



Standardization in the Context of PLM and ERP Processes

Opportunities and Experiences

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TESIS PLMware – Overview

Focus:

Optimization & integration of product development and business processes

Founded in 1988

- Based in Munich (D) and Chicago (USA)
- > 30 employees, member of the TESIS group (>160 employees)
- ~ 200 customers worldwide

Siemens PLM Software Partner since 1992

- Software development
- Consulting and implementation
- Reseller for Teamcenter and NX



SAP Software Solution Partner since 1997

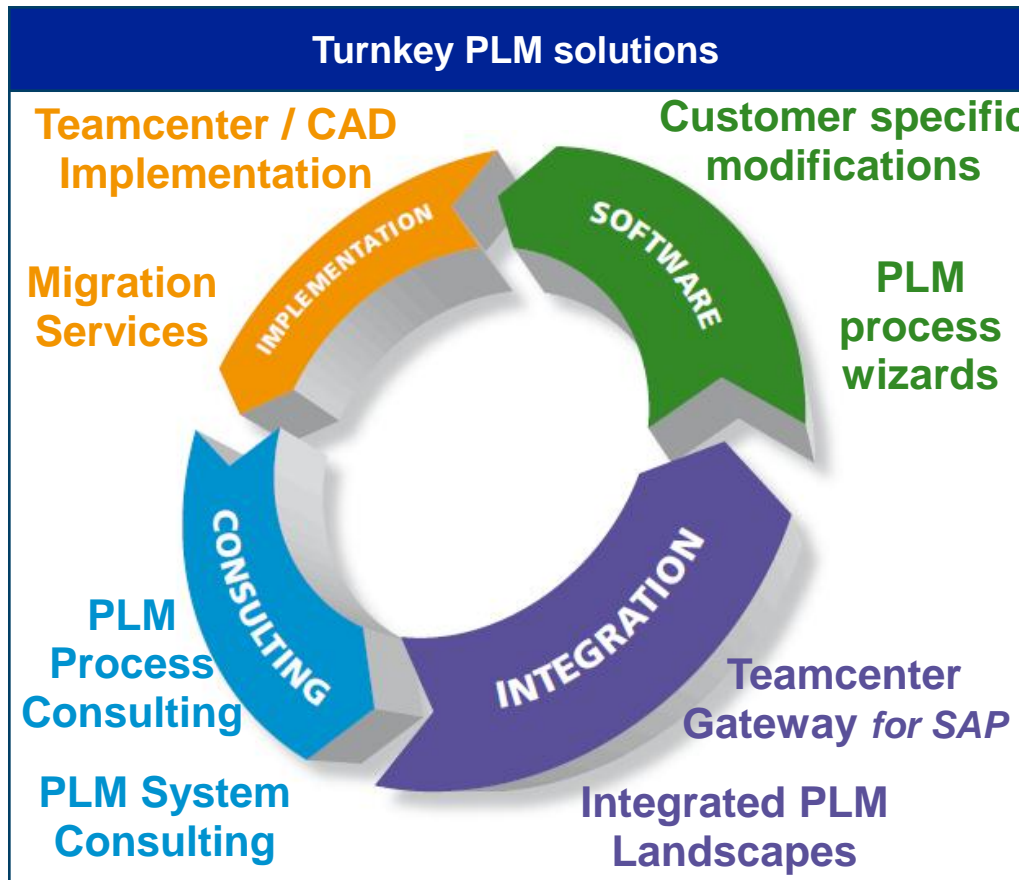


Complete PLM turnkey solution package
Consulting, Integration, Software, Implementation



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TESIS PLMware – Solution Portfolio



- Approach**
- **Efficient** – Solutions based on standard software to support end-to-end business processes
 - **Flexible** – Implementation tailored to the specific customer requirements
 - **Customer focused** – Specially developed solutions for the manufacturing industry
 - **Innovative** – Continuous improvements in software & processes
 - **Comprehensive** – Expert support from a single source
 - **Future proof** – >20 years of experience, use of proven Siemens PLM Software standard products, satisfied customers

▶ Offerings with products and solutions from TESIS PLMware and SIEMENS PLM Software

- **Standard and purchase parts in the PLM / ERP**
- **Tools involved**
- **Sample process**
 - Typical use cases
 - Customer examples
 - Potentials and benefits
- **Project approach**
- **Summary**

Historic context

- PDM environments usually driven by mechanic development; evolution in parallel with the (3D) MCAD world
- Specific tools for standard and purchase parts
- Only limited cross-domain information exchange
- PLM processes rarely supported by IT tools → no seamless processes across systems

Situation today

- (Customer) PLM / PDM environments have evolved
 - Increased benefits
 - Seamless processes can be realized with the help of IT tools
- Increasingly complex requirements for product development
 - Product variants / individual customer requirements
 - Cost pressure
 - Developing time / multifunctional development teams
 - Service
 - Globalization

Situation today

- (Customer) PLM / PDM environments have evolved

- Increased benefits

Optimizing the standard and purchase part process as a way

- Increasingly complex requirements for product development

to ensure competitive advantage

- Product variants / individual customer requirements

- Cost pressure

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Essential Requirements

Part Numbers

Simple Enterprise Integration and release Process

CAD Information

Size, material, weight

Supplier Information

Specification, effectivity
dates, usability status, terms
of delivery

PLM Information

Project data, export
regulations, status

ERP Information

In-stock, price,
manufacturing information,
alternatives

Preferred items

Integration

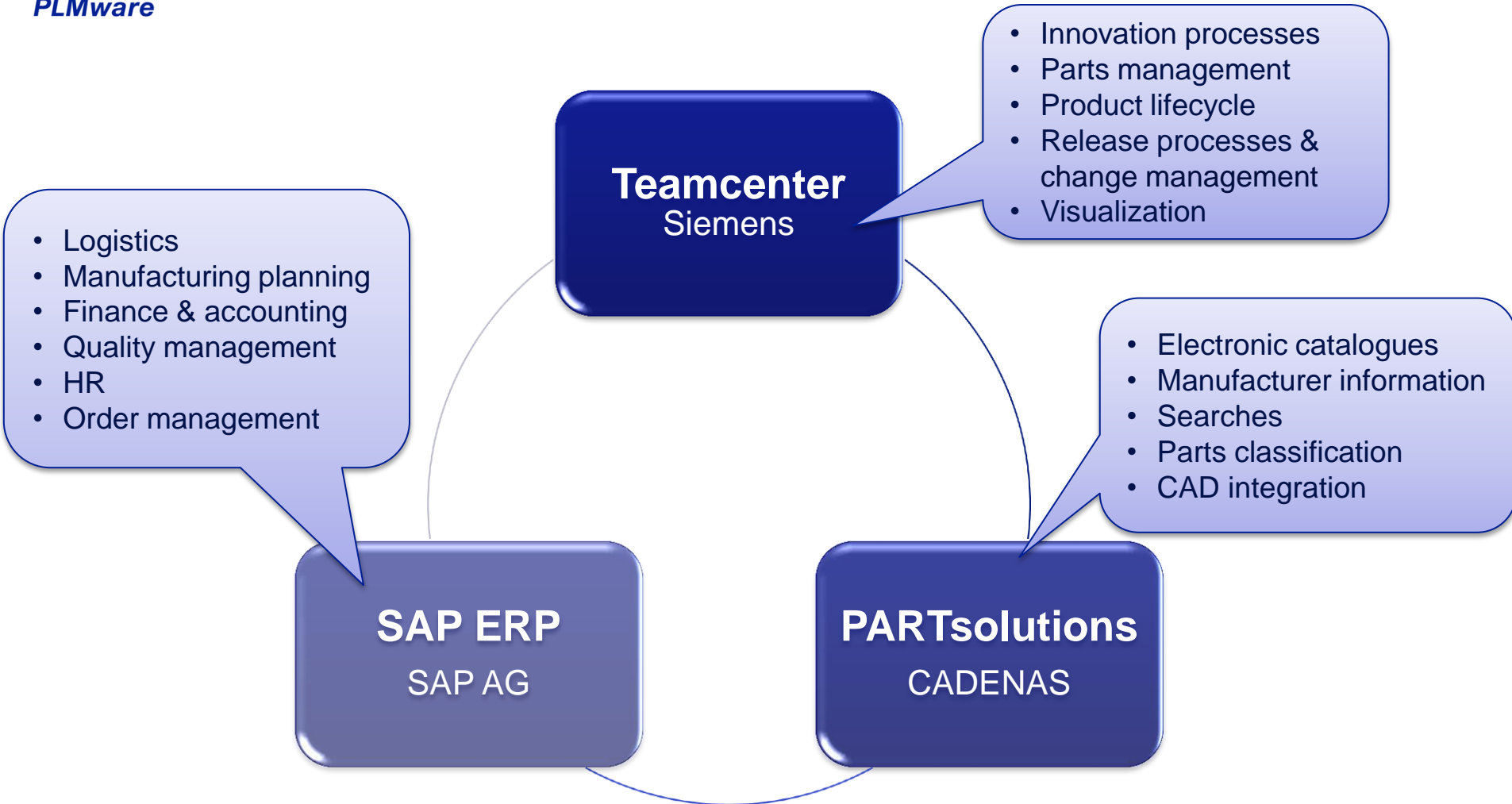
Providing of required
functions based on identical
data

Search / Comparison

Attribute search, geometric
search

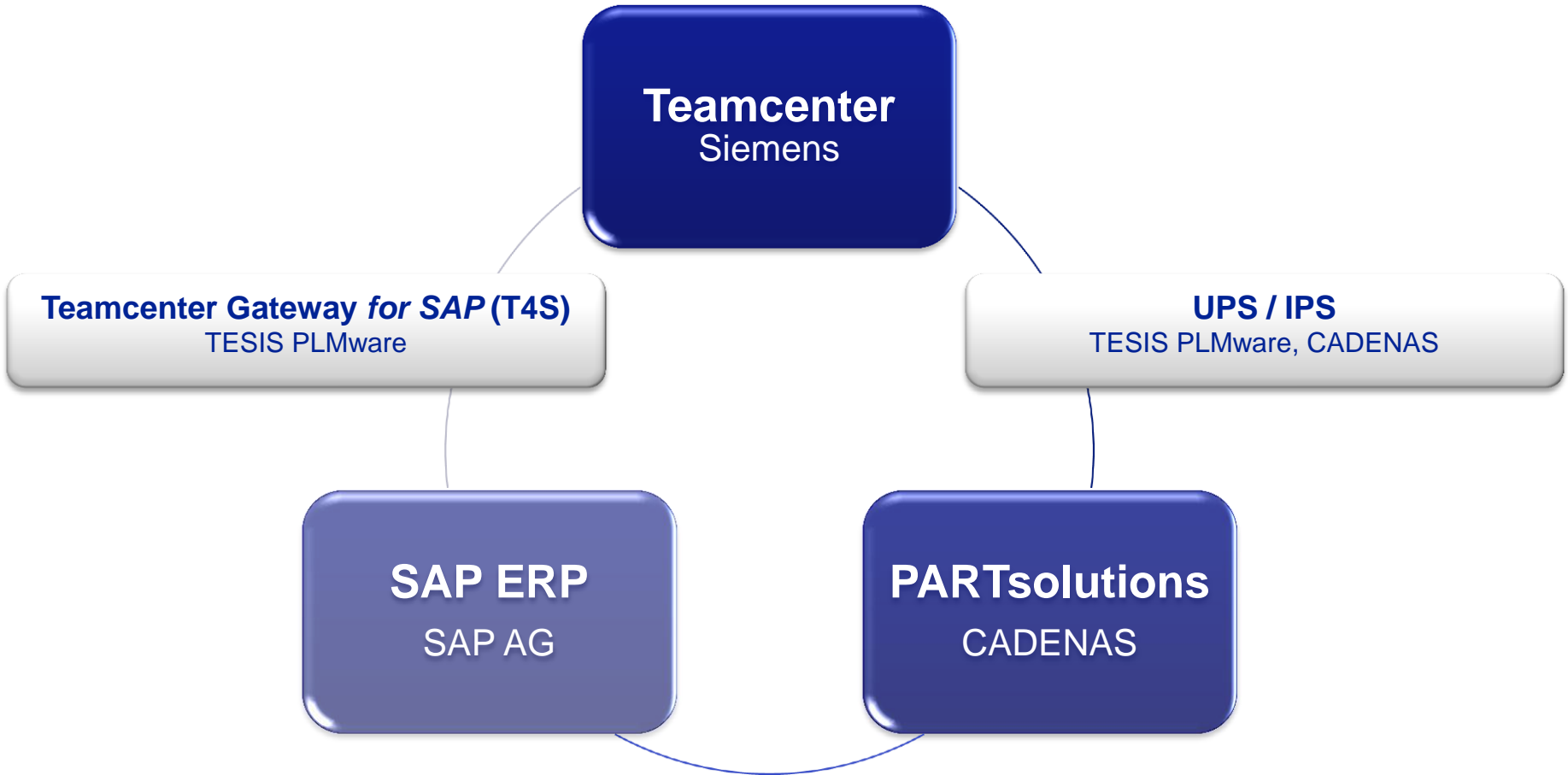
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Tools Involved



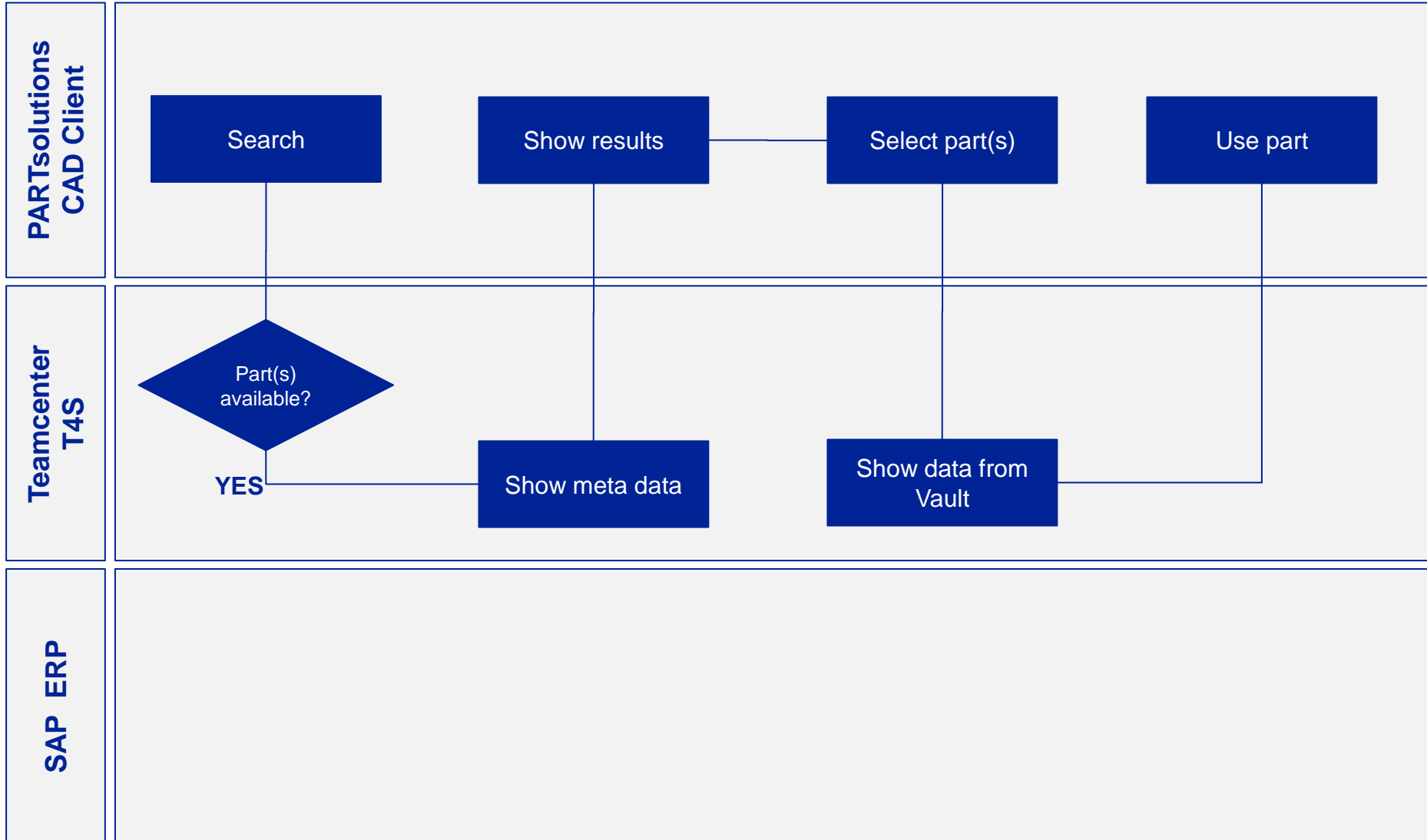
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Tools Involved



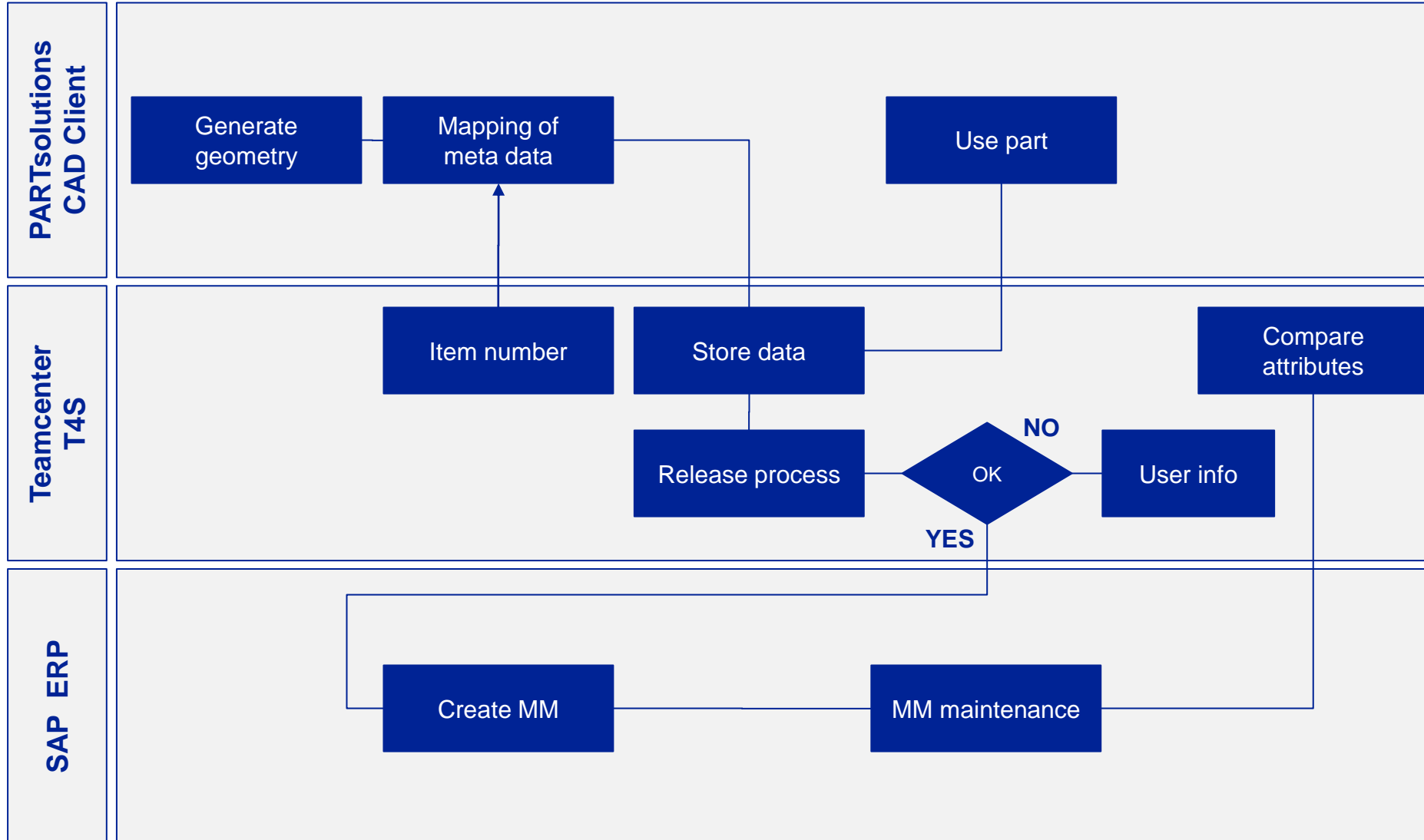
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Sample Processes – Parts Usage



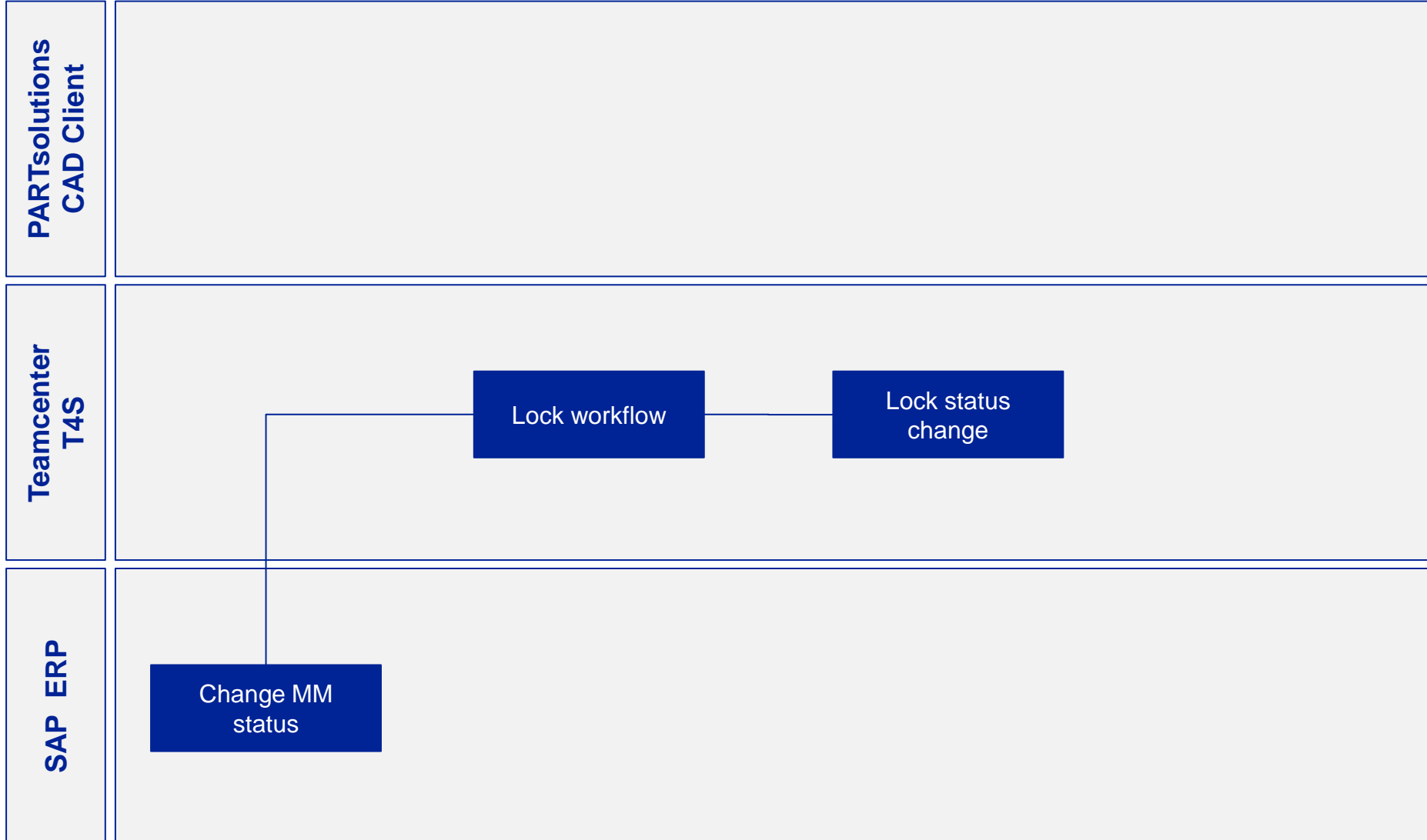
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Sample Processes – Concept Parts



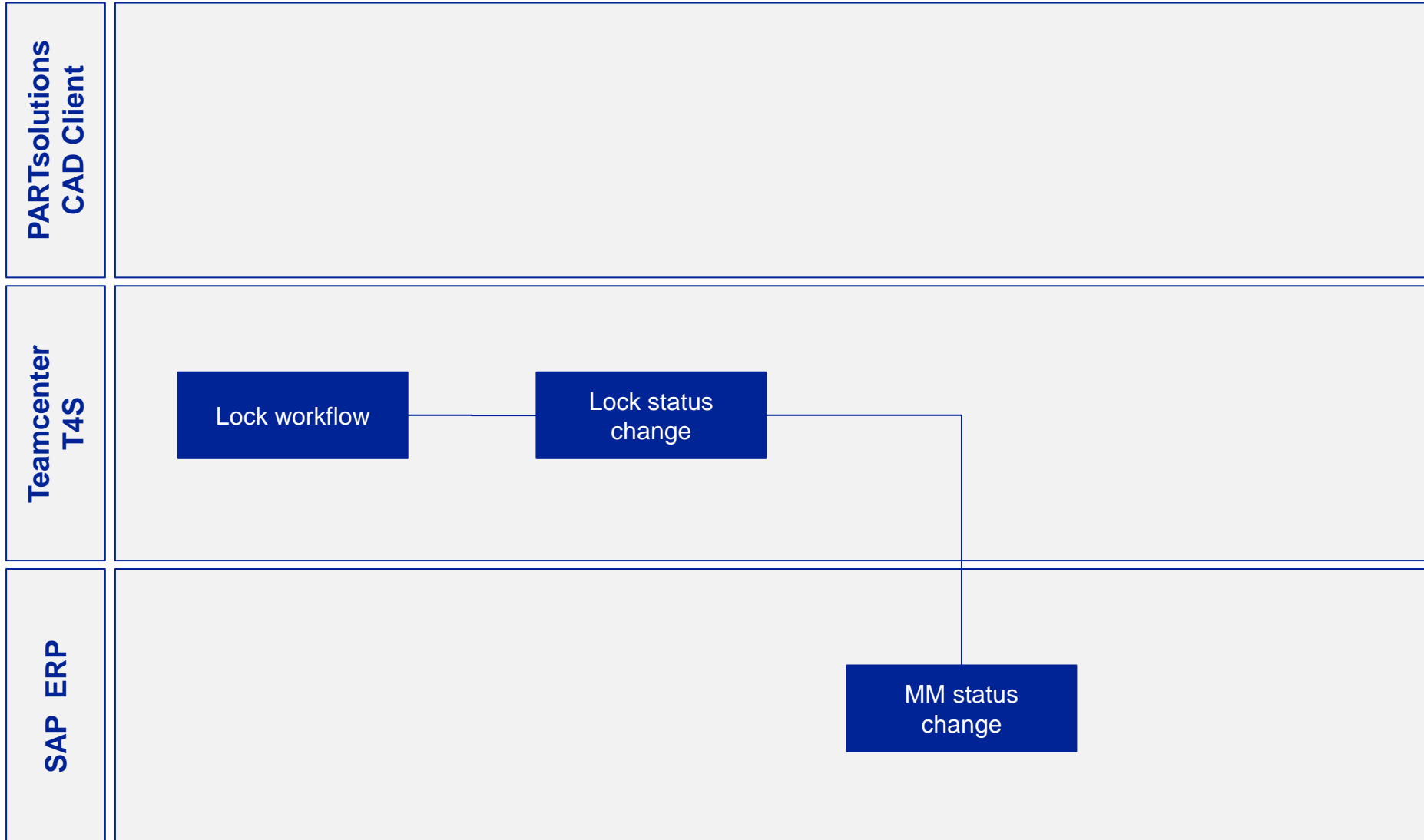
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Sample Processes – Locking (ERP)



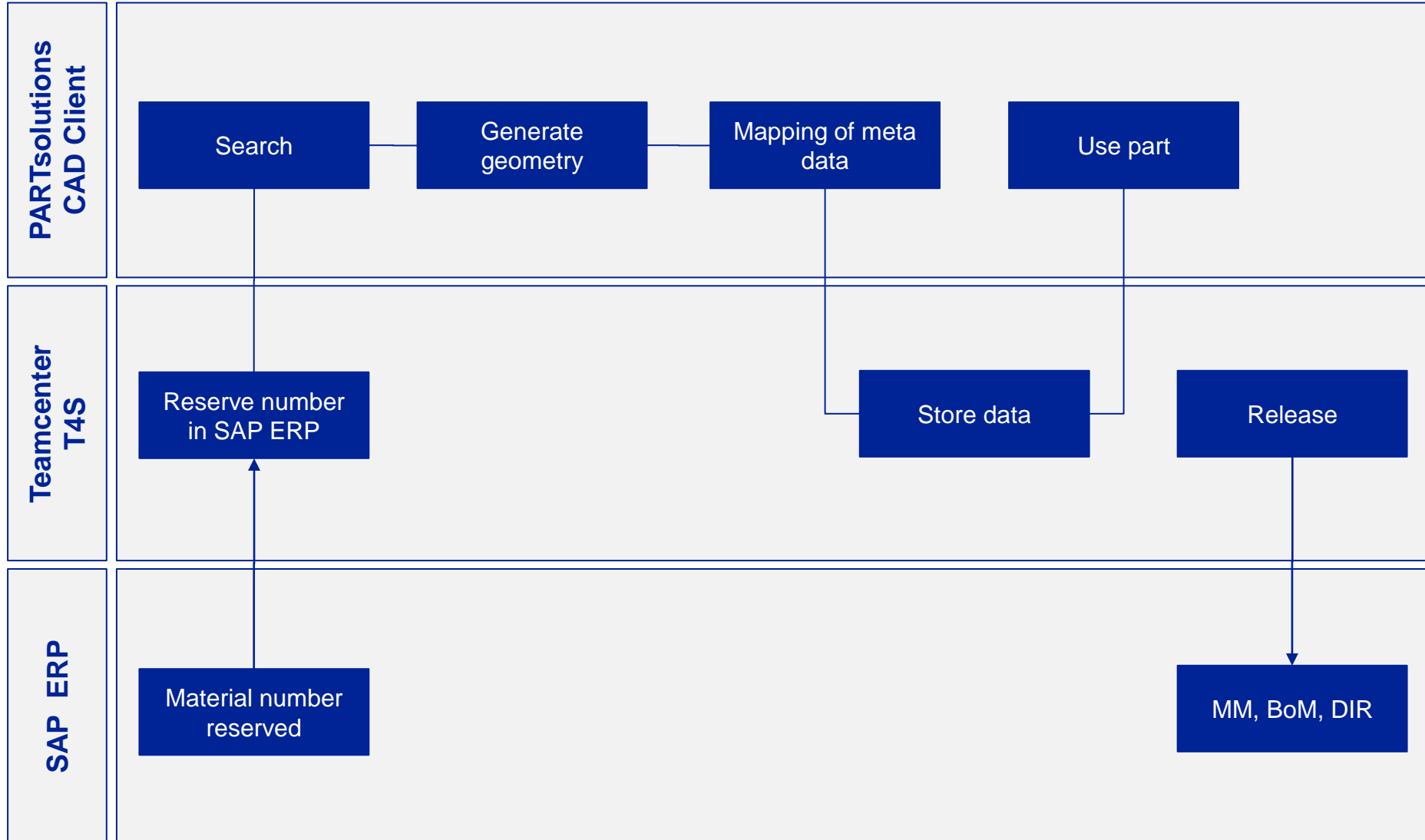
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Sample Processes – Locking (PLM)



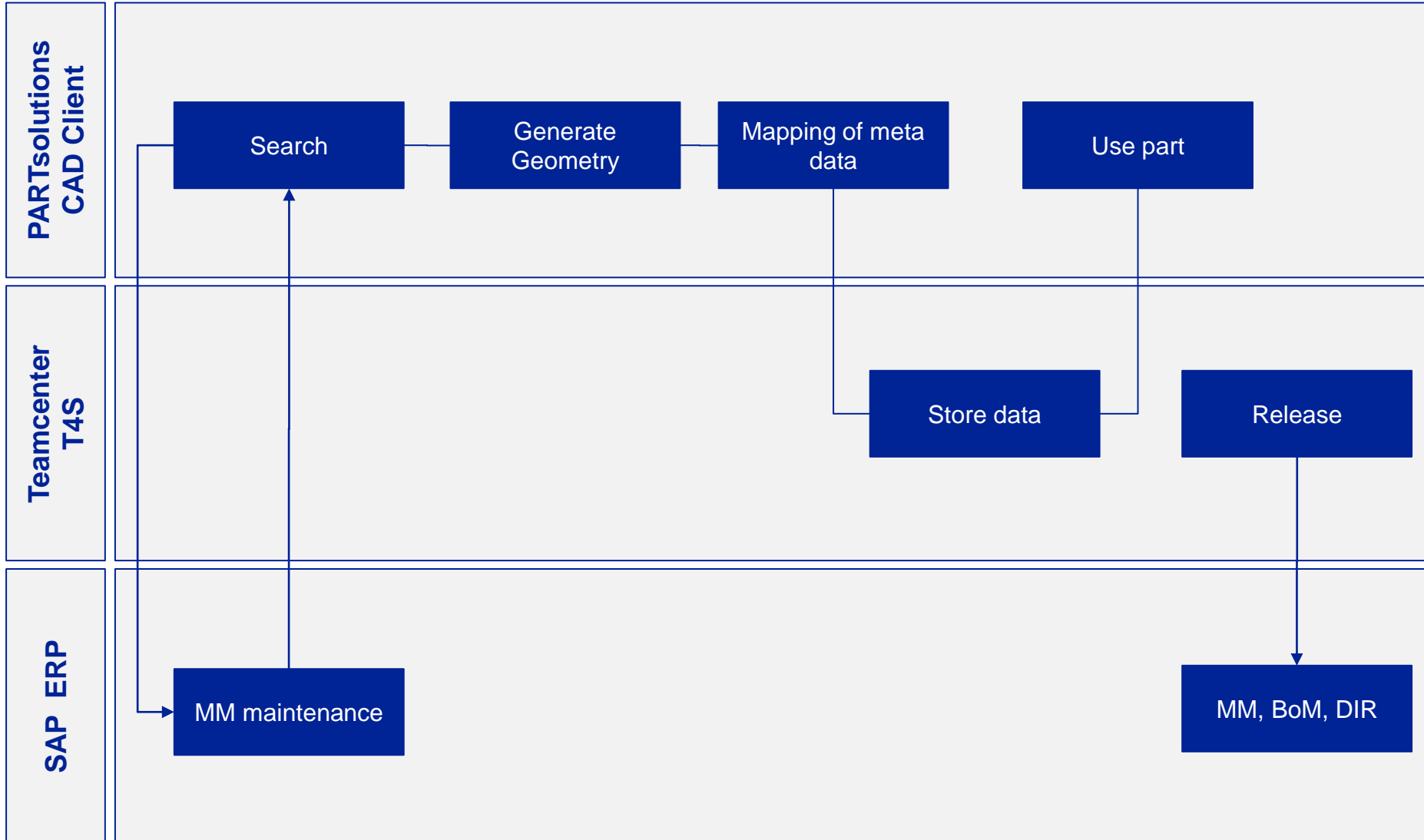
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Customer Examples – Concept Parts (A)



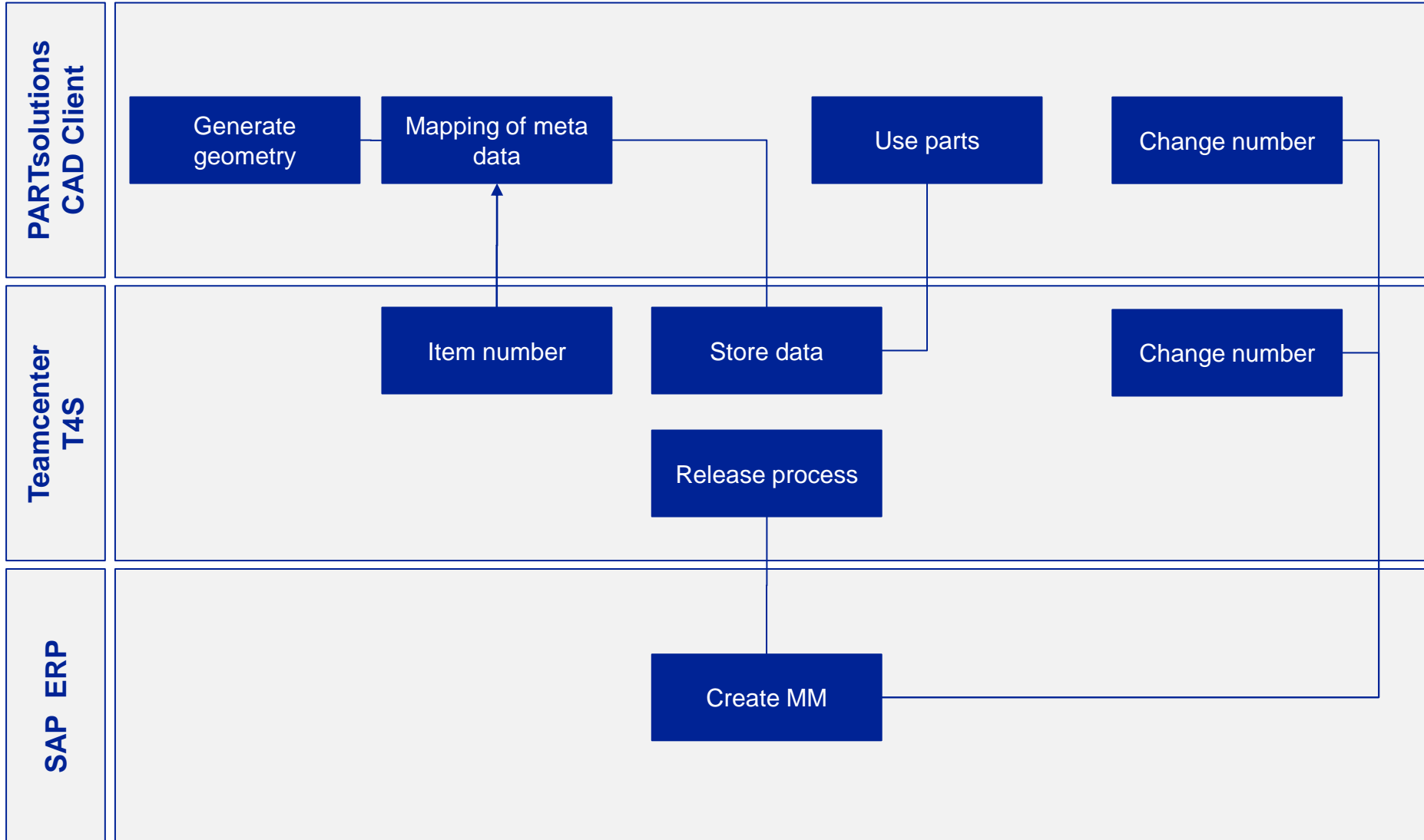
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Customer Examples – Concept Parts (B)



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Customer Examples – Concept Parts (C)



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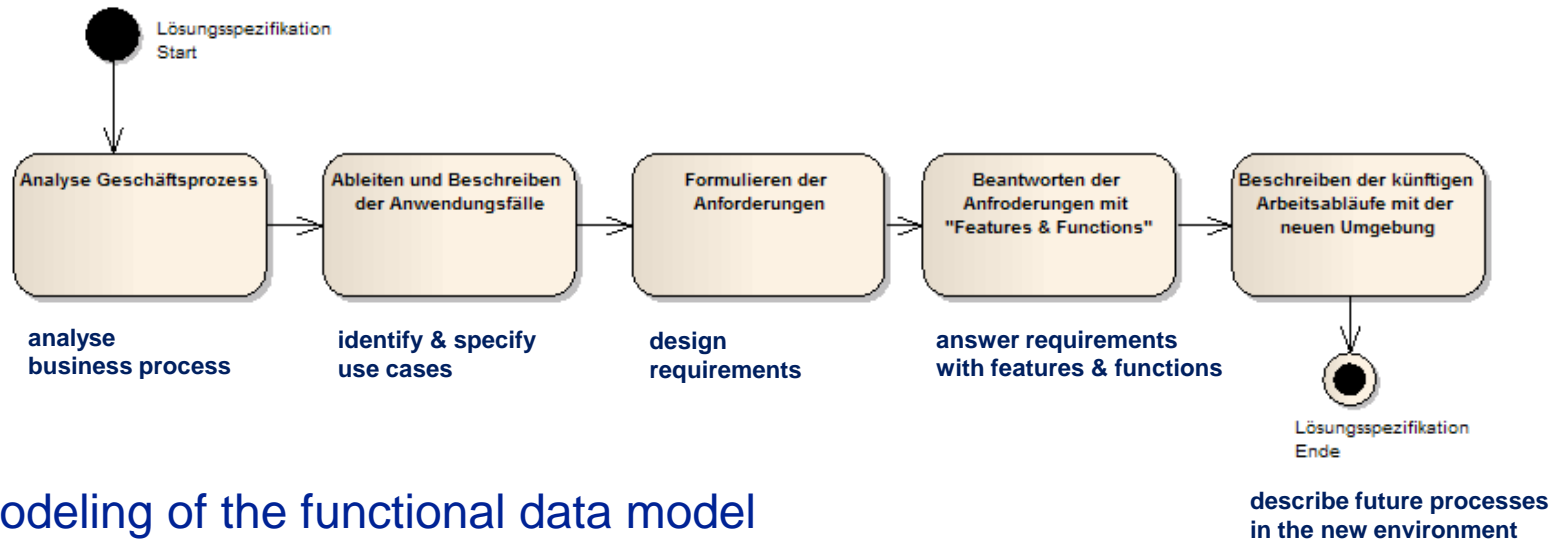
Potentials and Benefits

- Electronic catalogues can be used as a **virtual encyclopedia** in the entire PLM process, containing all parts-specific as well as essential company specific information (currently > 90 million parts)
- **Up-to-date supplier information** at all times
- **Support of the standardization process**
 - Easy searches (re-use of parts, use of purchase parts)
 - Standardized naming
 - Relevant information is available across all systems
- Optimum **support of the concept parts process**
- Synchronization of PLM, ERP and catalogue information ensures that **the „right“ parts are used**
- **Consistent quality** of Master Data
- Lay the basics for a **seamless BOM process** (use the correct item number right from the beginning)
- **Standardized release processes** for all parts and document to ensure high product quality
- **Reliable distribution of process results** into the different company departments

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Project Approach

- Identifying relevant processes



- Modeling of the functional data model
 - Business objects (articles, documents, relations)
- Integration into the existing Teamcenter, SAP ERP, PARTsolutions landscape
 - Technical data model
 - Release and change processes

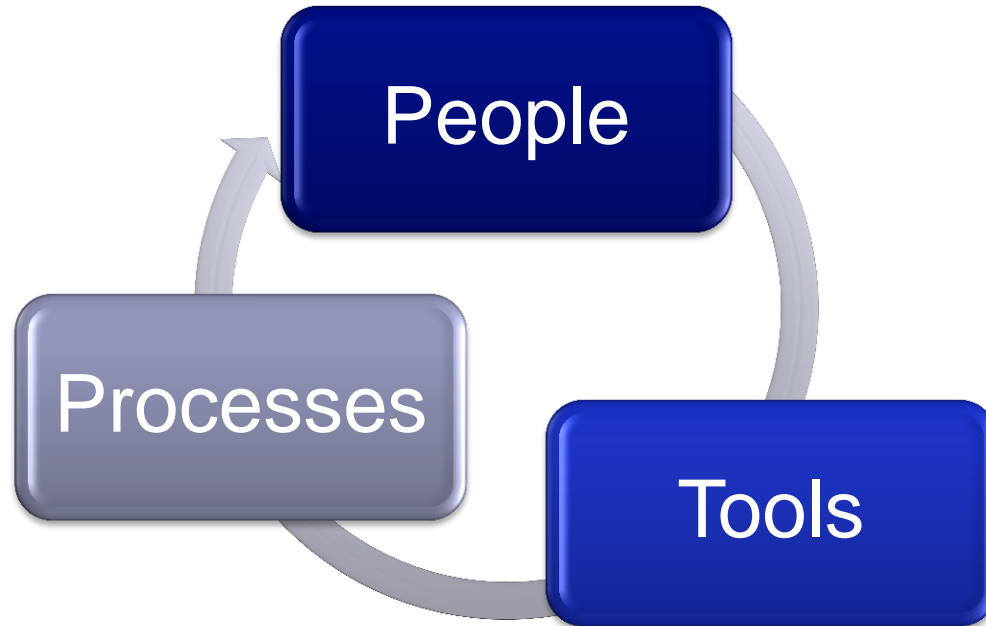
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Summary / Outlook

- In many cases, **existing tools & technologies can be used** and adapted / configured to realize new potentials for efficient business process support.
- The **integration of the different tools can also be seen as a chance.** — Now it's the time to select the right tools for the respective use cases.
- **Process automation** enables each user to provide and find *all* relevant information at the right time, whenever he needs it. **Process integration** allows for optimized business processes.
- Integration projects are best designed by **interdisciplinary project teams**, including at least one representative of every department. A clear vision for efficient company processes is a must.
- **Only processes that are filled with life** can deliver the results they are supposed to deliver. Don't forget employee training.
- **Partnership CADENAS — TESIS PLMware — Siemens offers new perspectives** for better process integration and for optimum use of the strengths of the individual solutions.

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The Key to Success





Thank you.

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