

Expanding the Definition of Content Reuse and Applicability



Introduction

Traditional reuse

Intro to JT standards and PLM content

Extending digital thread to include Tech Pubs reuse

Summary



Today

Leading position in Electrification, Automation and Digitalization

Employees

377,000+

Revenue

€82.9 billion

Net Income¹

€6.1 billion

Profit margin Ind. Business

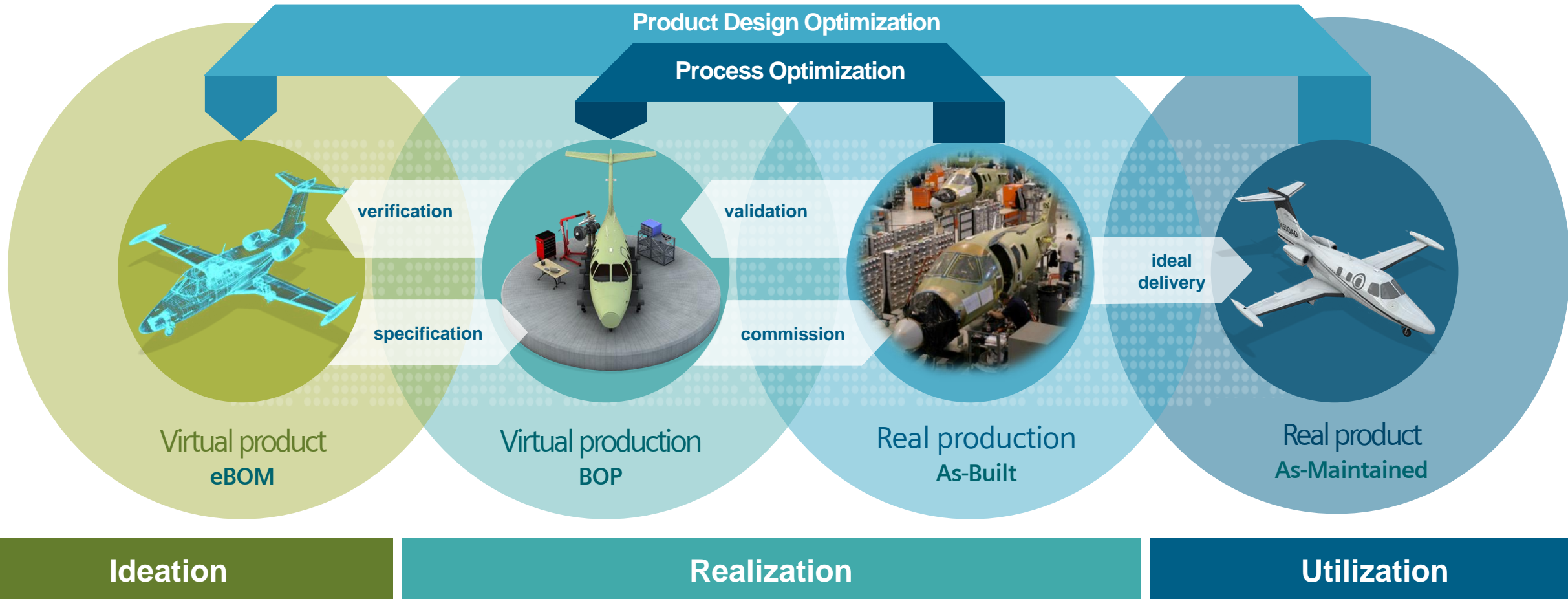
11.2%

Key figures as of Oct 2017 1 Strategic Unit

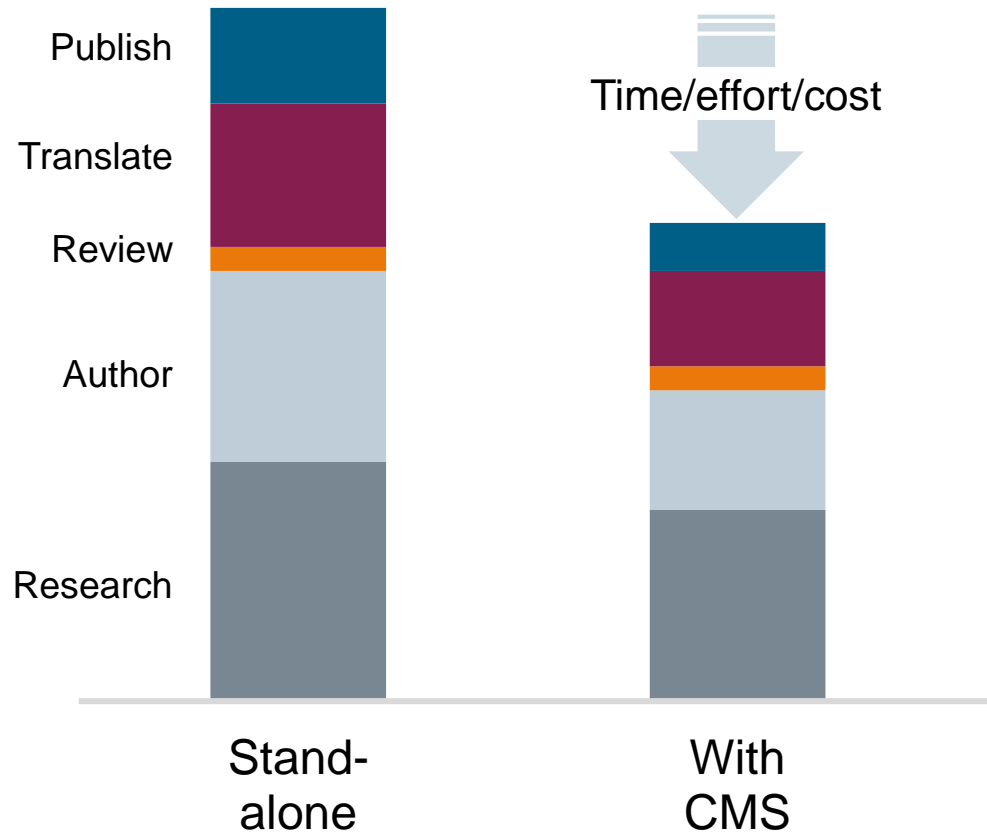
Digitalization's value fully realized

Digital threads connect the twins

SIEMENS
Ingenuity for life



Traditional goals of structured content authoring

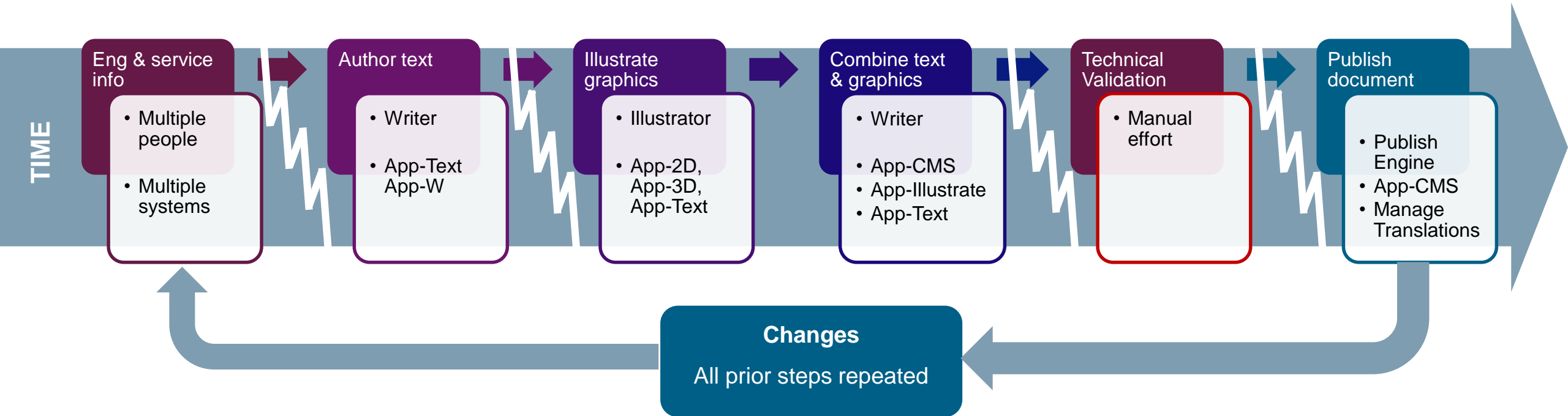


Structured content authoring, management and publishing have a proven record

Reuse results in

- Reduced time / cost in authoring, translation and publishing
- Increased consistency
- Ability to interchange with partners, customers

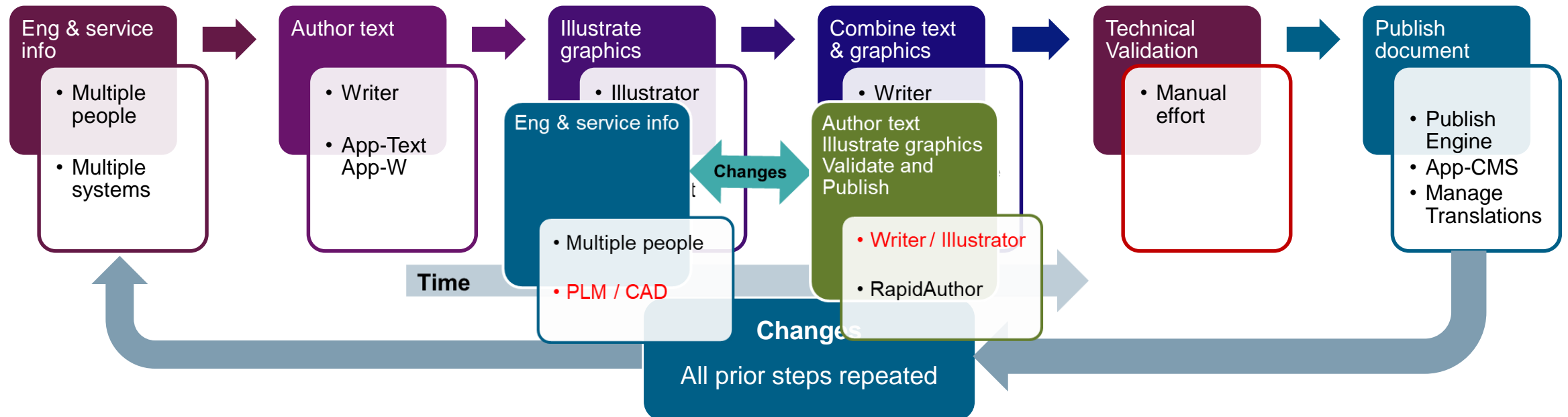
Traditional Authoring Process



But what if...

... we could reuse the source data without recreating the content?

... we could apply engineering changes to existing content, automatically?



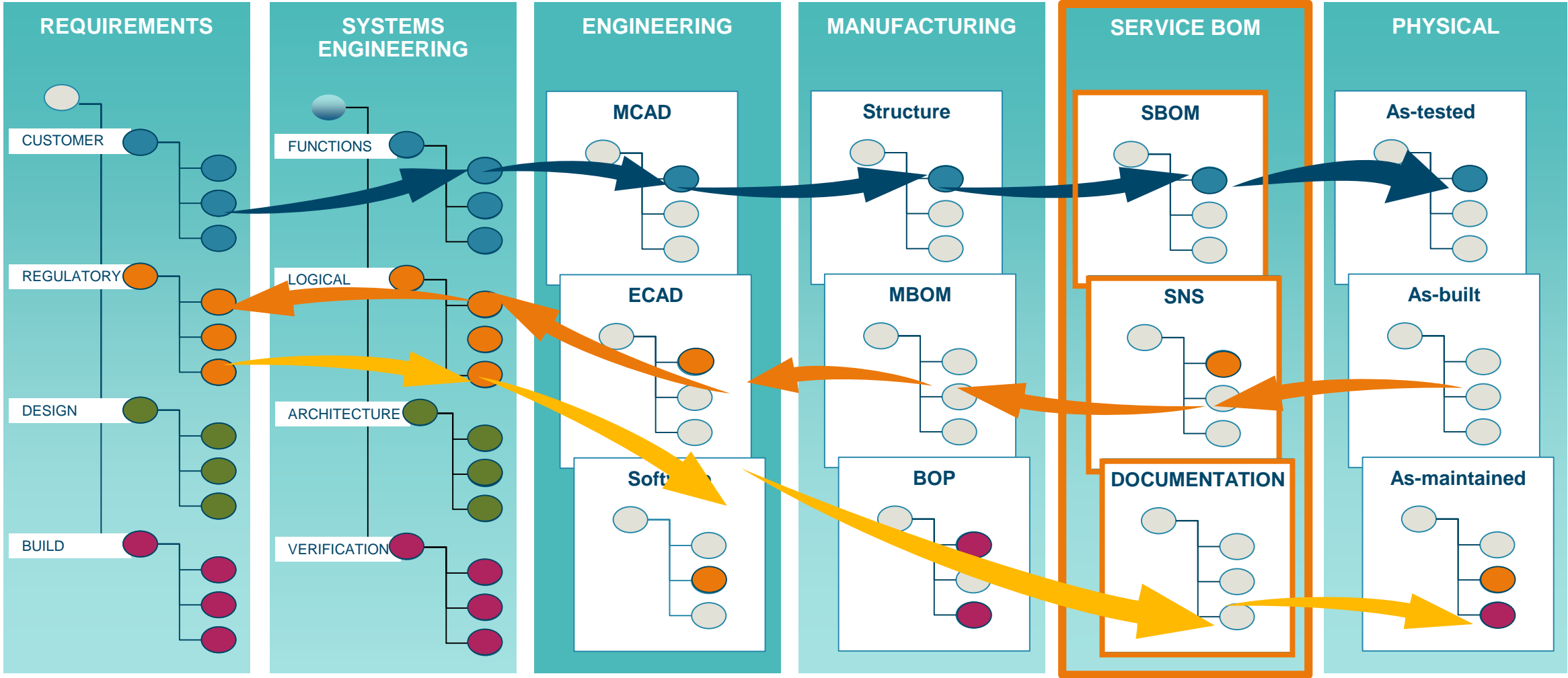
Benefits of authoring in the PLM environment



1. Immersive with the product lifecycle
 - Workflows
 - Engineering change notices
 - Visualization of product
2. Synchronized output
 - Linked content – product data and the documents that support them
3. More effective documents
 - Derived content – product data reused directly as source
 - Repurposed into rich interactive 2D, 3D, animated and augmented reality content

Digital Threads – Creating the Digital Twin

Product Lifecycle Management product structures



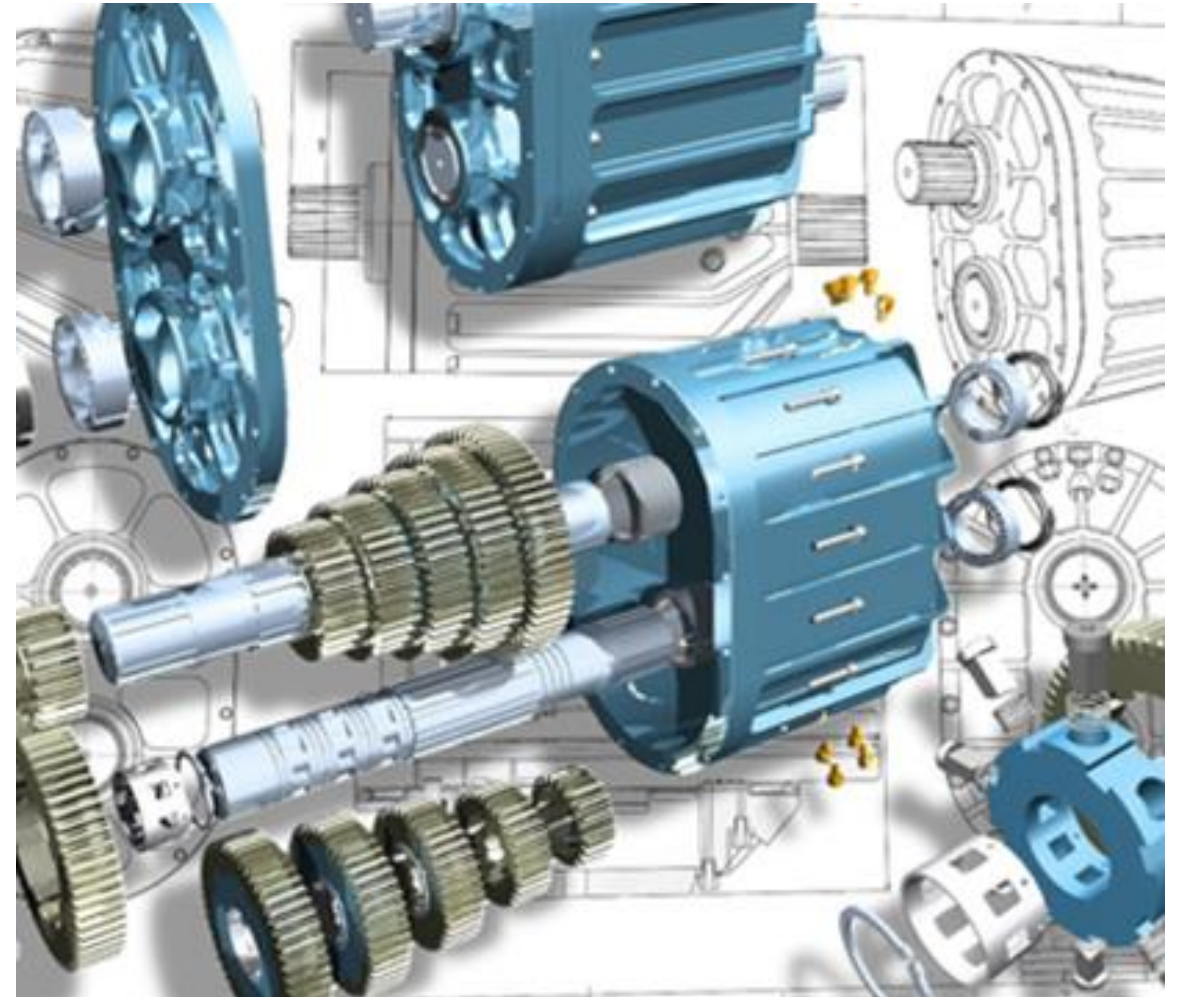
ISO 14306:2012

JT file format specification for 3D visualization

JT is an openly published data format.

It is widely used for communication, visualization, digital mockup and a variety of other purposes at a majority of the world's leading manufacturing companies

JT has been accepted by ISO as an International Standard for 3D visualization. In addition to visualization, many JT Adopters use JT as a process format for workflows such as data exchange, supplier collaboration, and long-term data retention.



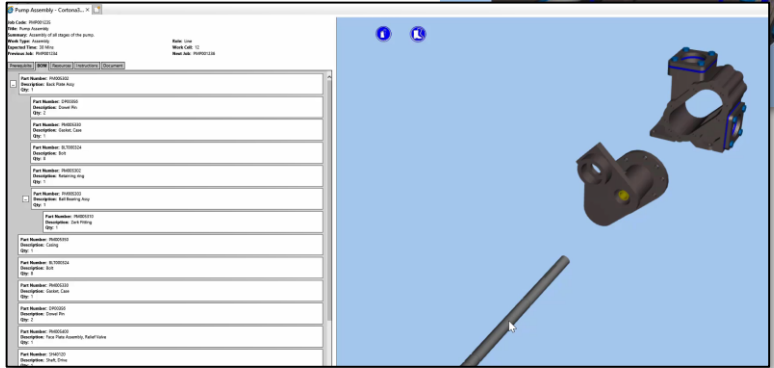
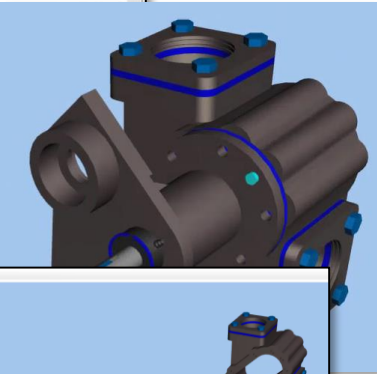
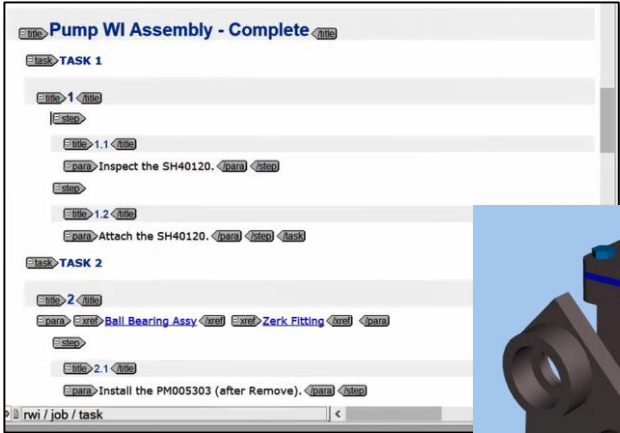
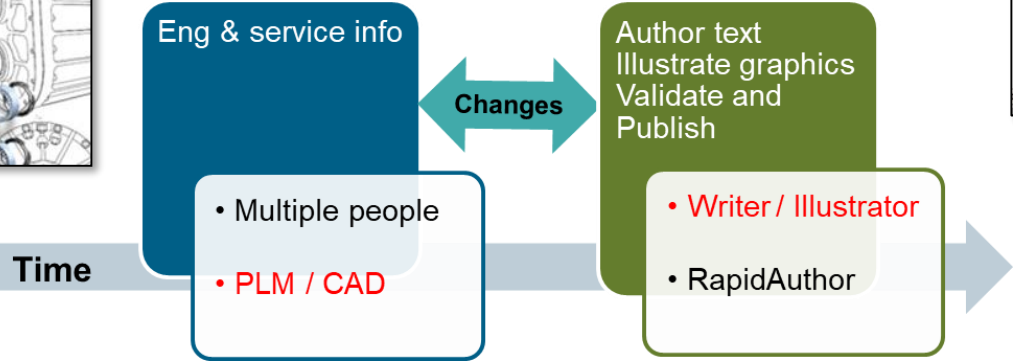
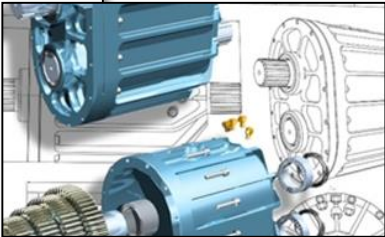
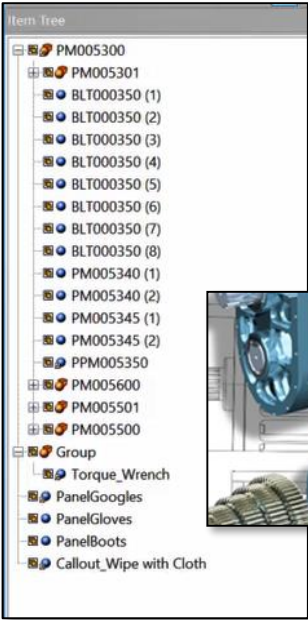
Sample of JT structured data

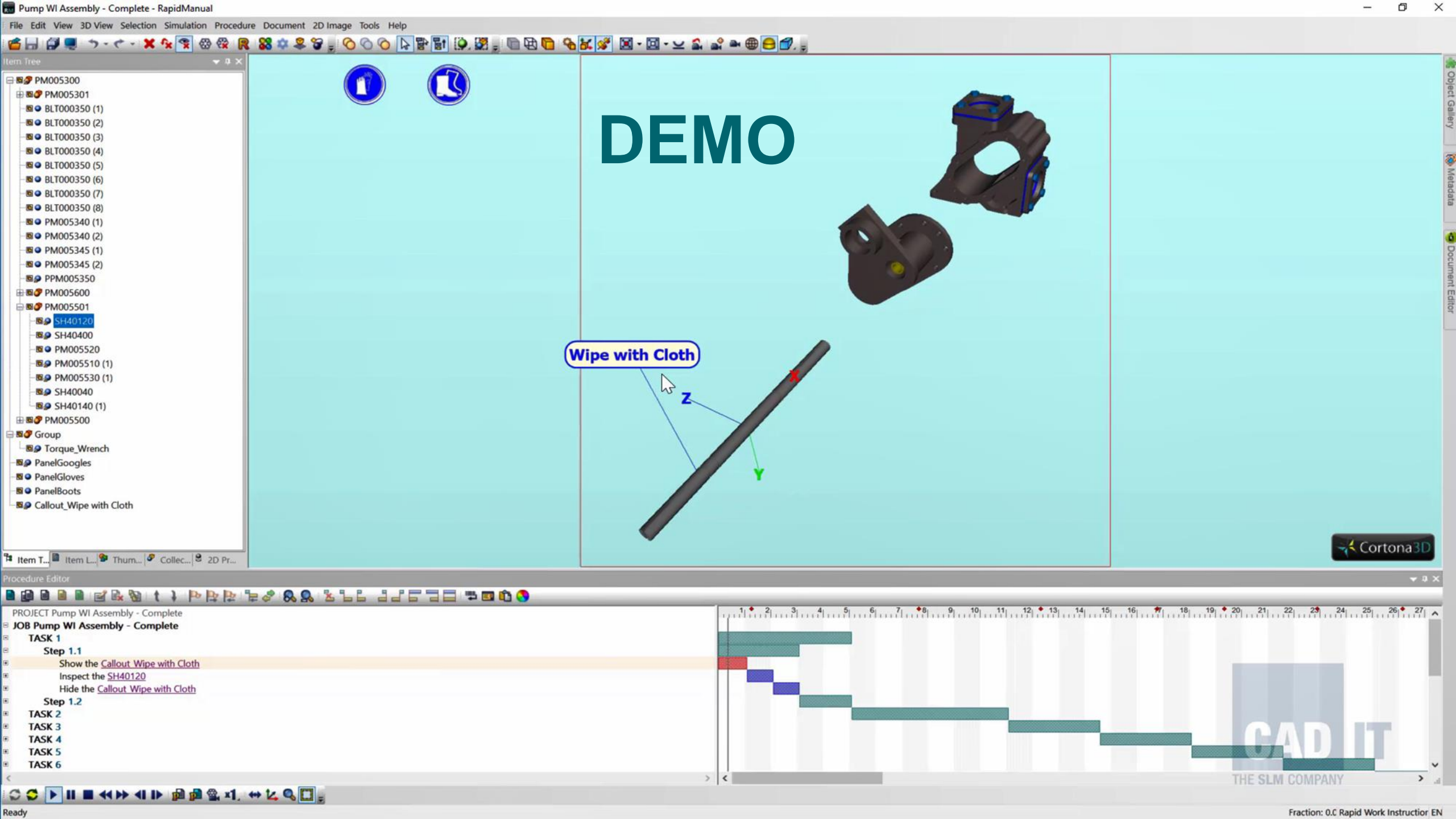


JT Structure

JT Viewer

Authoring from the digital thread





Summary

Authoring and Publishing via the Digital Thread



1. Create integrated tech pubs content from BOM, CAD and attribute data
2. Manage in alignment with the product's configuration
3. Publish highly effective technical documents

Author

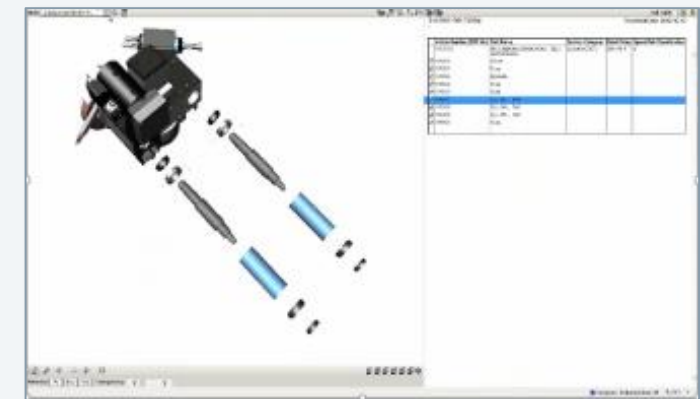
- Create, update, edit & enhance
 - 2D / 3D interactive technical documentation (2D, 3D, animations, hot-spots, XML text)
- ...directly from BOM, CAD & attribute data
- ...within the same application.

Manage and build documents

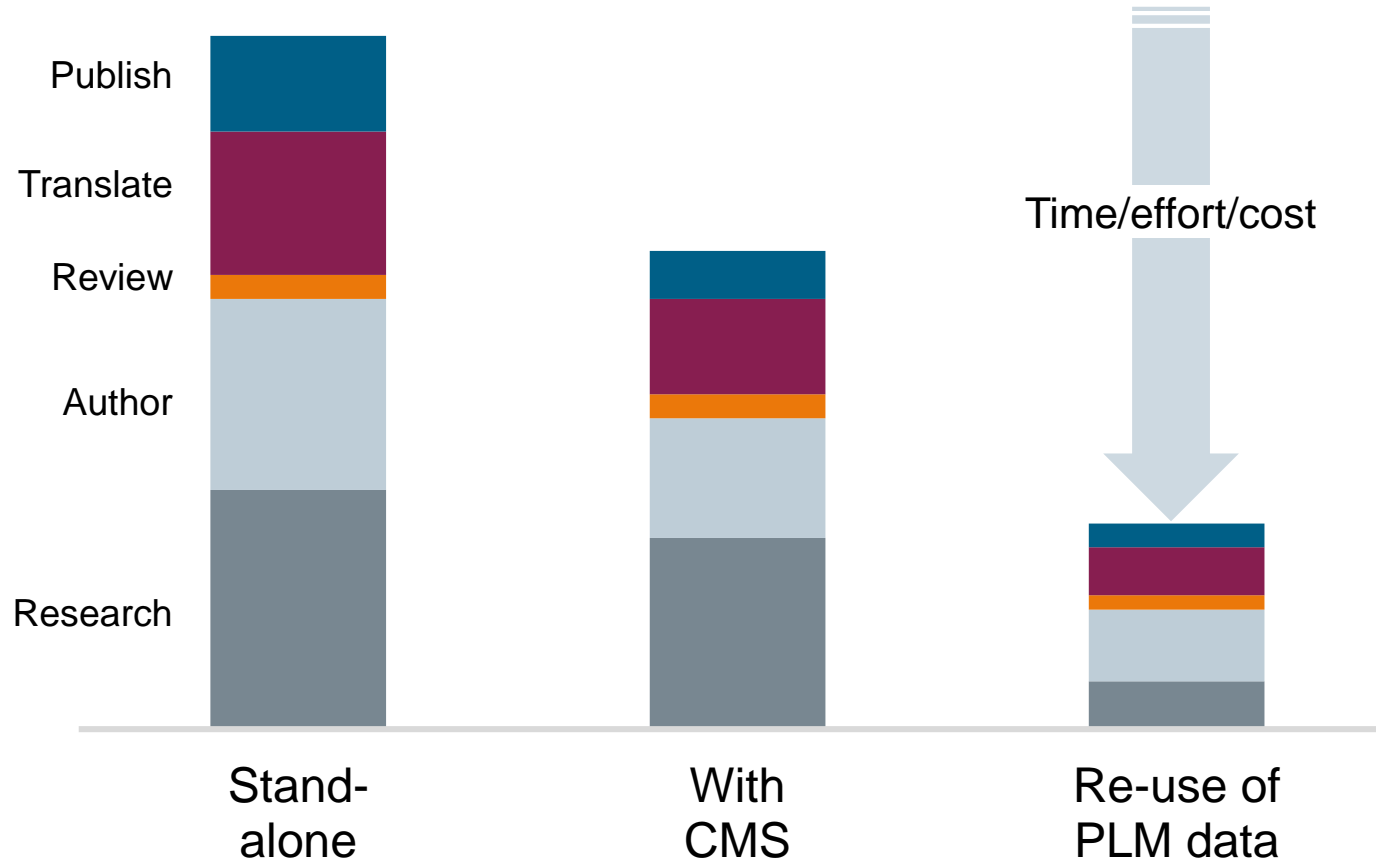
- Generation of documents; reuse of content
- Manage against product configuration, applicability, effectivity, etc.

Publish

- Create PDF, 3D PDF, HTML, HTML5, augmented reality (AR)
- Configuration-specific
- Training exercises, work instructions/job cards, operations, parts catalogs/IPC/EPC,



Is your Technical Documentation process best-in-class?



Change reuse definition to include reuse of product engineering content

- Synchronized with product configuration
- Reuse of existing engineering content

Include technical publications in the digital thread to improve:

- Accuracy of document content
- Authoring/publishing efficiency
- More effective end-user documentation

Thank you



Trish Laedtke

Phone +1 (651) 285-7991

patricia.laedtke@siemens.com