



KALYPSO

Connecting the Value Chain from Idea to Market

This presentation and all information contained herein is the confidential and proprietary information of Kalypso L.P. and its affiliates and subsidiaries (collectively, "Kalypso") and is intended solely for the person(s) to whom it is transmitted by or on behalf of Kalypso. As such, no information contained herein shall be reproduced, copied, quoted, circulated, relied upon, or disclosed without the express written consent of Kalypso. With receipt of the information contained herein, the recipient acknowledges and agrees to at all times abide by the aforementioned non-use and non-disclosure obligations and any applicable written non-disclosure agreement(s).

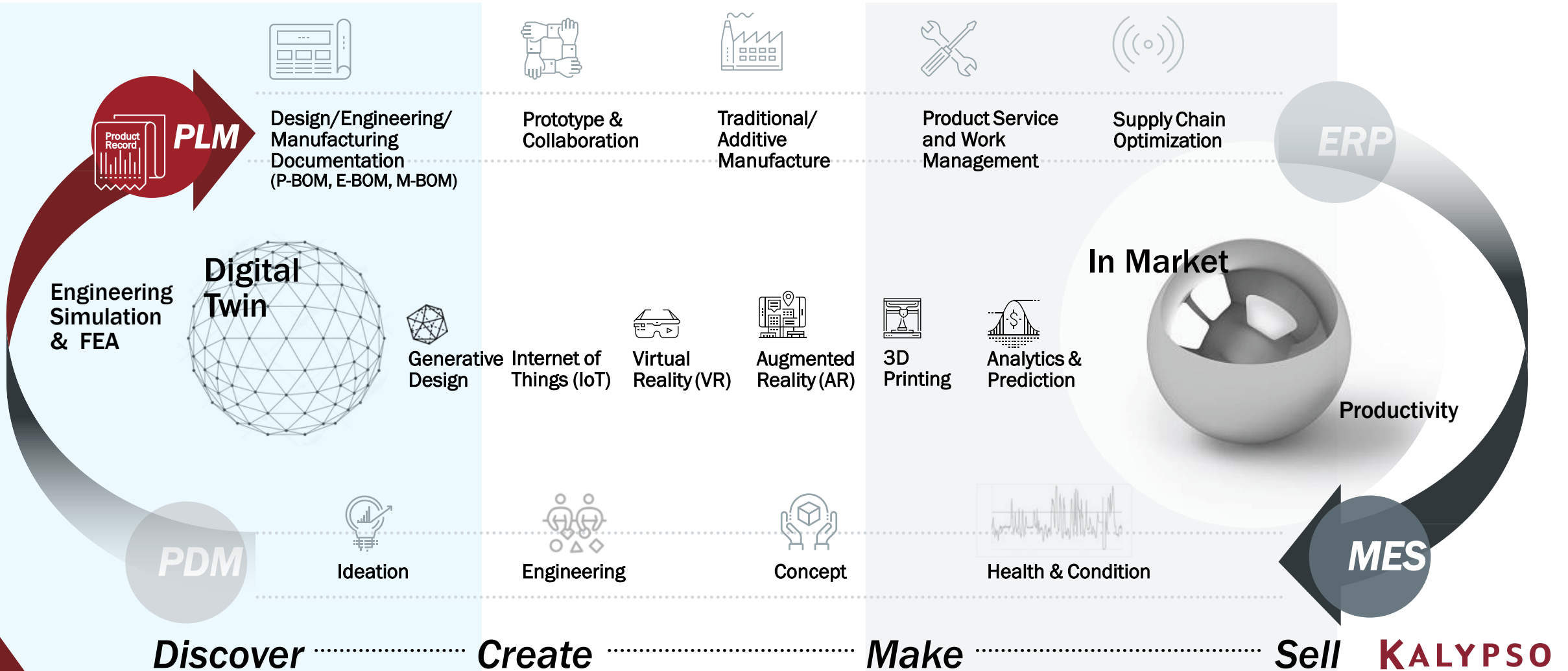
Innovate in a Digital World

PLM has provided efficiency and productivity benefits helping manufacturers shorten design cycles,

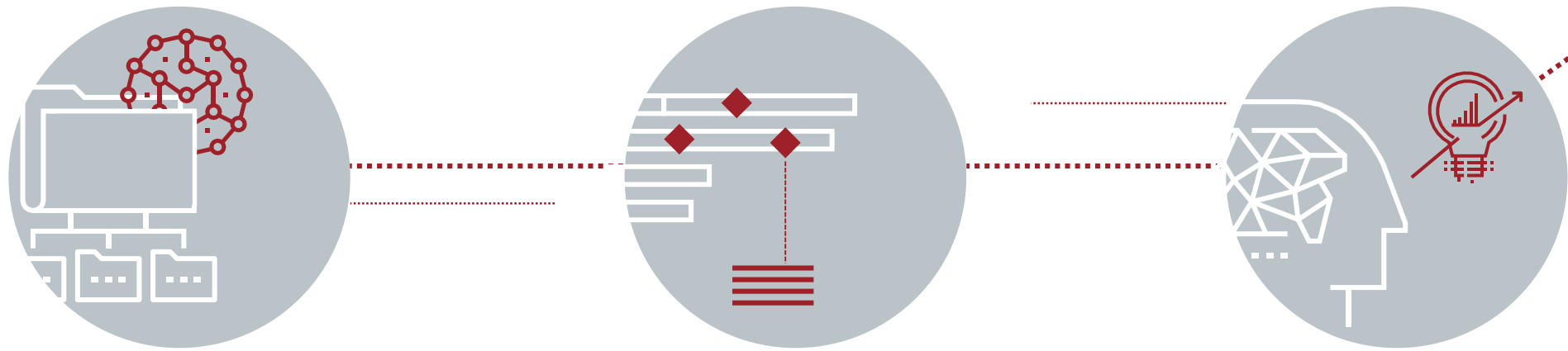
but now, coupled with **advanced digital solutions** such as AI and ML, it has the capacity to **deliver more innovation** and improve the design to manufacturing integration

The Digital Value Chain

Establishing a digital platform can enable the transformation of product design and development, production management, and customer service models



The availability of **intelligent data** and providing it to the **right functions** **at the right time** creates new opportunities to **reduce risk, improve quality, and accelerate innovation**



Smart Connected Value Chain

Project Management: Manage new product and equipment project

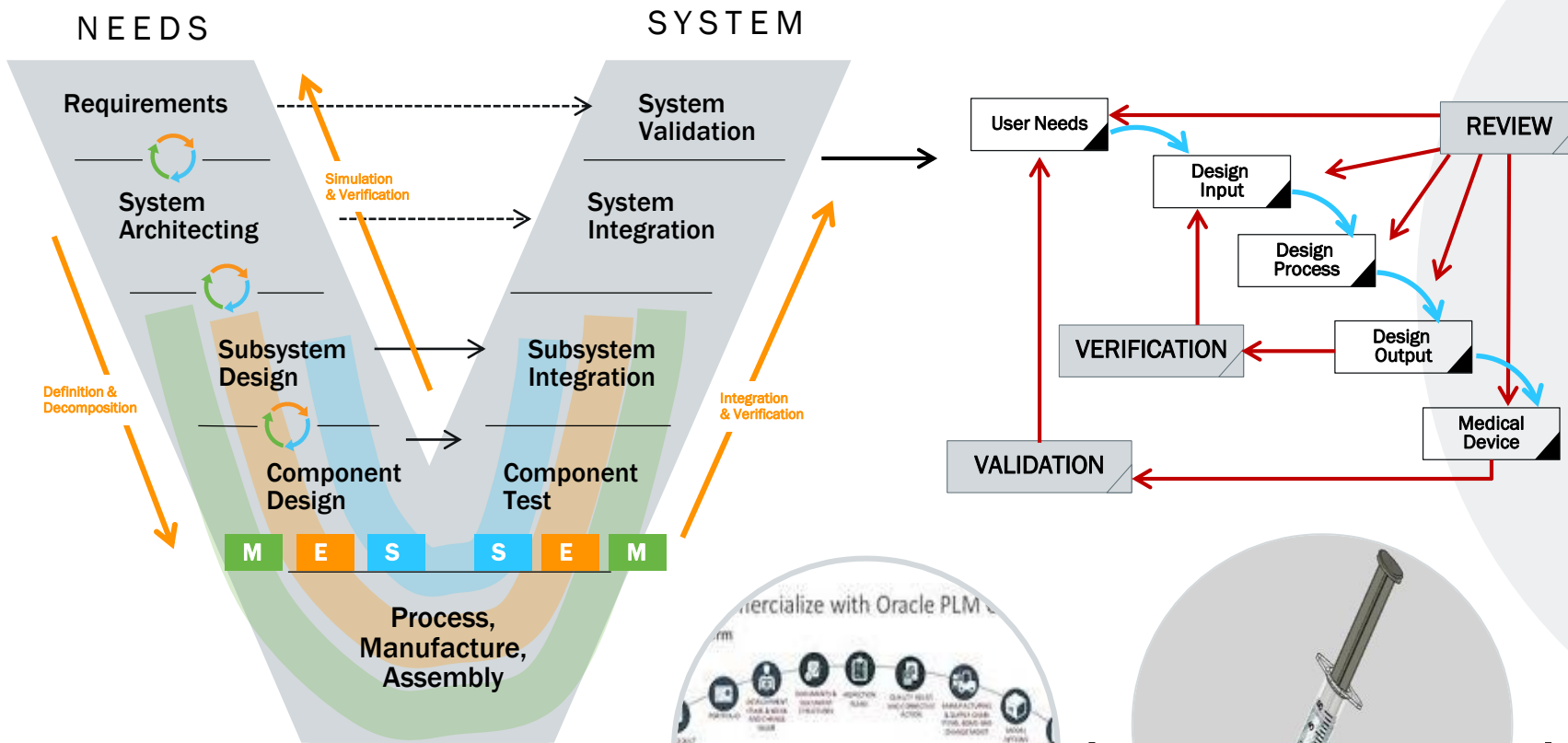


How about...?



Product Lifecycle Intelligence – Predict cost of change, time to implement change, resource by region etc.

Digital product creation and validation



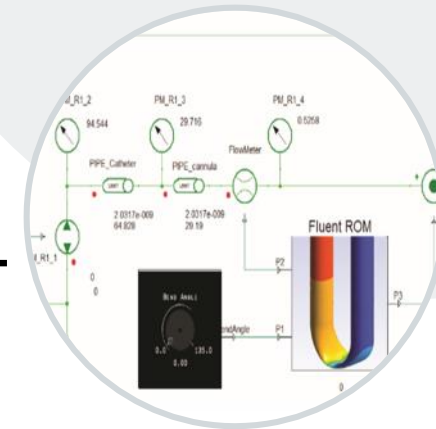
Systems Engineering approach to product development adapted by industry is achieved through the utilization of the digital tools aligned with the process below



Requirements and Digital content management

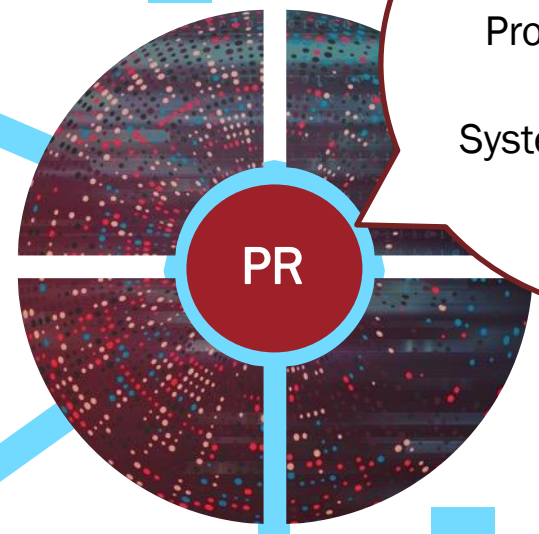


Virtual/Digital models



Virtual/Digital clones and digital verification and validation

Digital opportunity is built upon a solid product record foundation



The Connected Product Record through Systems and Data

But there is one common theme that spans across industries: for all digital efforts, data is the underlying raw material. And it's time to get your data under control.

We think of Digital as both strategic and practical.

We work with our clients to lay the right foundation, set the course and take the first steps.

Visit www.kalypso.com

to experience Smart Connected Discover to Make in real-life

Appendix

Medical Device Capability Accelerators



POWERED BY



Pre-configured, leading practice business processes using Windchill PLM and QMS for the following capabilities:

Part / BOM Management	CAD Data Management and Model Based Enterprise (MBE)	Document Management	Design Control & Design Review (DHF/DMR)
Change Management	Nonconformance	Complaints	CAPA & SCAR
New Product Introduction (NPI) Project Management	Regulatory Information Management (RIM)	Electronic Records Management (ERM)	Product Lifecycle Intelligence (PLI) - Machine Learning, Artificial Intelligence (AI), & Predictive Analytics
Roles / Groups & Access Control	Electronic Signatures	Automated Testing	Validation Documentation

CAD Management for a Model Based Enterprise (MBE)

Leading Practice

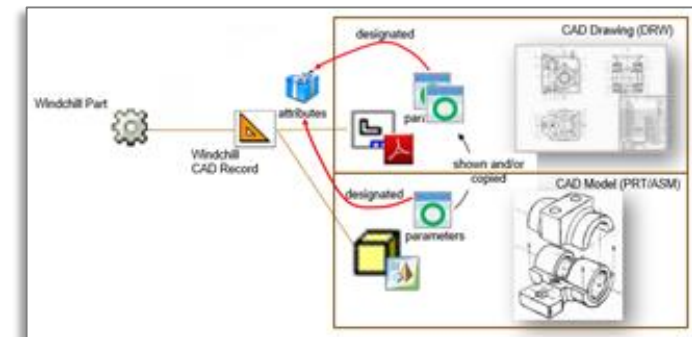
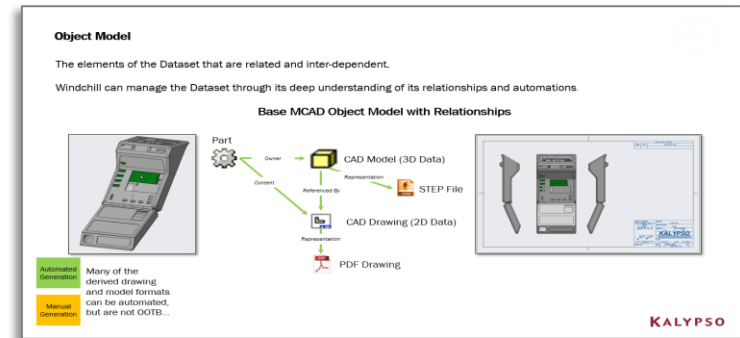
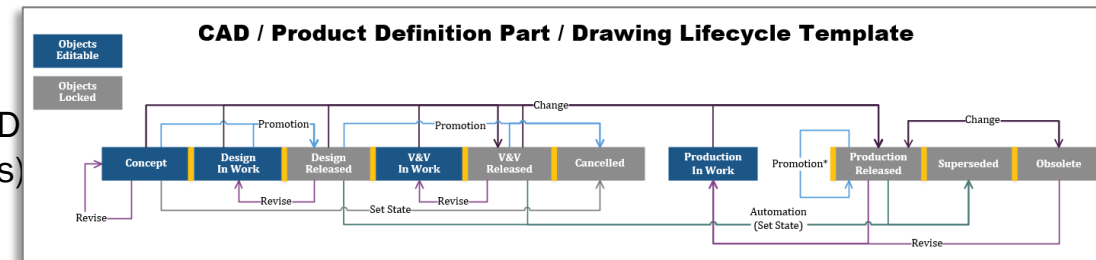
- Enforce use of a standard set of CAD Management practices (templates, CAD behavior configuration files, numbering & revision sequences, and approvals) to ensure support of the expectations of a Digital Model-Based Enterprise.

Capabilities

- Supported CAD Tools (Creo 4, Solidworks 2019, *later versions and other tool suites coming soon*)
- Example templates (start parts and drawings with linked parameters, restricted parameter files, application behaviors, etc.)
- Coherent Naming, Numbering, and Parameter mapping to Windchill Attributes based on Windchill Behavioral Preferences
 - Common Numbering & Revision Sequences, Roles and ACLs, Lifecycle with Maturity-based Data, Approvals Rules, Attribute Assignment, default Behavioral Preferences shared with Parts and BOMs
- Supports both Bottom-Up (CAD first) and Top-Down (Part first) approaches
- Simplified drawing initiation – naming, numbering, and parameter value rules
- Customized Check-In enforces cascading parameter and attributes rules
- Supports CAD-Driven Product Structure in Part and BOM Management

Value

- CAD usage aligned with integrated Master Data and Digital Model-Based Enterprise vision
- CAD created to be enterprise ready

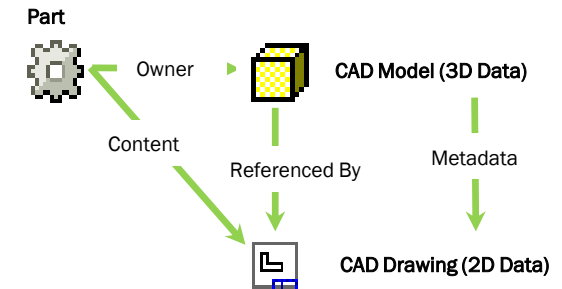
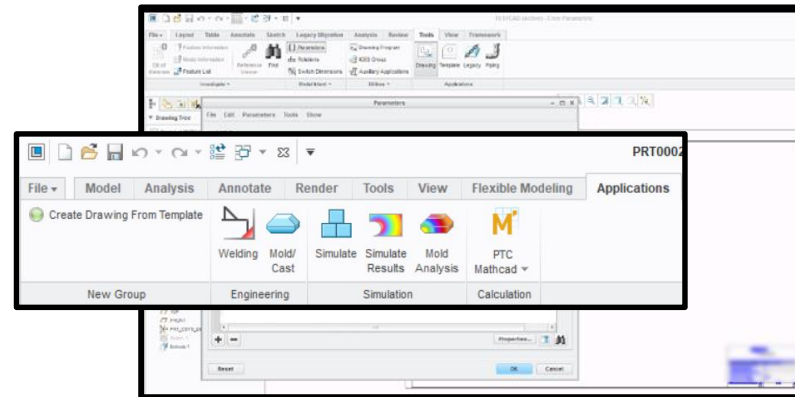
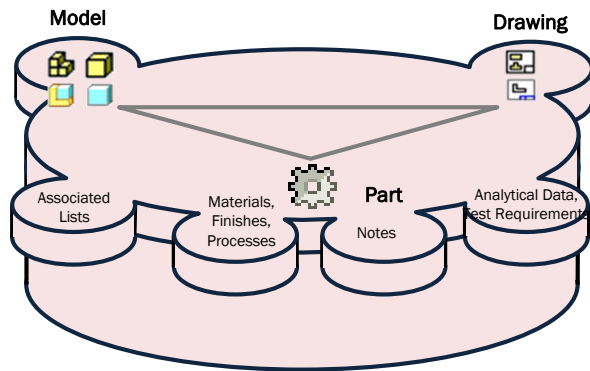


Data Set Automation

The ASME Y14.41 Data Set Concepts are supported by a series of small CAD-side automations and Windchill-side configurations. Product definition can start with any Data Set element using either “Top Down” and “Bottom Up” design approaches.

- Honor the “create data once and propagate it” paradigms.

ASME Y14.41 Data Set Concepts supported by light automation



- Data required for complete definition may be integral to, or referenced by, the product definition data set
- Data not integral product definition data set, but describing the product, may be revised independently
- Related data may be manually set or computer generated