

VORTRAG 09 · 13:35 – 14:15 UHR · HAUPTBÜHNE „PANORAMIC“ · DESIGN & MANUFACTURING

# Einfach mal machen

3D und Produktdaten für alle

**Mathias Voigt**

Bereichsleiter Maschinen- & Anlagenbau · Contelos GmbH

**Sven Dickmans**

Senior PDM/PLM Solution Engineer · Autodesk

# Agenda

## 1 Problem

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Herausforderungen  
des Arbeitsalltags

## 2 Lösung

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Erweiterung um  
neuartige Standards  
und Technologien

## 3 Umsetzung

---

Kleine Schritte,  
Schnelle Erfolge



**PLM**



**P**rodukt **L**eistung **M**aximieren



**P**rodukt

**L**eistung

**M**aximieren

**P**rojekt

**L**aufzeit

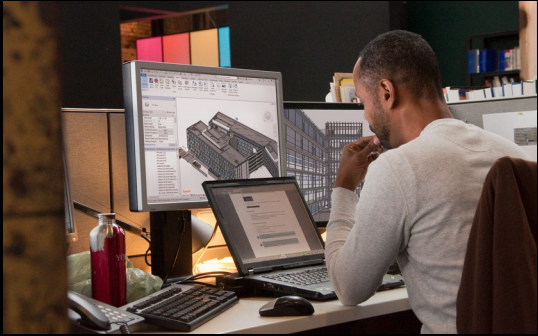
**M**inimieren

A row of industrial robotic arms, likely for welding or assembly, stretching into the distance. The arms are dark blue with yellow joints. The background is dark and slightly blurred, emphasizing the robots.

# PLM

## Wettbewerbsvorteil

Die Zeit zur **Einführung neuer Produkte** muss kontinuierlich weiter gesenkt werden, aber es fehlt die Zeit dafür



Innovationen werden ausgebremst, weil Mitarbeiter **manuell Stücklisten kopieren** und abgleichen müssen

Immer komplexere Produkte erfordern neue Prozesse um **Mechanik, Elektronik und Software** als Gesamtsystem zu koordinieren



Sales

CRM

Die Bestrebungen zur Produktkostenreduktion stehen im Gegensatz zu einer steigenden **Produktvielfalt** und anhaltenden Ressourcenengpässen



Trotz aufwändiger Datenbereitstellung kosten **Fehlbestellungen** und Fehllieferungen durch Lieferanten Zeit und Geld



**Gesetzesvorgaben** zur Prozessabbildung und Datenerfassung stellen neue Herausforderungen an aktuelle Systeme und etablierte Arbeitsweisen (DPP)



Unkontrollierte Änderungen führen zu **falschen Unterlagen** in der Beschaffung, Produktion und im Service



Die Bearbeitung immer komplexerer **Angebotsanfragen** erfordert bessere Koordination, Standardisierung und Automatisierung



**Service-Techniker** benötigen aktuelle Zeichnungen und Teilelisten. Ihre Erfahrungen könnten helfen, Produkte zu verbessern.

Die Prozessplanung hat Schwierigkeiten, die **Fertigungsstücklisten** mit den Stücklisten aus der Entwicklung im Einklang zu halten und gleichzeitig neue Verfahren an mehreren Standorten zu etablieren



Sales

CRM



M-Engineering

PDM



E-Engineering

ECAD



Purchasing

ERP



Supplier

Mail



Production

MES



Service

PDF

**Multiple, disconnected data sources meet manual process control**



Requirements  
Deliverables  
Issues  
Tasks  
Schedule  
Changes



Digital Product  
Passport



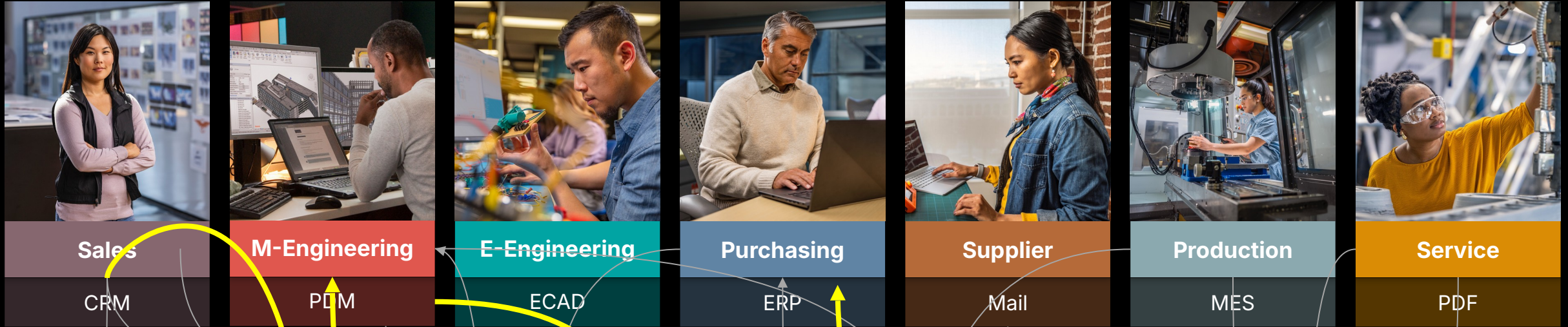
Drawings  
Schedule  
Design Changes



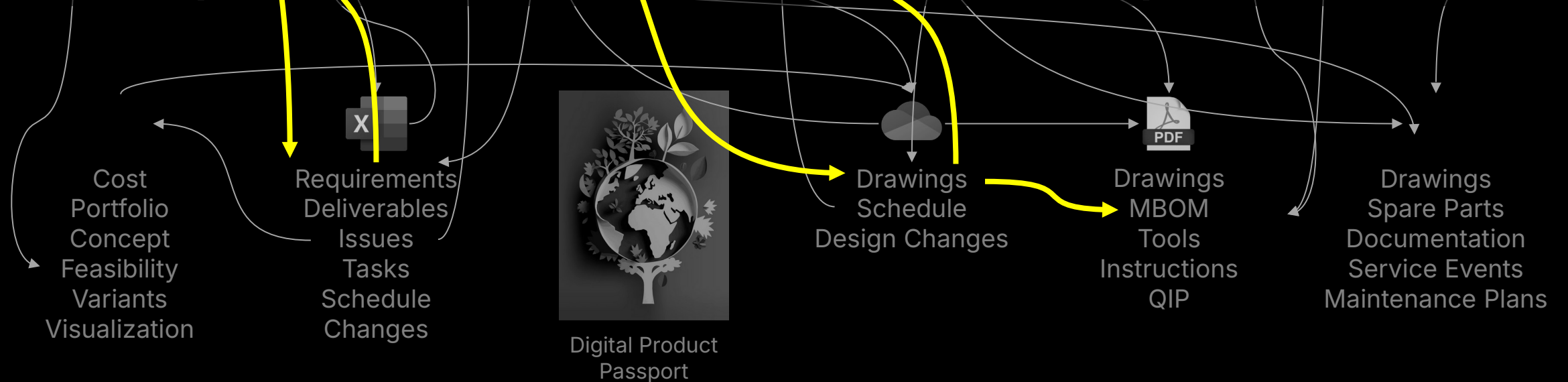
Drawings  
MBOM  
Tools  
Instructions  
QIP

Drawings  
Spare Parts  
Documentation  
Service Events  
Maintenance Plans

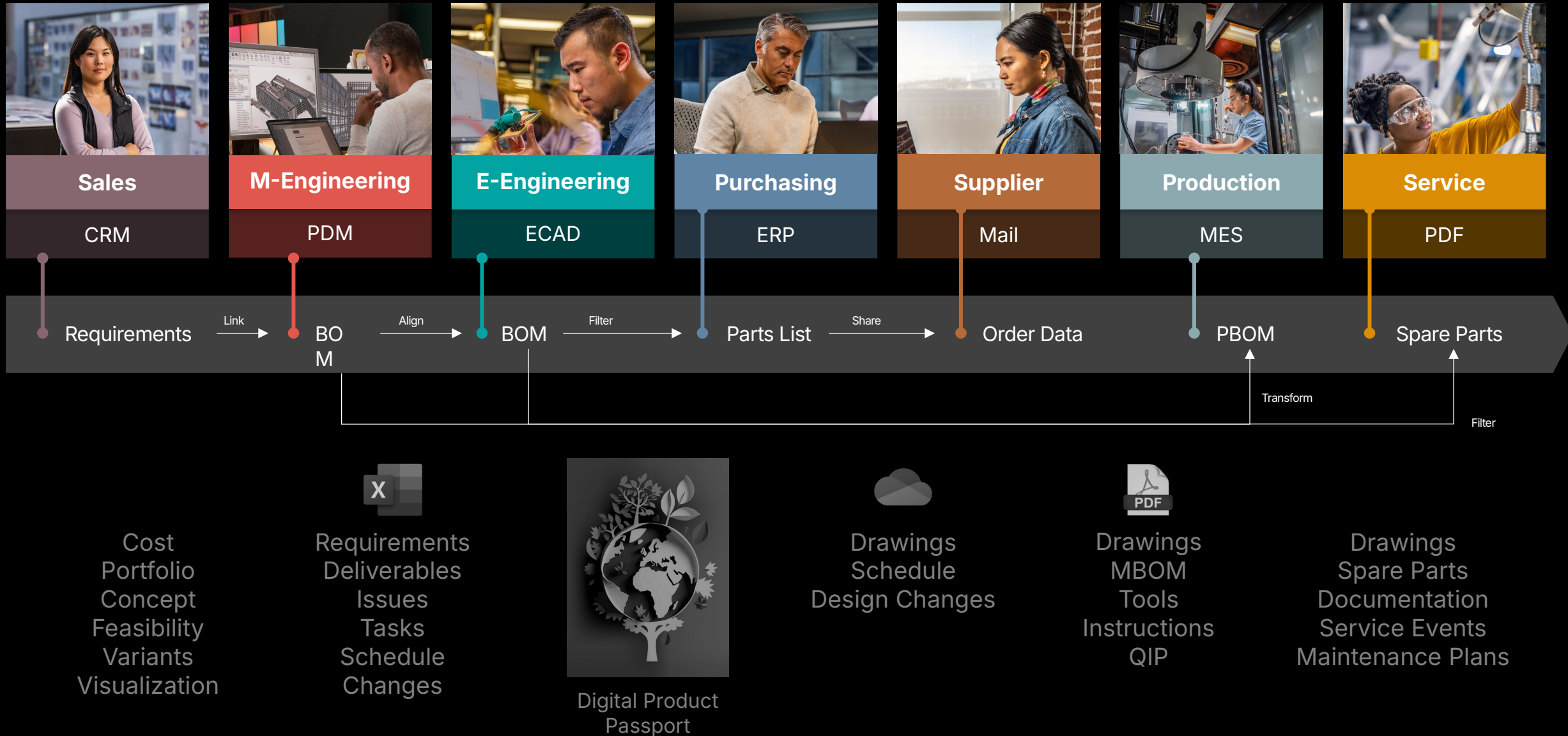
Cost  
Portfolio  
Concept  
Feasibility  
Variants  
Visualization



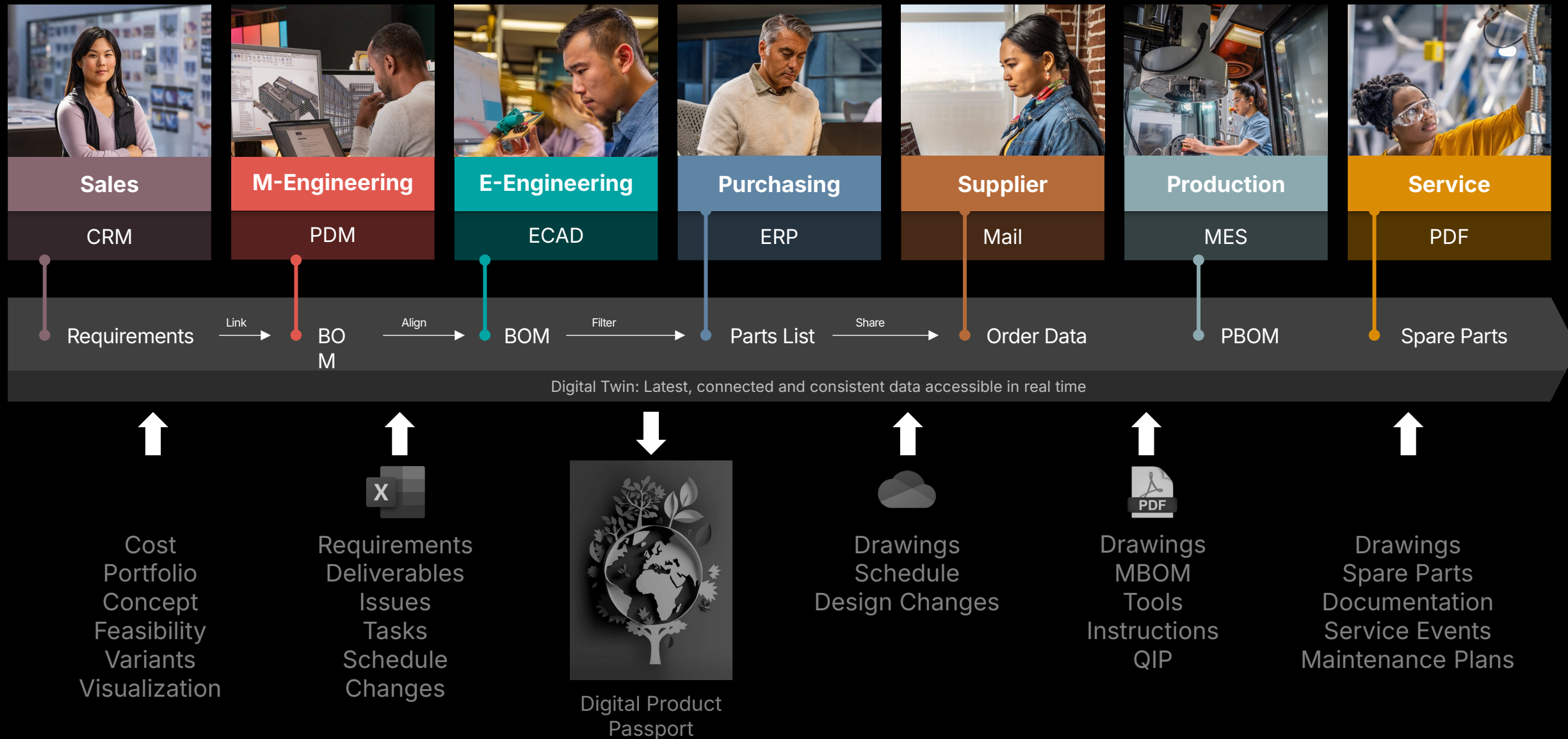
**Multiple, disconnected data sources meet manual process control**



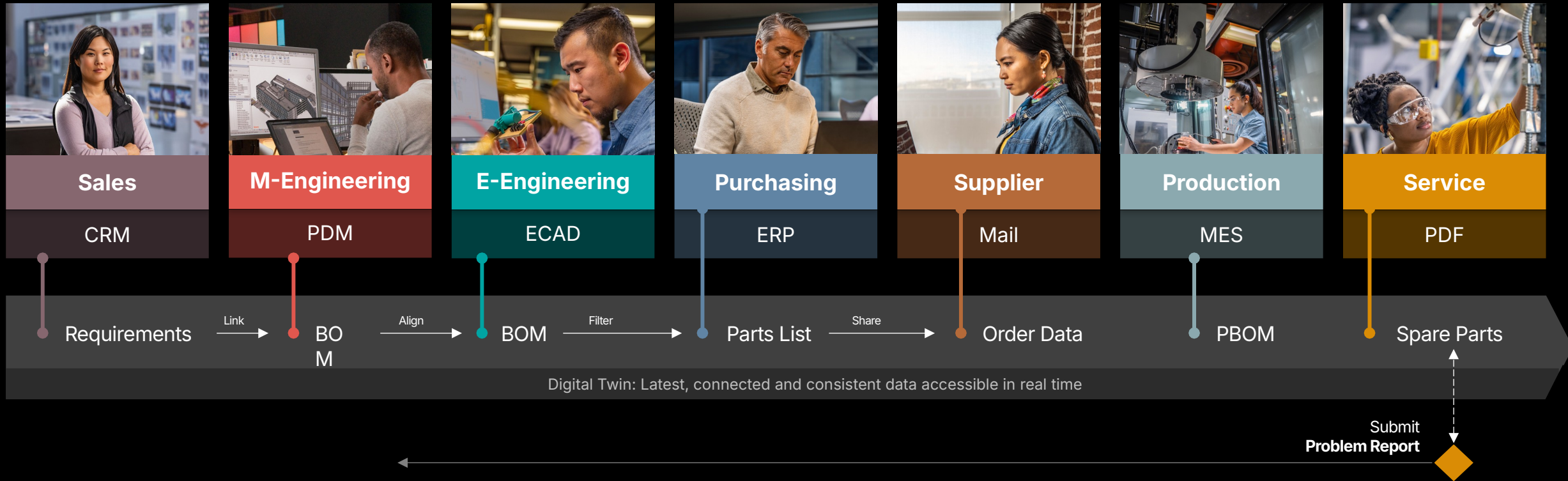
# Connected Digital Product Data



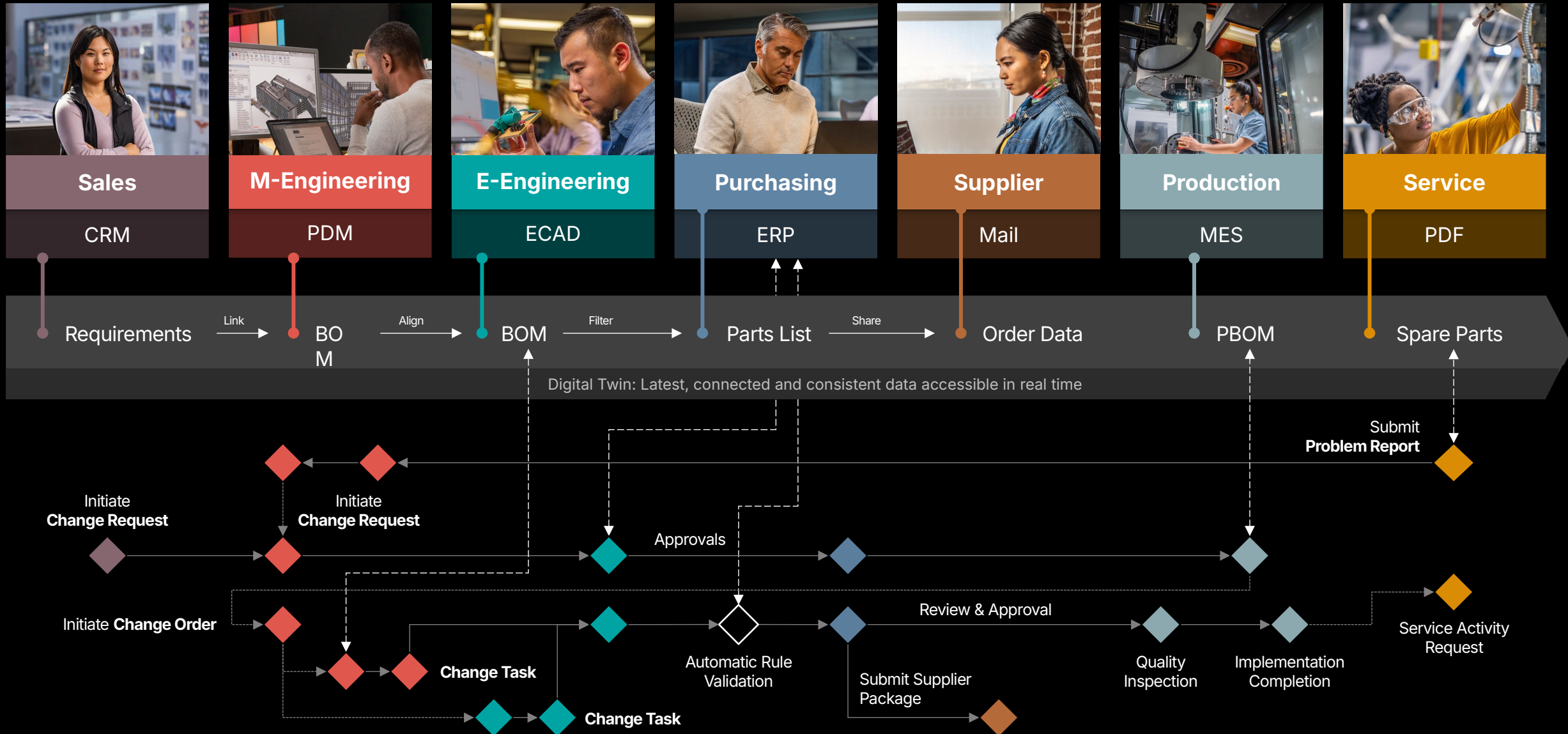
# Connected Digital Product Data



# Connected Digital Product Data & Processes



# Connected Digital Product Data & Processes



# Connected Digital Product Data & Processes

Gain Transparency &  
better **Control** your projects

**Improve Product Quality,**  
increase efficiency and reduce errors

**Save Time & Capacity**  
while maintaining flexibility



# Vault PLM

Schnelle, schrittweise und risikofreie PLM-Einführung auf Basis bestehender Lösungen

# Engineering Efficiency



Concurrent Engineering **Scalability**

Copy Design **Design Variants**

Duplicate Search **Reduce Item Cost**

Derive BOM from CAD **Prevent Errors**

Job Processor Automation **Increase Capacity**

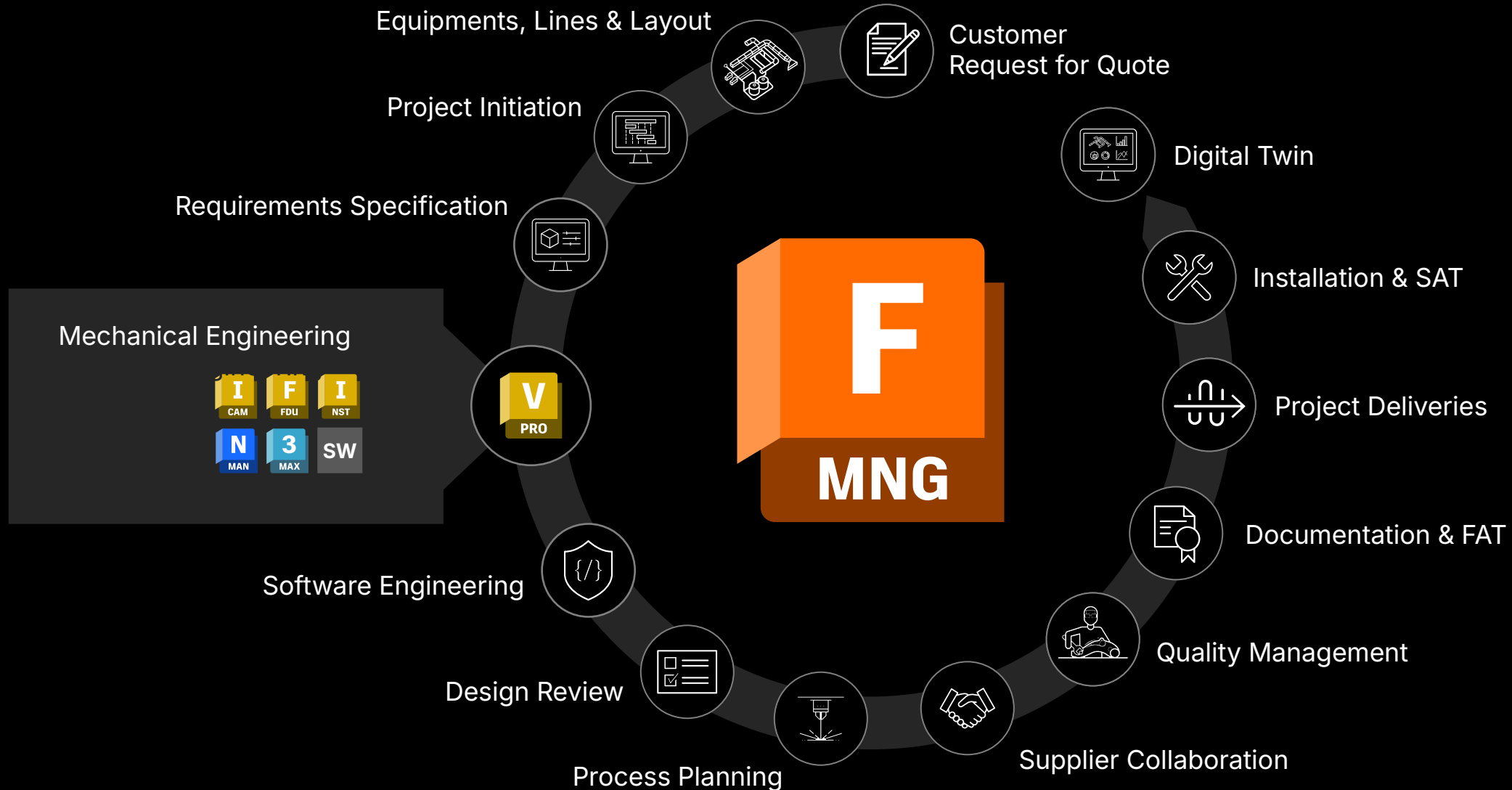
Revision Control **Consistency**

Request & Project Initiation

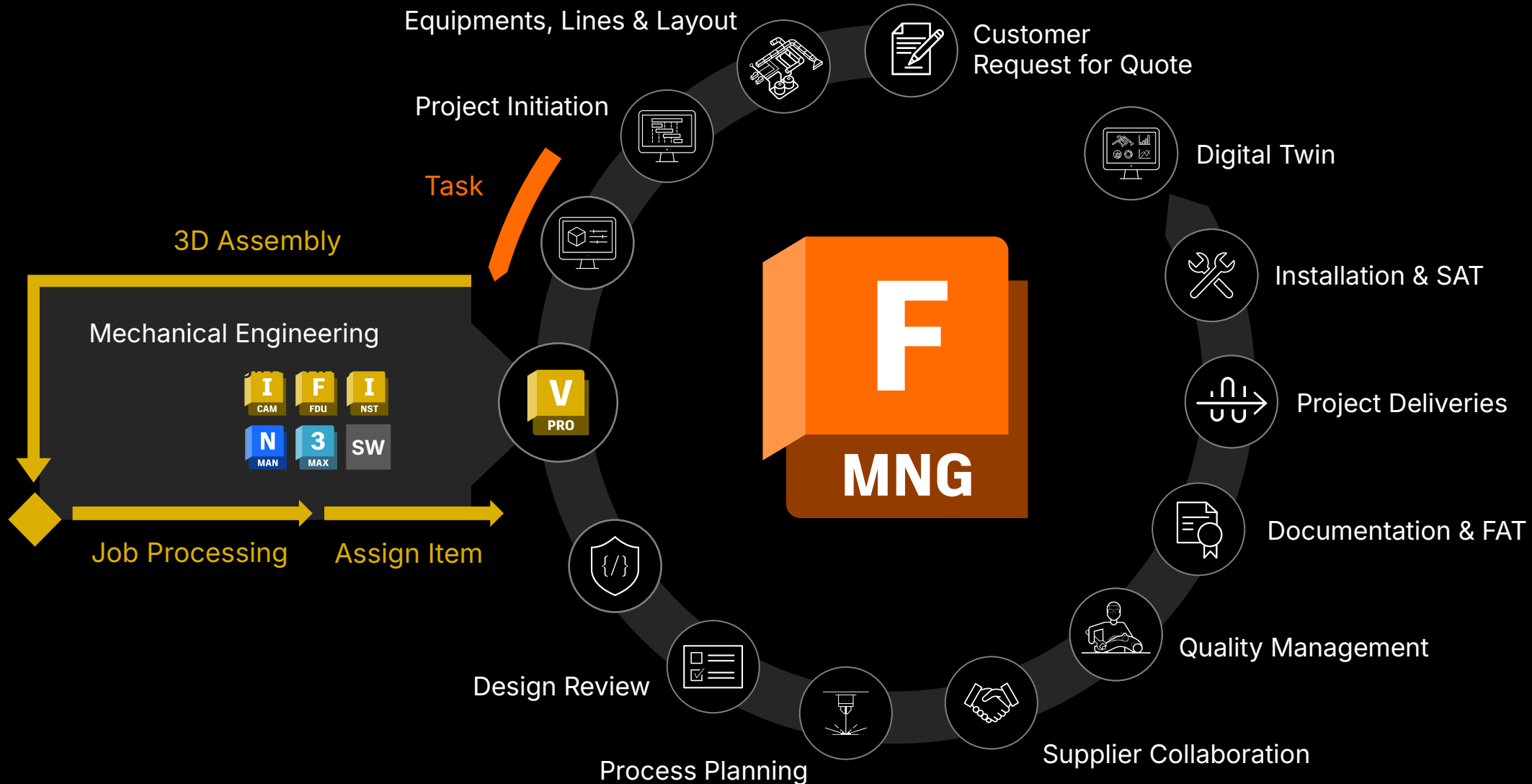
Maintain, Repair & Operate



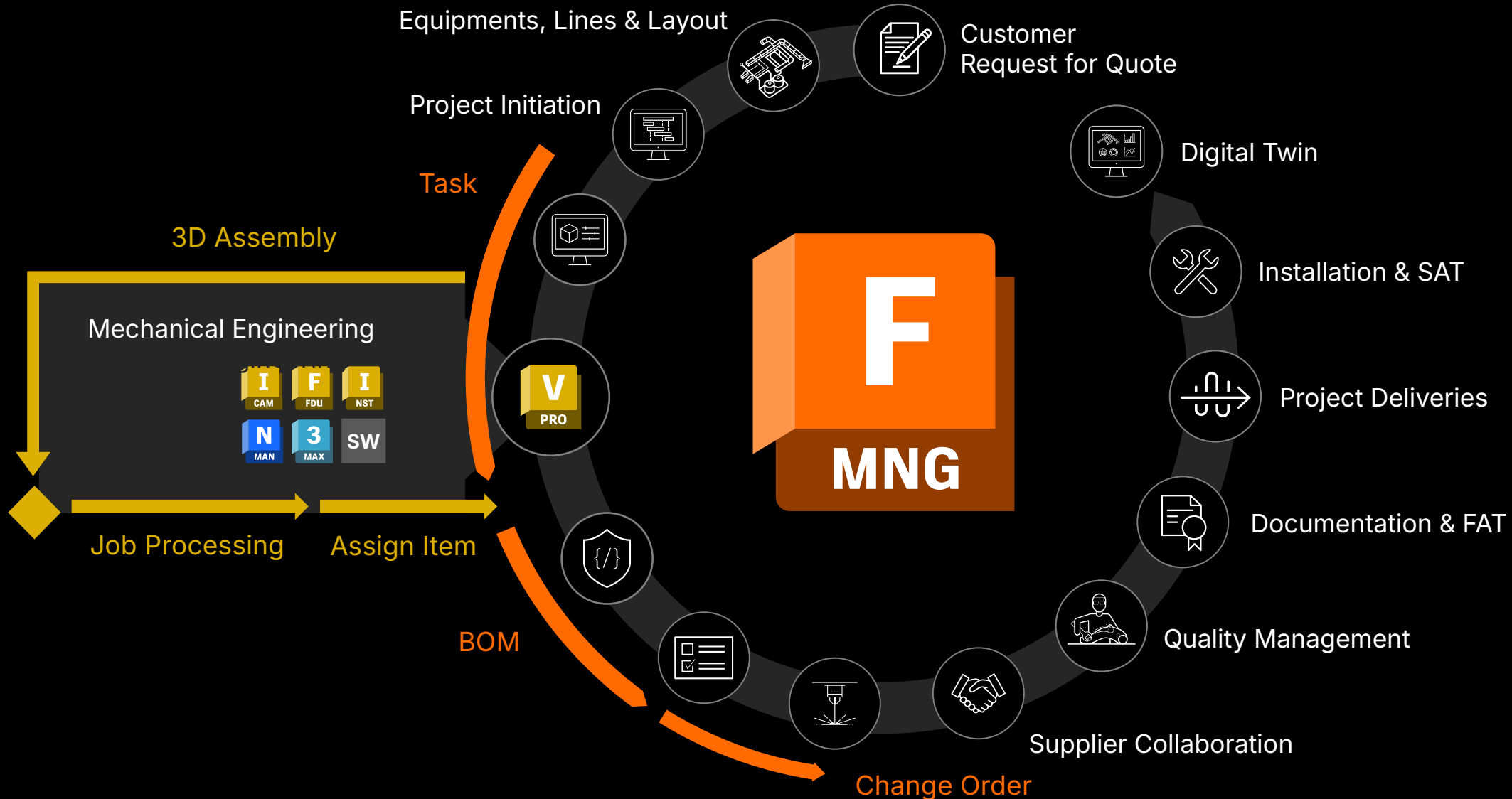
# Cloud Connected Data & Processes with Vault PLM



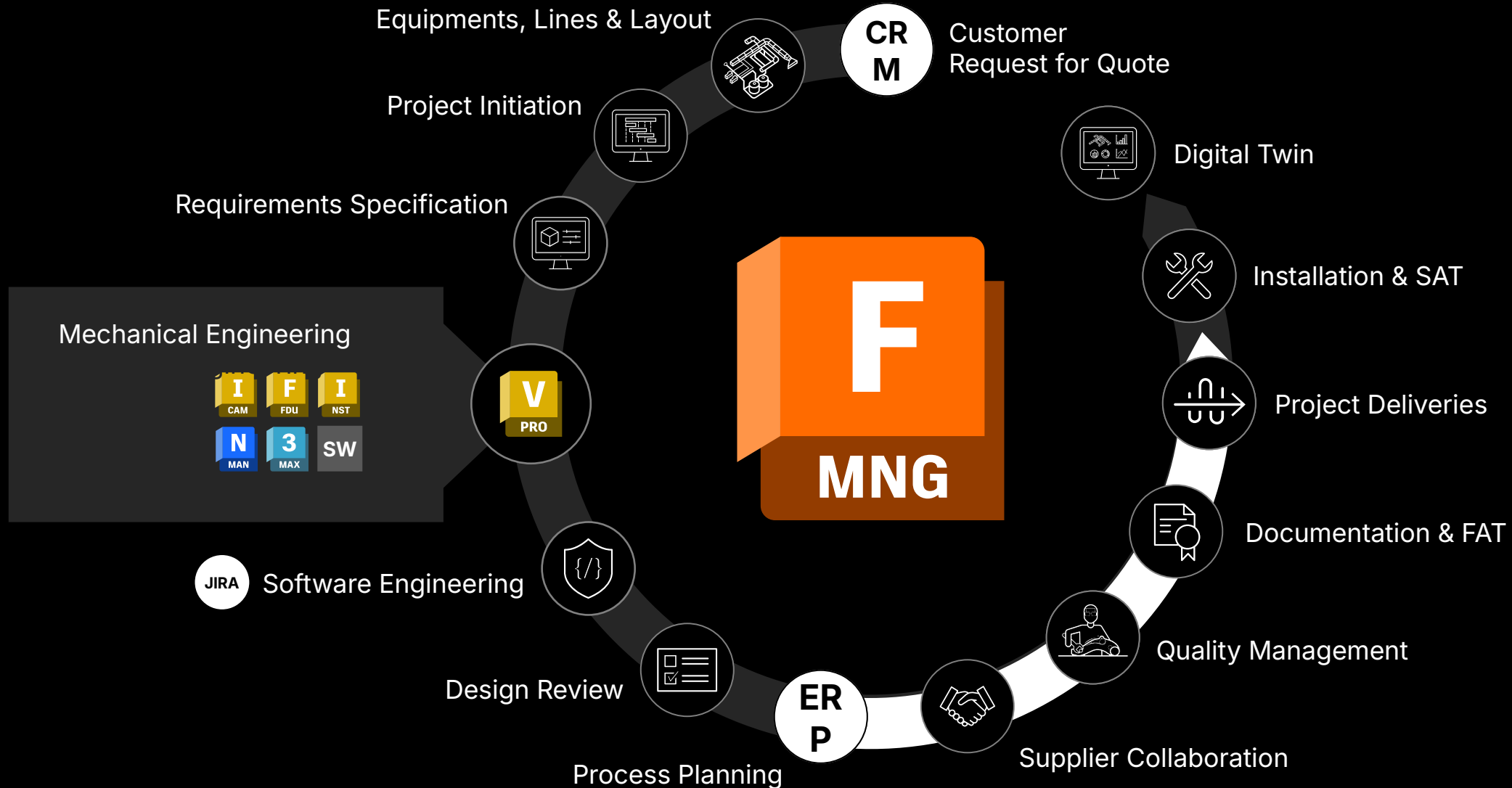
# Cloud Connected Data & Processes with Vault PLM



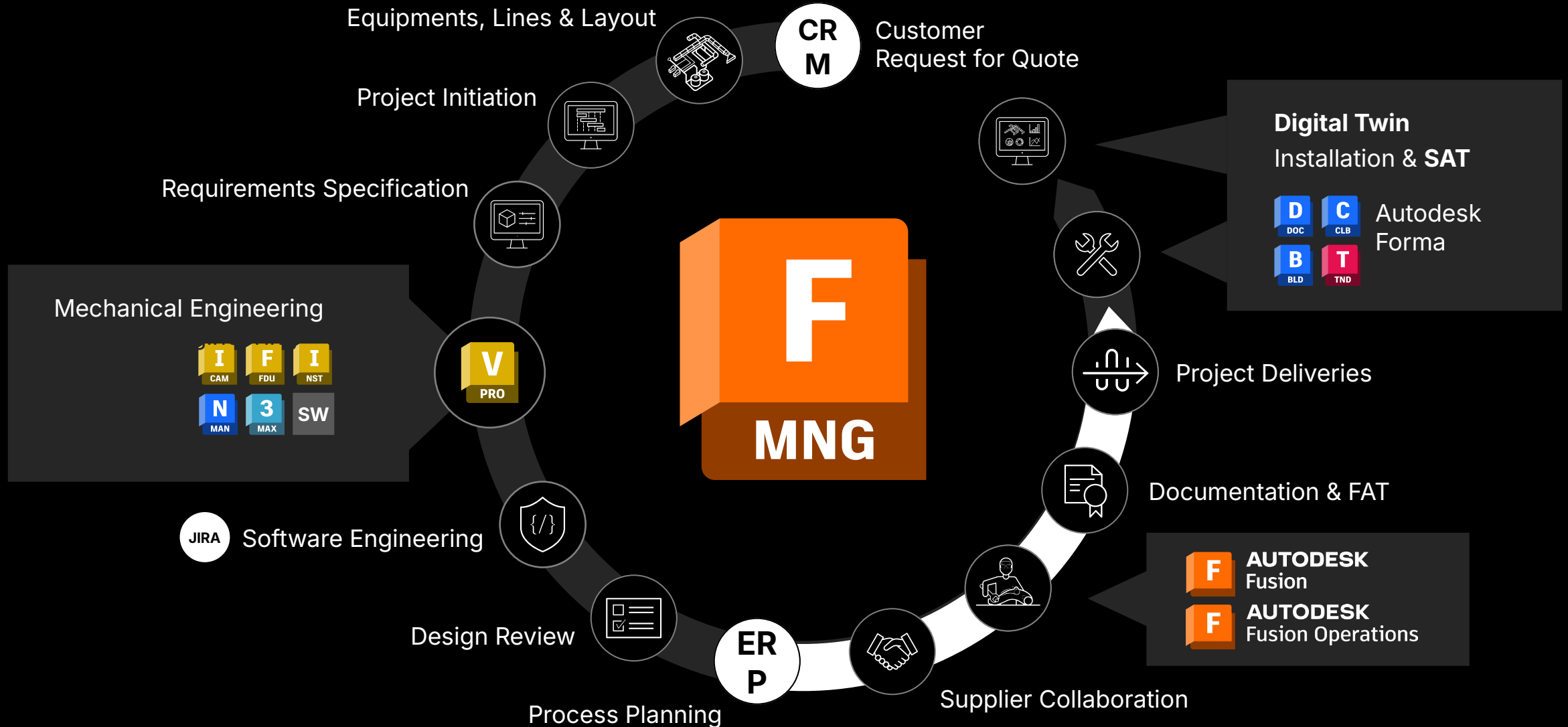
# Cloud Connected Data & Processes with Vault PLM



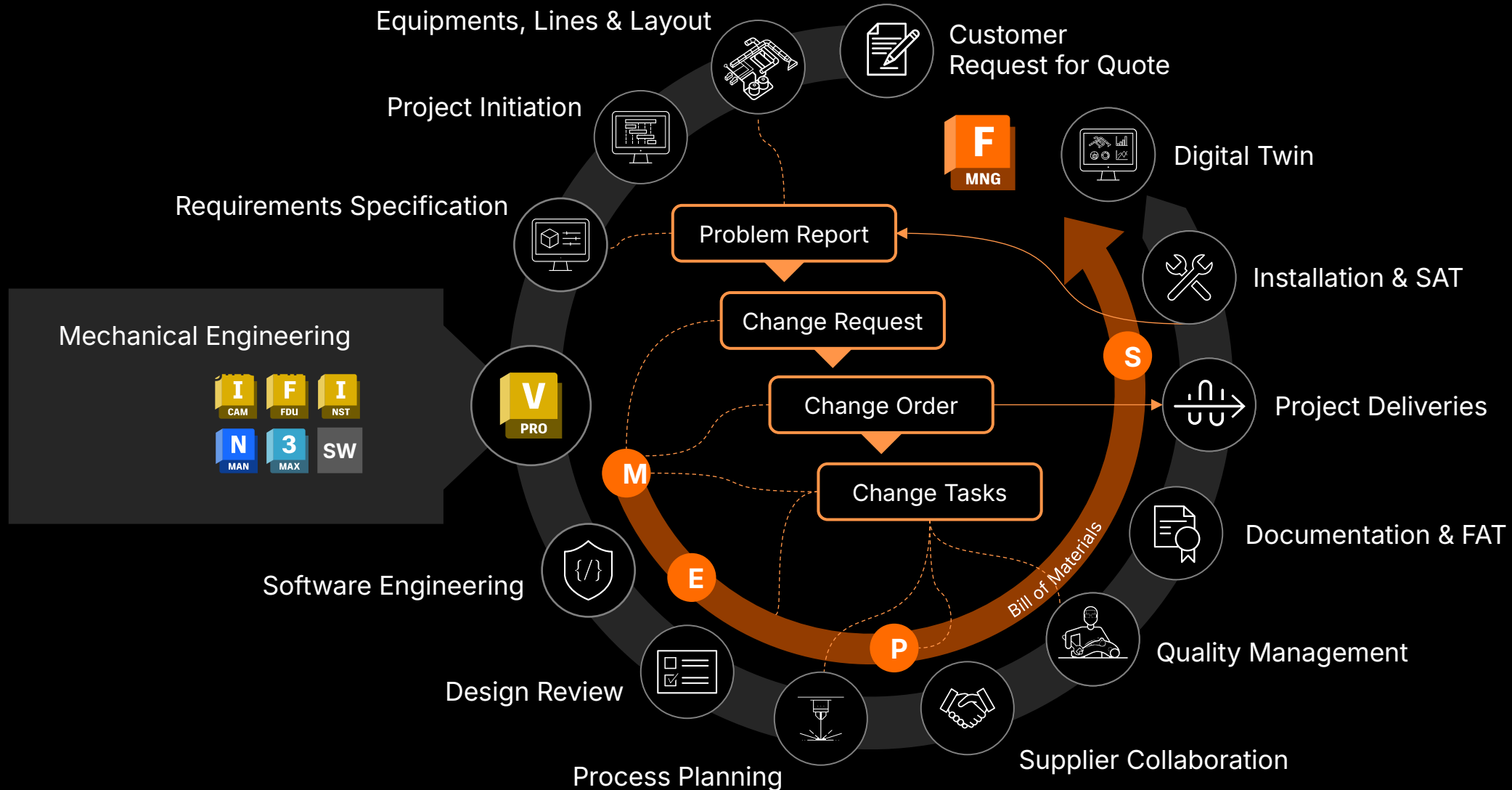
# Cloud Connected Data & Processes with Vault PLM



# Cloud Connected Data & Processes with Vault PLM



# Cloud Connected Data & Processes with Vault PLM



# Cloud Connected Data & Processes with Vault PLM

## On Premise PDM

Best performance for large files  
Setup aligned with CAD software  
Native CAD files remain on premise

Mechanical Engineering



Software Engineering

Design Review

Process Planning

Equipments, Lines & Layout

Project Initiation

Customer  
Request for Quote

Digital Twin

Installation & SAT

Project Deliveries

Documentation & FAT

Quality Management

Supplier Collaboration

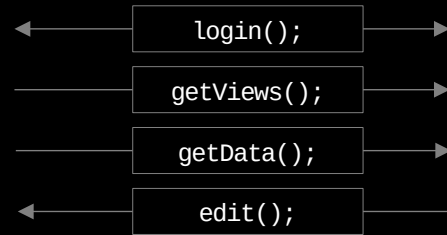


## Cloud PLM

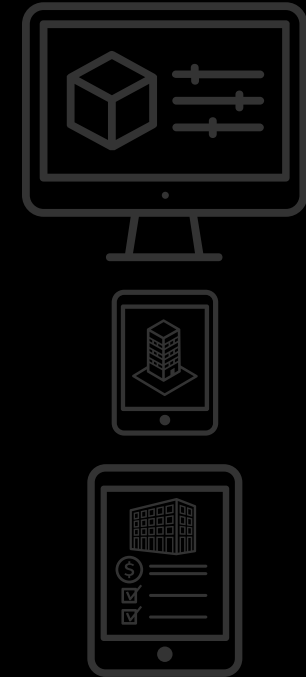
Accessible anytime anywhere  
Automatic updates  
No infrastructure

# Data Services

Integrate PLM data and processes in any business process  
while preventing redundant copies



UX Framework



# Ready-to-run with Templates



## Change & Approvals

**Change Management**

**Lean Change Orders**

**Quick Release Processes**

**Design Reviews**

**Document Management**

Document Control

Deviation / Waiver Requests



## Ideation

**Product Portfolio Management**

**Ideas Management**

**Requirements Management**



## Order Projects

Customer Management

Customer Requests \*

Equipment Lifecycle \*



## Quality

**Non-Conformances**

**Corrective / Preventative Actions**

8D Reports

Lean S5 Auditing

FMEA Analysis

Field Failure Requests

Quality Training

Claim Management



## Collaboration

**New Product Introduction**

Engineering Project Management

Innovation Project Management

Collections



## Supply Chain

**Supplier Collaboration**

Supplier Quality Business Review

Supplier Corrective Action Request

**Spare Parts Requests**



## Other Processes

Marketing Asset Management

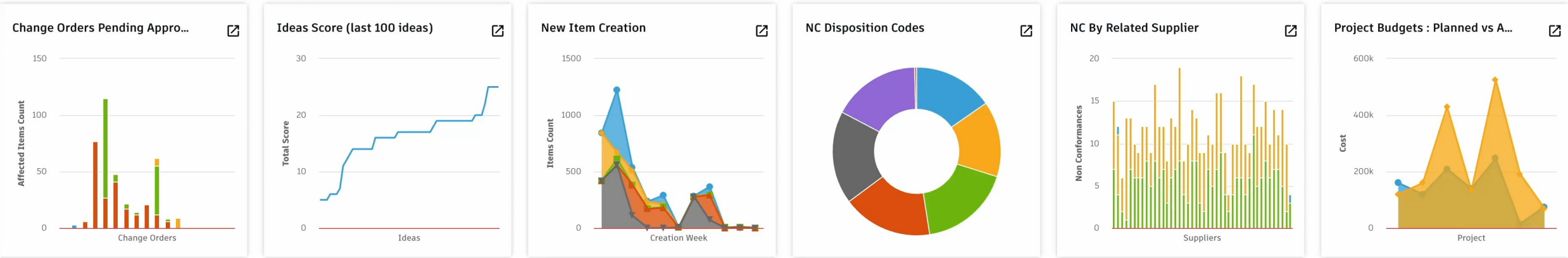
Manufacturing Asset Management

Equipment Calibration

Reminders Utility

Implementation Tracker

Charts



My Outstanding Work

Last updated: 06/03/2025 03:48 PM

|  |  | Due Date   | Item Descriptor                         | Workspace             | State               | State Set On | State Set By  |
|--|--|------------|-----------------------------------------|-----------------------|---------------------|--------------|---------------|
|  |  |            | PR-000084 - Machine Overheating         | Problem Reports       | Review              | 06/02/2025   | Sven Dickmans |
|  |  |            | SPR-000001                              | Spare Parts Requests  | Review              | 06/01/2025   | Sven Dickmans |
|  |  |            | CR-000300 - Update Technical Specifi... | Change Requests       | Review & Impact ... | 04/25/2025   | Sven Dickmans |
|  |  |            | CO-000300 - Desgin Change               | Change Orders         | Preparation         | 04/25/2025   | Sven Dickmans |
|  |  | 03/26/2025 | CT-CR-000199 - CT10 - Impact Analysis   | Change Tasks          | Assigned            | 03/26/2025   | Sven Dickmans |
|  |  | 03/26/2025 | CT-CR-000199 - CT40 - Layout            | Change Tasks          | Assigned            | 03/26/2025   | Sven Dickmans |
|  |  |            | DR-000002 - 1 - Initial Design Review   | Design Reviews        | In Progress         | 03/20/2025   | Sven Dickmans |
|  |  |            | DCO-000003 - Freigabe                   | Document Change Order | Preparing           | 03/20/2025   | Sven Dickmans |
|  |  |            | DR-000005 - 1 - Initial Design Review   | Design Reviews        | In Progress         | 03/20/2025   | Sven Dickmans |

My Bookmarked Items

|  | Item Descriptor                   | Workspace | Comment         |
|--|-----------------------------------|-----------|-----------------|
|  | 002952-M - Car Suspension [REV:w] | Items     | MPE Development |
|  | 002973-M - 002973 [REV:w]         | Items     | MPE Development |

Autodesk Vault Professional 2027

FileEditViewGoToolsActionsHelp

NewReport...Plot

Go to: Enter an item numberFind...

Search HelpShare ViewDownload from Cloud Drive

All ItemsWorkspace Sync...Change Category...Change State...Change Revision...

Item Master

Search Item Master

| Number                               | Revision | State            | Title (Item,CO)                                              |
|--------------------------------------|----------|------------------|--------------------------------------------------------------|
| 627_6 Bearing                        | A        | Work in Progress | 627_6 Bearing v1                                             |
| 001203                               | A        | Work in Progress | Intake Casing                                                |
| 99179A101_Heavy Duty Side-Mount E... | A        | Work in Progress | 99179A101_Heavy Duty Side-Mount External Retaining Ring      |
| Bottom Shaft Clamp                   | A        | Work in Progress | Bottom Shaft Clamp v1                                        |
| Fan                                  | A        | Work in Progress | Fan v1                                                       |
| Fan Motor Assembly                   | A        | Work in Progress | Fan Motor Assembly v2                                        |
| Fan Spacer                           | A        | Work in Progress | Fan Spacer v1                                                |
| ISO 4762 - M4 x 35 Steel 4.6 Plain   | A        | Work in Progress | Hexagon Socket Head Cap Screw ISO 4762 - M4 x 35 Steel 4.... |
| Motor Heatsink                       | A        | Work in Progress | Motor Heatsink v1                                            |
| Motor Shaft                          | A        | Work in Progress | Motor Shaft v1                                               |
| Rotor - Part                         | A        | Work in Progress | Rotor - Part v1                                              |
| Rotor - Sub Assembly                 | A        | Work in Progress | Rotor - Sub Assembly v1                                      |
| Rotor Magnet - Part                  | A        | Work in Progress | Rotor Magnet - Part v1                                       |
| Shaft Top Clamp                      | A        | Work in Progress | Shaft Top Clamp v1                                           |

GeneralHistoryBill of MaterialsWhere UsedChange OrderView

Revision:LatestWork in Progress

Number:Fan Motor Assembly

Title:Fan Motor Assembly v2

Description:Fan Motor Assembly

Units:Each

Associated files:

| File Name              | Version |
|------------------------|---------|
| Fan Motor Assembly.iam | 3       |
| Fan Motor Assembly.idw | 3       |

Properties:

| Name              | Value              |
|-------------------|--------------------|
| Equivalence Value | Fan Motor Assembly |

Category:Assembly

Lifecycle State:Work in Progress

Last Updated By:Irvin Hayes

Last Updated:2/11/2026 1:08 PM

Fusion Manage

Motor Heatsink - Motor H...Fan Motor Assembly - Fa...

Fan Motor Assembly - Fan Mot...

Pending | Unreleased | Fan Motor Assembly | Manufacturing

ItemFilesBill of MaterialsWhere UsedRelated Change Process

Basic

NumberFan Motor Assembly

TitleFan Motor Assembly v2

DescriptionFan Motor Assembly

TypeManufacturing

IconMBOM

Image

Actions

PDM Data

Technical Details

Classification

Classification Summary

Procurement

Sourcing Summary

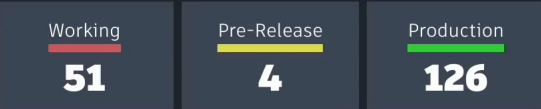
PropertiesAutodesk AssistantFusion Manage

16 Items (1 selected)localhostVaultirvin.hayes@autodesk.com

Dashboard



Item Lifecycle



Pending Change



Change Orders



Revision



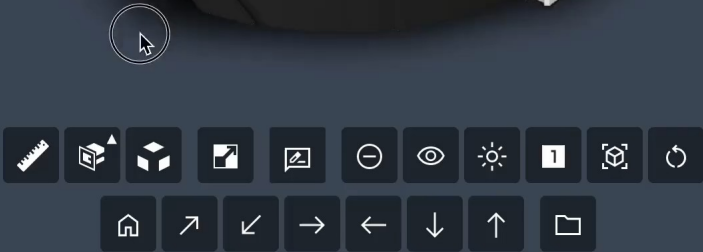
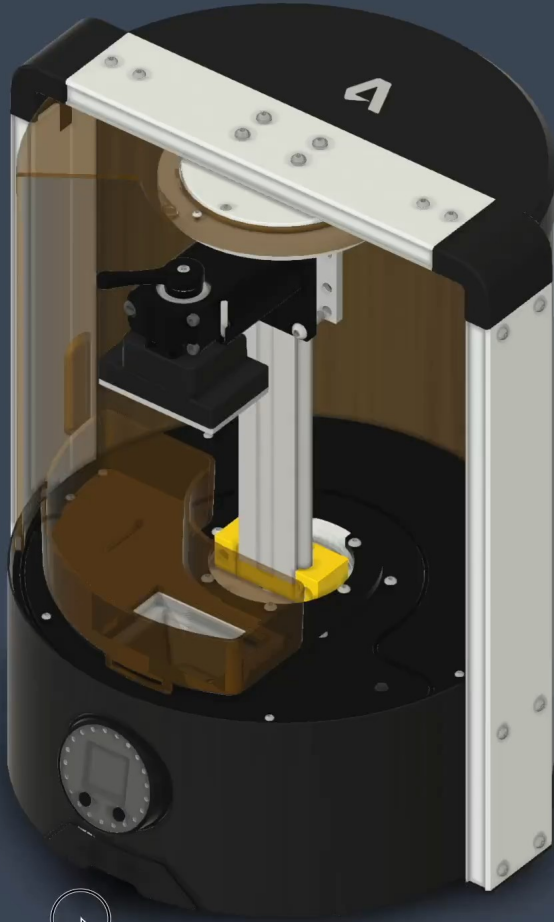
Status



Bill of Materials



- 1.1 002774 - Base Assembly [REV:w]
  - 2.1 002828 - Base Moulding (with inserts) v4 [REV:1]
    - 3.1 002897 - Base Moulding [REV:1]
    - 3.2 002899 - Brass Insert\_M4 [REV:1]
    - 3.3 002898 - Brass Insert\_M3 [REV:1]
  - 2.2 002821 - Fan 60x60 v2 [REV:w]
  - 2.3 002826 - 92095A187 [REV:w]
- 2.4 002824 - Rear Connector PCBA v4 [REV:w]
  - 3.1 002894 - Board [REV:w]
  - 3.2 002892 - P2 [REV:w]
  - 3.3 002896 - P4 [REV:w]
  - 3.4 002893 - P1 [REV:w]
  - 3.5 002895 - P5 [REV:w]
- 2.5 002827 - 94500A222 [REV:w]
- 2.6 002829 - Sliding Projector Assembly v11 [REV:A]
  - 3.1 002900 - Bottom Cabinet [REV:A]
  - 3.2 002902 - Top Cabinet [REV:A]
  - 3.3 002901 - Mirror 45 x 30 [REV:A]
  - 3.4 002907 - Lens Foam Gasket [REV:A]
  - 3.5 002904 - Window Gasket [REV:A]
  - 3.6 002908 - 92497A250 [REV:A]
  - 3.7 002903 - 92095A198 [REV:A]
  - 3.8 002905 - 95611A114 [REV:A]
  - 3.9 002906 - 94500A222 (1) [REV:A]
- 3.10 002909 - Projector - Wintech PRO4500 [REV:A]





The background of the slide features a close-up, artistic rendering of a robotic arm with multiple joints and sensors, set against a dark, industrial backdrop. The text 'Autodesk' is in white, sans-serif font, underlined with a thin orange line. Below it, 'PLM' is in a much larger, bold, white, sans-serif font.

# Autodesk PLM

## **Erweiterung des Vault**

Beibehaltung bestehender Prozesse

## **Ready-To-Use**

Vorkonfiguriert aber dennoch konfigurierbar

## **Cloud PLM**

Neue Möglichkeiten bei schnellem Einstieg

## **Data Services**

Wiederverwendung & Anreicherugn der Daten durch API



# Umsetzung

Einführung des Vault PLM in Phasen auf agile,  
flexible und wertschöpfende Weise

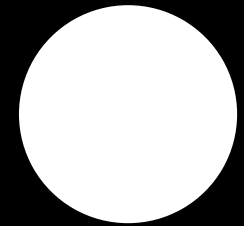


How to change?



# How to change?

Keep **attention and motivation** with many quick small success events  
Continuous improvements **involving end user feedback**  
Immediate reaction to end user experience  
**Low upfront invest** and fast time to value  
Agility with minimum risk  
Fixed **milestone dates**



●  
**Start**

M1

M2

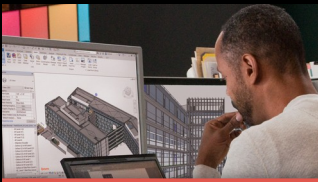
M3

**Vision**



**Sales**

CRM



**M-Engineering**

PDM



BOM + dwf



**E-Engineering**

ECAD



Parts List



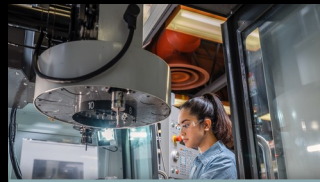
**Purchasing**

ERP



**Supplier**

Mail



**Production**

MES



**Service**

PDF



Spare Parts

# 1

# Datenbereitstellung

## Scope

Nur Standards  
Keine Prozesse in PLM  
Keine Integrationen  
Dedizierte Anwendungen

## Umsetzung

Vault Connector aktivieren  
Attribut-Mapping ggf. erweitern  
UX Framework einrichten

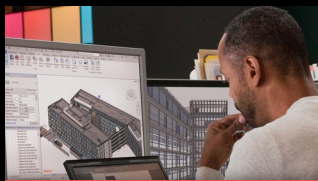
## Mehrwerte

Zeitersparnis Konstruktion  
Reduzierte Wartezeiten  
Gemeinsame Daten  
Zugänglichkeit (3D)



**Sales**

CRM



**M-Engineering**

PDM

BOM + dwf



**E-Engineering**

ECAD



**Purchasing**

ERP

Parts List



**Supplier**

Mail



**Production**

MES



**Service**

PDF

Spare Parts

# 2

## Produktdatenqualität

### Scope

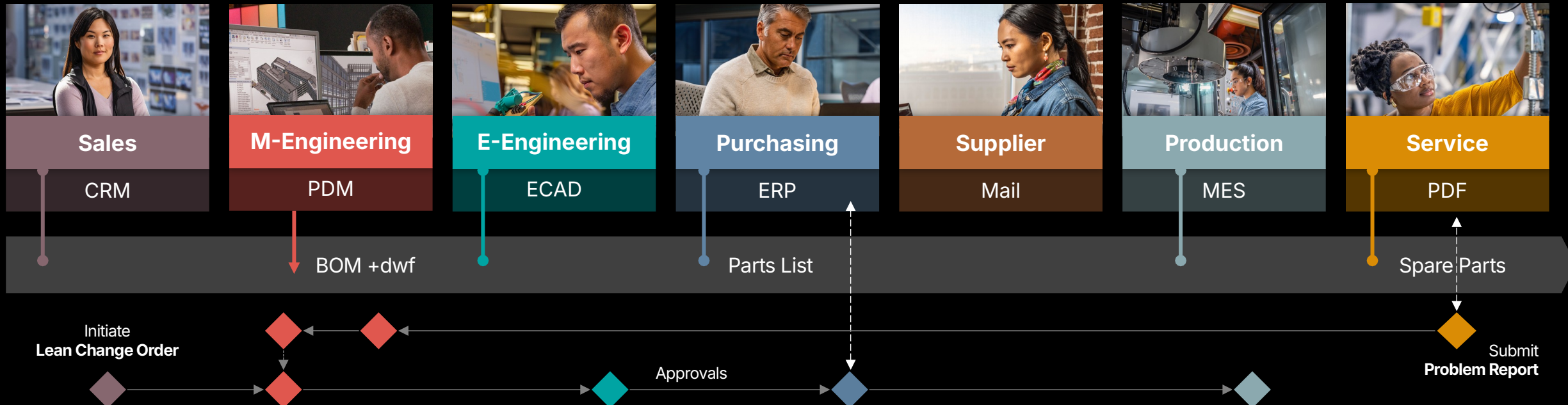
Freigabeprozesse  
Fehlermeldungen  
ERP-Integration

### Umsetzung

Freigabeprozess einrichten  
Merkmale abgleichen  
Daten importieren

### Mehrwerte

Fehlervermeidung & Zeitersparnis  
Steuerung von Verantwortungen  
Gemeinsame Entscheidungsfindung



# 3

## Lebenszyklus

### Scope

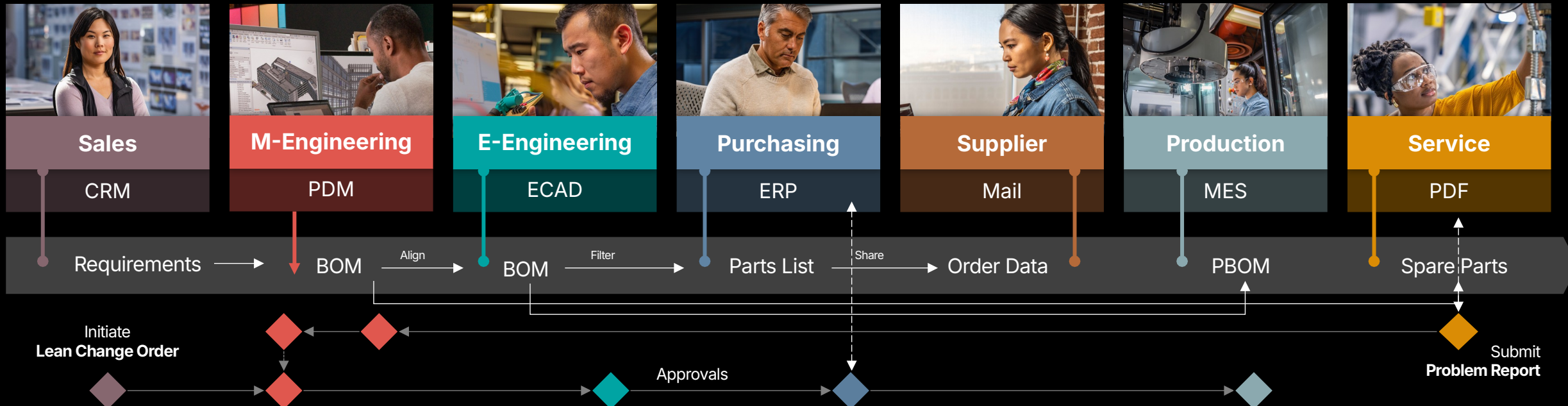
Effiziente, integrierte und koordinierte Transformation und Erweiterung der Produktdaten. Vollständig digitales Abbild des Produktes und zugehöriger Daten

Externe  
Zusammenarbeit

Qualitätsmanagement

Digitale Maschinenakte

Projektsteuerung



# 1

# Datenbereitstellung

## Scope

Nur Standards  
Keine Prozesse in PLM  
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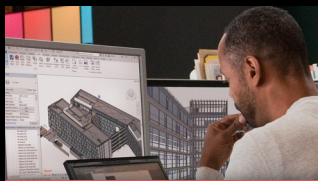
## Mehrwerte

Zeitersparnis Konstruktion  
Reduzierte Wartezeiten  
Gemeinsame Daten  
Zugänglichkeit (3D)



**Sales**

CRM



**M-Engineering**

PDM

BOM + dwf



**E-Engineering**

ECAD



**Purchasing**

ERP

Parts List



**Supplier**

Mail



**Production**

MES



**Service**

PDF

Spare Parts

ECS-27784DB0



## Autodesk Data Management Server

On ECS-27784DB0

|                                                     |               |
|-----------------------------------------------------|---------------|
| Number of days since the last server console Backup | Not Backed Up |
| Days since the last Incremental Backup              | Not Backed Up |
| Incremental backups since last full Backup          | 0             |
| Server is eligible for Incremental Restore          | No            |
| Vaults                                              | 1             |
| Vaults enabled at this site                         | 1             |
| Libraries                                           | 0             |
| Total size of vaults (SQL databases)                | 262.75 MB     |
| Total size of libraries (SQL databases)             | 0 bytes       |
| Total size of file store                            | 1.19 GB       |
| Total                                               | 1.44 GB       |



Search

Enter part number



Bookmarked Items



9410-000 - CHILLER-5-2000-500



FEOD-00071424 - frame - W=1020



01-0289 - FILTRATION TOWER



01-0290 - FILTRATION TOWER



002774 - BASE ASSEMBLY



002824 - REAR CONNECTOR PCBA V4



002804 - STEPPER MOTOR WITH CONNECTOR A:



packing machine - MS - PACKING MACHINE

Dashboard

⌵

⌶

↺

Item Lifecycle

Working

Pre-Release

Production

51

4

126

Pending Change

Yes

No

16

165

Change Orders

-

CO-000169 - Inconsistent Layer Adhesion

CO-000036 - Production Release

165

10

6

Revision

A

WIP

1

126

51

4

Status

Superseded

Working

Latest

Unreleased

0

0

130

51

Bill of Materials

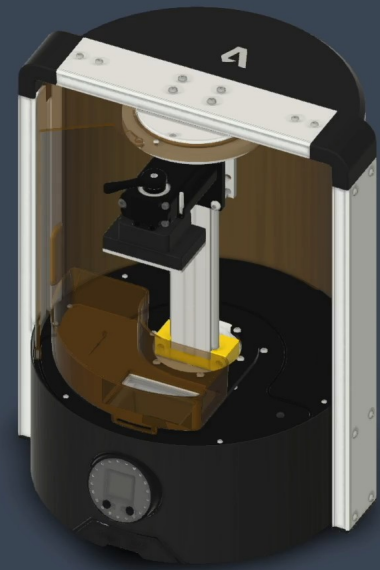
▶

↗

⊘

≡ Filter

|      |                                                  |
|------|--------------------------------------------------|
| 1.1  | 002774 - Base Assembly [REV:w]                   |
| 2.1  | 002828 - Base Moulding (with inserts) v4 [REV:1] |
| 3.1  | 002897 - Base Moulding [REV:1]                   |
| 3.2  | 002899 - Brass Insert_M4 [REV:1]                 |
| 3.3  | 002898 - Brass Insert_M3 [REV:1]                 |
| 2.2  | 002821 - Fan 60x60 v2 [REV:w]                    |
| 2.3  | 002826 - 92095A187 [REV:w]                       |
| 2.4  | 002824 - Rear Connector PCBA v4 [REV:w]          |
| 3.1  | 002894 - Board [REV:w]                           |
| 3.2  | 002892 - P2 [REV:w]                              |
| 3.3  | 002896 - P4 [REV:w]                              |
| 3.4  | 002893 - P1 [REV:w]                              |
| 3.5  | 002895 - P5 [REV:w]                              |
| 2.5  | 002827 - 94500A222 [REV:w]                       |
| 2.6  | 002829 - Sliding Projector Assembly v11 [REV:A]  |
| 3.1  | 002900 - Bottom Cabinet [REV:A]                  |
| 3.2  | 002902 - Top Cabinet [REV:A]                     |
| 3.3  | 002901 - Mirror 45 x 30 [REV:A]                  |
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| 3.5  | 002904 - Window Gasket [REV:A]                   |
| 3.6  | 002908 - 92497A250 [REV:A]                       |
| 3.7  | 002903 - 92095A198 [REV:A]                       |
| 3.8  | 002905 - 95611A114 [REV:A]                       |
| 3.9  | 002906 - 94500A222 (1) [REV:A]                   |
| 3.10 | 002909 - Projector - Wintech PRO4500 [REV:A]     |







BOM

⌵

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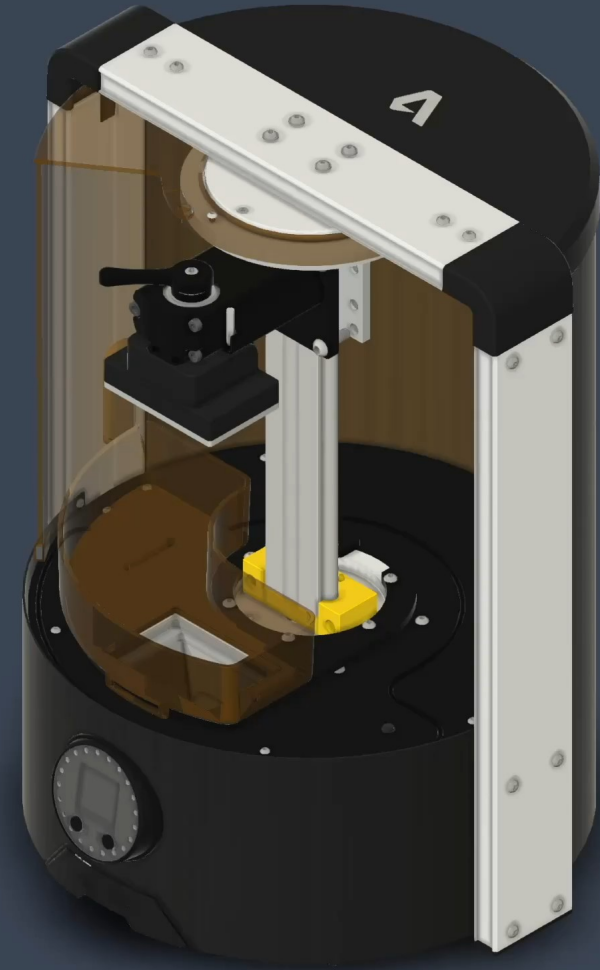
↺

☰

🔍

Type to search

| Item                 |                                                  |
|----------------------|--------------------------------------------------|
| 1.1                  | 002774 - Base Assembly [REV:w]                   |
| 2.1                  | 002828 - Base Moulding (with inserts) v4 [REV:1] |
| 3.1                  | 002897 - Base Moulding [REV:1]                   |
| 3.2                  | 002899 - Brass Insert_M4 [REV:1]                 |
| 3.3                  | 002898 - Brass Insert_M3 [REV:1]                 |
| 2.2                  | 002821 - Fan 60x60 v2 [REV:w]                    |
| 2.3                  | 002826 - 92095A187 [REV:w]                       |
| 2.4                  | 002824 - Rear Connector PCBA v4 [REV:w]          |
| 3.1                  | 002894 - Board [REV:w]                           |
| 3.2                  | 002892 - P2 [REV:w]                              |
| 3.3                  | 002896 - P4 [REV:w]                              |
| 3.4                  | 002893 - P1 [REV:w]                              |
| 3.5                  | 002895 - P5 [REV:w]                              |
| 2.5                  | 002827 - 94500A222 [REV:w]                       |
| 2.6                  | 002829 - Sliding Projector Assembly v11 [REV:A]  |
| 3.1                  | 002900 - Bottom Cabinet [REV:A]                  |
| 3.2                  | 002902 - Top Cabinet [REV:A]                     |
| 3.3                  | 002901 - Mirror 45 x 30 [REV:A]                  |
| 3.4                  | 002907 - Lens Foam Gasket [REV:A]                |
| 3.5                  | 002904 - Window Gasket [REV:A]                   |
| 3.6                  | 002908 - 92497A250 [REV:A]                       |
| 3.7                  | 002903 - 92095A198 [REV:A]                       |
| 181 total 181 unique |                                                  |



Spare Parts

Documentation

Problem Reports

|                                                                                       |                                                                                                                           | 🔍 Search                                       |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
|    | <div>2002821</div> <div>Fan 60x60 v2 [REV:w]</div> <div>📦 ABS Plastic ↔ 0.033 / 25 x 60 x 60 mm</div>                     | <div>Add to cart</div> <div>Out of stock</div> |
|    | <div>1002824</div> <div>Rear Connector PCBA v4 [REV:w]</div> <div>📦 ↔ 0.013 / 70 x 39,9 x 19,2 mm</div>                   | <div>Add to cart</div> <div>Low stock</div>    |
|    | <div>1002829</div> <div>Sliding Projector Assembly v11 [REV:A]</div> <div>📦 ↔ 0.735 / 113 x 263,9 x 95 mm</div>           | <div>Add to cart</div> <div>Out of stock</div> |
|    | <div>1002823</div> <div>Control Panel Assembly v4 [REV:w]</div> <div>📦 ↔ 0.036 / 105,3 x 37,4 x 78,8 mm</div>             | <div>Add to cart</div> <div>Out of stock</div> |
|    | <div>1002822</div> <div>Main PCBA v6 [REV:w]</div> <div>📦 ↔ 0.043 / 252,9 x 150 x 16,7 mm</div>                           | <div>Add to cart</div> <div>In stock</div>     |
|    | <div>1002865</div> <div>Molded Mid Plate v1 [REV:A]</div> <div>📦 ABS Plastic ↔</div>                                      | <div>Add to cart</div> <div>In stock</div>     |
|   | <div>2002804</div> <div>Stepper Motor with Connector Assembly</div> <div>📦 Aluminum 6061 ↔</div>                          | <div>Add to cart</div> <div>Out of stock</div> |
|  | <div>1002775</div> <div>Rotating Window Sub-Assembly [REV:w]</div> <div>📦 ↔ 1.4 / 278,3 x 279 x 244 mm</div>              | <div>Add to cart</div> <div>In stock</div>     |
|  | <div>1002830</div> <div>Rotating Window Moulding [REV:w]</div> <div>📦 Polycarbonate, Smoke ↔ 0.589 / 302 x 278 x 23</div> | <div>Add to cart</div> <div>In stock</div>     |
|  | <div>1002833</div> <div>Lazy Susan Bearing [REV:w]</div> <div>📦 Stainless Steel ↔ 0.652 / 140 x 10 x 140 mm</div>         | <div>Add to cart</div> <div>Out of stock</div> |

# 2

## Produktdatenqualität

### Scope

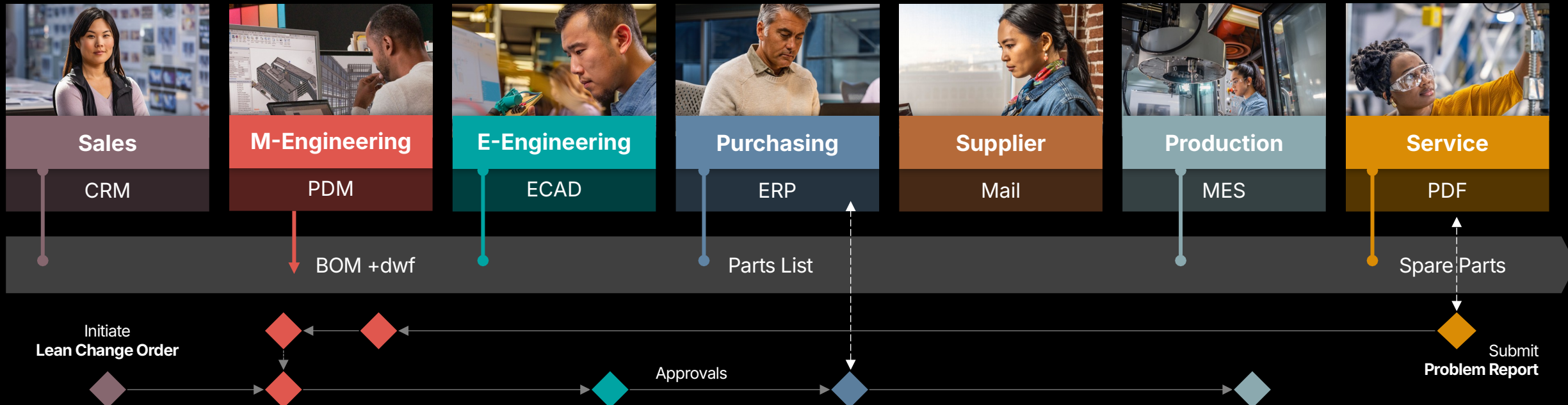
Freigabeprozesse  
Fehlermeldungen  
ERP-Integration

### Umsetzung

Freigabeprozess einrichten  
Merkmale abgleichen  
Daten importieren

### Mehrwerte

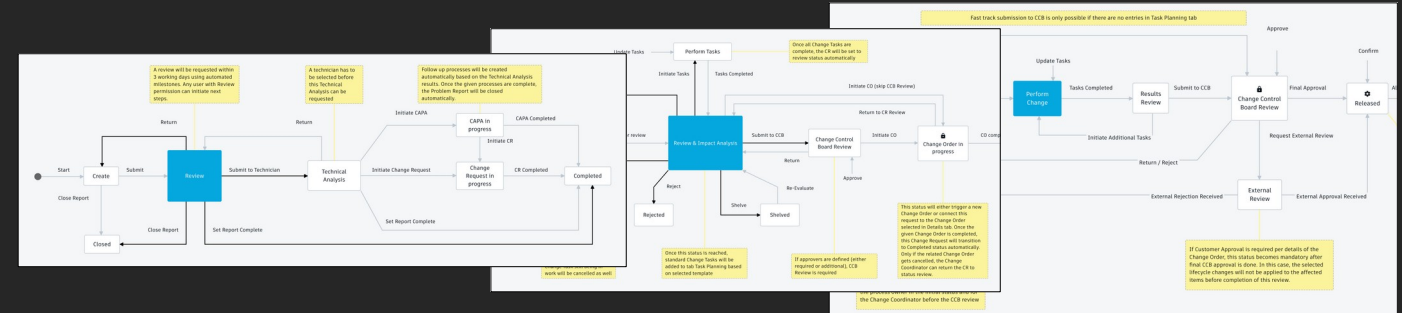
Fehlervermeidung & Zeitersparnis  
Steuerung von Verantwortungen  
Gemeinsame Entscheidungsfindung



# Change Management Scalability

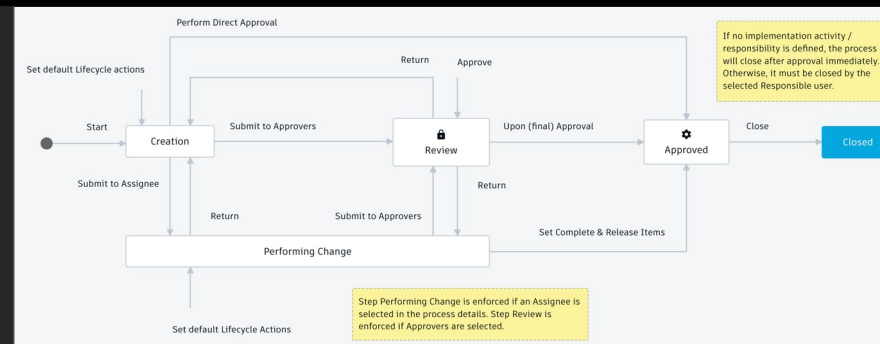
## Multi-Process Change Management

Dedicated Business Processes for Problem Reporting, Change Request, Change Orders and Change Tasks offer a maximum of control and traceability



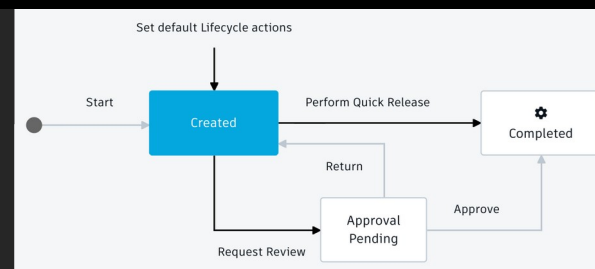
## Lean Change Order

Single Business Process enabling change request, task, approval and implementation



## Quick Releases

Suitable for elevated users, escalations and data migrations



The processes can be adjusted by customers on-the-fly without impact on migration to new releases

01-0289 - FILTRATION TOWER

[REV:A] ▾

Locked

04/24/2026

Production

★

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⌶

✕

Edit MBOM

Manage Variants

- Item
- Files (3 | 16)
- Bill of Materials (10)
- Where Used (0)
- Manufacturing Instructions (0)
- Sourcing (0)
- Related Change Processes (3)
- Relationships (0)
- Change Log (41)

Edit

Basic (1 of 12)

^

Number 01-0289

Title FILTRATION TOWER

Description MAIN ASSEMBLY

Type Top Level Assembly

Icon TLA

Image

Actions

Open in Vault

Open in Vault Thin Client

PDM Data (2 of 12)

^

|              | Category             | Revision                | Status      | Revision Notes         |
|--------------|----------------------|-------------------------|-------------|------------------------|
| Item         | Assembly             | A-9                     |             | Engineering approved   |
|              | File Name            | File Revision / Version | File Format | Location               |
| Primary File | 01-0289.iam          | B.2                     | Inventor    | \$/Designs/P-00023/CAD |
|              | Responsible Designer | Last Modification Date  | Vault Name  | Category Glyph         |
| Details      | CAD Admin            | 07/29/2025              | PDMC-Sample | <div></div>            |

# 3

## Lebenszyklus

### Scope

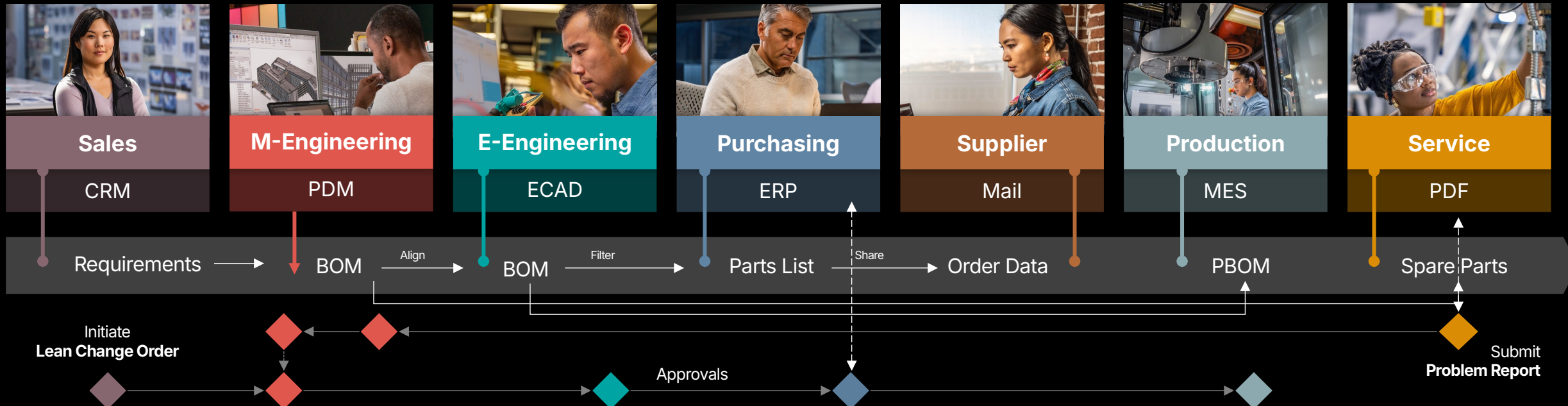
Effiziente, integrierte und koordinierte Transformation und Erweiterung der Produktdaten. Vollständig digitales Abbild des Produktes und zugehöriger Daten

Externe  
Zusammenarbeit

Qualitätsmanagement

Digitale Maschinenakte

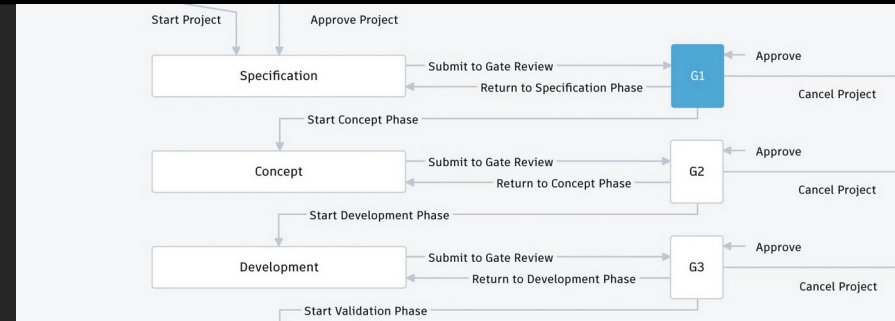
Projektsteuerung



# Project Management Solutions

## 1 New Product Introduction

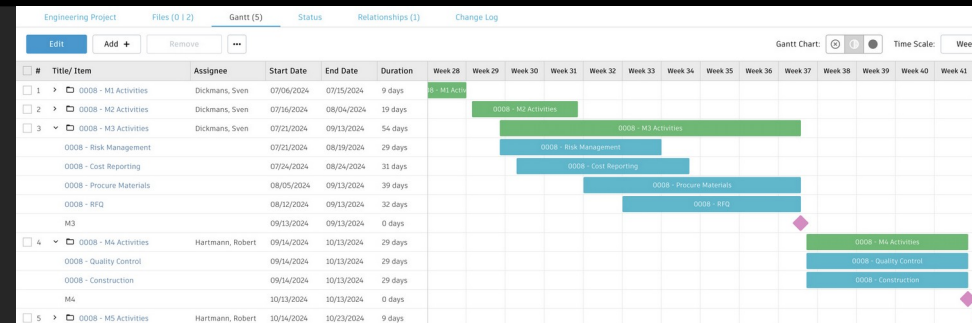
Task durations and dependencies drive overall schedule  
Workflow drives progression of project by phases and gates  
Tasks get grouped in dedicated Phase workspace  
**Task Assignment requires Teams & Members workspaces**



As a product manufacturer, manage the creation of new products within the product portfolio

## 2 Engineering Project Management

Milestones are set and drive task schedule  
Plan adjustments are done within the Gantt only  
Automatic notifications to stakeholders in case of plan updates  
Task assignment based on project teams



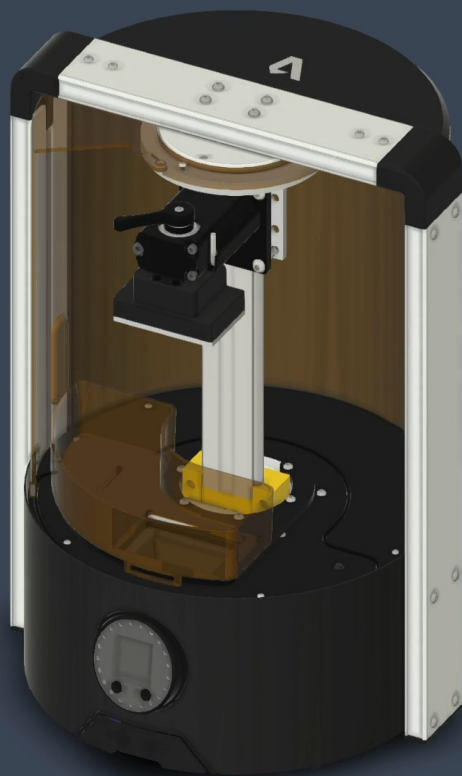
Manage deliveries against defined milestones within turnkey projects or product development projects

## 3 Innovation Project Management

Backlog in Grid instead of Gantt  
Neither Templates nor Target End Date  
Bi-weekly sprints provide flexibility  
**Task assignment based on users**

| Innovation Project            |                               |                              |                                     |                |
|-------------------------------|-------------------------------|------------------------------|-------------------------------------|----------------|
| Activity Backlog (5)          |                               |                              |                                     |                |
| Current Sprint Activities (2) |                               |                              |                                     |                |
| Files (0)                     |                               |                              |                                     |                |
| Status                        |                               |                              |                                     |                |
| <div>Save Cancel</div>        |                               |                              |                                     |                |
| #                             | Item                          | Deliverable                  | Next Sprint                         | Assignee       |
| 1                             | AI Model Development          |                              | <input checked="" type="checkbox"/> | Worton, Lee    |
| 2                             | Integration and Field Testing | Autonomous Material Handling | <input type="checkbox"/>            |                |
| 3                             | Review and Iteration          |                              | <input checked="" type="checkbox"/> | Dickmans, Sven |
| 4                             | Robot Design and Prototyping  | Autonomous Material Handling | <input checked="" type="checkbox"/> | Graves, Dave   |

Drive research projects to implement new ideas & technologies without defined outcome and timeline



|           |                                                  | Display All |            |   |   | Type to search |
|-----------|--------------------------------------------------|-------------|------------|---|---|----------------|
| Item      |                                                  | Quantity    | Spare/Wear |   |   |                |
| ▼ 1.1     | 002774 - BASE ASSEMBLY [REV:w]                   | 1.0         | -          | - | - |                |
| ▼ 2.1     | 002828 - Base Moulding (with inserts) v4 [REV:1] | 1.0         | -          | - |   |                |
| 3.1       | 002897 - Base Moulding [REV:1]                   | 1.0         | -          |   |   |                |
| 3.2       | 002899 - Brass Insert_M4 [REV:1]                 | 8.0         | -          | - | - |                |
| 3.3       | 002898 - Brass Insert_M3 [REV:1]                 | 6.0         | -          | - | - |                |
| 2.2       | 002821 - FAN 60X60 V2 [REV:w]                    | 2.0         |            |   |   |                |
| 2.3       | 002826 - 92095A187 [REV:w]                       | 8.0         | -          | - | - |                |
| ▼ 2.4     | 002824 - REAR CONNECTOR PCBA V4 [REV:w]          | 1.0         | Spare Part |   |   |                |
| 3.1       | 002894 - BOARD [REV:w]                           | 1.0         | -          |   |   |                |
| 3.2       | 002892 - PCB P2 [REV:w]                          | 1.0         | -          |   |   |                |
| 3.3       | 002896 - PCB P4 [REV:w]                          | 1.0         | -          |   |   |                |
| 3.4       | 002893 - PCB P1 [REV:w]                          | 1.0         | -          |   |   |                |
| 3.5       | 002895 - PCB P5 [REV:w]                          | 2.0         | -          |   |   |                |
| 2.5       | 002827 - 94500A222 [REV:w]                       | 14.0        | -          | - | - |                |
| ▼ 2.6     | 002829 - Sliding Projector Assembly v11 [REV:A]  | 1.0         | Spare Part | - | - | -              |
| 3.1       | 002900 - Bottom Cabinet [REV:A]                  | 1.0         | -          | - | - |                |
| 3.2       | 002902 - Top Cabinet [REV:A]                     | 1.0         | -          | - | - |                |
| 3.3       | 002901 - Mirror 45 x 30 [REV:A]                  | 1.0         | -          | - | - |                |
| 3.4       | 002907 - Lens Foam Gasket [REV:A]                | 1.0         |            |   |   |                |
| 3.5       | 002904 - Window Gasket [REV:A]                   | 1.0         |            |   |   |                |
| 179 total |                                                  | 179 unique  |            |   |   |                |

## ☰ Spare Parts

⊕ Service

> Full Service

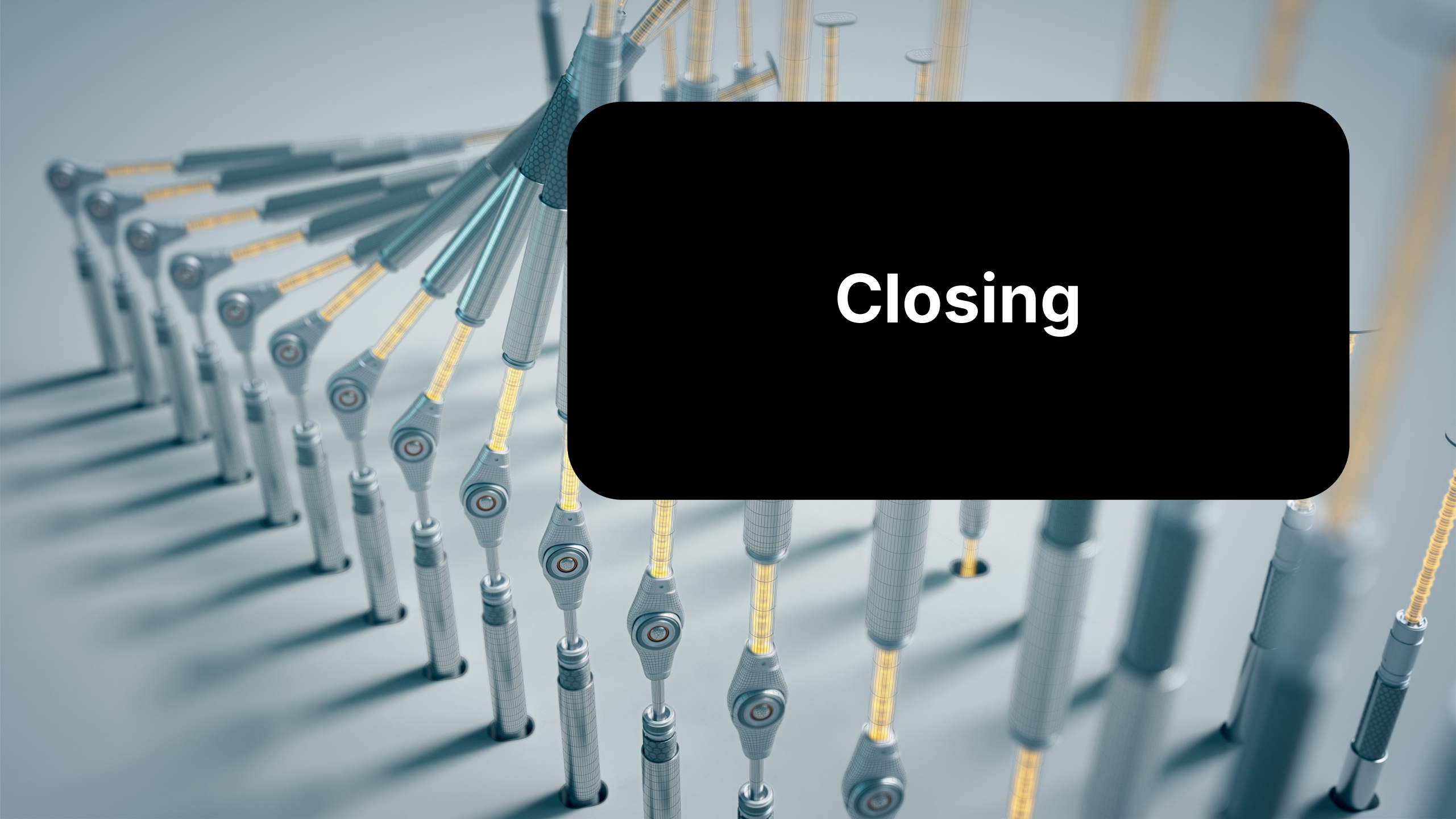
> Annual Maintenance

> Display Update

## > Projector Replacement

> Housing Replacement

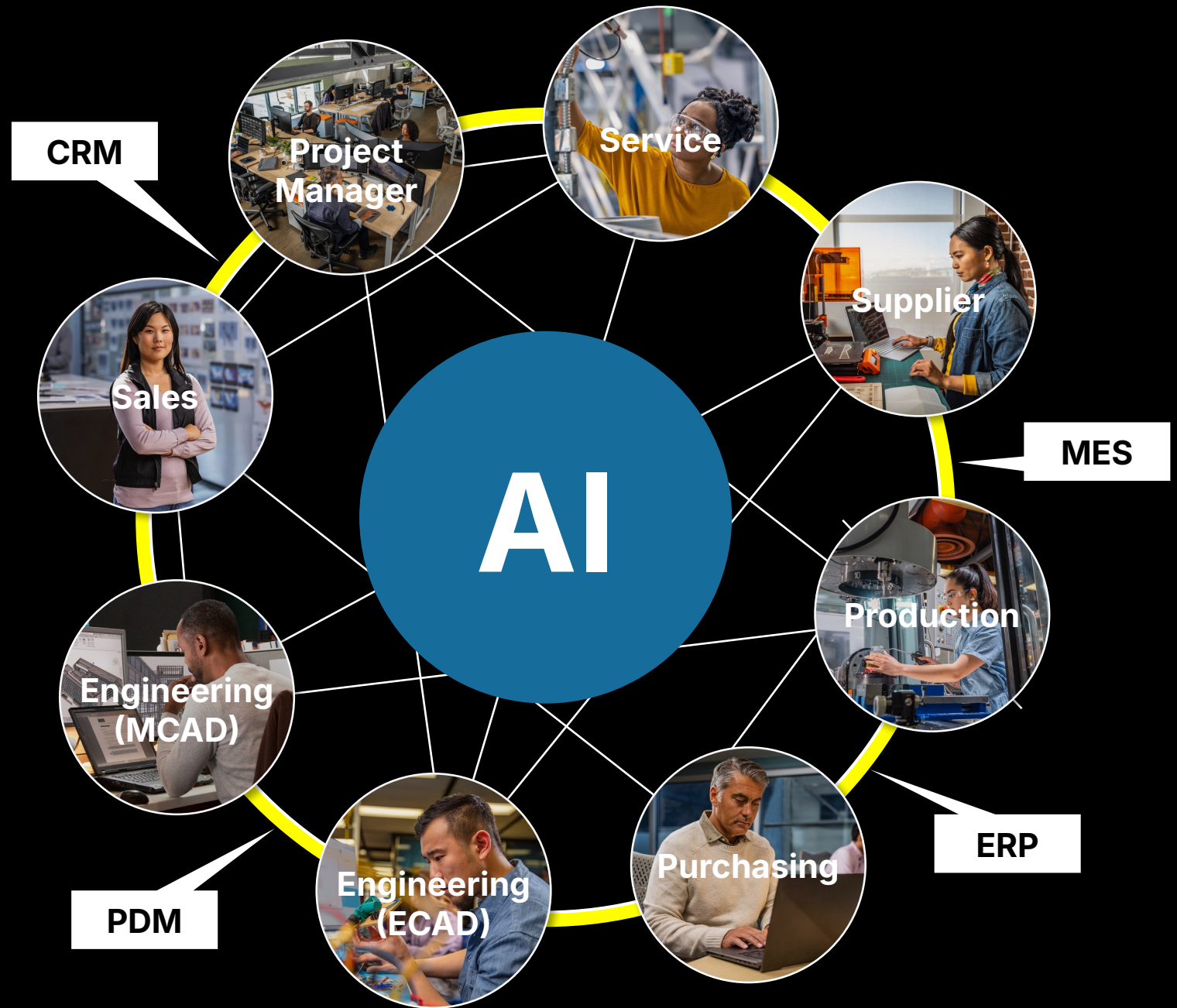




**Closing**

# Global Collaboration Efficiency

Common Product Data  
Smart Processes  
Dynamic KPIs  
Todo-Lists  
Dashboards  
Revision Control  
Automatic Notifications  
Approvals & Escalations



**Jeremy Lambert**  
Director, Product Management, Autodesk





Stücklisten,  
Projektplane,  
Änderungsübersichten,  
Fortschrittsübersichten  
Aufgabenlisten  
Offene-Punkte-Listen  
Übertragungsprotokolle  
Versionsstände  
Beschlüsse  
Ersatzteillisten  
Servicepläne  
Reifegradüberwachung  
Fertigungsanweisungen  
Qualitätsprüfpläne



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[voigt@contelos.de](mailto:voigt@contelos.de)



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Senior PDM/PLM Solution Engineer at Autodesk

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# Danke, dass Sie dabei waren.

Fragen zum Vortrag oder zu Ihrem Projekt? Sprechen Sie uns an.

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| <b>E-Mail</b>        | <a href="mailto:info@contelos.de">info@contelos.de</a> |
| <b>Web</b>           | <a href="http://www.contelos.de">www.contelos.de</a>   |