The Aerospace & Defense PLM Action Group

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Aerospace & Defense PLM Action Group
Formation

- **Established Feb 2014**

AIRBUS GROUP ✦ BOEING ✦ EMBRAER ✦ Gulfstream A GENERAL DYNAMICS COMPANY ✦ Rolls-Royce

✦ Charter members

- **Administered by**

CIMdata®

Aerospace & Defense PLM Action Group
Mission

An association of aerospace & defense companies within CIMdata's globally recognized PLM Community Program, which functions as a *PLM advocacy group* to:

- **Set the direction for the aerospace & defense industry on PLM-related topics that matter to members**
- **Promote common industry PLM processes and practices**
- **Define requirements for common interest PLM-related capabilities**
- **Communicate with a unified voice to PLM solution providers**
- **Sponsor collaborative PLM research on member-prioritized industry and technology topics**

Aerospace & Defense PLM Action Group

Cooperative Action

Topics and issues

Priorities set annually

Categories of action

- **Research**
- **Direction statements**
- **Requirements**
- **Policy**

Guiding principle regarding standards

A&D PLM Action Group will participate in standards groups and promote standards adoption in support of common industry PLM practices, but will not manage standardization process or content

Aerospace & Defense PLM Action Group

Membership Eligibility

As per the charter, eligible for membership are:

- **Commercial aircraft OEMs**
- **Defense OEMs – Aeronautics and space sectors only**
- **Aircraft engine providers**

Other Tier 1 commercial aircraft suppliers aren't included in the current scope

PLM solution providers cannot be members, but may participate as guest attendees at specific Group meetings in the future

Aerospace & Defense PLM Action Group
Value Proposition

- **Each member company contributes funding.**
- **CIMdata administers Group operations within its PLM Community Program, coordinates research, and manages the progression of policy formulation.**
- **Funding the Group's activity rather than relying on the effort of volunteers or vendor contributed resources indicates the seriousness of members' intent and their desire for timely performance to plan**

Enhanced and Accelerated Outcomes

Internal Improvement: Specific actions members can take within their companies and supply chains

Engagement with Solution Providers: Managed 4-step progression from intention to policy

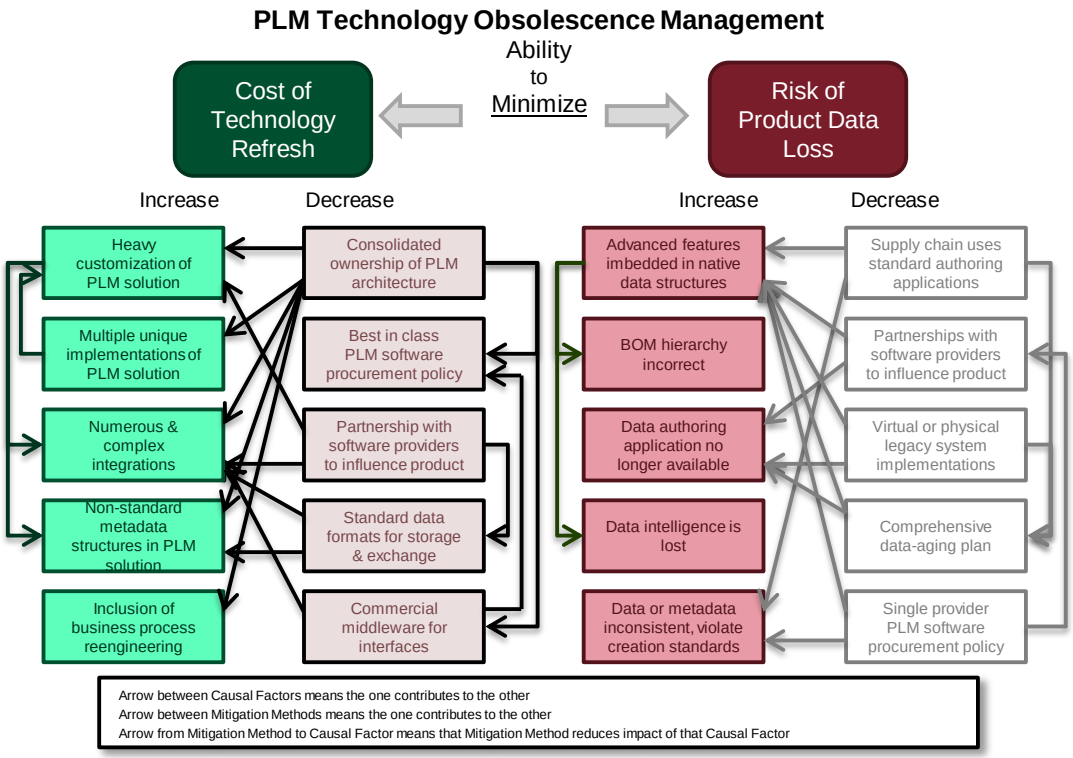
Engagement with Standards Bodies and Projects: Advocacy for development, promotion, and adoption of targeted standards

2014-15 Research
PLM Obsolescence Management – Phase 1

Scope
Factors and methods impacting the ability of an A&D company to refresh their PLM solution without loss of data and without excessive cost and effort.

Goal
Develop more precise definition of causal factors contributing to negative impacts of obsolescence and survey state of the art in mitigation methods.

Deliverables
- Obsolescence management model
  - Causal factors contributing to negative impacts of obsolescence
  - Methods for effective mitigation
- Initial assessment of current state
  - Causal factors ranking
  - Mitigation methods adoption
  - Solution provider perspectives



2015-16 Research

PLM Obsolescence Management – Phase 2

Scope

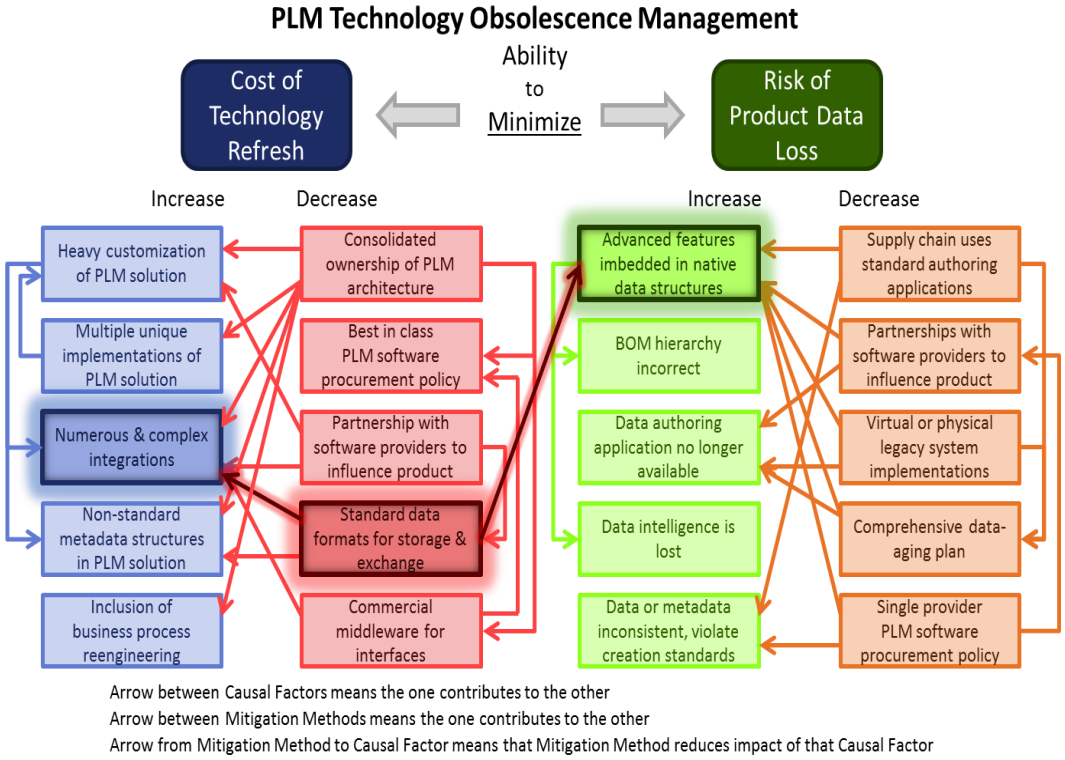
Three interrelated elements of the Obsolescence Management model with dependence on standards for mitigation. Include sources to obtain best practice insights.

Goal

Acquire insights and supporting evidence for a direction statement to influence solution providers, standards bodies, and members' supply chains.

Deliverables

- Benefits of advanced feature usage within design teams
- Cost and risk outside design teams due to advanced feature usage
- Current practice and trends in mitigation methods, e.g. standards
- Improvement opportunities
- Directives for solution providers



2014-15 Research
PLM Global Collaboration – Phase 1

Scope

Data standards and work processes for sharing and working with product data among A&D OEM sites and their product design and manufacturing engineering partners.

Goal

Characterize current state and future trends in collaboration, and determine highest potential opportunities where Members can most effectively improve collaboration performance.

Deliverables

- Collaboration taxonomy
- Characterization of current state
- Summary of trends and gaps
- Highest potential collaboration improvement opportunities

Top Five Collaboration Improvement Opportunities

Collaboration Entity	Collaboration Purpose: Work assignment & des'n delivery	Simultaneous design & evaluation	DMU Baselining	Design review & approval	Engineering Change	Supplier select'n – RFx & response	Contractual Discussions *
OEM Remote Site (Internal)							n.a.
Design & Build Partner	1 8.1	2 7.2	3 3.9	4 3.8	5 3.3		
Equip't & System Supplier *							
Design Supplier	4.4	3.3	3.8				
Build to Print Supplier *							
Tooling Design Supplier							

Very High (7.1-9.0)
High (5.1-7.0)
Moderate (3.1-5.0)
Low (1.1-3.0)
Very Low (<1.1)

2015-16 Research

PLM Global Collaboration – Phase 2

Global Product Data Interoperability Summit | **2015**

Scope

Explore a narrower scope in greater depth, and survey a broad sample so that findings will be statistically significant and representative of the A&D industry

Goal

Recommendations that improve members' collaboration capabilities, and a direction statement to influence solution providers

Deliverables

- Validation and adjustments to phase 1 findings
- For validated opportunities
  - Weaknesses, barriers, and problems in the current state
  - Trends over time
- Improvement opportunities
- Directives for solution suppliers

Phase 1

Collaboration Entity	Collaboration Purpose: Work assignment & des'n delivery	Simultaneous design & evaluation	DMU Baselining	Design review & approval	Engineering Change	Supplier select'n – RFx & response	Contractual Discussions *
OEM Remote Site (Internal)							n.a.
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Very High (7.1-9.0)
High (5.1-7.0)
Moderate (3.1-5.0)
Low (1.1-3.0)
Very Low (<1.1)

Phase 2

Collaboration Entity	**Collaboration Purpose**				
	Work assignment & design delivery	Simultaneous design & evaluation	DMU baselining	Design review & approval	Engineering change
OEM					
Design & Build Partner					
Equipment & System Supplier					
Design Supplier					

ELYSIUM Parker NORTHROP GRUMMAN BOEING

GLOBAL PRODUCT DATA INTEROPERABILITY SUMMIT 2015

If you are interested in participating in the PLM Global Collaboration Phase 2 research survey, please contact a CIMdata representative or any A&D PLM Action Group member.

Benefits of participation

If selected for participation, your company will receive a summary report of the results from this Phase 2 research survey. You will also receive a summary report of the results from the Phase 1 research survey, as well as the Global Collaboration Taxonomy that serves as the basis for both research surveys.

Confidentiality and anonymity

Our research will not disclose any company's practices or strategies to other research contributors or the companies sponsoring the research. Information collected from individual contributors will be held in confidence by CIMdata. Only summary and generalized results will be reported.

2015-16 Plan
Goals & Priorities

1. **Publish a direction statement to PLM software providers**
2. **Significantly impact one standard**
3. **Continue to conduct meaningful research**
4. **Inform key solution providers of Action Group's mission and policy formulation process**
5. **Achieve 8 full memberships**
6. **Issue a press release re Action Group's agenda**

2015-16 Plan

Goal #1: Publish a direction statement to PLM software providers

Members will publish Group's first direction statement in next few months emphasizing the following points:

- **The A&D industry requires a harmonized suite of product data standards as basis for stable, provider independent data exchange and for long term archiving and retrieval**
- **Members will support efforts to develop and harmonize these standards**
- **Members will view PLM solution providers who participate as demonstrating an advantage in compliance**

Communication with PLM Solution Providers

Notional timeline to achieve member objectives

Step 1: Intention	**3-6 months**
Step 2: Direction	**3-6 months**
Step 3: Requirements	**6-12 months**
Step 4: Procurement policy (individual members)	**6-12 months**

For further information or to inquire regarding membership

please contact CIMdata®

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or

any A&D PLM Action Group member