STUCK IN YOUR PLM JOURNEY?

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Raytheon – David Slader – Enterprise PDM Director
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STUCK IN YOUR PLM JOURNEY?

❑ **ArcherGrey**
  – Common Stuck Questions
  – Set Stage

❑ **Raytheon**
  – Advancing "PDM" to "PLM"
  – Making Your Case
  – Getting Un-Stuck

❑ **ArcherGrey**
  – Framework
  – Guiding Principles within Framework

FEELING STUCK?

- PLM implementation going on for years, yet feel benefits have not been realized

- If I only knew this before
  - In the second or third project and looking back, if I knew what I know now, this is how I would have done differently

- Fine tuned processes numerous times but end does not seem to achieve the end result

- Management changes direction in middle of project

- Funding for later phases not materializing

- PLM Projects identified in Project Portfolio not making it above the approval line

- OTHERS?

SETTING THE STAGE

- PLM maturity level varies at companies, the focus on the discussion today will benefit companies who have
  - Started the PLM journey
  - Completed at least one project

- Baseline Example from Raytheon
  - PDM is implemented
    - CAD data management
  - PLM solution implemented
    - BOM management
    - Change process
    - Parts
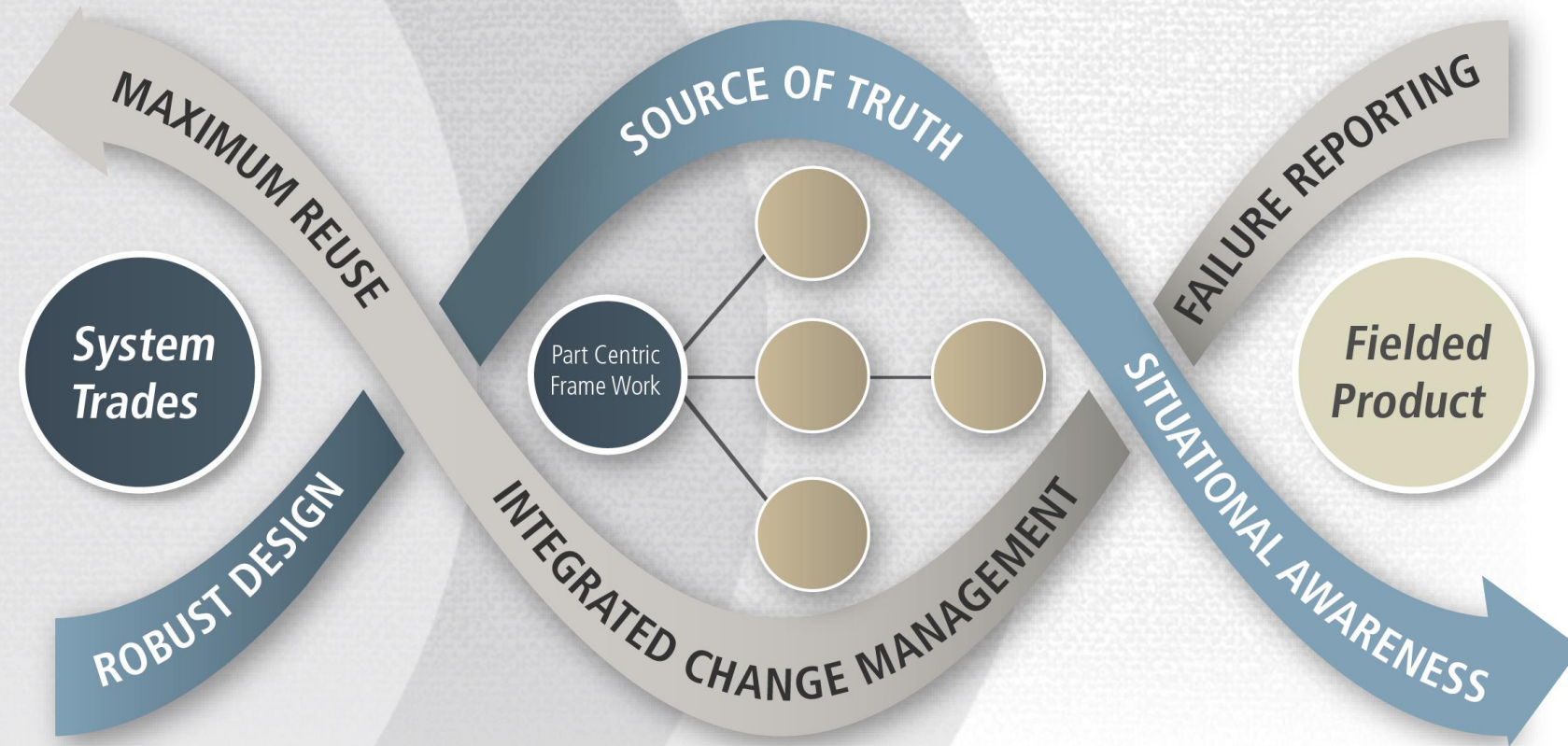 - Struggling ("**Stuck**") on how to implement a BOM strategy (EBOM, MBOM, As-Built, …..)

Raytheon
Customer Success Is Our Mission

DAVID B. SLADER
RAYTHEON ENTERPRISE
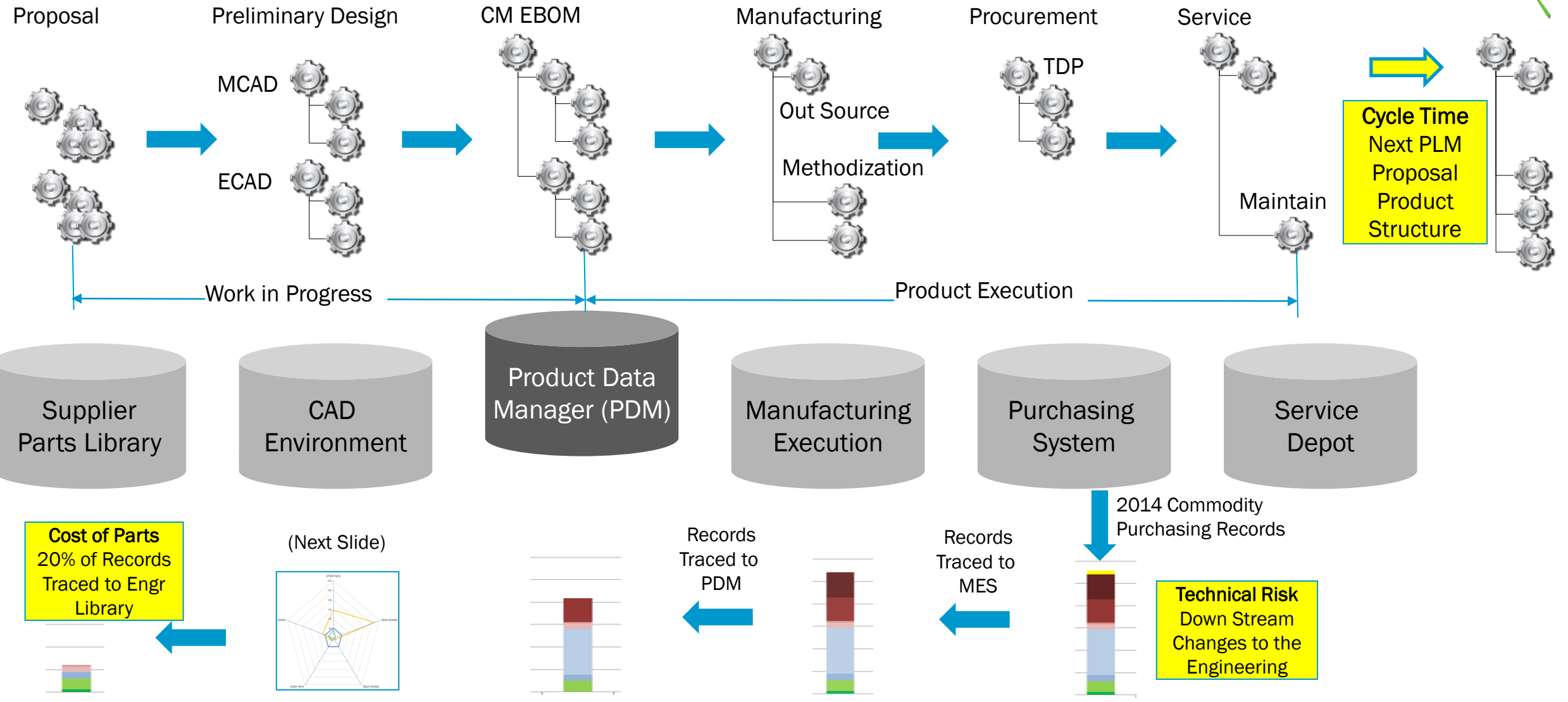PLM DIRECTOR

Product Lifecycle Management (PLM)

Advancing "PDM" to "PLM"

David B. Slader
Raytheon Enterprise
PLM Director
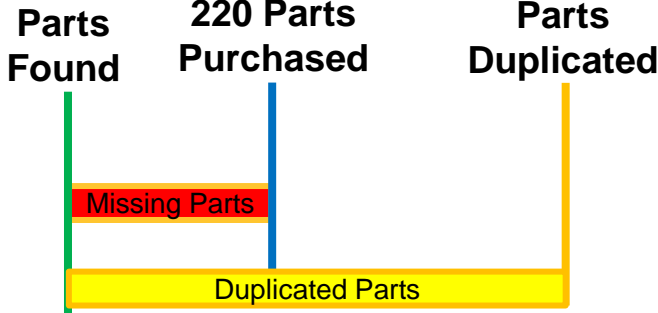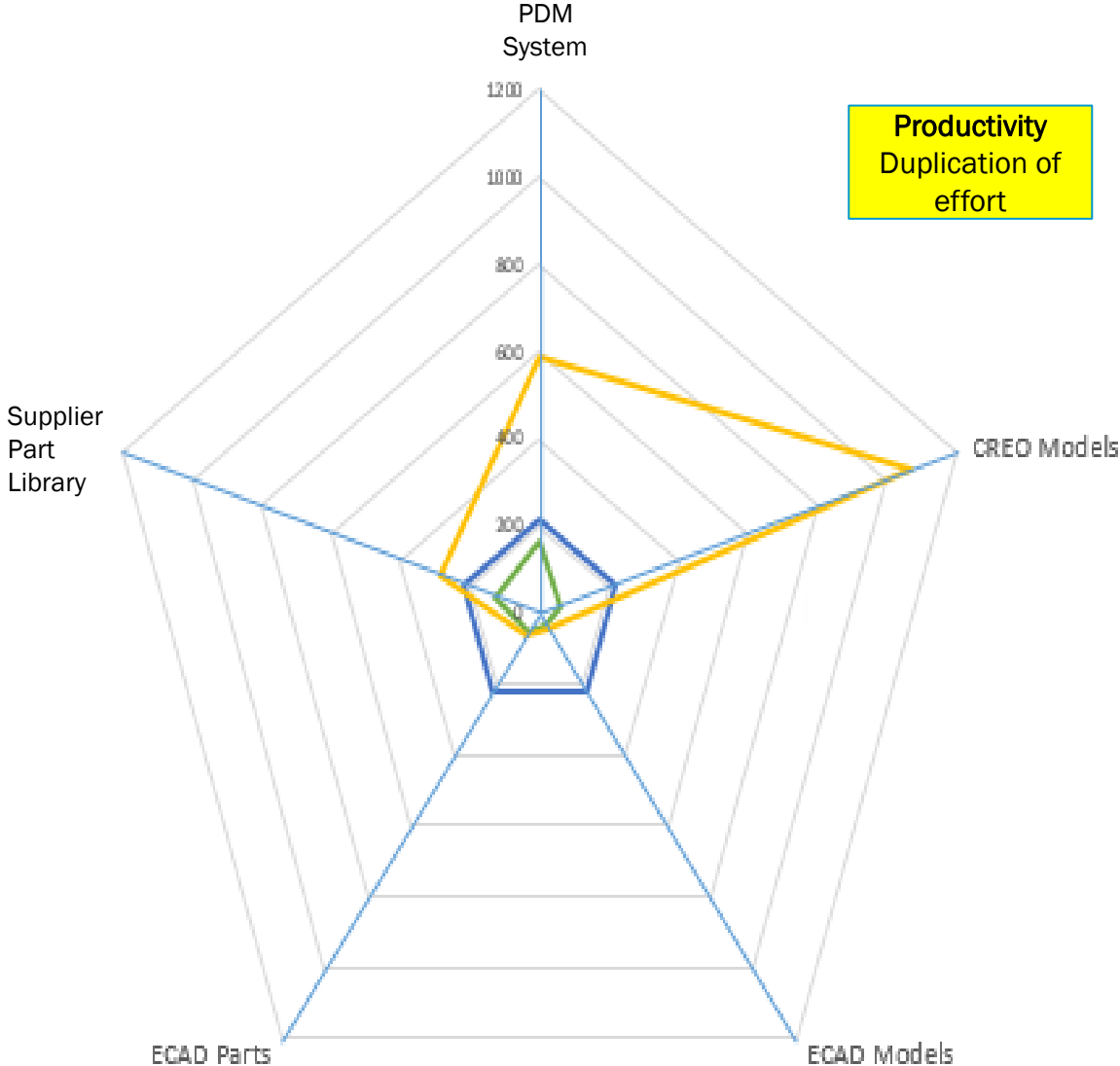
PDM: The control point for part and product definition

PLM: Product Structure (Bill of Material) management from Proposal to Disposal to Proposal

MAKING YOUR PLM CASE!

Proposal — Preliminary Design (MCAD, ECAD) — CM EBOM — Manufacturing (Out Source, Methodization) — Procurement (TDP) — Service (Maintain) — Cycle Time Next PLM Proposal Product Structure

Work in Progress — Product Execution

Supplier Parts Library | CAD Environment | Product Data Manager (PDM) | Manufacturing Execution | Purchasing System | Service Depot

Cost of Parts 20% of Records Traced to Engr Library

(Next Slide)

Records Traced to PDM

Records Traced to MES

2014 Commodity Purchasing Records

Technical Risk Down Stream Changes to the Engineering

Analyze the Current System in Reverse Will Compel a PLM Solution

MISSING AND DUPLICATE PARTS

GETTING "UN-STUCK"

- Motivating the business
  - Creating a vision
  - Drive the business case home: Cost, Schedule, and Technical impacts of current State

- Aligning the stakeholders
  - Who are the people that influence decision making?
    - Communicate early and often
  - Where are the improvements needed?
  - Where are the benefits gained and measured?
  - Identify funding streams

- Timing the project
  - Move quickly before benefits disappear with a Band Aid fix
    - Advertise the project to halt further investment in other solutions
  - What is the annual funding cadence
  - Are budgets annual or do they roll over to the next year

![ArcherGREY]

BILL MACEK
ARCHERGREY
DIRECTOR OF SERVICES

GETTING UN-STUCK FRAMEWORK

Enterprise Data Architecture
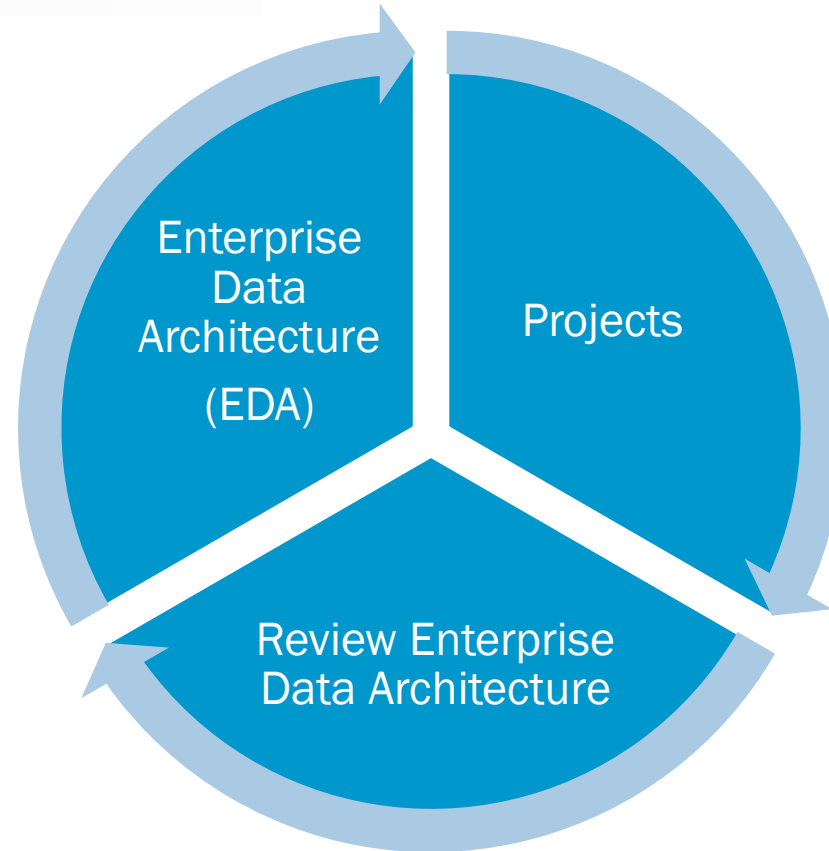
Description

- Define relationships between People/Data/Systems/Processes

Major Tasks

- Align leadership with Data and System Ownership
- Enterprise Architecture Roadmap
  - Includes ERP, PLM, CRM, etc…
- Enterprise Architecture Exploration
  - What Systems own What Data
  - What People own What Processes

Deliverables

- Enterprise Solution Roadmap
- Recommendations
  - Phased Implementation
  - Projects

Projects

Description

- Define projects, build business case(s) and implement

Major Tasks

- Business Requirements & Use Cases
- Functional / Technical Specifications
- Configuration
- Testing
- Go-Live
- HyperCare / Training
- Organizational Change Management

Deliverables

- Project Scope / Plan
- Business Return On Investment
- Cost Estimate

Enterprise Data Architecture (EDA)

Projects

Review Enterprise Data Architecture

Review Enterprise Data Architecture

Description — Review and update EDA to capture and resolve business changes during project timeframe

Major Tasks — Review EDA against business changes / priorities — Stakeholder Agreement — Identify and resolve actions — Agreement on new priorities if required

Deliverables — Updated EDA Document

GUIDING PRINCIPLES WITHIN UN-STUCK FRAMEWORK

- Understanding the "WHAT's"
    - WHAT are the Business Strategy Requirements
        - Enterprise roadmap
            - ERP Roadmap
            - PLM Roadmap
            - CRM Roadmap
            - All others …
    - WHAT are the Data Requirements
    - WHAT are the Process Requirements

- Start at the end and work back to the beginning to define requirements
    - WHAT data is required, not HOW to accomplish

- Remember all stakeholders in all stages that are consumers of data, need to understand their requirements
    - Examples may be
        - WHAT data does the Final Assembly in-house need?
        - WHAT data does Contract Manufacturing need?
        - WHAT data does Regulatory need?
        - WHAT data does ERP system need to cut PO to CM?

- Data Architecture (WHAT's needed)
    - WHAT data is
        - Parts, BOM's, Spec sheets, Documents etc …
    - WHAT data is required
    - WHAT data is stored in WHAT system
    - WHAT are the Data consumption requirements

QUESTIONS & CONTACT INFORMATION

- Time permitting – Please raise your hand

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