Discover SAP Enterprise Product Development

Define, develop, deliver, and manage innovative & sustainable products

SAP Virtual Event

Tuesday, September 12, 2023

03:00 PM - 06:00 PM CET

PUBLIC

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Agenda

1. Where do good product change ideas come from?
2. Enterprise Integration: Leveraging SAP’s super power
3. Product Data Collaboration without Boundaries
4. SAP Enterprise Product Development for cross-functional collaboration, Presentation by Gramont
5. SAP Enterprise Product Development Strategic Roadmap

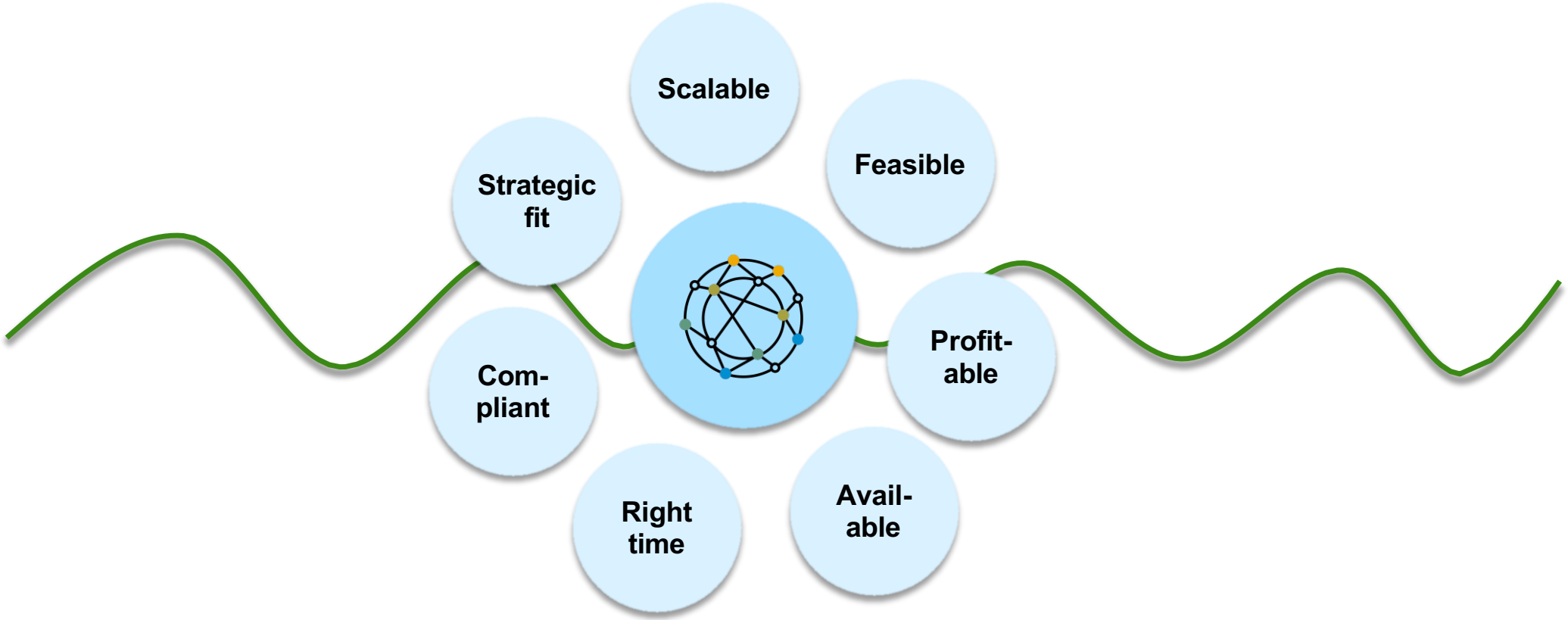
01 Where do good product change ideas come from?

Ing-Marie Lönnerheden
SAP

Atilla Madarász
SAP

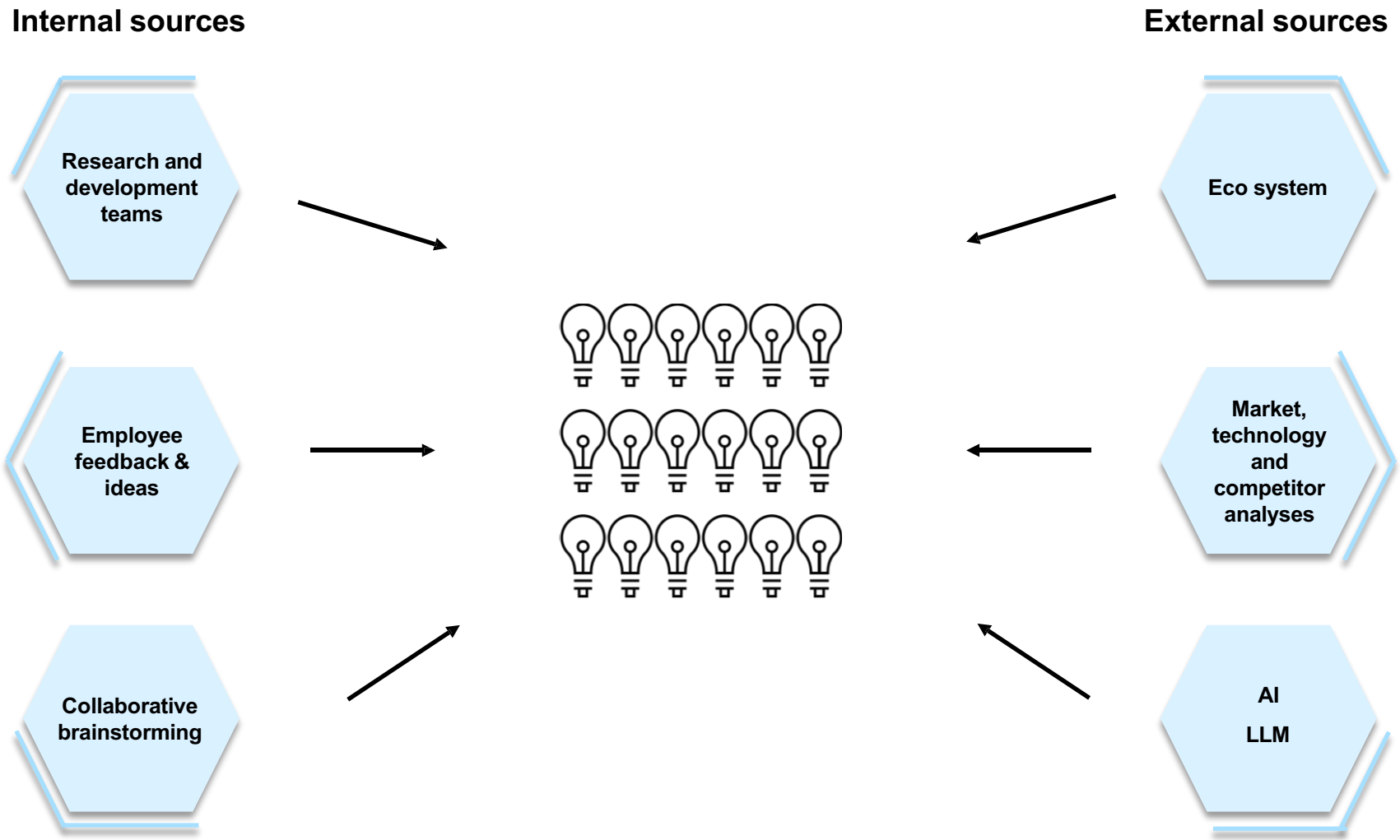
- What are good product change ideas and where can they be found?
- How can we identify the best ideas to pursue?
- How can we ensure a holistic and rapid change process?

What is a great product change idea?

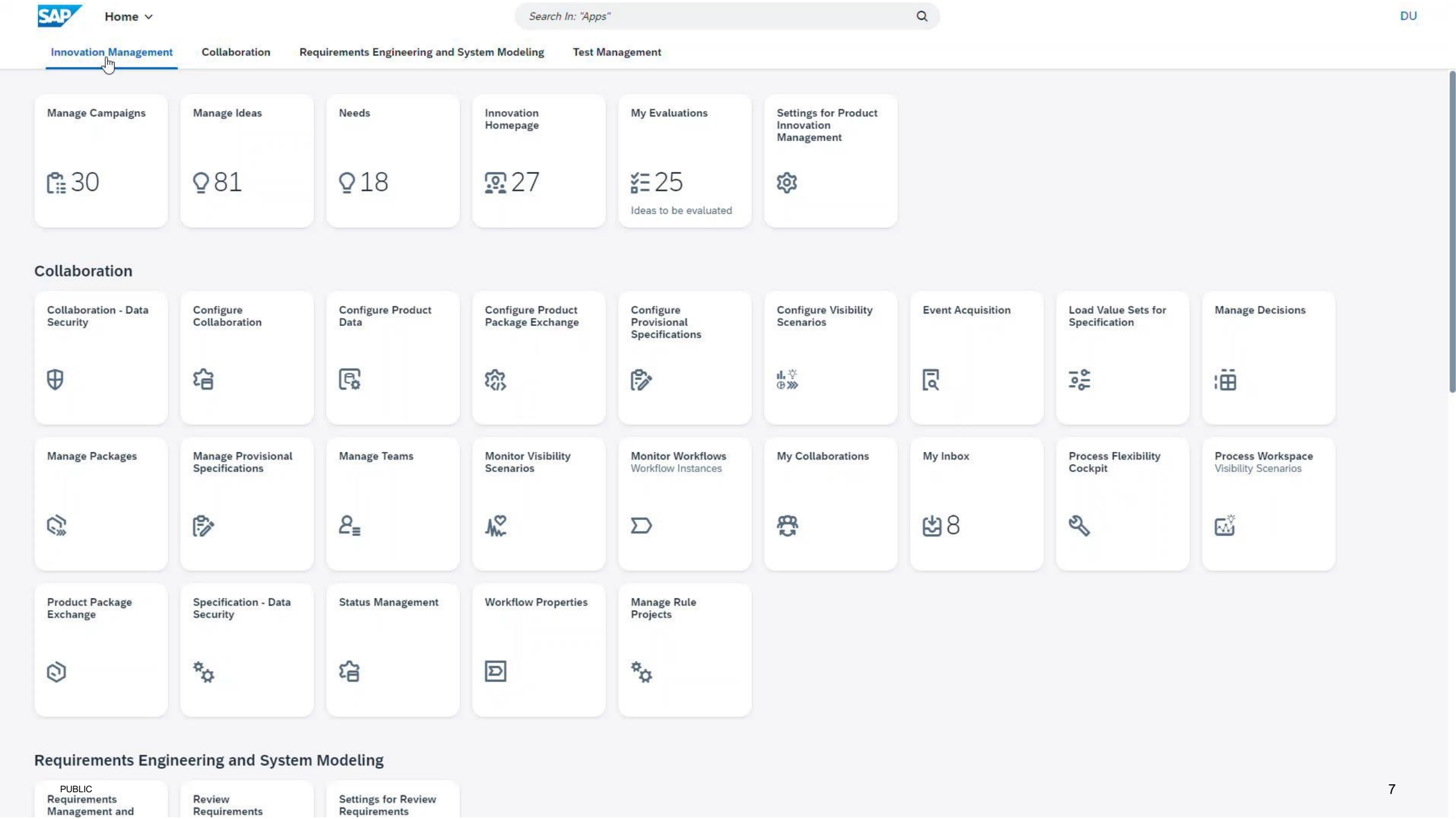


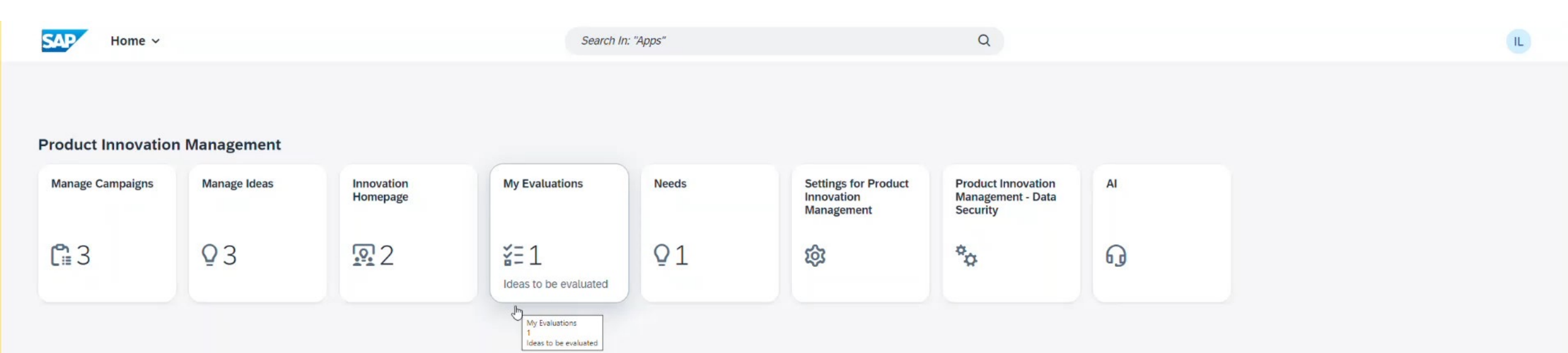
Solves a problem in a great way for the end users

What are good sources for ideas?

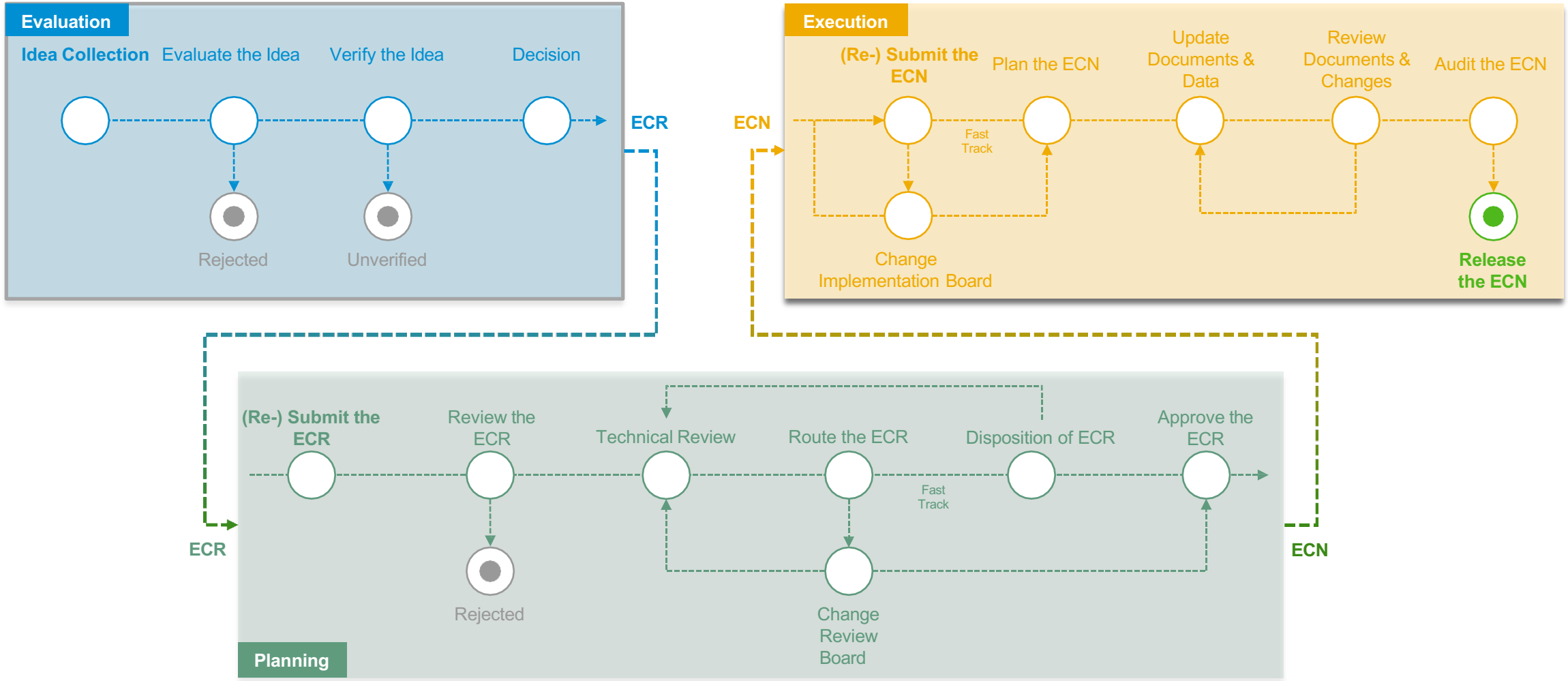


AI = Artificial Intelligence LLM = Large Language Models


Home
Search In: "Apps"
DU
Innovation Management
Collaboration
Requirements Engineering and System Modeling
Test Management
Manage Campaigns
30
Manage Ideas
81
Needs
18
Innovation Homepage
27
My Evaluations
25
Ideas to be evaluated
Settings for Product Innovation Management
Collaboration
Collaboration - Data Security
Configure Collaboration
Configure Product Data
Configure Product Package Exchange
Configure Provisional Specifications
Configure Visibility Scenarios
Event Acquisition
Load Value Sets for Specification
Manage Decisions
Manage Packages
Manage Provisional Specifications
Manage Teams
Monitor Visibility Scenarios
Monitor Workflows
Workflow Instances
My Collaborations
My Inbox
8
Process Flexibility Cockpit
Process Workspace
Visibility Scenarios
Product Package Exchange
Specification - Data Security
Status Management
Workflow Properties
Manage Rule Projects
Requirements Engineering and System Modeling
Requirements Management and
Review Requirements
Settings for Review Requirements

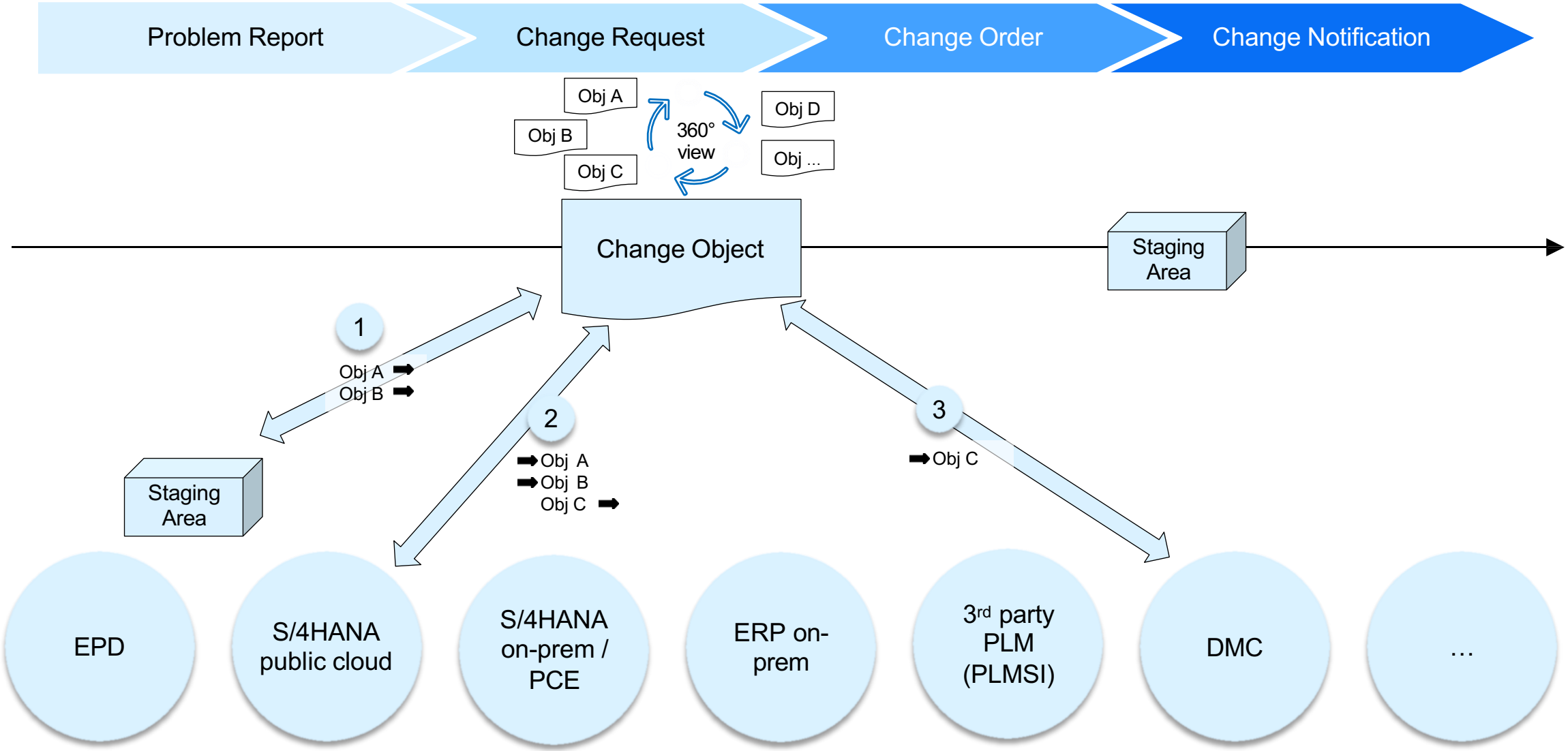

Home
Search In: "Apps"
IL
Product Innovation Management
Manage Campaigns
3
Manage Ideas
3
Innovation Homepage
2
My Evaluations
1
Ideas to be evaluated
Needs
1
Settings for Product Innovation Management
Product Innovation Management - Data Security
AI
My Evaluations
1
Ideas to be evaluated

Change Process



ECR = Engineering Change Request ECN = Engineering Change Notice

Our vision on change management



02 Enterprise Integration: Leveraging SAP's super power

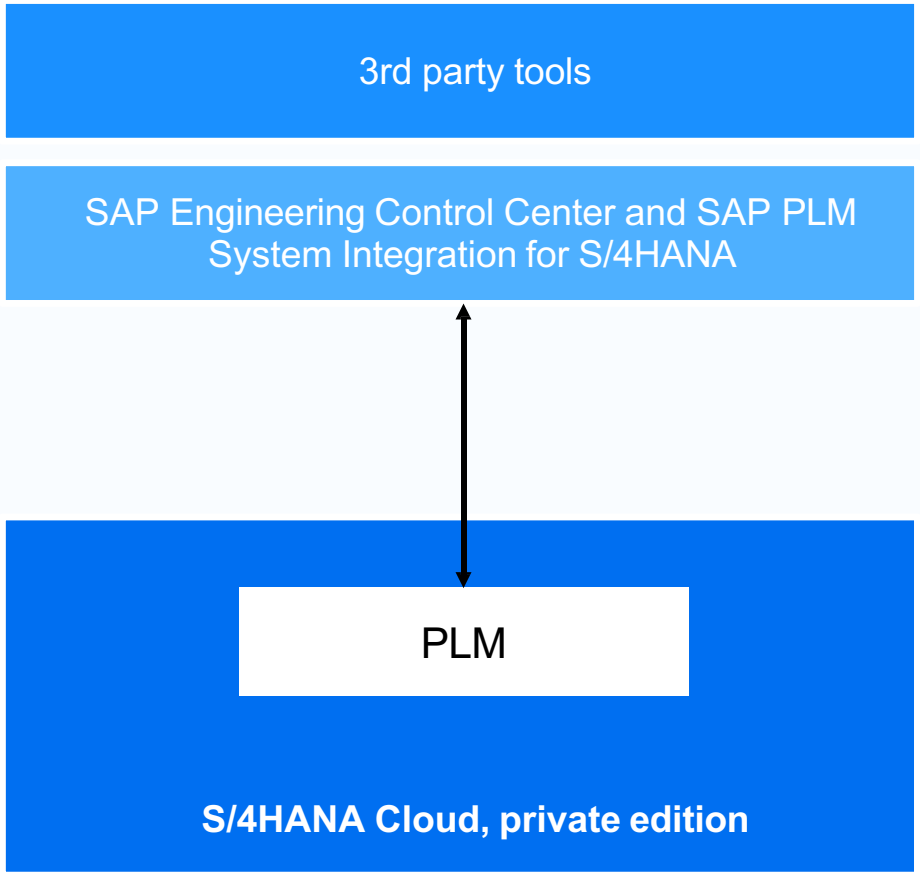
Gerhard Himmelsbach
SAP

Nick Wang
SAP

- What does the SAP PLM Portfolio for different industries look like?
- Why is Visualization Important to Manufacturers and Asset Operators?

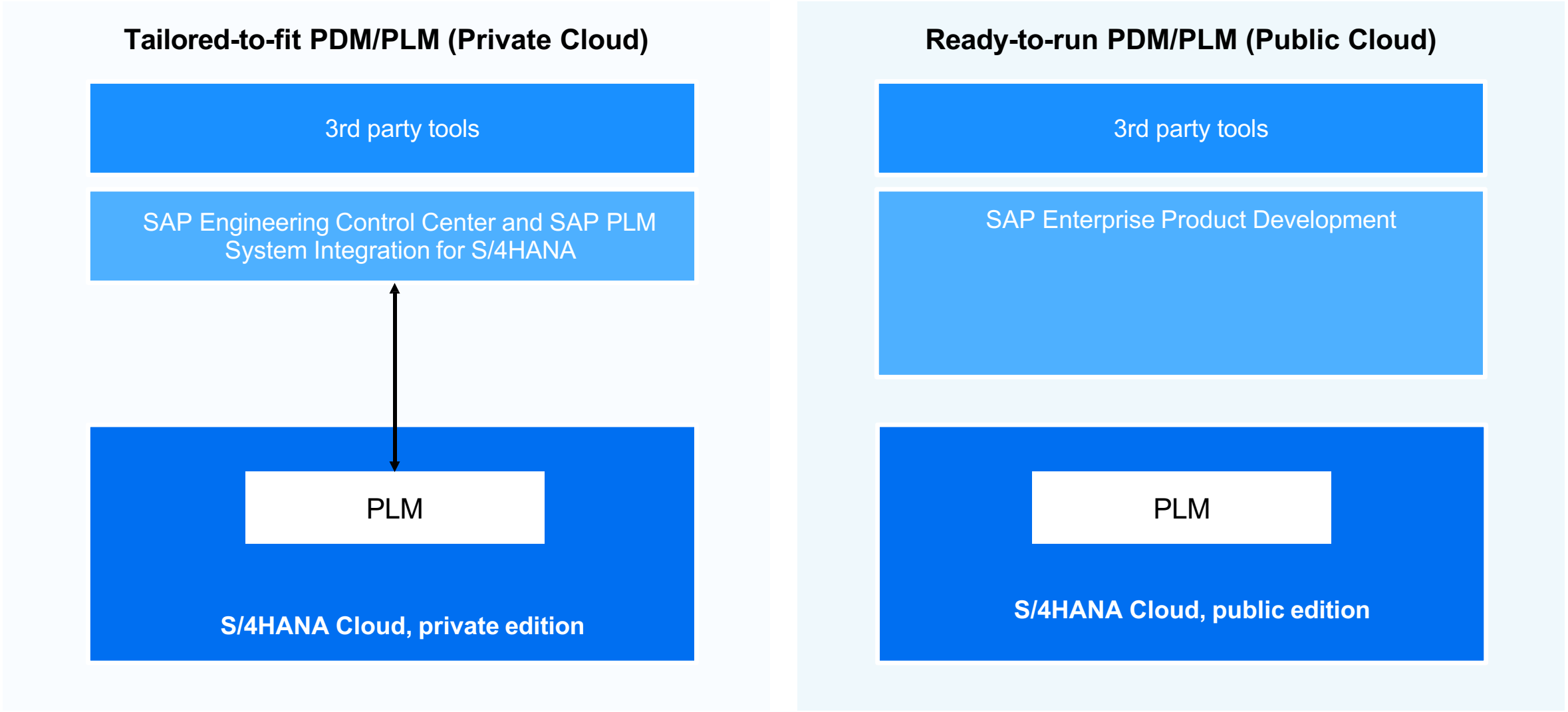
SAP PLM Portfolio for Discrete and Process Industries

Tailored-to-fit PDM/PLM (Private Cloud)



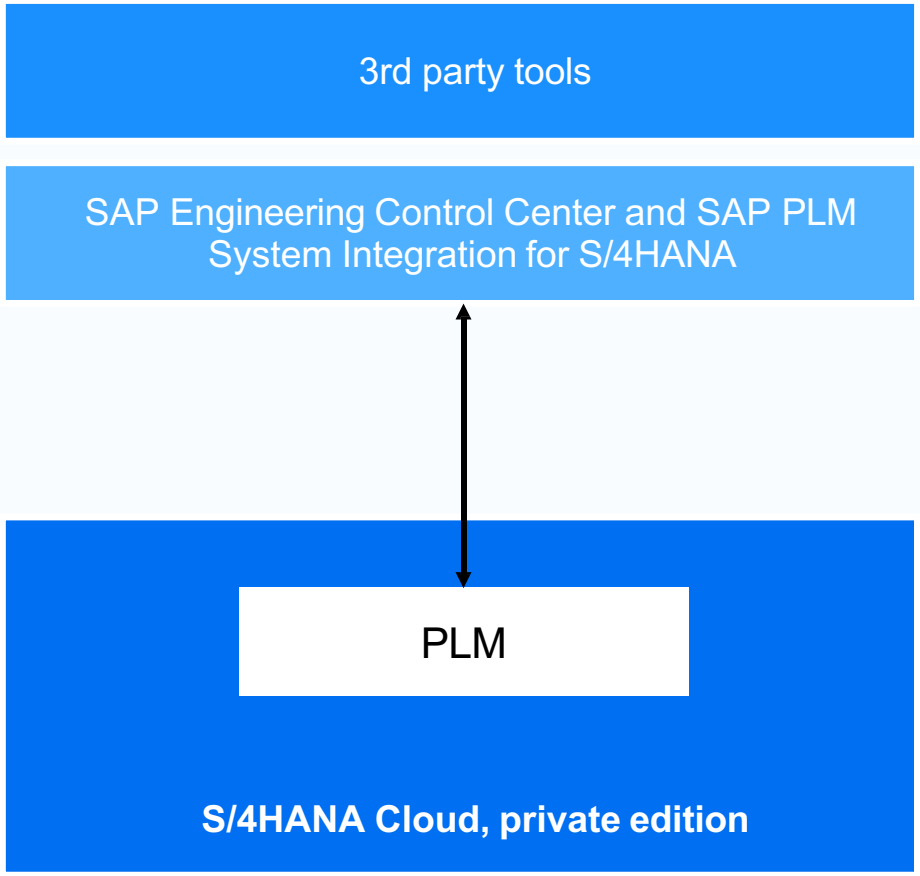
Ready-to-run Cloud PDM/PLM (Public Cloud)

SAP PLM Portfolio for Discrete and Process Industries

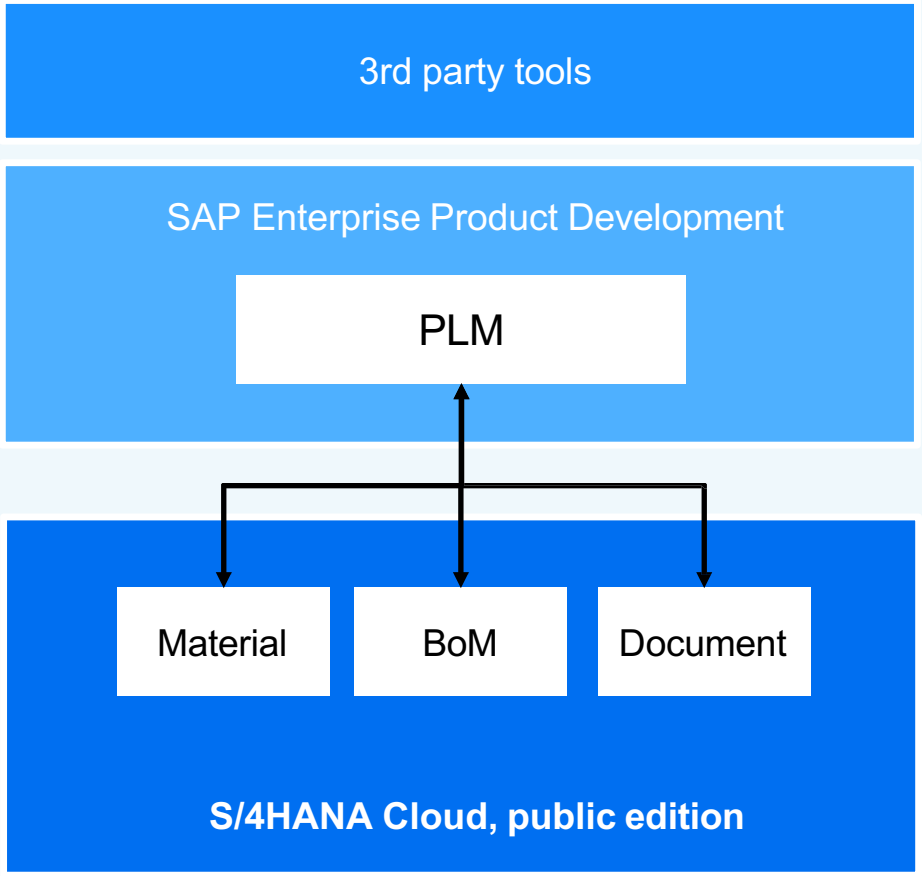


SAP PLM Portfolio for Discrete and Process Industries

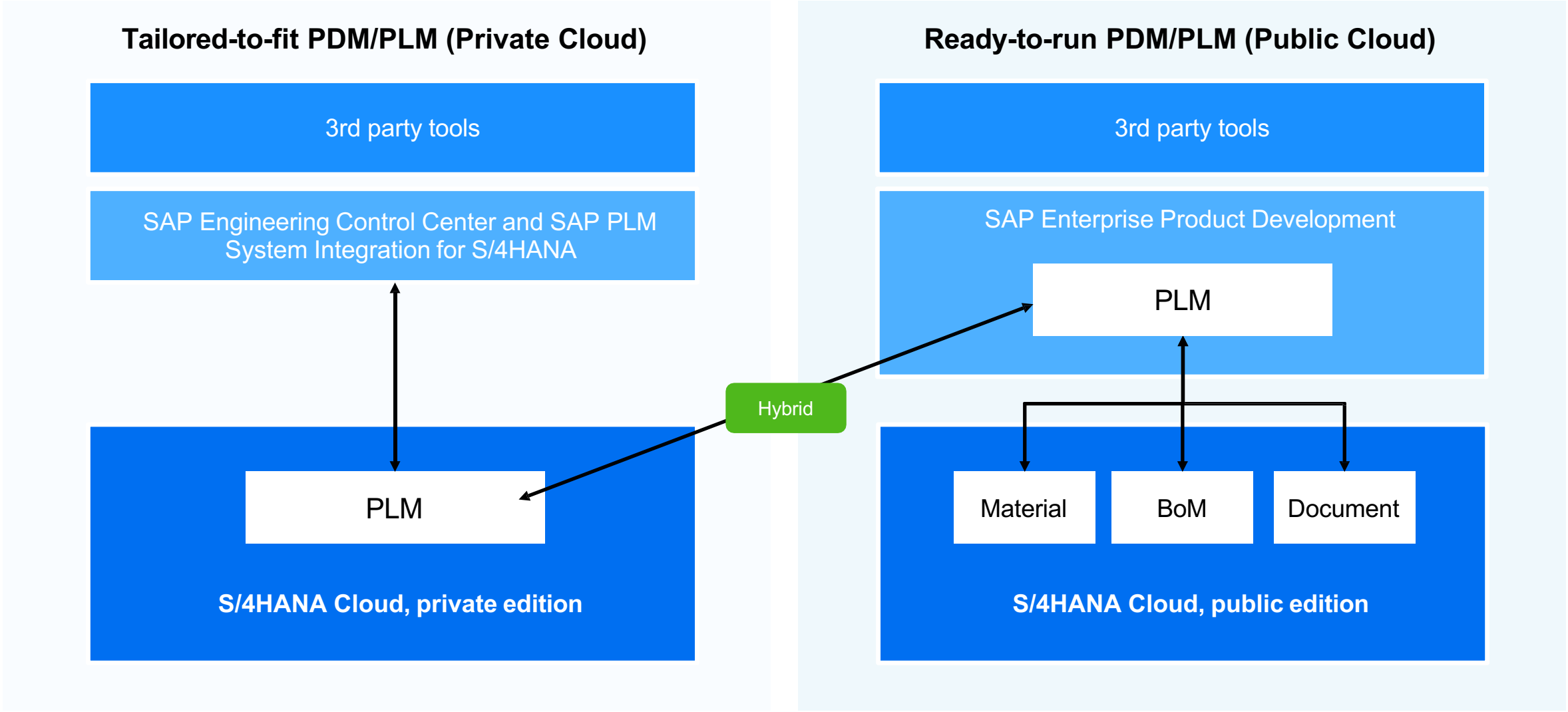
Tailored-to-fit PDM/PLM (Private Cloud)



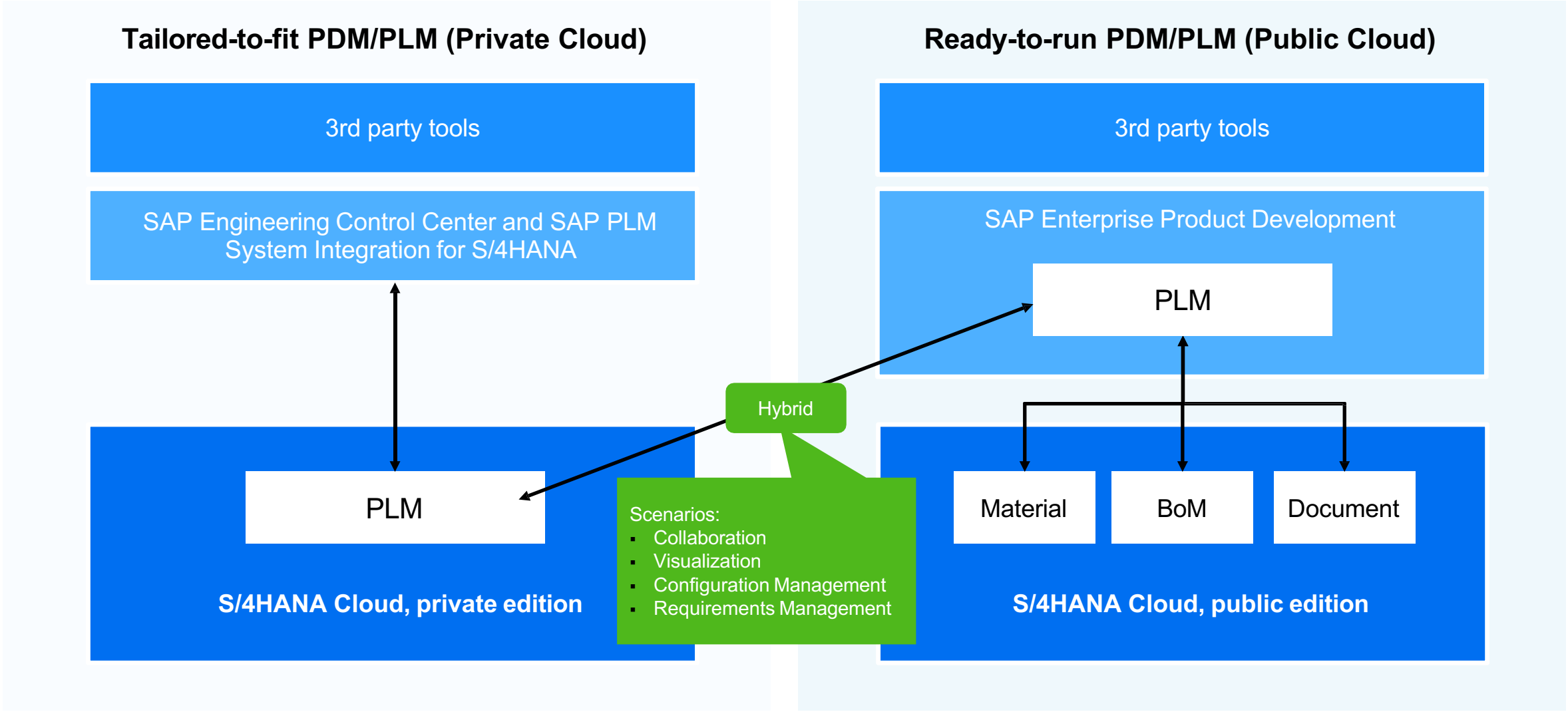
Ready-to-run PDM/PLM (Public Cloud)

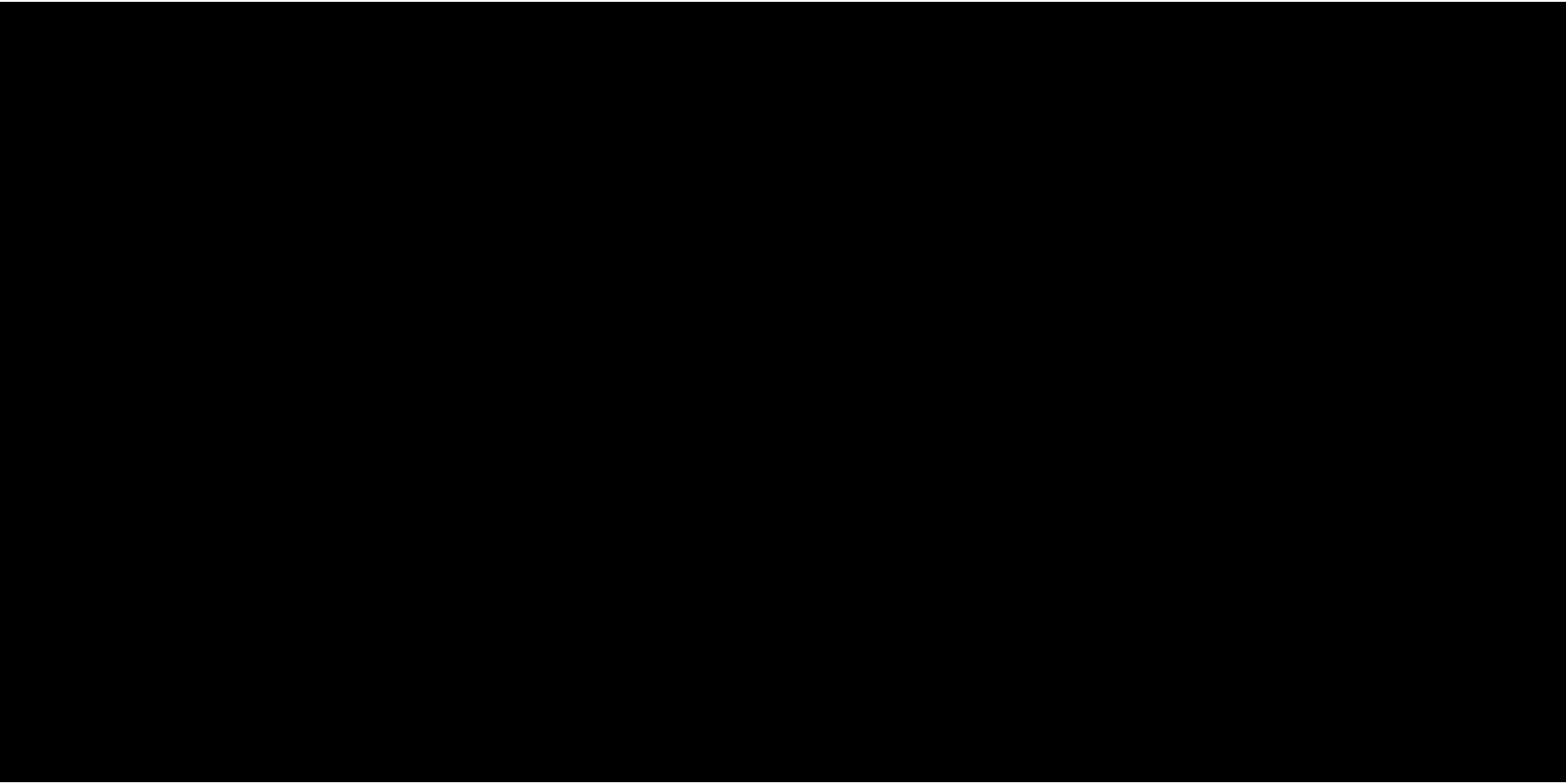


SAP PLM Portfolio for Discrete and Process Industries



SAP PLM Portfolio for Discrete and Process Industries





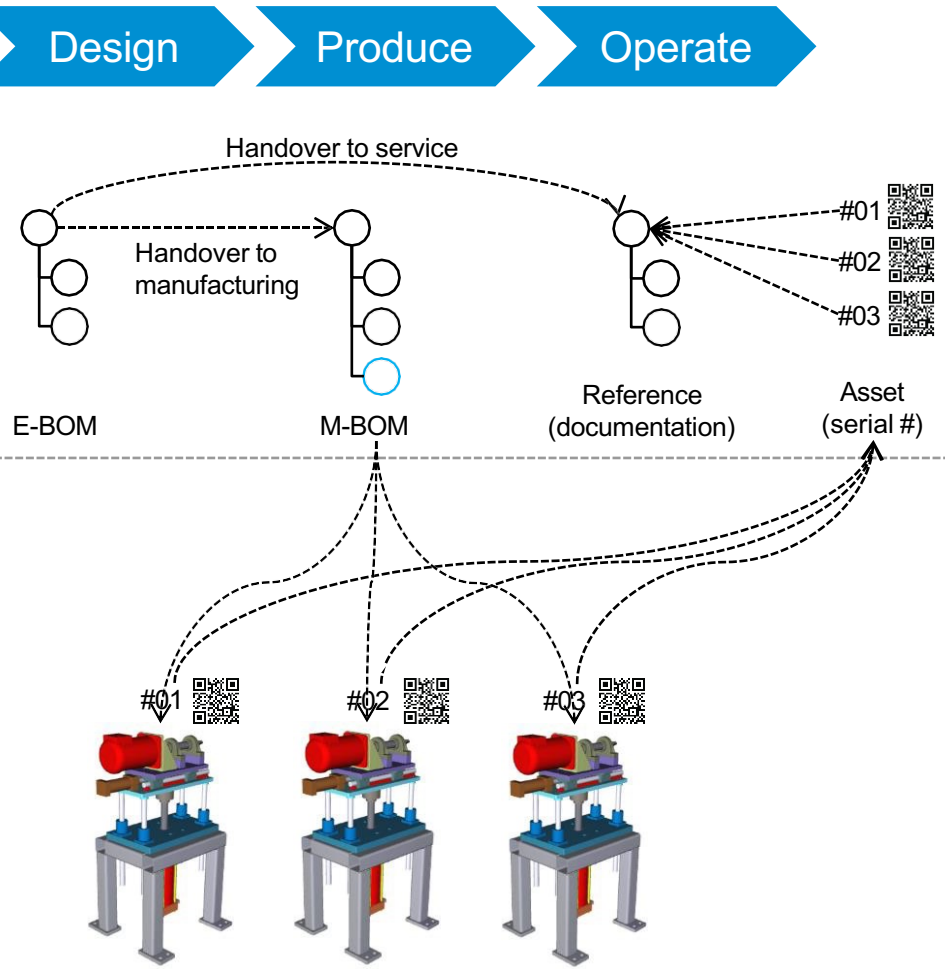
Design to Operate

My Enterprise

Other Business Partners

Digital world

Physical world



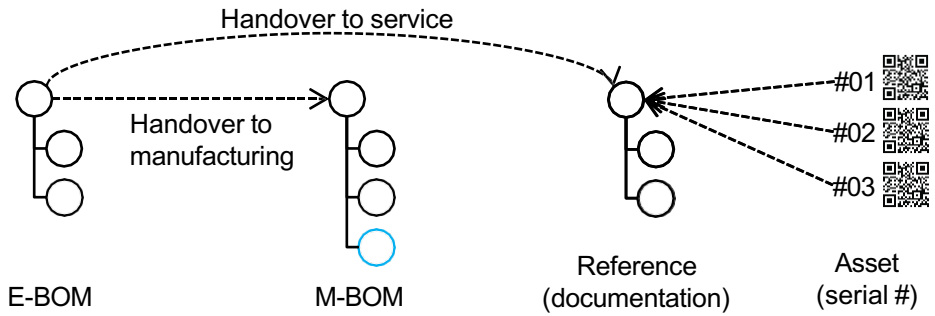
Design to Operate

My Enterprise

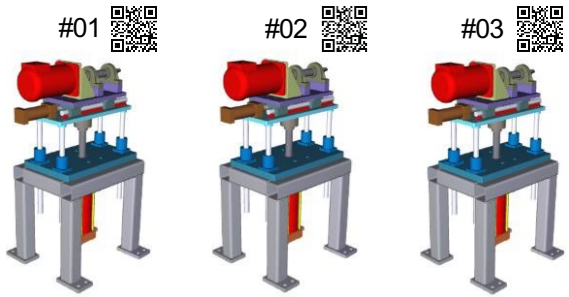
Other Business Partners

Digital world

Design → Produce → Operate → Ship → Operate → Recycle



Physical world



Why is Visualization Important to Manufacturers and Asset Operators?

Change and Complexity in our Products & Assets…

Smart Products

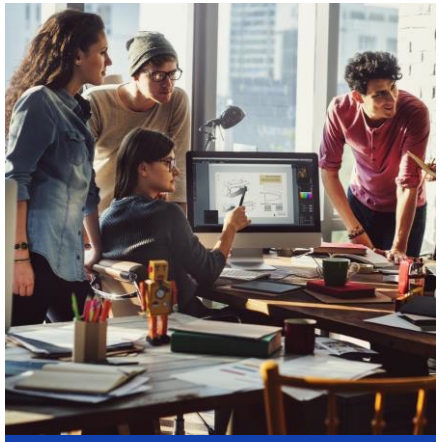
Products with embedded systems and/or software are getting more complex

Connected

Everything and everyone is connected

People Expertise

Domain knowledge requires product & asset contextual information



Processes

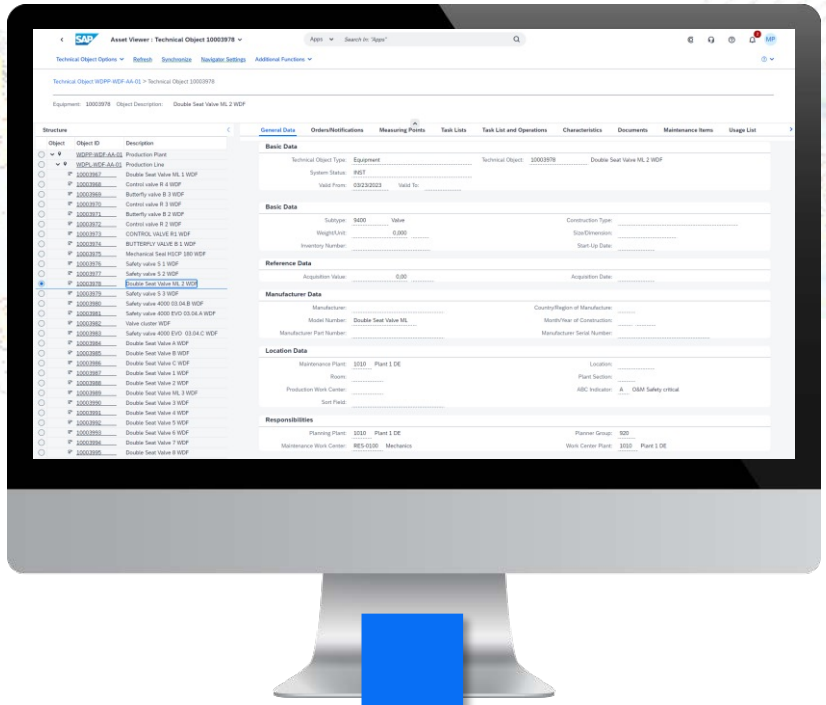
Siloed data and thinking does not work, change management is continues

Technology

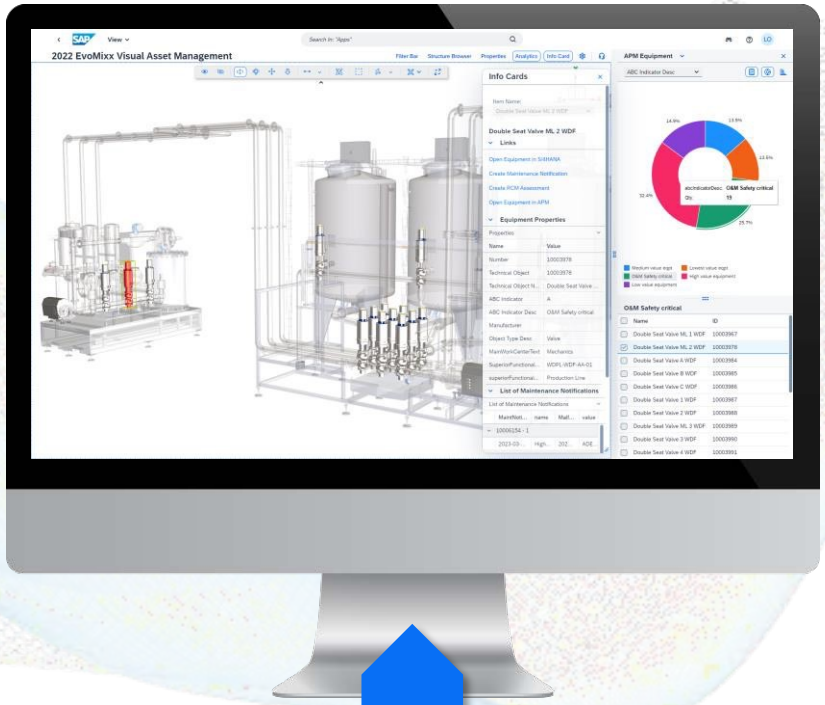
Modern day workforce, demand a modern-day user experience

We can‘t go on like we did in the past to manage this complexity...

We need a paradigm shift on the way we access, deliver and execute enterprise data….



- Product Design
- Collaboration & Sourcing
- Product Compliance
- Manufacturing & Quality
- Work Instructions
- Asset Management & Service
- Spares Parts



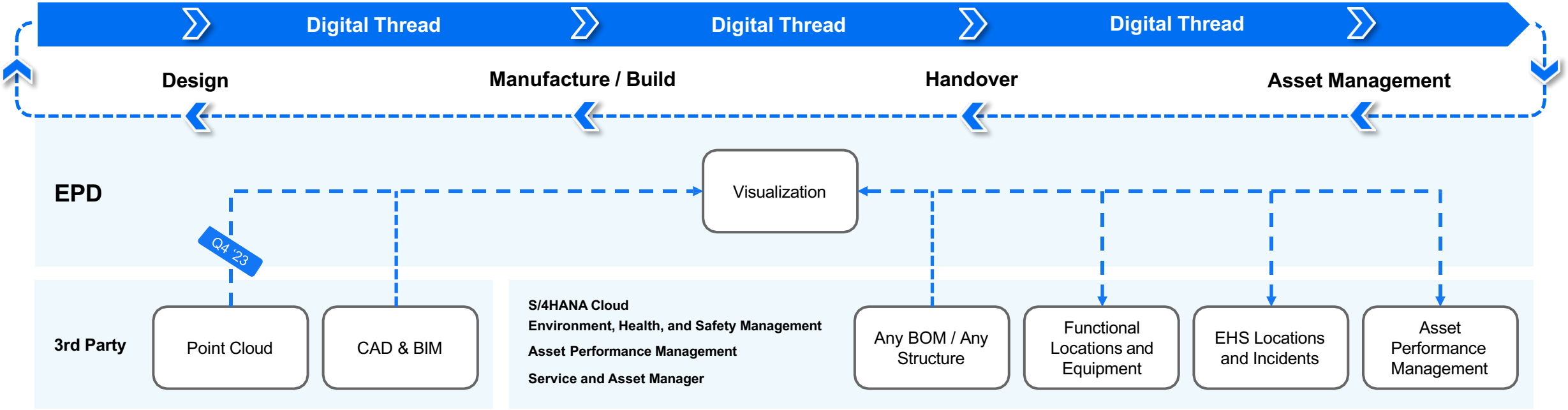
Moving from **Text & Table Centric** to a **Visual Digital Thread**

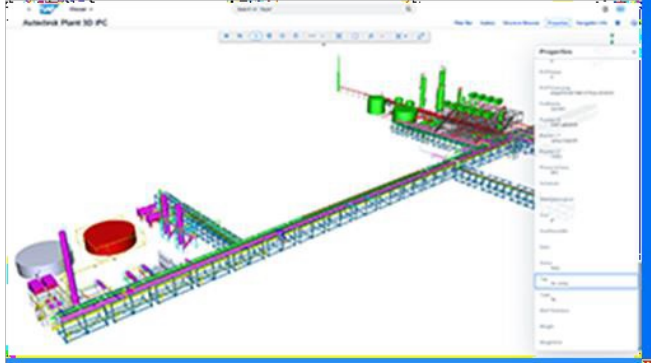
Digital Thread for Visual Asset Management

"I need to reuse 2D & 3D Design data from Design to Operations and Service"

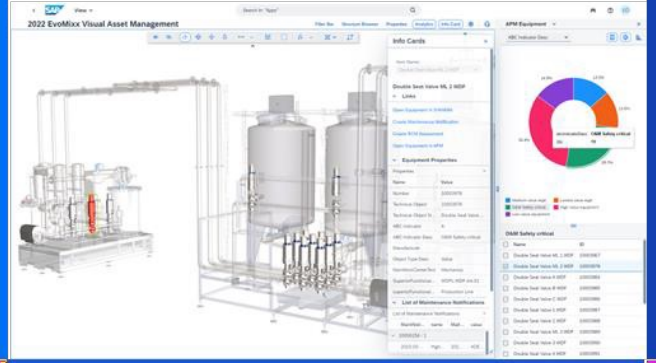
"I need to restructure the EBOM to MBOM to SBOM or EAM structure and tag with GUID's"

"I need to Operate and Service industrial assets"





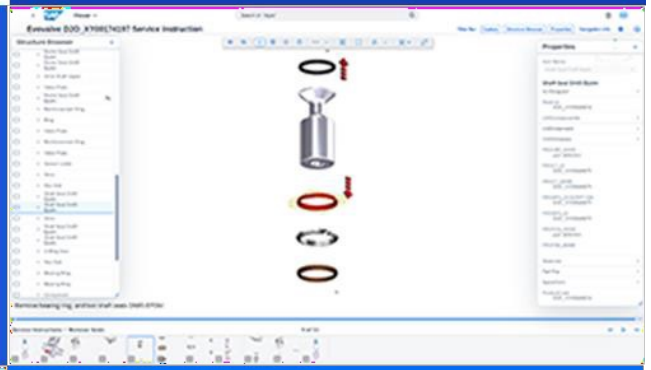
Building Information Modeling (BIM)

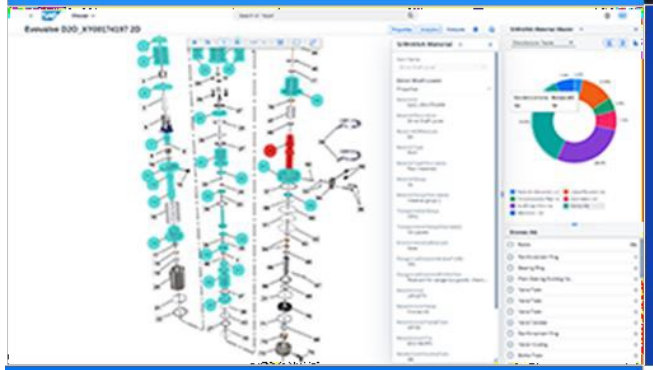


3D Visual Asset Lifecycle Analytics

Industry Foundation Classes (IFC)

3D Visual Work Instructions (VWI)

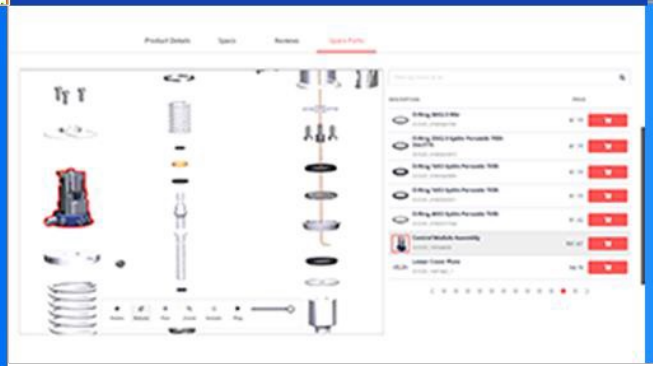




Visual Data Integration (VDI)

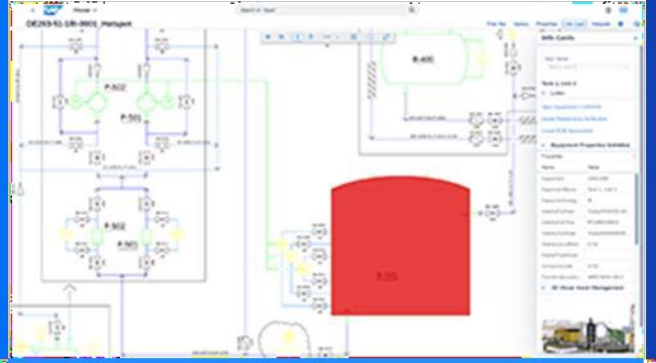
2D Visual Navigation

2D & 3D Visual Spares

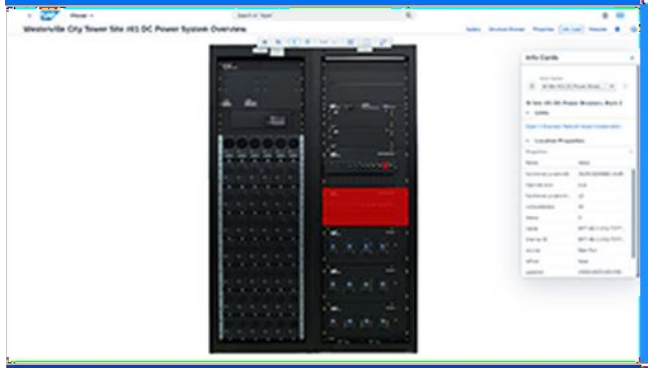


360 Panoramic Images

Piping and Instrumentation Diagram's (P&ID's)



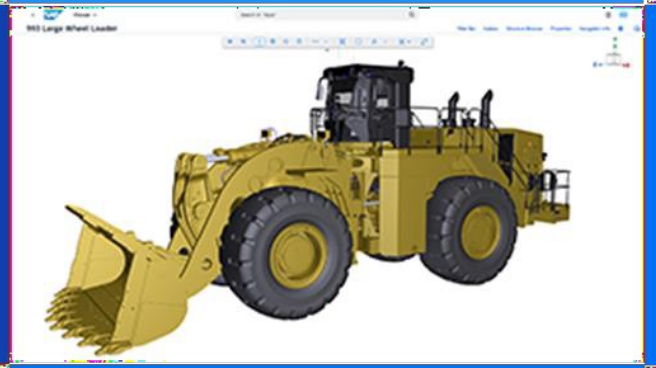
2D .DWG



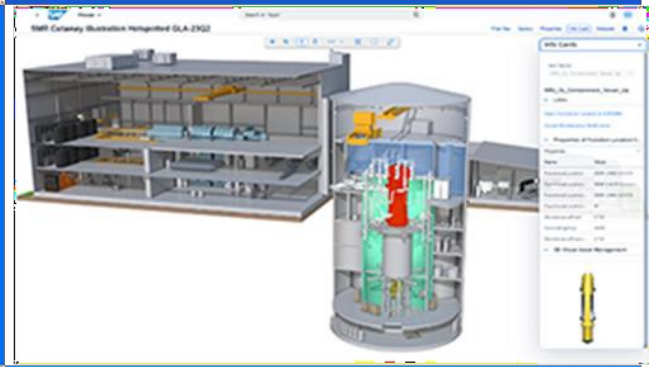
Massive Model Visualization

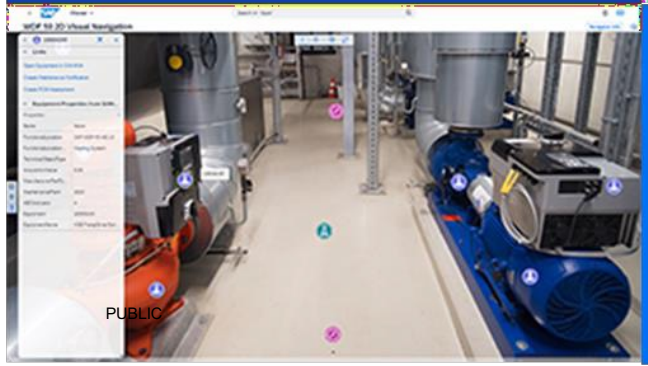
3D Augmented Reality

2D Images / Photographs

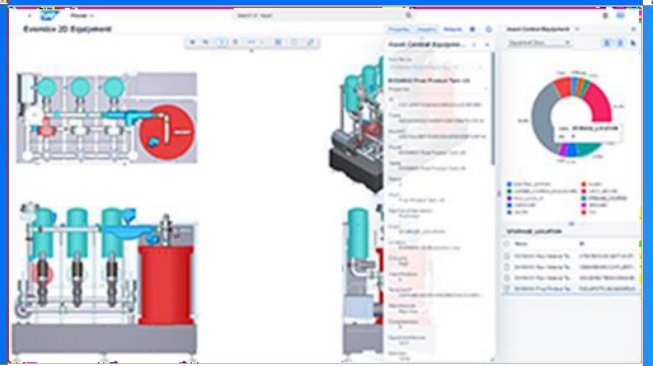


Computer Aided Design (CAD)





2D & 3D Mobile Asset Execution



2D Visual Asset Lifecycle Analytics

2022 EvoMixx Visual Asset Management

Demo

Info Cards

Item Name: Double Seat Valve ML 2 WDF

Double Seat Valve ML 2 WDF

Links

- Open Equipment in S/4HANA
- Create Maintenance Notification
- Create RCM Assessment
- Open Equipment in APM

Equipment Properties

Properties

Name	Value
Number	10003978
Technical Object	10003978
Technical Object N...	Double Seat Valve ...
ABC Indicator	A
ABC Indicator Desc	O&M Safety critical
Manufacturer	
Object Type Desc	Valve
MainWorkCenterText	Mechanics
SuperiorFunctional...	WDPL-WDF-AA-01
superiorFunctional...	Production Line

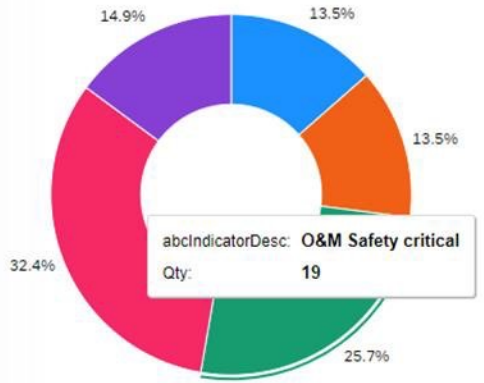
List of Maintenance Notifications

List of Maintenance Notifications

MaintNoti...	name	Malf...	value
10006154 - 1			
2023-03-...	High...	202...	ADE...

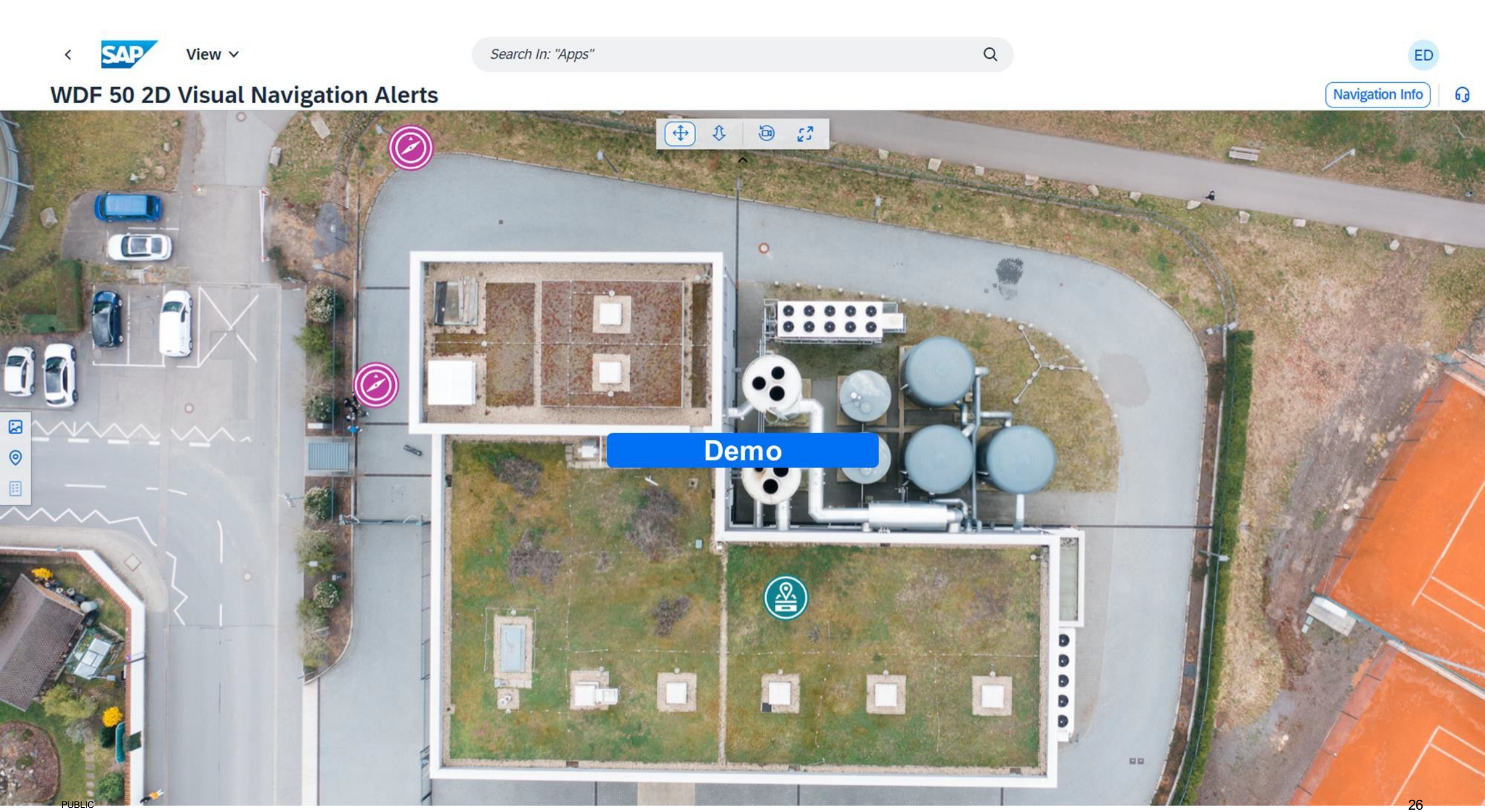
APM Equipment

ABC Indicator Desc



O&M Safety critical

Name	ID
Double Seat Valve ML 1 WDF	10003967
Double Seat Valve ML 2 WDF	10003978
Double Seat Valve A WDF	10003984
Double Seat Valve B WDF	10003985
Double Seat Valve C WDF	10003986
Double Seat Valve 1 WDF	10003987
Double Seat Valve 2 WDF	10003988
Double Seat Valve ML 3 WDF	10003989
Double Seat Valve 3 WDF	10003990
Double Seat Valve 4 WDF	10003991


View
Search In: "Apps"
ED
WDF 50 2D Visual Navigation Alerts
Navigation Info
Demo

Authoring

DU

Chemical_Plant DS 0.02

3D Edit | Animate | Annotate | Material | Markers

Selection List

No selection

Structure Browser

Chemical_Plant.e57

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03 Product Data Collaboration without Boundaries

Mark Landrosh
SAP

Manoj Kaippilly
SAP

- How can cross-departmental collaboration can lead to an emergence of great collective intelligence for the enterprise?

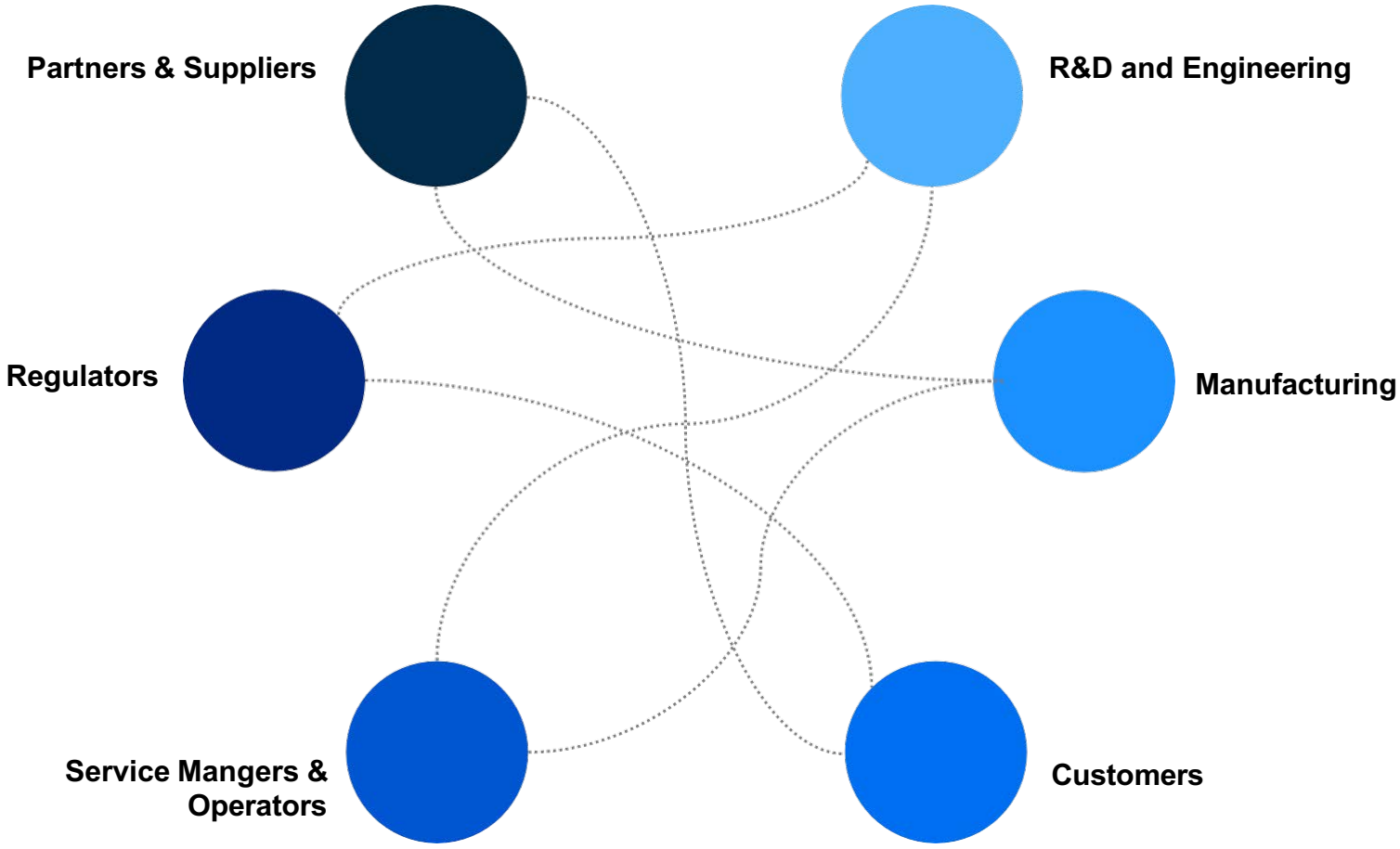
Today’s challenges in PLM

Challenges

- Increasing product complexity
- Heterogenous systems landscapes
- Supply chain disruptions

Implications

- Increase time-to-market
- Increasing R&D spend
- Reduced ability to Innovate

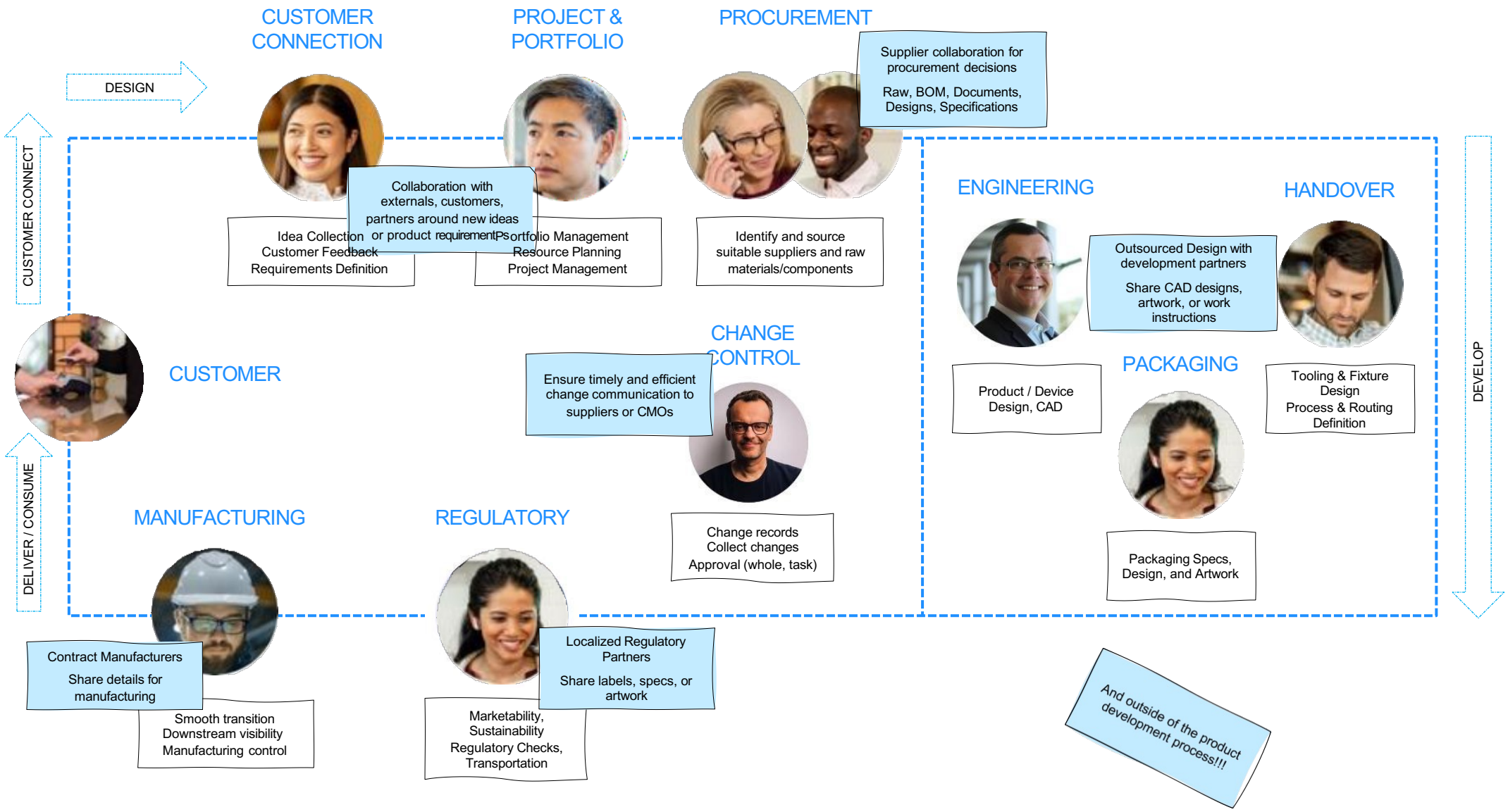


Harnessing Collective Intelligence: Collaborative Edge using EPD

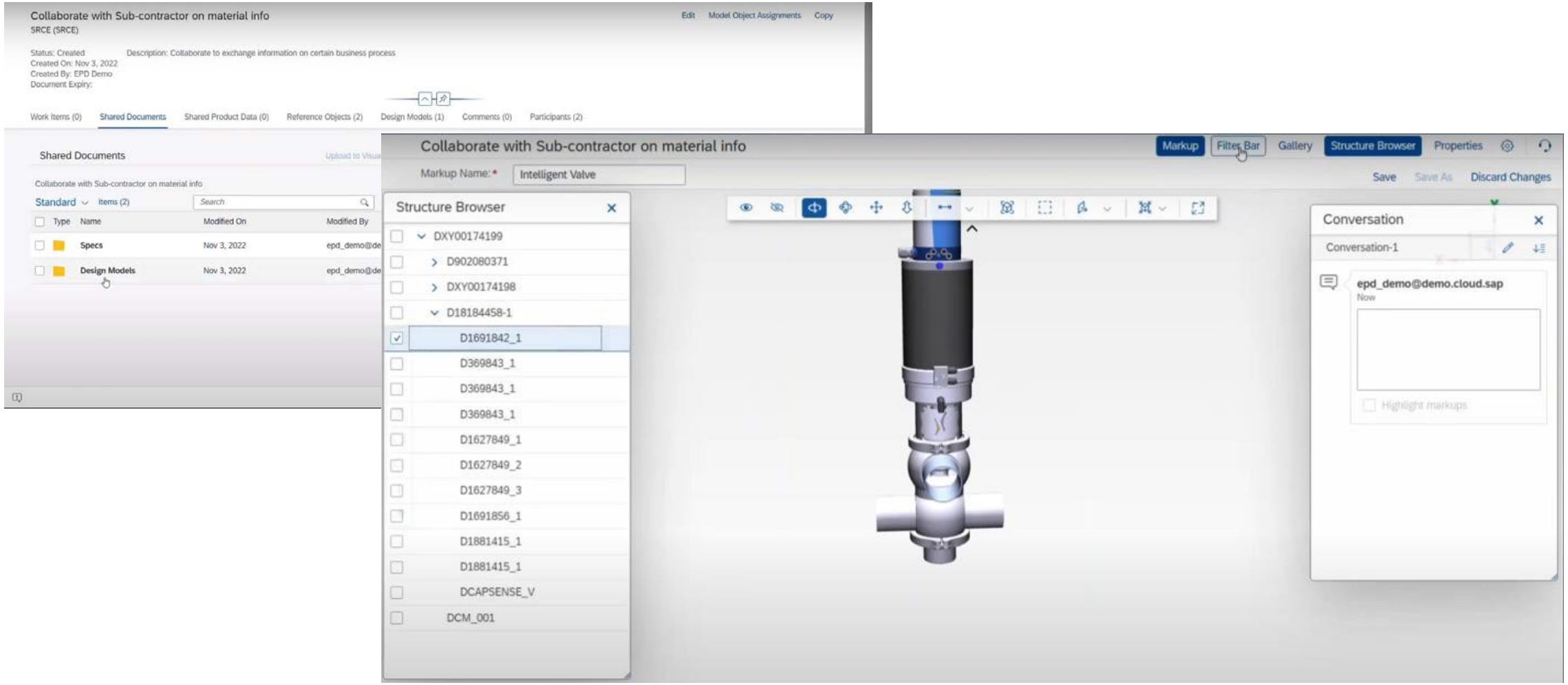
Collaboration drives **innovation**, **efficiency**, **compliance**, and **optimized manufacturing** in product development

PUBLIC

Streamlining Collaboration in the Product Development Process



Demo: Supplier Collaboration



Video link

Accelerating Digital Transformation
with SAP Enterprise Product Development (EPD)

COMPANY

Leading Automobile manufacturing based out of Europe is the world's leading manufacturer of premium automobiles and motorcycles. The company has 31 production and assembly facilities in 15 countries and a global sales network

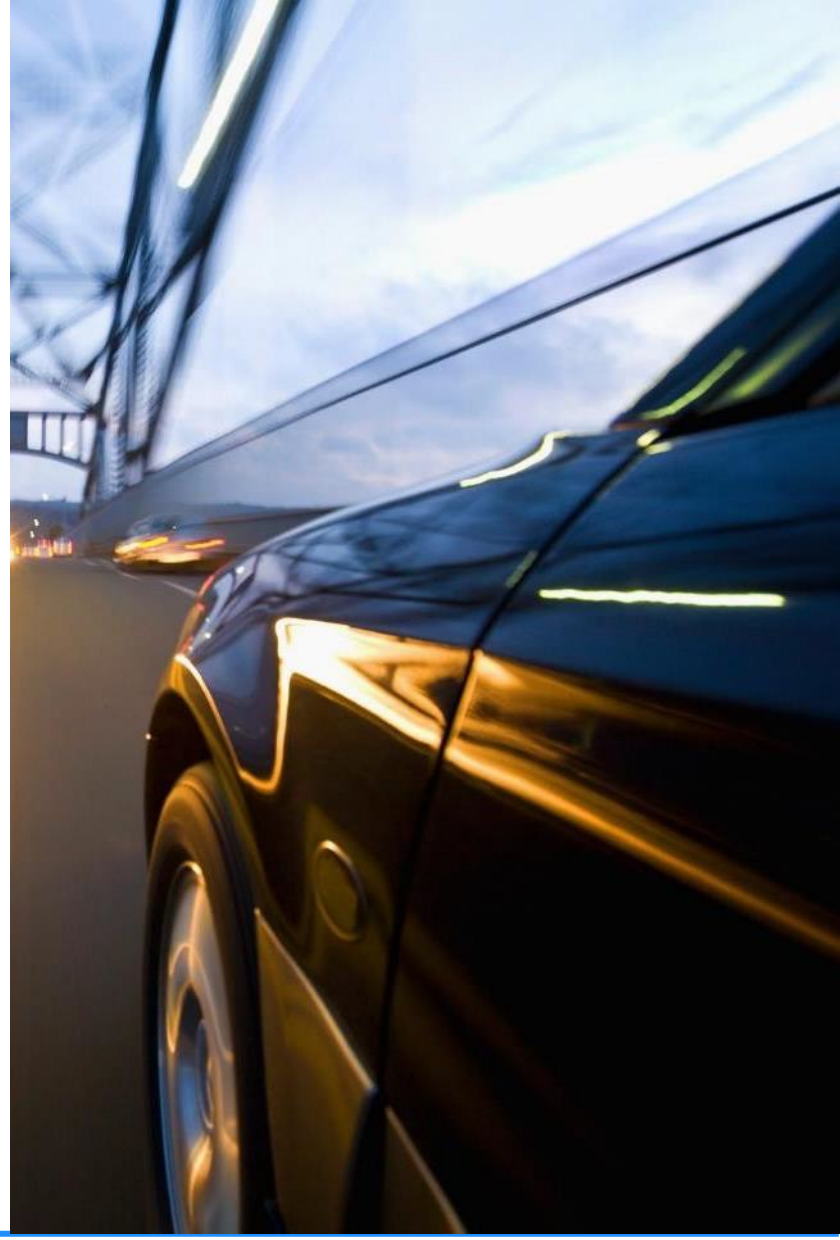
USE CASES & OBJECTIVE

Customer leverages EPD collaboration as replacement for cFolders to ensure timely availability of the **invoices** to customers and carriers for **custom clearance of shipments**.

- Solution to integrate and streamline product and data exchange across extended enterprise
- Customer adopted SAP EPD to benefit **300+ users globally** for **collaborations** and sharing documents seamlessly with customers and carriers

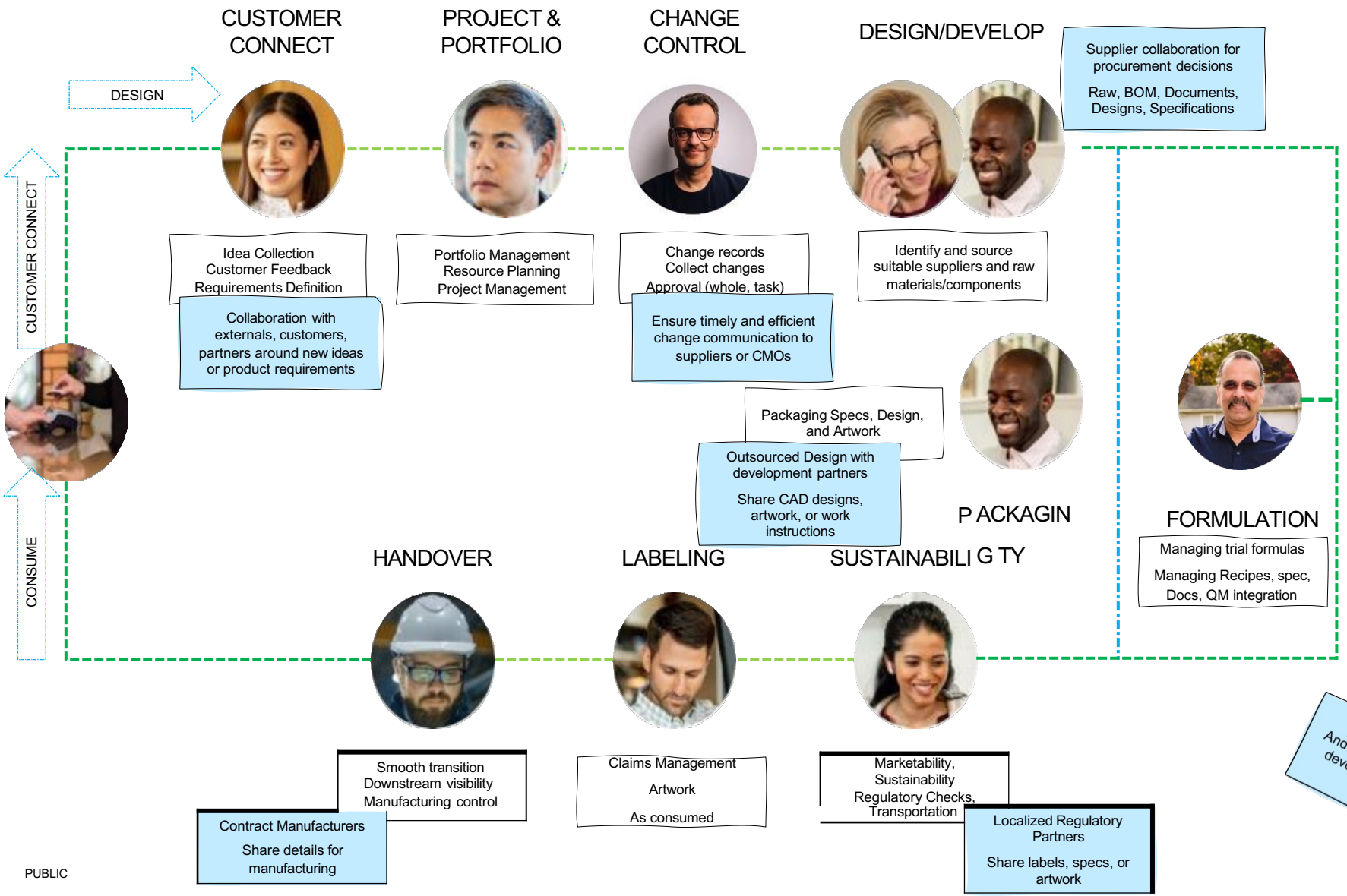
WHY SAP?

- ✓ Multi factor authentication enabled for secure document access for customer and its users
- ✓ Custom attributes such as search/sort/filter provided ease of document access for users
- ✓ Better control mechanism for managing users access for internal and external users
- ✓ Compliance without human intervention for documents: "Auto deletion after retention time"
- ✓ Simple browser-based FIORI UI, supporting mobile clients
- ✓ Clients/Business owners can subscribe for email notification for specific folders



Industry	Employees	Featured Solutions and Services
Automotive	> 125,000	SAP Enterprise Product Development (EPD): Collaboration

Streamlining Collaboration in the Product Formulation Process



Digitally Enhanced Product Development

- Full visibility across complete Product Lifecycle
- Integrated collaboration with internal and external business partners
- Regulatory compliant and cost effective product development

Developing the right product across the extended enterprise with SAP Enterprise Product Development

COMPANY

Global food company headquartered in Europe, that is one of the world's largest exporters of organic meat. As a cooperative they have an obligation to receive the livestock that their cooperative members supply. The company sells fresh and processed meat via their various brands along with a series of byproducts to customers in 130+ countries and went live with SAP EPD collaboration in May 2023.

USE CASES

- Collaborate with suppliers on documents and contracts in a process driven way to streamline information exchange
- Collaborate with suppliers on specifications for processed meats and byproducts, ensuring regulatory compliance, and maintaining a single source of truth

WHY SAP?

In line with their ambition to continually strive to improve their farm to fork process. SAP is an essential strategic component of the customer's future digital platform, that will enable them to achieve:

- ✓ Faster time to market
- ✓ More sustainable services and products for their end consumers
- ✓ Improved customer satisfaction

Industry	Suppliers	Revenue	Featured Solutions and Services
Consumer Products	Around 6,000	Approx 8bil USD	SAP Enterprise Product Development (EPD): Collaboration and Specification

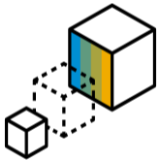
Harnessing Collective Intelligence: Collaborative Edge using EPD

Supplier Collocation

- **Optimize** supply chain to ensure time delivery of materials and **minimize** production delays.
- Foster **Innovation** – Enable access to **specialized** knowledge and valuable **insights**
- Support sustainability efforts - work hand-in-hand with suppliers to ensure adherence to **ethical** and environmental standards, driving **responsible** sourcing and production **practices**

BOM Collaboration

- **Accurate and Aligned Production** ensures that both the **primary manufacturer** and **co-manufacturer** have a synchronized understanding of the **required** components, quantities, and assembly processes
- Facilitate **real-time** communication between manufacturers and co-manufacturers.
- ensures that both parties are aware of and adhere to regulatory requirements for ingredients, labeling, and manufacturing processes



Design Collaboration

- Enable stakeholders to **visualize** and interact with designs in a **realistic digital** environment
- **Red lining** design documents with feedback, suggestions, or changes to **facilitate** collaborative **revisions**
- Aligns packaging aesthetics with brand identity, ensuring **consistency** across product lines

Document Collaboration

- **Ensures** regulatory compliance by providing a comprehensive record of processes, materials, and actions, facilitating transparency and **accountability** in adherence to legal and industry standards
- **Documents** such as Certificates of Analysis (COA), Safety Data Sheets (SDS), and quality test results can be collaboratively managed to ensure **accuracy**, consistency, and regulatory **compliance** throughout the product lifecycle

05 SAP Enterprise Product Development Strategic Roadmap

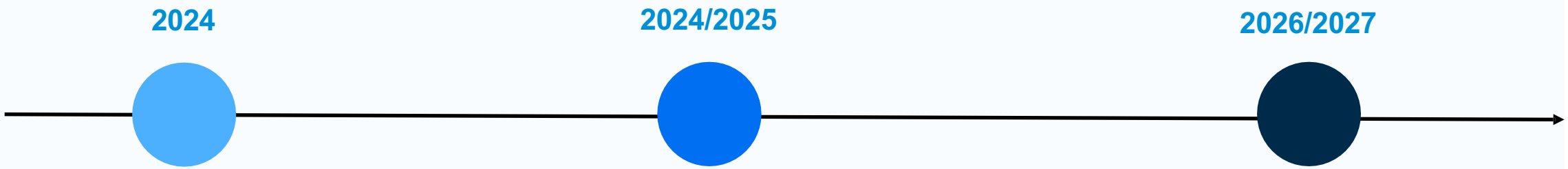
Carsten Dietze-Selent
SAP

Ismail Serin
SAP

- Product Goals
- Roadmap highlights
- Summary

SAP Enterprise Product Development: Long-term Product Goals

Goals



Enterprise PLM in the Cloud
- Provide a modern PLM process for Discrete and Process Industries
- Fast access to new innovations based on the Digital Thread
- Expand integrations with S/4HANA and SAP Digital Supply Chain

AI-enabled PLM
- Expand AI scenarios and infuse it into core PLM process steps
- Reduce manual and repeatable user tasks
- Leverage knowledge graphs for product mining scenarios

Network-aware PLM
- Continuously evolve the suite and expand integrations scenarios
- Enable organizations to establish KPI-driven PLM processes
- Expand collaboration and business network scenarios

Enablers

Process-Centric Enterprise PLM in the Cloud

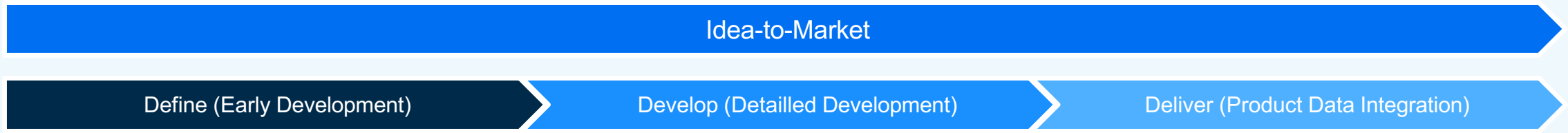
PLM as a platform for partners

Continuous Feature Delivery (CFD)

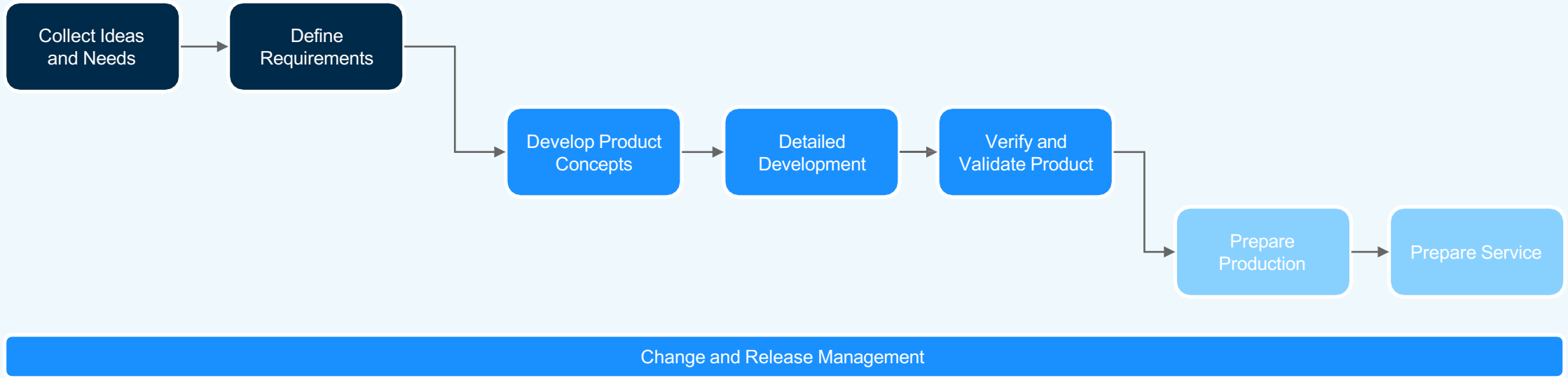
Simple and fast Adoption

PLM Process for Discrete and Process Industries

New Product Development & Introduction (NPDI) process

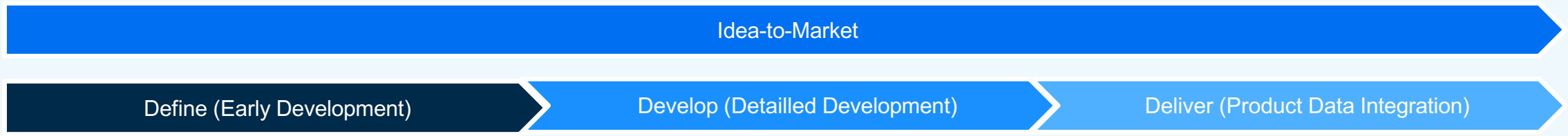


Core business process steps in SAP Enterprise Product Development

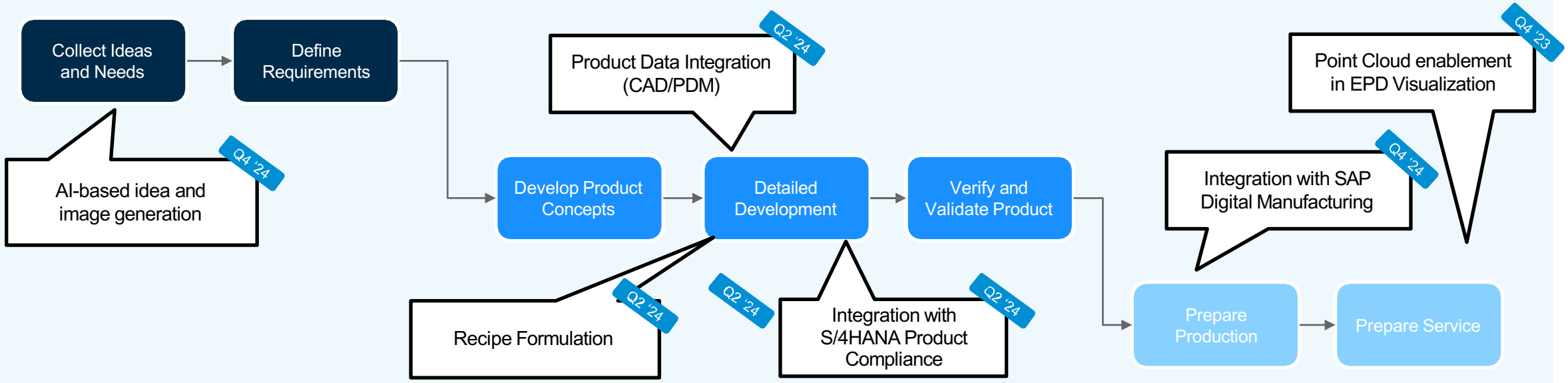


Roadmap Highlights

High level process



Planned innovations in the end-to-end process



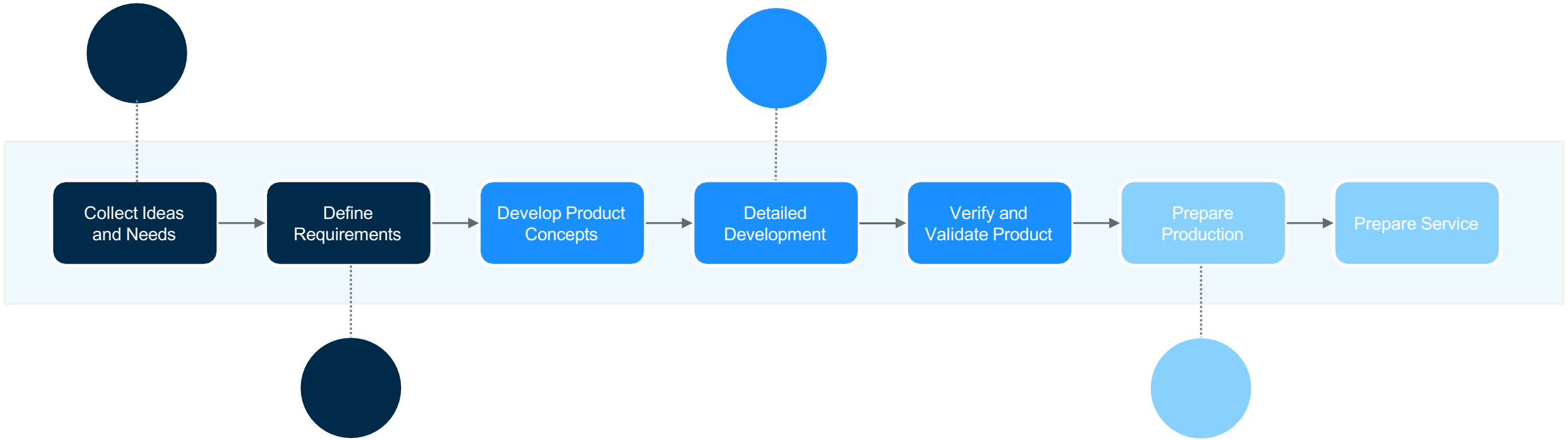
AI Infusion in PLM

Prompt Example

Analyze customer feedback and reviews to generate insights on potential improvements

Prompt Example

Generate 3 draft recipes based on the the requirement specification



Prompt Example

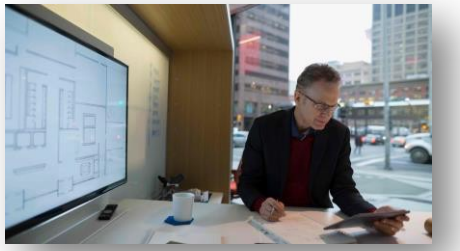
Generate a detailed requirement specification of a new idea that address a need

Prompt Example

Create a Manufacturing Bill of Material based on a the winning Recipe

Digital Thread for Discrete Industries

"I need to understand the market and define requirements"



"I need to design a drive-system and provide break function"

"I need to create an M-BoM and Production Instructions"

"I need service and operate the asset"

Digital Thread — Digital Thread — Digital Thread

Product Management | Product Development | Manufacturing | Asset Management

EPD

Ideas, Needs & Requirements → Logical and Functional Models → Enterprise Product Structures → Manufacturing Reference Structures (Q4 '24) → Equipment Reference Structures (Q4 '24)

3rd party

CAD and PDM Systems (Q2 '24)

S/4HANA Cloud & SAP Digital Manufacturing

M-BoM

Manufacturing Genealogy (Q4 '24)

Functional Locations and Equipments

Digital Thread for Process Industries

“I need to create requirements for the product brief”

“I need to develop specifications and recipes”

“I need to create an M-BoM and Production Instructions”

“I need to manufacture and deliver the product”

Digital Thread — Digital Thread — Digital Thread

Product Management & Marketing | Product Development | Manufacturing Preparation | Manufacturing Execution

EPD

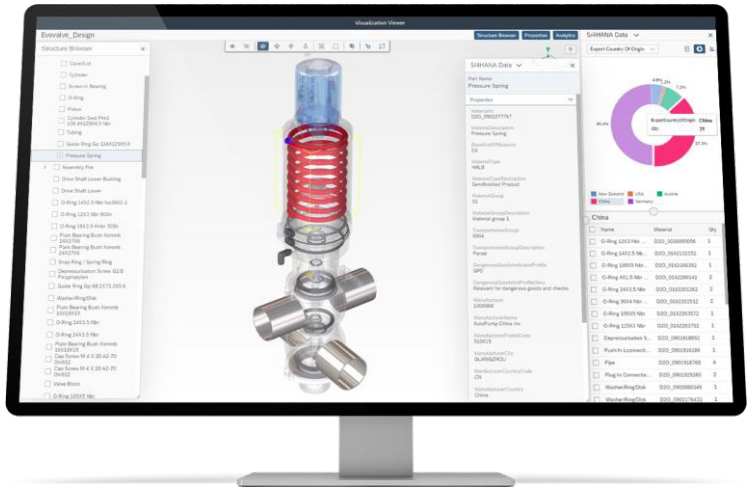
Product Brief ⟷ Specifications ⟷ Recipes (Q2 ‘24) ⟷ Product Structure

S/4HANA Cloud
& SAP Digital Manufacturing

Product Structure ⟷ M-BoM ⟷ Production Instruction / Bill of Process ⟷ Production Order

SAP Enterprise Product Development

Summary



SAP Enterprise Product Development enables product centric organizations to define, develop, and deliver innovative and sustainable products

OBJECTIVE

Provide end-to-end business processes to manage product data for standard and configurable products.

CAPABILITIES

- Innovation & Requirements Management
- Systems Engineering
- Product Data Management
- Collaboration
- Intelligent Handover
- Visualization
- Insights (Analytics & Reporting)

INTEGRATIONS

- S/4HANA Cloud, public and private edition
- SAP Digital Manufacturing
- SAP Asset Performance Management

BENEFITS

Grow market share
Listen to the voice of customer and drive data-driven product improvement decisions.

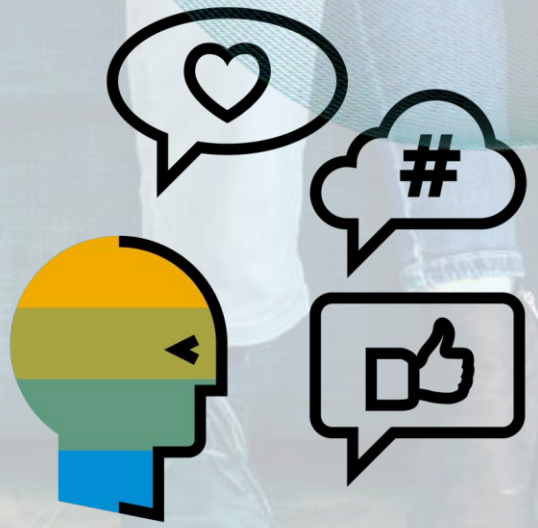
Shorten time-to-market
Coordinate multi disciplinary teams and heterogenous systems to improve operational efficiencies.

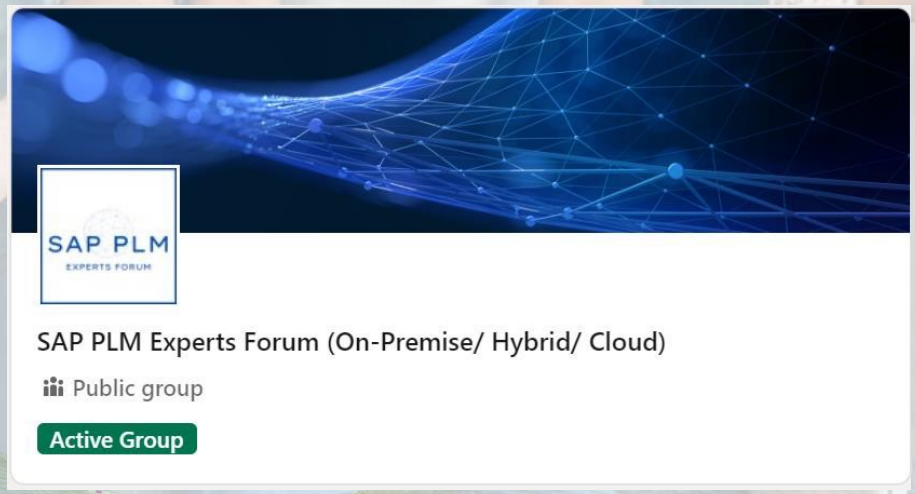
Reduce cost
Leverage workflows, collaborations and new technologies (e.g. AI) to reduce redundant work.

Ensure compliance, quality and sustainability
Integrate product data with expert systems to ensure all product requirements are fulfilled.

PUBLIC

Q&A





Join the SAP PLM Experts Forum (On-Premise/Hybrid/Cloud) group on LinkedIn and be a **part of the community!**

https://tinyurl.com/sapplm

Thank you :)

- SAP Enterprise Product Development

Share your valuable feedback!