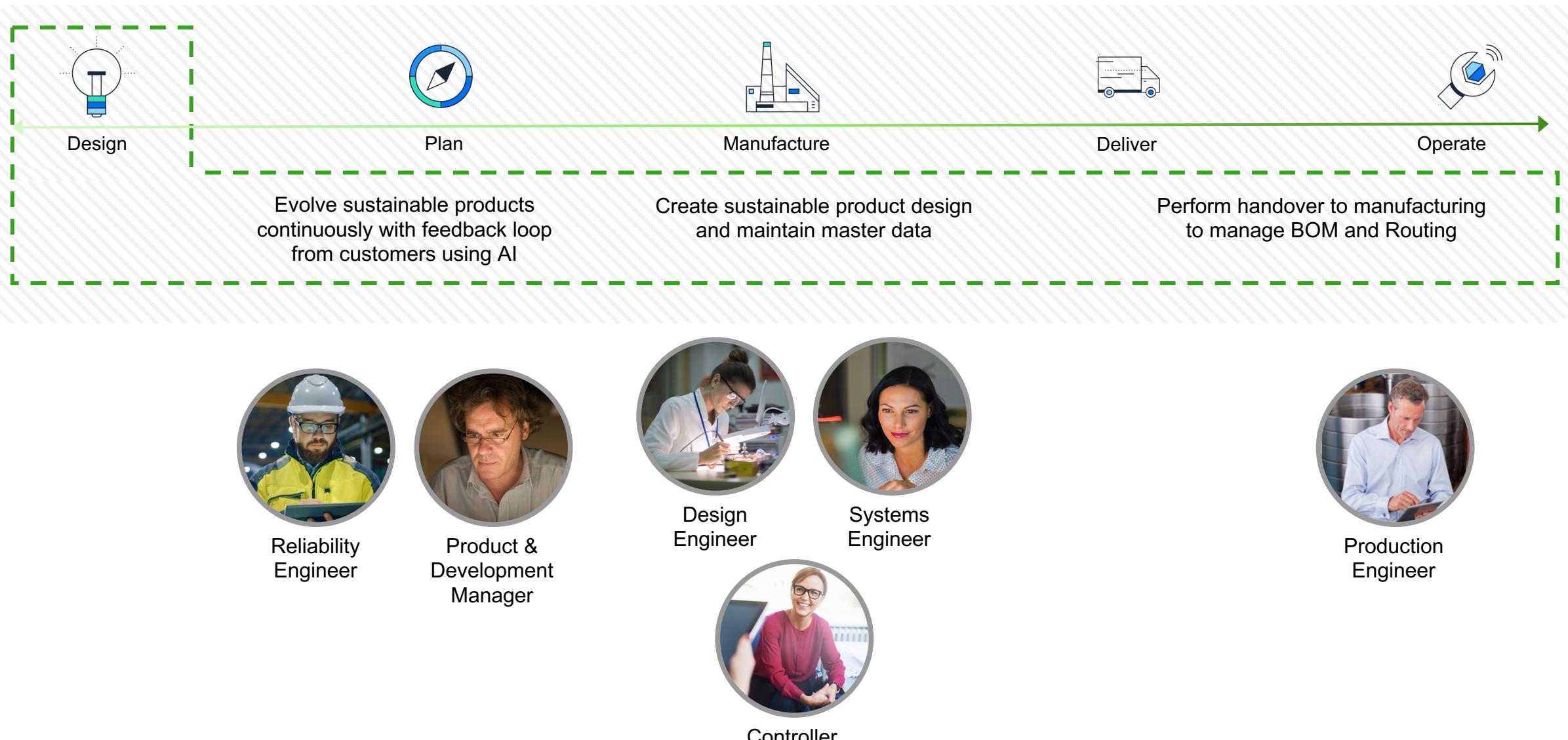
Contextualize Every Decision

- 2 Win the race to market by blending the customers' voices with business data to build new products faster.
- Develop compliant products using allowed and sustainable materials and data to guide design choices.
- Understand how changes impact costs, compliance, lead times, and more using data from multiple sources.

Collaborate with Your Ecosystem

- 3 Engage suppliers earlier by connecting through digital networks to accelerate design decisions and avoid delays.
- Share a digital definition of your product and plan, securely exchanging information to compress cycle times and improve time to value.
- Design products globally on a single platform that combines people, plans, and data.

Idea to Market: Design – Personas

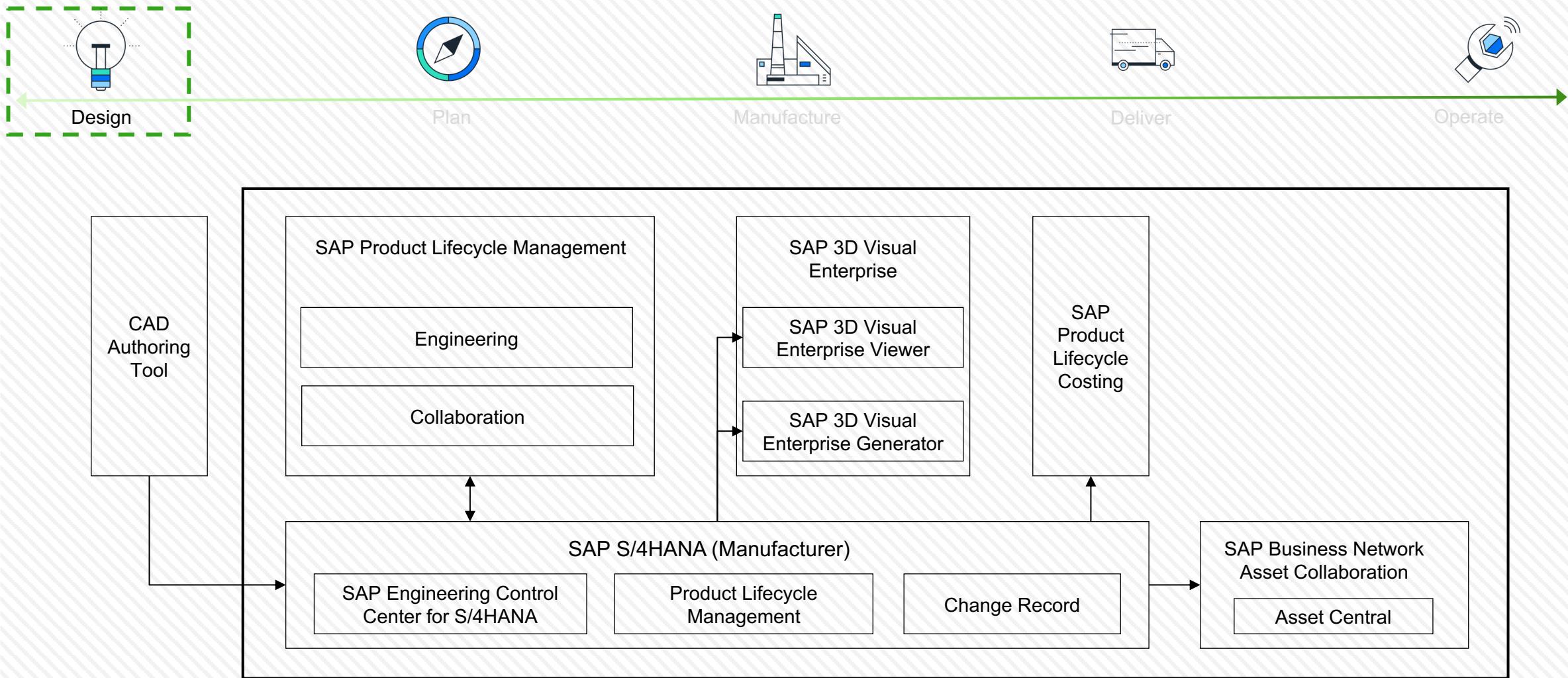


Idea to Market: Solution Components

Discrete Industries for Hybrid Deployment (Design to Operate)



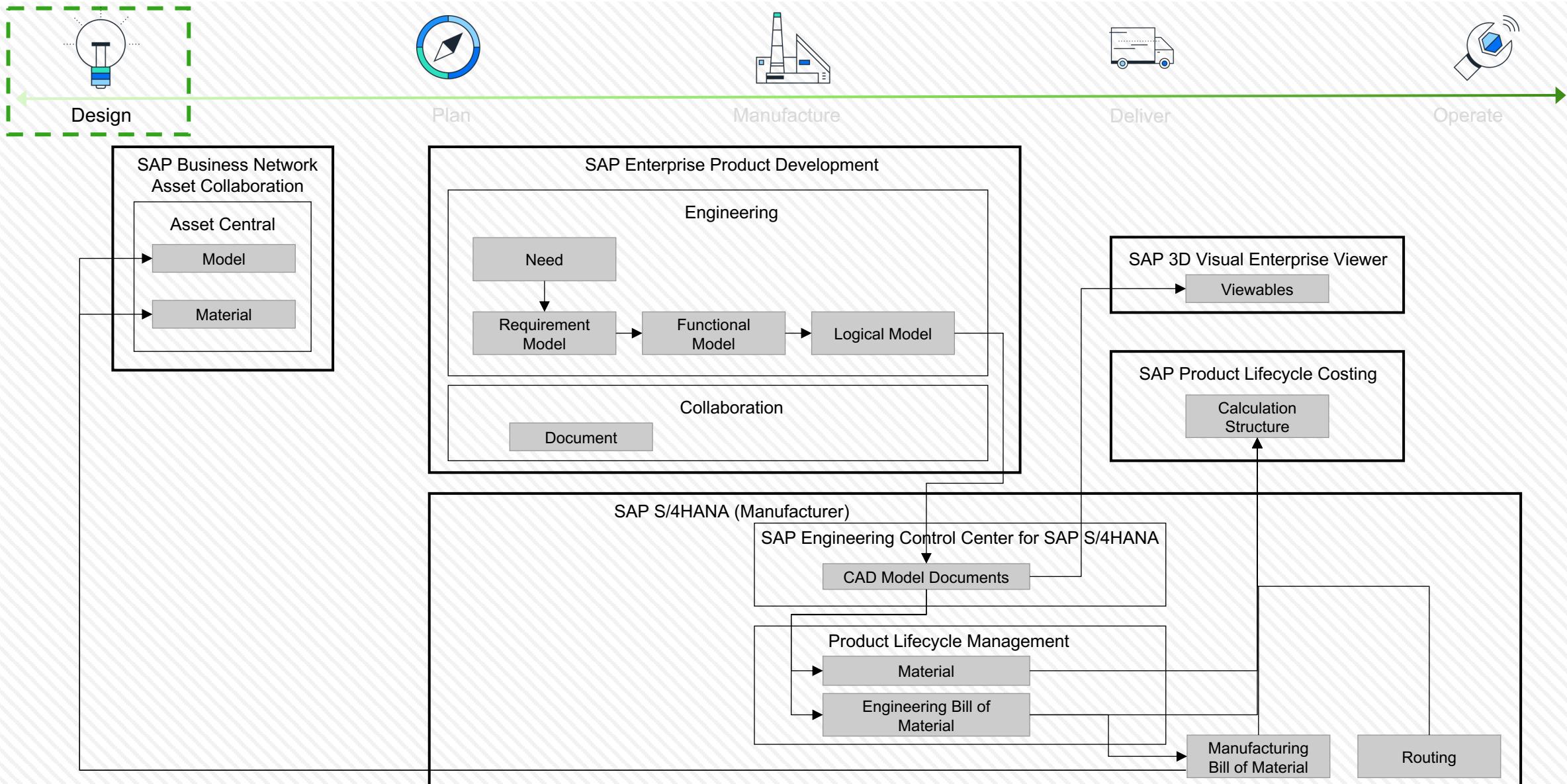
Solution Component Diagram



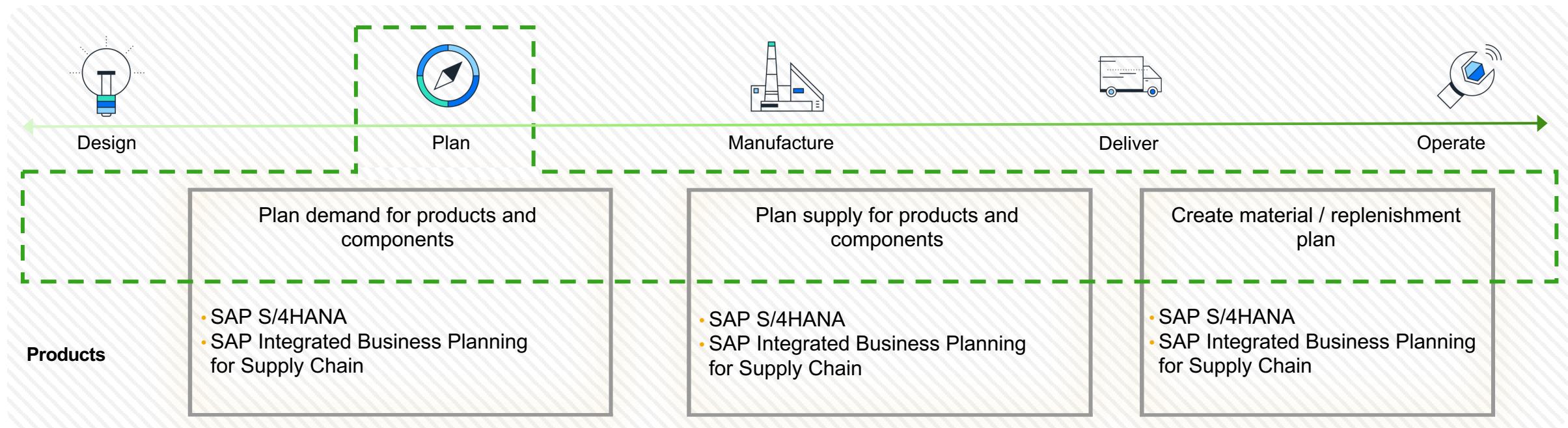
[Data Flow Link](#)

Idea to Market: Master and Transaction Data Flows

Discrete Industries for Hybrid Deployment (Design to Operate)



Plan to Fulfill: Plan – Products & Value Drivers



Business Benefits

Connect Every Process

- 1
 - 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 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.

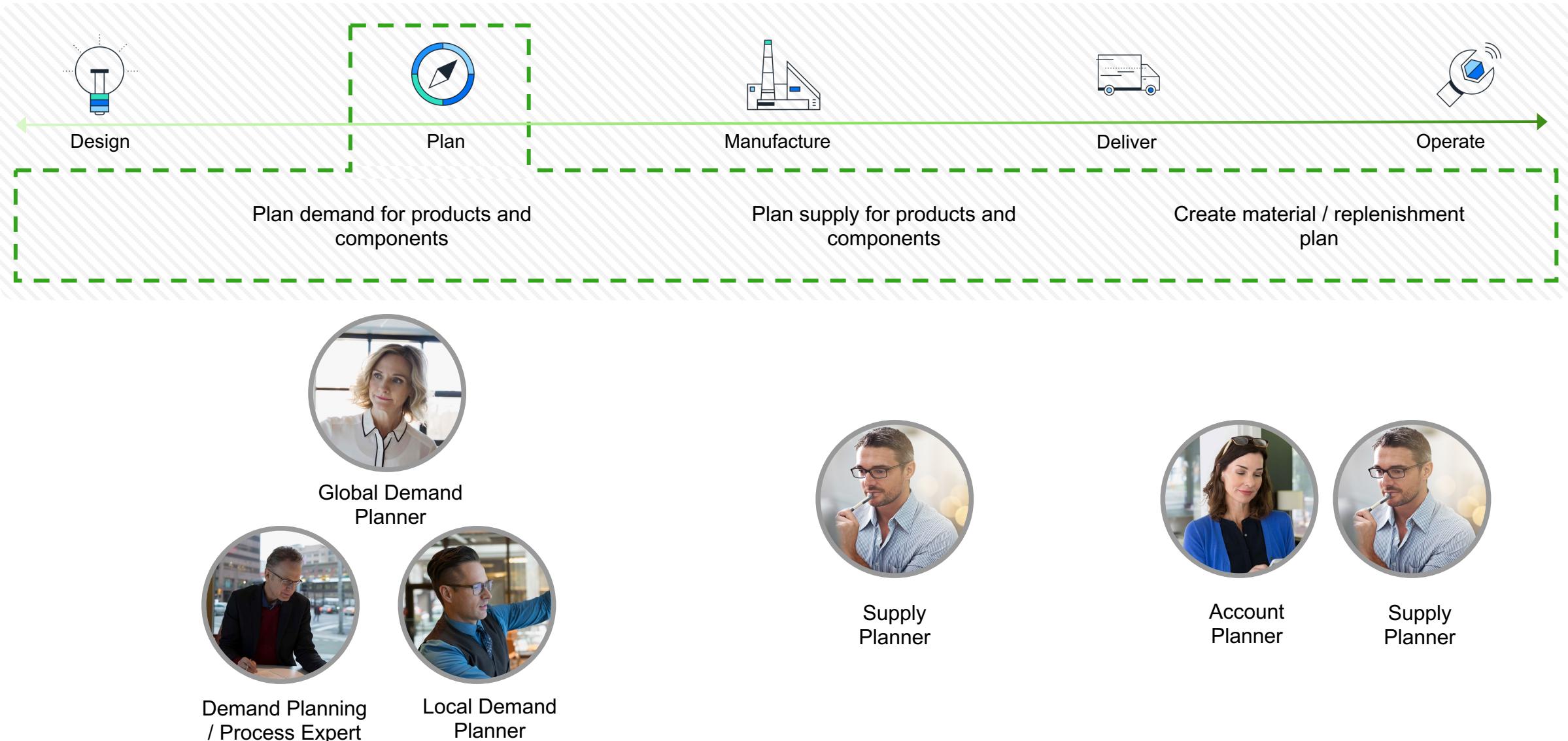
Contextualize Every Decision

- 2
 - 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 by ensuring reporting and tracking mechanisms include sustainability targets.

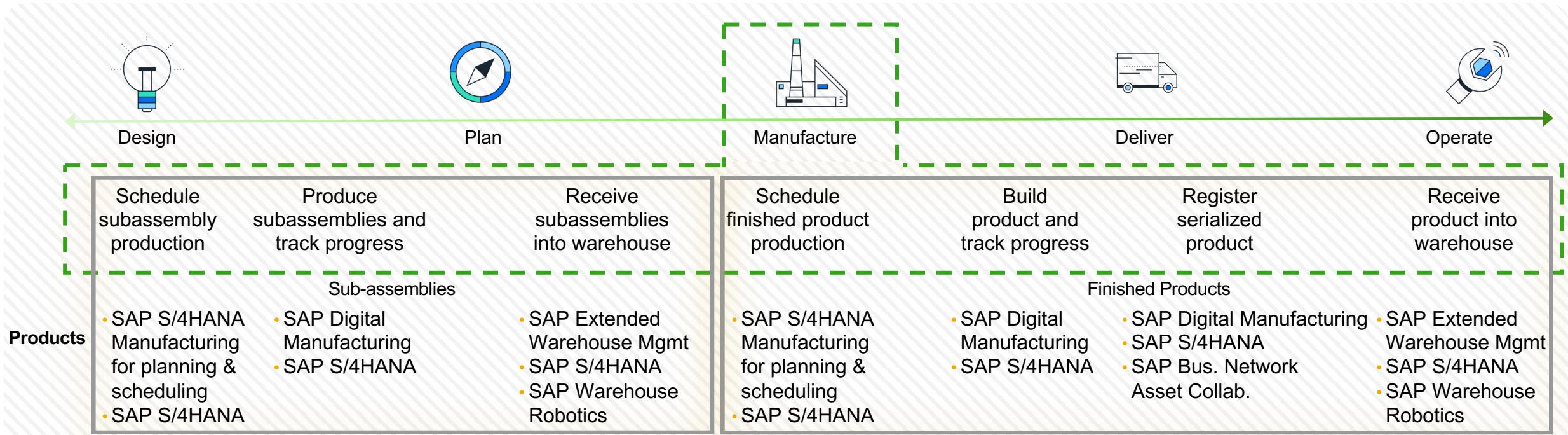
Collaborate with Your Ecosystem

- 3
 - Plan beyond your four walls by proactively sharing your goals and suppliers' capacity 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.

Plan to Fulfill: Plan – Personas



Plan to Fulfill: Manufacture – Products & Value Drivers



Business Benefits

Connect Every Process

- 1 ▪ Meet demand in every market by connecting operations to supply chain sensing.
- Choose the best production mode with visibility into real-time demand and configuration requirements.
- Accelerate cycle and task time by connecting and streamlining execution processes.
- Improve availability and on-time delivery by linking output to logistics systems.

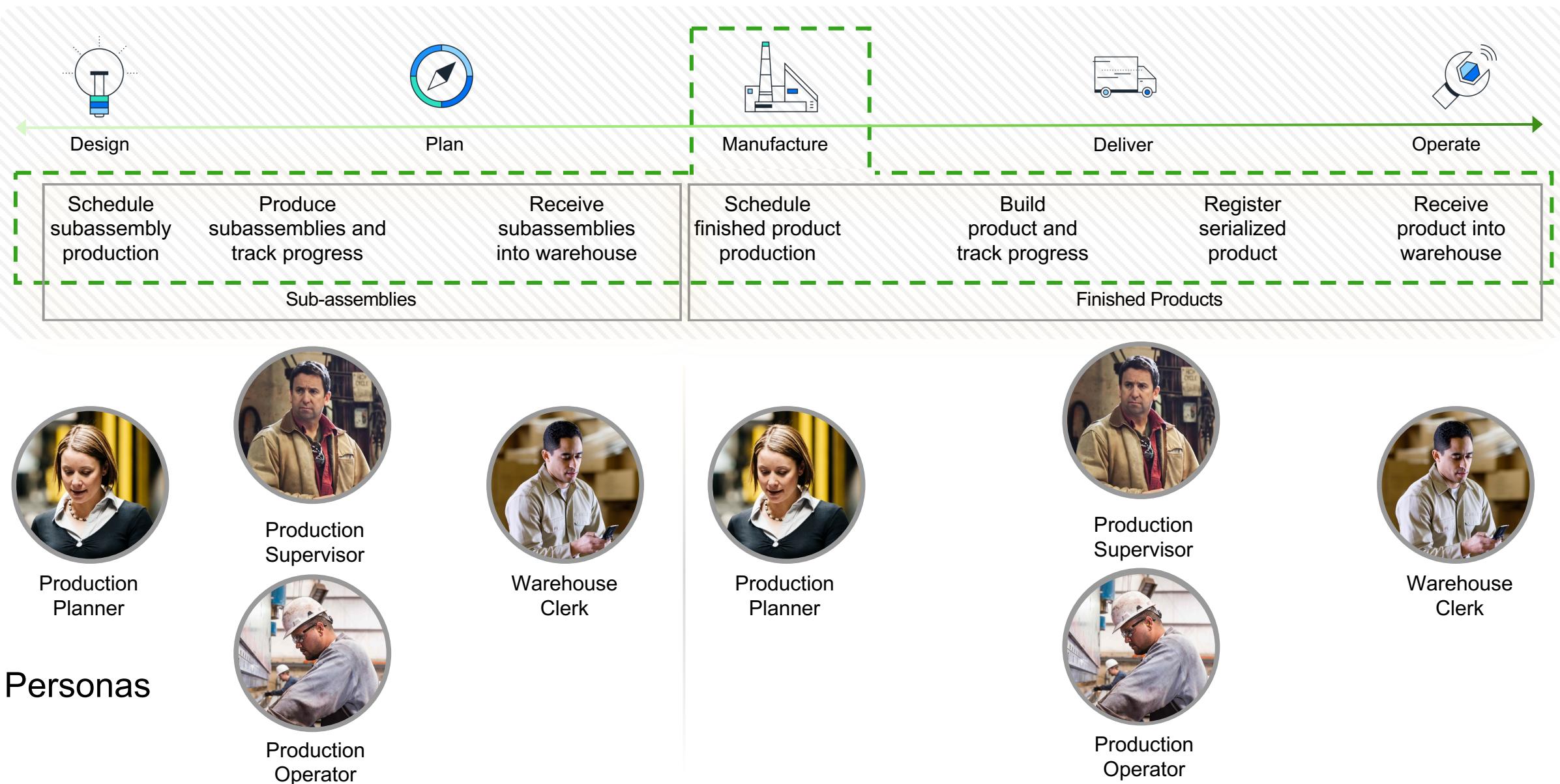
Contextualize Every Decision

- 2 ▪ Deliver insight to the decision point, by making holistic data available at the right time to the right people.
- Tailor insight to the right roles with dashboards that analyze manufacturing processes
- Provide worker guidance by showing 3D details to examine specs, costs, sustainability, and more.
- Build a predictive safety culture using advanced and automated hazard identification and risk mitigation.

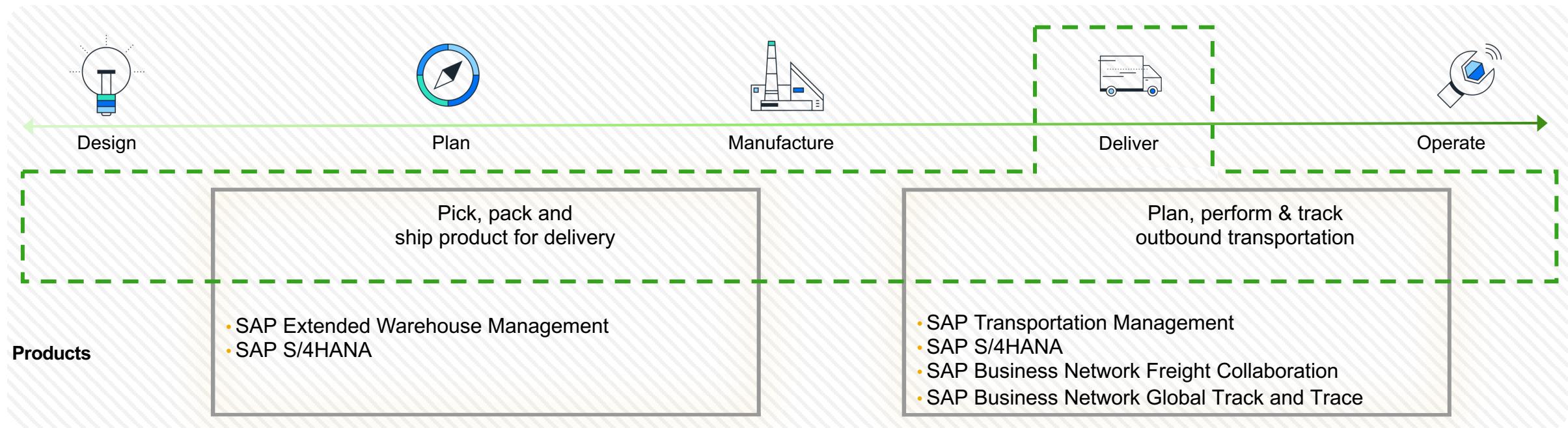
Collaborate with Your Ecosystem

- 3 ▪ Add capacity by balancing your production resources and contract manufacturing capabilities.
- Manage service from the shop floor with asset status/health and ability to request maintenance.
- Align production and supply with transparency into availability and delivery schedules.
- Shift production on the fly using visibility, process standardization, and an infinitely scalable platform.

Plan to Fulfill: Manufacture – Personas



Plan to Fulfill: Deliver – Products & Value Drivers



Business Benefits

Connect Every Process

- 1
 - Deliver a perfect order fulfillment experience to your customers with real-time process integration across manufacturing, warehousing, transportation, and fulfillment.
 - Keep everyone up to date with one, central data platform for every system, partner, and process.

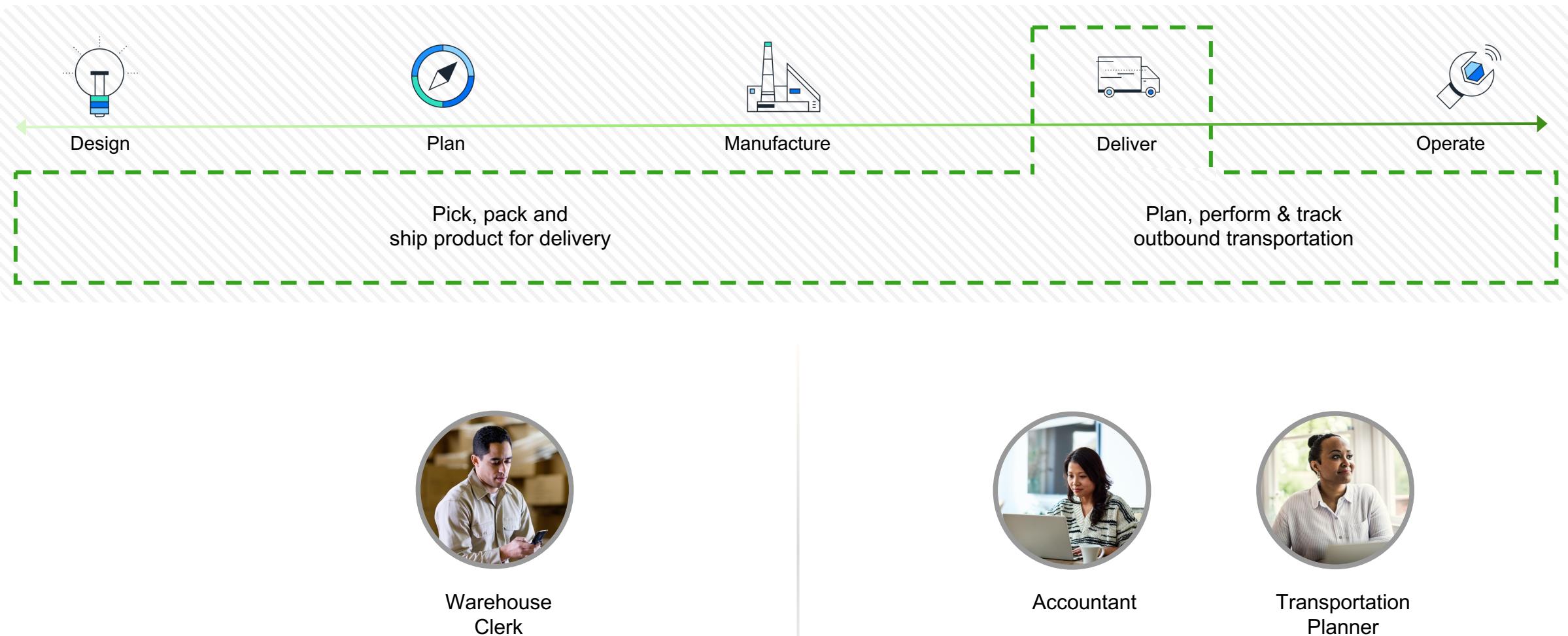
Contextualize Every Decision

- 2
 - Spot risks and avoid disruptions in your supply chain with instant, comprehensive summaries of all your logistics processes.
 - Obtain accurate insights over your whole warehouse by providing context to operational data to your employees and robots on the floor.
 - Provide relevant information with mobile devices that keep track of processes and orders in real-time.

Collaborate with Your Ecosystem

- 3
 - Create a single entry point for your entire logistics team linking carriers, 3PLs, and freight forwarders on one network.
 - Establish an ecosystem of business partners to closely collaborate with to deliver on customer commitments while constantly monitoring and adapting to changing business conditions.

Plan to Fulfill: Deliver – Personas

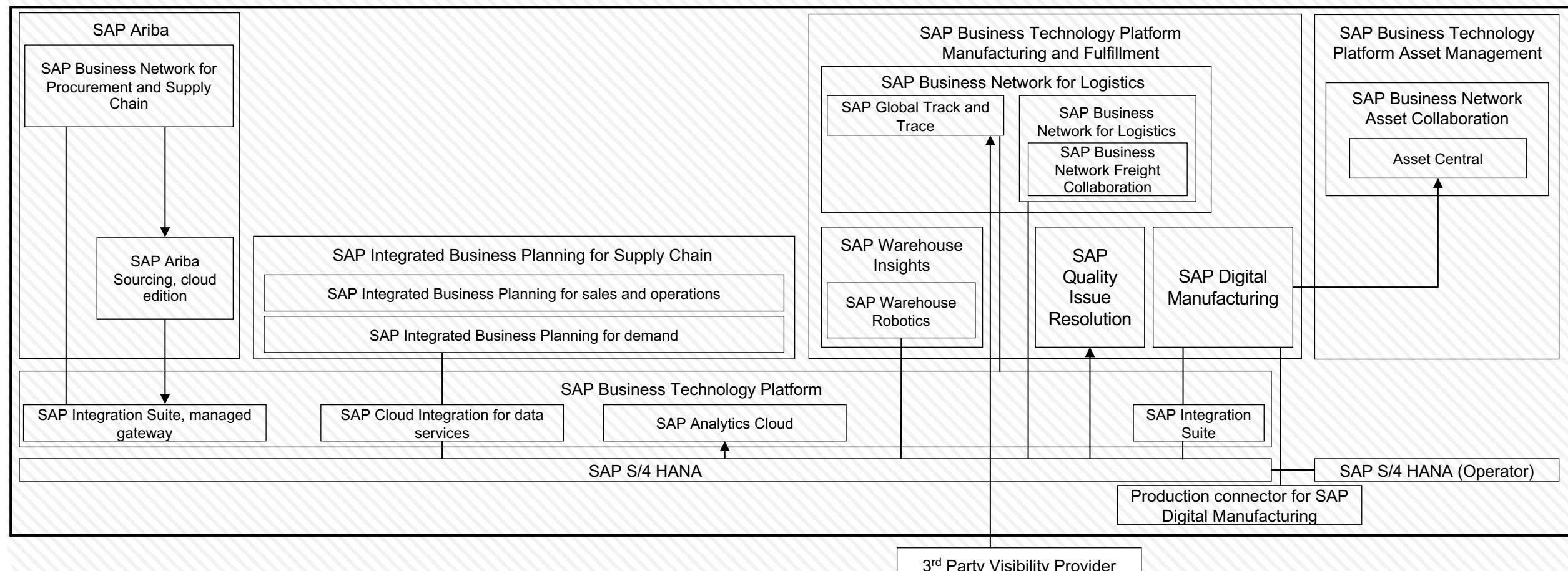
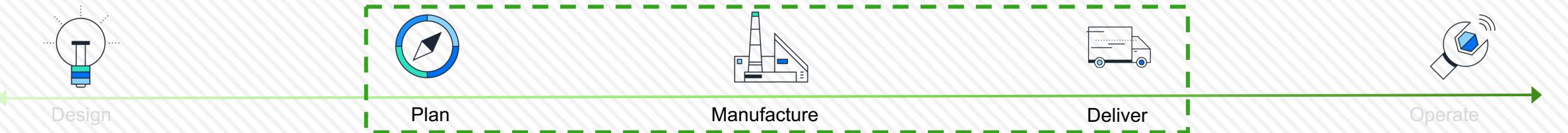


Plan to Fulfill: Solution Components

Discrete Industries for Hybrid Deployment (Design to Operate)



Solution Component Diagram

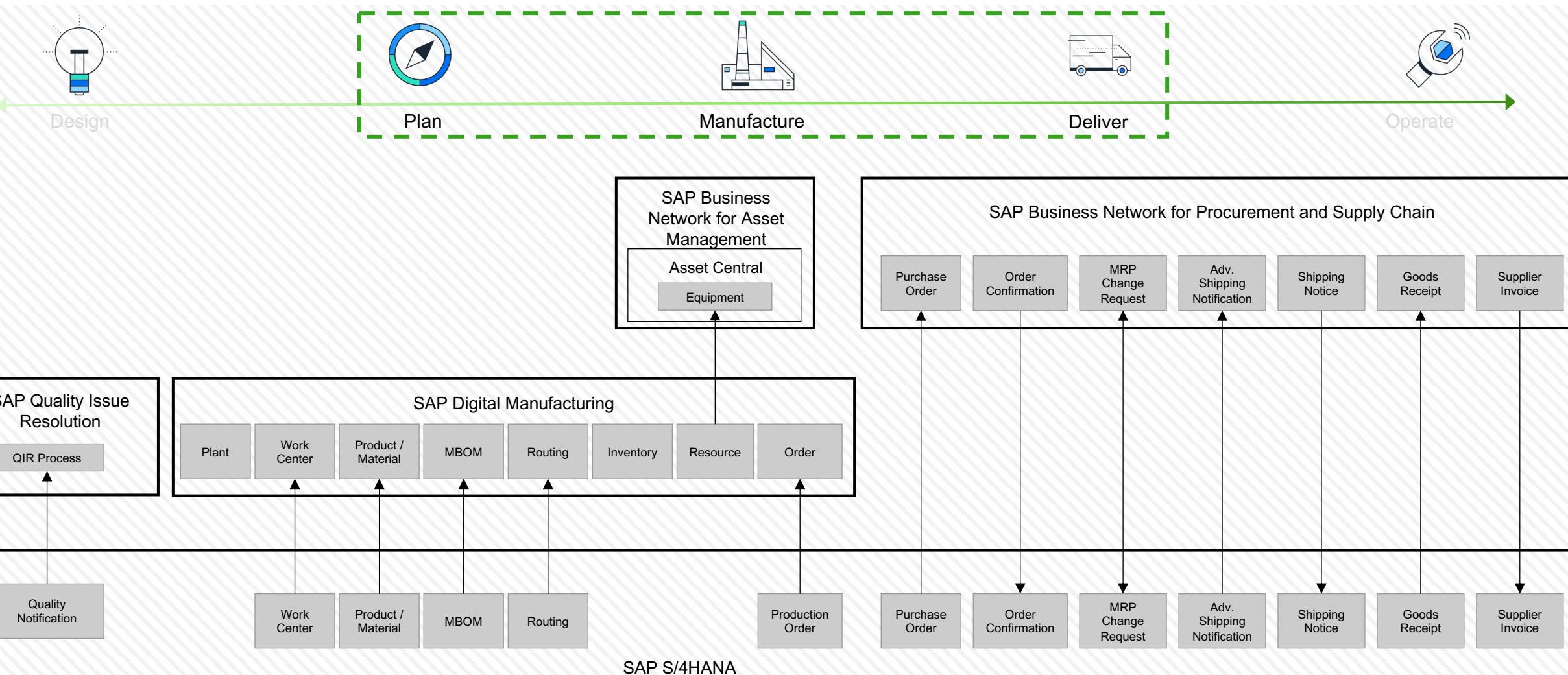




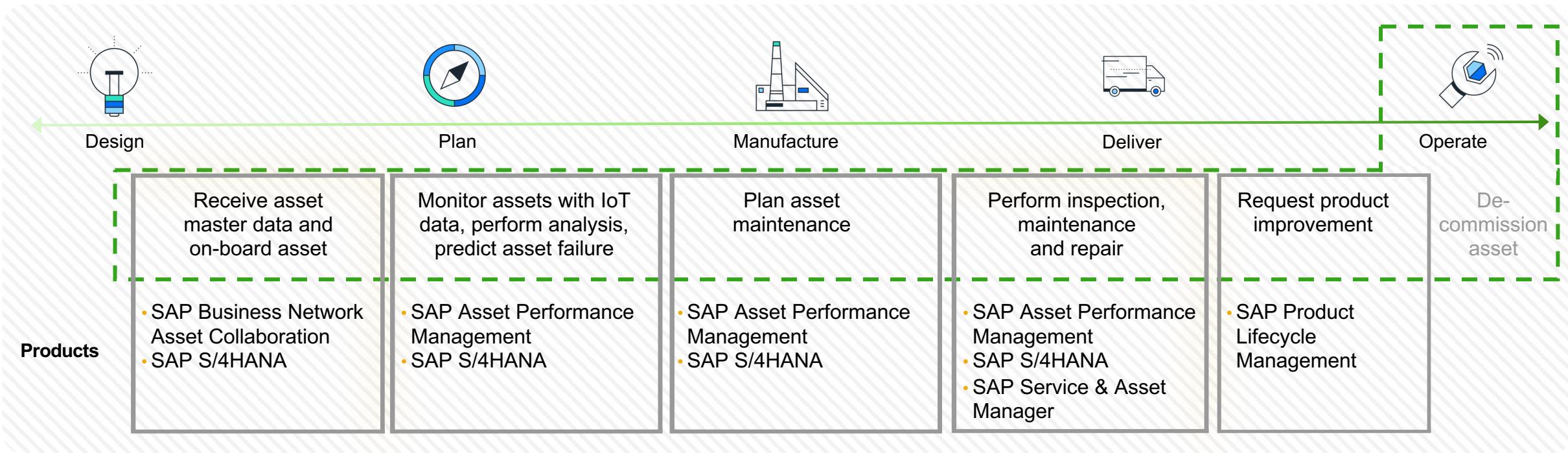
Plan to Full Manufacturing: Master and Transaction Data Flows

Discrete Industries for Hybrid Deployment (Design to Operate)

[Data Flow Link](#)



Acquire to Decommission: Operate – Products & Value Drivers



Business Benefits

Connect Every Process

- 1 ▪ Close the loop between equipment strategy, planning, and execution by linking the entire process with a single digital thread.
- Turn continuous insight into continuous improvement by combining asset and service intelligence across the enterprise.
- Decrease operational costs, reduce equipment down time, and optimize service levels, by synchronizing end-to-end maintenance and service processes.

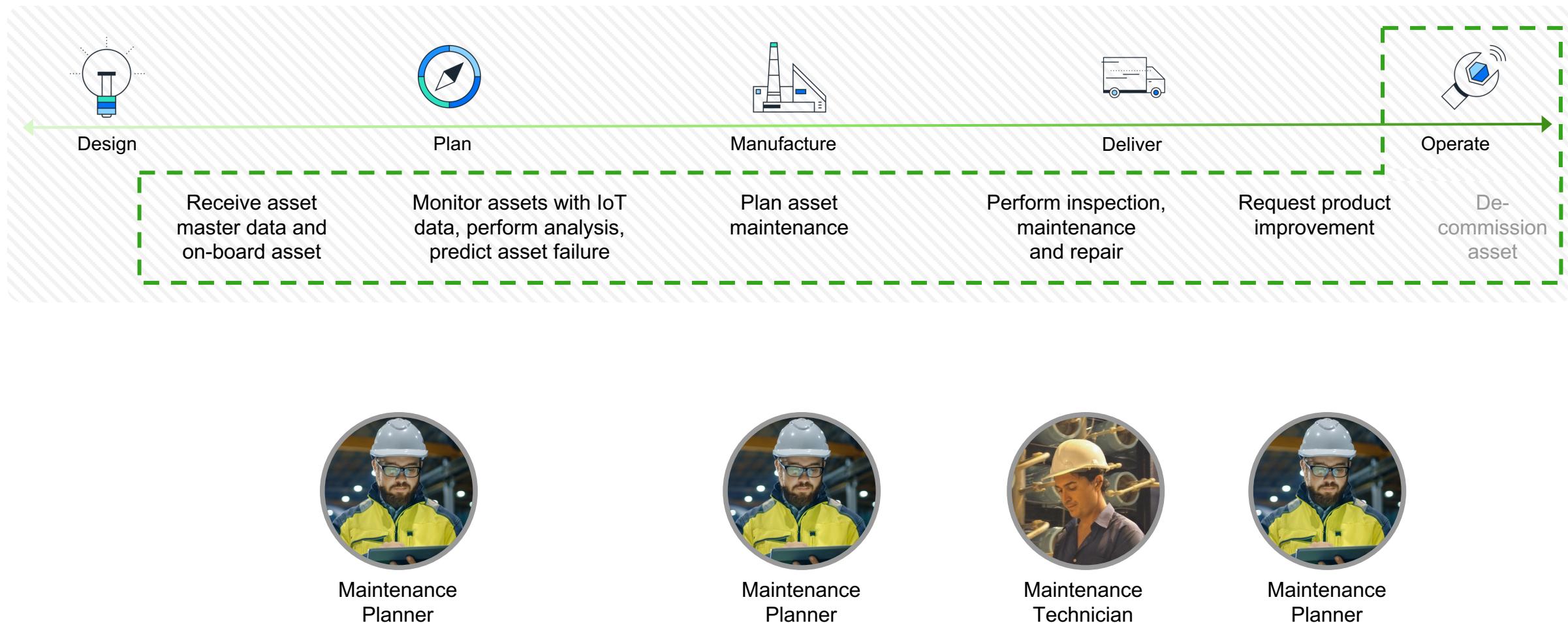
Contextualize Every Decision

- 2 ▪ Leverage intelligence to reduce downtime by using AI-driven analytics to proactively predict failure risk, assess criticality, and propose maintenance.
- Empower your maintenance techs with mobile apps that guide them through each maintenance step and automate tasks.
- Reduce emissions by keeping all your assets running efficiently and minimizing energy consumption.

Collaborate with Your Ecosystem

- 3 ▪ Connect everyone to the digital thread by bringing OEMs, components suppliers, operators, and services providers together on a single network.
- Manage outsourcing and the ecosystem by collaborating with delivery partners for planning, resourcing, and work order execution.
- Integrate maintenance with the procurement and supply network for equipment delivery, installation, and spare parts management.

Acquire to Decommission: Operate – Personas

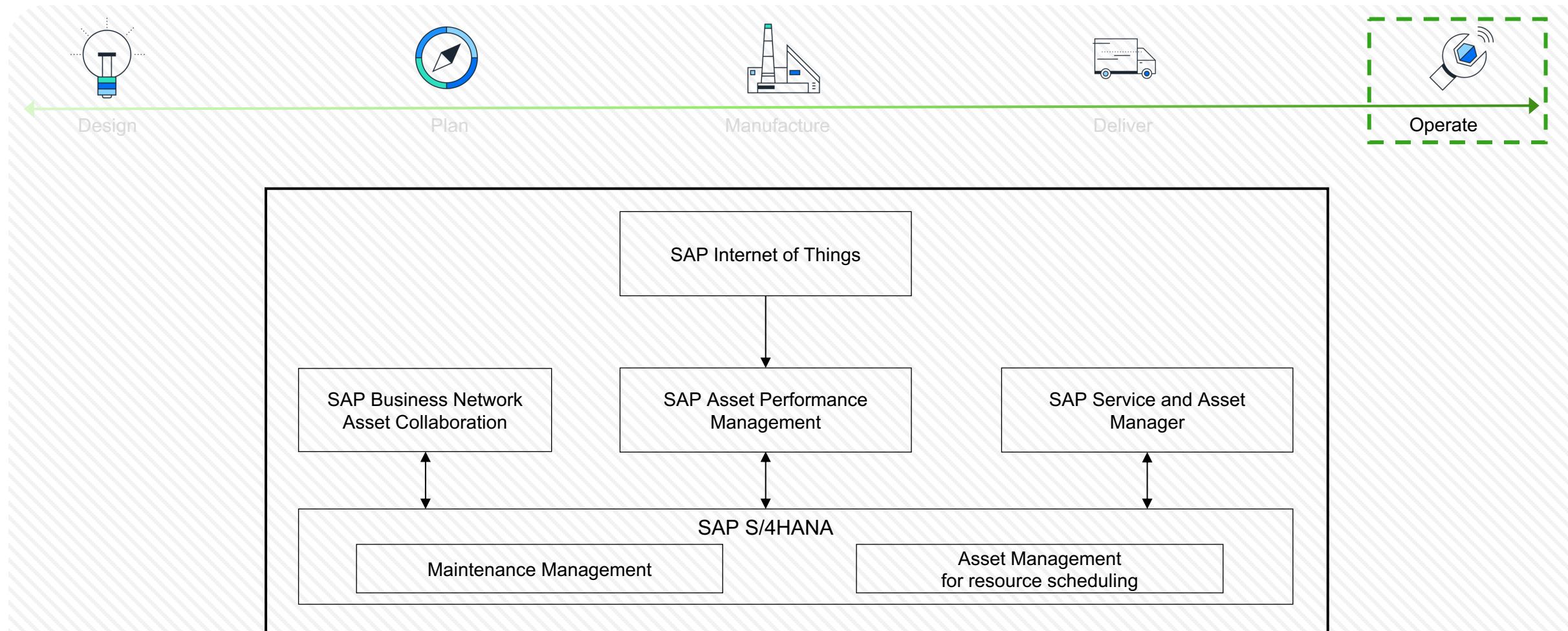


Acquire to Decommission: Solution Components

Discrete Industries for Hybrid Deployment (Design to Operate)



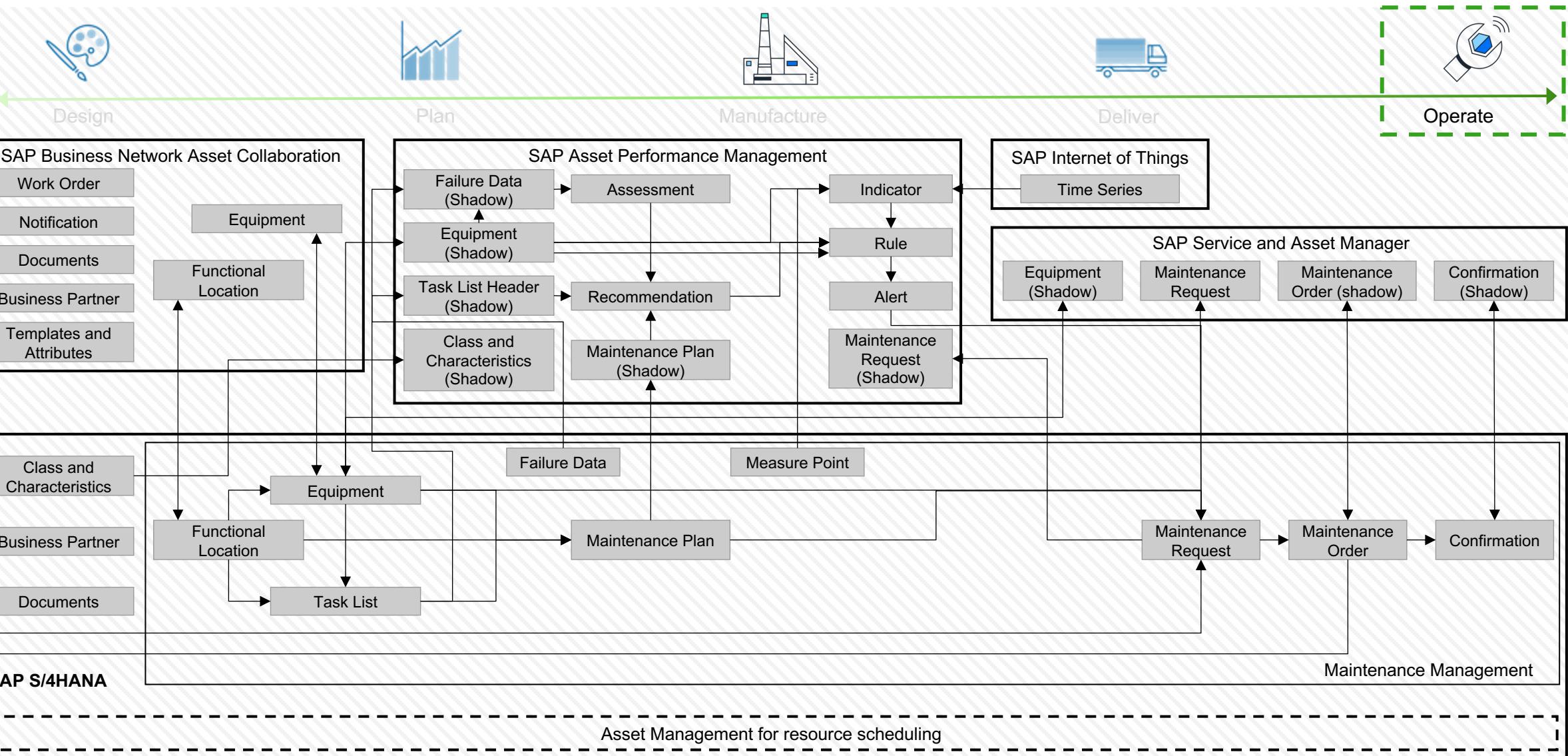
Solution Component Diagram



[Data Flow Link](#)

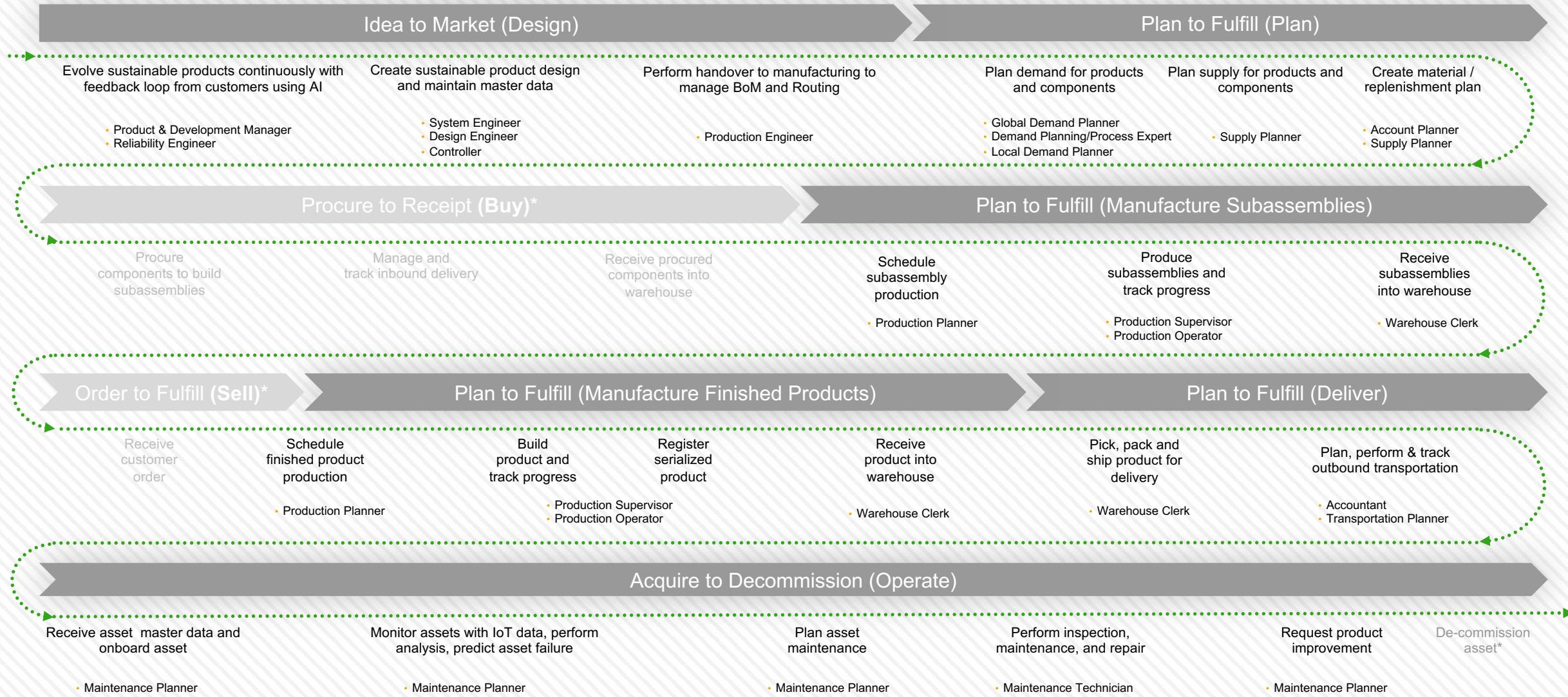
Acquire to Decommission: Master and Transaction Data Flows

Discrete Industries for Hybrid Deployment (Design to Operate)



Persona Flow: Design to Operate E2E Business Process & Enabling Solutions

(Business Process / Solution Variant: Assemble to Order for Discrete Industries)



Solution Variants Published on SAP Business Accelerator Hub

Idea to Market

The screenshot shows the SAP Business Accelerator Hub interface for the 'Idea to Market' solution variant. The top navigation bar includes 'Explore', 'Resources', 'Discover Integrations', and 'Partner with Us'. Below the navigation is a search bar and a 'Login' button. The main content area has a dark header with the title 'Idea to Market' and a sub-header 'Manage within Design-to-Operate all activities from a product idea to market readiness'. A detailed introduction follows, mentioning how it manages product or feature ideas internally or receives them through feedback mechanisms from customers or business partners. It also discusses how engineers can iterate on live-line product requirements and system concepts for a new or retrofitted product. The 'Solution Variants' section lists one item: 'Idea to Market for Hybrid Deployment' (3 Architecture Views). At the bottom right is a 'Chat (Beta)' button.

Plan to Fulfill

The screenshot shows the SAP Business Accelerator Hub interface for the 'Plan to Fulfill' solution variants. The top navigation bar is identical to the previous page. The main content area has a dark header with the title 'Plan to Fulfill' and a sub-header 'Manage and optimize the digital supply chain from planning and manufacturing to the delivery of a product'. A detailed introduction follows, explaining that Plan to Fulfill is a group of end-to-end business processes within Design-to-Operate that enables companies to manage a resilient, sustainable digital supply chain encompassing all business processes related to planning, manufacturing, and delivering their products. It helps to create a responsive design-to-operate process and customer-centric supply chain that are the backbone of a resilient business. The 'Solution Variants' section lists five items: 'Assemble to Order (Discrete Ind.) for Hybrid Deployment (Design to Operate)' (5 Architecture Views), 'Plan to Fulfill Side-by-Side (Discrete Industries) for Hybrid Deployment' (5 Architecture Views), 'Assemble to Order for Cloud Deployment' (5 Architecture Views), 'Make to Stock (Discrete Industries) for Cloud Deployment' (5 Architecture Views), and 'Make to Stock (Discrete Industries) for Hybrid Deployment' (5 Architecture Views). A 'FEEDBACK' button is located at the bottom right.

Acquire to Decommission

The screenshot shows the SAP Business Accelerator Hub interface for the 'Acquire to Decommission' solution variant. The top navigation bar is identical. The main content area has a dark header with the title 'Acquire to Decommission' and a sub-header 'Manage within Design-to-Operate all aspects of an industrial asset as it is received, onboarded and maintained on site'. A detailed introduction follows, explaining that after a company receives an industrial asset from its manufacturer, they technically onboard the asset using SAP Intelligent Asset Management solutions. Assets are then monitored and maintained leveraging intelligent technologies such as IoT and machine learning. This allows for any kind of asset maintenance with integrations into other domains (procurement, planning, and execution, etc.), and collaboration with business partners, to optimize asset performance. An operator can also suggest product improvements by sharing their feedback directly with the manufacturer. The 'Solution Variants' section lists one item: 'Acquire to Decommission with SAP Asset Performance Management for Hybrid' (3 Architecture Views). At the bottom right is a 'Chat (Beta)' button.

Thank you.

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