Conference programme



· eurostep- CIMdata

MOST WELCOME TO PLM ROAD MAP AND PDT 2019

PLM for Professionals – Product Lifecycle Innovation.

As PLM is naturally expanding its coverage there are plenty of opportunities opening for innovation across a product's entire lifecycle. Any PLM professional needs to manage the complex PLM legacy, as well as understand where all new capabilities in and around PLM can and most likely will take us. *PLM Road Map and PDT North America* is the meeting place where leaders will report on these two fronts—the classics of PLM and the upcoming PLM enablers. Pain points and trends!

In the camp of classic PLM are the pain points of understanding and deciding the borders between MBOM, EBOM, and SBOM—if the borders still exist! Configuration Management and Collaboration are additional areas that have been around where innovation can still provide significant advantages. New business models require rethinking. What was state of the art isn't anymore.

The PLM professional also needs to manage and plan for the introduction and democratization of Modeling & Simulation, Model Based Systems Engineering, Predictive Maintenance, Additive Manufacturing, Augmented Reality, and Cloud. Investment and training need to go where the best pay-off is, but PLM professionals must make sure recent and promising technologies are seamlessly integrated parts of the total PLM solution. Standardization at the right levels can enable an architecture where old and new will co-exist for the benefit of all in transformed digital networks.

Today, PLM is a topic that is hotter than ever with a lot of recent VC investments, as well as a long list of mergers & acquisitions.

PLM is definitely a major part of any organization's Digital Transformation.

Agenda | Day 1 - May 29

7:30 a.m. – 8:30 a.m.	Registration & Continental Breakfast in the PLM Collaboration Café	
8:30 a.m. – 8:40 a.m.	Welcome Peter Bilello, President, CIMdata & Håkan Kårdén, Director of Marketing, Eurostep	
8:40 a.m. –		
9:25 a.m.	This presentation will review the current state of the PLM industry with emphasis on key trends and issues, including augmented intelligence and other emerging trends that are critical to the success of PLM implementation and adoption. CIMdata will share its views on these trends and the impact they have on companies implementing PLM and the PLM professional community in this increasingly challenging global business environment.	
9:25 a.m. –	Best Practices for Multiple-view Bill of Materials (BOM) Management	
10:00 a.m.	Today's PLM tools allow for multiple views of the BOM and product structures. This presents the possibility of giving each participant in the value stream a level of independence to optimize configuration for performance within their domain. However, such solutions require reconciliation and complex consumption methods. The multi-view BOM concept must facilitate a consistent representation of the product across its lifecycle, from Design Engineering to Manufacturing Engineering, Procurement, Certification, and post production services. Members of an A&D multi-company project team will discuss progress made toward defining and instantiating industry best practices for managing multiple views of the BOM and how they can be used to enhance value from a company's chosen PLM solutions.	
10:00 a.m. – 10:30 a.m.	Sponsor Thought-Leadership Vignettes	
10:30a.m. – 11:00 a.m.	Networking Break & PLM Collaboration Café	
11:00 a.m. – 11:30 a.m.	Sponsor Thought-Leadership Vignettes	
11:30 a.m. – 12:05 p.m.	A Current and Future State Overview of PLM Interconnectivity for a Medical Device Company A major medical device company has invested in its PLM platform to address evolving business requirements that have resulted in a patchwork of interfaces to a growing number of both internal and external systems. Not all the systems are the typical ones used in PLM integration, e.g. ERP, as the PLM platform is easily leveraged for automating business processes outside of the usual change control processes for drawings, BOMs, and parts. This presentation will review the pitfalls, challenges, and benefits achieved by integrating PLM with disparate systems. The current state of integration along with the future roadmap that takes a more strategic approach to PLM integration to achieve a single source of truth will be presented.	
12:05 p.m. - 1:15 p.m.	Networking Lunch & PLM Collaboration Café	
1:15 p.m. – 2:00 p.m.	KEYNOTE: A Flagship Data Integration Project in Support of the Royal Navy's New Carriers The United Kingdom's Royal Navy commissioned the new aircraft carrier HMS Queen Elizabeth in late 2017. An aircraft carrier system is one of the most complex pieces of engineering one can imagine and any number associated with the carrier is mind-blowing. This presentation will consider the project from a product information management viewpoint, with all its complexity, diversity of stakeholders, and the value of data over time. Attendees will hear about the challenges and approaches for managing and maintaining data for this flagship project in order to support an operation meeting high standards for performance, availability, and safety.	

2:00 p.m. –	The Minimum Digital Thread for Aircraft Certification		
2:35 p.m.	The use of multiple software tools to create and consume model-based definition (MBD) data in different, often proprietary, formats result in substantial integration costs and data operability issues. An open, vendor-neutral standard format as the common language is critical. Members of an A&D multi-company project team defined the minimum data content in MBD type design required to meet manufacture, inspect, and regulatory certification requirements. They then tested ISO 10303-242 (STEP AP242) and commercial translation tools and identified gaps in the standard and translation tools that limit MBD adoption. In this presentation the team will review their work and resulting requirements, and describe their plan for presenting requirements, promoting adoption, and achieving compliance within the PLM ecosystem.		
2:35 p.m. – 3:00 p.m.	Networking Break & PLM Collaboration Café		
3:00 p.m. – 3:45 p.m.	Panel Discussion: PLM and Complexity		
	In this panel discussion we will consider PLM and complexity.		
	We will consider the following questions:		
	- What can we all do to make PLM simpler?		
	- When is PLM as simple as possible?		
	- Where should we invest for success: In technology, people, or processes?		
3:45 p.m. –	The Challenges of Model-Based Systems Engineering (MBSE) for NASA		
4:20 p.m.	NASA is investigating methods and tools to shift away from legacy document-centric systems engineering toward Model-Based Systems Engineering (MBSE) solutions. While the legacy Systems Engineering (SE) approach provides a robust and proven methodology appropriate to systems that may be unprecedented, mission or safety critical, and operating is extreme environments, the agency seeks to adopt new model-based strategies capable of supporting distributed development, model reuse, and a more comprehensive analytical environment. This presentation will provide an overview of NASA SE processes, recent MBSE initiatives, and remaining challenges in interoperability and model integration yet to be addressed.		
4:20 p.m. –	First day summary		
4:30 p.m.			
4:30 p.m.	Conference Adjourns for the Day		
4:30 p.m. –			
6:00 p.m.	Happy Hour - avoid the traffic and join us		
	for drinks and snacks in the PLM Collaboration Café		

Agenda | Day 2 - May 30

7:30 a.m. – 8:30 a.m.	Registration & Continental Breakfast in the PLM Collaboration Café
8:30 a.m. – 8:40 a.m.	Welcome
8:40 a.m. – 9:25 a.m.	KEYNOTE: Navigating the Journey to Industrie 4.0. The Good, The Bad, and Making the Ugly – Less Ugly! Manufacturing IT infrastructure has evolved in an adaptive emergent way for more than 30 years. Today, Industrie 4.0 represents the greatest disruption in business models and platform-based technology opportunities in more than a generation. This presentation will share insight based on recent surveys and discussions with leading manufacturers about the journey to Industrie 4.0 and ideas about how to mitigate key risks during that journey.
9:25 a.m. – 10:00 a.m.	Title to come. Description to come.
10:00a.m. – 10:30 a.m.	Networking Break & PLM Collaboration Café
10:30 a.m. – 11:05 p.m.	Optimization of Supply Chain Collaboration Practices The electronic definition of product has disrupted decades of industry standard practice for data transfer (i.e., paper and scan/fax) between OEMs and their supply chain. Supplier agreements still refer to paper processes instead of aligning with 3DMBD and advanced technology. Intellectual property, level of detail, connectivity technology, and data format quickly rose as inhibitors to electronic data definition and transfer. What has emerged as best practice for moving forward? Members of an A&D multi-company project team has developed templates for a data exchange setup and process protocols consistent with industry standards. This presentation will detail the mechanics of configuring and integrating an OEM and supplier in a consistent and optimized state.
11:40 a.m. –	PLM, Model-Based Systems Engineering, and the supply chain—challenges and opportunities The typical current situation in many enterprises is that PLM and ALM are well established but distinct and the increasing take up of Model-Based Systems Engineering (MBSE) cuts across these domains. There is an increased emphasis on simulation too, adding SDM. Many enterprises have document-based processes in place and the shift to go fully digitized and really apply MBSE presents real challenges and great opportunities. Including joint ventures and supply chain design partners adds to the mix. So does considering the full lifecycle and the different views (BOMS) used through life. This presentation will look at the challenges and some of the initiatives currently addressing them, both in the standards arena and in commercial practice. Networking Lunch & PLM Collaboration Café
1:00 p.m.	Networking Lunch & PLIVI Conaboration Care
1:00 p.m. – 1:45 p.m.	KEYNOTE: Presentation title to come Description to come.

1:45 p.m. –	Enabling Model-Based Systems Engineering Data Interoperability		
2:20 p.m.	The digitization of the product development process from the early conceptual design stage all the way through the entire product lifecycle is a major business goal across all manufacturing industries today. This is especially true in aerospace and defense programs due to the design complexities of cyber-physical systems with ever-increasing amounts of embedded software and electronics.		
	Members of an A&D multi-company project team evaluated current data interoperability standards, enabling a Model-Based Systems Engineering (MBSE) conceptual design process. The activity was to assess the feasibility of exchanging digital requirements and systems architecture models instead of documents within a collaborative product development activity. In this presentation the team will discuss their findings and recommendations for the short and longer term.		
2:20 p.m. – 2:45 p.m	Networking Break & PLM Collaboration Café		
2:45 p.m. –	Is it Really a Digital Twin If We Don't Know the As-Built Configuration?		
3:20 p.m.	The promise of the digital twin will be curtailed if we don't know the exact as-built configuration of its corresponding physical product instance. Further, it will be challenging to apply what we learn from comparing the predicted behavior of the twin to the actual behavior of its physical counterpart if we lack a comprehensive and accurate digital thread that enables us to trace from the as-built configuration back to the as-planned, as-designed, and as-specified configurations. It's almost as if we're getting ahead of ourselves in digital twin/thread initiatives.		
	The challenge of configuration management across the product lifecycle, from cradle to grave, predates digital twin and thread by decades and remains largely unaddressed, putting these advanced initiatives at risk. There are some emerging strategies to help us address this need.		
	This presentation will focus on holistic, cross-lifecycle product configuration management strategies, limitations, and direction.		
3:20 p.m. –	KEYNOTE: Bringing all the Trends Together, what's next?		
4:00 p.m.	Description to come.		
4:00 p.m. – 4:15 p.m.	Conference summary		
4:15 p.m.	Conference Adjourns		

Cost to Attend	
Industrial End-Users	by 28 March: US\$795 after 28 March: US\$995
Government & DoD	US\$495
Solution Providers	by 28 March: US\$1,295 after 28 March: US\$1,495

CIMdata PLM Action Group Members and CIMdata PLM Community Members: Check to see if you qualify for a free ticket!

Who Should Attend?

- Systems Engineers
- Certification Engineers
- PLM Program Managers
- PLM Solution Architects
- PLM Solution Planners
- Supply Chain Managers
- Chief Architects
- Chief Engineers and Engineering Managers
- Chief Innovation Officers
- Chief Technology Officers
- Design Engineers
- Engineering IT Executives
- Information Strategy Managers
- IT Professionals
- Mechatronics Experts
- NPD Leaders
- PLM Champions
- Process Designers and Improvement Experts
- Procurement Managers
- Product Development Innovation Experts
- Product Platform Managers
- Product Portfolio Managers
- Software & Service Professionals
- Solution Managers & Providers

What are the Benefits of Attending?

It's about MEANINGFUL TRANSFORMATION

How do you develop a meaningful global transformation and implementation framework for your company? You will take away a road map of actionable items that will enable the meaningful transformation of your enterprise.

It's about NETWORKING

How often are you able to spend meaningful time away from the day-to-day distractions of work while having the opportunity to network with a large group of like-minded peers? You will have plenty of time to focus on the tough issues while making valuable connections and additions to your network.

It's about CONTINUING YOUR EDUCATION

Product development continues to evolve at a rapid pace but how do you keep up with all the trends and changes? At PLM Road Map & PDT you will have the opportunity to listen to our top-of-class speakers and world class experts as they share with you their successes and experiences of making the technology work.

It's about COMMUNITY

Do you ever feel that the PLM events you attend leave you out in the cold after they end? At PLM Road Map & PDT this will not happen as attendees are part of our wider PLM community.

It's about INNOVATION

Do you feel vulnerable to competitor innovation challenges and want information on what will be available tomorrow – today? You will have the opportunity to meet with the industry's top solution providers from your space to find out what is available now, and what to expect in the future, allowing you to make innovative choices ahead of the



