

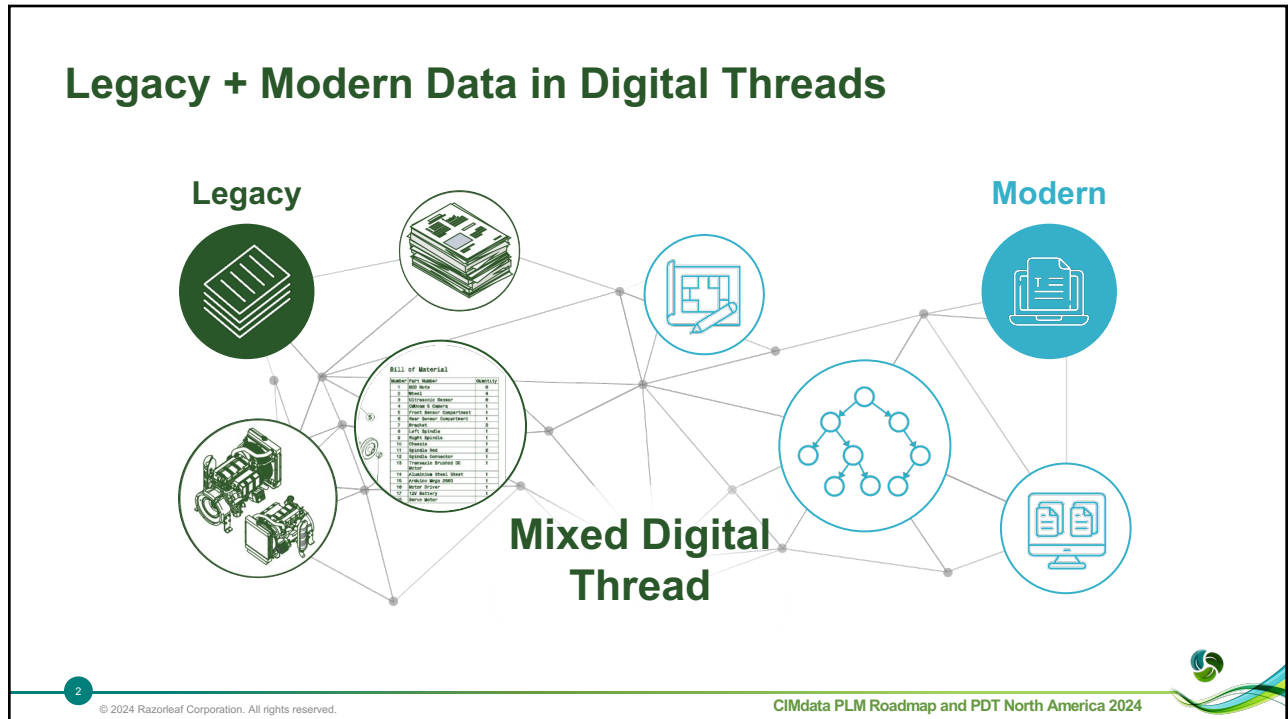
Razorleaf

PLM Road Map™ & PDT North America 2024
 Value Drivers for Digitalization of the Product Lifecycle
 Insights for the PLM Professional—Why the investment, what are the returns,
 and how are they achieved?
 May 8 & 9

CIMdata **eurostep**

Data: It's the Character That Matters
 Jonathan Scott | Chief Architect

Legacy + Modern Data in Digital Threads



Legacy

Modern

Mixed Digital Thread

BILL OF MATERIALS	
Material Number	Description
1	Blank
2	Blank
3	Electronic Blank
4	Blank
5	Blank
6	Blank
7	Blank
8	Blank
9	Blank
10	Blank
11	Blank
12	Blank
13	Blank
14	Blank
15	Blank
16	Blank
17	Blank
18	Blank
19	Blank
20	Blank

2

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CIMdata PLM Roadmap and PDT North America 2024

Documents

CONCEPT

- Basic product specification
- Describe aspects like:
 - Behavior
 - Material
 - Color



METADATA TRAIT

- Data about data
- For instance:
 - Document ID
 - Title
 - Author

HISTORY TRAIT

- Represents document evolution
- Revisions

PITFALLS

- Data loss - overwriting
- Wrong version usage

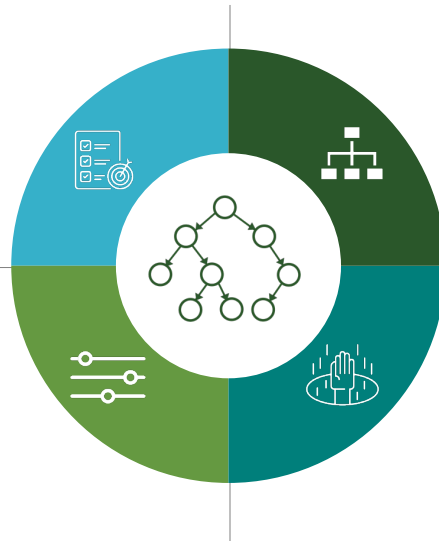
3



Bills of Materials

CONCEPT

- List of assembly components
- Collection of records



STRUCTURAL TRAIT

- Hierarchical structure
- One level or multi-level
- Elements AND relationships both may contain data

FILTERING BEHAVIOR

- Overloaded BOMs represent supersets of product definition
- Filter to define an exact product

PITFALLS

- Part shortage
- Build wrong product
- Overbuy components

4



Composite Documents

CONCEPT

- Document, but made from other content
- For instance, 3DPDF TDP
- Contains BOM, models, text



STRUCTURAL TRAIT

- Composed of other content
- Heterogeneous data linkages
- Rarely multi-level

UPDATE BEHAVIOR

- Document could be "live" or may require "updating"
- Update events may be link-specific

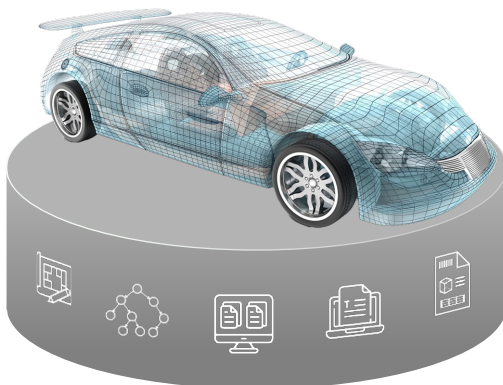
PITFALLS

- Review is required to change product specifications; why allow auto-update (change without review)?
- Linking versus embedding

5



Why Data Character Matters



1

Digital twins rely on robust digital threads that represent a wide range of data types

2

Digital thread robustness depends on data quality and accurate integration between systems

3

Product data must be handled carefully to support digitalization across the lifecycle to support the needs of end consumers

4

That's why it's the character of the data that matters! An integration strategy must factor in data types, behaviors and role in a process for effectiveness

6

